




Employees' Retirement System

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












Schedule	Wednesday, December 15, 2021 9:30 AM — 11:30 AM EST
Venue	Employees' Retirement System of RI, Board Conference Room, 50 Service Avenue, 2nd Floor, Warwick, RI 02886-1021
Description	ERSRI Retirement Board Meeting. The meeting will be in person at the 50 Service Avenue Board Room. All members are required to wear masks while in the building. The meeting will start at 9:30am. The meeting will be live streamed on ZOOM for public viewing at https://treasury-ri-gov.zoom.us/j/krkxQqqB8 or Dial-in: +1 929 205 6099 (US) / Access Code 875 6914 6261
Notes for Participants	If you are unable to attend the December meeting, please contact Frank at 462-7610 or Roxanne at 462-7608. For the legal report, Board members may seek to convene in Executive Session pursuant to Rhode Island General Laws §42-46-5 (a) (2) to discuss pending and potential litigation
Organizer	Frank J. Karpinski

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Employees' Retirement System of Rhode Island



Posted Agenda



EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND

RETIREMENT BOARD MONTHLY MEETING

Wednesday, December 15, 2021

9:30 a.m.

2nd Floor Conference Room,

50 Service Avenue, Warwick, RI

Meeting Streamed via Zoom®

Dial-in: +1 929 205 6099 (US) / Access Code 875 6914 6261

Link: <https://treasury-ri-gov.zoom.us/j/87569146261>

- I. Chairperson Call to Order
- II. Approval of the Draft Meeting Minutes of the September 15, 2021 Retirement Board Meeting and the October 8, 2021 Board Training Session
- III. Chairperson's Report
 - Consideration of the General Treasurer's Nominations for Committee Chairs to be effective January 1, 2022
- IV. Executive Director's Report
 - Presentation and Consideration of the Actuarial Valuation as of June 30, 2021 by Gabriel, Roeder, Smith and Company (GRS) for the ERS (State and Teachers), MERS Plans (Municipal Employees), State Police (SPRBT), State Police Retirement Fund Trust (SPRFT), Judges (JRBT), Judicial Retirement Fund Trust (RIJRFT) and the Teacher Survivor Benefits Plan (TSBP)
 - Administration, Audit, Risk & Compliance Committee Recommendation on Actuarial Valuations as of June 30, 2021
- V. Approval of the October and November Pensions as Presented by ERSRI
- VI. Legal Counsel Report
 - * Discussion and Consideration of litigation *regarding Frank Andre et.al. vs Employees' Retirement System Of Rhode Island, By and through its Executive Director, Frank Karpinski; C.A. No. PC-2019-7971*
- VII. Committee Reports
 - *Disability Committee* – See Attachments I and II
 - *Governance Committee* – Update on Board Training

VIII. Adjournment

** Board members may seek to convene in Executive Session pursuant to Rhode Island General Laws §42-46-5 (a) (2) to discuss pending and potential litigation*

Attachment I

Disability Applications and Hearings on Friday, November 5, 2021

- * Russell Arcand
- * Cortney Lancaster
- * Cheryl Osborne
- * Michael Lowery
- * Maximiano Ferreira
- * Michael Oteau
- * Normanda Alves
- * Lonnie Maldonado
- * Sheila Joost
- * Cheryl DeCotis-Thomas
- * Tanya Alderman
- * Erin Riordan
- ** Robert Bell
- ** Christine Chase

* Votes by the full Board on these applications will be limited to approvals made by the Disability Subcommittee at their November 5, 2021 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 Subcommittee at their November 5, 2021 meeting

Attachment II

Disability Applications and Hearings on Friday, December 3, 2021

- * Michael Bronson
- * Vito Martinelli
- * Lori Gesualdi
- * Stephanie Carroll
- * Donald Lapp
- * David Broccoli
- * Meagan Fiske
- * Diane Antaya
- * Richard Renzi
- * Kevin Proulx
- * Sara Smith
- * Douglas Pendergrass
- * Christiana Matley
- ** Michael Lowery
- ** Normanda Alves
- * Gino Caputo

* Votes by the full Board on these applications will be limited to approvals made by the Disability Subcommittee at their December 3, 2021 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 Subcommittee at their December 3, 2021 meeting

Employees' Retirement System of Rhode Island



1. Chairperson Call to Order

Call to Order

Presented by Treasurer Seth Magaziner

Employees' Retirement System of Rhode Island



2. Roll Call

Roll Call of Members

Presented by Frank J. Karpinski

Employees' Retirement System of Rhode Island



3. Approval of the Draft Meeting Minutes of the September 15, 2021, and October 8, 2021 Retirement Board Meetings

For Vote

Presented by Treasurer Seth Magaziner



Employees' Retirement System of Rhode Island

Retirement Board Meeting Minutes

Wednesday, September 15, 2021

2nd Floor Conference Room,

50 Service Avenue, Warwick, RI

Meeting Streamed via Zoom®

Dial-in: +1 929 205 6099 (US) / Access Code: 816 3557 6453

Link: <http://treasury-ri-gov.zoom.us/j/81635576453>

I. Call to Order

The Meeting of the Retirement Board was called to order at 9:00 a.m., on Wednesday, September 15, 2021.

II. Roll Call of Members

Treasurer Magaziner asked the Director to call the roll, and the following members were present: General Treasurer Seth Magaziner; Mark A. Carruolo; Brian M. Daniels; Paul L. Dion, Ph.D.; Thomas M. Lambert; John P. Maguire; Thomas A. Mullaney; Claire M. Newell; Jean Rondeau; Dr. Laura Shawhughes; James E. Thorsen and Michael Twohey.

Members absent were Roger P. Boudreau; Raymond J. Pouliot and Lisa A. Whiting.

Also in attendance: Frank J. Karpinski, ERSRI Executive Director; Attorney Michael P. Robinson, Board Counsel.

III. Approval of Minutes

On a motion duly made by John P. Maguire and seconded by Mark A. Carruolo, it was unanimously:

VOTED: To approve the draft regular and executive session meeting minutes from the July 14, 2021 Board meeting.

IV. Chairperson's Report

- *Discussion of MERS assuming management of the West Warwick General Municipal and Public Safety Retirement Plans.*

Executive Director Karpinski provided the Retirement Board with a presentation regarding recent enabling legislation that would allow the Town of West Warwick general municipal and public safety retirement plans to become subject to MERS administration, including an overview of the manner in which the plans are to be administered, and a summary of the procedural steps required to effectuate transition of the plans. Members of the Retirement Board engaged in a discussion of the legislation, the current status of the West Warwick plans, the relative merits of and potential issues associated with MERS assuming

administrative responsibility for the plans, and the potential ramifications of administering current West Warwick benefit structures, retirement ages and contribution rates that substantively differ from those applicable to current MERS members.

Following the Board's discussion, on a motion duly made by Jean Rondeau and seconded by Brian M. Daniels and following a roll call vote, it was:

VOTED: To accept the West Warwick General Municipal and Public Safety Retirement Plans into MERS

Paul Dion and Michael Twohey voted No. Mark Carruolo recused himself from participation in the matter.

- *Investment update on the Defined Benefit Investment Portfolio as of June 30, 2021, by CIO Andrew Junkin, CFA, CAIA.*

CIO Andrew Junkin provided the Retirement Board with an investment update on the defined benefit investment portfolio as of June 30, 2021.

V. Executive Director's Report

- *Presentation of the FY 2023 Administrative and Investment Budget, and Consideration and Approval of the Administration, Audit, Risk & Compliance Committee Recommendation Regarding Same.*

Executive Director Karpinski introduced Chief Financial Officer Stacey Whitton CPA, who presented the FY 2023 Administrative and Investment Budget.

Ms. Whitton provided the Board with a presentation of the proposed FY2023 budget and analysis. She discussed Salary and Wages, Legal Services General/Other, Financial Services Accounting/Auditing/Actuary, IT System Support, Postage and Postal Services, Rental/Lease Property and reductions in Out-of-State Lodging, Registrations and Transportation.

At the conclusion of the presentation, Thomas A. Mullaney noted that the Administration, Audit, Risk & Compliance Committee met on September 8, 2021 and received a similar presentation on the proposed FY2023 budget. The Committee discussed the budget presentation and requested certain adjustments be made to certain expenses in line with historical spending, which were reflected in the budget presentation provided to the Board. Chairman Mullaney said that as revised, the Committee recommends approval of the FY 2023 Retirement Administration and Investment Expense Budget as presented for approval by the full Board. On a motion duly made by Thomas A. Mullaney and seconded by Mark A Carruolo, it was unanimously:

VOTED: To accept the recommendation of the Administration, Audit, Risk & Compliance Committee to approve and adopt the FY 2023 Retirement Administration and Investment Expense Budget for \$14,253,965 as presented.

VI. Approval of the July 2021 and August 2021 Pensions as Presented by ERSRI

On a motion duly made by Jean Rondeau and seconded by Thomas A. Mullaney, it was unanimously:

VOTED: To approve the July and August 2021 Pensions as Presented by ERSRI

VII. Legal Counsel Report

Attorney Robinson indicated there was no formal report for this meeting.

VIII. Committee Reports

Disability Subcommittee

The Disability Committee recommended the following actions on disability applications as a result of its August 6, 2021 meeting for approval by the full Board:

Name	Membership Group	Type	Action
1. John Boyer	Municipal	Accidental	Approved
2. Carolyn Davis	Teacher	Accidental	Approved at 50%
3. Charles Dough	State	Accidental	Approved at 66 2/3%
4. Jessie Jacavone	Municipal	Accidental	Approved
5. Karen Quinlan	State	Accidental	Approved at 66 2/3%
6. Christopher Rich	Municipal	Accidental	Approved
7. Cynthia Roberge	State	Accidental	Approved at 50%
8. Lori Derita	State	Ordinary	Approved
9. Peter Palermo	Teacher	Ordinary	Approved
10. Lisa Sindoni	State	Ordinary	Approved
11. Tracy Dugan	State	Accidental	Deny
12. Michael Bronson	Municipal	Accidental	Deny
13. Deborah Tuirok	State	Accidental	Deny
14. Tracy Tahyor-Satu	State	Accidental	Deny

On a motion duly made by Dr. Laura Shawhughes and seconded by Thomas M. Lambert, it was unanimously:

VOTED: To approve the Disability Committee's recommendations from its meeting of August 6, 2021 on items 1-14.

The Disability Subcommittee recommended the following actions on disability applications as a result of its September 2, 2021 meeting for approval by the full Board:

Name	Membership Group	Type	Action
1. Patricia Patterson	State	Accidental	Approved at 66 2/3%
2. Scott Lepizzera	State	Accidental	Approved at 50%
3. Patrick O'Rourke	Municipal	Accidental	Approved
4. Prince Graham	State	Ordinary	Approved
5. Joanne Sullivan	State	Ordinary	Approved
6. Barbara Zanger	Teacher	Ordinary	Approved
7. Angela Sibilia	Municipal	Ordinary	Approved
8. Christine Mero-Amaral	State	Ordinary	Approved
9. James Rockwell III	State	Ordinary	Approved
10. Denise Fournier	Teacher	Ordinary	Approved
11. Patricia Schmiedeknecht	Teacher	Ordinary	Approved
12. Mary Tramonti	State	Ordinary	Approved
13. Nelson Ramos	Municipal	Ordinary	Approved
14. Joanne Avila	State	Ordinary	Approved
15. Cheryl Bailey	State	Accidental	The Committee voted to uphold the previous denial of Ms. Bailey's application for an accidental disability retirement

On a motion duly made by Dr. Laura Shawhughes, and seconded by Thomas M. Lambert, it was unanimously:

VOTED: To approve the Disability Committee's recommendation from its meeting of September 2, 2021 on items 1-15.

Administration, Audit Risk & Compliance Committee

Committee Chairman Thomas A. Mullaney provided the Retirement Board with an update on the status of ERSRI's anticipated issuance of a Request for Proposals (RFP) for the Procurement of Actuarial Services. He noted that the RFP will be issued on October 1, 2021, with proposals due back to the System by December 1, 2021. The Board will thereafter interview the recommended three finalists at the March 2022 Retirement Board meeting.

IX. Adjournment

There being no other business to come before the Board, on a motion by James E. Thorsen, and seconded by Thomas A. Mullaney, it was unanimously voted to adjourn the meeting at 10:50 a.m.

Respectfully submitted,

Frank J. Karpinski
Executive Director



Employees' Retirement Board of Rhode Island
Meeting Minutes
Friday, October 8, 2021, 9:00 a.m.
Save the Bay Center
100 Save the Bay Drive
Providence, RI 02905

The Meeting of the Retirement Board was called to order at 9:01 a.m., Friday, October 8, 2021 in the Citizens Bank Community Room, Save the Bay Center, 100 Save the Bay Drive, Providence, RI 02905.

I. Roll Call of Members

The following members were present at roll call: General Treasurer Seth Magaziner; Roger P. Boudreau, Mark A. Carruolo; Joseph Codega, Jr.; Paul L. Dion, Ph.D.; Thomas M. Lambert; John P. Maguire; Claire M. Newell; Raymond J. Pouliot; Jean Rondeau; Dr. Laura Shawhughes; Michael J. Twohey and James E. Thorsen.

Treasurer Magaziner introduced Joseph Codega, Jr., who replaced recently retired Thomas A. Mullaney, as Associate Director/Budget.

Also in attendance: Frank J. Karpinski, ERSRI Executive Director; Attorney Michael P. Robinson, Board Counsel; Amy L. Crane, Esq., General Counsel; Seth A. Klaiman, Chief of Staff; Heidi Halbur, Deputy Director; Chief Investment Officer Andrew Junkin, CFA, CAIA; Gayle Mambro-Martin, Deputy General Counsel; Kara DiPaola, Esq., Senior Legal Counsel and Roxanne Donoyan, Assistant to the Director.

Recognizing a quorum, Treasurer Magaziner called the meeting to order.

Brian M. Daniels and Lisa A. Whiting were absent.

II. Approval of the September Pensions as Presented by ERSRI

On a motion duly made by Roger P. Boudreau and seconded by John P. Maguire, it was unanimously

VOTED: To approve the September Pensions as Presented

III. Disability Subcommittee

The Disability Subcommittee recommended the following actions on disability applications as a result of its October 1, 2021 meeting for approval by the full Board.

	Name	Membership Group	Type	Action
1.	Jason D'Aguanno	Municipal	Accidental	Approved
2.	Dawn Eidam	State	Accidental	Approved at 50%

	Name	Membership Group	Type	Action
3.	Arthur Franco	State	Accidental	Approved at 50%
4.	Fernanda Simoes	State	Accidental	Approved at 66 2/3%
5.	Timothy Kenney	Municipal	Accidental	Approved
6.	Ronald Benedetti	State	Accidental	Approved at 50%
7.	Theresa Pacheco	Teacher	Ordinary	Approved
8.	Jennie Lynn Angell	State	Ordinary	Approved
9.	Jacqueline Carter	State	Ordinary	Approved
10.	Marybeth Caldarone	Teacher	Ordinary	Approved
11.	Valerie Fry	State	Ordinary	Approved
12.	Glen Lamountain	State	Ordinary	Approved
13.	David Bradley	State	Accidental	Deny
14.	Prince Graham	State	Accidental	Deny
15.	Pamela Azar	Teacher	Accidental	Review and consideration of request by member Pamela Azar regarding her previously adjudicated application for accidental disability (Retired)-- Deny

On a motion by Dr. Laura Shawhughes and seconded by Thomas M. Lambert, it was unanimously

VOTED: To approve the recommendations of the Disability Subcommittee from its meeting on October 1, 2021 on items 1 – 15.

IV. Board Fiduciary Training and Continuing Education Session

Joseph P. Newton and Paul T. Wood – COVID-19 Impact on Plan Funding

Mr. Joseph P. Newton, F.S.A., E.A., Senior Consultant & Actuary of Gabriel, Roeder, Smith & Company provided a presentation and overview to the Board on COVID-19 and its impact on funding of the ERSRI plans.

Robert D. Klausner, Esq., Fiduciary Duty and Update on COVID Cases – Attorney Klausner provided the Board with a presentation on Fiduciary Duty and the legal challenges raised by COVID-19. He covered topics including Fiduciary Duty, Conflicts of Interest, Environmental issues, Social issues, Governance issues (ESG),

Legal Consequences of Underfunding, Loss Prevention, Due Process, Constitutional issues and issues related to the availability of Line of duty benefits due to COVID-19.

- **Lynne Radiches, Esq., Rhode Island Ethics Commission** Attorney Lynne Radiches provided an overview of the Rhode Island Code of Ethics and its applicability to Retirement Board members.
- **Board Self-Evaluation Review and Discussion –**

Executive Director Frank Karpinski thanked John P. Maguire, Chairman, and the Governance Committee, for all their efforts in compiling questions for the Board's Self-Evaluation. The Director provided a graphic presentation of the results of the Board's self-evaluation. The Board thereafter discussed various comments made by members in the evaluation and points on which members noted the Board should focus its attention in the next year.

V. Adjournment

There being no other business to come before the Board, on a motion by Jean Rondeau and seconded by Claire M. Newell, the meeting adjourned at 2:33 p.m.

Respectfully submitted,

Frank J. Karpinski

Executive Director

Employees' Retirement System of Rhode Island



4. Chairperson's Report

For Report

Employees' Retirement System of Rhode Island



Consideration of the Treasurer's Nominations for Committee Chairs to be effective January 1, 2022

For Discussion and Recommendation to the Full
Board

Presented by Treasurer Seth Magaziner



ERSRI Memorandum

ERSRI Board:

Seth Magaziner
General Treasurer
Chair

John P. Maguire
Vice Chair

Roger P. Boudreau

Mark A. Carruolo

Joseph Codega

Brian M. Daniels

Paul L. Dion

Thomas M. Lambert

Thomas A. Mullaney

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: December 9, 2021

To: Retirement Board

From: Frank J. Karpinski, Executive Director

Subject: New Committee Assignments

As you may recall, there was discussion at our offsite training session at Save the Bay regarding the makeup of the Board Committees. Given that discussion, Treasurer Magaziner requested that Board members provide the Committees that they would like to serve on beginning January 2022.

An email was sent to all members on November 5th requesting you provide a list of committees you would consider serving on with alternates, if the preferred committee were not available. Regulation 1.1, *General Administrative Rules of the Retirement Board*, section 1.1.1 (k) provides procedures on the Committee composition. Consistent with that regulation, listed below is the revised make-up of the Committees:

<u>Administration, Audit, Risk & Compliance Committee</u>	<u>Disability Committee</u>
Jean Rondeau	Dr. Laura Shawhughes
Joseph Codega	Roger P. Boudreau
Andrew Manca (Treasurer Designee)	Kara DiPaola (Treasurer Designee)
Raymond J. Pouliot	Claire M. Newell
James E. Thorsen	RILCT Designee (Vacant)

<u>Governance Committee</u>	<u>Member Services Committee</u>
John P. Maguire	Roger P. Boudreau
Mark A. Carruolo	Paul L. Dion
Amy Crane (Treasurer Designee)	Randall Rice (Treasurer Designee)
RILCT Designee (Vacant)	Michael J. Twohey
Municipal Employee Member (TBD)	Lisa A. Whiting

Regulation 1.1, *General Administrative Rules of the Retirement Board*, section 1.1.1 (k) provides that “*The Board Chairperson shall recommend a chairperson for each of the standing committees and special committees, with the advice and consent of the Board. Each committee shall select a Vice Chairperson*”.

Accordingly, Treasurer Magaziner recommends the following members for chairpersons of the current Committees:

Administration, Audit, Risk & Compliance Committee

Jean Rondeau

Governance Committee

John P. Maguire

Disability Committee

Dr. Laura Shawhughes

Member Services Committee

Roger P. Boudreau

A vote by the Board will be required. Upon approval, the revised Committees will become effective January 2022.

Employees' Retirement System of Rhode Island



5. Executive Director's Report

Employees' Retirement System of Rhode Island



Presentation and Consideration of the Actuarial Valuation as of June 30, 2021 by Gabriel, Roeder, Smith and Company (GRS) for the ERS (State and Teachers), MERS Plans (Municipal Employees), State Police (SPRBT), State Police Retirement Fund Trust (SPRFT), Judges (JRBT), Judicial Retirement Fund Trust (RIJRFT) and the Teacher Survivor Benefits Plan (TSBP)

For Vote



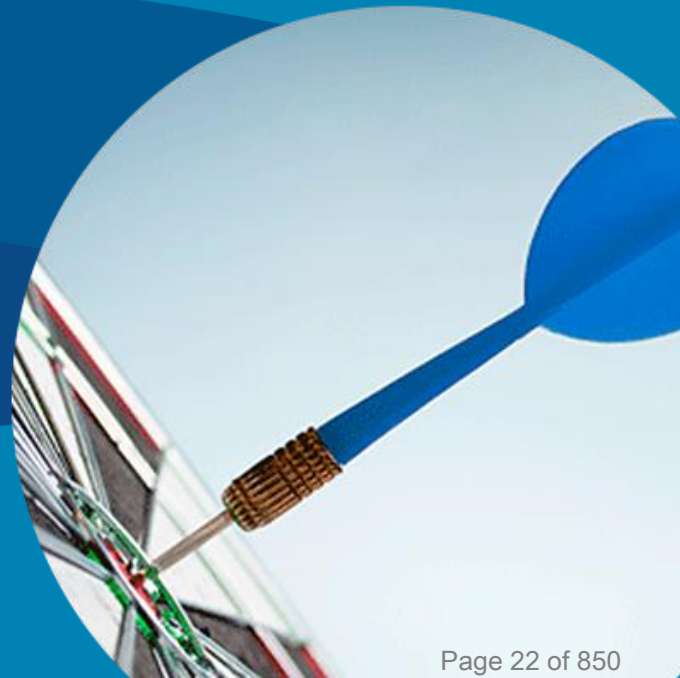
EMPLOYEES' RETIREMENT SYSTEM OF RHODE ISLAND

Actuarial Valuations as of June 30, 2021

Joe Newton

Paul Wood

December 15, 2021



Actuarial Valuations as of June 30, 2021

- Purposes:
 - Measure the System's liabilities
 - Determine employer contribution rates for FY 2024
 - FY 2022 set by June 30, 2019 valuation
 - FY 2023 set by June 30, 2020 valuation
 - Provide other information for reporting
 - GASB #67/68 & CAFR
 - Explain changes in actuarial condition of ERSRI
 - Track changes over time

Actuarial Valuations as of June 30, 2021

- Prepared as of June 30, 2021, using
 - Member data provided by ERSRI Staff
 - Audited financial data
 - Current benefit and contribution provisions
 - Actuarial assumptions and methods approved by the Retirement Board in May 2020
- Plans covered today:
 - ERSRI (State Employees and Teachers)
 - MERS (General Employees and Police/Fire)
 - JRBT (Judges)
 - SPRBT (State Police)
 - Teacher Survivor Benefits Plan (TSBP)
 - SPRFT (Formerly Paygo State Police)
 - RIJRFT (Contributing, Paygo Judges)

STATE AND TEACHERS PLAN



Actuarial Valuations as of June 30, 2021

Key Changes and Issues

- Remarkable 2021 market value investment performance
~27.0% dollar weighted return on market value of assets
- Aggregate UAAL decreased for the third year in a row!
 - this year decreased from \$5.24b to \$5.01b
- Aggregate funded ratio increased from 55.4% to 57.9%
- FY2024 projected employer contribution amounts are \$20m lower than previous projections
 - Now projected at \$541.7m vs previously projected \$561.8m

Actuarial Valuations as of June 30, 2021

Financial Results and COLA Calculations

- The projected COLA restoration year for teachers and state employees continues to be unchanged, although much stronger probability
 - As of June 30, 2031 valuation
- 2021 COLA is 3.50%
 - 50% from change in CPI and 50% from investment performance
 - \$27,901 limit will also grow by 3.50% (\$28,878 in 2022)



Actuarial Valuations as of June 30, 2021

Employer Contribution Rates – State Employees

Item	2020 Actual Results	2021 Projected Results	2021 Actual Results
Total Normal Cost %	8.17%	8.17%	8.01%
Member Contribution	<u>4.23%</u>	<u>4.23%</u>	<u>4.25%</u>
Employer Normal Cost%	3.94%	3.94%	3.76%
Amortization rate	<u>24.06%</u>	<u>24.65%</u>	<u>25.21%</u>
Total Employer Contribution	28.00%	28.59%	28.97%
FY ending June 30,	2023	2024	2024
Payroll Projected 2 Years	\$825.3	\$850.1	\$808.6
Projected Contribution	\$231.1	\$243.0	\$234.3

Above dollar amounts in millions



Actuarial Valuations as of June 30, 2021

Employer Contribution Rates – Teachers

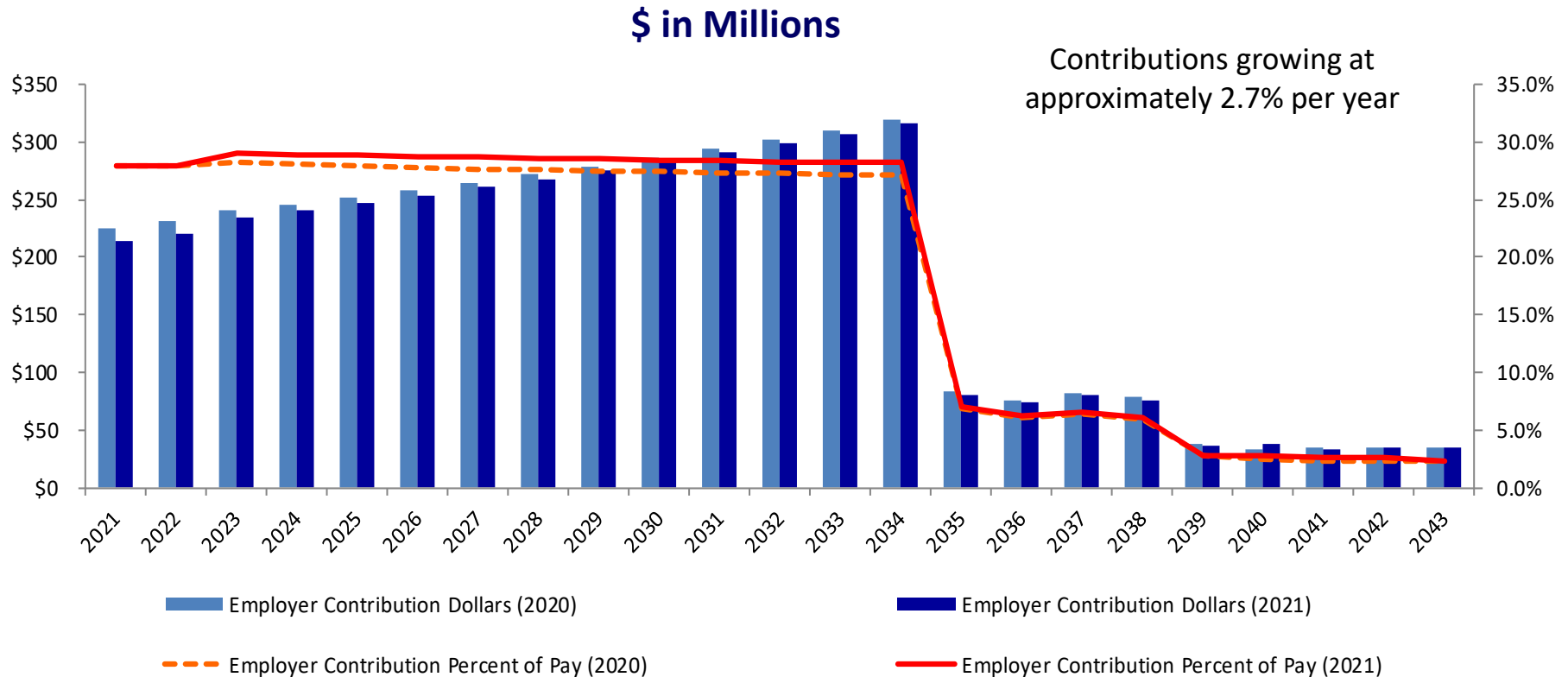
Item	2020 Actual Results	2021 Projected Results	2021 Actual Results
Total Normal Cost %	7.55%	7.55%	7.43%
Member Contribution	<u>3.75%</u>	<u>3.75%</u>	<u>3.75%</u>
Employer Normal Cost%	3.80%	3.80%	3.68%
Amortization rate	<u>22.36%</u>	<u>22.92%</u>	<u>22.48%</u>
Total Employer Contribution	26.16%	26.72%	26.16%
FY ending June 30,	2023	2023	2024
Payroll Projected 2 Years	\$1,164.0	\$1,193.1	\$1,175.4
Projected Contribution	\$304.5	\$318.8	\$307.5

Above dollar amounts in millions



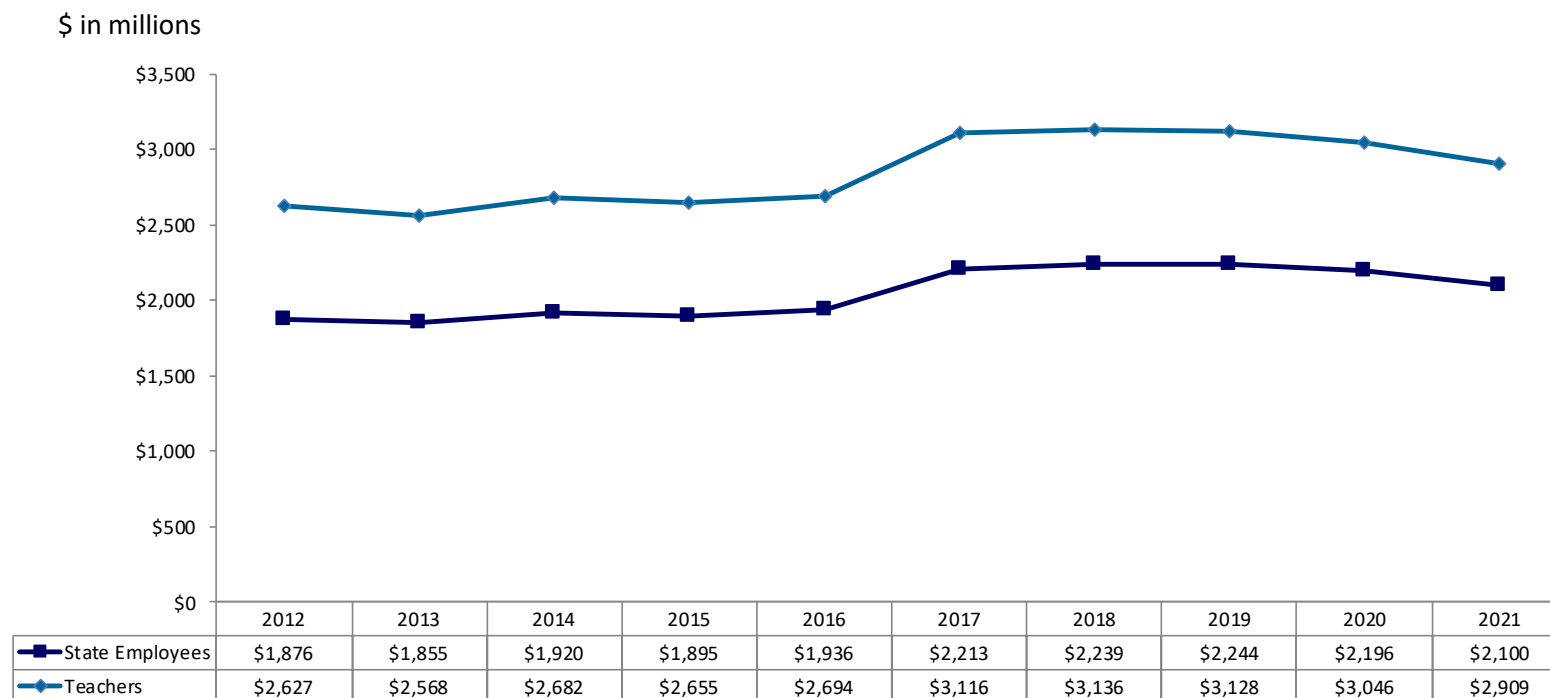
Projected Contribution Requirements

State Employees



Actuarial Valuations as of June 30, 2021

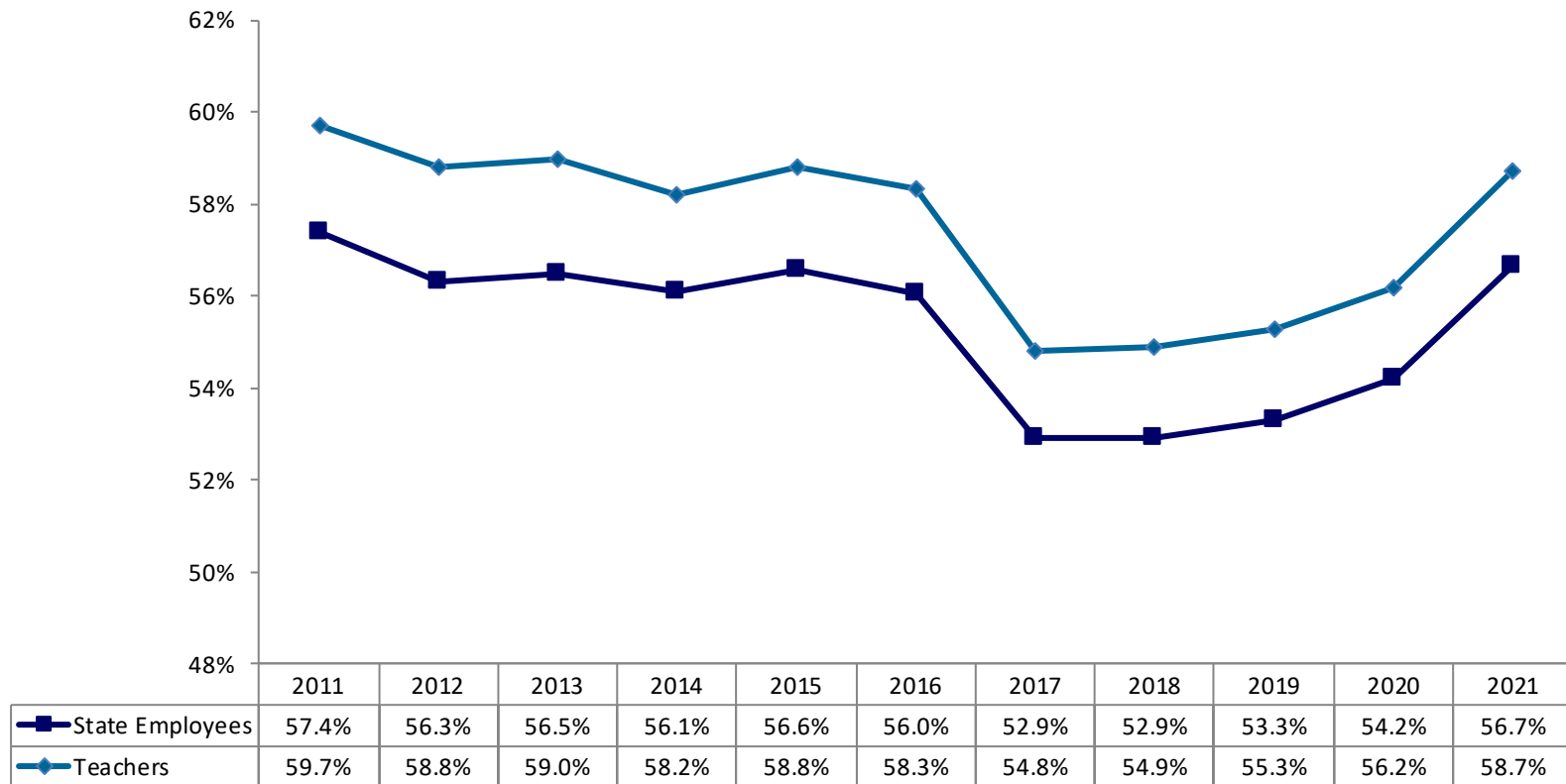
Historical Unfunded Actuarial Accrued Liability (UAAL)



Investment Return Assumption lowered from 7.5% to 7.0% in 2017

Actuarial Valuations as of June 30, 2021

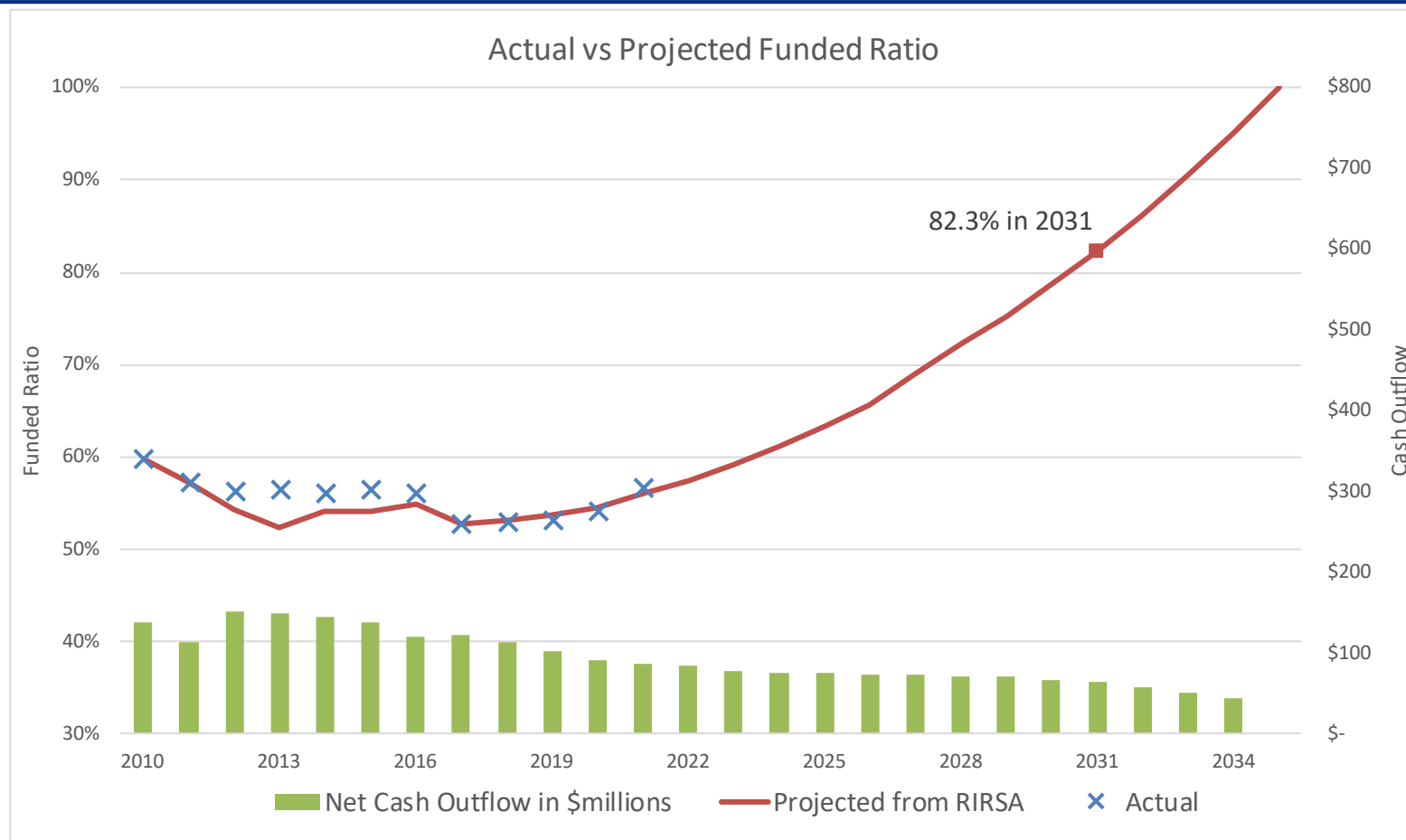
Historical Funded Ratios



Investment Return Assumption lowered from 7.5% to 7.0% in 2017

Funded Ratio History

Compared to Original RIRSA Projections – State Employees

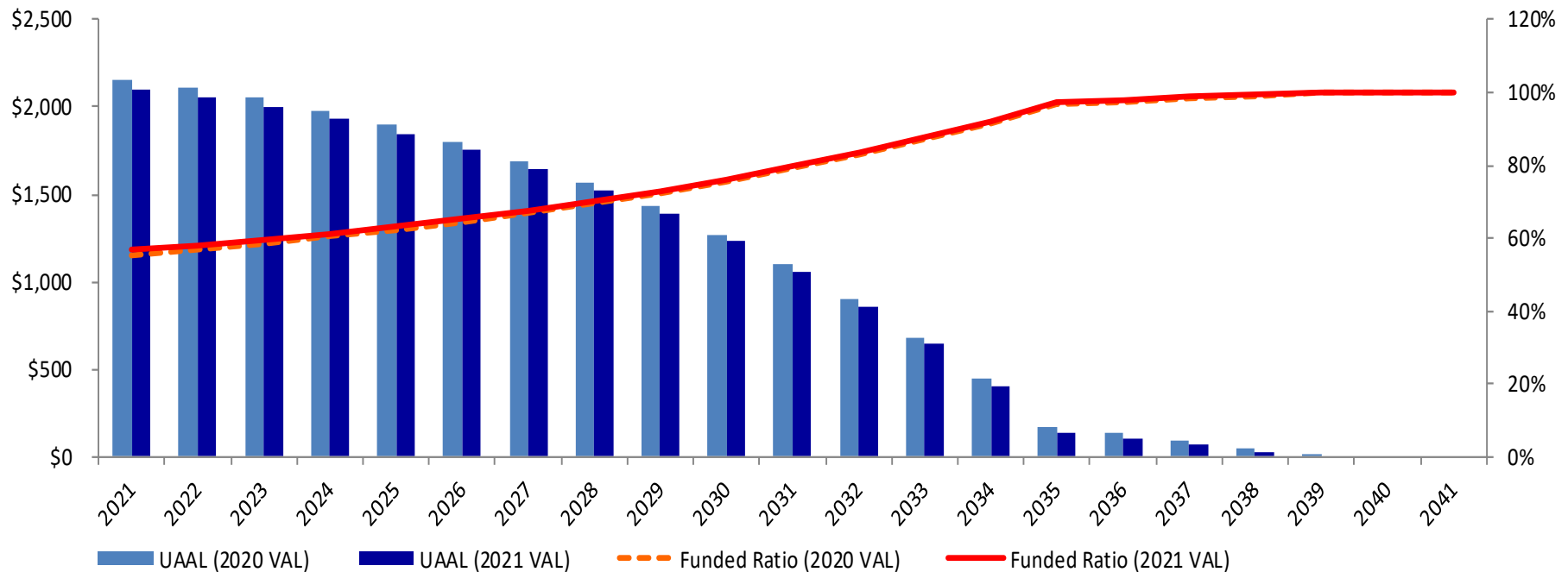


Original Projections from the RIRSA Impact Statement, adjusted for Mediation changes in 2016 (-1.4%) and change to investment return assumption in 2017 (-2.7%)

Projected Unfunded Liability

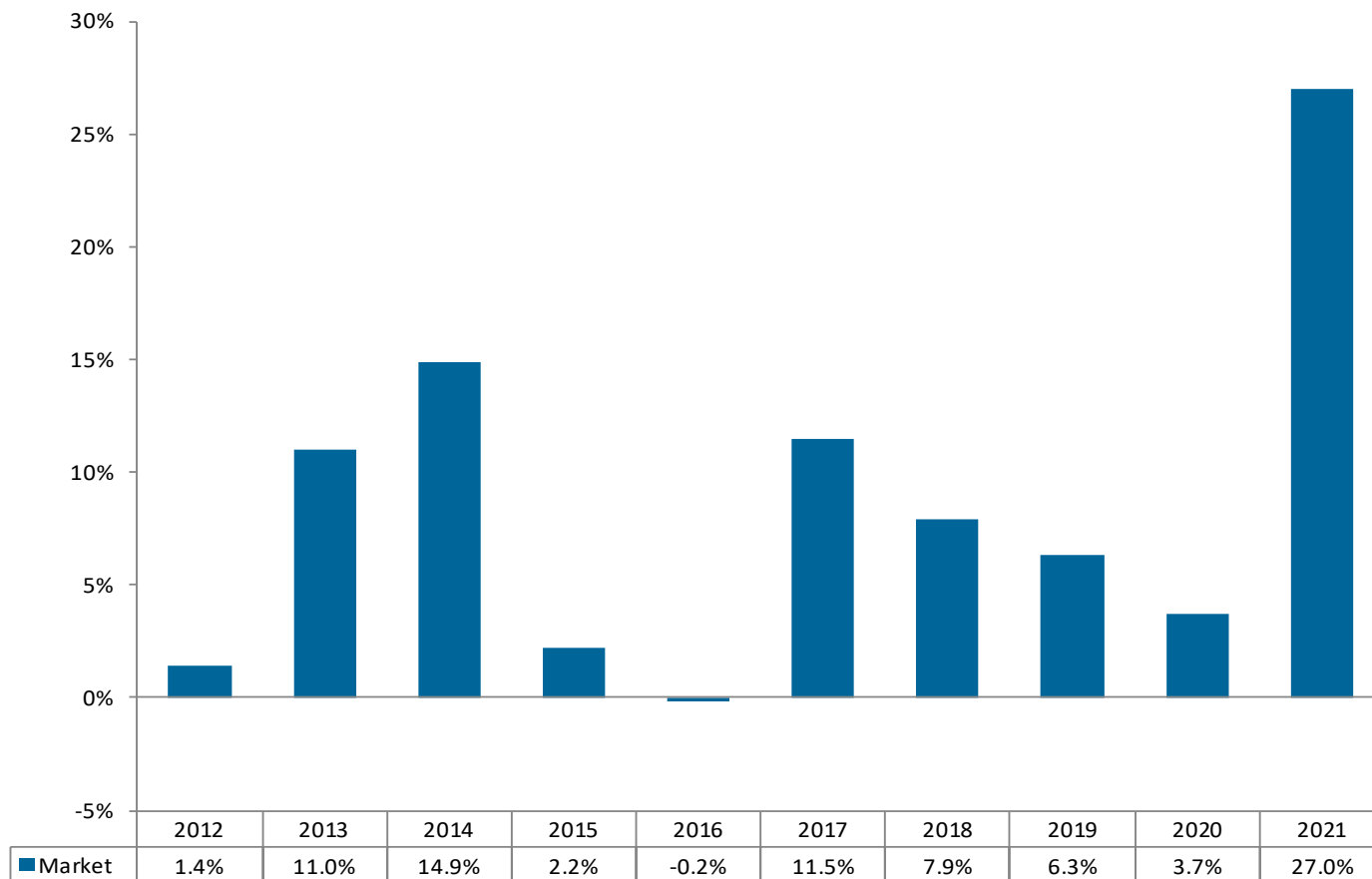
State Employees

\$ in Millions



Actuarial Valuations as of June 30, 2021

Estimated Yields Based on Market Value of Assets (Total ERSRI Fund)



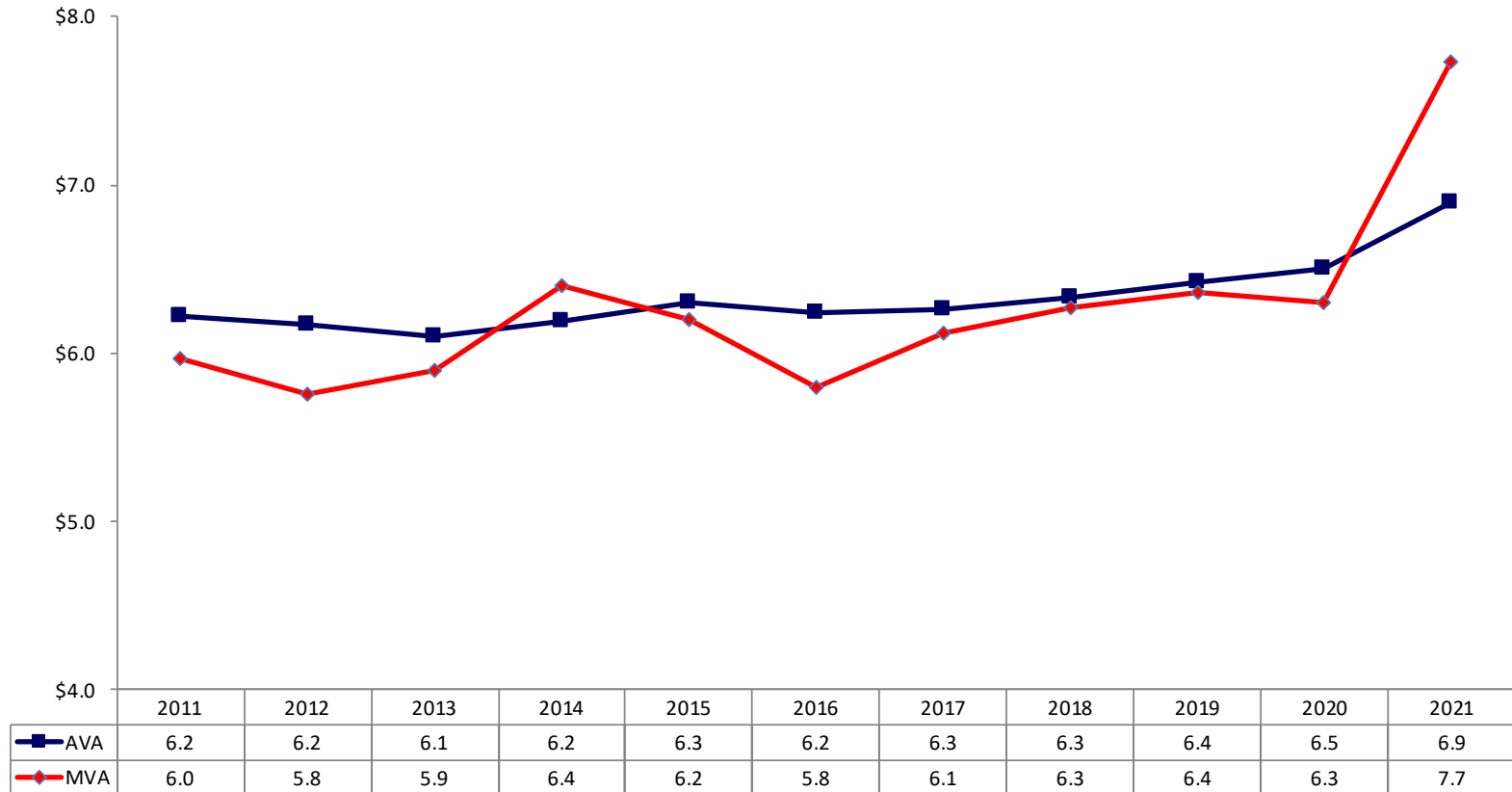
8.3% average compound return on market value of assets over the last 10 years

7.7% average compound return on market value of assets since 1995



Actuarial Valuations as of June 30, 2021

Asset Values – State Employees and Teachers Combined



\$ in billions

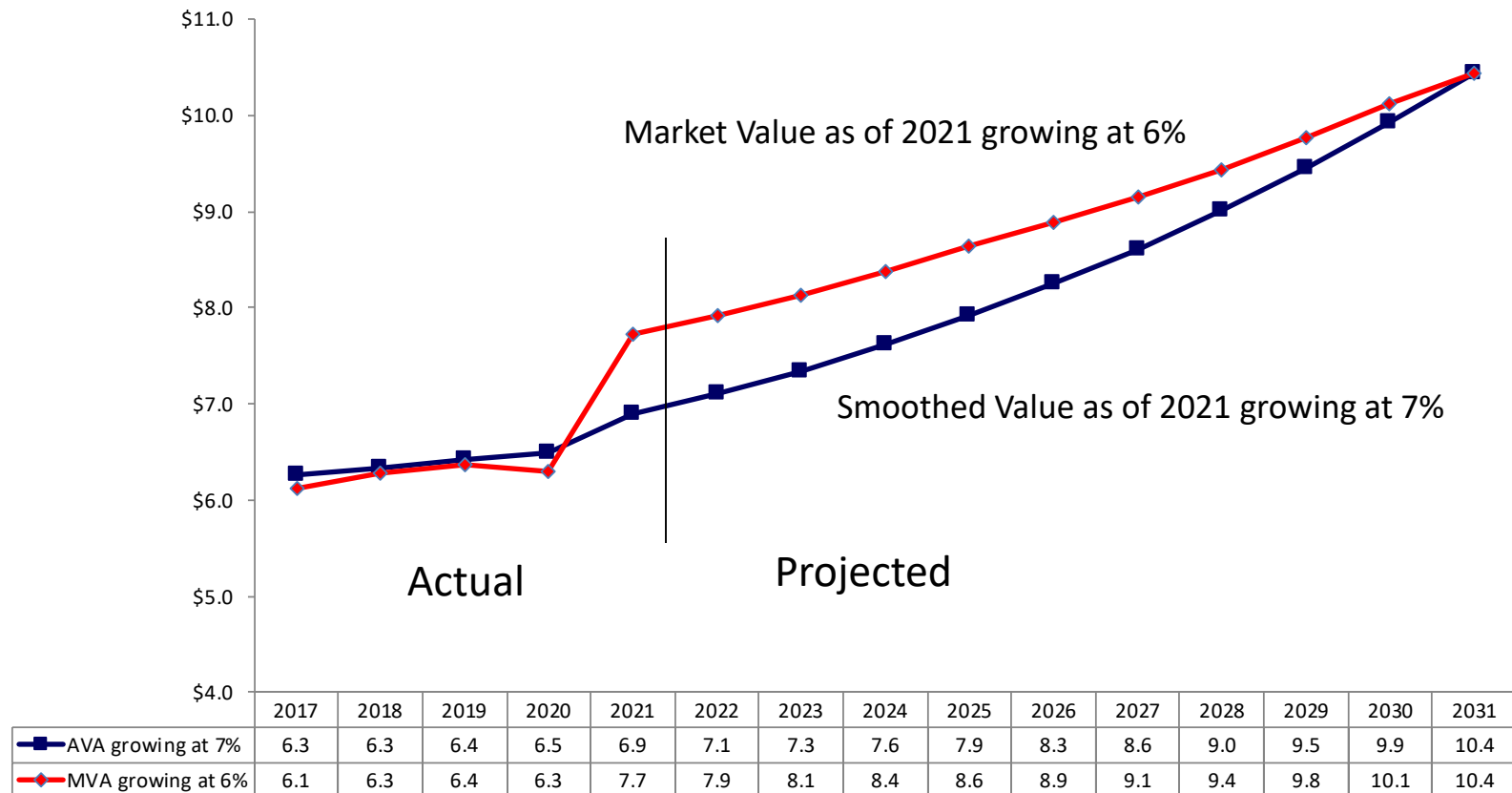
AVA: Actuarial Value of Assets

MVA: Market Value of Assets



Actuarial Valuations as of June 30, 2021

Projected Asset Values – State Employees and Teachers Combined



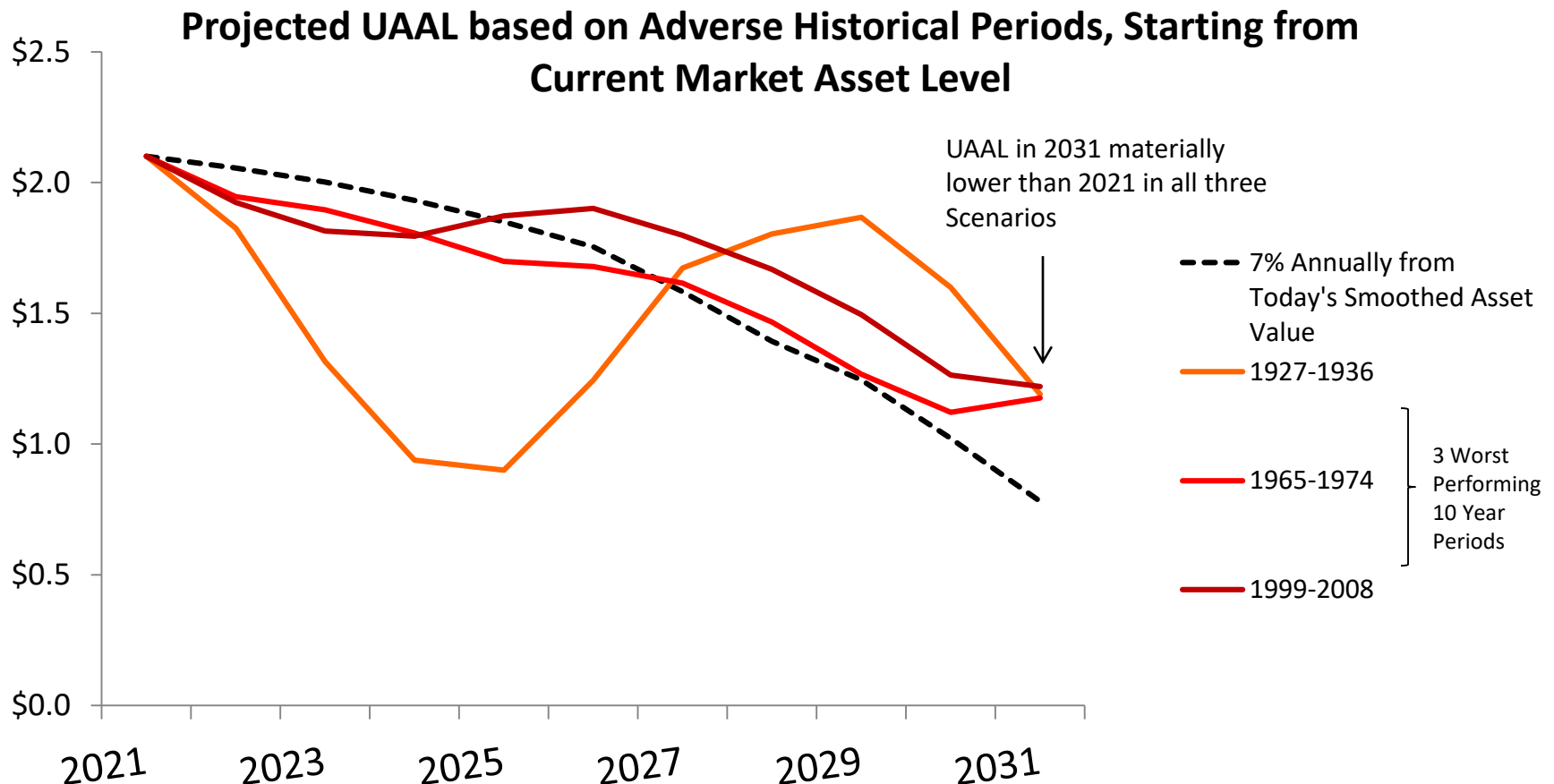
AVA: Actuarial Value of Assets

MVA: Market Value of Assets



Adverse Scenarios Using Actual Historical Adverse Periods

State Employees (\$ in billions)



Adverse Scenarios are actual returns during the years indicated generated from a 70% Stock/30% Bond Portfolio



Monte Carlo Simulation: Smoothed to Smooth Impact

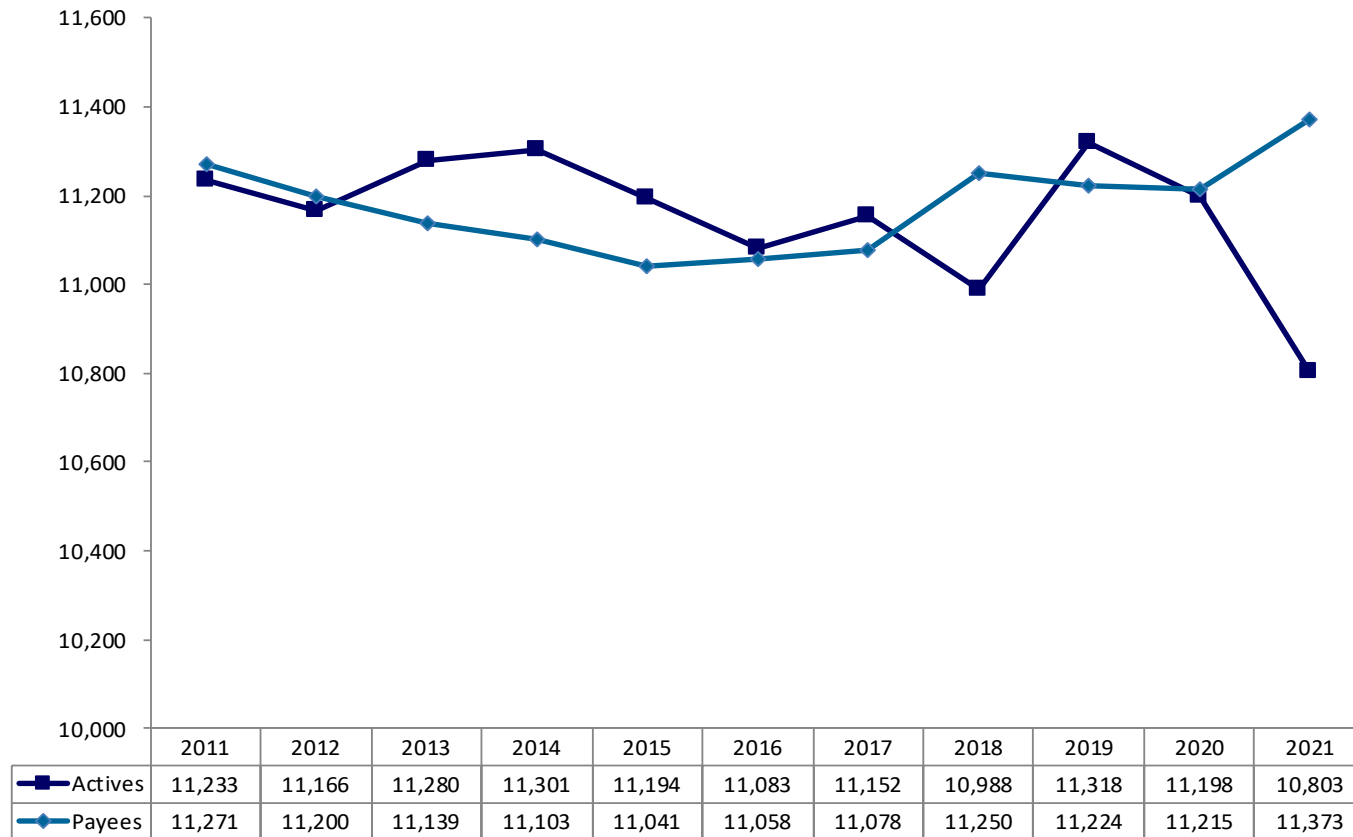
	From 2020 Smoothed Assets	From 2021 Smoothed Assets
Probability UAAL is smaller in 5 Years	79.4%	82.3%
Probability 80% Funded Ratio by 2030	49.1%	51.4%
Probability 100% Funded Ratio by 2040	67.4%	68.0%
Probability FY24 Contribution Rate is Highest Going Forward	43.2%	41.7%

Monte Carlo Simulation: Market to Market Impact

	From 2020 Market Assets	From 2021 Market Assets
Probability UAAL is smaller in 5 Years	73.9%	96.1%
Probability 80% Funded Ratio by 2030	44.3%	68.2%
Probability 100% Funded Ratio by 2040	65.8%	72.8%
Probability FY24 Contribution Rate is Highest Going Forward	36.0%	70.4%

Actuarial Valuations as of June 30, 2021

Membership – State Employees

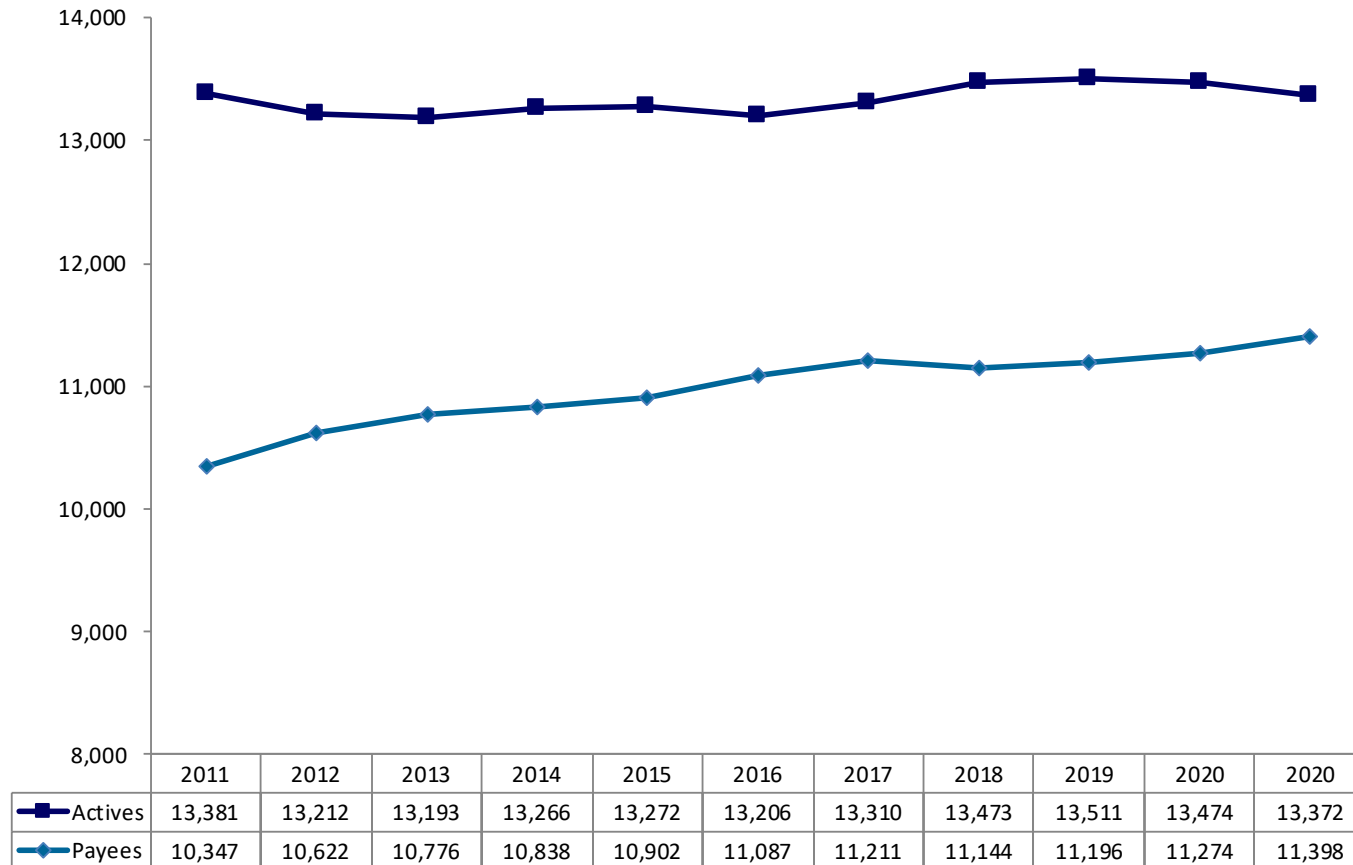


0.4% average decrease in active members since 2011

0.1% average increase in retired members since 2011

Actuarial Valuations as of June 30, 2021

Membership – Teachers

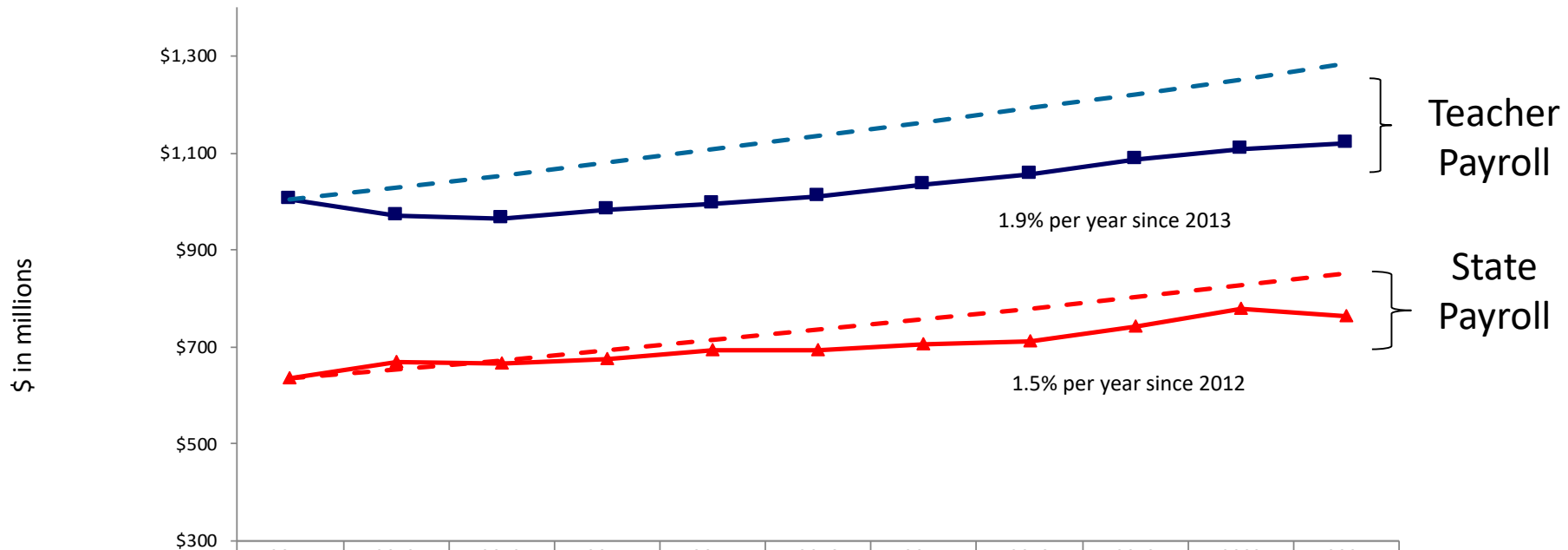


0.0% average increase in active members since 2011

1.0% average increase in retired members since 2011

Actuarial Valuations as of June 30, 2021

Payroll – Actual vs. Expected



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Actual - Teachers	\$1,003	\$972	\$964	\$983	\$996	\$1,010	\$1,036	\$1,057	\$1,087	\$1,108	\$1,119
Projected - Teachers	\$1,003	\$1,028	\$1,053	\$1,080	\$1,107	\$1,134	\$1,163	\$1,192	\$1,222	\$1,252	\$1,283
Actual - State	\$633	\$669	\$664	\$675	\$692	\$693	\$704	\$712	\$740	\$778	\$762
Projected - State	\$633	\$652	\$672	\$692	\$713	\$734	\$756	\$779	\$802	\$826	\$851

1.1% average payroll growth for Teachers since 2011 (Expecting 2.5%)

1.9% average payroll growth for State since 2011 (Expecting 3.0%)

Stress Test on Population Contraction for State:

Declining scenario assumes 2% annual active population contraction every year

Active Population:	UAAL		Funded Ratio		Contribution Dollars		Contribution Rate	
	Level	Declining	Level	Declining	Level	Declining	Level	Declining
2021	\$2,100	\$2,100	56.7%	56.7%	213	213	28.01%	28.01%
2022	2,055	2,055	58.0%	58.0%	220	216	28.00%	28.00%
2023	2,002	2,006	59.4%	59.3%	234	225	28.97%	28.97%
2024	1,932	1,944	61.1%	60.9%	240	231	28.85%	29.36%
2025	1,850	1,871	63.1%	62.6%	247	237	28.83%	29.90%
2026	1,754	1,786	65.2%	64.5%	254	244	28.74%	30.41%
2027	1,583	1,624	68.4%	67.5%	261	250	28.66%	30.94%
2028	1,393	1,444	72.1%	70.9%	268	257	28.58%	31.50%
2029	1,245	1,307	75.2%	73.7%	270	260	27.97%	31.47%
2030	1,021	1,094	79.5%	77.8%	272	262	27.39%	31.44%
2031	781	865	84.2%	82.3%	280	270	27.33%	32.03%
2032	579	673	88.4%	86.2%	282	272	26.78%	32.04%
2033	360	465	92.8%	90.5%	285	275	26.25%	32.07%
2034	124	239	97.5%	95.1%	293	284	26.21%	32.69%
2035	(137)	(11)	102.7%	100.2%	34	26	2.91%	2.98%
2036	(146)	(13)	102.9%	100.3%	34	26	2.88%	2.93%

Summary – ERSRI

- 2024 Employer contribution dollars are lower than expected, but the contribution rate for State is higher due to the contraction in the active headcount
- The UAAL should continue to decline year over year going forward
- The contribution rates should slowly decline year over year, but will be based on how active headcount and payroll grows
- There are some deferred investment gains that can help offset some future adverse experience

MERS PLAN



Actuarial Valuations as of June 30, 2021

Benefit Changes – MERS

- One new unit
 - Portsmouth Police Department
- No closed units
- The following units merged 7/1/2021
 - Cumberland Hill Fire
 - North Cumberland
 - Cumberland Fire
- No new COLA elections
- Full results can be found in the report



Actuarial Valuations as of June 30, 2021

Actuarial Results – MERS

- For MERS, the unfunded actuarial accrued liability (UAAL) for all units combined is \$346 million, compared to \$414 million last year
- The aggregate funded ratio (actuarial assets divided by actuarial accrued liability) for all units combined improved to 84.3%
- Results for individual units are shown in Table 7 of the actuarial valuation report
 - 37 units have funded ratios over 100%, 30 last year
 - 81 units have funded ratios over 80%, 76 last year
- COLA Changes
 - One unit dropped below 80% funded
 - Seven units moved from under 80% funded to over 80% funded



Actuarial Valuations as of June 30, 2021

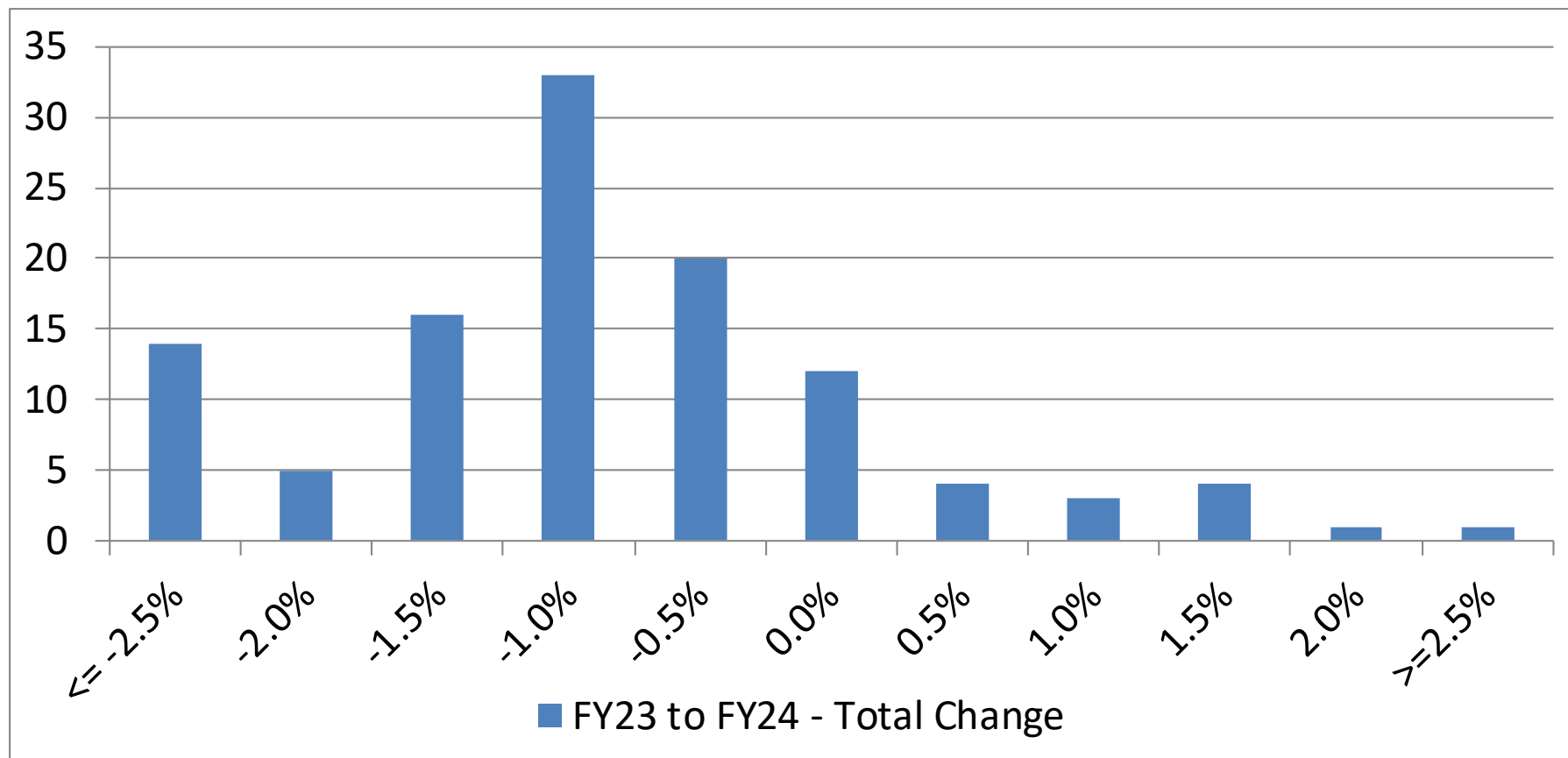
Summary of MERS Results in Aggregate

	MERS General	MERS P&F	Total
FY2023 Employer Rate	12.64%	20.17%	15.13%
Change due to:			
Suspension of 2021 COLA for those <80%	-0.11%	-0.15%	-0.13%
Asset Performance	-0.93%	-1.32%	-1.05%
Actual 2022 COLA (3.50%)	0.20%	0.20%	0.20%
Individual salary increases	-0.09%	-0.08%	-0.08%
Overall payroll growth	0.27%	0.05%	0.19%
Noneconomic liability growth	-0.22%	-0.09%	-0.18%
Benefit Tier Turnover	-0.24%	-0.10%	-0.19%
Recognition of Assumption Changes	<u>0.34%</u>	<u>0.74%</u>	<u>0.47%</u>
Total Change	-0.77%	-0.75%	-0.76%
FY2024 Employer Rate	11.87%	19.42%	14.37%



Actuarial Valuations as of June 30, 2021

Distribution of Changes in Contribution Rate By Unit



Rounded to nearest 0.5% change in rate as a percentage of payroll



OTHER PLANS

Actuarial Valuations as of June 30, 2021

Actuarial Results – Judges (JRBT)

	June 30, 2020 (1)	June 30, 2021 (2)
1. Actuarial accrued liability		
a. Actives & Inactives	\$ 53,696,719	\$ 48,377,260
b. Annuitants	34,837,821	43,051,226
2. Total actuarial accrued liability (1a +1b)	\$ 88,534,540	\$ 91,428,486
3. Actuarial value of assets	82,419,083	90,266,123
4. UAAL (2 - 3)	\$ 6,115,457	\$ 1,162,363
5. Funded ratio (3 / 2)	93.1%	98.7%
6. UAAL/Payroll	59.8%	10.9%

Weighted Average Contribution Rate for Applicable Fiscal Year

7. Full retirement rate		
a. Applicable Fiscal Year	2023	2024
b. Normal cost	20.61%	20.38%
c. Prior service	3.55%	1.74%
d. Full retirement rate	24.16%	22.12%



Actuarial Valuations as of June 30, 2021

Actuarial Results – State Police (SPRBT)

	June 30, 2020 (1)	June 30, 2021 (2)
1. Actuarial accrued liability		
a. Actives & Inactives	\$ 98,735,725	\$ 99,771,611
b. Annuitants	88,775,166	99,071,361
2. Total actuarial accrued liability (1a +1b)	\$ 187,510,891	\$ 198,842,972
3. Actuarial value of assets	158,212,175	175,036,771
4. UAAL (2 - 3)	\$ 29,298,716	\$ 23,806,201
5. Funded ratio (3 / 2)	84.4%	88.0%
6. UAAL/Payroll	110.9%	90.0%

Weighted Average Contribution Rate for Applicable Fiscal Year

7. Full retirement rate		
a. Applicable Fiscal Year	2023	2024
b. Normal cost	13.29%	13.20%
c. Prior service	7.58%	7.46%
d. Full retirement rate	20.87%	20.66%



Actuarial Valuations as of June 30, 2021

Actuarial Results – Teachers’ Survivors Benefit Plan (TSBP)

	June 30, 2020 (1)	June 30, 2021 (2)
1. Actuarial accrued liability		
a. Actives & Inactives	\$ 42,461,831	\$ 46,737,942
b. Annuitants	180,508,590	174,608,197
2. Total actuarial accrued liability (1a +1b)	\$ 222,970,421	\$ 221,346,139
3. Market value of assets	342,259,317	423,973,743
4. UAAL (2 - 3)	\$ (119,288,896)	\$ (202,627,604)
5. Funded ratio (3 / 2)	153.5%	191.5%
6. UAAL/Payroll	-20.3%	-34.4%

Weighted Average Contribution Rate for Applicable Fiscal Year

7. Full retirement rate		
a. Applicable Fiscal Year	2023	2024
b. Normal cost	\$ 1,506,774	\$ 1,604,635
c. Amortization of UAAL	(7,810,996)	(15,827,436)
d. Total (7a plus 7b, not less than zero)	\$ -	\$ -



Actuarial Valuations as of June 30, 2021

Actuarial Results – SPRFT (Formerly Paygo State Police)

- Article 12
 - Trust was established with ERSRI
 - Used to advance fund the benefits
 - Initial deposit of \$15 million
- Annual contributions of \$16,387,092 until UAL is fully funded
- Expected to be fully funded in 2035

	<u>June 30, 2020</u>	<u>June 30, 2021</u>
1. Accrued Liability	\$ 173,150,156	\$ 165,430,247
2. Market Value of Assets	<u>17,255,399</u>	<u>23,499,497</u>
3. Unfunded Accrued Liability	\$ 155,894,757	\$ 141,930,750
4. Funded Ratio (2 / 1)	10.0%	14.2%



Actuarial Valuations as of June 30, 2020

Actuarial Results - RIJRT (Contributing, Paygo Judges)

- Pay-as-you-go plan
 - No advanced funding
- Uses a discount rate of 1.92% (2.45% last year)
 - Municipal Bond Rate used because there is no advanced funding

	<u>June 30, 2020</u>	<u>June 30, 2021</u>
1. Accrued Liability	\$ 21,806,903	\$ 22,298,813
2. Market Value of Assets	<u>1,113,364</u>	<u>1,419,660</u>
3. Unfunded Accrued Liability	\$ 20,693,539	\$ 20,879,153
4. Funded Ratio (2 / 1)	5.1%	6.4%



Wrap up and Next Year?

- Remarkable investment year has improved the funding outlook
- The current ERSRI funding and benefit policies are proving themselves in real time
- Our strongest recommendation would be to stay the course and let the process continue to work

Employees' Retirement System of Rhode Island

Actuarial Valuation Report
As of June 30, 2021

DRAFT





December 10, 2021

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

Dear Members of the Board:

Subject: Actuarial Valuation as of June 30, 2021

This is the June 30, 2021 actuarial valuation of the Employees' Retirement System of Rhode Island (ERSRI), which is a defined benefit plan that covers State Employees and Teachers. This report describes the current actuarial condition of ERSRI, determines recommended employer contribution rates, and analyzes changes in these contribution rates. Valuations are prepared annually, as of June 30th, the last day of the ERSRI plan year. Not covered in this report are the Municipal Employees' Retirement System, the State Police Retirement Benefits Trust, State Police Retirement Fund Trust, the Judicial Retirement Benefits Trust, and the Teachers' Survivor Benefits Plan, even though assets for ERSRI and these other programs are commingled for investment purposes. Additionally, this report does not consider the contribution requirements associated with any defined contribution benefits provided to State Employees and Teachers outside of the defined benefit plan.

DRAFT

Under Rhode Island General Laws, the employer contribution rates for State Employees and for Teachers 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 this June 30, 2021 actuarial valuation will be applicable for the year beginning July 1, 2023 and ending June 30, 2024.

FINANCING OBJECTIVES

The actuarial cost method and the amortization periods are set by statute. Normal cost rate (as a percent of pay) and actuarial accrued 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 employer normal cost rate is the difference between the normal cost rate and the member contribution rate. The amortization rate, also determined as a level percent of pay, 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 and for Teachers.

PROGRESS TOWARD REALIZATION OF FINANCING OBJECTIVES

The employer contribution rate for State Employees is 28.97% while the employer contribution rate for Teachers is 26.16%. These employer contribution rates determined by this June 30, 2021 actuarial valuation will be applicable for the year beginning July 1, 2023 and ending June 30, 2024. The projected dollar amount of contribution for fiscal year 2024 for both groups is lower than expected from previous valuations, but the payroll for both groups did not grow at the rate of the assumed payroll growth rate, and in fact the total payroll for the State Employee group contracted from fiscal year 2020 to 2021, driven by the recent early retirement incentive. As such, the contribution rate for Teachers remained flat from the previous valuation while the contribution rate for State Employees increased from 28.00% of payroll to 28.97% of payroll. If the payrolls had grown with the assumption, the contribution rates for both groups would have declined.

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) is a standard measure of a plan's funded status. The funded status alone is not appropriate for assessing the need for future contributions. The funded status is not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations. The funded ratio for State Employees is 56.7% while the funded ratio for Teachers is 58.7%. The funded ratio increased from the prior valuation for both State Employees and Teachers primarily due to actuarial gains from strong investment performance during the fiscal year. The funded ratio also increased because the contributions determined by the funding policy are intended to move the System towards 100% funded.

Given the plan's contribution allocation procedure, if all actuarial assumptions are met (including the assumption of the plan earning 7.00% on the actuarial valuation of assets), it is expected that:

1. The employer normal cost as a percentage of pay will decrease to the level of the newest tier as members with service under the old tiers declines and is replaced by new tier members (approximately, 7.0% for the State and 6.0% for Teachers),
2. The amortization payment as a percentage of pay remain level from fiscal year 2024 through 2036,
3. The unfunded actuarial accrued liability will be fully amortized within 20 years from fiscal year 2024 with single equivalent periods for all current amortization layers of 15.5 and 17.0 years for state and teachers respectively, and
4. In the absence of benefit improvements, the funded ratio should increase over time, until it reaches 100%.

An analysis of the changes in the employer contribution rates appears in Table 11A of this report. An analysis of the changes in the unfunded actuarial accrued liability appears in Table 11C.

BENEFIT PROVISIONS

The benefit provisions reflected in this valuation are those which were in effect on June 30, 2021, and there have been no changes to the benefit provisions since the preceding valuation. All benefit provisions are summarized in Appendix B.

ASSUMPTIONS AND METHODS

The assumptions are unchanged from the last actuarial valuation and were approved by the Board on May 22, 2020 based on the Actuarial Experience Investigation dated May 6, 2020. We believe the assumptions are internally consistent and are reasonable, based on the actual experience of ERSRI.

The results of the actuarial valuation are dependent upon the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities and the calculated contribution rates.

All assumptions and methods are described in Appendix A. The actuarial assumptions and methods used in this report comply with the parameters for disclosure that appear in Governmental Accounting Standards Board (GASB) Statement Number 67.

This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

DATA

The ERSRI staff supplied data for retired, active and inactive members as of June 30, 2021. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the prior year's data. The ERSRI staff also supplied asset data as of June 30, 2021.

CERTIFICATION

All of our work conforms with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Rhode Island state law and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board.

The undersigned are independent actuaries. All are Members of the American Academy of Actuaries. They all meet the Qualification Standards of the American Academy of Actuaries and they are experienced in performing valuations for large public retirement systems.

Respectfully submitted,

Gabriel, Roeder, Smith & Company



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



Brad Stewart, ASA, MAAA, EA
Consultant and Actuary



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

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Actuarial Standards of Practice Disclosure Statements

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

This report should not be relied on for any purpose other than the purpose described above. Determinations of the financial results associated with the benefits described in this report in a manner other than the intended purpose may produce significantly different results.

The valuation was based upon information furnished by the System's staff, concerning Retirement System benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by the System's staff.

The developed findings included in this report consider data or other information through June 30, 2021.

DRAFT

This is one of multiple documents comprising the actuarial report. The other document comprising the actuarial report is a PowerPoint presentation presented to the Board of Trustees following the publication of this report.

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SECTION A

EXECUTIVE SUMMARY

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Executive Summary (State Employees)

Item	Valuation Date:	
	June 30, 2021	June 30, 2020
Membership		
Number of:		
- Active members	10,803	11,198
- Retirees and beneficiaries	11,373	11,215
- Inactive members	<u>4,154</u>	<u>3,875</u>
- Total	26,330	26,288
Previous year payroll supplied by ERSRI	\$ 739,998,727	\$ 755,310,749
Contribution rates (Defined Benefit Only)		
Member	4.25%	4.23%
Employer	28.97%	28.00%
Assets		
Market value	\$ 3,057,226,491	\$ 2,520,792,045
Actuarial value	2,747,732,215	2,597,672,247
Return on market value	27.0%	3.7%
Return on actuarial value	10.1%	5.7%
Employer contribution for FYE	\$ 204,267,002	\$ 199,894,288
Ratio of actuarial value to market value	89.9%	103.0%
Actuarial Information		
Employer normal cost %	3.76%	3.94%
Unamortized actuarial accrued liability (UAAL)	\$ 2,100,454,287	\$ 2,195,994,771
Amortization rate	25.21%	24.06%
Single Equivalent Funding period	15.5 years	15.9 years
Funded ratio	56.7%	54.2%
Projected employer contribution		
Fiscal year ending June 30,	2024	2023
Projected payroll (millions)	\$ 808.6	\$ 825.3
Projected employer contribution (millions)	234.3	231.1

Executive Summary (Teachers)

Item	Valuation Date:	
	June 30, 2021	June 30, 2020
Membership		
Number of:		
- Active members	13,372	13,474
- Retirees and beneficiaries	11,398	11,274
- Inactive members	<u>4,227</u>	<u>4,001</u>
- Total	28,997	28,749
Previous year payroll supplied by ERSRI	\$ 1,091,442,659	\$ 1,080,912,926
Contribution rates (Defined Benefit Only)		
Member	3.75%	3.75%
Employer	26.16%	26.16%
State share	11.13%	11.12%
Local employer share	15.03%	15.04%
Assets		
Market value	\$ 4,671,641,312	\$ 3,798,755,901
Actuarial value	4,142,172,560	3,911,140,020
Return on market value	27.0%	3.7%
Return on actuarial value	10.1%	5.7%
Employer contribution (state & local)	\$ 275,778,411	\$ 266,034,899
Ratio of actuarial value to market value	88.7%	103.0%
Actuarial Information		
Employer normal cost %	3.68%	3.80%
Unamortized actuarial accrued liability (UAAL)	\$ 2,909,260,411	\$ 3,046,446,298
Amortization percentage	22.48%	22.36%
Single Equivalent Funding period	17.0 years	17.7 years
Funded ratio	58.7%	56.2%
Projected employer contribution		
Fiscal year ending June 30,	2024	2023
Projected payroll (millions)	\$ 1,175.4	\$ 1,164.0
Projected employer contribution (millions)	307.5	304.5
State share (millions)	130.8	129.4
Local employer share (millions)	176.7	175.1

SECTION B

DISCUSSION

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Discussion (Contribution Rates)

The employer contribution rates for ERSRI are determined actuarially. Separate rates are determined for State Employees and for Teachers. The rates determined in this valuation become effective two years after the valuation date, i.e., as of July 1, 2023.

The rate consists of two pieces: the normal cost rate and the amortization rate. The normal cost rate is the employer's Entry Age normal cost, expressed as a percentage of active member payroll. The amortization rate is the contribution required to amortize each of the laddered bases that comprise the unfunded actuarial accrued liability over closed period as a level percentage of payroll. Payment for each base is generally calculated based on a 20-year amortization period beginning 2 years after they are established. The investment return assumption was lowered from 7.5% to 7.0% in the 2017 experience study and the impact was divided into separate "stagers" with the first payment beginning in FY2020 over a 20-year period. Other staggers will begin payment in FY2021 through FY2024 with amortization periods decreasing by one year for each year past FY2020 in which payment begins (e.g. the FY2024 stagger will have a 16-year amortization period). Thus, all of the individual staggers will be fully amortized over the 20-year period beginning with FY2020, but will have different starting years. The impact of the most recent experience study was a small gain and it is divided into two staggers to align with the final two staggers from the 2017 experience study. Please see pages 11 and 12 for details on each outstanding base.

For the Teachers, the State of Rhode Island pays 40% of the rate, adjusted so that the State pays the entire amortization charge for the 1990/91 and 1991/92 deferrals, and the town or city employing the Teacher pays the balance.

	Local	State	Total
Amortization for FY 91 and 92 deferrals	0.00%	0.30%	0.30%
Normal cost and all other amortizations	<u>15.03%</u>	<u>10.83%</u>	<u>25.86%</u>
Total	15.03%	11.13%	26.16%

Discussion (Impact of Decrease in Contribution Rate)

Under Rhode Island General Laws (RIGL) §36-10-2(e), if the State's actuarially determined contribution rate for State Employees or for Teachers for a fiscal year will be less than in the preceding fiscal year, the Governor is required to include an appropriation to ERSRI in the fiscal year budget equal to 20% of the reduction. Because the FYE 2024 contribution rates are higher than or equal to the rates for FYE 2023, no additional appropriation will be required.

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Discussion (Financial Data and Experience)

Assets for ERSRI are held in trust and are commingled with those of several other plans and programs for investment purposes. The State Investment Commission is responsible for setting the asset allocation policy and for investing the funds. The ERSRI assets are then allocated by the ERSRI staff among State Employees, Teachers, and the Teachers' Survivor Benefits Plan.

Table 6 of this report shows the net plan assets for ERSRI in total, and it shows the breakdown between State Employees, Teachers and the Teachers' Survivor Benefits Plan. Table 7 of this report shows a reconciliation of the assets for State Employees and Teachers between the previous valuation and this valuation. Table 9 shows the target distribution of investments by category—60% of assets are held in equities, including real estate and private equity—and Table 10 shows a historical summary of the return rates. As can be seen, the net market value rate of return was 27.0% for the year ended June 30, 2021, and the return on an actuarial asset value basis was 10.1%.

The average annual return based on the market value of assets over the last ten years (July 1, 2011 – June 30, 2021) was 8.3%. This is more than the current 7.0% annual investment return assumption.

All returns above are net of both investment and administrative expenses and may differ from other information provided by the General Treasurer's office or the investment managers and advisors due to timing of reflected cash flows, frequency of compounding, and treatment of administrative expenses.

The ERSRI staff provided all of the financial information used in this report.

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Discussion (Benefit Provisions)

Appendix B includes a summary of the benefit provisions for ERSRI. There were no material changes in the benefit provisions since the preceding valuation.

The COLA to be provided to retired members is contingent on the investment performance, the annual change in the CPI-U, and funded status of the System. The amount of the COLA is determined based on 50% of the plan's five-year average investment rate of return minus 5.0% and will range from zero to 4.0%, and 50% of the lesser of 3% or last year's CPI-U increase for a total maximum increase of 3.50%. This calculation produces a 3.50% COLA for Calendar Year 2022. The COLA will be limited and this limit will be indexed annually to increase in the same manner as COLAs, with the known values as follows:

<u>Year</u>	<u>COLA Limit</u>
2014	\$ 25,000
2015	\$ 25,168
2016	\$ 25,855
2017	\$ 26,098
2018	\$ 26,291
2019	\$ 26,687
2020	\$ 27,184
2021	\$ 27,608
2022	\$ 27,901
2023	\$ 28,878

Furthermore, the COLA will be suspended for all state employees, teachers, BHDDH nurses, correctional officers, judges and state police until the aggregate funding level of their plans exceeds 80%; however, an interim COLA will be granted in four-year intervals while the COLA is suspended. The first interim COLA was during the Calendar Year beginning January 1, 2017. Also, for current retirees and beneficiaries retired on or before July 1, 2015 the \$25,000 cap will be increased to \$30,000 (indexed) for any COLA payable based on the every fourth year provision.

Discussion (Actuarial Methods and Assumptions)

Appendix A of this report includes a summary of the actuarial assumptions and methods used in this valuation. Costs are determined using the Entry Age Normal actuarial cost method.

The method used to determine the actuarial value of assets is the five-year smoothed market method. This technique is further described in Section III of Appendix A. The development of the actuarial value of assets utilizing this method is shown in Tables 8A and 8B of this report.

The assumptions were adopted by the Board on May 22, 2020. We believe the assumptions are internally consistent and are reasonable, based on the actual experience of ERSRI.

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SECTION C

TABLES

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Table 1A

Development of Contribution Rate (State Employees)

	June 30, 2021 (1)	June 30, 2020 (2)
1. Aggregate payroll		
(a) Supplied by ERSRI for previous fiscal year	\$ 739,998,727	\$ 755,310,749
(b) Adjusted for one-year's payroll growth	762,198,689	777,970,071
2. Actuarial accrued liability	4,848,186,502	4,793,667,018
3. Actuarial value of assets	2,747,732,215	2,597,672,247
4. Unfunded actuarial accrued liability (UAAL) (2 - 3)	2,100,454,287	2,195,994,771
5. Single Equivalent Funding Period	15.5	15.9
6. Contribution effective for fiscal year ending:	June 30, 2024	June 30, 2023
7. Payroll projected for two-year delay	808,616,589	825,348,448
8. Amortization of UAAL	203,839,705	198,543,181
9. Normal cost		
(a) Total normal cost rate	8.01%	8.17%
(b) Employee contribution rate	4.25%	4.23%
(c) Employer normal cost rate (a - b)	3.76%	3.94%
10. Employer contribution rate as percent of payroll		
(a) Employer normal cost rate	3.76%	3.94%
(b) Amortization payments (8 / 7)	25.21%	24.06%
(c) Total (a + b)	28.97%	28.00%
11. Estimated employer contribution amount (7 * 10(c))	\$ 234,256,226	\$ 231,097,566

Table 1B**Development of Contribution Rate (Teachers)**

	June 30, 2021 (1)	June 30, 2020 (2)
1. Aggregate payroll		
(a) Supplied by ERSRI for previous fiscal year	\$ 1,091,442,659	\$ 1,080,912,926
(b) Adjusted for one-year's payroll growth	1,118,728,726	1,107,935,749
2. Actuarial accrued liability	7,051,432,971	6,957,586,318
3. Actuarial value of assets	4,142,172,560	3,911,140,020
4. Unfunded actuarial accrued liability (UAAL) (2 - 3)	2,909,260,411	3,046,446,298
5. Single Equivalent Funding Period	17.0	17.7
6. Contribution effective for fiscal year ending:	June 30, 2024	June 30, 2023
7. Payroll projected for two-year delay	1,175,364,368	1,164,024,996
8. Amortization of UAAL	264,207,906	260,278,531
9. Normal cost		
(a) Total normal cost rate	7.43%	7.55%
(b) Employee contribution rate	3.75%	3.75%
(c) Employer normal cost rate (a - b)	3.68%	3.80%
10. Employer contribution rate as percent of payroll		
(a) Employer normal cost rate	3.68%	3.80%
(b) Amortization payments (8 / 7)	22.48%	22.36%
(c) Total (a + b)	26.16%	26.16%
11. Estimated employer contribution amount (7 * 10(c))	\$ 307,475,319	\$ 304,508,939

Table 2A

Summary of Unfunded Liability (State Employees)

Purpose	Remaining Balance as of June 30, 2021	Fiscal Year 2022 Amortization Payment *	Fiscal Year 2023 Amortization Payment *	Fiscal Year 2024 Amortization Payment *	Years Remaining Beginning with Fiscal Year 2024
FY 1991 and FY 1992 Deferrals	\$ 26,912,307	\$ 2,517,430	\$ 2,592,953	\$ 2,670,742	12
Original 2011 RIRSA Base	1,701,560,776	159,167,316	163,942,335	168,860,605	12
2014 Experience Base	(46,894,000)	(4,165,584)	(4,290,552)	(4,419,269)	13
2014 Mediation Settlement	112,344,791	9,979,564	10,278,950	10,587,319	13
2015 Experience Base	(33,554,271)	(2,842,767)	(2,928,050)	(3,015,892)	14
2016 Experience Base	46,152,032	3,743,411	3,855,713	3,971,384	15
2016 Assumption Change - FY20 Stagger **	32,544,694	2,535,678	2,611,748	2,690,099	16
2016 Assumption Change - FY21 Stagger **	74,960,162	5,840,423	6,015,635	6,196,105	16
2016 Assumption Change - FY22 Stagger **	80,825,580	6,297,419	6,486,342	6,680,932	16
2016 Assumption Change - FY23 Stagger **	80,825,580	-	7,014,703	7,225,144	16
2016 Assumption Change - FY24 Stagger **	80,825,580	-	-	7,839,889	16
2017 Experience Base	17,367,517	1,353,168	1,393,763	1,435,575	16
2018 Experience Base	26,268,808	1,971,889	2,031,046	2,091,977	17
2019 Experience Base	7,865,026	570,327	587,437	605,060	18
2020 New Assumptions - FY23 Stagger **	(29,092,517)	-	(2,524,886)	(2,600,633)	16
2020 New Assumptions - FY24 Stagger **	(29,092,517)	-	-	(2,821,905)	16
2020 Experience Base	19,023,558	-	1,476,044	1,520,325	19
New Experience Base This Fiscal Year	(68,388,819)	-	-	(5,677,752)	20
Unfunded Actuarial Accrued Liability	\$ 2,100,454,287	\$ 186,968,274	\$ 198,543,181	\$ 203,839,705	

*Assuming payment made at the middle of the year.

**Assumption change staggers will begin in the fiscal year indicated.



Table 2B

Purpose	Remaining Balance as of June 30, 2021	Fiscal Year 2022 Amortization Payment *	Fiscal Year 2023 Amortization Payment *	Fiscal Year 2024 Amortization Payment *	Years Remaining Beginning with Fiscal Year 2024
FY 1991 and FY 1992 Deferrals (State)	\$ 34,868,184	\$ 3,355,738	\$ 3,439,631	\$ 3,525,622	12
Original 2011 RIRSA Base (State)	924,551,512	88,979,480	91,203,966	93,484,066	12
Original 2011 RIRSA Base (Local)	1,491,573,622	120,486,019	123,498,169	126,585,625	16
2014 Experience Base (State)	(15,574,831)	(1,426,219)	(1,461,874)	(1,498,421)	13
2014 Experience Base (Local)	(24,323,636)	(1,964,809)	(2,013,929)	(2,064,278)	16
2014 Mediation Settlement (State)	63,781,963	5,840,644	5,986,661	6,136,328	13
2014 Mediation Settlement (Local)	99,610,040	8,046,278	8,247,436	8,453,621	16
2015 Experience Base	(48,777,241)	(4,268,283)	(4,374,992)	(4,484,366)	14
2016 Experience Base	32,502,522	2,728,104	2,796,307	2,866,215	15
2016 Assumption Change - FY20 Stagger **	63,687,514	5,144,537	5,273,150	5,404,979	16
2016 Assumption Change - FY21 Stagger **	97,218,555	7,853,100	8,049,428	8,250,664	16
2016 Assumption Change - FY22 Stagger **	105,143,735	8,493,278	8,705,610	8,923,250	16
2016 Assumption Change - FY23 Stagger **	105,143,735	-	9,443,024	9,679,100	16
2016 Assumption Change - FY24 Stagger **	105,143,735	-	-	10,533,850	16
2017 Experience Base	67,253,364	5,432,578	5,568,392	5,707,602	16
2018 Experience Base	7,979,604	622,156	637,710	653,653	17
2019 Experience Base	(16,546,477)	(1,248,501)	(1,279,714)	(1,311,707)	18
2020 New Assumptions - FY23 Stagger **	(38,265,653)	-	(3,436,662)	(3,522,579)	16
2020 New Assumptions - FY24 Stagger **	(38,265,659)	-	-	(3,833,654)	16
2020 Experience Base	(46,844)	-	(3,782)	(3,877)	19
New Experience Base This Fiscal Year	(107,397,333)	-	-	(9,277,787)	20
Unfunded Actuarial Accrued Liability	\$ 2,909,260,411	\$ 248,074,100	\$ 260,278,531	\$ 264,207,906	
State Portion of UAAL Payment				\$ 113,481,732	
Local Portion of UAAL Payment				\$ 150,726,174	

*Assuming payment made at the middle of the year.

**Assumption change staggers will begin in the fiscal year indicated.



Table 3A

Actuarial Present Value of Future Benefits (State Employees)

	June 30, 2021 (1)	June 30, 2020 (2)
1. Active members		
a. Service retirement benefits	\$ 1,675,537,765	\$ 1,778,206,442
b. Deferred termination benefits	64,246,078	64,563,907
c. Refunds	4,322,226	4,609,465
d. Pre-retirement death benefits	27,726,065	29,394,868
e. Disability retirement benefits	179,086,799	180,055,260
f. Total	\$ 1,950,918,933	\$ 2,056,829,942
2. Retired members		
a. Service retirements	\$ 2,890,245,657	\$ 2,765,262,350
b. Disability retirements	187,593,263	180,185,992
c. Beneficiaries	201,497,256	197,970,734
d. Post-retirement death benefit	17,665,000	17,336,000
e. Stipends payable	0	0
f. Total	\$ 3,297,001,176	\$ 3,160,755,076
3. Inactive members	\$ 137,274,178	\$ 133,107,601
4. Total actuarial present value of future benefits	\$ 5,385,194,287	\$ 5,350,692,619
5. Determination of actuarial accrued liability		
a. Total actuarial present value of future benefits	\$ 5,385,194,287	\$ 5,350,692,619
b. Less present value of future normal costs	(509,536,556)	(520,962,918)
c. Less present value of supplemental member contributions	(27,471,229)	(36,062,683)
d. Actuarial accrued liability (a + b + c)	\$ 4,848,186,502	\$ 4,793,667,018

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Table 3B**Actuarial Present Value of Future Benefits (Teachers)**

	June 30, 2021 (1)	June 30, 2020 (2)
1. Active members		
a. Service retirement benefits	\$ 2,614,619,879	\$ 2,597,148,882
b. Deferred termination benefits	61,771,280	64,075,507
c. Refunds	4,364,392	4,426,920
d. Pre-retirement death benefits	33,394,740	33,496,172
e. Disability retirement benefits	299,126,472	293,531,559
f. Total	<u>\$ 3,013,276,763</u>	<u>\$ 2,992,679,040</u>
2. Retired members		
a. Service retirements	\$ 4,417,985,669	\$ 4,382,936,559
b. Disability retirements	108,163,593	101,312,882
c. Beneficiaries	134,955,431	133,620,188
d. Post-retirement death benefit	17,255,000	16,820,000
e. Stipends payable	0	0
f. Total	<u>\$ 4,678,359,693</u>	<u>\$ 4,634,689,629</u>
3. Inactive members	\$ 190,407,605	\$ 173,752,951
4. Total actuarial present value of future benefits	\$ 7,882,044,061	\$ 7,801,121,620
5. Determination of actuarial accrued liability		
a. Total actuarial present value of future benefits	\$ 7,882,044,061	\$ 7,801,121,620
b. Less present value of future normal costs	(797,000,410)	(803,180,884)
c. Less present value of supplemental member contributions	(33,610,680)	(40,354,418)
d. Actuarial accrued liability (a + b + c)	<u>\$ 7,051,432,971</u>	<u>\$ 6,957,586,318</u>

Table 3C

Ten-Year Projections (State Employees)

Valuation as of June 30,	Unfunded Actuarial Accrued Liability (in Millions)	Funded Ratio	Actuarial Value of Fund Assets (in Millions)	For Fiscal Year Ending June 30,	Covered Compensation (in Millions)	Employer Contribution Rate	Employer Contribution	Employee Contribution	Benefit Payments, Refunds, and Administrativ	Net External Cash Flow
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
2021	\$ 2,100.5	56.7%	\$ 2,747.7	2022	\$ 762.2	28.01%	\$ 213.5	\$ 38.7	\$ 356.1	\$ (103.9)
2022	2,055.3	58.0%	2,832.6	2023	785.1	28.00%	219.8	38.9	360.4	(101.6)
2023	2,002.3	59.4%	2,925.8	2024	808.6	28.97%	234.3	39.2	363.5	(90.0)
2024	1,931.6	61.1%	3,037.5	2025	832.9	28.85%	240.3	39.6	367.4	(87.6)
2025	1,849.5	63.1%	3,159.5	2026	857.9	28.83%	247.3	40.0	374.8	(87.5)
2026	1,754.5	65.2%	3,290.2	2027	883.6	28.74%	253.9	40.4	379.3	(84.9)
2027	1,582.9	68.4%	3,432.6	2028	910.1	28.66%	260.8	41.0	379.2	(77.3)
2028	1,392.7	72.1%	3,592.9	2029	937.4	28.58%	267.9	41.7	379.1	(69.4)
2029	1,244.8	75.2%	3,772.6	2030	965.5	27.97%	270.1	42.5	385.7	(73.1)
2030	1,021.4	79.5%	3,961.0	2031	994.5	27.39%	272.3	43.4	384.7	(68.9)
2031	780.8	84.2%	4,167.0	2032	1,024.3	27.33%	279.9	44.4	383.1	(58.8)

Table 3D

Ten-Year Projections (Teachers)

Valuation as of June 30,	Unfunded Actuarial Accrued Liability (in Millions)	Funded Ratio	Actuarial Value of Fund Assets (in Millions)	For Fiscal Year Ending June 30,	Covered Compensation (in Millions)	Employer Contribution Rate	Employer Contribution	Employee Contribution	Benefit Payments, Refunds, and Administrativ	Net External Cash Flow
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
2021	\$ 2,909.3	58.7%	\$ 4,142.2	2022	\$ 1,118.7	25.72%	\$ 287.7	\$ 49.4	\$ 499.9	\$ (162.7)
2022	2,857.8	59.9%	4,263.8	2023	1,146.7	26.16%	300.0	49.7	502.8	(153.2)
2023	2,791.2	61.2%	4,403.8	2024	1,175.4	26.16%	307.5	50.0	505.5	(148.1)
2024	2,713.3	62.7%	4,558.9	2025	1,204.7	26.05%	313.8	50.2	508.5	(144.4)
2025	2,623.0	64.3%	4,728.7	2026	1,234.9	25.95%	320.5	50.5	517.5	(146.5)
2026	2,519.1	66.1%	4,908.1	2027	1,265.7	25.85%	327.2	50.9	520.7	(142.5)
2027	2,337.0	68.6%	5,104.2	2028	1,297.4	25.76%	334.2	51.4	522.0	(136.5)
2028	2,135.1	71.4%	5,320.4	2029	1,329.8	25.67%	341.3	52.0	523.1	(129.8)
2029	1,975.0	73.8%	5,558.5	2030	1,363.1	25.18%	343.2	52.8	531.4	(135.4)
2030	1,737.6	77.0%	5,807.5	2031	1,397.1	24.71%	345.2	53.6	531.9	(133.1)
2031	1,481.7	80.4%	6,076.4	2032	1,432.1	24.64%	352.8	54.6	532.8	(125.3)

Table 4

Schedule of Funding Progress

Valuation Date (1)	Actuarial Value of Assets (AVA) (2)	Actuarial Accrued Liability (3)	Unfunded Actuarial Accrued Liability (UAAL) (3)-(2) (4)	Funded Ratio (2)/(3) (5)	Annual Covered Payroll (6)	UAAL as % of Payroll (4)/(6) (7)
State Employees						
June 30, 2012	2,421,191,542	4,297,261,311	1,876,069,769	56.3%	669,477,539	280.2%
June 30, 2013 ¹	2,411,057,214	4,266,053,163	1,854,995,949	56.5%	664,118,904	279.3%
June 30, 2014 ²	2,449,125,421	4,369,081,872	1,919,956,451	56.1%	675,204,750	284.4%
June 30, 2015	2,476,485,327	4,371,789,900	1,895,304,573	56.6%	691,555,582	274.1%
June 30, 2016	2,468,446,998	4,404,298,648	1,935,851,650	56.0%	693,242,177	279.2%
June 30, 2017	2,485,576,642	4,698,278,808	2,212,702,166	52.9%	704,036,300	314.3%
June 30, 2018	2,516,618,305	4,755,940,934	2,239,322,629	52.9%	711,736,212	314.6%
June 30, 2019	2,557,560,104	4,801,093,045	2,243,532,941	53.3%	740,294,095	303.1%
June 30, 2019 ³	2,557,560,104	4,750,271,989	2,192,711,885	53.8%	739,575,363	296.5%
June 30, 2020	2,597,672,247	4,793,667,018	2,195,994,771	54.2%	777,970,071	282.3%
June 30, 2021	2,747,732,215	4,848,186,502	2,100,454,287	56.7%	762,198,689	275.6%
Teachers						
June 30, 2012	3,746,299,871	6,373,081,344	2,626,781,473	58.8%	971,904,991	270.3%
June 30, 2013 ¹	3,697,787,537	6,265,311,945	2,567,524,408	59.0%	963,525,547	266.5%
June 30, 2014 ²	3,742,152,714	6,424,596,267	2,682,443,553	58.2%	982,565,406	273.0%
June 30, 2015	3,783,601,053	6,438,732,100	2,655,131,047	58.8%	995,994,669	266.6%
June 30, 2016	3,772,348,051	6,466,478,470	2,694,130,419	58.3%	1,009,979,725	266.8%
June 30, 2017	3,778,302,063	6,894,243,228	3,115,941,165	54.8%	1,035,710,229	300.9%
June 30, 2018	3,815,698,266	6,951,505,936	3,135,807,670	54.9%	1,057,179,746	296.6%
June 30, 2019	3,866,452,572	6,994,286,436	3,127,833,864	55.3%	1,086,984,336	287.8%
June 30, 2019 ³	3,866,452,572	6,927,441,023	3,060,988,451	55.8%	1,085,923,864	281.9%
June 30, 2020	3,911,140,020	6,957,586,318	3,046,446,298	56.2%	1,107,935,749	275.0%
June 30, 2021	4,142,172,560	7,051,432,971	2,909,260,411	58.7%	1,118,728,726	260.1%

¹June 30, 2013 actuarial value after changes of actuarial assumptions

²June 30, 2014 actuarial value after reflecting the amendment of Article 21

³June 30, 2019 actuarial value after changes of actuarial assumptions



Table 5

Notes to Required Supplementary Information

Item (1)	State Employees (2)	Teachers (3)
Valuation date	June 30, 2021	June 30, 2021
Actuarial cost method	Entry Age Normal	Entry Age Normal
Amortization method	Level percentage, closed	Level percentage, closed
Remaining amortization period	15 years	17 years
Asset valuation method	5-Yr Smoothed Market	5-Yr Smoothed Market
Actuarial assumptions:		
Investment rate of return *	7.00%	7.00%
Projected salary increase *	3.25% to 6.25%	3.00% to 13.00%
* Includes inflation at:	2.50%	2.50%
Cost of living adjustments	2.10%	2.10%

COLAs are currently suspended for all state employees, teachers, BHDDH nurses, correctional officers, judges and state police until the aggregate funding level of their plans exceeds 80%. It is assumed that the COLAs will be suspended through 2027 due to the current funding level of the plans; however, an interim COLA may be granted in four-year intervals while the COLA is suspended.

Table 6

Plan Net Assets
(Assets at Market or Fair Value)

Item (1)	June 30, 2021 (2)	June 30, 2020 (3)
A. Total ERSRI assets		
1. Cash and cash equivalents	\$ 6,182,790	\$ 5,140,959
2. Receivables:		
a. Transfers receivable	\$ 0	\$ 0
b. Member and employer contributions	15,856,759	20,468,395
c. Due from state for teachers	24,092,359	32,238,993
d. Net investment income and other	1,658,506	1,085,129
e. Total receivables	\$ 41,607,624	\$ 53,792,517
3. Investments		
a. Short-term investment fund	\$ 0	\$ 0
b. Pooled trust	8,107,517,206	6,606,761,266
c. Plan specific investments	0	0
d. Invested securities lending collateral	0	0
e. Total	\$ 8,107,517,206	\$ 6,606,761,266
4. Prepaid expenses	\$ 2,271,451	\$ 2,765,757
5. Total assets	\$ 8,157,579,071	\$ 6,668,460,499
6. Liabilities		
a. Due to other plans	\$ 580,266	\$ 1,113,848
b. Accounts and vouchers payable	4,157,257	5,539,387
c. Securities lending liability	0	0
d. Total liabilities	\$ 4,737,523	\$ 6,653,235
7. Total market value of assets available for benefits (Item 5 - Item 6)	\$ 8,152,841,548	\$ 6,661,807,264
B. Breakdown		
1. State employees	\$ 3,057,226,491	\$ 2,520,792,045
2. Teachers	4,671,641,312	3,798,755,901
3. Teachers' survivors benefits	423,973,744	342,259,317
4. Total	\$ 8,152,841,548	\$6,661,807,264

Table 7**Reconciliation of Plan Net Assets**

Item (1)	Year Ending June 30, 2021	
	State Employees (2)	Teachers (3)
1. Market value of assets at beginning of year	\$ 2,520,792,045	\$ 3,798,755,901
Current year prior period adjustments	0	0
Adjusted market value of assets at BOY	\$ 2,520,792,045	\$ 3,798,755,901
2. Contributions		
a. Members	\$ 39,436,591	\$ 49,381,014
b. Employers	204,267,002	275,778,411
c. Reimbursement of Supplemental Pensions	18,118	790,384
d. Service purchases	71,511	2,652
e. Total	\$ 243,793,222	\$ 325,952,461
3. Investment earnings, net of investment and administrative expenses	\$ 636,694,392	\$ 1,034,477,257
4. Expenditures for the year		
a. Benefit payments	\$ (285,309,775)	\$ (388,897,569)
b. Cost-of-living adjustments	(52,569,992)	(95,483,116)
c. Death benefits	(1,884,267)	(1,014,782)
d. Social security supplements	(1,986,720)	(421,355)
e. Supplemental pensions	(18,118)	(790,384)
f. Refunds	(2,216,774)	(1,185,952)
g. Total expenditures	\$ (343,985,646)	\$ (487,793,158)
5. Transfers and other adjustments	\$ (67,522)	\$ 248,851
6. Market value of assets at end of year	\$ 3,057,226,491	\$ 4,671,641,312

Table 8A

Development of Actuarial Value of Assets (State Employees)

	Year Ending June 30, 2021
1. Market value of assets at beginning of year (prior to adjustment)	\$ 2,520,792,045
2. Net new investments	
a. Contributions	\$ 243,793,222
b. Benefits paid	(341,768,872)
c. Refunds	(2,216,774)
d. Transfers	(67,522)
e. Subtotal	<u>(100,259,946)</u>
3. Market value of assets at end of year	\$ 3,057,226,491
4. Net earnings (3-1-2) (includes misc revenues)	\$ 636,694,392
5. Assumed investment return rate for fiscal year	7.00%
6. Expected return	\$ 172,946,345
7. Excess return (4-6)	\$ 463,748,047

8. Development of amounts to be recognized as of June 30, 2021:

Fiscal Year End	Remaining Deferrals of Excess (Shortfall) of Investment		Offsetting of Gains/(Losses)	Net Deferrals Remaining	Years Remaining	Recognized for this valuation	Remaining after this valuation
	Income*						
	(1)		(2)	(3) = (1) + (2)	(4)	(5) = (3) / (4)	(6) = (3) - (5)
2017	\$ 0		\$ 0	\$ 0	1	\$ 0	\$ 0
2018	0		0	0	2	0	0
2019	(9,466,555)		9,466,555	0	3	0	0
2020	(67,413,647)		67,413,647	0	4	0	0
2021	<u>463,748,047</u>		<u>(76,880,202)</u>	<u>386,867,845</u>	5	<u>77,373,569</u>	<u>309,494,276</u>
Total	\$ 386,867,845		\$ 0	\$ 386,867,845		\$ 77,373,569	\$ 309,494,276

9. Actuarial value of assets as of June 30, 2021 (Item 3 - Item 8)	\$ 2,747,732,215
10. Ratio of actuarial value to market value	89.9%

*Values of \$0 result from the beginning balance being offset by future gains or losses in the opposite direction.



Table 8B

Development of Actuarial Value of Assets (Teachers)

	Year Ending June 30, 2021
1. Market value of assets at beginning of year	\$ 3,798,755,901
2. Net new investments	
a. Contributions	\$ 325,952,461
b. Benefits paid	(486,607,206)
c. Refunds	(1,185,952)
d. Transfers	248,851
e. Subtotal	<u>(161,591,846)</u>
3. Market value of assets at end of year	\$ 4,671,641,312
4. Net earnings (3-1-2) (includes misc revenues)	\$ 1,034,477,257
5. Assumed investment return rate for fiscal year	7.00%
6. Expected return	\$ 260,257,198
7. Excess return (4-6)	\$ 774,220,059

8. Development of amounts to be recognized as of June 30, 2021:

Fiscal Year End	Remaining Deferrals of Excess (Shortfall)		Net Deferrals Remaining	Years Remaining	Recognized for this valuation	Remaining after this valuation
	of Investment Income*	Offsetting of Gains/(Losses)				
	(1)	(2)	(3) = (1) + (2)	(4)	(5) = (3) / (4)	(6) = (3) - (5)
2017	\$ 0	\$ 0	\$ 0	1	\$ 0	\$ 0
2018	0	0	0	2	0	0
2019	(14,616,574)	14,616,574	0	3	0	0
2020	(97,767,545)	97,767,545	0	4	0	0
2021	<u>774,220,059</u>	<u>(112,384,119)</u>	<u>661,835,940</u>	5	<u>132,367,188</u>	<u>529,468,752</u>
Total	\$ 661,835,940	\$ 0	\$ 661,835,940		\$ 132,367,188	\$ 529,468,752

9. Actuarial value of assets as of June 30, 2021 (Item 3 - Item 8) \$ 4,142,172,560

10. Ratio of actuarial value to market value 88.7%

*Values of \$0 result from the beginning balance being offset by future gains or losses in the opposite direction.



Table 9**Target Distribution of Assets at Market Value
(Percentage of Total Investments)**

Item (1)	June 30, 2021 (2)
US Equity	24.3%
International Developed Equity	11.1%
Emerging Markets Equity	4.6%
Private Equity and Opportunistic Private Credit	12.5%
Non-Core Real Estate	2.5%
Equity Options	2.0%
EMD (50/50 Blend)	2.0%
Liquid Credit	3.0%
Private Credit	3.0%
CLOs	2.0%
Treasury Duration	5.0%
Systematic Trend	5.0%
Core Real Estate	4.0%
Private Infrastructure	4.0%
IG Corp Credit	3.3%
Securitized Credit	3.3%
Absolute Return	6.5%
Cash	2.0%
Total investments	100.0%

Table 10

History of Investment Return Rates
 (Net of Investment and Administrative Expenses)

Year Ending June 30 of	Market	Actuarial
(1)	(2)	(3)
1995	17.0%	10.2%
1996	13.7%	13.7%
1997	19.1%	19.1%
1998	16.1%	16.5%
1999	10.1%	14.7%
2000	9.1%	8.8%
2001	-11.0%	4.9%
2002	-8.4%	0.9%
2003	2.6%	-0.8%
2004	18.7%	0.4%
2005	11.4%	1.8%
2006	11.6%	7.4%
2007	18.2%	13.0%
2008	-5.8%	10.7%
2009	-20.1%	2.4%
2010	14.0%	0.8%
2011	19.5%	2.1%
2012	1.4%	3.9%
2013	11.0%	6.1%
2014	14.9%	8.2%
2015	2.2%	7.3%
2016	-0.2%	5.5%
2017	11.5%	5.7%
2018	7.9%	6.3%
2019	6.3%	6.3%
2020	3.7%	5.7%
2021	27.0%	10.1%
Average Returns:		
Last 5 Years	11.0%	6.8%
Last 10 Years	8.3%	6.5%
Since 1995	7.7%	7.0%

Table 11A

Analysis of Change in Employer Cost

Basis (1)	State Employees (2)	Teachers (3)
1. Employer contribution rates from prior valuation	28.00%	26.16%
2. Impact of changes, gains and losses		
a. Non-economic liability experience (gain)/loss	0.13%	0.16%
b. Salary (gain)/loss	(0.13%)	(0.08%)
c. Total payroll growth (gain)/loss	1.27%	0.35%
d. Investment experience (gain)/loss	(0.74%)	(0.91%)
e. Actual COLA (3.50%)	0.04%	0.05%
f. Recognition of 2017 & 2020 Assumption Changes	0.59%	0.56%
g. Decrease in Normal Cost from New Hires	(0.19%)	(0.13%)
h. Change in Assumptions/Methods	0.00%	0.00%
i. Total	0.97%	0.00%
3. Employer contribution rates from current valuation	28.97%	26.16%

Table 11B

History of Employer Contribution Rates

Valuation Date as of June 30, (1)	Fiscal Year Ending June 30, (2)	Employer Contribution Rate (3)
State Employees		
2004	2007	18.40%
2005	2008	20.77%
2006	2009	21.64% ¹
2007	2010	20.78% ²
2008	2011	20.78%
2009	2012	22.98%
2010	2013	21.18% ³
2011	2014	23.05%
2012	2015	23.33%
2013	2016	23.64%
2014	2017	25.34% ⁴
2015	2018	24.87%
2016	2019	25.75%
2017	2020	26.39%
2018	2021	27.54%
2019	2022	28.01%
2020	2023	28.00%
2021	2024	28.97%
Teachers		
2004	2007	19.64%
2005	2008	22.01%
2006	2009	20.07% ¹
2007	2010	19.01% ²
2008	2011	19.01%
2009	2012	22.32%
2010	2013	19.29% ³
2011	2014	20.68%
2012	2015	22.60%
2013	2016	23.14%
2014	2017	23.13% ⁴
2015	2018	23.13%
2016	2019	23.51%
2017	2020	24.61%
2018	2021	25.25%
2019	2022	25.72%
2020	2023	26.16%
2021	2024	26.16%

¹ Restated after adopting the amendment of Article 7.

² Restated after adopting the amendment of Article 16.

³ Restated after reflecting the Rhode Island Retirement Security Act of 2011.

⁴ Restated after adopting the amendment of Article 21.

Table 11C

Analysis of Change in UAAL

Basis (1)	State Employees (2)	Teachers (3)
1. UAAL as of June 30, 2020	\$ 2,196	\$ 3,046
2. Impact of changes, gains and losses		
a. Interest at 7.00% for one year	154	213
b. Expected amortization payments	(181)	(242)
c. Actual cash flows (amortization payments) *	1	-
d. Investment experience (gain)/loss	(72)	(124)
e. Actual COLA (3.50%)	3	5
f. Salary (gain)/loss	(13)	(11)
g. Non-economic liability experience (gain)/loss	12	22
h. Changes in assumptions/methods	-	-
i. Changes in plan provisions	-	-
j. Total	\$ (96)	\$ (137)
3. UAAL as of June 30, 2021	\$ 2,100	\$ 2,909

Note: All dollar amounts are shown in millions.

**The Loss due to Actual Amortization Payments reflects the difference in payroll growth between the valuation that sets the contribution rates for the Fiscal Year, and the actual payroll that is paid during the year.*

Table 12A

Membership Data (State Employees)

	June 30, 2021 (1)	June 30, 2020 (2)	June 30, 2019 (3)
1. Active members			
a. Eligible for 2.00% Multiplier	1,102	1,406	1,564
b. Hired before 2012 without 2.00% Multiplier	5,187	5,498	5,729
c. Zero Service as of 06/30/2012	4,514	4,294	4,025
d. Total Count	10,803	11,198	11,318
e. Number vested	7,726	8,011	8,071
f. Annualized salaries	\$ 733,336,552	\$ 750,004,772	\$729,415,756
g. Average salary	67,883	66,977	64,447
h. Average age	49.2	49.3	49.2
i. Average service	13.7	13.8	13.6
2. Inactive members			
a. Number	4,154	3,875	3,784
3. Service retirees			
a. Number	9,270	9,114	9,130
b. Total annual benefits	\$ 300,008,653	\$ 289,179,615	\$299,947,210
c. Average annual benefit	32,363	31,729	32,853
d. Average age	74.3	74.3	74.1
4. Disabled retirees			
a. Number	797	775	774
b. Total annual benefits	\$ 18,095,550	\$ 17,499,796	\$17,150,822
c. Average annual benefit	22,705	22,580	22,159
d. Average age	66.6	66.5	66.0
5. Beneficiaries and spouses			
a. Number	1,306	1,326	1,320
b. Total annual benefits	\$ 25,052,311	\$ 24,946,505	\$25,297,187
c. Average annual benefit	19,182	18,813	19,165
d. Average age	76.6	76.8	76.8

Table 12B

Membership Data (Teachers)

	June 30, 2021 (1)	June 30, 2020 (2)	June 30, 2019 (3)
1. Active members			
a. Eligible for 2.00% Multiplier	1,214	1,402	1,586
b. Hired before 2012 without 2.00% Multiplier	8,290	8,555	8,773
c. Zero Service as of 06/30/2012	3,868	3,517	3,152
d. Number	13,372	13,474	13,511
e. Number vested	11,028	11,140	11,971
f. Annualized salaries	\$ 1,098,198,511	\$1,090,815,161	\$1,070,499,270
g. Average salary	82,127	80,957	79,232
h. Average age	46.8	46.8	46.7
i. Average service	15.9	15.7	15.5
2. Inactive members			
a. Number	4,227	4,001	3,888
3. Service retirees			
a. Number	10,441	10,338	10,284
b. Total annual benefits	\$ 456,696,521	\$451,779,276	\$455,784,380
c. Average annual benefit	43,741	43,701	44,320
d. Average age	74.2	73.7	73.3
4. Disabled retirees			
a. Number	356	342	323
b. Total annual benefits	\$ 10,629,328	\$10,128,301	\$9,480,940
c. Average annual benefit	29,858	29,615	29,353
d. Average age	66.2	66.2	66.4
5. Beneficiaries and spouses			
a. Number	601	594	589
b. Total annual benefits	\$ 15,630,218	\$15,340,474	\$15,024,177
c. Average annual benefit	26,007	25,826	25,508
d. Average age	75.2	74.8	74.8

Table 13

Historical Summary of Active Member Data

Valuation as of June 30,	Active Members		Total Salaries		Average Salary		Average Age	Average Service
	Number	Percent Increase	Amount in \$ Millions	Percent Increase	\$ Amount	Percent Increase		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
State Employees								
2010	11,122	0.9%	600	4.4%	53,936	3.5%	48.6	13.8
2011	11,233	1.0%	617	2.9%	54,949	1.9%	48.8	14.0
2012	11,166	-0.6%	644	4.3%	57,667	4.9%	49.1	14.2
2013	11,280	0.4%	650	5.3%	57,624	4.9%	49.2	14.1
2014	11,301	0.2%	653	0.5%	57,813	0.3%	49.4	14.2
2015	11,194	-0.9%	667	2.1%	59,615	3.1%	49.7	14.4
2016	11,083	-1.0%	670	0.4%	60,482	1.5%	49.9	14.6
2017	11,152	0.6%	686	2.4%	61,538	1.7%	49.8	14.3
2018	10,978	-1.6%	686	0.0%	62,519	1.6%	49.4	13.9
2019	11,318	3.1%	729	6.3%	64,447	3.1%	49.2	13.6
2020	11,198	-1.1%	750	2.8%	66,977	3.9%	49.3	13.8
2021	10,803	-3.5%	733	-2.2%	67,883	1.4%	49.2	13.7
Teachers								
2010	13,530	-1.2%	937	0.6%	69,235	1.8%	44.9	12.9
2011	13,381	-1.1%	966	3.1%	72,174	4.2%	45.2	13.3
2012	13,212	-1.3%	962	-0.4%	72,809	0.9%	45.3	13.4
2013	13,193	-1.4%	936	-3.1%	70,965	-1.7%	45.4	13.6
2014	13,266	0.6%	952	1.7%	71,754	1.1%	45.6	14.0
2015	13,272	0.0%	968	1.7%	72,942	1.7%	45.8	14.3
2016	13,206	-0.5%	968	-0.1%	73,265	0.4%	46.0	14.6
2017	13,310	0.8%	1,001	3.4%	75,191	2.6%	46.1	14.8
2018	13,297	-0.1%	1,032	3.1%	77,581	3.2%	46.2	15.0
2019	13,511	1.6%	1,070	3.8%	79,232	2.1%	46.7	15.5
2020	13,474	-0.3%	1,091	1.9%	80,957	2.2%	46.8	15.7
2021	13,372	-0.8%	1,098	0.7%	82,127	1.4%	46.8	15.9



Table 14A

Distribution of Active Members by Age and by Years of Service (State Employees) As of June 30, 2021

Attained Age	Years of Credited Service												Total Count & Avg. Comp.
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	
Under 25	53 \$48,108	28 \$44,718	21 \$46,839	3 \$38,600	0 \$0	1 \$34,140	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	106 \$46,560
25-29	144 \$52,626	118 \$50,043	135 \$52,562	110 \$55,919	50 \$57,812	52 \$52,896	1 \$37,555	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	610 \$53,129
30-34	121 \$59,848	108 \$52,879	160 \$57,555	118 \$60,597	123 \$60,640	280 \$62,687	54 \$68,828	2 \$51,241	0 \$0	0 \$0	0 \$0	0 \$0	966 \$60,188
35-39	83 \$55,052	78 \$53,643	111 \$61,610	81 \$59,736	95 \$64,274	288 \$66,689	230 \$66,755	69 \$66,188	0 \$0	0 \$0	0 \$0	0 \$0	1,035 \$63,443
40-44	59 \$57,865	54 \$57,280	73 \$63,128	73 \$65,506	63 \$63,778	255 \$67,644	211 \$68,440	201 \$71,766	53 \$77,429	0 \$0	0 \$0	0 \$0	1,042 \$67,307
45-49	45 \$52,879	61 \$61,442	67 \$59,574	55 \$61,662	39 \$63,879	193 \$65,387	173 \$67,932	242 \$72,739	222 \$80,276	21 \$75,617	0 \$0	0 \$0	1,118 \$69,218
50-54	56 \$61,606	43 \$58,871	77 \$61,451	56 \$59,831	43 \$65,645	224 \$63,034	208 \$65,786	230 \$71,160	285 \$79,179	189 \$85,986	160 \$77,816	0 \$0	1,571 \$71,499
55-59	39 \$54,846	38 \$58,519	74 \$57,271	57 \$56,866	50 \$55,464	257 \$57,983	247 \$65,279	222 \$69,082	237 \$75,363	227 \$83,651	426 \$83,065	91 \$83,949	1,965 \$71,680
60-64	19 \$54,772	29 \$57,975	47 \$63,136	27 \$68,433	32 \$53,527	189 \$63,953	201 \$58,053	231 \$64,532	251 \$75,281	161 \$82,842	226 \$83,763	141 \$89,520	1,554 \$71,878
65 & Over	9 \$113,807	6 \$58,813	19 \$68,343	16 \$67,046	11 \$61,430	117 \$67,619	135 \$61,010	157 \$66,761	133 \$72,186	73 \$77,924	74 \$82,407	86 \$85,479	836 \$71,521
Total	628 \$56,348	563 \$54,498	784 \$58,626	596 \$60,305	506 \$61,164	1,856 \$63,811	1,460 \$65,078	1,354 \$69,268	1,181 \$76,925	671 \$83,240	886 \$82,240	318 \$86,833	10,803 \$67,883



Table 14B

Distribution of Active Members by Age and by Years of Service (Teachers) As of June 30, 2021

Attained Age	Years of Credited Service												Total Count & Avg. Comp.
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	
Under 25	37 \$52,757	80 \$43,689	14 \$47,918	1 \$48,650	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	132 \$46,717
25-29	83 \$50,263	166 \$48,005	230 \$49,608	132 \$53,865	102 \$56,891	97 \$61,678	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	810 \$52,403
30-34	44 \$57,011	91 \$55,036	102 \$57,337	89 \$58,792	134 \$61,200	614 \$69,317	75 \$83,006	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	1,149 \$65,783
35-39	40 \$67,657	72 \$59,622	83 \$62,789	80 \$65,851	73 \$65,006	447 \$75,053	555 \$84,652	129 \$87,380	0 \$0	0 \$0	0 \$0	0 \$0	1,479 \$77,097
40-44	28 \$65,085	61 \$63,285	60 \$67,066	36 \$72,497	48 \$71,439	263 \$76,741	351 \$85,878	807 \$88,602	212 \$90,583	0 \$0	0 \$0	0 \$0	1,866 \$84,018
45-49	20 \$82,503	33 \$70,113	53 \$61,619	33 \$64,581	51 \$71,239	201 \$80,276	195 \$86,226	525 \$89,411	914 \$90,065	105 \$93,874	0 \$0	0 \$0	2,130 \$86,883
50-54	13 \$77,263	29 \$78,314	29 \$74,597	32 \$70,386	30 \$75,051	181 \$77,681	188 \$86,560	390 \$89,334	738 \$90,767	567 \$92,268	120 \$93,788	0 \$0	2,317 \$88,767
55-59	12 \$86,892	19 \$54,794	17 \$67,961	21 \$68,693	13 \$77,497	100 \$78,559	120 \$85,972	269 \$87,971	371 \$90,655	318 \$92,660	457 \$93,966	47 \$96,779	1,764 \$89,635
60-64	1 \$125,547	12 \$72,399	9 \$73,438	4 \$103,738	7 \$72,583	67 \$80,023	69 \$84,992	194 \$87,947	337 \$90,948	196 \$92,746	185 \$92,322	76 \$94,216	1,157 \$89,830
65 & Over	2 \$64,777	5 \$52,488	5 \$80,109	4 \$66,739	4 \$81,295	30 \$82,214	33 \$83,636	97 \$87,881	165 \$90,024	110 \$90,019	73 \$93,168	40 \$93,031	568 \$88,757
Total	280 \$61,119	568 \$55,251	602 \$57,825	432 \$61,984	462 \$64,726	2,000 \$74,077	1,586 \$85,359	2,411 \$88,679	2,737 \$90,481	1,296 \$92,376	835 \$93,506	163 \$94,664	13,372 \$82,127



APPENDIX 1

SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

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APPENDIX 1

Summary of Actuarial Methods and 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 present value of the supplemental member contributions for members with 20 years of service as of June 30, 2012 is also subtracted. The unfunded actuarial accrued liability (UAAL) is then determined as (i) the actuarial accrued liability, minus (ii) the actuarial value of assets.

APPENDIX 1 (Continued)

6. The amortization contribution rate is the level percentage of payroll required to reduce the UAAL to zero over the remaining amortization period. 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 amortization payment for the applicable fiscal year is first determined based on the individual amortization bases. The covered payroll is projected forward for two years, and we then determine the amortization rate by dividing the amortization payment by the projected payroll. Contributions are assumed to be made monthly throughout the year.

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 for the UAAL that existed at that time. In addition, in conjunction with the Article 21 legislation, the amortization period for the local portion of the UAAL of the Teacher's Plan existing as of June 30, 2014 was reset to 25 years from June 30, 2014. New gains and losses each year will be amortized over individual 20 year periods. At any time that the System is in an overfunded status, the amortization schedule will be a rolling 20 year amortization of any surplus.

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 State Employees: The sum of (i) a 3.25% wage inflation assumption (composed of a 2.50% price inflation assumption and a 0.75% 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.



APPENDIX 1 (Continued)

Salary Increase Rates						
Service	State Employees		Correctional Officers		Teachers	
	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%	4.25%	2.00%	5.25%	10.00%	13.00%
2	2.00%	5.25%	3.00%	6.25%	9.00%	12.00%
3	3.00%	6.25%	4.00%	7.25%	6.25%	9.25%
4	2.75%	6.00%	3.75%	7.00%	5.50%	8.50%
5	2.75%	6.00%	3.75%	7.00%	5.00%	8.00%
6	2.50%	5.75%	3.50%	6.75%	5.00%	8.00%
7	1.25%	4.50%	2.25%	5.50%	4.50%	7.50%
8	1.00%	4.25%	2.00%	5.25%	4.25%	7.25%
9	1.00%	4.25%	2.00%	5.25%	4.00%	7.00%
10	1.00%	4.25%	2.00%	5.25%	4.00%	7.00%
11	1.00%	4.25%	1.50%	4.75%	0.00%	3.00%
12	2.00%	5.25%	2.50%	5.75%	0.00%	3.00%
13	1.25%	4.50%	1.75%	5.00%	0.00%	3.00%
14	1.00%	4.25%	1.50%	4.75%	0.00%	3.00%
15	1.00%	4.25%	1.50%	4.75%	0.00%	3.00%
16	1.00%	4.25%	1.00%	4.25%	0.00%	3.00%
17	0.50%	3.75%	1.00%	4.25%	0.00%	3.00%
18	0.50%	3.75%	1.00%	4.25%	0.00%	3.00%
19	0.50%	3.75%	1.00%	4.25%	0.00%	3.00%
20	0.50%	3.75%	1.00%	4.25%	0.00%	3.00%
21	0.50%	3.75%	1.00%	4.25%	0.00%	3.00%
22	0.25%	3.50%	1.00%	4.25%	0.00%	3.00%
23	0.25%	3.50%	1.00%	4.25%	0.00%	3.00%
24	0.25%	3.50%	1.00%	4.25%	0.00%	3.00%
25 or more	0.00%	3.25%	0.00%	3.25%	0.00%	3.00%

APPENDIX 1 (Continued)

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.

4. Payroll growth rate: In the amortization of the unfunded actuarial accrued liability, payroll is assumed to increase 3.00% for State Employees and 2.50% for Teachers per year. This increase rate is solely due to the effect of wage inflation on, with no allowance for future membership growth.
5. Post-retirement Benefit Increase: Post-retirement benefit increases are assumed to be 2.10%, 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, 2021, it is assumed that the COLAs will be suspended through 2027 due to the current funding level of the plans. The actual amount of the COLA is determined based on 50% of the plan's five-year average investment rate of return minus 5.00% which will range from zero to 4.0%, and 50% of the lesser of 3% or last year's CPI-U increase for a total maximum increase of 3.50%.

B. Demographic Assumptions

1. Post-termination mortality rates (non-disabled)
 - a. Male state employees: PUB-10 Median Table for Healthy General Employee Males, loaded by 115%, projected with Scale Ultimate MP16.
 - b. Female state employees: PUB-10 Median Table for Healthy General Employee Females, loaded by 111%, projected with Scale Ultimate MP16.
 - c. Male teachers: PUB-10 Median Table for Healthy Teacher Males, loaded by 108%, projected with Scale Ultimate MP16.
 - d. Female teachers: PUB-10 Median Table for Healthy Teacher Females, loaded by 115%, projected with Scale Ultimate MP16.

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				
	2020	2025	2030	2035	2040
State Employee - Male	20.7	21.1	21.5	21.9	22.3
State Employee - Female	23.5	23.9	24.3	24.7	25.0
Teacher – Male	22.8	23.2	23.6	24.0	24.4
Teacher – Female	24.6	25.0	25.3	25.7	26.0

APPENDIX 1 (Continued)

2. Post-retirement mortality (disabled lives): Separate set of rates are used for state employees and teachers
 - a. State Employees: Sex distinct PUB-10 Tables for General Disabled Retirees by Occupation, projected with Scale Ultimate MP16.
 - b. Teachers: Sex distinct PUB-10 Tables for Teacher Disabled Retirees by Occupation females, projected with Scale Ultimate MP16.
3. Pre-retirement mortality: Separate set of rates are used for state employees and teachers
 - a. State Employees: Sex distinct PUB-10 Tables for General Employees by Occupation, projected with Scale Ultimate MP16.
 - b. Teachers: Sex distinct PUB-10 Tables for Teachers Employees by Occupation for females, projected with Scale Ultimate MP16.
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	0.45	0.09	0.36	0.07	0.27	0.02	0.23	0.02
30	0.55	0.11	0.44	0.09	0.33	0.02	0.28	0.02
35	0.75	0.15	0.6	0.12	0.45	0.03	0.38	0.03
40	1.1	0.22	0.88	0.18	0.66	0.04	0.55	0.04
45	1.8	0.36	1.44	0.29	1.08	0.07	0.90	0.07
50	3.05	0.61	2.44	0.49	1.83	0.12	1.53	0.12
55	5.05	1.01	4.04	0.81	3.03	0.20	2.53	0.20
60	7.05	1.41	5.64	1.13	4.23	0.28	3.53	0.28
65	11.55	2.31	9.24	1.85	6.93	0.46	5.78	0.46

In addition, for members that are above age 60 and not eligible to retire, 2% is added to the rates above. For members that are age 55 with 20 Years of service and not eligible to retire, another 1% is added to the rates above.

APPENDIX 1 (Continued)

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

Service	State Employees	Correctional Officers	Teachers
1	0.168000	0.100000	0.157500
2	0.106218	0.070000	0.105000
3	0.084806	0.057393	0.078750
4	0.072281	0.049595	0.068052
5	0.063394	0.045034	0.050571
6	0.056501	0.041797	0.040169
7	0.050868	0.039287	0.033280
8	0.046107	0.037236	0.028385
9	0.041982	0.035502	0.024731
10	0.038344	0.033999	0.021900
11	0.035089	0.032674	0.019643
12	0.032145	0.031489	0.017804
13	0.029457	0.030417	0.016275
14	0.026984	0.029438	0.014985
15	0.024695	0.028537	0.013881
16	0.022563	0.027704	0.012928
17	0.020570	0.026927	0.012094
18	0.018697	0.026201	0.011361
19	0.016931	0.025519	0.010710
20	0.015262	0.024876	0.010128
21	0.013677	0.024268	0.009606
22	0.012170	0.023691	0.009135
23	0.010733	0.023142	0.008707
24	0.009360	0.022619	0.008316
25	0.008045	0.022119	0.007959

APPENDIX 1 (Continued)

6. Retirement rates (unreduced):

For State Employees (except Correctional Officers): 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 65 eligible for unreduced retirement, a flat 35% per year retirement probability for members at age 65 or older eligible for unreduced retirement. A 30% retirement probability at first eligibility will be applied for employees under age 65.

For Correctional Officers: A set of unisex rates, indexed by service, as shown below. 100% of officers who have attained Social Security normal retirement age and have at least 5 years of service are assumed to retire.

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%

APPENDIX 1 (Continued)

7. Reduced retirement: Rates based on the years from Normal Retirement Age, as shown below:

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

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: 85% 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.

APPENDIX 1 (Continued)

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: For members who terminated service prior to June 30, 2017 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. For members who terminated service after June 30, 2017, the expected liability at termination has been carried forward with interest from the last valuation the member was active.
12. Decrement timing: For all non-teachers employees, 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 or Teacher), 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.



APPENDIX 1 (Continued)

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. An additional adjustment was made so that a member's compensation would not be less than it was in the previous 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.

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APPENDIX 2

SUMMARY OF BENEFIT PROVISIONS

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APPENDIX 2

Summary of Benefit Provisions

1. **Effective Date and Authority:** The Employees' Retirement System of Rhode Island (ERSRI) became effective on July 1, 1936 for State Employees and on July 1, 1949 for Teachers. Benefits for State Employees are described in Rhode Island General Laws, Title 36, Chapter 36-10, and benefits for Teachers are described in Rhode Island General Laws, Title 16, Chapter 16-16.
2. **Plan Year:** A twelve-month period ending June 30th.
3. **Administration:** ERSRI is administered by the State of Rhode Island Retirement Board. However, the State Investment Commission is responsible for the investment of the trust assets, including the establishment of the asset allocation policy.
4. **Type of Plan:** ERSRI is a qualified governmental defined benefit retirement plan. Separate contribution rates are determined for state employees and for teachers. For Governmental Accounting Standards Board purposes, it is a cost-sharing multiple employer plan.
5. **Eligibility:** Most Rhode Island state employees and certified public school teachers participate in ERSRI. Certain employees of the Airport Corporation, the Economic Development Corporation, and the Narragansett Bay Commission participate in the plan as though they were state employees. State police officers, state judges, and teachers and administrators in the public colleges and universities are covered by their own separate systems, and are therefore excluded. Certain elected state officials are excluded unless they make an election to join ERSRI. Superintendents, principals, business agents and other administrators participate as teachers. Non-certified public school employees, such as teacher's aides, janitors, secretaries, and bus drivers, cannot participate in ERSRI, although they may be covered by the Municipal Employees Retirement System (MERS) or a separate plan maintained by the town or city. Eligible employees become members as of their date of employment.
6. **Employee Contributions:** Effective July 1, 2012, State Employees (excluding Correctional Officers) and Teachers contribute 3.75% of their salary per year. For State Employees and Teachers with 20 or more years of service as of June 30, 2012 the contribution rate beginning July 1, 2015 will be 11.0%. Correctional Officers contribute 8.75% of their salary per year. The state "picks up" the members' contributions for its employees under the provisions of Internal Revenue Code (IRC) Section 414(h). At their option, the city or town employing a Teacher may also pick up their members' contributions.
7. **Salary:** Salary includes the member's base earnings plus any payments under a regular longevity or incentive plan. Salary excludes overtime, unused sick and vacation leave, severance pay, and other extraordinary compensation. Certain amounts that are excluded from taxable wages, such as amounts sheltered under a Section 125 plan or amounts picked up by the employer under IRC Section 414(h), are not excluded from salary.



APPENDIX 2 (Continued)

8. Employer Contributions: For Teachers, the state contributes 40% of the employer contribution rate and the city, town or other local employer contributes the remaining 60%. (This basic 40-60 split is further adjusted, since the State bears the cost of repaying certain amounts taken from the trust in the early 1990's.) Contributions determined in a given actuarial valuation go into effect two years after the actuarial valuation.

In fiscal years beginning after June 30, 2005, if the State's contribution on behalf of State Employees decreases, the State shall appropriate an additional amount to the retirement trust. Such amount shall be equal to 20% of any decrease in expected contributions.

9. Service: Employees receive credit for service while a member. In addition, a member may purchase credit for certain periods, such as time spent teaching at a public school in another state, by making an additional contribution to purchase the additional service and those costs will be determined at full actuarial value, except for purchases of military service and redeposits of previously refunded contributions. Special rules and limits govern the purchase of additional service and the contribution required.
10. Final Average Compensation (FAC): For members eligible to retire as of September 30, 2009, their Final Average Compensation (FAC) will be based on the highest three consecutive annual salaries. For members not eligible to retire as of September 30, 2009, their FAC will be based on the highest five consecutive years of salary. Monthly benefits are based on one-twelfth of this amount.

11. Retirement

- a. Eligibility: As of July 1, 2012, retirement eligibility dates will be as follows.
 - (i) Members with less than five years of contributory service as of June 30, 2012 and members hired on or after that date are eligible for retirement on or after their Social Security normal retirement age.
 - (ii) Members who had at least five years of contributory service as of June 30, 2012 will be eligible for retirement at an individually determined age. This age is the result of interpolating between the member's Article 7 Retirement Date, described in Section 11(b) below, and the retirement age applicable to members hired after June 30, 2012 in (i) above. The interpolation is based on service as of June 30, 2012 divided by projected service at the member's Article 7 Retirement Date. The minimum retirement age is 59.
 - (iii) Members with 10 or more years of contributory service on June 30, 2012 may choose to retire at their Article 7 Retirement Date if they continue to work and contribute until that date. If option is elected, the retirement benefit will be calculated using the benefits you have accrued as of June 30, 2012, i.e., the member will accumulate no additional defined benefits after this date, but the benefit will be paid without any actuarial reduction.
 - (iv) Effective July 1, 2015, members will be eligible to retire with full benefits at the earlier of their current RIRSA date described in sections (i) – (iii) above or upon the attainment of age 65 with 30 years of service, age 64 with 31 years of service, age 63 with 32 years of service, or age 62 with 33 years of service.



APPENDIX 2 (Continued)

- (v) A member who is within five years of reaching their retirement eligibility date, described in this section, and has 20 or more years of service, may elect to retire at any time with a reduced benefit. The reduction is 9% for year 1, 8% for year 2, and 7% for each year thereafter.
 - (vi) Nurses (RNs) employed by MHRH are eligible to retire when they are at least 55 years old and have a minimum of 25 years of contributing service.
 - (vii) Correctional officers are eligible to retire when they are at least 55 years old and have a minimum of 25 years of contributing service. If a member has 25 years of service as of June 30, 2012, they may retain their Article 7 Retirement Date. Correctional officers who do not work for 25 years will not receive their pension benefit until they reach their Social Security normal retirement age.
- b. Article 7 Retirement Date (member's retirement date as of September 30, 2009):
- (i) Grandfathered Schedule A members—members with at least 10 years of contributory service at June 30, 2005 and eligible for retirement at September 30, 2009—are eligible to retire on or after age 60 if they have credit for 10 years of service, or at any age if they have credit for 28 years of service.
 - (ii) Correctional officers who have reached age 50 and have credit for 20 years of service as of September 30, 2009 are eligible to retire and are grandfathered.
 - (iii) Nurses (RNs) employed by MHRH who have reached age 50 with 25 years of service by September 30, 2009 are eligible to retire and are grandfathered.
 - (iv) Schedule B members—members with less than 10 years of contributory service as of June 30, 2005 and members hired on or after that date—are eligible for retirement on or after age 65 if they have credit for 10 years of service, or on or after age 62 if they have credit for 29 years of service. In addition, a member who attains age 62 with at least 20 years of service credit may retire with an actuarially reduced retirement benefit. The reduction is based on the difference between 65 and the member's age at retirement.
 - (v) Correctional officers who are hired after September 30, 2009 become eligible to retire when they have reach age 55 and have credit for 25 years of service.
 - (vi) Nurses (RNs) employed by MHRH who are hired after September 30, 2009 become eligible when they have reach age 55 and have credit for 25 years of service.
 - (vii) Schedule A members who are not grandfathered, i.e., members who had at least 10 years of creditable service at June 30, 2005 but who were not eligible to retire on September 30, 2009, will be eligible for retirement at an individually determined age. This age is the result of interpolating between the retirement age under the rules applicable to grandfathered employees in (i) above and the retirement age applicable to members hired after September 30, 2009 in (iv) above. The interpolation is based on service as of September 30, 2009 divided by projected service at the retirement age under (i) above.

APPENDIX 2 (Continued)

- (viii) Correctional officers hired on or before September 30, 2009 who are not eligible for retirement at that date will have an individually determined retirement age. This age is the result of interpolating between the retirement age for grandfathered employees in (ii) above and the retirement age applicable to members hired after September 30, 2009 in (v) above.
- (ix) Similarly, MHRH nurses (RNs) hired on or before September 30, 2009 who are not eligible to retire at that date will have an individually determined retirement age. This age is the result of interpolating between the retirement age for grandfathered employees in (iii) above and the retirement age applicable to members hired after September 30, 2009 in (vi) above.
- c. Monthly Benefit: Upon retirement, members are eligible to commence a benefit determined as the sum of:
 - (i) Benefit accrual of 1.0% per year for all service after June 30, 2015 unless the member had 20 or more years of service as of June 30, 2012 in which case the benefit accrual is 2.0% per year for service after June 30, 2015, and
 - (ii) Benefit accrual of 1.0% per year for all service from July 1, 2012 through June 30, 2015, and
 - (iii) Benefit accruals earned as of June 30, 2012, described in Section (d), below.

For purposes of calculating benefit accruals for service after June 30, 2012, the FAC is determined through retirement. Additionally, Correctional Officers who have completed 25 years of service on or before June 30, 2012 will continue to receive the benefit accrual rate under previous law for years 31 through 35 of service.

APPENDIX 2 (Continued)

- d. Benefit accruals earned as of June 30, 2012: The retirement benefit is a percentage of the member's monthly FAC. This percentage is a function of the member's service as described below. For purposes of determining the benefit accruals earned as of June 30, 2012, the service and FAC are frozen as of June 30, 2012.
- (i) For grandfathered Schedule A members (members with at least 10 years of contributory service at June 30, 2005 and eligible for retirement at September 30, 2009), benefits are based under this schedule (Schedule A):

For Service In:	Years	Benefit Percentage Earned
The first 10 years of service	1 – 10	1.7% per year
The next 10 years of service	11 – 20	1.9% per year
The next 14 years of service	21 – 34	3.0% per year
The next 1 year of service	35	2.0% per year

The maximum benefit is 80% of FAC.

- (ii) For Schedule B members (members with less than 10 years of contributory service as of June 30, 2005) and for all future hires, benefits are based on the following schedule (Schedule B):

For Service In:	Years	Benefit Percentage Earned
The first 10 years of service	1 – 10	1.6% per year
The next 10 years of service	11 – 20	1.8% per year
The next 5 years of service	21 – 25	2.0% per year
The next 5 years of service	26 – 30	2.25% per year
The next 7 years of service	31 – 37	2.50% per year
The next 1 year of service	38	2.25% per year

The maximum benefit is 80% of FAC.

- (iii) For Schedule A members who are not grandfathered, i.e., members who had at least 10 years of creditable service at June 30, 2005 but who were not eligible to retire on September 30, 2009, benefits are based on Schedule A (under (i) above) for service through September 30, 2009 and on Schedule B (under (ii) above) for service after September 30, 2009. The maximum benefit is 80% of FAC.



APPENDIX 2 (Continued)

(iv) MHRH nurses receive a benefit determined under the appropriate formula above.

(v) Correctional Officers receive a benefit computed under a different formula:

For Service In:	Years	Benefit Percentage Earned
The first 30 years of service	1 – 30	2.0% per year
The next 1 year of service	31	6.0% per year
The next 1 year of service	32	5.0% per year
The next 1 year of service	33	4.0% per year
The next 1 year of service	34	3.0% per year
The next 14 years of service	35	2.0% per year

Members with less than 25 years of service as of June 30, 2012 receive a flat 2.0% per year of service for years 1-30, 3.0 per year of service for years 31-35, and 2.0% per year of service in excess of 35. The maximum benefit for correctional officers is the greater of the benefit accrual as of June 30, 2012 or 75% of FAC.

- e. Payment Form: Benefits are paid as a monthly life annuity. Optional forms of payment are available; see Item 16 below.
- f. Death benefit: After retirement, death benefits are based on the form of annuity elected. If no option is elected, i.e., if payments are made as a life annuity, there is a minimum death benefit equal to the sum of the member's contributions without interest, less the sum of the monthly benefit payments made before the member's death. In addition, a lump-sum death benefit is payable upon the death of any retired member, regardless of option elected. This lump sum is equal to a percentage of the lump-sum death benefit that was available to the member at the time of retirement. The percentage is 100% in the first year of retirement, 75% in the second year, 50% in the third year, and 25% in the fourth and subsequent years of retirement. However, in no event will the lump sum death benefit be less than \$4,000.

12. Disability Retirement

- a. Eligibility: A member is eligible provided he/she has credit for at least five years of service or if the disability is work-related. Members are not eligible for an ordinary disability benefit if they are eligible for unreduced retirement.
- b. Ordinary Disability Benefit: The benefit payable under the retirement formula, using FAC and service at the time of disability, but not less than 10 years of service.
- c. Accidental Disability Benefit:



APPENDIX 2 (Continued)

- (i) For applications filed before or on September 30, 2009: An annual annuity equal to two-thirds (66 2/3%) of salary at the time of disability.
- (ii) For applications filed after September 30, 2009: An accidental disability will be available at two-thirds (66 2/3%) of salary for members who are permanently and totally disabled from engaging in any occupation as determined by the retirement board. If the member is eligible for an accidental disability benefit but deemed able to work in other jobs, the benefit is limited to fifty percent (50%) of salary.

(iii) Benefits will be subject to an annual review by ERSRI.

- d. **Payment Form:** The disability benefit commences immediately upon the member's retirement. Benefits cease upon recovery or reemployment. Disability benefits are payable as a monthly life annuity with a guarantee that, at the member's death, the sum of the member's contributions plus interest as of the date of retirement will be paid in a lump-sum to the member's beneficiary. All alternative forms of payment except for the Social Security Option are permitted in the case of disability retirement.

13. Deferred Termination Benefit

- a. **Eligibility:** A member with at least five years of service is vested. A vested member who does not withdraw his/her contributions from the fund is eligible for a deferred termination benefit.
- b. **Monthly Benefit:** The monthly benefit is based on the retirement formula described above. Both FAC and service are determined at the time the member leaves active employment. Benefits may commence when the member has met the requirements for a retirement benefit.
- c. **Payment Form:** The same as for Retirement above.
- d. **Death Benefit before retirement:** A member who dies after leaving active service but before retiring is entitled to receive a benefit as described below in item 15.
- e. **Death Benefit after Retirement:** The same as for Retirement above.

14. Withdrawal (Refund) Benefit

- a. **Eligibility:** All members leaving covered employment with less than five years of service are eligible. Optionally, vested members (those with five or more years of service) may withdraw their accumulated contributions in lieu of the deferred benefits otherwise due.
- b. **Benefit:** The member who withdraws receives a lump-sum payment equal to the sum of his/her employee contributions. No interest is credited on these contributions.

15. Death Benefit of Active or Inactive Members

- a. **Eligibility:** Death must have occurred while an active or an inactive, non-retired member.



APPENDIX 2 (Continued)

- b. Basic Benefit: Upon the death of a nonvested member, or upon the death of an inactive, vested member, or upon the death of an active, unmarried member, a refund of the member's contributions (without interest) is paid. Upon the death of a vested, married, active member, the spouse may elect (i) the refund benefit described above, or (ii) a life annuity paid to the spouse or beneficiary. The amount of the annuity is equal to the amount which would have been paid had the member retired at the time of his death and elected the Joint and 100% Survivor option. If the member was not eligible for retirement, the annuity benefit is reduced 9% per year from the date at which the member would have been eligible had he or she remained in service.
 - c. Lump-sum Benefit: \$800 per year of service, with a maximum benefit of \$16,000 and a minimum of \$4,000. This benefit is only available to active members.
 - d. Accidental Duty-related Death Benefit: If a member dies as the result of an accident while in the course of his or her duties, in lieu of the above benefits the member's spouse may elect to receive (i) a refund of all contributions made (including interest), and (ii) an annual life annuity equal to 50% of the member's salary at the time of death. The annuity benefit stops when the spouse remarries or dies, although it may be continued to any children under age 18 or to any dependent parents.
16. Optional Forms of Payment: In addition to a life annuity, ERSRI offers members these optional forms of payment on an actuarially equivalent basis:
- a. Option 1 (Joint and 100% Survivor) - A life annuity payable while either the participant or his beneficiary is alive.
 - b. Option 2 (Joint and 50% Survivor) - A life annuity payable to the member while both the member and beneficiary are alive, reducing to 50% of this amount if the member predeceases the beneficiary.
 - c. Social Security Option – An annuity paid at one amount prior to age 62, and at a reduced amount after age 62, designed to provide a level total income when combined with the member's age 62 Social Security benefit. Benefits cease upon the member's death. This option is only available for members with at least 10 years of contributory service as of June 30, 2005.

Actuarial equivalence is based on tables adopted by the Employees' Retirement Board.



APPENDIX 2 (Continued)

17. Post-retirement Benefit Increase:

- a. For members with at least 10 years of contributory service as of June 30, 2005 who are retired or eligible to retire as of September 30, 2009, and for all members receiving a disability retirement benefit on that date: a 3.00% compound increase in their retirement benefit each year, beginning in January of the year in which the member reaches the third anniversary of retirement. This increase is not a function of actual increases in the cost of living.
- b. For other members who were retired or were eligible to retire as of June 30, 2010: a compound increase in their retirement benefit each year equal to the increase in the CPI, effective on each anniversary date beginning on the third anniversary of retirement. This increase is limited to 3.00%.
- c. For other members who were not retired or eligible to retire as of June 30, 2010: a compound increase in their first \$35,000 of annual retirement benefit each year equal to the increase in the CPI, effective on each anniversary date beginning on the later of the member's third anniversary of retirement and the month following their 65th birthday. This increase is limited to 3.00%. Additionally, the \$35,000 annual COLA limit is applicable for benefits paid in 2010 and would be indexed annually to increase in the same manner as COLAs for Schedule B members (CPI increase for the year, not greater than 3.00%).
- d. For members who retire after June 30, 2012: members will be eligible to receive cost of living increases at the later of the member's third anniversary of retirement and the month following their SSNRA.
- e. Effective July 1, 2012, the following provisions will apply to all members:
 - (i) The COLA will be suspended for all state employees, teachers, BHDDH nurses, correctional officers, judges and state police until the aggregate funding level of their plans exceeds 80%; however, an interim COLA will be granted in four-year intervals while the COLA is suspended. The first interim COLA may begin January 1, 2017.
 - (ii) Effective July 1, 2015, the COLA is determined based on 50% of the plan's five-year average investment rate of return less 5.0% limited to a range of 0.0% to 4.0%, plus 50% of the lesser of 3.0% or last year's CPI-U increase for a total maximum increase of 3.50%. Previously, it was the plan's five-year average investment rate of return less 5.5% limited to a range of 0.0% to 4.0%
 - (iii) The COLA will be limited to the first \$25,000 of the member's annual pension benefit. For retirees and beneficiaries who retired on or before July 1, 2015, years in which a COLA is payable based on the every fourth year provision described in (i) above will be limited to the first \$30,000. These limits will be indexed annually to increase in the same manner as COLAs, with the known values of \$25,000 for 2013, \$25,000 for 2014, \$25,168 for 2015, \$25,855 for 2016, \$26,098 for 2017, \$26,290 for 2018, \$26,687 for 2019, \$27,184 for 2020, \$27,608 for 2021, \$27,901 for 2022 and \$28,878 for 2022.



APPENDIX 2 (Continued)

- f. In addition to the scheduled increases described in section (e) above, there will be a one-time 2% COLA paid in FY2016 on the first \$25,000 of pension benefit for all retirees and beneficiaries who retired on or before June 30, 2012. There will also be two one-time stipends of \$500 payable in FY2016 and FY2017 to retirees and beneficiaries who retired on or before June 30, 2015.

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APPENDIX 3

RISKS ASSOCIATED WITH MEASURING THE ACCRUED LIABILITY AND ACTUARIALLY DETERMINED CONTRIBUTION

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APPENDIX 3

Risks Associated with Measuring the Accrued Liability and Actuarially Determined Contribution

The determination of the accrued liability and the actuarially determined contribution requires the use of assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that result from the differences between actual experience and the actuarial assumptions.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions due to changing conditions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period, or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

1. Investment risk – actual investment returns may differ from the expected returns;
2. Asset/Liability mismatch – changes in asset values may not match changes in liabilities, thereby altering the gap between the accrued liability and assets and consequently altering the funded status and contribution requirements;
3. Contribution risk – actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
4. Salary and Payroll risk – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
5. Longevity risk – members may live longer or shorter than expected and receive pensions for a period of time other than assumed;
6. Other demographic risks – members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

APPENDIX 3 (Continued)

The effects of certain trends in experience can generally be anticipated. For example if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the cost of the plan can be expected to increase (or decrease). Likewise if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

The computed contribution rate shown on page 9 may be considered as a minimum contribution rate that complies with the Board's funding policy. The timely receipt of the actuarially determined contributions is critical to support the financial health of the plan. Users of this report should be aware that contributions made at the actuarially determined rate do not necessarily guarantee benefit security.

PLAN MATURITY MEASURES

Risks facing a pension plan evolve over time. A young plan with virtually no investments and paying few benefits may experience little investment risk. An older plan with a large number of members in pay status and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures include the following:

	State Employees		
	<u>June 30, 2021</u>	<u>June 30, 2020</u>	<u>June 30, 2019</u>
Ratio of the market value of assets to total payroll	4.0	3.2	3.4
Ratio of actuarial accrued liability to payroll	6.4	6.2	6.5
Ratio of actives to retirees and beneficiaries	0.9	1.0	1.0
Ratio of net cash flows to market value of assets	-3.3%	-4.0%	-4.5%
Duration of the actuarial accrued liability	10.7	10.4	10.7

	Teachers		
	<u>June 30, 2021</u>	<u>June 30, 2020</u>	<u>June 30, 2019</u>
Ratio of the market value of assets to total payroll	4.2	3.4	3.5
Ratio of actuarial accrued liability to payroll	6.3	6.3	6.4
Ratio of actives to retirees and beneficiaries	1.2	1.2	1.2
Ratio of net cash flows to market value of assets	-3.5%	-4.5%	-4.8%
Duration of the actuarial accrued liability	11.1	11.5	10.7

RATIO OF MARKET VALUE OF ASSETS TO PAYROLL

The relationship between assets and payroll is a useful indicator of the potential volatility of contributions. For example, if the market value of assets is 4.0 times the payroll, a return on assets 5% different than assumed would equal 20% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in plan sponsor contributions as a percentage of payroll.

RATIO OF ACTUARIAL ACCRUED LIABILITY TO PAYROLL

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of contributions for a fully funded plan. A funding policy that targets a funded ratio of



APPENDIX 3 (Continued)

100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time.

The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 5.5 times the payroll, a change in liability 2% other than assumed would equal 11% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also plan sponsor contributions) as a percentage of payroll.

RATIO OF ACTIVES TO RETIREES AND BENEFICIARIES

A young plan with many active members and few retirees will have a high ratio of active to retirees. A mature open plan may have close to the same number of actives to retirees resulting in a ratio near 1.0. A super-mature or closed plan may have significantly more retirees than actives resulting in a ratio below 1.0.

RATIO OF NET CASH FLOW TO MARKET VALUE OF ASSETS

A positive net cash flow means contributions exceed benefits and expenses. A negative cash flow means existing funds are being used to make payments. A certain amount of negative net cash flow is generally expected to occur when benefits are prefunded through a qualified trust. Large negative net cash flows as a percent of assets may indicate a super-mature plan or a need for additional contributions.

DURATION OF ACTUARIAL ACCRUED LIABILITY

The duration of the actuarial accrued liability may be used to approximate the sensitivity to a 1% change in the assumed rate of return. For example, duration of 10 indicates that the liability would increase approximately 10% if the assumed rate of return were lowered 1%.

ADDITIONAL RISK ASSESSMENT

Additional risk assessment is outside the scope of the annual actuarial valuation. Additional assessment may include scenario tests, sensitivity tests, stochastic modeling, stress tests, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability. These types of other assessments are provided to the Board in the annual presentation.

GLOSSARY

DEFINITION OF ACTUARIAL TERMS

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GLOSSARY

1. Actuarial Accrued Liability (AAL) - That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of Future Plan Benefits which is not provided for by future Normal Costs. It is equal to the Actuarial Present Value of Future Plan Benefits minus the actuarial present value of future Normal Costs.
2. Actuarial Assumptions - Assumptions as to future experience under the Plan. These include assumptions about the occurrence of future events affecting costs or liabilities, such as:
 - mortality, withdrawal, disablement, and retirement;
 - future increases in salary;
 - future rates of investment earnings and future investment and administrative expenses;
 - characteristics of members not specified in the data, such as marital status;
 - characteristics of future members;
 - future elections made by members; and
 - other relevant items.
3. Actuarial Cost Method or Funding Method - A procedure for allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability. These items are used to determine the ARC.
4. Actuarial Gain or Actuarial Loss - A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. Through the actuarial assumptions, rates of decrements, rates of salary increases, and rates of fund earnings have been forecasted. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted, or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., the Plan's assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results that produce actuarial liabilities which are larger than projected. Actuarial gains will shorten the time required for funding of the actuarial balance sheet deficiency while actuarial losses will lengthen the funding period.
5. Actuarially Equivalent - Of equal actuarial present value, determined as of a given date and based on a given set of Actuarial Assumptions.

GLOSSARY (Continued)

6. Actuarial Present Value (APV) - The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:
 - a. adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.),
 - b. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and
 - c. discounted according to an assumed rate (or rates) of return to reflect the time value of money.
7. Actuarial Present Value of Future Plan Benefits - The Actuarial Present Value of those benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits. The Actuarial Present Value of Future Plan Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive, nonretired members either entitled to a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would be provide sufficient assets to pay all projected benefits and expenses when due.
8. Actuarial Valuation - The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB 25, such as the funded ratio and the ARC.
9. Actuarial Value of Assets or Valuation Assets - The value of the Plan's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly actuaries use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the ARC.
10. Actuarially Determined - Values which have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the law.

GLOSSARY (Continued)

11. Amortization Method - A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.
12. Amortization Payment - That portion of the pension plan contribution or ARC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.
13. Annual Required Contribution (ARC) - The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under GASB 25. The ARC consists of the Employer Normal Cost and the Amortization Payment.
14. Closed Amortization Period - A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc. See Funding Period and Open Amortization Period.
15. Decrements: Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or termination.
16. Defined Benefit Plan: An employer-sponsored retirement benefit that provides workers, upon attainment of designated age and service thresholds, with a monthly benefit based on the employee's salary and length of service. The value of a benefit from a defined benefit plan is generally not affected by the return on the assets that are invested to fund the benefit.
17. Defined Contribution Plan: An employer-sponsored retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, and the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.
18. Employer Normal Cost: The portion of the Normal Cost to be paid by the employers. This is equal to the Normal Cost less expected member contributions.
19. Experience Study: A periodic review and analysis of the actual experience of the Plan which may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified as deemed appropriate by the Actuary.

GLOSSARY (Continued)

20. **Funded Ratio:** The ratio of the actuarial value of assets (AVA) to the actuarial accrued liability (AAL). Plans sometimes calculate a market funded ratio, using the market value of assets (MVA), rather than the AVA, although GASB 25 reporting requires the use of the AVA.
21. **Funding Period or Amortization Period:** The term “Funding Period” is used in two ways. In the first sense, it is the period used in calculating the Amortization Payment as a component of the ARC. This funding period is chosen by the Board of Trustees. In the second sense, it is a calculated item: the number of years in the future that will theoretically be required to amortize (i.e., pay off or eliminate) the Unfunded Actuarial Accrued Liability, based on the statutory employer contribution rate, and assuming no future actuarial gains or losses.
22. **GASB:** Governmental Accounting Standards Board.
23. **GASB 67 and GASB 68:** Governmental Accounting Standards Board Statements No. 67 and No. 68. These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 67 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 68 sets the rules for the systems themselves.
24. **Normal Cost:** That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method. Any payment in respect of an Unfunded Actuarial Accrued Liability is not part of Normal Cost (see Amortization Payment). For pension plan benefits which are provided in part by employee contributions, Normal Cost refers to the total of employee contributions and employer Normal Cost unless otherwise specifically stated. Under the entry age normal cost method, the Normal Cost is intended to be the level cost (when expressed as a percentage of pay) needed to fund the benefits of a member from hire until ultimate termination, death, disability or retirement.
25. **Open Amortization Period:** An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered payroll.
26. **Unfunded Actuarial Accrued Liability:** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. This value may be negative in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus.
27. **Valuation Date or Actuarial Valuation Date:** The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Plan Benefits is determined. The expected benefits to be paid in the future are discounted to this date.

Judicial Retirement Benefits Trust State of Rhode Island

Actuarial Valuation Report
As of June 30, 2021

DRAFT





December 10, 2021

Retirement Board
40 Fountain Street, First Floor
Providence, RI 02903-1854

Dear Members of the Board:

Subject: Actuarial Valuation of the JRBT as of June 30, 2021

This is the June 30, 2021 actuarial valuation of the Judicial Retirement Benefits Trust (JRBT). This report describes the current actuarial condition of the JRBT, determines the recommended employer contribution rate, and analyzes changes in the contribution rate. Valuations are prepared annually, as of June 30, the last day of the JRBT plan year. Benefits for state judges hired before January 1, 1990 are funded by the State from general assets, on a pay-as-you-go basis, and are not included in this valuation.

Under Rhode Island General Laws, the employer contribution rate for the JRBT is certified annually by the State of Rhode Island Retirement Board. This rate is determined actuarially, based on the plan provisions in effect as of the valuation date and the actuarial assumptions and methods adopted by the Board or set by statute. The Board's current policy is that the contribution rate determined by a given actuarial valuation becomes effective two years after the valuation date. For example, the rate determined by the June 30, 2021 actuarial valuation will be applicable for the year beginning July 1, 2023 and ending June 30, 2024.

Financing objectives and funding policy

The actuarial cost method and the amortization periods are set by statute. The normal cost rate (as a percent of pay) and actuarial accrued 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 employer normal cost rate is the difference between the normal cost rate and the member contribution rate. The amortization rate, also determined as a level percent of pay, 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.

Progress toward realization of financing objectives

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) is a standard measure of a plan's funded status. The funded status alone is not appropriate for assessing the need for future contributions. The funded status is also not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations. The funded ratio, as can be seen in Table 4 of this report, increased from 93.1% to 98.7% between the valuations. This is due to a gain on the actuarial value of assets with the return on the actuarial value of assets of 10.2% compared to the 7.0% assumption as well as liability gains mainly resulting from fewer retirements than expected. If the market value of assets were used rather than the actuarial value, the funded ratio would be 110.9%.

Given the plan's contribution allocation procedure, if all actuarial assumptions are met (including the assumption of the plan earning 7.00% on the actuarial valuation of assets), it is expected that:

1. The amortization payment as a percentage of pay will increase through fiscal year 2024 as annual payments begin for each of four staggered bases established in connection with the experience study after which it will remain level through fiscal year 2036,
2. The unfunded actuarial accrued liability will be fully amortized after 20 years from fiscal year 2021, and
3. In the absence of benefit improvements, the funded ratio should increase over time, until it reaches 100%.

The employer contribution rate decreased from 24.16% to 22.12% for fiscal year 2024, due to the asset and liability gains mentioned previously. The impact from these gains was partially offset by the phased recognition of the 2017 and 2019 assumption changes in the contribution rate.

An analysis of the changes in the employer contribution rate appears on Table 11a of this report. An analysis of the changes in the unfunded actuarial accrued liability appears on Table 11c.

Additional information regarding these assumptions changes is provided further below and in the body of this report.

Benefit provisions

The benefit provisions reflected in this valuation are those which were in effect on June 30, 2021, and there have been no changes in benefits since the preceding valuation. All benefit provisions are summarized in Appendix B.

Assumptions and methods

The assumptions are unchanged from the last actuarial valuation and were approved by the Board on May 22, 2020. We believe the assumptions are internally consistent and are reasonable, based on the actual experience of ERSRI.

The results of the actuarial valuation are dependent upon the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities and the calculated contribution rates.

All assumptions and methods are described in Appendix A. The actuarial assumptions and methods used in this report comply with the parameters for disclosure that appear in Governmental Accounting Standards Board (GASB) Statement Number 67.

This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

Data

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The System's staff supplied data for active members and retirees as of June 30, 2021. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the prior year's data. The System's staff also supplied asset data as of June 30, 2021.



Certification

All of our work conforms with generally accepted actuarial principles and practices and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Rhode Island state law and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board.

The undersigned are independent actuaries. All are Members of the American Academy of Actuaries. They all meet the Qualification Standards of the American Academy of Actuaries, and they are experienced in performing valuations for large public retirement systems.

Respectfully submitted,



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



Brad Stewart, ASA, MAAA, EA
Consultant and Actuary



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Senior Consultant and Actuary

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Actuarial Standards of Practice Disclosure Statements

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

This report should not be relied on for any purpose other than the purpose described above. Determinations of the financial results associated with the benefits described in this report in a manner other than the intended purpose may produce significantly different results.

The valuation was based upon information furnished by the System's staff, concerning Retirement System benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by the System's staff.

The developed findings included in this report consider data or other information through June 30, 2021.

This is one of multiple documents comprising the actuarial report. The other document comprising the actuarial report is a PowerPoint presentation presented to the Board of Trustees following the publication of this report.



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Executive Summary

Item	Valuation Date	
	June 30, 2021	June 30, 2020
Membership <ul style="list-style-type: none"> Number of: <ul style="list-style-type: none"> - Active members 56 54 - Retirees and beneficiaries 31 27 - Inactive members 1 1 - Total 88 82 Payroll supplied by ERSRI, annualized \$ 10,651,072 \$ 10,220,315 		
Contribution rates <ul style="list-style-type: none"> Member 12.00% 12.00% State 22.12% 24.16% 		
Assets <ul style="list-style-type: none"> Market value \$ 101,371,285 \$ 80,157,921 Actuarial value 90,266,123 82,419,083 Return on market value 27.2% 3.7% Return on actuarial value 10.2% 6.1% Employer contribution \$ 2,245,823 \$ 2,189,255 Ratio of actuarial value to market value 89.0% 102.8% 		
Actuarial Information <ul style="list-style-type: none"> Employer normal cost % 20.38% 20.61% Unfunded actuarial accrued liability (UAAL) \$ 1,162,363 \$ 6,115,457 Amortization rate 1.74% 3.55% Funding period 20 years 20 years Funded ratio 98.7% 93.1% 		
Projected employer contribution <ul style="list-style-type: none"> Fiscal year ending June 30, 2024 2023 Projected payroll \$ 11,472,104 \$ 11,053,790 Projected employer contribution 2,537,629 2,670,596 		

Discussion (Contribution Rates)

The employer contribution rate for the JRBT is determined actuarially. The rate determined in each valuation becomes effective two years after the valuation date, in this case as of July 1, 2023.

The rate consists of two pieces: the normal cost rate and the amortization rate. The normal cost rate is the employer's Entry Age normal cost, expressed as a percentage of active member payroll. The amortization rate is the contribution required to amortize each of the laddered bases that comprise the unfunded actuarial accrued liability over closed period as a level percentage of payroll. Payment for each base is generally calculated based on a 20 year amortization period beginning 2 years after they are established. The impact of the experience study was divided into separate "stagers" with the first payment beginning in FY2020 over a 20 year period. Other staggers will begin payment in FY2021 through FY2024 with amortization periods decreasing by one year for each year past FY2020 in which payment begins (e.g. the FY2024 stagger will have a 16 year amortization period). The amortization rate is adjusted for the fact that the contribution rate set by this valuation is deferred for two years. Should the JRBT become overfunded, the UAAL will be amortized using a single base over a period of 20 years.

There was a decrease in the employer contribution rate from 24.16% to 22.12% of payroll for FY2024. This is due to a gain on the actuarial value of assets with the return on the actuarial value of assets of 10.2% compared to the 7.0% assumption as well as liability gains mainly resulting from fewer retirements than expected. The impact from these gains was partially offset by the phased recognition of the 2017 and 2019 assumption changes in the contribution rate.

An analysis of the changes in the employer contribution rate appears in Table 11a of this report and a history of the employer contribution rates appears in Table 11b. Table 11c shows a reconciliation of the UAAL.

Discussion (Financial Data and Experience)

Assets for the JRBT are held in trust and are commingled with those of several other plans and programs—including the Employees' Retirement System of Rhode Island—for investment purposes. The State Investment Commission is responsible for setting the asset allocation policy and for investing the funds.

Table 6 shows the net plan assets for the JRBT. Table 7 shows a reconciliation of the assets between the previous valuation and this valuation. Table 8 shows the development of the actuarial value of assets. Table 9 shows the distribution of investments by category — 60% of assets are held in equities, including real estate and private equity — and Table 10 shows a historical summary of the return rates. As can be seen, the market value rate of return was 27.2% for the year ended June 30, 2021, and the return on an actuarial asset value basis was 10.2%.

The average annual return based on the market value of assets over the last ten years (July 1, 2011 – June 30, 2021) was 8.4%. This is more than the current 7.00% annual investment return assumption. The average annual return based on the actuarial value of assets over the same period was 7.0%.

All returns above are net of both investment and administrative expenses and may differ from other information provided by the General Treasurer's office or the investment managers and advisors.

The System's staff provided all of the financial information used in this report.

Discussion (Member Data)

The System's staff supplied member data as of June 30, 2021. While we did not audit this data, we did perform various tests to ensure that it was internally consistent, consistent with the prior year's data, and was reasonable overall. Information provided for active members includes: name, identification number, sex, a code indicating whether the member was active or inactive, date of birth, service, salary, date of last contribution, and accumulated member contributions without interest. For retired members, data includes: name, an identification number, sex, date of birth, date of retirement, amount of benefit (original, COLA, gross), 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 sex.

Table 12 and Table 13 show information and statistics about the active and retired members. Table 14 shows the distribution of active members by age and service.

The total payroll shown on the statistical tables is the amount that was supplied by the System's staff. For the cost calculations, the earnings were adjusted in accordance with the actuarial assumptions to reflect one year's salary increase.

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Discussion (Benefit Provisions)

Appendix B includes a summary of the benefit provisions for the JRBT. There were no changes in the benefit provisions since the preceding valuation. Also, there are no ancillary benefits—e.g., cost of living benefits—that are currently provided by a source independent of the JRBT but that might be deemed a liability of the JRBT if continued beyond the availability of funding by the current funding source.

The COLA to be provided to retired members is contingent on the investment performance, the annual change in the CPI-U, and funded status of the System. The amount of the COLA is determined based on 50% of the plan's five-year average investment rate of return minus 5.0% and will range from zero to 4.0%, and 50% of the lesser of 3% or last year's CPI-U increase for a total maximum increase of 3.50%. This calculation produces a 3.50% COLA for Calendar Year 2022. The COLA will be limited and this limit will be indexed annually to increase in the same manner as COLAs, with the known values of \$25,855 for 2016, \$26,098 for 2017, \$26,290 for 2018, \$26,687 for 2019, \$27,184 for 2020, \$27,608 for 2021, \$27,472 for 2022, and \$28,878 for 2023.

Furthermore, the COLA will be suspended for all state employees, teachers, BHDDH nurses, correctional officers, judges and state police until the aggregate funding level of their plans exceeds 80%; however, an interim COLA will be granted in four-year intervals while the COLA is suspended. The first interim COLA was during the Calendar Year beginning January 1, 2017. Also, for current retirees and beneficiaries retired on or before July 1, 2015 the \$25,000 cap will be increased to \$30,000 (indexed) for any COLA payable based on the every fourth year provision.

Discussion (Actuarial Methods and Assumptions)

Appendix A of this report includes a summary of the actuarial assumptions and methods used in this valuation.

Costs are determined using the Entry Age Normal actuarial cost method. This method was initially adopted effective June 30, 1999 and was modified, effective June 30, 2011, to be consistent with the Act and the standards outlined in the GASB Statement No. 67 exposure draft, which has now been finalized.

The method used to determine the actuarial value of assets is the five-year smoothed market method. This technique is further described in Section III of Appendix A. The development of the actuarial value of assets utilizing this method is shown on Table 8.

The assumptions were adopted by the Board on May 22, 2020 and are unchanged from the previous valuation. We believe the assumptions are internally consistent and are reasonable, based on the actual experience of the JRBT.

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Table 1

Development of Contribution Rate (Judges)

	June 30, 2021 (1)	June 30, 2020 (2)
1. Compensation		
(a) Supplied by ERSRI, annualized	\$ 10,651,072	\$ 10,220,315
(b) Adjusted for one-year's pay increase	10,866,243	10,470,021
2. Actuarial accrued liability	91,428,486	88,534,540
3. Actuarial value of assets	90,266,123	82,419,083
4. Unfunded actuarial accrued liability (UAAL) (2 - 3)	1,162,363	6,115,457
5. Remaining amortization period at valuation date	20	20
6. Contribution effective for fiscal year ending:	June 30, 2024	June 30, 2023
7. Base pay projected for two-year delay	11,472,104	11,053,790
8. Amortization of UAAL	200,127	392,493
9. Normal cost		
(a) Total normal cost rate	32.38%	32.61%
(b) Employee contribution rate	12.00%	12.00%
(c) Employer normal cost rate (a - b)	20.38%	20.61%
10. Employer contribution rate as percent of payroll		
(a) Employer normal cost rate	20.38%	20.61%
(b) Amortization payments (8 / 7)	1.74%	3.55%
(c) Total (a + b)	22.12%	24.16%
11. Estimated employer contribution amount (7 * 10(c))	\$ 2,537,629	\$ 2,670,596

Table 2

Summary of Unfunded Liability

Purpose	Remaining Balance as of June 30, 2021	Fiscal Year 2022 Amortization Payment *	Fiscal Year 2023 Amortization Payment *	Fiscal Year 2024 Amortization Payment *	Years Remaining Beginning with Fiscal Year 2024
Original 2011 RIRSA Base	5,867,303	548,839	572,844	588,597	12
2014 Experience Base	(3,496,915)	(310,630)	(324,541)	(333,466)	13
2014 Mediation Settlement	276,649	24,575	25,675	26,381	13
2015 Experience Base	(1,311,799)	(111,138)	(116,229)	(119,426)	14
2016 Experience Base	(833,860)	(67,635)	(70,802)	(72,749)	15
2016 Assumption Change - FY20 Stagger **	252,246	19,653	20,594	21,160	16
2016 Assumption Change - FY21 Stagger **	2,882,417	224,580	235,322	241,793	16
2016 Assumption Change - FY22 Stagger **	1,229,279	95,778	100,359	103,119	16
2016 Assumption Change - FY23 Stagger **	1,229,279	-	108,534	111,519	16
2016 Assumption Change - FY24 Stagger **	1,229,279	-	-	121,186	16
2017 Experience Base	(1,330,505)	(103,664)	(108,623)	(111,610)	16
2018 Experience Base	(2,991,772)	(224,579)	(235,543)	(242,021)	17
2019 Experience Base	700,783	50,817	53,347	54,814	18
2019 Assumption Change - FY23 Stagger**	1,332,970	-	117,689	120,925	16
2019 Assumption Change - FY24 Stagger**	1,332,970	-	-	131,408	16
2020 Experience Base	175,214	-	13,869	14,250	19
New Experience Base This Fiscal Year	(5,381,175)	-	-	(455,753)	20
Unfunded Actuarial Accrued Liability	\$ 1,162,363	\$ 146,596	\$ 392,493	\$ 200,127	

*Assuming payment made at the middle of the year.

**Assumption change staggers will begin in the fiscal year indicated. The stagger was accelerated in FY21 so that the FY2021 amortization payment would not be a credit when the UAAL was still positive.



Table 3

Actuarial Present Value of Future Benefits

	June 30, 2021 (1)	June 30, 2020 (2)
1. Active members		
a. Service retirement benefits	\$ 66,930,497	\$ 69,446,214
b. Deferred termination benefits	-	-
c. Refunds	-	-
d. Pre-retirement death benefits	618,562	537,702
e. Non-occupational disability retirement benefits	-	-
f. Occupational disability retirement benefits	-	-
g. Total	<u>\$ 67,549,059</u>	<u>\$ 69,983,916</u>
2. Retired members		
a. Service retirements	\$ 39,524,813	\$ 31,582,456
b. Disability retirements	-	-
c. Beneficiaries	3,526,413	3,255,365
d. Total	<u>\$ 43,051,226</u>	<u>\$ 34,837,821</u>
3. Inactive members	<u>\$ 182,320</u>	<u>\$ 182,320</u>
4. Total actuarial present value of future benefits	\$ 110,782,605	\$ 105,004,057
5. Determination of actuarial accrued liability		
a. Total actuarial present value of future benefits	\$ 110,782,605	\$ 105,004,057
b. Less present value of future normal costs	<u>(19,354,119)</u>	<u>(16,469,517)</u>
c. Actuarial accrued liability (a + b)	\$ 91,428,486	\$ 88,534,540

Table 4

Schedule of Funding Progress

Valuation Date	Actuarial Value of Assets (AVA)	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability (UAAL) (3)-(2)	Funded Ratio (2)/(3)	Annual Covered Payroll	UAAL as % of Payroll (4)/(6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
June 30, 2004	16,019,053	21,845,744	5,826,691	73.3%	5,637,865	103.3%
June 30, 2005	19,347,372	22,250,728	2,903,356	87.0%	5,684,585	51.1%
June 30, 2006	23,873,009	27,504,102	3,631,093	86.8%	6,313,069	57.5%
June 30, 2007 ¹	29,630,637	35,355,326	5,724,689	83.8%	6,451,666	88.7%
June 30, 2008 ²	34,670,394	38,115,602	3,445,208	91.0%	6,601,889	52.2%
June 30, 2009	36,839,221	41,738,040	4,898,819	88.3%	6,843,454	71.6%
June 30, 2010	38,074,287	48,941,360	10,867,073	77.8%	7,461,120	145.6%
June 30, 2010 ³	38,074,287	46,641,701	8,567,414	81.6%	7,461,120	114.8%
June 30, 2011	40,105,919	46,594,407	6,488,488	86.1%	8,474,716	76.6%
June 30, 2012	43,428,646	52,085,154	8,656,508	83.4%	8,822,823	98.1%
June 30, 2013 ⁴	47,640,773	54,429,531	6,788,758	87.5%	8,975,536	75.6%
June 30, 2014 ⁵	53,830,516	57,504,663	3,674,147	93.6%	9,309,572	39.5%
June 30, 2015	60,004,470	61,963,672	1,959,202	96.8%	9,285,354	21.1%
June 30, 2016	64,401,616	65,287,527	885,911	98.6%	9,034,080	9.8%
June 30, 2017	68,784,251	73,728,347	4,944,096	93.3%	9,569,304	51.7%
June 30, 2018	73,673,771	76,198,297	2,524,526	96.7%	9,237,641	27.3%
June 30, 2019	78,027,132	81,260,939	3,233,807	96.0%	9,928,890	32.6%
June 30, 2019 ⁶	78,027,132	83,589,474	5,562,342	93.3%	9,928,890	56.0%
June 30, 2020	82,419,083	88,534,540	6,115,457	93.1%	10,220,315	59.8%
June 30, 2021	90,266,123	91,428,486	1,162,363	98.7%	10,651,072	10.9%

¹ Reflects the benefit changes enacted by Article 35.

² Restated to reflect the benefit changes enacted by Article 16.

³ Restated after reflecting the Rhode Island Retirement Security Act of 2011.

⁴ Restated to reflect recommended salary scale assumption.

⁵ Restated to reflect impact of Article 21.

⁶ June 30, 2019 results after assumption changes.



Table 5

Notes to Required Supplementary Information

Valuation date	June 30, 2021
Actuarial cost method	Entry Age Normal
Amortization method	Level percentage, closed
Remaining amortization period	20 years
Asset valuation method	5-Yr Smoothed Market
Actuarial assumptions:	
Investment rate of return:	7.00% *
Projected salary increase:	2.75% *
Cost of living adjustment	2.10% **

* Includes inflation at 2.50%.

** COLAs are currently suspended for all state employees, teachers, BHDDH nurses, correctional officers, judges and state police until the aggregate funding level of their plans exceeds 80%. It is assumed that the COLAs will be suspended through 2027 due to the current funding level of the plans; however, an interim COLA may be granted in four-year intervals while the COLA is suspended.

Table 6

Plan Net Assets
(Assets at Market or Fair Value)

Item (1)	June 30, 2021 (2)	June 30, 2020 (3)
1. Cash and cash equivalents	\$ 164,787	\$ 142,388
2. Receivables:		
a. Employer and member contributions	\$ 0	\$ 515
b. Transfers receivable	0	0
c. Miscellaneous	18,938	19,209
d. Total receivables	\$ 18,938	\$ 19,724
3. Investments		
a. Pooled trust	\$ 101,219,640	\$ 80,045,574
b. Plan specific investments	0	0
c. Total	\$ 101,219,640	\$ 80,045,574
4. Invested securities lending collateral	\$ 0	\$ 0
5. Property and equipment	\$ 0	\$ 0
6. Total assets	\$ 101,403,365	\$ 80,207,686
7. Liabilities		
a. Other post-employment benefit liability, net	\$ 0	\$ 0
b. Securities lending liability	0	0
c. Accounts and vouchers payable	32,080	49,765
d. Total liabilities	\$ 32,080	\$ 49,765
8. Total market value of assets available for benefits		
Total (Item 6 - Item 7)	\$ 101,371,285	\$ 80,157,921

Table 7

Reconciliation of Plan Net Assets

Item (1)	June 30, 2021 (2)	June 30, 2020 (3)
1. Market value of assets as of beginning of year		
a. Market value of assets as of beginning of year	\$ 80,157,922	\$ 77,612,616
b. Adjustment for market value of assets	0	0
c. Adjusted market value of assets as of beginning of year	\$ 80,157,922	\$ 77,612,616
2. Contributions		
a. Members	\$ 1,215,454	\$ 1,204,448
b. State	2,245,823	2,189,255
c. Service purchases	0	0
d. Total	\$ 3,461,277	\$ 3,393,703
3. Investment earnings, net of investment and administrative expenses	\$ 21,735,397	\$ 2,875,722
4. Expenditures for the year		
a. Benefit payments	\$ (3,920,007)	\$ (3,656,689)
b. Cost-of-living adjustments	(63,304)	(67,430)
c. Post-retirement death benefits	0	0
d. Pre-retirement death benefits	0	0
e. Social security supplements	0	0
f. Supplemental pensions	0	0
g. Refunds	0	0
h. Total expenditures	\$ (3,983,311)	\$ (3,724,119)
5. Transfers and other adjustments	\$ 0	\$ 0
6. Market value of assets at end of year	\$ 101,371,285	\$ 80,157,922

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Table 8

Development of Actuarial Value of Assets

	Year Ending June 30, 2021					
1. Market value of assets at beginning of year	\$	80,157,922				
2. Net new investments						
a. Contributions	\$	3,461,277				
b. Benefits paid		(3,983,311)				
c. Refunds		0				
d. Subtotal		(522,034)				
3. Market value of assets at end of year	\$	101,371,285				
4. Net earnings (3-1-2)	\$	21,735,397				
5. Assumed investment return rate		7.00%				
6. Expected return	\$	5,592,783				
7. Excess return (4-6)	\$	16,142,614				
8. Development of amounts to be recognized as of June 30, 2021:						
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	Remaining Deferrals					
Fiscal Year End	of Excess (Shortfall) of Investment Income	Offsetting of Gains/(Losses)	Net Deferrals Remaining	Years Remaining	Recognized for this valuation	Remaining after this valuation
	(1)	(2)	(3) = (1) + (2)	(4)	(5) = (3) / (4)	(6) = (3) - (5)
2017	\$ 0	\$ 0	\$ 0	1	\$ 0	\$ 0
2018	0	0	0	2	0	0
2019	(224,683)	224,683	0	3	0	0
2020	(2,036,478)	2,036,478	0	4	0	0
2021	16,142,614	(2,261,161)	13,881,453	5	2,776,291	11,105,162
	\$ 13,881,453	\$ 0	\$ 13,881,453		\$ 2,776,291	\$ 11,105,162
9. Actuarial value of assets as of June 30, 2021 (Item 3 - Item 8)	\$	90,266,123				
10. Ratio of actuarial value to market value		89.0%				

*Values of \$0 result from the beginning balance being offset by future gains or losses in the opposite direction.

Table 9

Distribution of Assets at Market Value (Percentage of Total Investments)

Item (1)	June 30, 2021 (2)
US Equity	24.3%
International Developed Equity	11.1%
Emerging Markets Equity	4.6%
Private Equity and Opportunistic Private Credit	12.5%
Non-Core Real Estate	2.5%
Equity Options	2.0%
EMD (50/50 Blend)	2.0%
Liquid Credit	3.0%
Private Credit	3.0%
CLOs	2.0%
Treasury Duration	5.0%
Systematic Trend	5.0%
Core Real Estate	4.0%
Private Infrastructure	4.0%
IG Corp Credit	3.3%
Securitized Credit	3.3%
Absolute Return	6.5%
Cash	2.0%
Total investments	100.0%

Table 10

History of Investment Return Rates

Year Ending June 30 of (1)	Market (2)	Actuarial (3)
1996	13.7%	13.7%
1997	19.1%	19.1%
1998	16.1%	16.5%
1999	10.1%	14.7%
2000	9.1%	8.8%
2001	-11.0%	4.9%
2002	-8.4%	0.9%
2003	4.3%	1.4%
2004	18.0%	4.1%
2005	10.2%	5.9%
2006	11.6%	8.8%
2007	18.2%	12.2%
2008	-5.9%	9.1%
2009	-19.5%	1.9%
2010	13.4%	1.2%
2011	19.4%	3.2%
2012	1.6%	5.4%
2013	10.7%	6.6%
2014	15.0%	8.6%
2015	2.2%	7.6%
2016	0.0%	5.7%
2017	11.6%	6.1%
2018	7.8%	6.7%
2019	6.5%	6.7%
2020	3.7%	6.1%
2021	27.2%	10.2%
Average Returns:		
Last 5 Years	11.1%	7.1%
Last 10 Years	8.4%	7.0%
Since 1996	7.3%	7.4%

Table 11a

Analysis of Change in Employer Cost

Basis	Employer Cost
1. Employer contribution rates from prior valuation	24.16%
2. Impact of changes, gains and losses	
a. Non-salary normal cost and liability experience (gain)/loss	-1.93%
b. Salary (gain)/loss	-0.34%
c. Total payroll growth (gain)/loss	-0.03%
d. Investment experience (gain)/loss	-1.94%
e. Recognition of 2017 & 2019 Assmption Changes	2.20%
f. Changes in assumptions	0.00%
g. Changes in plan provisions	0.00%
i. Total	-2.04%
3. Employer contribution rates from current valuation	22.12%

Table 11b**History of Employer Contribution Rates**

Valuation Date as of June 30, (1)	Fiscal Year Ending June 30, (2)	Employer Contribution Rate (3)
1999	2002	31.58%
2000	2003	33.42%
2001	2004	33.90%
2002	2005	36.19%
2003	2006	35.51%
2004	2007	36.07%
2005	2008	32.07%
2006	2009	24.06% ¹
2007	2010	16.19% ²
2008	2011	16.19% ²
2009	2012	18.69%
2010	2013	19.69% ³
2011	2014	27.28%
2012	2015	28.32%
2013	2016	26.80%
2014	2017	21.58% ⁴
2015	2018	21.13%
2016	2019	20.28%
2017	2020	21.30%
2018	2021	21.61%
2019	2022	21.82%
2020	2023	24.16%
2021	2024	22.12%

¹ Reflects changes in benefit provisions enacted by Article 35.

² Restated to reflect changes in benefit provisions enacted by Article 16.

³ Restated after reflecting the Rhode Island Retirement Security Act of 2011.

⁴ Restated after reflecting the impact of Article 21.

Table 11c

Analysis of Change in UAAL

Basis (1)	June 30, 2021 (2)
1. UAAL as of June 30, 2020:	\$ 6,115
2. Impact of changes, gains and losses	
a. Interest at 7.00% for one year	428
b. Expected amortization payments	-
c. Investment experience (gain)/loss	(2,618)
d. Salary (gain)/loss	(449)
e. Non-salary liability experience (gain)/loss	(2,314)
f. Changes in assumptions	0
g. Changes in plan provisions	0
i. Total	\$ (4,953)
3. UAAL as of June 30, 2021:	\$ 1,162

Note: All dollar figures are shown in thousands.

Table 12

Membership Data (State Judges)

	<u>June 30, 2021</u>	<u>June 30, 2020</u>
	(1)	(2)
1. Active members		
a. Number	56	54
b. Number eligible to retire	18	15
c. Total annualized payroll supplied by State	\$ 10,651,072	\$ 10,220,315
d. Average salary	\$ 190,198	\$ 189,265
e. Average age	60.8	61.3
f. Average service	10.4	11.7
2. Inactive members		
a. Number	1	1
3. Service retirees		
a. Number	25	21
b. Total annual benefits	\$ 3,985,251	\$ 3,285,077
c. Average annual benefit	\$ 159,410	156,432
d. Average age	73.0	74.1
4. Disabled retirees		
a. Number	0	0
b. Total annual benefits	\$ 0	\$ 0
c. Average annual benefit	N/A	N/A
d. Average age	N/A	N/A
5. Beneficiaries and spouses		
a. Number	6	6
b. Total annual benefits	\$ 409,066	\$ 415,352
c. Average annual benefit	\$ 68,178	\$ 69,225
d. Average age	77.7	79.3

Table 13

Historical Summary of Active Member Data

Valuation as of June 30,	Active Members		Covered Payroll		Average Salary		Average Age	Average Service
	Number	Percent Increase	Amount	Percent Increase	Amount	Percent Increase		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2000	31	6.9%	3,533,354	11.5%	113,979	4.3%	55.9	6.5
2001	35	12.9%	4,092,423	15.8%	116,926	2.6%	55.4	6.4
2002	39	11.4%	4,738,059	15.8%	121,489	3.9%	55.6	7.5
2003	42	7.7%	5,303,153	11.9%	126,266	3.9%	55.8	7.6
2004	44	4.8%	5,637,865	6.3%	128,133	1.5%	56.9	8.2
2005	44	0.0%	5,684,585	0.8%	129,195	0.8%	58.3	8.4
2006	45	2.3%	6,313,069	11.1%	140,290	8.6%	58.3	9.0
2007	44	-2.2%	6,451,666	2.2%	146,629	4.5%	59.0	9.8
2008	43	-2.3%	6,601,889	2.3%	153,532	4.7%	59.4	10.4
2009	45	4.7%	6,843,454	3.7%	152,077	-0.9%	58.6	10.0
2010	49	8.9%	7,461,120	9.0%	152,268	0.1%	58.8	10.2
2011	54	10.2%	8,474,716	13.6%	156,939	3.1%	58.8	9.6
2012	53	-1.9%	8,822,823	4.1%	166,468	6.1%	59.7	10.5
2013	54	1.9%	8,975,536	1.7%	166,214	-0.2%	60.2	10.9
2014	56	3.7%	9,309,572	3.7%	166,242	0.0%	60.9	11.1
2015	54	-3.6%	9,285,354	-0.3%	171,951	3.4%	61.6	11.4
2016	52	-3.7%	9,034,080	-2.7%	173,732	1.0%	61.5	11.2
2017	55	5.8%	9,569,304	5.9%	173,987	0.1%	62.0	11.4
2018	53	-3.6%	9,237,641	-3.5%	174,295	0.2%	62.0	11.5
2019	55	3.8%	9,928,890	7.5%	180,525	3.6%	60.5	10.6
2020	54	-1.8%	10,220,315	2.9%	189,265	4.8%	61.3	11.7
2021	56	3.7%	10,651,072	4.2%	190,198	0.5%	60.8	10.4

Table 14

Distribution of Active Members by Age and by Years of Service As of June 30, 2021

Attained Age	Years of Credited Service												Total
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.
Under 30	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
30-34	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
35-39	0 \$0	0 \$0	2 \$168,879	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	2 \$168,879
40-44	1 \$170,545	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	1 \$170,545
45-49	1 \$189,424	0 \$0	0 \$0	0 \$0	0 \$0	1 \$196,056	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	2 \$192,740
50-54	2 \$174,809	0 \$0	3 \$170,273	1 \$192,295	1 \$196,056	1 \$178,951	1 \$181,635	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	9 \$178,819
55-59	2 \$174,523	0 \$0	1 \$176,612	1 \$179,500	1 \$181,966	1 \$178,951	5 \$186,819	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	11 \$181,833
60-64	0 \$0	0 \$0	0 \$0	1 \$172,605	1 \$173,960	1 \$173,301	4 \$191,747	1 \$207,601	1 \$204,652	0 \$0	0 \$0	0 \$0	9 \$188,790
65-69	1 \$196,127	0 \$0	0 \$0	0 \$0	0 \$0	4 \$196,955	5 \$194,338	6 \$203,770	2 \$197,259	2 \$199,260	2 \$238,675	0 \$0	22 \$202,211
70 & Over	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
Total	7 \$179,251	0 \$0	6 \$170,865	3 \$181,466	3 \$183,994	8 \$189,385	15 \$190,294	7 \$204,317	3 \$199,723	2 \$199,259	2 \$238,675	0 \$0	56 \$190,198



APPENDIX A

SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

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APPENDIX A

Summary of Actuarial Methods and 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 Normal 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, sex 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.

APPENDIX A (Continued)

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 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 amortization payment for the applicable fiscal year is first determined based on the individual amortization bases. The covered payroll is projected forward for two years, and we then determine the amortization rate by dividing the amortization payment by the projected payroll. Contributions are assumed to be made monthly throughout the year.
 - (a) 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 for the UAAL that existed at that time. New gains and losses each year will be amortized over individual 20 year periods. At any time that the System is in an overfunded status, the amortization schedule will be a rolling 20 year amortization of any surplus.

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.

APPENDIX A (Continued)

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: Salaries are assumed to increase at the rate of 2.75% per year.

Salary increases are assumed to occur once a year, on July 1. Therefore the pay used for the period between the valuation date and the first anniversary of the valuation date is equal to the reported pay for the prior year, increased by the salary increase assumption.

3. Payroll growth rate: In the amortization of the unfunded frozen liability, payroll is assumed to increase 2.75% per year. This assumption includes no allowance for future membership growth.
4. Post-retirement Benefit Increase: Post-retirement benefit increases are assumed to be 2.10%, 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 first such COLA will be applicable in Calendar Year 2017. As of June 30, 2021, it is assumed that the COLAs will be suspended through 2027 due to the current funding level of the plans. The actual amount of the COLA is determined based on 50% of the plan's five-year average investment rate of return minus 5.00% which will range from zero to 4.0%, and 50% of the lesser of 3% or last year's CPI-U increase for a total maximum increase of 3.50%.

APPENDIX A (Continued)

B. Demographic Assumptions

1. Post-termination mortality rates (non-disabled lives)
 - a. Male: PUB(10) Above Median Table for Healthy General Employee Males, projected with Scale Ultimate MP16.
 - b. Females: PUB(10) Above Median Table for Healthy General Employee Females, projected with Scale Ultimate MP16.
2. Post-termination mortality rates (disabled lives)
 - a. Males: PUB(10) Tables for Disabled Retirees by Occupation for males, projected with Scale Ultimate MP16.
 - b. Females: PUB(10) Tables for Disabled Retirees by Occupation for females, projected with Scale Ultimate MP16.
3. Pre-termination mortality rates
 - a. Males: PUB(10) Tables for Disabled Retirees by Occupation for males, projected with Scale Ultimate MP16.
 - b. Females: PUB(10) Tables for Disabled Retirees by Occupation for females, projected with Scale Ultimate MP16.
4. Disability rates – None
5. Termination rates – None
6. Retirement rates – 33% of members are assumed to retire when first eligible for a reduced retirement benefit (age 65 with 10 years of service, or any age with 20 years of service). All other members are assumed to retire when eligible for an unreduced retirement benefit (age 65 with 20 years of service, or age 70 with 15 years of service). Judges who have not reached eligibility for a retirement benefit by age 75 are assumed to terminate at age 75 and receive either a reduced retirement benefit, if eligible, or a refund.

C. Other Assumptions

1. Percent married: 85% of employees are assumed to be married.
2. 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.

APPENDIX A (Continued)

3. Remarriage: It is assumed that no surviving spouse will remarry and there will be no children's benefit.
4. All married members appointed after January 1, 2009 will elect the optional spouse's coverage at retirement.
5. Investment and administrative expenses: The assumed investment return rate represents the anticipated net return after payment of all investment and administrative expenses.

V. Participant Data

Participant data was supplied in electronic files for active members and retirees. The data for active members included birth date, sex, service, salary and employee contribution account balance. For retired members and beneficiaries, the data included date of birth, sex, spouse's date of birth (where applicable), amount of monthly benefit, date of retirement, and a form of payment code.

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APPENDIX B

SUMMARY OF BENEFIT PROVISIONS

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APPENDIX B

Summary of Benefit Provisions

1. Effective Date and Authority: The Judicial Retirement Benefits Trust (JRBT) became effective on January 1, 1990 for judges hired on or after that date. Benefits are described in Rhode Island General Laws, Title 8, Chapters 3, 8, and 16, Title 28, Chapter 30, and Title 31, Chapter 43.
2. Plan Year: A twelve-month period ending June 30th.
3. Administration: The Judicial Retirement Benefits Trust is administered by the State of Rhode Island Retirement Board. However, the State Investment Commission is responsible for the investment of the trust assets, including the establishment of the asset allocation policy. Assets are commingled for investment purposes with those of the Employees' Retirement System of Rhode Island and various other plans and programs.
4. Type of Plan: The Judicial Retirement Benefits Trust is a qualified governmental defined benefit retirement plan. For Governmental Accounting Standards Board purposes, it is a single-employer plan.
5. Eligibility: All judges or justices of the Supreme Court, a superior court, a district court, a family court, an administrative adjudication court or a workers' compensation court participate in this plan if they were hired on or after January 1, 1990. (These are referred to collectively as state judges.) Benefits for state judges hired before January 1, 1990 are being paid by the state from the general assets of the state, on a pay-as-you-go basis. Eligible state judges become members at their date of employment.
6. Salary: Contributions are based on the judge's salary. Benefits are based on the judge's salary at the time of retirement.
7. Employee Contributions: State judges contribute 8.75% of their salary per year. Effective July 1, 2012, State judges (excluding justices of supreme, superior, family, and district courts) will contribute 12.00% of their salary per year. Active justices of supreme, superior, and family courts as of June 30, 2011 contribute the rate in effect as of June 30, 2012. The State "picks up" the members' contributions for its employees under the provisions of Internal Revenue Code (IRC) Section 414(h).



APPENDIX B (Continued)

8. Employer Contributions: The State contributes an actuarially determined percentage of the member's annual salary. Contributions determined in a given actuarial valuation go into effect two years after the actuarial valuation.
9. Final Average Compensation (FAC)
 - a. For judges who became members on or before July 2, 1997, one-twelfth of the judge's annual salary at the time of retirement.
 - b. For judges who became members after July 2, 1997 but before July 1, 2009, one-twelfth of the average of the judge's highest three consecutive annual salaries.
 - c. For judges who became members on or after July 1, 2009, one-twelfth of the average of the judge's highest five consecutive annual salaries.
 - d. Benefits for death while an active member are based on the member's salary at the time of death, regardless of when the judge became a member.
10. Full Retirement
 - a. Eligibility: All judges are eligible for unreduced retirement at or after age 65 if the judge has served for 20 years, or at or after age 70 after 15 years of service.
 - b. Monthly Benefit:
 - (i) Judges who were appointed prior to January 1, 2009 receive 100% of FAC at retirement.
 - (ii) Judges who were appointed on or after January 1, 2009 but prior to July 1, 2009 receive 90% of FAC at retirement, and take an additional 10% reduction to 80% of FAC at retirement if they wish to elect the spouse's death benefit.
 - (iii) Judges who were appointed on or after July 1, 2009 receive 80% of FAC at retirement, or 70% of FAC at retirement if they wish to elect the spouse's death benefit.
 - c. Payment Form: Benefits are paid as a monthly life annuity. Members appointed prior to January 1, 2009 automatically receive the spouse's death benefit described below. Members appointed on or after January 1, 2009 must elect to a reduced benefit as described above if they wish to receive the spouse's death benefit. There are no other optional forms of payment available.



APPENDIX B (Continued)

- d. Death Benefit: After the death of a retired member, if the member was married, 50% of the retiree's benefit is paid to the surviving spouse for life (or until remarriage) if spouse's death benefit is elected. (No election or benefit reduction is required for members appointed prior to January 1, 2009.)

11. Reduced Retirement

- a. Eligibility: A judge is eligible for a reduced retirement benefit at age 65 if the judge has served for 10 years, or at any age after 20 years of service.
- b. Reduced Retirement Benefit:
 - (i) For judges who were appointed prior to January 1, 2009: 75% of FAC at retirement.
 - (ii) For judges who were appointed on or after January 1, 2009 but prior to July 1, 2009: receive 70% of FAC at retirement, or take an additional 10% reduction to 60% of FAC at retirement if they wish to elect the spouse's death benefit.
 - (iii) For judges who were appointed on or after July 1, 2009: receive 65% of FAC at retirement, or 55% of FAC at retirement if they wish to elect the spouse's death benefit.
- c. Payment Form: Same as for Full Retirement.
- d. Death Benefit: Same as for Full Retirement.

12. Refunds

- a. Eligibility: All judges leaving covered employment for a reason other than death or retirement.
- b. Benefit: A lump-sum payment equal to the sum of his/her employee contributions. No interest is credited on these contributions.

13. Death Benefit of Active Members

After the death of an active member, if the member was married, a benefit will be paid to the spouse until his/her death or remarriage. The benefit is equal to 25% of the judge's salary at death if the member had less than seven years of service. If the judge had at least seven but less than 15 years of service, the benefit is equal to 1/3 of the judge's salary at death. If the judge had at least 15 years of service or if the judge was eligible for retirement, the spouse receives 50% of the judge's salary at death. Benefits are payable until the spouse's death or remarriage. Benefits may be paid to any minor



APPENDIX B (Continued)

children after the death of the spouse. If an active member dies without having a spouse or minor children, a refund is paid to the member's beneficiary.

14. Post-retirement Benefit Increase:

- a. For members who retired or will be eligible for retirement as of June 12, 2010: members receive an increase equal to 3.00% of the original benefit each year, beginning in January of the year in which the member reaches the third anniversary of retirement. The increase applies to both retirement and death benefits. This increase is not tied in any way to actual increases in the cost of living. (Judges of the administrative adjudication and workers compensation courts receive a compound 3.00% increase, rather than a simple 3.00% increase.)
- b. For members who are or were formally justices of supreme, superior, family, and district courts and were not retired or were not eligible to retire as of June 12, 2010: The member will receive the first COLA upon the later of their third anniversary of retirement or when the member reaches age 65. The annual increase in the member's benefit will be equal to the lesser of their original benefit and the COLA limit in effect in the year the member retires, multiplied by the percentage increase in CPI up to a maximum of 3.0% per year. The COLA will be provided on a simple basis. The applicable annual COLA limit will be \$35,000 in 2010, and increase annually by the percentage increase in the Consumer Price Index (CPI) up to a maximum of 3.0% per year. No COLA would be paid on any part of the annual benefit in excess of this limit. The annual increase in the COLA limit will be determined on a compound basis.
- c. For members who are or were formally judges of the administrative adjudication court, traffic tribunal, and workers' compensation court and were not retired or were not eligible to retire as of June 12, 2010: The member will receive the first COLA upon the later of their third anniversary of retirement or when the member reaches age 65. The annual increase in the member's benefit will be equal to the lesser of the current benefit and the current COLA limit, multiplied by the percentage increase in CPI up to a maximum of 3.0% per year. The COLA will be provided on a compound basis. The applicable annual COLA limit will initially be \$35,000, and increase annually by the percentage increase in the Consumer Price Index (CPI) up to a maximum of 3.0% per year. No COLA would be paid on any part of the annual benefit in excess of this limit. The annual increase in the COLA limit will be determined on a compound basis.
- d. For members who retire after June 30, 2012: members will be eligible to receive cost of living increases at the later of the member's third anniversary of retirement and the month following their SSNRA.
- e. Effective July 1, 2012, the following provisions will apply to all members:



APPENDIX B (Continued)

- (i) The COLA will be suspended for all state employees, teachers, BHDDH nurses, correctional officers, judges and state police until the aggregate funding level of their plans exceeds 80%; however, an interim COLA will be granted in four-year intervals while the COLA is suspended. The first interim COLA may begin January 1, 2017.
 - (ii) Effective July 1, 2015, the COLA is determined based on 50% of the plan's five-year average investment rate of return less 5.5% limited to a range of 0.0% to 4.0%, plus 50% of the lesser of 3.0% or last year's CPI-U increase for a total maximum increase of 3.50%. Previously, it was the plan's five-year average investment rate of return less 5.5% limited to a range of 0.0% to 4.0%
 - (iii) The COLA will be limited to the first \$25,000 of the member's annual pension benefit. For retirees and beneficiaries who retired on or before July 1, 2015, years in which a COLA is payable based on the every fourth year provision described in (i) above will be limited to the first \$30,000. These limits will be indexed annually to increase in the same manner as COLAs, with the known values of \$25,000 for 2013, \$25,000 for 2014, \$25,168 for 2015, \$25,855 for 2016, \$26,098 for 2017, and \$27,472 for 2022.
- f. In addition to the scheduled increases described in section (e) above, there will be a one-time 2% COLA paid in FY2016 on the first \$25,000 of pension benefit for all retirees and beneficiaries who retired on or before June 30, 2012. There will also be two one-time stipends of \$500 payable in FY2016 and FY2017 to retirees and beneficiaries who retired on or before June 30, 2015.

APPENDIX C

RISKS ASSOCIATED WITH MEASURING THE ACCRUED LIABILITY AND ACTUARIALLY DETERMINED CONTRIBUTION

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APPENDIX C

Risks Associated with Measuring the Accrued Liability and Actuarially Determined Contribution

The determination of the accrued liability and the actuarially determined contribution requires the use of assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that result from the differences between actual experience and the actuarial assumptions.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions due to changing conditions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period, or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

1. Investment risk – actual investment returns may differ from the expected returns;
2. Asset/Liability mismatch – changes in asset values may not match changes in liabilities, thereby altering the gap between the accrued liability and assets and consequently altering the funded status and contribution requirements;
3. Contribution risk – actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
4. Salary and Payroll risk – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
5. Longevity risk – members may live longer or shorter than expected and receive pensions for a period of time other than assumed;
6. Other demographic risks – members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

APPENDIX C (Continued)

The effects of certain trends in experience can generally be anticipated. For example if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the cost of the plan can be expected to increase (or decrease). Likewise if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

The computed contribution rate shown on page 9 may be considered as a minimum contribution rate that complies with the Board's funding policy. The timely receipt of the actuarially determined contributions is critical to support the financial health of the plan. Users of this report should be aware that contributions made at the actuarially determined rate do not necessarily guarantee benefit security.

PLAN MATURITY MEASURES

Risks facing a pension plan evolve over time. A young plan with virtually no investments and paying few benefits may experience little investment risk. An older plan with a large number of members in pay status and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures include the following:

	<u>June 30, 2021</u>	<u>June 30, 2020</u>	<u>June 30, 2019</u>
Ratio of the market value of assets to total payroll	9.5	7.8	7.8
Ratio of actuarial accrued liability to payroll	8.6	8.7	8.2
Ratio of actives to retirees and beneficiaries	1.8	2.0	2.1
Ratio of net cash flows to market value of assets	-0.7%	-0.4%	-0.8%
Duration of the actuarial accrued liability	11.2	11.1	10.5

RATIO OF MARKET VALUE OF ASSETS TO PAYROLL

The relationship between assets and payroll is a useful indicator of the potential volatility of contributions. For example, if the market value of assets is 4.0 times the payroll, a return on assets 5% different than assumed would equal 20% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in plan sponsor contributions as a percentage of payroll.

RATIO OF ACTUARIAL ACCRUED LIABILITY TO PAYROLL

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of contributions for a fully funded plan. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time.

The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 5.5 times the payroll, a change in liability 2% other than assumed would equal 11% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also plan sponsor contributions) as a percentage of payroll.

APPENDIX C (Continued)

RATIO OF ACTIVES TO RETIREES AND BENEFICIARIES

A young plan with many active members and few retirees will have a high ratio of active to retirees. A mature open plan may have close to the same number of actives to retirees resulting in a ratio near 1.0. A super-mature or closed plan may have significantly more retirees than actives resulting in a ratio below 1.0.

RATIO OF NET CASH FLOW TO MARKET VALUE OF ASSETS

A positive net cash flow means contributions exceed benefits and expenses. A negative cash flow means existing funds are being used to make payments. A certain amount of negative net cash flow is generally expected to occur when benefits are prefunded through a qualified trust. Large negative net cash flows as a percent of assets may indicate a super-mature plan or a need for additional contributions.

DURATION OF ACTUARIAL ACCRUED LIABILITY

The duration of the actuarial accrued liability may be used to approximate the sensitivity to a 1% change in the assumed rate of return. For example, duration of 10 indicates that the liability would increase approximately 10% if the assumed rate of return were lowered 1%.

ADDITIONAL RISK ASSESSMENT

Additional risk assessment is outside the scope of the annual actuarial valuation. Additional assessment may include scenario tests, sensitivity tests, stochastic modeling, stress tests, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability

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GLOSSARY

Actuarial Accrued Liability (AAL): That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of Future Plan Benefits which is not provided for by future Normal Costs. It is equal to the Actuarial Present Value of Future Plan Benefits minus the actuarial present value of future Normal Costs.

Actuarial Assumptions: Assumptions as to future experience under the Fund. These include assumptions about the occurrence of future events affecting costs or liabilities, such as:

- mortality, withdrawal, disablement, and retirement;
- future increases in salary;
- future rates of investment earnings and future investment and administrative expenses;
- characteristics of members not specified in the data, such as marital status;
- characteristics of future members;
- future elections made by members; and
- other relevant items.

Actuarial Cost Method or Funding Method: A procedure for allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability. These items are used to determine the ARC.

Actuarial Gain or Actuarial Loss: A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. Through the actuarial assumptions, rates of decrements, rates of salary increases, and rates of fund earnings have been forecasted. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted, or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., the Fund's assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results that produce actuarial liabilities which are larger than projected. Actuarial gains will shorten the time required for funding of the actuarial balance sheet deficiency while actuarial losses will lengthen the funding period.

Actuarially Equivalent: Of equal actuarial present value, determined as of a given date and based on a given set of Actuarial Assumptions.

GLOSSARY (Continued)

Actuarial Present Value (APV): The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:

- a) adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.)
- b) multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and
- c) discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Actuarial Present Value of Future Plan Benefits: The Actuarial Present Value of those benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits. The Actuarial Present Value of Future Plan Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive, nonretired members either entitled to a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would be provide sufficient assets to pay all projected benefits and expenses when due.

Actuarial Valuation: The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB 25, such as the funded ratio and the ARC.

Actuarial Value of Assets or Valuation Assets: The value of the Fund's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly actuaries use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the ARC.

Actuarially Determined: Values which have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the law.

Amortization Method: A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization payment is one of a stream of increasing



GLOSSARY (Continued)

payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.

Amortization Payment: That portion of the pension plan contribution or ARC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

Annual Required Contribution (ARC): The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under GASB 25. The ARC consists of the Employer Normal Cost and the Amortization Payment.

Closed Amortization Period: A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc. See Funding Period and Open Amortization Period.

Decrements: Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or termination.

Defined Benefit Plan: A retirement plan that is not a Defined Contribution Plan. Typically a defined benefit plan is one in which benefits are defined by a formula applied to the member's compensation and/or years of service.

Defined Contribution Plan: A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, and the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.

Employer Normal Cost: The portion of the Normal Cost to be paid by the employers. This is equal to the Normal Cost less expected member contributions.

Experience Study: A periodic review and analysis of the actual experience of the Fund which may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified as deemed appropriate by the Actuary.

Funded Ratio: The ratio of the actuarial value of assets (AVA) to the actuarial accrued liability (AAL). Plans sometimes calculate a market funded ratio, using the market value of assets (MVA), rather than the AVA.



GLOSSARY (Continued)

Funding Period or Amortization Period: The term “Funding Period” is used it two ways. In the first sense, it is the period used in calculating the Amortization Payment as a component of the ARC. This funding period is chosen by the Board of Trustees. In the second sense, it is a calculated item: the number of years in the future that will theoretically be required to amortize (i.e., pay off or eliminate) the Unfunded Actuarial Accrued Liability, based on the statutory employer contribution rate, and assuming no future actuarial gains or losses.

GASB: Governmental Accounting Standards Board.

GASB 67 and GASB 68: Governmental Accounting Standards Board Statements No. 67 and No. 68. These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 67 sets the rules for the systems themselves.

Normal Cost: That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method. Any payment in respect of an Unfunded Actuarial Accrued Liability is not part of Normal Cost (see Amortization Payment). For pension plan benefits which are provided in part by employee contributions, Normal Cost refers to the total of employee contributions and employer Normal Cost unless otherwise specifically stated. Under the entry age normal cost method, the Normal Cost is intended to be the level cost (when expressed as a percentage of pay) needed to fund the benefits of a member from hire until ultimate termination, death, disability or retirement.

Open Amortization Period: An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered payroll.

Unfunded Actuarial Accrued Liability: The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. This value may be negative in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus.

GLOSSARY (Continued)

Valuation Date or Actuarial Valuation Date: The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Plan Benefits is determined. The expected benefits to be paid in the future are discounted to this date.

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Municipal Employees Retirement System State of Rhode Island

Actuarial Valuation Report
As of June 30, 2021

DRAFT





December 10, 2021

Retirement Board
40 Fountain Street, First Floor
Providence, RI 02903-1854

Dear Members of the Board:

Subject: Actuarial Valuation as of June 30, 2021

This is the June 30, 2021 actuarial valuation of the Municipal Employees' Retirement System (MERS). This report describes the current actuarial condition of MERS, determines recommended employer contribution rates, and analyzes changes in these contribution rates. Separate liabilities and contribution rates are determined for each of the participating units. Valuations are prepared annually as of June 30, the last day of the plan year.

Under Rhode Island General Laws, the employer contribution rates for the units participating in MERS 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 and the actuarial assumptions and methodology adopted by the Board. Where known, we have also reflected adoption of a COLA provision even if the effective date is after the valuation date. 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 this June 30, 2021 actuarial valuation will be applicable for the year beginning July 1, 2023 and ending June 30, 2024.

FINANCING OBJECTIVES AND FUNDING POLICY

The actuarial cost method and the amortization periods are set by board policy. Normal cost rate (as a percent of pay) and actuarial accrued 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 employer normal cost rate is the difference between the normal cost rate and the member contribution rate. The amortization rate, also determined as a level percent of pay, 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.

PROGRESS TOWARD REALIZATION OF FINANCING OBJECTIVES

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) is a standard measure of a plan's funded status. The funded ratio of the average unit in MERS is 84.3%, which increased from 80.5% in the prior valuation. The funded status alone is not appropriate for assessing the need for future contributions for a given unit. The funded status is also not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.

Given the plan's contribution allocation procedure, if all actuarial assumptions are met (including the assumption of the plan earning 7.00% on the actuarial valuation of assets), it is expected that:

1. The employer normal cost as a percentage of pay will decrease to the level of the newest tier as the old tier population declines and is replaced by new tier members,
2. The amortization payment as a percentage of pay will increase through fiscal year 2024 as annual payments begin for each of the five staggered bases established in connection with the experience study after which they will remain level through fiscal year 2038, and
3. In the absence of benefit improvements, the funded ratio should increase over time, until it reaches 100%

There are currently 122 units participating in MERS, 69 covering general employees and 53 covering police and/or fire employees. Of these 122 units, one is a new unit that joined MERS since the last valuation, 22 had their rate increase and 90 had their rate decrease. Six units have no required contribution rate, while East Smithfield Water, Westerly and Barrington Fire (20) have fixed dollar contributions. Of the 69 continuing general employee units, 11 had rate increases, while 11 of the 53 continuing police/fire units had rate increases. An analysis of the changes in the employer contribution rates appears on Table 5. The primary cause of the rate decreases was an asset gain with a return on the actuarial value of assets of 10.2% exceeding the 7.0% assumed rate. This was partially offset by the continued recognition of the changes in assumption first effective with the June 30, 2017 valuation.

BENEFIT PROVISIONS

The benefit provisions reflected in this valuation are those which were in effect on June 30, 2021. There have been no material changes to the benefit provisions since the preceding valuation. We have also reflected the known adoption of COLA B or COLA C, even if the effective date and/or the adoption date occurred after the valuation date. The benefit provisions are summarized in Appendix B, and each unit's individual election is indicated by a code in column 4 on Table 1. Changes in elections are discussed on page 5.

ASSUMPTIONS AND METHODS

The assumptions are unchanged from the last actuarial valuation and were approved by the Board on May 22, 2020. We believe the assumptions are internally consistent and are reasonable, based on the actual experience of ERSRI.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities and the calculated contribution rates.

All assumptions and methods are described in Appendix A. The actuarial assumptions and methods used in this report comply with the parameters for disclosure that appear in GASB 67.

This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

DATA

The System's staff supplied data for retired, active and inactive members as of June 30, 2021. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the prior year's data. The System's staff also supplied asset data as of June 30, 2021.

CERTIFICATION

All of our work conforms with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Rhode Island state law and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board.



The undersigned are independent actuaries. All are Members of the American Academy of Actuaries. They all meet the Qualification Standards of the American Academy of Actuaries and they are experienced in performing valuations for large public retirement systems.


Respectfully submitted,



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



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



Brad Stewart, ASA, MAAA, EA
Consultant and Actuary

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Actuarial Standards of Practice Disclosure Statements

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

This report should not be relied on for any purpose other than the purpose described above. Determinations of the financial results associated with the benefits described in this report in a manner other than the intended purpose may produce significantly different results.

The valuation was based upon information furnished by the System's staff, concerning Retirement System benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by the System's staff.

The developed findings included in this report consider data or other information through June 30, 2021.

This is one of multiple documents comprising the actuarial report. The other document comprising the actuarial report is a PowerPoint presentation presented to the Board of Trustees following the publication of this report.

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SECTION I

DISCUSSION

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Discussion (Contribution Rates)

The employer contribution rates for MERS are determined actuarially. The rates determined in this valuation become effective two years after the valuation date, in this case as of July 1, 2023.

Each rate consists of two pieces: the employer normal cost rate and the amortization rate. The normal cost and actuarial accrued liability are determined using the Entry Age actuarial cost method. The employer normal cost is the difference between (i) the normal cost rate, determined as a level percent of pay, and (ii) the member contribution rate. The unfunded actuarial accrued liability (UAAL) is amortized as a level percent of payroll over a closed period. For underfunded units, the period is 25 years as measured from June 30, 2010, or 15 years as of the current valuation date for any existing UAAL. In conjunction with the Article 21 legislation, employers were given the option to extend the amortization period for the UAAL existing as of June 30, 2014 to 25 years as measured from June 30, 2014. All new experience gains and losses for underfunded units are amortized over individual closed periods of 20 years using the process of “laddering”. Generally, overfunded plans will have an amortization rate calculated using a single base amortized over an open period of 20 years. However, the impact of the experience study was divided into separate “stagers” with the first payment beginning in FY2020 over a 20 year period. Other staggers will begin payment in FY2021 through FY2024 with amortization periods also equal to 20 years (e.g. the FY2024 stagger will have a 20 year amortization period). The impact of the most recent experience study is divided into two staggers to align with the final two staggers from the 2017 experience study. The amortization rate is adjusted for the fact that the contribution rate set by this valuation is deferred for two years.

Table 1 shows the member contribution rate, the employer normal cost rate, the amortization rate and the total employer contribution rate. These rates are applicable to the fiscal year ending June 30, 2024. Table 2 compares the total employer contribution rate with those rates determined in the two prior actuarial valuations. Table 3 shows the components used to determine the employer contribution rate in dollar amounts. Finally, Table 5 shows the major components of the rate change for each unit.

Discussion (Financial Data and Experience)

Assets for MERS are held in trust and are commingled with those of several other plans and programs—including the Employees' Retirement System of Rhode Island—for investment purposes. The State Investment Commission is responsible for setting the asset allocation policy and for investing the funds. The System's staff determines a reserve for each unit, reflecting that unit's contributions and benefit payments, and reflecting the unit's share of the earnings, determined on a market-value basis.

Table 6a shows the development of the actuarial value of assets in aggregate. The actuarial value of assets is determined by recognizing any difference between actual return and expected return (7.00% of market value) over a five-year period, 20% in each year, where gains and losses are allowed to offset each other immediately. The market value for MERS as of June 30, 2021 was \$2,080 million while the actuarial value was \$1,852 million (89.1% of market). Therefore, a cumulative total of \$228 million in actuarial gains related to the investment experience 2021 continue to be deferred and will be recognized over the next four valuations. Recognition of this deferred gain will, all other things being equal, result in contribution rates decreasing over the next four years.

Table 4a shows the market and actuarial values of assets for each unit and Table 4b shows the reconciliation of the market value of assets for each unit for the fiscal year ending June 30, 2021. Table 6b shows a historical summary of the return rates. The fund earned 27.2% during the year ending June 30, 2021 on a market value basis and returned 10.2% on an actuarial value basis. The average annual return based on the market value of assets over the last ten years (July 1, 2011 – June 30, 2021) was 8.4%. This is more than the current 7.00% annual investment return assumption used. The average annual return based on the actuarial value of assets over the same period was 6.8%. The returns above are net of both investment and administrative expenses, so they may differ from other information provided by the General Treasurer's office or the investment managers and advisors.

The System's staff provided all of the financial information used in this report.

Discussion (Member Data)

The System's staff supplied member data as of June 30, 2021. While we did not audit this data, we did perform various tests to ensure that it was internally consistent, consistent with the prior year's data, and was reasonable overall. Information provided for active members includes: name, identification number, sex, a code indicating whether the member was active or inactive, date of birth, service, salary, unit indicator, date of last contribution, accumulated member contributions without interest, accrued benefit multiplier as of June 30, 2021, Final Average Compensation as of June 30, 2012, and the Rhode Island Retirement Security Act Retirement Date. For retired members, data includes: name, an identification number, sex, 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 sex. For the special survivor benefit provided to retired police and fire members, we have not been provided demographic information on possible spouses who will be eligible for that benefit. For this valuation, we have assumed 80% of members will be married and 10% of married members will choose option 1 or 2. The 80% was derived from analyzing two other large GRS clients with similar demographics and benefit provisions. One data set showed 84% of retirees with spousal information and the other 77%.

Table 9 shows active member statistics for each unit, and Table 10 shows statistics on retirees and beneficiaries for each unit. Tables 11 and 12 show the distribution of active members by age and service, separately for general employees and for police and fire employees. Tables 13, 14, and 15 show summaries of the total membership data for general employee units (Table 13), for police and fire units (Table 14), and for all MERS units (Table 15).

The total payroll shown on the statistical tables is the amount that was supplied by the System's staff, annualized if necessary. For the cost calculations, the pays were adjusted in accordance with the actuarial assumptions to reflect one year's salary increase.

Discussion (Benefit Provisions)

Appendix B includes a summary of the benefit provisions for MERS. There were no material changes in the benefit provisions since the preceding valuation.

Individual units may elect certain optional provisions, including an annual benefit increase applicable to future retirees only (COLA C), the same increase applicable to both current and future retirees (COLA B). There were no other changes reflected in this valuation.

No units closed, withdrew or subdivided since the prior valuation.

There are no ancillary benefits—e.g., cost of living benefits—that are currently provided by a source independent of MERS but that might be deemed a MERS liability if continued beyond the availability of funding by the current funding source.

The Central Falls Police & Fire Legacy plan is new this year as a result of the “Pathway to MERS” legislation. The benefit provisions for this group are generally unchanged from the benefits provided prior to entering MERS. For more details on these benefits, please contact the ERSRI.

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Discussion (Actuarial Methods and Assumptions)

Appendix A of this report includes a summary of the actuarial assumptions and methods used in this valuation.

Costs are determined using the Entry Age Normal actuarial cost method. This method was initially adopted effective June 30, 1999 and was modified, effective June 30, 2011, to be consistent with the Act and the standards outlined in GASB Statement No. 67 exposure draft, which has now been finalized.

The method used to determine the actuarial value of assets is the five-year smoothed market method. This technique is further described in Section III of Appendix A. The development of the actuarial value of assets utilizing this method is shown in Table 6a of this report.

The assumptions were adopted by the Board on May 22, 2020. We believe the assumptions are internally consistent and are reasonable, based on the actual experience of ERSRI.

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Discussion (Other Observations and Comments)

- Westerly (1622/1623) has no active members, but does have retirees/beneficiaries and an inactive member covered by MERS. The actuarial value of assets is less than the actuarial liability; therefore, a special contribution will be made in the next few years to amortize the unfunded liability. Based on the June 30, 2012 actuarial valuation, a fixed contribution amount of \$181,261 per year was calculated to amortize the UAAL over a 5-year period. They are now overfunded with a UAAL as of June 30, 2021 of (\$34,596), so no funding is required for the Unit. Please note that future experience may result in additional contribution requirements.
- East Smithfield Water (1177) has no active members but does have vested members due a deferred benefit and retirees/beneficiaries. The actuarial value of assets is less than the actuarial accrued liability resulting in an unfunded liability as of June 30, 2021. Based on this unfunded liability, a fixed contribution amount of \$5,360 was calculated to amortize the UAAL over a 5 year period beginning in FY2024.
- Scituate Police (1464) has no active members, but does have retirees/beneficiaries covered by MERS. The actuarial value of assets is larger than the actuarial liability, so no funding is required.
- Tiogue Fire and Lighting (1528) has no active members, but it has one retiree. The unit's liability is less than the actuarial value of its assets, so no funding is required.
- Albion Fire (Admin) (1702) has no active employees but it has one retiree. Its assets exceed its liabilities, and thus there is no contribution requirement for the year ending June 30, 2024.
- Barrington Fire 20 (1005) no longer has any active members, so they will continue to contribute a fixed dollar amount for FY2024. Based on the June 30, 2021 valuation, the actuarially determined contribution is \$342,484.
- Pascoag Fire District (ADMIN) COLA (1802) had no active members, but it has an inactive member. There are still no active members hired, so the unit will need to contribute on a dollar basis. For FY24 a payment of \$1,802 will be required.
- East Greenwich Fire (ADMIN) (1159) still has one active member and its contributions have been converted to a percent of pay. Based on the June 30, 2021 valuation, the actuarially determined contribution for FY2023 is \$9,707 or 22.01% of projected pay.
- There is one new unit that joined MERS since prior valuation. This unit is Portsmouth Police Department (1424).
- Effective July 1, 2021, Cumberland Fire Department (1125), Cumberland Hill Fire District (1135), North Cumberland Fire Department (1365) merged and are presented as one Unit in this valuation.
- Effective November 1, 2021, Albion Fire District (1705) and Saylesville Fire (1815) merged. For purposes of this valuation, the Units are presented separately but a blended contribution rate is calculated and shown.
- Other changes made between this valuation and July 1, 2022 such as units adopting new benefits, mergers of units, spin offs from one unit into two units, etc. will also result in revisions of contribution rates.

SECTION II

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Table 1

Contribution Rates For Fiscal Year Ending June 30, 2024

Old Unit Number	New Unit Number	Unit	Code(s)	Member Rate	Employer Rate		
					Employer Normal Cost	Amortization Rate	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
General Employee Units							
3002	1012 1019	Bristol	B	2.00%	5.57%	8.82%	14.39%
3003	1032 1033	Burrillville	C	2.00%	5.97%	1.26%	7.23%
3004	1052	Central Falls		1.00%	5.01%	8.53%	13.54%
3005	1082	Charlestown	C	2.00%	6.02%	(1.32%)	4.70%
3007	1112 1113	Cranston	B	2.00%	6.78%	3.14%	9.92%
3008	1122 1123	Cumberland		1.00%	6.16%	2.49%	8.65%
3009	1152 1153	East Greenwich	C	2.00%	6.18%	(1.24%)	4.94%
3010	1162 1163	East Providence	B	2.00%	5.84%	16.25%	22.09%
3011	1183	Exeter/West Greenwich	B	2.00%	7.36%	4.56%	11.92%
3012	1192 1193	Foster		1.00%	6.94%	2.55%	9.49%
3013	1212 1213	Glocester	C	2.00%	6.37%	2.34%	8.71%
3014	1262	Hopkinton	C	2.00%	5.79%	(3.79%)	2.00%
3015	1272 1273	Jamestown	C	2.00%	6.03%	3.82%	9.85%
3016	1282 1283	Johnston	C	2.00%	5.81%	14.27%	20.08%
3017	1302 1303	Lincoln		1.00%	9.17%	2.03%	11.20%
3019	1322 1323	Middletown	C	2.00%	6.04%	4.89%	10.93%
3021	1352 1353 1354	Newport	B	2.00%	5.57%	15.15%	20.72%
3022	1342 1343	New Shoreham	B	2.00%	5.41%	1.08%	6.49%
3023	1372 1373	North Kingstown	C	2.00%	5.94%	11.19%	17.13%
3024	1382 1383	North Providence		1.00%	5.96%	0.44%	6.40%
3025	1392 1393	North Smithfield	B	2.00%	6.06%	(2.10%)	3.96%
3026	1412 1413	Pawtucket	C	2.00%	6.00%	6.45%	12.45%
3027	1515	Union Fire District		1.00%	6.17%	(0.43%)	5.74%
3029	1452	Richmond		1.00%	5.76%	1.79%	7.55%
3030	1462 1463	Scituate	B	2.00%	6.52%	7.76%	14.28%
3031	1472 1473	Smithfield	C	2.00%	6.54%	2.44%	8.98%
3032	1492 1493	South Kingstown	B	2.00%	6.18%	6.40%	12.58%
3033	1532 1533	Tiverton	C	2.00%	5.68%	(1.64%)	4.04%
3034	1562	Warren	C	2.00%	5.22%	4.26%	9.48%
3037	1602	West Greenwich	C	2.00%	6.01%	4.26%	10.27%
3039	1632 1633	Woonsocket	B	2.00%	5.91%	5.39%	11.30%
3040	1073	Chariho School District	C	2.00%	6.04%	4.96%	11.00%
3041	1203	Foster/Glocester	B	2.00%	5.78%	4.83%	10.61%
3043	1336	Narragansett Housing	C	2.00%	7.19%	(4.87%)	2.32%
3045	1098	Coventry Lighting District	C	2.00%	5.69%	(119.45%)	0.00%
3046	1242	Hope Valley Fire	C	2.00%	4.70%	(8.21%)	0.00%
3050	1156	East Greenwich Housing	C	2.00%	6.21%	(2.32%)	3.89%
3051	1116	Cranston Housing	C	2.00%	5.51%	(0.01%)	5.50%
3052	1166	East Providence Housing	B	2.00%	5.70%	(1.20%)	4.50%
3053	1416	Pawtucket Housing	B	2.00%	5.86%	(9.11%)	0.00%
3056	1126	Cumberland Housing	C	2.00%	6.84%	(3.21%)	3.63%
3057	1306	Lincoln Housing	B	2.00%	5.31%	5.42%	10.73%
3059	1016	Bristol Housing		1.00%	6.29%	(4.08%)	2.21%
3065	1036	Burrillville Housing	B	2.00%	5.34%	8.04%	13.38%
3066	1386	North Providence Housing	B	2.00%	5.28%	21.56%	26.84%



Table 1

Contribution Rates For Fiscal Year Ending June 30, 2024

Old Unit Number	New Unit Number	Unit	Code(s)	Member Rate	Employer Rate		
					Employer Normal Cost	Amortization Rate	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
3068	1227	Greenville Water	B	2.00%	6.68%	(4.10%)	2.58%
3069	1356	Newport Housing	C	2.00%	5.93%	17.31%	23.24%
3071	1566	Warren Housing	B	2.00%	5.04%	1.45%	6.49%
3072	1286	Johnston Housing		1.00%	6.77%	6.43%	13.20%
3077	1538	Tiverton Local 2670A	C	2.00%	4.93%	1.55%	6.48%
3078	1002 1003 1007 1009	Barrington COLA	C	2.00%	6.08%	3.00%	9.08%
3079	1096	Coventry Housing		1.00%	7.10%	(1.86%)	5.24%
3080	1496	South Kingstown Housing	C	2.00%	5.55%	(4.76%)	0.79%
3081	1403	N. RI Collaborative Adm. Services	C	2.00%	5.82%	9.48%	15.30%
3083	1616	West Warwick Housing	B	2.00%	4.76%	2.64%	7.40%
3084	1476	Smithfield Housing		1.00%	6.36%	(3.96%)	2.40%
3094	1478	Smithfield COLA	C	2.00%	5.94%	2.68%	8.62%
3096	1056	Central Falls Housing	C	2.00%	6.22%	7.24%	13.46%
3098	1293	Lime Rock Administrative Services		1.00%	7.01%	3.84%	10.85%
3099	1063	Central Falls Schools	C	2.00%	5.53%	2.12%	7.65%
3100	1023	Bristol/Warren Schools	B	2.00%	5.74%	9.43%	15.17%
3101	1157 1158	Town of E. Greenwich-COLA-NCE	C	2.00%	6.18%	(1.24%)	4.94%
3102	1712	Harrisville Fire District (ADMIN)	C	2.00%	7.23%	(5.20%)	2.03%
3150	1159	East Greenwich Fire (ADMIN)	C	2.00%	3.26%	18.75%	22.01%
General Employee Units Averages				1.89%	6.04%	5.83%	11.87%
Police & Fire Units							
4016	1285	Johnston Fire	D	9.00%	8.65%	1.84%	10.49%
4029	1454	Richmond Police	6	9.00%	8.55%	1.30%	9.85%
4031	1474	Smithfield Police	C,D	10.00%	9.32%	0.48%	9.80%
4042	1555	Valley Falls Fire	D	9.00%	8.99%	18.97%	27.96%
4047	1395 1435	North Smithfield Voluntary Fire	B,D	10.00%	8.95%	7.96%	16.91%
4050	1155	East Greenwich Fire	C,D	10.00%	9.39%	23.82%	33.21%
4054	1154	East Greenwich Police	C,D	10.00%	9.91%	23.36%	33.27%
4055	1375	North Kingstown Fire	C,D	10.00%	9.53%	20.20%	29.73%
4056	1374	North Kingstown Police	C,D	10.00%	9.39%	18.06%	27.45%
4058	1385	North Providence Fire	D	9.00%	9.08%	18.99%	28.07%
4059	1008	Barrington Fire (25)	C	10.00%	8.75%	1.38%	10.13%
4060	1004	Barrington Police	C,D	10.00%	8.98%	20.32%	29.30%
4062	1564 1565	Warren Police & Fire	C,D	10.00%	9.90%	16.68%	26.58%
4063	1494	South Kingstown Police	B,1	10.00%	9.53%	17.70%	27.23%
4076	1394	North Smithfield Police	C,D	10.00%	8.81%	12.54%	21.35%
4077	1534	Tiverton Fire	C,D	10.00%	9.14%	13.99%	23.13%
4082	1194	Foster Police	C,D	10.00%	11.19%	17.35%	28.54%
4085	1634	Woonsocket Police	C,D	10.00%	9.17%	22.67%	31.84%

Table 1

Contribution Rates For Fiscal Year Ending June 30, 2024

Old Unit Number	New Unit Number	Unit	Code(s)	Member Rate	Employer Rate		
					Employer Normal Cost	Amortization Rate	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
4086	1084	Charlestown Police	C,D	10.00%	9.45%	20.45%	29.90%
4087	1264	Hopkinton Police	C,D,6	10.00%	10.22%	22.16%	32.38%
4088	1214	Glocester Police	C,D	10.00%	10.40%	13.16%	23.56%
4089	1604	West Greenwich Police/Rescue	C,D	10.00%	10.73%	10.40%	21.13%
4090	1034	Burrillville Police	C,D,6	10.00%	9.24%	9.99%	19.23%
4091	1148	Cumberland Rescue	C,D	10.00%	10.02%	0.62%	10.64%
4093	1635	Woonsocket Fire	C,D	10.00%	9.73%	4.43%	14.16%
4094	1015	Bristol Fire	D	9.00%	11.32%	(1.41%)	9.91%
4096	1014	Bristol Police	C,D	10.00%	9.30%	(2.55%)	6.75%
4098	1095	Coventry Fire	C,D	10.00%	9.64%	37.62%	47.26%
4099	1505	South Kingstown EMT	C,D	10.00%	10.47%	(6.52%)	3.95%
4102	1045 1235 1525 1585	Central Coventry Fire	C,D	10.00%	9.67%	25.18%	34.85%
4103	1255	Hopkins Hill Fire	C,D	10.00%	9.58%	2.84%	12.42%
4104	1114	Cranston Police	C,D,4	10.00%	9.29%	6.11%	15.40%
4105	1115	Cranston Fire	C,D,4	10.00%	9.64%	(1.71%)	7.93%
4106	1125	Cumberland Fire	B,D	10.00%	9.82%	14.68%	24.50%
4107	1305	Lincoln Rescue	C	10.00%	9.14%	20.34%	29.48%
4108	1344	New Shoreham Police	B,D	10.00%	8.09%	12.77%	20.86%
4109	1324	Middletown Police & Fire	C,D	10.00%	9.02%	(1.25%)	7.77%
4110	1715	Harrisville Fire District	C,D	10.00%	10.31%	(8.62%)	1.69%
4111	1705	Albion Fire District	C	10.00%	8.60%	3.47%	12.07%
1054	1054	Central Falls Police & Fire New	C	10.00%	8.41%	(0.26%)	8.15%
1055	1055	Central Falls Police & Fire Legacy	C	11.70%	8.26%	49.49%	57.75%
1284	1284	Johnston Police		9.00%	8.63%	(0.91%)	7.72%
1364	1364	Newport Police Dept		9.00%	8.53%	(1.00%)	7.53%
1424	1424	Portsmouth Police Department	C,2	10.00%	8.43%	(0.02%)	8.41%
1425	1425	Portsmouth Fire Department	C	10.00%	8.63%	0.18%	8.81%
1465	1465	Smithfield Fire	C	10.00%	8.96%	(1.51%)	7.45%
1484	1484	Scituate Police Dept COLA	C	10.00%	8.78%	(0.72%)	8.06%
1805	1805	Pascoag Fire District COLA	C	10.00%	9.69%	10.25%	19.94%
1815	1815	Saylesville Fire (NO COLA)	C	10.00%	8.60%	3.47%	12.07%
Police & Fire Units Averages				9.92%	9.32%	10.10%	19.42%
All MERS Units Averages				4.55%	7.13%	7.24%	14.37%

B - Municipality has adopted COLA Plan B

C - Municipality has adopted COLA Plan C

D - Municipality has adopted the "20-year" optional Police & Fire Plan

1 - S.Kingstown Police have a unique plan that provides 2.0% of salary for service prior to July 1, 1993, and 2.5% of salary for service on or after July 1, 1993.

2 - New unit since prior valuation.

3 - Closed unit.

4 - Historically, Cranston Fire and Police are contributing 10% due to special plan provision.

5 - This unit has no active members.

6 - Historically, Special plan provisions apply to this unit.



Table 2

Comparison of Employer Contribution Rates

Old Unit Number	New Unit Number	Unit	Code(s)	Contribution Rates			Projected Payroll, Projected from Actual FY2021 Payroll			Estimated Contributions		
				June 30, 2021 Actuarial Valuation, for FY2024	June 30, 2020 Actuarial Valuation, for FY2023	June 30, 2019 Actuarial Valuation, for FY2022	For FY2024	For FY2023	For FY2022	June 30, 2021 Actuarial Valuation, for FY2024	June 30, 2020 Actuarial Valuation, for FY2023	June 30, 2019 Actuarial Valuation, for FY2022
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
3002	1012 1019	Bristol	B	14.39%	15.14%	15.24%	\$ 5,656,931	\$ 5,492,166	\$ 5,332,200	\$ 814,032	\$ 831,514	\$ 812,627
3003	1032 1033	Burrillville	C	7.23%	7.98%	7.66%	6,993,974	6,790,266	6,592,492	505,664	541,863	504,985
3004	1052	Central Falls		13.54%	14.86%	14.42%	2,342,814	2,274,577	2,208,327	317,217	338,002	318,441
3005	1082	Charlestown	C	4.70%	7.08%	7.42%	3,166,062	3,073,846	2,984,317	148,805	217,628	221,436
3007	1112 1113	Cranston	B	9.92%	11.06%	10.70%	26,212,779	25,449,300	24,708,059	2,600,308	2,814,693	2,643,762
3008	1122 1123	Cumberland		8.65%	10.08%	10.81%	11,715,902	11,374,662	11,043,362	1,013,426	1,146,566	1,193,787
3009	1152 1153	East Greenwich	C	4.94%	6.08%	5.54%	1,753,012	1,701,954	1,652,382	86,599	103,479	91,542
3010	1162 1163	East Providence	B	22.09%	21.59%	21.56%	21,885,052	21,247,623	20,628,760	4,834,408	4,587,362	4,447,561
3011	1183	Exeter/West Greenwich	B	11.92%	12.79%	12.64%	3,398,751	3,299,758	3,203,649	405,131	422,039	404,941
3012	1192 1193	Foster		9.49%	11.73%	12.11%	1,467,166	1,424,433	1,382,945	139,234	167,086	167,475
3013	1212 1213	Glocester	C	8.71%	10.23%	10.47%	3,148,967	3,057,249	2,968,203	274,275	312,757	310,771
3014	1262	Hopkinton	C	2.00%	2.91%	2.98%	2,020,490	1,961,640	1,904,505	40,410	57,084	56,754
3015	1272 1273	Jamestown	C	9.85%	9.75%	10.53%	4,822,037	4,681,590	4,545,233	474,971	456,455	478,613
3016	1282 1283	Johnston	C	20.08%	19.10%	16.62%	8,366,573	8,122,886	7,886,297	1,680,008	1,551,471	1,310,703
3017	1302 1303	Lincoln		11.20%	12.04%	11.42%	1,058,278	1,027,454	997,529	118,527	123,706	113,918
3019	1322 1323	Middletown	C	10.93%	11.43%	11.92%	5,290,841	5,136,739	4,987,125	578,289	587,129	594,465
3021	1352 1353 1354	Newport	B	20.72%	21.58%	21.08%	15,462,331	15,011,972	14,574,730	3,203,795	3,239,584	3,072,353
3022	1342 1343	New Shoreham	B	6.49%	7.33%	7.03%	2,932,433	2,847,022	2,764,099	190,315	208,687	194,316
3023	1372 1373	North Kingstown	C	17.13%	17.43%	17.04%	13,597,251	13,201,214	12,816,713	2,329,209	2,300,972	2,183,968
3024	1382 1383	North Providence		6.40%	6.94%	6.38%	9,471,386	9,195,520	8,927,690	606,169	638,169	569,587
3025	1392 1393	North Smithfield	B	3.96%	6.10%	5.93%	4,668,296	4,532,326	4,400,317	184,865	276,472	260,939
3026	1412 1413	Pawtucket	C	12.45%	13.80%	14.28%	22,437,461	21,783,943	21,149,459	2,793,464	3,006,184	3,020,143
3027	1515	Union Fire District		5.74%	6.84%	6.91%	328,832	319,255	309,956	18,875	21,837	21,418
3029	1452	Richmond		7.55%	8.77%	8.61%	1,495,597	1,452,036	1,409,744	112,918	127,344	121,379
3030	1462 1463	Scituate	B	14.28%	14.66%	15.01%	3,934,519	3,819,922	3,708,662	561,849	560,001	556,670
3031	1472 1473	Smithfield	C	8.98%	10.17%	9.89%	4,099,007	3,979,618	3,863,707	368,091	404,727	382,121
3032	1492 1493	South Kingstown	B	12.58%	12.78%	12.37%	14,502,429	14,080,028	13,669,930	1,824,406	1,799,428	1,690,970
3033	1532 1533	Tiverton	C	4.04%	4.21%	3.11%	4,178,265	4,056,568	3,938,415	168,802	170,781	122,485
3034	1562	Warren	C	9.48%	10.43%	10.69%	2,894,162	2,809,866	2,728,025	274,367	293,069	291,626
3037	1602	West Greenwich	C	10.27%	13.38%	14.60%	1,431,070	1,389,388	1,348,920	146,971	185,900	196,942
3039	1632 1633	Woonsocket	B	11.30%	11.98%	11.43%	14,647,843	14,221,207	13,806,997	1,655,206	1,703,701	1,578,140
3040	1073	Chariho School District	C	11.00%	11.45%	11.50%	5,967,430	5,793,621	5,624,875	656,417	663,370	646,861
3041	1203	Foster/Glocester	B	10.61%	11.43%	10.29%	2,451,588	2,380,183	2,310,857	260,114	272,055	237,787
3043	1336	Narragansett Housing	C	2.32%	3.39%	2.80%	225,102	218,546	212,180	5,222	7,409	5,941
3045	1098	Coventry Lighting District	C	0.00%	0.00%	0.00%	51,910	50,398	48,930	-	-	-
3046	1242	Hope Valley Fire	C	0.00%	0.00%	0.00%	183,658	178,308	173,115	-	-	-
3050	1156	East Greenwich Housing	C	3.89%	11.18%	11.67%	588,659	571,513	554,867	22,899	63,895	64,753
3051	1116	Cranston Housing	C	5.50%	6.09%	6.54%	1,307,845	1,269,753	1,232,770	71,931	77,328	80,623



Table 2

Comparison of Employer Contribution Rates

Old Unit Number	New Unit Number	Unit	Code(s)	Contribution Rates			Projected Payroll, Projected from Actual FY2021 Payroll			Estimated Contributions		
				June 30, 2021 Actuarial Valuation, for FY2024	June 30, 2020 Actuarial Valuation, for FY2023	June 30, 2019 Actuarial Valuation, for FY2022	For FY2024	For FY2023	For FY2022	June 30, 2021 Actuarial Valuation, for FY2024	June 30, 2020 Actuarial Valuation, for FY2023	June 30, 2019 Actuarial Valuation, for FY2022
				(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
3052	1166	East Providence Housing	B	4.50%	11.45%	11.75%	895,290	869,214	843,897	40,288	99,525	99,158
3053	1416	Pawtucket Housing	B	0.00%	0.00%	0.00%	3,390,315	3,291,568	3,195,697	-	-	-
3056	1126	Cumberland Housing	C	3.63%	4.47%	5.08%	639,238	620,619	602,543	23,204	27,742	30,609
3057	1306	Lincoln Housing	B	10.73%	10.25%	9.77%	687,307	667,288	647,852	73,748	68,397	63,295
3059	1016	Bristol Housing		2.21%	2.17%	1.17%	586,579	569,494	552,907	12,963	12,358	6,469
3065	1036	Burrillville Housing	B	13.38%	13.29%	12.31%	250,623	243,324	236,237	33,533	32,338	29,081
3066	1386	North Providence Housing	B	26.84%	35.17%	33.81%	330,790	321,156	311,802	88,784	112,950	105,420
3068	1227	Greenville Water	B	2.58%	3.47%	2.97%	419,270	407,059	395,203	10,817	14,125	11,738
3069	1356	Newport Housing	C	23.24%	21.53%	19.01%	1,652,557	1,604,424	1,557,693	384,054	345,433	296,117
3071	1566	Warren Housing	B	6.49%	6.33%	5.48%	493,764	479,382	465,420	32,045	30,345	25,505
3072	1286	Johnston Housing		13.20%	13.62%	13.55%	530,905	515,442	500,429	70,080	70,203	67,808
3077	1538	Tiverton Local 2670A	C	6.48%	6.77%	7.03%	1,320,515	1,282,054	1,244,713	85,569	86,795	87,503
3078	1002 1003 1007 1009	Barrington COLA	C	9.08%	10.74%	11.36%	9,379,222	9,106,041	8,840,816	851,633	977,989	1,004,317
3079	1096	Coventry Housing		5.24%	6.05%	6.38%	698,849	678,494	658,732	36,620	41,049	42,027
3080	1496	South Kingstown Housing	C	0.79%	0.00%	0.00%	218,956	212,578	206,387	1,730	-	-
3081	1403	N. RI Collaborative Adm. Services	C	15.30%	13.93%	13.87%	881,736	856,055	831,121	134,906	119,248	115,277
3083	1616	West Warwick Housing	B	7.40%	9.00%	9.40%	622,994	604,848	587,231	46,102	54,436	55,200
3084	1476	Smithfield Housing		2.40%	2.42%	1.68%	214,792	208,536	202,462	5,155	5,047	3,401
3094	1478	Smithfield COLA	C	8.62%	9.92%	10.20%	4,806,626	4,666,628	4,530,706	414,331	462,929	462,132
3096	1056	Central Falls Housing	C	13.46%	13.89%	14.14%	1,299,741	1,261,884	1,225,130	174,945	175,276	173,233
3098	1293	Lime Rock Administrative Services		10.85%	13.24%	14.82%	119,130	115,661	112,292	12,926	15,313	16,642
3099	1063	Central Falls Schools	C	7.65%	8.48%	8.42%	5,021,042	4,874,798	4,732,814	384,110	413,383	398,503
3100	1023	Bristol/Warren Schools	B	15.17%	16.19%	16.07%	5,137,478	4,987,843	4,842,566	779,355	807,532	778,200
3101	1157 1158	Town of E. Greenwich-COLA-NCE	C	4.94%	6.08%	5.54%	6,321,016	6,136,909	5,958,164	312,258	373,124	330,082
3102	1712	Harrisville Fire District (ADMIN)	C	2.03%	4.73%	5.04%	298,363	289,672	281,235	6,057	13,702	14,174
3150	1159	East Greenwich Fire (ADMIN)	C	22.01%	19.74%	34.47%	44,102	42,818	41,571	9,707	8,451	8,045
General Employee Units Average				11.87%	12.64%	12.47%	\$ 282,417,904	\$ 274,192,139	\$ 266,205,961	\$ 33,512,107	\$ 34,647,433	\$ 33,194,739
Police & Fire Units												
4016	1285	Johnston Fire	D	10.49%	11.49%	12.49%	\$ 5,544,069	\$ 5,382,591	\$ 5,225,817	\$ 581,572	\$ 618,460	\$ 652,705
4029	1454	Richmond Police	6	9.85%	10.77%	10.40%	973,465	945,112	917,584	95,886	101,788	95,429
4031	1474	Smithfield Police	C,D	9.80%	11.93%	12.54%	3,601,902	3,496,992	3,395,138	352,987	417,191	425,750
4042	1555	Valley Falls Fire	D	27.96%	28.82%	28.23%	741,918	720,309	699,329	207,440	207,593	197,421
4047	1395 1435	North Smithfield Voluntary Fire	B,D	16.91%	16.71%	17.82%	1,638,223	1,590,508	1,544,182	277,023	265,774	275,173
4050	1155	East Greenwich Fire	C,D	33.21%	34.64%	33.83%	3,002,533	2,915,080	2,830,175	997,141	1,009,784	957,448



Table 2

Comparison of Employer Contribution Rates

Old Unit Number	New Unit Number	Unit	Code(s)	Contribution Rates			Projected Payroll, Projected from Actual FY2021 Payroll			Estimated Contributions		
				June 30, 2021 Actuarial Valuation, for FY2024	June 30, 2020 Actuarial Valuation, for FY2023	June 30, 2019 Actuarial Valuation, for FY2022	For FY2024	For FY2023	For FY2022	June 30, 2021 Actuarial Valuation, for FY2024	June 30, 2020 Actuarial Valuation, for FY2023	June 30, 2019 Actuarial Valuation, for FY2022
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
4058	1385	North Providence Fire	D	28.07%	28.51%	28.14%	7,122,282	6,914,837	6,713,433	1,999,224	1,971,420	1,889,161
4059	1008	Barrington Fire (25)	C	10.13%	11.59%	10.80%	2,132,210	2,070,107	2,009,813	215,993	239,926	217,060
4060	1004	Barrington Police	C,D	29.30%	30.65%	34.02%	2,119,360	2,057,632	1,997,701	620,973	630,664	679,618
4062	1564 1565	Warren Police & Fire	C,D	26.58%	27.45%	27.15%	2,112,545	2,051,015	1,991,277	561,515	563,004	540,632
4063	1494	South Kingstown Police	B,1	27.23%	27.52%	26.12%	4,254,804	4,130,877	4,010,561	1,158,583	1,136,817	1,047,558
4076	1394	North Smithfield Police	C,D	21.35%	22.75%	23.39%	2,201,156	2,137,044	2,074,800	469,947	486,178	485,296
4077	1534	Tiverton Fire	C,D	23.13%	22.97%	24.73%	2,185,913	2,122,245	2,060,432	505,602	487,480	509,545
4082	1194	Foster Police	C,D	28.54%	27.84%	30.48%	574,040	557,320	541,088	163,831	155,158	164,924
4085	1634	Woonsocket Police	C,D	31.84%	31.82%	30.62%	6,899,535	6,698,577	6,503,473	2,196,812	2,131,487	1,991,363
4086	1084	Charlestown Police	C,D	29.90%	36.20%	34.25%	1,756,179	1,705,028	1,655,367	525,097	617,220	566,963
4087	1264	Hopkinton Police	C,D,6	32.38%	34.35%	32.62%	1,180,790	1,146,398	1,113,008	382,340	393,788	363,063
4088	1214	Glocester Police	C,D	23.56%	24.67%	25.15%	1,370,401	1,330,486	1,291,734	322,866	328,231	324,871
4089	1604	West Greenwich Police/Rescue	C,D	21.13%	21.37%	23.22%	1,177,662	1,143,361	1,110,059	248,840	244,336	257,756
4090	1034	Burrillville Police	C,D,6	19.23%	19.75%	21.63%	2,003,361	1,945,011	1,888,360	385,246	384,140	408,453
4091	1148	Cumberland Rescue	C,D	10.64%	12.19%	13.52%	1,293,318	1,255,648	1,219,076	137,609	153,064	164,819
4093	1635	Woonsocket Fire	C,D	14.16%	14.85%	14.95%	8,191,501	7,952,914	7,721,275	1,159,916	1,181,008	1,154,331
4094	1015	Bristol Fire	D	9.91%	12.55%	13.61%	180,495	175,238	170,134	17,887	21,992	23,155
4096	1014	Bristol Police	C,D	6.75%	8.13%	8.93%	3,458,014	3,357,295	3,259,510	233,416	272,948	291,074
4098	1095	Coventry Fire	C,D	47.26%	50.10%	31.86%	675,149	655,484	636,393	319,075	328,398	202,755
4099	1505	South Kingstown EMT	C,D	3.95%	4.95%	4.01%	1,183,383	1,148,916	1,115,452	46,744	56,871	44,730
4102	1045 1235 1525 1585	Central Coventry Fire	C,D	34.85%	33.74%	32.88%	2,001,640	1,943,340	1,886,738	697,571	655,683	620,359
4103	1255	Hopkins Hill Fire	C,D	12.42%	10.39%	15.74%	1,012,054	982,577	953,958	125,697	102,090	150,153
4104	1114	Cranston Police	C,D,4	15.40%	16.13%	15.56%	13,661,914	13,263,994	12,877,664	2,103,935	2,139,482	2,003,764
4105	1115	Cranston Fire	C,D,4	7.93%	9.26%	8.64%	17,504,312	16,994,478	16,499,493	1,388,092	1,573,689	1,425,556
4106	1125	Cumberland Fire	B,D	24.50%	19.34%	20.97%	3,032,141	2,943,826	2,858,084	742,875	569,336	599,340
4107	1305	Lincoln Rescue	C	29.48%	29.83%	29.70%	931,514	904,383	878,041	274,610	269,777	260,778
4108	1344	New Shoreham Police	B,D	20.86%	19.16%	21.17%	432,058	419,474	407,256	90,127	80,371	86,216
4109	1324	Middletown Police & Fire	C,D	7.77%	7.74%	9.58%	5,302,048	5,147,619	4,997,688	411,969	398,425	478,778
4110	1715	Harrisville Fire District	C,D	1.69%	4.62%	7.29%	552,822	536,720	521,087	9,343	24,797	37,987
4111	1705	Albion Fire District	C	12.07%	13.09%	17.99%	339,532	329,642	320,041	40,969	43,150	57,575
1054	1054	Central Falls Police & Fire New	C	8.15%	8.96%	N/A	1,273,358	1,022,942	8.96%	103,779	91,655	N/A
1055	1055	Central Falls Police & Fire Legacy	C	57.75%	61.52%	N/A	4,193,095	4,284,294	61.52%	2,421,512	2,635,698	N/A
1284	1284	Johnston Police		7.72%	8.36%	9.18%	1,638,562	1,590,837	1,544,502	126,497	132,994	141,785



Table 2

Comparison of Employer Contribution Rates

Old Unit Number	New Unit Number	Unit	Code(s)	Contribution Rates			Projected Payroll, Projected from Actual FY2021 Payroll			Estimated Contributions		
				June 30, 2021 Actuarial Valuation, for FY2024	June 30, 2020 Actuarial Valuation, for FY2023	June 30, 2019 Actuarial Valuation, for FY2022	For FY2024	For FY2023	For FY2022	June 30, 2021 Actuarial Valuation, for FY2024	June 30, 2020 Actuarial Valuation, for FY2023	June 30, 2019 Actuarial Valuation, for FY2022
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1364	1364	Newport Police Dept		7.53%	7.91%	8.49%	1,704,740	1,655,087	1,606,881	128,367	130,917	136,424
1424	1424	Portsmouth Police Department	C,2	8.41%	N/A	N/A	1,626,487	1,579,114	1,533,120	136,788	N/A	N/A
1425	1425	Portsmouth Fire Department	C	8.81%	8.29%	N/A	1,154,132	1,120,517	N/A	101,679	92,891	N/A
1465	1465	Smithfield Fire	C	7.45%	8.29%	8.95%	2,187,946	2,124,219	2,062,349	163,002	176,098	184,580
1484	1484	Scituate Police Dept COLA	C	8.06%	8.39%	7.84%	521,627	506,434	491,684	42,043	42,490	38,548
1805	1805	Pascoag Fire District COLA	C	19.94%	21.98%	22.37%	301,989	293,194	284,654	60,217	64,444	63,677
1815	1815	Saylesville Fire (NO COLA)	C	12.07%	13.09%	8.11%	192,902	187,283	181,828	23,276	24,515	14,746
Police & Fire Units Average				19.42%	20.17%	18.99%	\$ 140,016,050	\$ 135,937,913	\$ 125,738,020	\$ 27,188,835	\$ 27,420,620	\$ 23,876,656
All MERS Units Average				14.37%	15.13%	14.56%	\$ 422,433,954	\$ 410,130,052	\$ 391,943,981	\$ 60,700,942	\$ 62,068,053	\$ 57,071,395

B - Municipality has adopted COLA Plan B

C - Municipality has adopted COLA Plan C

1 - S.Kingstown Police have a unique plan that provides 2.0% of salary for service prior to July 1, 1993, and 2.5% of salary for service on or after July 1, 1993.

2 - New unit since prior valuation.

4 - Historically, Cranston Fire and Police are contributing 10% due to special plan provision.

6 - Historically, Special plan provisions apply to this unit.

D - Municipality has adopted the "20-year" optional Police & Fire Plan

3 - Closed unit.

5 - This unit has no active members.



Table 3

Components Used in Determining Contribution Rates

Old Unit Number	New Unit Number	Unit	Code(s)	Projected Compensation	Normal Cost (Total)	Actuarial Accrued Liability	Actuarial Value of Assets
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
General Employee Units							
3002	1012 1019	Bristol	B	5,332,200	399,434	26,873,152	20,820,962
3003	1032 1033	Burrillville	C	6,592,492	522,429	33,707,735	32,539,926
3004	1052	Central Falls		2,208,327	133,507	7,952,778	5,904,446
3005	1082	Charlestown	C	2,984,317	229,658	9,458,728	9,961,628
3007	1112 1113	Cranston	B	24,708,059	2,062,979	161,378,518	151,841,701
3008	1122 1123	Cumberland		11,043,362	756,368	36,040,290	32,301,129
3009	1152 1153	East Greenwich	C	1,652,382	128,866	7,579,045	8,493,988
3010	1162 1163	East Providence	B	20,628,760	1,551,721	115,884,244	72,241,421
3011	1183	Exeter/West Greenwich	B	3,203,649	286,848	13,796,787	12,200,335
3012	1192 1193	Foster		1,382,945	99,408	4,751,628	4,388,021
3013	1212 1213	Glocester	C	2,968,203	242,616	11,343,262	10,656,843
3014	1262	Hopkinton	C	1,904,505	151,688	5,685,529	6,608,498
3015	1272 1273	Jamestown	C	4,545,233	341,417	19,033,272	17,118,395
3016	1282 1283	Johnston	C	7,886,297	599,932	49,171,327	34,510,749
3017	1302 1303	Lincoln		997,529	90,935	3,253,405	3,094,023
3019	1322 1323	Middletown	C	4,987,125	377,223	25,573,374	22,429,127
3021	1352 1353 1354	Newport	B	14,574,730	1,067,332	80,112,359	56,451,463
3022	1342 1343	New Shoreham	B	2,764,099	195,013	9,595,383	9,187,301
3023	1372 1373	North Kingstown	C	12,816,713	1,001,117	70,590,630	55,035,955
3024	1382 1383	North Providence		8,927,690	617,891	33,283,456	32,676,170
3025	1392 1393	North Smithfield	B	4,400,317	350,257	15,971,198	17,152,983
3026	1412 1413	Pawtucket	C	21,149,459	1,749,475	123,333,021	105,468,752
3027	1515	Union Fire District		309,956	24,364	1,044,853	1,061,940
3029	1452	Richmond		1,409,744	92,320	3,440,755	3,146,351
3030	1462 1463	Scituate	B	3,708,662	296,687	15,561,927	12,379,646
3031	1472 1473	Smithfield	C	3,863,707	321,195	15,283,244	13,991,288
3032	1492 1493	South Kingstown	B	13,669,930	1,062,626	74,339,080	64,145,998
3033	1532 1533	Tiverton	C	3,938,415	295,815	14,991,412	15,814,305
3034	1562	Warren	C	2,728,025	188,683	8,692,533	7,156,071
3036	1622 1623	Westerly		-	-	756,047	790,643
3037	1602	West Greenwich	C	1,348,920	106,317	4,619,365	3,872,674



Table 3

Components Used in Determining Contribution Rates

Old Unit Number	New Unit Number	Unit	Code(s)	Projected Compensation	Normal Cost (Total)	Actuarial Accrued Liability	Actuarial Value of Assets
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
3039	1632 1633	Woonsocket	B	13,806,997	1,055,095	75,674,389	66,873,713
3040	1073	Chariho School District	C	5,624,875	439,036	26,651,754	23,541,209
3041	1203	Foster/Glocester	B	2,310,857	176,723	9,824,297	8,500,978
3042	1528	Tiogue Fire & Lighting	C,5	-	-	25,816	54,679
3043	1336	Narragansett Housing	C	212,180	18,417	740,283	872,435
3045	1098	Coventry Lighting District	C	48,930	3,731	567,467	1,314,317
3046	1242	Hope Valley Fire	C	173,115	11,301	349,498	531,223
3050	1156	East Greenwich Housing	C	554,867	45,623	1,576,619	1,740,822
3051	1116	Cranston Housing	C	1,232,770	91,236	6,133,392	6,116,738
3052	1166	East Providence Housing	B	843,897	59,332	3,217,384	3,346,807
3053	1416	Pawtucket Housing	B	3,195,697	244,917	13,716,509	17,436,065
3056	1126	Cumberland Housing	C	602,543	58,585	1,465,349	1,712,541
3057	1306	Lincoln Housing	B	647,852	47,919	2,297,664	1,837,710
3059	1016	Bristol Housing		552,907	41,208	2,186,170	2,474,634
3065	1036	Burrillville Housing	B	236,237	17,158	1,213,057	960,172
3066	1386	North Providence Housing	B	311,802	22,412	1,829,601	943,753
3067	1177	East Smithfield Water	C	-	-	719,395	699,540
3068	1227	Greenville Water	B	395,203	32,512	1,403,633	1,610,737
3069	1356	Newport Housing	C	1,557,693	121,678	10,319,572	7,293,485
3071	1566	Warren Housing	B	465,420	32,421	1,286,906	1,190,407
3072	1286	Johnston Housing		500,429	37,090	1,766,320	1,348,734
3077	1538	Tiverton Local 2670A	C	1,244,713	84,629	4,707,311	4,522,153
3078	1002 1003 1007 1009	Barrington COLA	C	8,840,816	706,328	42,733,203	39,485,731
3079	1096	Coventry Housing		658,732	54,634	1,570,739	1,727,335
3080	1496	South Kingstown Housing	C	206,387	15,371	491,561	617,086
3081	1403	N. RI Collaborative Adm. Services	C	831,121	52,790	4,133,246	3,246,982
3083	1616	West Warwick Housing	B	587,231	33,036	1,932,787	1,770,134
3084	1476	Smithfield Housing		202,462	14,223	634,240	736,770
3094	1478	Smithfield COLA	C	4,530,706	338,032	20,229,857	18,581,025



Table 3

Components Used in Determining Contribution Rates

Old Unit Number	New Unit Number	Unit	Code(s)	Projected Compensation	Normal Cost (Total)	Actuarial Accrued Liability	Actuarial Value of Assets
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
3096	1056	Central Falls Housing	C	1,225,130	110,030	4,023,771	2,863,668
3098	1293	Lime Rock Administrative Services		112,292	8,501	512,283	455,184
3099	1063	Central Falls Schools	C	4,732,814	342,277	19,164,646	17,901,992
3100	1023	Bristol/Warren Schools	B	4,842,566	378,100	24,692,354	18,689,034
3101	1157 1158	Town of E. Greenwich-COLA-NCE	C	5,958,164	470,766	26,209,472	26,501,300
3102	1712	Harrisville Fire District (ADMIN)	C	281,235	24,441	1,038,393	1,225,159
3103	1702	Albion Fire District (ADMIN)	C,5	-	-	134,803	147,601
3150	1159	East Greenwich Fire (ADMIN)	C	41,571	2,142	250,285	146,670
General Employee Units Subtotal				\$ 266,205,961	\$ 20,535,815	\$ 1,318,585,070	\$ 1,132,507,731
Police & Fire Units							
4016	1285	Johnston Fire	D	5,225,817	941,078	15,284,162	13,966,294
4029	1454	Richmond Police	6	917,584	162,606	3,161,359	3,081,577
4031	1474	Smithfield Police	C,D	3,395,138	656,583	22,118,979	21,884,509
4042	1555	Valley Falls Fire	D	699,329	122,712	6,043,300	4,325,226
4047	1395 1435	North Smithfield Voluntary Fire	B,D	1,544,182	291,044	11,162,995	9,806,484
4050	1155	East Greenwich Fire	C,D	2,830,175	546,708	24,922,784	17,547,880
4054	1154	East Greenwich Police	C,D	2,411,130	426,716	24,805,170	18,697,501
4055	1375	North Kingstown Fire	C,D	5,346,279	1,000,041	51,389,928	39,676,371
4056	1374	North Kingstown Police	C,D	4,380,371	842,305	36,969,166	28,354,239
4058	1385	North Providence Fire	D	6,713,433	1,197,591	57,014,098	40,788,601
4059	1008	Barrington Fire (25)	C	2,009,813	382,583	5,622,803	5,273,828
4060	1004	Barrington Police	C,D	1,997,701	387,434	16,746,156	12,496,766
4061	1005	Barrington Fire (20)	C,D	5,729	-	9,225,185	5,681,092
4062	1564 1565	Warren Police & Fire	C,D	1,991,277	391,093	18,167,485	13,826,094
4063	1494	South Kingstown Police	B,1	4,010,561	787,434	36,552,390	28,793,820
4073	1464	Scituate Police	5	-	-	14,545	278,273
4076	1394	North Smithfield Police	C,D	2,074,800	414,443	14,757,423	11,954,673
4077	1534	Tiverton Fire	C,D	2,060,432	405,229	16,013,867	12,710,825



Table 3

Components Used in Determining Contribution Rates

Old Unit Number	New Unit Number	Unit	Code(s)	Projected Compensation	Normal Cost (Total)	Actuarial Accrued Liability	Actuarial Value of Assets
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
4082	1194	Foster Police	C,D	541,088	120,536	4,451,349	3,443,108
4085	1634	Woonsocket Police	C,D	6,503,473	1,248,942	65,485,744	49,492,908
4086	1084	Charlestown Police	C,D	1,655,367	326,173	16,585,797	12,836,424
4087	1264	Hopkinton Police	C,D,6	1,113,008	228,292	9,359,836	6,715,147
4088	1214	Glocester Police	C,D	1,291,734	266,107	10,490,294	8,550,463
4089	1604	West Greenwich Police/Rescue	C,D	1,110,059	207,181	7,657,999	6,165,663
4090	1034	Burrillville Police	C,D,6	1,888,360	358,786	15,187,665	13,126,826
4091	1148	Cumberland Rescue	C,D	1,219,076	250,783	8,842,822	8,705,883
4093	1635	Woonsocket Fire	C,D	7,721,275	1,533,802	65,557,472	61,482,044
4094	1015	Bristol Fire	D	170,134	28,310	673,490	704,158
4095	1135	Cumberland Hill Fire	C,D	810,624	-	-	-
4096	1014	Bristol Police	C,D	3,259,510	624,263	11,359,115	12,422,836
4098	1095	Coventry Fire	C,D	636,393	128,006	6,769,032	3,613,317
4099	1505	South Kingstown EMT	C,D	1,115,452	225,871	4,565,938	5,495,262
4101	1365	North Cumberland	C,D	646,002	-	-	-
4102	1045 1235 1525 1585	Central Coventry Fire	C,D	1,886,738	353,214	17,321,354	11,272,535
4103	1255	Hopkins Hill Fire	C,D	953,958	179,612	4,710,458	4,330,885
4104	1114	Cranston Police	C,D,4	12,877,664	2,407,052	69,237,081	59,859,065
4105	1115	Cranston Fire	C,D,4	16,499,493	3,077,317	89,884,482	93,498,837
4106	1125	Cumberland Fire	B,D	2,858,084	575,763	23,436,519	18,007,896
4107	1305	Lincoln Rescue	C	878,041	186,540	6,857,455	4,789,220
4108	1344	New Shoreham Police	B,D	407,256	89,792	2,515,663	1,945,537
4109	1324	Middletown Police & Fire	C,D	4,997,688	1,033,118	12,461,519	13,259,039
4110	1715	Harrisville Fire District	C,D	521,087	96,064	1,894,379	2,468,144
4111	1705	Albion Fire District	C	320,041	64,744	1,693,816	1,390,102
1054	1054	Central Falls Police & Fire New	C	774,774	137,080	139,860	180,350
1055	1055	Central Falls Police & Fire Legacy	C	4,377,882	873,748	42,315,799	16,219,865
1284	1284	Johnston Police		1,544,502	289,712	1,717,727	1,897,301



Table 3

Components Used in Determining Contribution Rates

Old Unit Number	New Unit Number	Unit	Code(s)	Projected Compensation	Normal Cost (Total)	Actuarial Accrued Liability	Actuarial Value of Assets
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1364	1364	Newport Police Dept		1,606,881	291,919	1,271,855	1,477,323
1424	1424	Portsmouth Police Department	C,2	1,533,120	306,006	1,336,024	1,339,920
1425	1425	Portsmouth Fire Department	C	1,087,881	284,707	1,466,519	1,441,386
1465	1465	Smithfield Fire	C	2,062,349	403,633	2,606,749	3,005,178
1484	1484	Scituate Police Dept COLA	C	491,684	115,476	363,797	409,303
1805	1805	Pascoag Fire District COLA	C	284,654	55,172	1,083,776	704,806
1815	1815	Saylesville Fire (NO COLA)	C	181,828	28,745	57,119	127,685
		Police & Fire Units Subtotal		<u>\$ 133,440,911</u>	<u>\$ 25,352,066</u>	<u>\$ 879,330,298</u>	<u>\$ 719,522,469</u>
		All MERS Units Total		\$ 399,646,871	\$ 45,887,881	\$ 2,197,915,369	\$ 1,852,030,200

DRAFT

B - Municipality has adopted COLA Plan B

C - Municipality has adopted COLA Plan C

D - Municipality has adopted the "20-year" optional Police & Fire Plan

1 - S.Kingstown Police have a unique plan that provides 2.0% of salary for service prior to July 1, 1993, and 2.5% of salary for service on or after July 1, 1993.

2 - New unit since prior valuation.

3 - Closed unit.

4 - Historically, Cranston Fire and Police are contributing 10% due to special plan provision.

5 - This unit has no active members.

6 - Historically, Special plan provisions apply to this unit.



Table 4a

Asset Values

Old Unit Number	New Unit Number	Unit	Code	Market Value of Assets	Actuarial Value of Assets
(1)	(2)	(3)	(4)	(5)	(6)
General Employee Units					
3002	1012 1019	Bristol	B	\$ 23,378,800	\$ 20,820,962
3003	1032 1033	Burrillville	C	36,537,429	32,539,926
3004	1052	Central Falls		6,629,802	5,904,446
3005	1082	Charlestown	C	11,185,406	9,961,628
3007	1112 1113	Cranston	B	170,495,331	151,841,701
3008	1122 1123	Cumberland		36,269,296	32,301,129
3009	1152 1153	East Greenwich	C	9,537,468	8,493,988
3010	1162 1163	East Providence	B	81,116,221	72,241,421
3011	1183	Exeter/West Greenwich	B	13,699,136	12,200,335
3012	1192 1193	Foster		4,927,086	4,388,021
3013	1212 1213	Glocester	C	11,966,027	10,656,843
3014	1262	Hopkinton	C	7,420,347	6,608,498
3015	1272 1273	Jamestown	C	19,221,376	17,118,395
3016	1282 1283	Johnston	C	38,750,366	34,510,749
3017	1302 1303	Lincoln		3,474,121	3,094,023
3019	1322 1323	Middletown	C	25,184,527	22,429,127
3021	1352 1353 1354	Newport	B	63,386,479	56,451,463
3022	1342 1343	New Shoreham	B	10,315,954	9,187,301
3023	1372 1373	North Kingstown	C	61,797,077	55,035,955
3024	1382 1383	North Providence		36,690,411	32,676,170
3025	1392 1393	North Smithfield	B	19,260,213	17,152,983
3026	1412 1413	Pawtucket	C	118,425,502	105,468,752
3027	1515	Union Fire District		1,192,398	1,061,940
3029	1452	Richmond		3,532,878	3,146,351
3030	1462 1463	Scituate	B	13,900,476	12,379,646
3031	1472 1473	Smithfield	C	15,710,106	13,991,288
3032	1492 1493	South Kingstown	B	72,026,282	64,145,998
3033	1532 1533	Tiverton	C	17,757,080	15,814,305
3034	1562	Warren	C	8,035,188	7,156,071
3036	1622 1623	Westerly		887,773	790,643
3037	1602	West Greenwich	C	4,348,429	3,872,674
3039	1632 1633	Woonsocket	B	75,089,094	66,873,713
3040	1073	Chariho School District	C	26,433,227	23,541,209
3041	1203	Foster/Glocester	B	9,545,316	8,500,978
3042	1528	Tiogue Fire & Lighting	C,5	61,396	54,679
3043	1336	Narragansett Housing	C	979,613	872,435
3045	1098	Coventry Lighting District	C	1,475,780	1,314,317
3046	1242	Hope Valley Fire	C	596,483	531,223

Table 4a

Asset Values

Old Unit Number	New Unit Number	Unit	Code	Market Value of Assets	Actuarial Value of Assets
(1)	(2)	(3)	(4)	(5)	(6)
3050	1156	East Greenwich Housing	C	1,954,681	1,740,822
3051	1116	Cranston Housing	C	6,868,174	6,116,738
3052	1166	East Providence Housing	B	3,757,959	3,346,807
3053	1416	Pawtucket Housing	B	19,578,071	17,436,065
3056	1126	Cumberland Housing	C	1,922,925	1,712,541
3057	1306	Lincoln Housing	B	2,063,471	1,837,710
3059	1016	Bristol Housing		2,778,641	2,474,634
3065	1036	Burrillville Housing	B	1,078,128	960,172
3066	1386	North Providence Housing	B	1,059,692	943,753
3067	1177	East Smithfield Water	C	785,478	699,540
3068	1227	Greenville Water	B	1,808,615	1,610,737
3069	1356	Newport Housing	C	8,189,484	7,293,485
3071	1566	Warren Housing	B	1,336,648	1,190,407
3072	1286	Johnston Housing		1,514,425	1,348,734
3077	1538	Tiverton Local 2670A	C	5,077,696	4,522,153
3078	1002 1003 1007 1009	Barrington COLA	C	44,336,521	39,485,731
3079	1096	Coventry Housing		1,939,537	1,727,335
3080	1496	South Kingstown Housing	C	692,895	617,086
3081	1403	N. RI Collaborative Adm. Services	C	3,645,871	3,246,982
3083	1616	West Warwick Housing	B	1,987,593	1,770,134
3084	1476	Smithfield Housing		827,282	736,770
3094	1478	Smithfield COLA	C	20,863,689	18,581,025
3096	1056	Central Falls Housing	C	3,215,467	2,863,668
3098	1293	Lime Rock Administrative Services		511,103	455,184
3099	1063	Central Falls Schools	C	20,101,237	17,901,992
3100	1023	Bristol/Warren Schools	B	20,984,967	18,689,034
3101	1157 1158	Town of E. Greenwich-COLA-NCE	C	29,756,963	26,501,300
3102	1712	Harrisville Fire District (ADMIN)	C	1,375,669	1,225,159
3103	1702	Albion Fire District (ADMIN)	C,5	165,734	147,601
3150	1159	East Greenwich Fire (ADMIN)	C	164,688	146,670
1802	1802	Pascoag Fire District (ADMIN) COLA	C	52,186	46,476
General Employee Units Subtotal				\$ 1,271,635,384	\$ 1,132,507,731
Police & Fire Units					
4016	1285	Johnston Fire	D	\$ 15,682,042	\$ 13,966,294
4029	1454	Richmond Police	6	3,460,146	3,081,577
4031	1474	Smithfield Police	C,D	24,573,003	21,884,509
4042	1555	Valley Falls Fire	D	4,856,577	4,325,226
4047	1395 1435	North Smithfield Voluntary Fire	B,D	11,011,203	9,806,484
4050	1155	East Greenwich Fire	C,D	19,703,623	17,547,880
4054	1154	East Greenwich Police	C,D	20,994,474	18,697,501
4055	1375	North Kingstown Fire	C,D	44,550,581	39,676,371
4056	1374	North Kingstown Police	C,D	31,837,534	28,354,239
4058	1385	North Providence Fire	D	45,799,448	40,788,601
4059	1008	Barrington Fire (25)	C	5,921,714	5,273,828
4060	1004	Barrington Police	C,D	14,031,984	12,496,766
4061	1005	Barrington Fire (20)	C,D	6,379,009	5,681,092
4062	1564 1565	Warren Police & Fire	C,D	15,524,618	13,826,094
4063	1494	South Kingstown Police	B,1	32,331,117	28,793,820



Table 4a

Asset Values

Old Unit Number	New Unit Number	Unit	Code	Market Value of Assets	Actuarial Value of Assets
(1)	(2)	(3)	(4)	(5)	(6)
4073	1464	Scituate Police	5	312,459	278,273
4076	1394	North Smithfield Police	C,D	13,423,295	11,954,673
4077	1534	Tiverton Fire	C,D	14,272,339	12,710,825
4082	1194	Foster Police	C,D	3,866,091	3,443,108
4085	1634	Woonsocket Police	C,D	55,573,072	49,492,908
4086	1084	Charlestown Police	C,D	14,413,368	12,836,424
4087	1264	Hopkinton Police	C,D,6	7,540,097	6,715,147
4088	1214	Glocester Police	C,D	9,600,880	8,550,463
4089	1604	West Greenwich Police/Rescue	C,D	6,923,110	6,165,663
4090	1034	Burrillville Police	C,D,6	14,739,446	13,126,826
4091	1148	Cumberland Rescue	C,D	9,775,394	8,705,883
4093	1635	Woonsocket Fire	C,D	69,035,063	61,482,044
4094	1015	Bristol Fire	D	790,663	704,158
4096	1014	Bristol Police	C,D	13,948,971	12,422,836
4098	1095	Coventry Fire	C,D	4,057,210	3,613,317
4099	1505	South Kingstown EMT	C,D	6,170,351	5,495,262
4102	1045 1235 1525 1585	Central Coventry Fire	C,D	12,657,357	11,272,535
4103	1255	Hopkins Hill Fire	C,D	4,862,931	4,330,885
4104	1114	Cranston Police	C,D,4	67,212,702	59,859,065
4105	1115	Cranston Fire	C,D,4	104,985,093	93,498,837
4106	1125	Cumberland Fire	B,D	20,220,151	18,007,896
4107	1305	Lincoln Rescue	C	5,377,572	4,789,220
4108	1344	New Shoreham Police	B,D	2,184,545	1,945,537
4109	1324	Middletown Police & Fire	C,D	14,887,901	13,259,039
4110	1715	Harrisville Fire District	C,D	2,771,353	2,468,144
4111	1705	Albion Fire District	C	1,560,875	1,390,102
1054	1054	Central Falls Police & Fire New	C	202,506	180,350
1055	1055	Central Falls Police & Fire Legacy	C	18,212,462	16,219,865
1284	1284	Johnston Police		2,130,383	1,897,301
1364	1364	Newport Police Dept		1,658,811	1,477,323
1424	1424	Portsmouth Police Department	C,2	1,504,528	1,339,920
1425	1425	Portsmouth Fire Department	C	1,618,459	1,441,386
1465	1465	Smithfield Fire	C	3,374,362	3,005,178
1484	1484	Scituate Police Dept COLA	C	459,585	409,303
1805	1805	Pascoag Fire District COLA	C	791,391	704,806
1815	1815	Saylesville Fire (NO COLA)	C	143,371	127,685
Police & Fire Units Subtotal				\$ 807,915,220	\$ 719,522,469
All MERS Units Total				\$ 2,079,550,604	\$ 1,852,030,200

B - Municipality has adopted COLA Plan B

C - Municipality has adopted COLA Plan C

D - Municipality has adopted the "20-year" optional Police & Fire Plan

1 - S.Kingstown Police have a unique plan that provides 2.0% of salary for service prior to July 1, 1993, and 2.5% of salary for service on or after July 1, 1993.

2 - New unit since prior valuation.

3 - Closed unit.

4 - Historically, Cranston Fire and Police are contributing 10% due to special plan provision.

5 - This unit has no active members.

6 - Historically, Special plan provisions apply to this unit.



Table 4b

Reconciliation of Market Assets by Unit

Old Unit Number	New Unit Number	Unit	Code (s)	Beginning of Year Account Balance	Current year prior period adjustments	Adjusted Beginning of Year Account Balance	Member Contributions	Employer Contributions	Service Purchases and Others*	Benefit Payments	Refunds	Net Investment Return	End of Year Account Balance
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
General Employee Units													
3002	1012 1019	Bristol	B	\$ 18,878,454	\$ -	\$ 18,878,454	\$ 154,583	\$ 826,914	\$ 10,589	\$ (1,532,665)	\$ -	\$ 5,040,925	\$ 23,378,800
3003	1032 1033	Burrillville	C	29,905,929	0	29,905,929	163,254	513,316	49,494	(1,972,747)	0	7,878,183	36,537,429
3004	1052	Central Falls		5,233,908	0	5,233,908	32,703	275,290	177,325	(517,439)	(1,499)	1,429,514	6,629,802
3005	1082	Charlestown	C	8,813,509	0	8,813,509	96,350	198,762	(57,511)	(274,526)	(2,969)	2,411,791	11,185,406
3007	1112 1113	Cranston	B	140,347,795	0	140,347,795	717,749	2,516,380	184,933	(9,973,432)	(60,218)	36,762,124	170,495,331
3008	1122 1123	Cumberland		28,644,395	0	28,644,395	175,069	1,170,652	403,742	(1,912,136)	(32,795)	7,820,369	36,269,296
3009	1152 1153	East Greenwich	C	7,553,045	0	7,553,045	42,347	82,459	257,734	(452,982)	(1,599)	2,056,464	9,537,468
3010	1162 1163	East Providence	B	66,549,748	0	66,549,748	490,109	4,302,014	(11,750)	(7,690,771)	(13,371)	17,490,242	81,116,221
3011	1183	Exeter/West Greenwich	B	11,009,491	0	11,009,491	73,055	422,882	(90,984)	(661,829)	(7,279)	2,953,800	13,699,136
3012	1192 1193	Foster		4,024,703	0	4,024,703	26,792	159,105	(38,291)	(275,532)	(32,068)	1,062,377	4,927,086
3013	1212 1213	Glocester	C	9,561,746	0	9,561,746	79,869	321,059	0	(576,756)	0	2,580,109	11,966,027
3014	1262	Hopkinton	C	6,077,706	0	6,077,706	40,876	69,700	(80,408)	(261,759)	(25,738)	1,599,970	7,420,347
3015	1272 1273	Jamestown	C	15,519,969	0	15,519,969	130,464	491,150	(205,758)	(858,952)	0	4,144,503	19,221,376
3016	1282 1283	Johnston	C	32,293,759	0	32,293,759	180,496	1,276,570	(8,382)	(3,346,328)	(1,084)	8,355,335	38,750,366
3017	1302 1303	Lincoln		2,814,150	0	2,814,150	9,685	116,798	(106,028)	(109,573)	0	749,089	3,474,121
3019	1322 1323	Middletown	C	20,417,254	0	20,417,254	141,468	599,771	(137,146)	(1,254,247)	(12,849)	5,430,276	25,184,527
3021	1352 1353 1354	Newport	B	51,458,593	0	51,458,593	410,748	2,987,410	137,698	(5,272,997)	(2,337)	13,667,364	63,386,479
3022	1342 1343	New Shoreham	B	7,853,857	0	7,853,857	60,141	194,798	498,539	(515,702)	0	2,224,321	10,315,954
3023	1372 1373	North Kingstown	C	50,952,988	0	50,952,988	302,324	2,150,148	(406,051)	(4,509,232)	(17,757)	13,324,657	61,797,077
3024	1382 1383	North Providence		29,989,913	0	29,989,913	144,887	551,929	49,058	(1,937,073)	(19,473)	7,911,170	36,690,411
3025	1392 1393	North Smithfield	B	15,640,318	0	15,640,318	97,357	228,401	128,359	(975,846)	(11,254)	4,152,878	19,260,213
3026	1412 1413	Pawtucket	C	96,947,594	0	96,947,594	597,221	3,041,226	(222,934)	(7,432,486)	(39,972)	25,534,853	118,425,502
3027	1515	Union Fire District		992,061	0	992,061	3,391	21,546	0	(81,705)	0	257,105	1,192,398
3029	1452	Richmond		2,620,997	0	2,620,997	27,891	117,144	179,588	(174,499)	0	761,757	3,532,878
3030	1462 1463	Scituate	B	11,093,773	0	11,093,773	97,452	586,545	0	(874,508)	0	2,997,214	13,900,476
3031	1472 1473	Smithfield	C	12,784,220	0	12,784,220	85,197	363,487	0	(908,296)	(1,908)	3,387,406	15,710,106
3032	1492 1493	South Kingstown	B	59,286,469	0	59,286,469	370,253	1,655,036	(563,682)	(4,241,631)	(10,436)	15,530,273	72,026,282
3033	1532 1533	Tiverton	C	14,485,667	0	14,485,667	89,533	138,575	9,293	(794,763)	0	3,828,775	17,757,080
3034	1562	Warren	C	6,325,599	0	6,325,599	76,052	274,364	0	(373,371)	0	1,732,544	8,035,188
3036	1622 1623	Westerly		660,404	0	660,404	0	181,261	0	(145,313)	0	191,421	887,773
3037	1602	West Greenwich	C	3,278,232	0	3,278,232	29,449	191,861	122,533	(211,253)	0	937,607	4,348,429
3039	1632 1633	Woonsocket	B	62,458,029	0	62,458,029	330,633	1,458,978	(190,365)	(5,152,129)	(6,727)	16,190,675	75,089,094
3040	1073	Chariho School District	C	21,303,803	0	21,303,803	149,681	612,732	(13,686)	(1,318,824)	0	5,699,521	26,433,227
3041	1203	Foster/Glocester	B	7,785,691	0	7,785,691	47,220	223,764	13,566	(583,082)	0	2,058,157	9,545,316
3042	1528	Tiogue Fire & Lighting	C,5	50,262	0	50,262	0	0	0	(2,104)	0	13,238	61,396
3043	1336	Narragansett Housing	C	758,769	0	758,769	4,120	5,500	0	0	0	211,224	979,613
3045	1098	Coventry Lighting District	C	1,220,195	0	1,220,195	950	0	0	(63,572)	0	318,207	1,475,780
3046	1242	Hope Valley Fire	C	483,722	0	483,722	3,361	2,807	0	(22,021)	0	128,614	596,483
3050	1156	East Greenwich Housing	C	1,556,167	0	1,556,167	10,774	61,574	0	(95,302)	0	421,468	1,954,681
3051	1116	Cranston Housing	C	5,689,134	0	5,689,134	35,590	69,091	0	(406,553)	0	1,480,912	6,868,174
3052	1166	East Providence Housing	B	3,070,105	0	3,070,105	16,361	104,545	0	(243,341)	0	810,289	3,757,959
3053	1416	Pawtucket Housing	B	15,870,041	0	15,870,041	105,133	0	(18,421)	(600,097)	0	4,221,415	19,578,071
3056	1126	Cumberland Housing	C	1,518,164	0	1,518,164	11,698	34,161	15	(55,732)	0	414,619	1,922,925
3057	1306	Lincoln Housing	B	1,720,475	0	1,720,475	12,580	56,420	(30,681)	(140,247)	0	444,924	2,063,471
3059	1016	Bristol Housing		2,285,198	0	2,285,198	13,866	3,757	0	(123,309)	0	599,129	2,778,641
3065	1036	Burrillville Housing	B	905,847	0	905,847	4,587	25,940	0	(90,713)	0	232,467	1,078,128
3066	1386	North Providence Housing	B	890,698	0	890,698	6,054	83,187	(1)	(148,738)	0	228,492	1,059,692
3067	1177	East Smithfield Water	C	667,882	0	667,882	0	0	0	(51,769)	0	169,365	785,478
3068	1227	Greenville Water	B	1,438,383	0	1,438,383	7,674	11,395	0	(38,810)	0	389,973	1,808,615



Table 4b

Reconciliation of Market Assets by Unit

Old Unit Number	New Unit Number	Unit	Code (s)	Current year prior		Adjusted		Member Contributions	Employer Contributions	Service		Benefit Payments	Refunds	Net Investment		End of Year Account Balance
				Beginning of Year Account Balance	period adjustments	Beginning of Year Account Balance				Purchases and Others*				Return		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
3069	1356	Newport Housing	C	6,847,573	0	6,847,573	34,377	291,273	365	(746,255)	(3,662)	1,765,813	8,189,484			
3071	1566	Warren Housing	B	1,133,417	0	1,133,417	9,038	19,475	0	(113,489)	0	288,207	1,336,648			
3072	1286	Johnston Housing		1,230,438	0	1,230,438	4,859	65,494	0	(112,905)	0	326,539	1,514,425			
3077	1538	Tiverton Local 2670A	C	4,151,277	0	4,151,277	24,170	113,353	0	(305,955)	0	1,094,851	5,077,696			
3078	1002 1003 1007 1009	Barrington COLA	C	36,060,962	0	36,060,962	211,908	949,313	42,459	(2,487,942)	0	9,559,821	44,336,521			
3079	1096	Coventry Housing		1,516,415	0	1,516,415	6,395	42,275	(1,561)	(42,189)	0	418,202	1,939,537			
3080	1496	South Kingstown Housing	C	534,945	0	534,945	4,008	1,202	24,912	(21,573)	0	149,401	692,895			
3081	1403	N. RI Collaborative Adm. Services	C	2,946,718	0	2,946,718	24,011	103,482	0	(205,846)	(8,615)	786,121	3,645,871			
3083	1616	West Warwick Housing	B	1,559,913	0	1,559,913	11,403	136,232	(10)	(148,508)	0	428,563	1,987,593			
3084	1476	Smithfield Housing		639,374	0	639,374	7,505	2,025	0	0	0	178,378	827,282			
3094	1478	Smithfield COLA	C	16,684,287	0	16,684,287	139,973	444,713	488	(904,391)	0	4,498,619	20,863,689			
3096	1056	Central Falls Housing	C	2,515,971	0	2,515,971	28,806	156,412	1,032	(180,071)	0	693,317	3,215,467			
3098	1293	Lime Rock Administrative Services		394,363	0	394,363	5,127	15,950	0	(14,541)	0	110,204	511,103			
3099	1063	Central Falls Schools	C	16,350,772	0	16,350,772	107,152	313,379	(9,932)	(982,265)	(12,089)	4,334,220	20,101,237			
3100	1023	Bristol/Warren Schools	B	17,294,544	0	17,294,544	107,505	731,087	4,962	(1,653,318)	(24,582)	4,524,769	20,984,967			
3101	1157 1158	Town of E. Greenwich-COLA-NCE	C	24,221,958	0	24,221,958	163,621	297,328	(57,556)	(1,282,812)	(1,758)	6,416,182	29,756,963			
3102	1712	Harrisville Fire District (ADMIN)	C	1,053,073	0	1,053,073	11,312	14,663	0	0	0	296,621	1,375,669			
3103	1702	Albion Fire District (ADMIN)	C,5	139,473	0	139,473	0	0	0	(9,474)	0	35,735	165,734			
3150	1159	East Greenwich Fire (ADMIN)	C	142,436	0	142,436	807	7,420	0	(21,485)	0	35,510	164,688			
1802	1802	Pascoag Fire District (ADMIN) COLA	C	40,933	0	40,933	0	0	0	0	0	11,253	52,186			
General Employee Units Subtotal				\$ 1,037,147,653	\$ -	\$ 1,037,147,653	\$ 6,609,024	\$ 32,485,480	\$ 45,546	\$ (78,489,711)	\$ (352,039)	\$ 274,189,431	\$ 1,271,635,384			
Police & Fire Units																
4016	1285	Johnston Fire	D	\$ 11,533,198	\$ 0	\$ 11,533,198	\$ 456,625	\$ 539,324	\$ -	\$ (227,411)	\$ (1,050)	\$ 3,381,356	\$ 15,682,042			
4029	1454	Richmond Police	6	2,551,779	0	2,551,779	80,177	108,507	0	(26,392)	0	746,075	3,460,146			
4031	1474	Smithfield Police	C,D	19,040,732	0	19,040,732	329,627	395,220	0	(490,997)	0	5,298,421	24,573,003			
4042	1555	Valley Falls Fire	D	3,850,004	0	3,850,004	61,106	180,739	0	(282,445)	0	1,047,173	4,856,577			
4047	1395 1435	North Smithfield Voluntary Fire	B,D	8,709,233	0	8,709,233	149,921	249,919	4,334	(476,435)	0	2,374,231	11,011,203			
4050	1155	East Greenwich Fire	C,D	15,405,247	0	15,405,247	274,776	888,892	2,181	(1,115,959)	0	4,248,486	19,703,623			
4054	1154	East Greenwich Police	C,D	16,788,938	0	16,788,938	234,092	721,232	0	(1,206,235)	(70,372)	4,526,819	20,994,474			
4055	1375	North Kingstown Fire	C,D	35,936,369	0	35,936,369	519,057	1,614,784	(489,583)	(2,636,023)	0	9,605,977	44,550,581			
4056	1374	North Kingstown Police	C,D	24,790,838	0	24,790,838	425,279	1,338,351	0	(1,581,729)	0	6,864,795	31,837,534			
4058	1385	North Providence Fire	D	36,596,152	0	36,596,152	586,615	1,760,484	0	(2,981,996)	(37,063)	9,875,256	45,799,448			
4059	1008	Barrington Fire (25)	C	4,344,509	0	4,344,509	195,127	208,592	0	(103,351)	0	1,276,837	5,921,714			
4060	1004	Barrington Police	C,D	10,850,315	0	10,850,315	193,953	682,903	1,012	(721,770)	0	3,025,571	14,031,984			
4061	1005	Barrington Fire (20)	C,D	5,492,493	0	5,492,493	556	310,491	0	(799,971)	0	1,375,440	6,379,009			
4062	1564 1565	Warren Police & Fire	C,D	12,284,773	0	12,284,773	195,289	547,814	0	(850,668)	0	3,347,410	15,524,618			
4063	1494	South Kingstown Police	B,1	25,787,524	0	25,787,524	389,375	1,080,517	0	(1,882,058)	(15,462)	6,971,221	32,331,117			
4073	1464	Scituate Police	5	248,695	0	248,695	0	0	0	(3,609)	0	67,373	312,459			
4076	1394	North Smithfield Police	C,D	10,603,403	0	10,603,403	201,437	498,153	11	(774,035)	0	2,894,326	13,423,295			
4077	1534	Tiverton Fire	C,D	11,331,433	0	11,331,433	200,042	473,099	20,978	(798,496)	(32,112)	3,077,395	14,272,339			
4082	1194	Foster Police	C,D	3,080,131	0	3,080,131	52,533	156,863	(9,508)	(247,534)	0	833,606	3,866,091			
4085	1634	Woonsocket Police	C,D	43,708,690	0	43,708,690	650,435	2,071,704	62,981	(2,900,351)	(3,028)	11,982,641	55,573,072			
4086	1084	Charlestown Police	C,D	10,355,750	0	10,355,750	160,716	1,574,879	0	(785,781)	0	3,107,804	14,413,368			
4087	1264	Hopkinton Police	C,D,6	5,918,612	0	5,918,612	108,059	354,866	8,969	(476,202)	0	1,625,793	7,540,097			
4088	1214	Glocester Police	C,D	7,560,525	0	7,560,525	125,411	304,498	0	(459,690)	0	2,070,136	9,600,880			
4089	1604	West Greenwich Police/Rescue	C,D	5,348,152	0	5,348,152	107,773	254,666	2,232	(282,471)	0	1,492,758	6,923,110			
4090	1034	Burrillville Police	C,D,6	11,648,048	0	11,648,048	183,336	414,889	0	(684,940)	0	3,178,113	14,739,446			
4091	1148	Cumberland Rescue	C,D	7,756,868	0	7,756,868	118,358	138,478	0	(284,805)	(61,271)	2,107,766	9,775,394			
4093	1635	Woonsocket Fire	C,D	54,777,294	0	54,777,294	762,604	1,039,052	(1,393)	(2,427,802)	0	14,885,308	69,035,063			
4094	1015	Bristol Fire	D	597,532	0	597,532	14,866	25,140	(1)	(17,356)	0	170,482	790,663			



Table 4b

Reconciliation of Market Assets by Unit

Old Unit				Current year prior	Adjusted				Service			Net Investment	End of Year
Number	New Unit Number	Unit	Code	Beginning of Year	period	Beginning of Year	Member	Employer	Purchases and	Benefit	Refunds	Return	Account Balance
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	Others*	Payments	(12)	(13)	(14)
4096	1014	Bristol Police	C,D	10,471,194	0	10,471,194	316,460	240,510	(47,636)	(39,228)	0	3,007,671	13,948,971
4098	1095	Coventry Fire	C,D	3,277,531	0	3,277,531	61,786	207,847	0	(364,768)	0	874,814	4,057,210
4099	1505	South Kingstown EMT	C,D	4,829,938	0	4,829,938	108,297	37,579	(2,221)	(133,691)	0	1,330,449	6,170,351
4102	1045 1235 1525 1585	Central Coventry Fire	C,D	10,169,699	0	10,169,699	183,179	603,388	(186,995)	(841,088)	0	2,729,174	12,657,357
4103	1255	Hopkins Hill Fire	C,D	3,655,788	0	3,655,788	92,618	155,227	73	(89,317)	0	1,048,542	4,862,931
4104	1114	Cranston Police	C,D,4	50,862,831	0	50,862,831	1,253,877	1,982,333	0	(1,378,711)	0	14,492,372	67,212,702
4105	1115	Cranston Fire	C,D,4	81,198,438	0	81,198,438	1,601,895	1,244,667	1,341	(1,698,086)	0	22,636,838	104,985,093
4106	1125	Cumberland Fire	B,D,7	5,296,581	10,608,817	15,905,398	277,483	745,332	6,180	(1,074,103)	0	4,359,861	20,220,151
4107	1305	Lincoln Rescue	C	4,276,859	0	4,276,859	85,246	208,769	0	(352,812)	0	1,159,510	5,377,572
4108	1344	New Shoreham Police	B,D	1,816,381	0	1,816,381	39,539	85,089	(148,690)	(78,805)	0	471,031	2,184,545
4109	1324	Middletown Police & Fire	C,D	10,797,610	0	10,797,610	485,213	484,242	3,478	(62,439)	(30,324)	3,210,121	14,887,901
4110	1715	Harrisville Fire District	C,D	2,087,131	0	2,087,131	50,591	36,072	0	0	0	597,559	2,771,353
4111	1705	Albion Fire District	C	1,227,534	0	1,227,534	31,072	58,975	0	(93,261)	0	336,555	1,560,875
1054	1054	Central Falls Police & Fire New	C	37,967	0	37,967	58,507	62,368	0	0	0	43,664	202,506
1055	1055	Central Falls Police & Fire Legacy	C	13,355,625	(1)	13,355,624	542,581	2,749,991	260,222	(2,622,920)	0	3,926,964	18,212,462
1284	1284	Johnston Police		1,398,861	0	1,398,861	134,957	135,257	1,956	0	0	459,352	2,130,383
1364	1364	Newport Police Dept		1,022,508	0	1,022,508	140,407	138,225	0	0	0	357,671	1,658,811
1424	1424	Portsmouth Police Department	C,2	0	0	0	148,847	1,358,873	0	0	0	(3,192)	1,504,528
1425	1425	Portsmouth Fire Department	C	405,752	0	405,752	105,620	105,937	652,179	0	0	348,971	1,618,459
1465	1465	Smithfield Fire	C	2,264,747	0	2,264,747	200,226	181,811	0	0	0	727,578	3,374,362
1484	1484	Scituate Police Dept COLA	C	260,903	0	260,903	47,736	42,342	9,508	0	0	99,096	459,585
1805	1805	Pascoag Fire District COLA	C	523,362	0	523,362	27,636	69,753	0	0	0	170,640	791,391
1815	1815	Saylesville Fire (NO COLA)	C	74,574	0	74,574	15,888	21,996	0	0	0	30,913	143,371
Police & Fire Units Subtotal				\$ 626,817,868	\$ 10,608,816	\$ 626,817,867	\$ 12,786,806	\$ 28,890,639	\$ 151,608	\$ (34,355,741)	\$ (250,682)	\$ 173,874,723	\$ 807,915,220
All MERS Units Total				\$ 1,663,965,521	\$ 10,608,816	\$ 1,663,965,520	\$ 19,395,830	\$ 61,376,119	\$ 197,154	\$ (112,845,452)	\$ (602,721)	\$ 448,064,154	\$ 2,079,550,604

B - Municipality has adopted COLA Plan B

C - Municipality has adopted COLA Plan C

D - Municipality has adopted the "20-year" optional Police & Fire Plan

1 - S.Kingstown Police have a unique plan that provides 2.0% of salary for service prior to July 1, 1993, and 2.5% of salary for service on or after July 1, 1993.

2 - New unit since prior valuation.

3 - Closed unit.

4 - Historically, Cranston Fire and Police are contributing 10% due to special plan provision.

5 - This unit has no active members.

6 - Historically, Special plan provisions apply to this unit.

7 - Units 4095 and 4101 merged into 4106 effective July 1, 2021. Assets have been combined for this this valuation.



Table 5a

Explanation of Rate Changes

All rates are gross: before recognizing 0% minimum contribution rate

			Source of Rate Change									
Old Unit Number	New Unit Number	Unit	June 30, 2020 Actuarial Valuation	Salary (Gains)/ Losses	Payroll (Gains)/ Losses	Other Non-Asset (Gains)/ Losses	Asset (Gains)/ Losses	Benefit Accrual Turnover	Recognition of Assumption Changes	COLA Suspension	2022 COLA different than Assumed	June 30, 2021 Actuarial Valuation
(1)	(2)	(3)	(4)	(5)	(6)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
General Employee Units												
3002	1012 1019	Bristol	15.14%	(0.20%)	0.05%	0.12%	(0.87%)	(0.25%)	0.42%	(0.25%)	0.23%	14.39%
3003	1032 1033	Burrillville	7.98%	(0.29%)	0.08%	0.23%	(1.07%)	(0.31%)	0.34%	0.00%	0.27%	7.23%
3004	1052	Central Falls	14.86%	(0.09%)	0.21%	(0.93%)	(0.62%)	(0.24%)	0.35%	0.00%	0.00%	13.54%
3005	1082	Charlestown	7.08%	(0.46%)	(0.04%)	(1.28%)	(0.78%)	(0.02%)	0.12%	0.00%	0.08%	4.70%
3007	1112 1113	Cranston	11.06%	(0.09%)	0.26%	(0.53%)	(1.32%)	(0.23%)	0.43%	0.00%	0.33%	9.92%
3008	1122 1123	Cumberland	10.08%	(0.19%)	0.04%	(0.56%)	(0.68%)	(0.22%)	0.18%	0.00%	0.00%	8.65%
3009	1152 1153	East Greenwich	6.08%	0.39%	(0.04%)	(0.52%)	(1.02%)	(0.36%)	0.21%	0.00%	0.15%	4.88%
3010	1162 1163	East Providence	21.59%	(0.29%)	1.09%	0.15%	(0.76%)	(0.11%)	0.48%	(0.33%)	0.26%	22.09%
3011	1183	Exeter/West Greenwich	12.79%	(0.11%)	0.01%	(0.23%)	(0.86%)	(0.20%)	0.33%	0.00%	0.19%	11.92%
3012	1192 1193	Foster	11.73%	0.01%	0.06%	(1.59%)	(0.69%)	(0.20%)	0.18%	0.00%	0.00%	9.49%
3013	1212 1213	Glocester	10.23%	0.00%	(0.01%)	(0.90%)	(0.82%)	(0.22%)	0.29%	0.00%	0.15%	8.71%
3014	1262	Hopkinton	2.91%	(0.11%)	(0.16%)	0.67%	(0.75%)	(0.64%)	0.00%	0.00%	0.09%	2.00%
3015	1272 1273	Jamestown	9.75%	0.04%	0.10%	0.86%	(0.84%)	(0.43%)	0.21%	0.00%	0.16%	9.85%
3016	1282 1283	Johnston	19.10%	(0.11%)	0.70%	1.38%	(0.91%)	(0.48%)	0.47%	(0.36%)	0.29%	20.08%
3017	1302 1303	Lincoln	12.04%	(0.17%)	0.08%	(0.25%)	(0.69%)	(0.07%)	0.26%	0.00%	0.00%	11.20%
3019	1322 1323	Middletown	11.43%	(0.14%)	0.27%	0.06%	(1.00%)	(0.33%)	0.40%	0.00%	0.23%	10.93%
3021	1352 1353 1354	Newport	21.58%	(0.15%)	0.69%	(0.63%)	(0.85%)	(0.34%)	0.48%	(0.33%)	0.27%	20.72%
3022	1342 1343	New Shoreham	7.33%	0.00%	(0.00%)	0.06%	(0.83%)	(0.38%)	0.18%	0.00%	0.14%	6.49%
3023	1372 1373	North Kingstown	17.43%	(0.01%)	0.29%	0.23%	(0.92%)	(0.28%)	0.43%	(0.32%)	0.27%	17.13%
3024	1382 1383	North Providence	6.94%	0.16%	0.01%	0.15%	(0.80%)	(0.34%)	0.28%	0.00%	0.00%	6.40%
3025	1392 1393	North Smithfield	6.10%	(0.08%)	(0.04%)	(1.13%)	(0.86%)	(0.20%)	0.00%	0.00%	0.17%	3.96%
3026	1412 1413	Pawtucket	13.80%	(0.47%)	0.77%	(0.80%)	(1.08%)	(0.19%)	0.48%	(0.31%)	0.25%	12.45%
3027	1515	Union Fire District	6.84%	(0.02%)	(0.11%)	0.66%	(0.72%)	(0.91%)	0.00%	0.00%	0.00%	5.74%
3029	1452	Richmond	8.77%	0.10%	0.01%	(0.99%)	(0.58%)	0.12%	0.12%	0.00%	0.00%	7.55%
3030	1462 1463	Scituate	14.66%	(0.04%)	(0.11%)	0.17%	(0.76%)	0.03%	0.34%	(0.20%)	0.19%	14.28%
3031	1472 1473	Smithfield	10.17%	0.08%	0.04%	(0.79%)	(0.80%)	(0.16%)	0.28%	0.00%	0.16%	8.98%
3032	1492 1493	South Kingstown	12.78%	0.15%	0.20%	0.06%	(1.00%)	(0.24%)	0.40%	0.00%	0.24%	12.58%
3033	1532 1533	Tiverton	4.21%	(0.06%)	(0.04%)	0.83%	(0.88%)	(0.16%)	0.00%	0.00%	0.14%	4.04%
3034	1562	Warren	10.43%	(0.02%)	(0.13%)	(0.21%)	(0.62%)	(0.16%)	0.21%	(0.12%)	0.10%	9.48%
3037	1602	West Greenwich	13.38%	0.19%	(0.04%)	(2.66%)	(0.73%)	(0.15%)	0.30%	(0.17%)	0.15%	10.27%
3039	1632 1633	Woonsocket	11.98%	0.05%	0.10%	(0.35%)	(1.01%)	(0.15%)	0.41%	0.00%	0.27%	11.30%
3040	1073	Chariho School District	11.45%	(0.15%)	0.28%	0.03%	(0.94%)	(0.17%)	0.32%	0.00%	0.17%	11.00%
3041	1203	Foster/Glocester	11.43%	0.02%	0.19%	(0.04%)	(0.80%)	(0.55%)	0.21%	0.00%	0.15%	10.61%
3043	1336	Narragansett Housing	3.39%	0.45%	0.11%	(0.62%)	(1.00%)	(0.04%)	0.00%	0.00%	0.03%	2.32%
3045	1098	Coventry Lighting District	(105.56%)	0.00%	(1.87%)	(0.64%)	(5.69%)	0.01%	0.00%	0.00%	0.00%	(113.76%)
3046	1242	Hope Valley Fire	(2.71%)	0.00%	(0.06%)	(0.08%)	(0.68%)	0.01%	0.00%	0.00%	0.00%	(3.51%)
3050	1156	East Greenwich Housing	11.18%	0.05%	(0.11%)	(5.00%)	(0.72%)	(1.64%)	0.08%	0.00%	0.05%	3.89%
3051	1116	Cranston Housing	6.09%	0.07%	0.00%	0.08%	(1.05%)	(0.07%)	0.25%	0.00%	0.13%	5.50%
3052	1166	East Providence Housing	11.45%	0.24%	0.06%	(5.66%)	(0.86%)	(1.31%)	0.35%	0.00%	0.23%	4.50%
3053	1416	Pawtucket Housing	(2.27%)	0.00%	(0.13%)	0.62%	(1.21%)	(0.27%)	0.00%	0.00%	0.00%	(3.25%)



Table 5a

Explanation of Rate Changes

All rates are gross: before recognizing 0% minimum contribution rate

Old Unit Number	New Unit Number	Unit	June 30, 2020 Actuarial Valuation	Source of Rate Change							2022 COLA different than Assumed	June 30, 2021 Actuarial Valuation
				Salary (Gains)/ Losses	Payroll (Gains)/ Losses	Other Non-Asset (Gains)/ Losses	Asset (Gains)/ Losses	Benefit Accrual Turnover	Recognition of Assumption Changes	COLA Suspension		
(1)	(2)	(3)	(4)	(5)	(6)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
3056	1126	Cumberland Housing	4.47%	(0.01%)	(0.12%)	(0.08%)	(0.66%)	(0.03%)	0.00%	0.00%	0.06%	3.63%
3057	1306	Lincoln Housing	10.25%	(0.22%)	(0.01%)	0.69%	(0.59%)	(0.05%)	0.44%	0.00%	0.22%	10.73%
3059	1016	Bristol Housing	2.17%	0.30%	(0.12%)	1.27%	(0.96%)	(0.45%)	0.00%	0.00%	0.00%	2.21%
3065	1036	Burrillville Housing	13.29%	(0.03%)	(0.09%)	0.71%	(0.83%)	0.00%	0.32%	(0.34%)	0.35%	13.38%
3066	1386	North Providence Housing	35.17%	(0.19%)	(3.23%)	(4.50%)	(0.62%)	(0.06%)	0.46%	(0.48%)	0.28%	26.84%
3068	1227	Greenville Water	3.47%	0.30%	0.07%	(0.38%)	(0.94%)	(0.02%)	0.00%	0.00%	0.08%	2.58%
3069	1356	Newport Housing	21.53%	0.14%	1.41%	0.65%	(0.97%)	0.11%	0.50%	(0.44%)	0.31%	23.24%
3071	1566	Warren Housing	6.33%	0.03%	(0.02%)	0.48%	(0.51%)	0.01%	0.01%	0.00%	0.16%	6.49%
3072	1286	Johnston Housing	13.62%	(0.04%)	(0.01%)	0.04%	(0.59%)	(0.04%)	0.22%	0.00%	0.00%	13.20%
3077	1538	Tiverton Local 2670A	6.77%	0.15%	(0.06%)	0.01%	(0.79%)	(0.08%)	0.30%	0.00%	0.18%	6.48%
3078	1002 1003 1007 1009	Barrington COLA	10.74%	(0.14%)	(0.00%)	(0.69%)	(0.98%)	(0.34%)	0.30%	0.00%	0.19%	9.08%
3079	1096	Coventry Housing	6.05%	(0.04%)	(0.09%)	(0.27%)	(0.62%)	0.21%	0.00%	0.00%	0.00%	5.24%
3080	1496	South Kingstown Housing	(0.44%)	0.11%	1.69%	0.40%	(0.73%)	(0.38%)	0.00%	0.00%	0.14%	0.79%
3081	1403	N. RI Collaborative Adm. Services	13.93%	2.51%	(2.48%)	1.93%	(0.87%)	(0.38%)	0.45%	0.00%	0.21%	15.30%
3083	1616	West Warwick Housing	9.00%	0.13%	(0.83%)	(0.91%)	(0.71%)	0.16%	0.37%	0.00%	0.19%	7.40%
3084	1476	Smithfield Housing	2.42%	0.74%	(0.03%)	0.16%	(0.89%)	(0.01%)	0.00%	0.00%	0.00%	2.40%
3094	1478	Smithfield COLA	9.92%	(0.36%)	0.09%	(0.24%)	(0.93%)	(0.30%)	0.30%	0.00%	0.15%	8.62%
3096	1056	Central Falls Housing	13.89%	0.15%	0.16%	(0.33%)	(0.56%)	0.01%	0.20%	(0.13%)	0.07%	13.46%
3098	1293	Ume Rock Administrative Services	13.24%	(0.18%)	(0.06%)	(1.19%)	(0.99%)	(0.01%)	0.04%	0.00%	0.00%	10.85%
3099	1063	Central Falls Schools	8.48%	0.01%	0.02%	(0.29%)	(0.83%)	(0.20%)	0.27%	0.00%	0.19%	7.65%
3100	1023	Bristol/Warren Schools	16.19%	(0.05%)	(0.04%)	(0.41%)	(0.82%)	(0.09%)	0.42%	(0.31%)	0.28%	15.17%
3101	1157 1158	Town of E. Greenwich-COLA-NCE	6.08%	0.39%	(0.04%)	(0.52%)	(1.02%)	(0.36%)	0.21%	0.00%	0.15%	4.88%
3102	1712	Harrisville Fire District (ADMIN)	4.73%	(0.39%)	(0.01%)	(1.25%)	(1.08%)	0.01%	0.00%	0.00%	0.02%	2.03%
General Employee Units Averages			12.64%	(0.09%)	0.27%	(0.22%)	(0.93%)	(0.24%)	0.34%	(0.11%)	0.20%	11.87%
Police & Fire Units												
4016	1285	Johnston Fire	11.49%	(0.29%)	(0.02%)	(0.28%)	(0.71%)	(0.05%)	0.35%	0.00%	0.00%	10.49%
4029	1454	Richmond Police	10.77%	(0.34%)	(0.00%)	(0.34%)	(0.89%)	(0.08%)	0.73%	0.00%	0.00%	9.85%
4031	1474	Smithfield Police	11.93%	(0.52%)	0.02%	(0.58%)	(1.56%)	(0.07%)	0.44%	0.00%	0.14%	9.80%
4042	1555	Valley Falls Fire	28.82%	(0.56%)	0.22%	(0.10%)	(1.43%)	(0.14%)	1.15%	0.00%	0.00%	27.96%
4047	1395 1435	North Smithfield Voluntary Fire	16.71%	0.13%	0.06%	0.37%	(1.48%)	(0.11%)	0.87%	0.00%	0.36%	16.91%
4050	1155	East Greenwich Fire	34.64%	(0.28%)	(0.31%)	(0.67%)	(1.48%)	0.02%	1.27%	(0.39%)	0.40%	33.21%
4054	1154	East Greenwich Police	31.70%	0.04%	0.27%	1.93%	(1.77%)	(0.14%)	1.21%	(0.39%)	0.42%	33.27%
4055	1375	North Kingstown Fire	30.35%	(0.31%)	0.27%	(0.01%)	(1.66%)	(0.02%)	1.13%	(0.43%)	0.41%	29.73%
4056	1374	North Kingstown Police	29.01%	(0.22%)	(0.35%)	(0.27%)	(1.55%)	(0.05%)	0.82%	(0.33%)	0.39%	27.45%
4058	1385	North Providence Fire	28.51%	0.09%	(0.64%)	0.11%	(1.39%)	(0.20%)	1.58%	0.00%	0.00%	28.07%



Table 5a

Explanation of Rate Changes

All rates are gross: before recognizing 0% minimum contribution rate

Old Unit Number	New Unit Number	Unit	June 30, 2020 Actuarial Valuation	Source of Rate Change								June 30, 2021 Actuarial Valuation
				Salary (Gains)/ Losses	Payroll (Gains)/ Losses	Other Non-Asset (Gains)/ Losses	Asset (Gains)/ Losses	Benefit Accrual Turnover	Recognition of Assumption Changes	COLA Suspension	2022 COLA different than Assumed	
(1)	(2)	(3)	(4)	(5)	(6)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
4059	1008	Barrington Fire (25)	11.59%	(0.22%)	0.00%	(0.89%)	(0.70%)	0.02%	0.27%	0.00%	0.06%	10.13%
4060	1004	Barrington Police	30.65%	(0.42%)	0.57%	(0.14%)	(1.52%)	(0.51%)	0.75%	(0.34%)	0.26%	29.30%
4062	1564 1565	Warren Police & Fire	27.45%	(0.36%)	0.50%	(0.57%)	(1.61%)	(0.09%)	1.35%	(0.40%)	0.32%	26.58%
4063	1494	South Kingstown Police	27.52%	0.49%	0.19%	(1.05%)	(1.64%)	(0.16%)	1.87%	(0.38%)	0.39%	27.23%
4076	1394	North Smithfield Police	22.75%	0.84%	(0.14%)	(1.72%)	(1.34%)	(0.12%)	1.12%	(0.36%)	0.33%	21.35%
4077	1534	Tiverton Fire	22.97%	0.50%	(0.11%)	0.03%	(1.43%)	(0.23%)	1.49%	(0.45%)	0.35%	23.13%
4082	1194	Foster Police	27.84%	(0.41%)	1.51%	0.30%	(1.46%)	(0.47%)	1.22%	(0.55%)	0.55%	28.54%
4085	1634	Woonsocket Police	31.82%	(0.06%)	0.45%	(0.11%)	(1.79%)	(0.10%)	1.58%	(0.46%)	0.52%	31.84%
4086	1084	Charlestown Police	36.20%	(0.99%)	0.17%	(5.16%)	(2.13%)	0.00%	1.81%	(0.39%)	0.40%	29.90%
4087	1264	Hopkinton Police	34.35%	(0.96%)	0.05%	(0.92%)	(1.43%)	0.28%	0.99%	(0.42%)	0.43%	32.38%
4088	1214	Glocester Police	24.67%	(0.06%)	(0.74%)	0.50%	(1.55%)	(0.12%)	0.89%	(0.40%)	0.36%	23.56%
4089	1604	West Greenwich Police/Rescue	21.37%	(0.09%)	0.57%	(0.39%)	(1.35%)	(0.12%)	1.14%	(0.24%)	0.25%	21.13%
4090	1034	Burrillville Police	19.75%	0.13%	0.21%	(0.23%)	(1.62%)	(0.16%)	0.82%	0.00%	0.33%	19.23%
4091	1148	Cumberland Rescue	12.19%	(0.32%)	(0.01%)	(0.62%)	(1.65%)	0.00%	0.74%	0.00%	0.31%	10.64%
4093	1635	Woonsocket Fire	14.85%	0.05%	(0.18%)	0.21%	(1.84%)	(0.17%)	0.92%	0.00%	0.32%	14.16%
4094	1015	Bristol Fire	12.55%	(0.92%)	(0.05%)	(0.97%)	(1.05%)	0.01%	0.35%	0.00%	0.00%	9.91%
4096	1014	Bristol Police	8.13%	(0.32%)	0.04%	(0.14%)	(0.98%)	(0.06%)	0.00%	0.00%	0.07%	6.75%
4098	1095	Coventry Fire	50.10%	(0.25%)	(3.24%)	0.55%	(1.27%)	(0.24%)	2.06%	(0.58%)	0.13%	47.26%
4099	1505	South Kingstown EMT	4.95%	0.65%	0.35%	(1.08%)	(1.17%)	0.09%	0.00%	0.00%	0.16%	3.95%
4102	045 1235 1525 1585	Central Coventry Fire	33.74%	(0.63%)	1.11%	0.16%	(1.35%)	0.06%	1.90%	(0.52%)	0.38%	34.85%
4103	1255	Hopkins Hill Fire	10.39%	(0.44%)	(0.19%)	2.80%	(1.16%)	1.15%	(0.25%)	0.00%	0.12%	12.42%
4104	1114	Cranston Police	16.13%	0.10%	0.03%	(0.34%)	(1.17%)	(0.22%)	0.78%	0.00%	0.10%	15.40%
4105	1115	Cranston Fire	9.26%	0.00%	0.02%	0.14%	(1.38%)	(0.23%)	0.00%	0.00%	0.11%	7.93%
4106	1125	Cumberland Fire	19.34%	(0.32%)	0.11%	5.06%	(1.48%)	0.86%	0.69%	(0.12%)	0.36%	24.50%
4107	1305	Lincoln Rescue	29.83%	(0.27%)	1.71%	(2.10%)	(1.26%)	0.04%	1.68%	(0.44%)	0.29%	29.48%
4108	1344	New Shoreham Police	19.16%	(0.01%)	1.20%	2.71%	(1.00%)	(2.05%)	0.77%	(0.17%)	0.25%	20.86%
4109	1324	Middletown Police & Fire	7.74%	(0.02%)	0.09%	0.74%	(0.72%)	(0.10%)	0.00%	0.00%	0.04%	7.77%
4110	1715	Harrisville Fire District	4.62%	(0.55%)	(0.08%)	(1.21%)	(1.21%)	0.06%	0.00%	0.00%	0.06%	1.69%
4111	1705	Albion Fire District	17.65%	(0.08%)	0.06%	(0.44%)	(1.02%)	0.09%	0.55%	(0.33%)	0.25%	16.74%
1054	1054	Central Falls Police & Fire New	8.96%	0.00%	0.03%	(0.23%)	(0.09%)	(0.54%)	0.00%	0.00%	0.02%	8.15%
1055	1055	Central Falls Police & Fire Legacy	61.52%	(0.17%)	0.05%	(2.16%)	(1.09%)	0.19%	0.00%	(0.58%)	(0.00%)	57.75%
1284	1284	Johnston Police	8.36%	(0.10%)	0.16%	(0.20%)	(0.38%)	(0.12%)	0.00%	0.00%	0.00%	7.72%
1364	1364	Newport Police Dept	7.91%	0.09%	0.15%	(0.25%)	(0.31%)	(0.07%)	0.00%	0.00%	0.00%	7.53%
1425	1425	Portsmouth Fire Department	8.29%	(0.02%)	(0.11%)	1.07%	(0.72%)	0.28%	0.00%	0.00%	0.03%	8.81%
1465	1465	Smithfield Fire	8.29%	(0.17%)	0.16%	(0.31%)	(0.44%)	(0.11%)	0.00%	0.00%	0.03%	7.45%
1484	1484	Scituate Police Dept COLA	8.39%	0.05%	0.17%	(0.12%)	(0.30%)	(0.16%)	0.00%	0.00%	0.03%	8.06%
1805	1805	Pascoag Fire District COLA	21.98%	(0.57%)	1.71%	(2.19%)	(0.76%)	0.08%	(0.38%)	0.00%	0.07%	19.94%
1815	1815	Saylesville Fire (NO COLA)	4.24%	(0.17%)	0.02%	(0.83%)	(0.27%)	0.16%	0.00%	0.00%	0.00%	3.14%
Police & Fire Units Averages			20.17%	(0.08%)	0.05%	(0.09%)	(1.32%)	(0.10%)	0.74%	(0.15%)	0.20%	19.42%
All MERS Units Averages			15.13%	(0.08%)	0.19%	(0.18%)	(1.05%)	(0.19%)	0.47%	(0.13%)	0.20%	14.37%

Units with no active members are excluded from this exhibit and units new in 2021 are excluded from this exhibit



Table 5B

Analysis of Financial Experience

Basis	Municipal Employees Retirement System Plan - General	Municipal Employees Retirement System Plan - Police/Fire
1. UAAL as of June 30, 2020	\$ 227.1	\$ 187.1
2. Impact of changes, gains and losses		
a. Interest at 7.00% for one year	16.0	13.0
b. Expected amortization payments	(16.2)	(12.9)
c. Investment experience (gain)/loss	(31.6)	(21.9)
d. Actual COLA (3.50%)	7.0	3.2
e. COLA Suspension	(3.6)	(2.5)
f. Salary (gain)/loss	(3.0)	(1.6)
g. Non-economic liability experience (gain)/loss	(9.6)	(4.5)
h. Changes in assumptions/methods	-	-
i. Changes in plan provisions	-	-
j. Total	\$ (41.0)	\$ (27.3)
3. UAAL as of June 30, 2021	\$ 186.1	\$ 159.8

Note: All dollar amounts are shown in millions.

Table 6a

Development of Actuarial Value of Assets (All Units in Aggregate)

	Year Ending June 30, 2021																																																								
1. Market value of assets at beginning of year (prior to adjustments)	\$ 1,663,965,521																																																								
Adjustments	(1)																																																								
Market value of assets at beginning of year (after adjustments)	\$ 1,663,965,520																																																								
2. Net new investments																																																									
a. Contributions	\$ 80,969,103																																																								
b. Benefits and refunds paid	(113,448,173)																																																								
c. Subtotal	(32,479,070)																																																								
3. Market value of assets at end of year	\$ 2,079,550,604																																																								
4. Net earnings (3-1-2) (includes misc revenues)	\$ 448,064,153																																																								
5. Assumed investment return rate for fiscal year	7.00%																																																								
6. Expected return	\$ 115,340,819																																																								
7. Excess return (4-6)	\$ 332,723,334																																																								
8. Development of amounts to be recognized as of June 30, 2021:																																																									
<table><tr><th>Fiscal Year End</th><th>Remaining Deferrals of Excess (Shortfall) of Investment Income*</th><th>Offsetting of Gains/(Losses)</th><th>Net Deferrals Remaining</th><th>Years Remaining</th><th>Recognized for this valuation</th><th>Remaining after this valuation</th></tr><tr><th></th><th>(1)</th><th>(2)</th><th>(3) = (1) + (2)</th><th>(4)</th><th>(5) = (3) / (4)</th><th>(6) = (3) - (5)</th></tr><tr><td>2017</td><td>\$ 0</td><td>\$ 0</td><td>\$ 0</td><td>1</td><td>\$ 0</td><td>\$ 0</td></tr><tr><td>2018</td><td>0</td><td>0</td><td>0</td><td>2</td><td>0</td><td>0</td></tr><tr><td>2019</td><td>(5,139,196)</td><td>5,139,196</td><td>0</td><td>3</td><td>0</td><td>0</td></tr><tr><td>2020</td><td>(43,183,628)</td><td>43,183,628</td><td>0</td><td>4</td><td>0</td><td>0</td></tr><tr><td>2021</td><td>332,723,334</td><td>(48,322,824)</td><td>284,400,510</td><td>5</td><td>56,880,102</td><td>227,520,408</td></tr><tr><td>Total</td><td>\$ 284,400,510</td><td>\$ 0</td><td>\$ 284,400,510</td><td></td><td>\$ 56,880,102</td><td>\$ 227,520,408</td></tr></table>		Fiscal Year End	Remaining Deferrals of Excess (Shortfall) of Investment Income*	Offsetting of Gains/(Losses)	Net Deferrals Remaining	Years Remaining	Recognized for this valuation	Remaining after this valuation		(1)	(2)	(3) = (1) + (2)	(4)	(5) = (3) / (4)	(6) = (3) - (5)	2017	\$ 0	\$ 0	\$ 0	1	\$ 0	\$ 0	2018	0	0	0	2	0	0	2019	(5,139,196)	5,139,196	0	3	0	0	2020	(43,183,628)	43,183,628	0	4	0	0	2021	332,723,334	(48,322,824)	284,400,510	5	56,880,102	227,520,408	Total	\$ 284,400,510	\$ 0	\$ 284,400,510		\$ 56,880,102	\$ 227,520,408
Fiscal Year End	Remaining Deferrals of Excess (Shortfall) of Investment Income*	Offsetting of Gains/(Losses)	Net Deferrals Remaining	Years Remaining	Recognized for this valuation	Remaining after this valuation																																																			
	(1)	(2)	(3) = (1) + (2)	(4)	(5) = (3) / (4)	(6) = (3) - (5)																																																			
2017	\$ 0	\$ 0	\$ 0	1	\$ 0	\$ 0																																																			
2018	0	0	0	2	0	0																																																			
2019	(5,139,196)	5,139,196	0	3	0	0																																																			
2020	(43,183,628)	43,183,628	0	4	0	0																																																			
2021	332,723,334	(48,322,824)	284,400,510	5	56,880,102	227,520,408																																																			
Total	\$ 284,400,510	\$ 0	\$ 284,400,510		\$ 56,880,102	\$ 227,520,408																																																			
9. Actuarial value of assets as of June 30, 2021 (Item 3 - Item 8)	\$ 1,852,030,196																																																								
10. Ratio of actuarial value to market value	89.1%																																																								

*Values of \$0 result from the beginning balance being offset by future gains or losses in the opposite direction.



Table 6b

History of Investment Return Rates

Year Ending June 30 of	Market	Actuarial
(1)	(2)	(3)
1999	10.1%	14.7%
2000	9.1%	8.8%
2001	-11.0%	4.9%
2002	-8.4%	0.9%
2003	2.5%	-0.7%
2004	19.2%	0.7%
2005	11.4%	2.3%
2006	11.7%	7.7%
2007	18.3%	12.9%
2008	-5.8%	10.5%
2009	-19.8%	2.4%
2010	13.7%	1.1%
2011	19.5%	2.7%
2012	1.5%	4.7%
2013	11.0%	6.3%
2014	14.8%	8.4%
2015	2.2%	7.5%
2016	0.0%	5.6%
2017	11.6%	6.0%
2018	7.9%	6.6%
2019	6.4%	6.6%
2020	3.7%	5.9%
2021	27.2%	10.2%
Average Returns:		
Last 5 Years	11.1%	7.0%
Last 10 Years	8.4%	6.8%

Table 7

Schedule of Funding Progress

Old Unit Number	New Unit Number	Unit	Code (s)	Actuarial Value of Assets (AVA)	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liability (UAAL) (5) - (4)	Funded Ratio (4)/(5)	Annual Covered Payroll (9)	UAAL as % of Payroll (7)/(9)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
General Employee Units									
3002	1012 1019	Bristol	B	20,820,962	26,873,152	6,052,190	77.5%	5,252,523	115.2%
3003	1032 1033	Burrillville	C	32,539,926	33,707,735	1,167,809	96.5%	6,526,611	17.9%
3004	1052	Central Falls		5,904,446	7,952,778	2,048,332	74.2%	2,224,460	92.1%
3005	1082	Charlestown	C	9,961,628	9,458,728	(502,900)	105.3%	2,920,061	(17.2%)
3007	1112 1113	Cranston	B	151,841,701	161,378,518	9,536,817	94.1%	23,959,797	39.8%
3008	1122 1123	Cumberland		32,301,129	36,040,290	3,739,161	89.6%	10,677,993	35.0%
3009	1152 1153	East Greenwich	C	8,493,988	7,579,045	(914,943)	112.1%	1,626,466	(56.3%)
3010	1162 1163	East Providence	B	72,241,421	115,884,244	43,642,823	62.3%	19,812,242	220.3%
3011	1183	Exeter/West Greenwich	B	12,200,335	13,796,787	1,596,452	88.4%	3,110,000	51.3%
3012	1192 1193	Foster		4,388,021	4,751,628	363,607	92.3%	1,288,065	28.2%
3013	1212 1213	Glocester	C	10,656,843	11,343,262	686,419	93.9%	2,960,591	23.2%
3014	1262	Hopkinton	C	6,608,498	5,685,529	(922,969)	116.2%	1,958,211	(47.1%)
3015	1272 1273	Jamestown	C	17,118,395	19,033,272	1,914,877	89.9%	4,273,264	44.8%
3016	1282 1283	Johnston	C	34,510,749	49,171,327	14,660,578	70.2%	7,668,223	191.2%
3017	1302 1303	Lincoln		3,094,023	3,253,405	159,382	95.1%	926,172	17.2%
3019	1322 1323	Middletown	C	22,429,127	25,573,374	3,144,247	87.7%	4,691,641	67.0%
3021	1352 1353 1354	Newport	B	56,451,463	80,112,359	23,660,896	70.5%	14,108,471	167.7%
3022	1342 1343	New Shoreham	B	9,187,301	9,595,383	408,082	95.7%	2,647,063	15.4%
3023	1372 1373	North Kingstown	C	55,035,955	70,590,630	15,554,675	78.0%	12,701,540	122.5%
3024	1382 1383	North Providence		32,676,170	33,283,456	607,286	98.2%	8,967,105	6.8%
3025	1392 1393	North Smithfield	B	17,152,983	15,971,198	(1,181,785)	107.4%	4,348,506	(27.2%)
3026	1412 1413	Pawtucket	C	105,468,752	123,333,021	17,864,269	85.5%	21,908,207	81.5%
3027	1515	Union Fire District		1,061,940	1,044,853	(17,087)	101.6%	337,385	(5.1%)
3029	1452	Richmond		3,146,351	3,440,755	294,404	91.4%	1,364,553	21.6%
3030	1462 1463	Scituate	B	12,379,646	15,561,927	3,182,281	79.6%	3,585,032	88.8%
3031	1472 1473	Smithfield	C	13,991,288	15,283,244	1,291,956	91.5%	3,782,740	34.2%
3032	1492 1493	South Kingstown	B	64,145,998	74,339,080	10,193,082	86.3%	13,115,948	77.7%
3033	1532 1533	Tiverton	C	15,814,305	14,991,412	(822,893)	105.5%	3,826,866	(21.5%)
3034	1562	Warren	C	7,156,071	8,692,533	1,536,462	82.3%	2,621,590	58.6%
3036	1622 1623	Westerly		790,643	756,047	(34,596)	104.6%	0	-
3037	1602	West Greenwich	C	3,872,674	4,619,365	746,691	83.8%	1,335,548	55.9%
3039	1632 1633	Woonsocket	B	66,873,713	75,674,389	8,800,676	88.4%	13,386,541	65.7%
3040	1073	Chariho School District	C	23,541,209	26,651,754	3,110,545	88.3%	5,448,363	57.1%
3041	1203	Foster/Glocester	B	8,500,978	9,824,297	1,323,319	86.5%	2,248,537	58.9%
3042	1528	Tiogue Fire & Lighting	C,5	54,679	25,816	(28,863)	211.8%	0	-



Table 7

Schedule of Funding Progress

Old Unit Number	New Unit Number	Unit	Code	Actuarial Value of Assets (AVA)	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liability (UAAL) (5) - (4)	Funded Ratio (4)/(5)	Annual Covered Payroll	UAAL as % of Payroll (7)/(9)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3043	1336	Narragansett Housing	C	872,435	740,283	(132,152)	117.9%	206,000	(64.2%)
3045	1098	Coventry Lighting District	C	1,314,317	567,467	(746,850)	231.6%	47,505	(1572.2%)
3046	1242	Hope Valley Fire	C	531,223	349,498	(181,725)	152.0%	168,073	(108.1%)
3050	1156	East Greenwich Housing	C	1,740,822	1,576,619	(164,203)	110.4%	551,444	(29.8%)
3051	1116	Cranston Housing	C	6,116,738	6,133,392	16,654	99.7%	1,219,032	1.4%
3052	1166	East Providence Housing	B	3,346,807	3,217,384	(129,423)	104.0%	780,686	(16.6%)
3053	1416	Pawtucket Housing	B	17,436,065	13,716,509	(3,719,556)	127.1%	3,126,767	(119.0%)
3056	1126	Cumberland Housing	C	1,712,541	1,465,349	(247,192)	116.9%	675,181	(36.6%)
3057	1306	Lincoln Housing	B	1,837,710	2,297,664	459,954	80.0%	652,917	70.4%
3059	1016	Bristol Housing	C	2,474,634	2,186,170	(288,464)	113.2%	570,769	(50.5%)
3065	1036	Burrillville Housing	B	960,172	1,213,057	252,885	79.2%	229,356	110.3%
3066	1386	North Providence Housing	B	943,753	1,829,601	885,848	51.6%	302,722	292.6%
3067	1177	East Smithfield Water	C	699,540	719,395	19,855	97.2%	0	-
3068	1227	Greenville Water	B	1,610,737	1,403,633	(207,104)	114.8%	383,692	(54.0%)
3069	1356	Newport Housing	C	7,293,485	10,319,572	3,026,087	70.7%	1,554,278	194.7%
3071	1566	Warren Housing	B	1,190,407	1,286,906	96,499	92.5%	451,865	21.4%
3072	1286	Johnston Housing	C	1,348,734	1,766,320	417,586	76.4%	485,853	85.9%
3077	1538	Tiverton Local 2670A	C	4,522,153	4,707,311	185,158	96.1%	1,228,685	15.1%
3078	1002 1003 1007 1009	Barrington COLA	C	39,485,731	42,733,203	3,247,472	92.4%	8,756,796	37.1%
3079	1096	Coventry Housing	C	1,727,335	1,570,739	(156,596)	110.0%	692,868	(22.6%)
3080	1496	South Kingstown Housing	C	617,086	491,561	(125,525)	125.5%	200,375	(62.6%)
3081	1403	N. RI Collaborative Adm. Services	C	3,246,982	4,133,246	886,264	78.6%	668,608	132.6%
3083	1616	West Warwick Housing	B	1,770,134	1,932,787	162,653	91.6%	486,533	33.4%
3084	1476	Smithfield Housing	C	736,770	634,240	(102,530)	116.2%	198,110	(51.8%)
3094	1478	Smithfield COLA	C	18,581,025	20,229,857	1,648,832	91.8%	4,273,777	38.6%
3096	1056	Central Falls Housing	C	2,863,668	4,023,771	1,160,103	71.2%	1,338,681	86.7%
3098	1293	Lime Rock Administrative Services	C	455,184	512,283	57,099	88.9%	109,021	52.4%
3099	1063	Central Falls Schools	C	17,901,992	19,164,646	1,262,654	93.4%	4,544,880	27.8%
3100	1023	Bristol/Warren Schools	B	18,689,034	24,692,354	6,003,320	75.7%	4,894,743	122.6%
3101	1157 1158	Town of E. Greenwich-COLA-NCE	C	26,501,300	26,209,472	(291,828)	101.1%	5,768,320	(5.1%)
3102	1712	Harrisville Fire District (ADMIN)	C	1,225,159	1,038,393	(186,766)	118.0%	273,043	(68.4%)
3103	1702	Albion Fire District (ADMIN)	C,5	147,601	134,803	(12,798)	109.5%	0	-
3150	1159	East Greenwich Fire (ADMIN)	C	146,670	250,285	103,615	58.6%	40,360	256.7%
1802	1802	Pascoag Fire District (ADMIN) COLA	C	46,476	62,706	16,230	74.1%	0	-
General Employee Units Subtotal				\$ 1,132,507,731	\$ 1,318,585,070	\$ 186,077,339	85.9%	\$ 260,491,255	71.4%



Table 7

Schedule of Funding Progress

Old Unit Number	New Unit Number	Unit	Code	Actuarial Value of Assets (AVA)	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liability (UAAL) (5) - (4)	Funded Ratio (4)/(5)	Annual Covered Payroll	UAAL as % of Payroll (7)/(9)
(1)	(2)	(3)	(s) (4)	(5)	(6)	(7)	(8)	(9)	(10)
Police & Fire Units									
4016	1285	Johnston Fire	D	13,966,294	15,284,162	1,317,868	91.4%	5,132,744	25.7%
4029	1454	Richmond Police	6	3,081,577	3,161,359	79,782	97.5%	894,831	8.9%
4031	1474	Smithfield Police	C,D	21,884,509	22,118,979	234,470	98.9%	3,354,111	7.0%
4042	1555	Valley Falls Fire	D	4,325,226	6,043,300	1,718,074	71.6%	681,409	252.1%
4047	1395 1435	North Smithfield Voluntary Fire	B,D	9,806,484	11,162,995	1,356,511	87.8%	1,511,713	89.7%
4050	1155	East Greenwich Fire	C,D	17,547,880	24,922,784	7,374,904	70.4%	2,733,267	269.8%
4054	1154	East Greenwich Police	C,D	18,697,501	24,805,170	6,107,669	75.4%	2,140,496	285.3%
4055	1375	North Kingstown Fire	C,D	39,676,371	51,389,928	11,713,557	77.2%	5,075,403	230.8%
4056	1374	North Kingstown Police	C,D	28,354,239	36,969,166	8,614,927	76.7%	4,268,236	201.8%
4058	1385	North Providence Fire	D	40,788,601	57,014,098	16,225,497	71.5%	6,650,969	244.0%
4059	1008	Barrington Fire (25)	C	5,273,828	5,622,803	348,975	93.8%	1,951,925	17.9%
4060	1004	Barrington Police	C,D	12,496,766	16,746,156	4,249,390	74.6%	2,059,862	206.3%
4061	1005	Barrington Fire (20)	C,D	5,681,092	9,225,185	3,544,093	61.6%	0	-
4062	1564 1565	Warren Police & Fire	C,D	13,826,094	18,167,485	4,341,391	76.1%	1,958,086	221.7%
4063	1494	South Kingstown Police	B,1	28,793,820	36,552,390	7,758,570	78.8%	3,911,781	198.3%
4073	1464	Scituate Police	5	278,273	14,545	(263,728)	1913.1%	0	-
4076	1394	North Smithfield Police	C,D	11,954,673	14,757,423	2,802,750	81.0%	2,119,324	132.2%
4077	1534	Tiverton Fire	C,D	12,710,825	16,013,867	3,303,042	79.4%	2,030,545	162.7%
4082	1194	Foster Police	C,D	3,443,108	4,451,349	1,008,241	77.3%	552,194	182.6%
4085	1634	Woonsocket Police	C,D	49,492,908	65,485,744	15,992,836	75.6%	6,348,372	251.9%
4086	1084	Charlestown Police	C,D	12,836,424	16,585,797	3,749,373	77.4%	1,616,649	231.9%
4087	1264	Hopkinton Police	C,D,6	6,715,147	9,359,836	2,644,689	71.7%	1,080,590	244.7%
4088	1214	Gloicester Police	C,D	8,550,463	10,490,294	1,939,831	81.5%	1,257,484	154.3%
4089	1604	West Greenwich Police/Rescue	C,D	6,165,663	7,657,999	1,492,336	80.5%	1,005,196	148.5%
4090	1034	Burrillville Police	C,D,6	13,126,826	15,187,665	2,060,839	86.4%	1,821,243	113.2%
4091	1148	Cumberland Rescue	C,D	8,705,883	8,842,822	136,939	98.5%	1,210,197	11.3%
4093	1635	Woonsocket Fire	C,D	61,482,044	65,557,472	4,075,428	93.8%	7,656,624	53.2%
4094	1015	Bristol Fire	D	704,158	673,490	(30,668)	104.6%	167,011	(18.4%)
4096	1014	Bristol Police	C,D	12,422,836	11,359,115	(1,063,721)	109.4%	3,121,797	(34.1%)

Table 7

Schedule of Funding Progress

Old Unit Number	New Unit Number	Unit	Code (s)	Actuarial Value of Assets (AVA) (5)	Actuarial Accrued Liability (AAL) (6)	Unfunded Actuarial Accrued Liability (UAAL) (5) - (4) (7)	Funded Ratio (4)/(5) (8)	Annual Covered Payroll (9)	UAAL as % of Payroll (7)/(9) (10)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4098	1095	Coventry Fire	C,D	3,613,317	6,769,032	3,155,715	53.4%	632,744	498.7%
4099	1505	South Kingstown EMT	C,D	5,495,262	4,565,938	(929,324)	120.4%	1,048,280	(88.7%)
4102	1045 1235 1525 1585	Central Coventry Fire	C,D	11,272,535	17,321,354	6,048,819	65.1%	1,731,037	349.4%
4103	1255	Hopkins Hill Fire	C,D	4,330,885	4,710,458	379,573	91.9%	953,962	39.8%
4104	1114	Cranston Police	C,D,4	59,859,065	69,237,081	9,378,016	86.5%	12,221,958	76.7%
4105	1115	Cranston Fire	C,D,4	93,498,837	89,884,482	(3,614,356)	104.0%	15,772,237	(22.9%)
4106	1125	Cumberland Fire	B,D	18,007,896	23,436,519	5,428,623	76.8%	2,799,805	193.9%
4107	1305	Lincoln Rescue	C	4,789,220	6,857,455	2,068,235	69.8%	928,221	222.8%
4108	1344	New Shoreham Police	B,D	1,945,537	2,515,663	570,126	77.3%	488,015	116.8%
4109	1324	Middletown Police & Fire	C,D	13,259,039	12,461,519	(797,520)	106.4%	5,227,040	(15.3%)
4110	1715	Harrisville Fire District	C,D	2,468,144	1,894,379	(573,765)	130.3%	505,912	(113.4%)
4111	1705	Albion Fire District	C	1,390,102	1,693,816	303,714	82.1%	310,720	97.7%
1054	1054	Central Falls Police & Fire New	C	180,350	139,860	(40,490)	129.0%	692,397	(5.8%)
1055	1055	Central Falls Police & Fire Legacy	C	16,219,865	42,315,799	26,095,934	38.3%	4,310,182	605.4%
1284	1284	Johnston Police		1,897,301	1,717,727	(179,574)	110.5%	1,561,525	(11.5%)
1364	1364	Newport Police Dept		1,477,323	1,271,855	(205,468)	116.2%	1,562,296	(13.2%)
1424	1424	Portsmouth Police Department	C,2	1,339,920	1,336,024	(3,896)	100.3%	1,572,742	(0.2%)
1425	1425	Portsmouth Fire Department	C	1,441,386	1,466,519	25,133	98.3%	1,451,810	1.7%
1465	1465	Smithfield Fire	C	3,005,178	2,606,749	(398,429)	115.3%	2,049,447	(19.4%)
1484	1484	Scituate Police Dept COLA	C	409,303	363,797	(45,506)	112.5%	575,122	(7.9%)
1805	1805	Pascoag Fire District COLA	C	704,806	1,083,776	378,970	65.0%	276,365	137.1%
1815	1815	Saylesville Fire (NO COLA)	C	127,685	57,119	(70,566)	223.5%	176,532	(40.0%)
Police & Fire Units Subtotal				<u>\$ 719,522,469</u>	<u>\$ 879,330,298</u>	<u>\$ 159,807,829</u>	81.8%	<u>\$ 129,160,408</u>	123.7%
All MERS Units Total				1,852,030,200	2,197,915,369	345,885,169	84.3%	389,651,663	88.8%

B - Municipality has adopted COLA Plan B

D - Municipality has adopted the "20-year" optional Police & Fire Plan

C - Municipality has adopted COLA Plan C

1 - S.Kingstown Police have a unique plan that provides 2.0% of salary for service prior to July 1, 1993, and 2.5% of salary for service on or after July 1, 1993.

2 - New unit since prior valuation.

3 - Closed unit.

4 - Historically, Cranston Fire and Police are contributing 10% due to special plan provision.

5 - This unit has no active members.

6 - Historically, Special plan provisions apply to this unit.



Table 8**Distribution of Assets at Market Value
(Percentage of Total Investments)**

Item (1)	June 30, 2021 (2)
US Equity	24.3%
International Developed Equity	11.1%
Emerging Markets Equity	4.6%
Private Equity and Opportunistic Private Credit	12.5%
Non-Core Real Estate	2.5%
Equity Options	2.0%
EMD (50/50 Blend)	2.0%
Liquid Credit	3.0%
Private Credit	3.0%
CLOs	2.0%
Treasury Duration	5.0%
Systematic Trend	5.0%
Core Real Estate	4.0%
Private Infrastructure	4.0%
IG Corp Credit	3.3%
Securitized Credit	3.3%
Absolute Return	6.5%
Cash	2.0%
Total investments	100.0%

Table 9

Active Member Statistics

Old Unit Number	New Unit Number	Unit	Code(s)	Active Employees as of June 30, 2021				Active Employees as of June 30, 2020			
				Number	Average Age	Average Service	Average Salary	Number	Average Age	Average Service	Average Salary
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
General Employee Units											
3002	1012 1019	Bristol	B	92	49.8	14.7	\$ 57,093	93	50.0	14.7	\$ 55,970
3003	1032 1033	Burrillville	C	133	52.8	12.4	49,072	137	52.9	12.8	48,635
3004	1052	Central Falls		46	44.3	9.0	48,358	42	46.6	10.3	51,516
3005	1082	Charlestown	C	48	53.1	14.3	60,835	48	52.3	13.5	60,557
3007	1112 1113	Cranston	B	583	54.8	14.3	41,097	632	54.3	13.9	39,255
3008	1122 1123	Cumberland		248	52.2	11.9	43,056	261	52.6	12.3	42,132
3009	1152 1153	East Greenwich	C	18	53.1	12.7	90,359	17	54.4	13.9	92,521
3010	1162 1163	East Providence	B	402	50.9	11.8	49,284	436	50.2	11.1	47,681
3011	1183	Exeter/West Greenwich	B	68	56.2	13.0	45,735	69	55.1	13.1	42,437
3012	1192 1193	Foster		34	55.9	11.6	37,884	35	56.2	11.3	37,425
3013	1212 1213	Glocester	C	67	54.1	12.2	44,188	66	54.5	12.1	43,208
3014	1262	Hopkinton	C	38	49.7	7.9	51,532	38	51.6	10.1	52,932
3015	1272 1273	Jamestown	C	80	52.7	13.5	53,416	83	52.9	14.3	52,431
3016	1282 1283	Johnston	C	197	50.9	11.3	38,925	214	51.4	11.4	38,081
3017	1302 1303	Lincoln		13	60.8	18.6	71,244	14	61.0	17.6	69,763
3019	1322 1323	Middletown	C	97	50.8	13.4	48,367	106	52.4	13.7	47,120
3021	1352 1353 1354	Newport	B	279	48.2	11.3	50,568	286	48.9	11.3	49,742
3022	1342 1343	New Shoreham	B	59	49.5	8.9	44,865	58	49.9	9.1	44,680
3023	1372 1373	North Kingstown	C	309	50.6	10.3	41,105	316	50.8	10.6	39,952
3024	1382 1383	North Providence		219	50.4	11.3	40,946	224	51.4	12.0	38,982
3025	1392 1393	North Smithfield	B	98	52.2	10.8	44,373	95	52.6	10.4	43,583
3026	1412 1413	Pawtucket	C	493	50.8	13.4	44,439	481	50.7	13.7	45,806
3027	1515	Union Fire District		6	55.3	11.5	56,231	7	61.0	17.9	56,540
3029	1452	Richmond		26	50.9	11.1	52,483	27	49.7	10.1	50,301
3030	1462 1463	Scituate	B	85	53.1	12.4	42,177	88	51.8	11.3	39,693
3031	1472 1473	Smithfield	C	88	53.1	11.1	42,986	88	54.5	11.8	45,402
3032	1492 1493	South Kingstown	B	280	51.6	13.1	46,843	281	52.2	13.6	46,529
3033	1532 1533	Tiverton	C	97	51.2	9.4	39,452	100	50.2	8.7	37,890
3034	1562	Warren	C	46	47.4	14.0	56,991	45	47.4	13.9	56,232
3036	1622 1623	Westerly		---	---	---	---	---	---	---	---
3037	1602	West Greenwich	C	24	50.7	13.3	55,648	23	50.9	12.4	54,584
3039	1632 1633	Woonsocket	B	357	50.6	10.7	37,497	376	50.4	10.9	35,864
3040	1073	Chariho School District	C	153	52.6	14.0	35,610	160	51.9	13.5	34,769
3041	1203	Foster/Glocester	B	56	51.2	9.8	40,152	57	51.8	10.4	39,081
3043	1336	Narragansett Housing	C	4	58.7	22.3	51,500	4	57.7	21.3	48,911
3045	1098	Coventry Lighting District	C	1	54.3	6.4	47,505	1	53.3	5.4	46,856
3046	1242	Hope Valley Fire	C	3	45.7	10.6	56,024	3	44.7	9.6	54,765
3050	1156	East Greenwich Housing	C	9	53.1	8.6	61,272	9	58.2	12.1	61,475
3051	1116	Cranston Housing	C	20	46.5	9.1	60,952	19	47.1	8.6	59,947
3052	1166	East Providence Housing	B	13	49.5	9.2	60,053	13	54.0	11.5	62,005
3053	1416	Pawtucket Housing	B	48	47.9	13.8	65,141	48	49.4	14.5	64,868
3056	1126	Cumberland Housing	C	12	55.4	10.8	56,265	10	55.5	12.2	56,508
3057	1306	Lincoln Housing	B	13	50.9	9.3	50,224	13	49.9	8.4	49,069
3059	1016	Bristol Housing		9	51.2	11.4	63,419	9	53.9	14.1	60,075
3065	1036	Burrillville Housing	B	4	50.3	9.3	57,339	4	49.3	8.3	55,069
3066	1386	North Providence Housing	B	7	47.9	6.8	43,246	7	46.9	5.8	44,723
3067	1177	East Smithfield Water	C	---	---	---	---	---	---	---	---
3068	1227	Greenville Water	B	5	56.2	18.3	76,738	5	55.2	17.3	73,277

Table 9

Active Member Statistics

Old Unit Number	New Unit Number	Unit	Code(s)	Active Employees as of June 30, 2021				Active Employees as of June 30, 2020			
				Number	Average Age	Average Service	Average Salary	Number	Average Age	Average Service	Average Salary
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
3069	1356	Newport Housing	C	27	53.3	11.3	57,566	27	51.5	10.6	56,231
3071	1566	Warren Housing	B	8	50.9	7.6	56,483	8	49.9	6.6	54,165
3072	1286	Johnston Housing		8	53.3	16.6	60,732	8	52.3	15.6	58,895
3077	1538	Tiverton Local 2670A	C	27	45.7	9.3	45,507	27	45.9	8.5	42,964
3078	02 1003 1007 10	Barrington COLA	C	186	52.9	11.8	47,080	177	53.8	12.9	47,377
3079	1096	Coventry Housing		14	57.3	13.2	49,491	13	55.0	13.4	50,670
3080	1496	South Kingstown Housing	C	4	55.8	5.0	50,094	3	55.7	3.1	44,754
3081	1403	N. RI Collaborative Adm. Services	C	20	51.5	9.9	33,430	23	54.2	10.3	27,497
3083	1616	West Warwick Housing	B	10	50.7	5.2	48,653	7	44.7	6.2	57,400
3084	1476	Smithfield Housing		3	54.7	16.8	66,037	3	53.7	15.8	64,065
3094	1478	Smithfield COLA	C	69	52.2	13.8	61,939	71	52.2	14.4	62,610
3096	1056	Central Falls Housing	C	23	52.8	11.8	58,204	21	51.9	12.2	56,978
3098	1293	Lime Rock Administrative Services		2	61.8	21.7	54,511	2	60.8	20.7	52,121
3099	1063	Central Falls Schools	C	123	47.7	10.2	36,950	117	48.3	10.3	38,029
3100	1023	Bristol/Warren Schools	B	123	51.2	10.3	39,795	117	50.6	10.7	39,406
3101	1157 1158	Town of E. Greenwich-COLA-NCE	C	147	53.1	13.0	39,240	159	54.2	12.8	36,052
3102	1712	Harrisville Fire District (ADMIN)	C	4	58.2	23.3	68,261	4	57.2	22.3	67,087
3103	1702	Albion Fire District (ADMIN)	C,5	---	---	---	---	---	---	---	---
3150	1159	East Greenwich Fire (ADMIN)	C	1	38.5	1.7	40,360	1	37.5	0.7	36,653
1802	1802	Pascoag Fire District (ADMIN) COLA	C	---	---	---	---	---	---	---	---
All General Employee Units				5,786	51.5	12.1	\$ 45,021	5,936	51.7	12.2	\$ 44,085
Police & Fire Units											
4016	1285	Johnston Fire	D	72	40.5	11.7	\$ 71,288	71	39.7	10.8	\$ 69,272
4029	1454	Richmond Police	6	13	40.1	13.2	68,833	13	39.1	12.2	66,607
4031	1474	Smithfield Police	C,D	42	41.7	16.7	79,860	40	41.5	16.5	78,884
4042	1555	Valley Falls Fire	D	10	43.6	17.1	68,141	10	42.6	16.2	66,749
4047	1395 1435	North Smithfield Voluntary Fire	B,D	23	40.1	12.7	65,727	23	40.4	13.1	63,882
4050	1155	East Greenwich Fire	C,D	37	45.0	14.5	73,872	35	45.1	14.7	73,901
4054	1154	East Greenwich Police	C,D	30	44.7	14.1	71,350	33	45.3	14.7	71,768
4055	1375	North Kingstown Fire	C,D	67	42.8	14.7	75,752	68	41.9	13.8	72,939
4056	1374	North Kingstown Police	C,D	52	40.5	14.4	82,081	51	39.5	13.4	79,349
4058	1385	North Providence Fire	D	97	39.6	12.9	68,567	90	40.6	13.8	67,423
4059	1008	Barrington Fire (25)	C	28	36.8	9.4	69,712	28	36.1	9.0	68,773
4060	1004	Barrington Police	C,D	26	42.3	15.1	79,225	26	41.1	15.3	74,828
4061	1005	Barrington Fire (20)	C,D	---	---	---	---	1	54.0	33.0	70,390
4062	1564 1565	Warren Police & Fire	C,D	27	41.7	14.8	72,522	26	41.4	14.4	70,517
4063	1494	South Kingstown Police	B,1	54	39.0	12.2	72,440	53	39.8	13.0	70,838
4076	1394	North Smithfield Police	C,D	27	33.8	8.6	78,493	25	33.5	8.3	73,402
4077	1534	Tiverton Fire	C,D	30	39.8	9.7	67,685	29	38.3	9.0	62,138
4082	1194	Foster Police	C,D	9	48.0	6.8	61,355	8	42.8	6.8	64,187
4085	1634	Woonsocket Police	C,D	94	39.8	12.9	67,536	93	39.4	12.4	66,104
4086	1084	Charlestown Police	C,D	20	41.6	14.4	80,832	20	40.6	13.4	79,463
4087	1264	Hopkinton Police	C,D,6	15	42.1	10.2	72,039	15	42.3	10.3	76,580
4088	1214	Glocester Police	C,D	17	42.2	12.4	73,970	17	43.1	13.1	71,957
4089	1604	West Greenwich Police/Rescue	C,D	14	47.0	13.4	71,800	16	46.1	13.5	68,058
4090	1034	Burrillville Police	C,D,6	24	39.9	12.3	75,885	24	40.5	12.6	72,879
4091	1148	Cumberland Rescue	C,D	18	44.0	15.3	67,233	18	43.0	14.3	64,643
4093	1635	Woonsocket Fire	C,D	115	39.7	13.4	66,579	108	40.5	14.1	65,554
4094	1015	Bristol Fire	D	3	53.2	13.5	55,670	3	52.2	12.5	55,613

Table 9

Active Member Statistics

Old Unit Number	New Unit Number	Unit	Code(s)	Active Employees as of June 30, 2021				Active Employees as of June 30, 2020			
				Number	Average Age	Average Service	Average Salary	Number	Average Age	Average Service	Average Salary
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
4095	1135	Cumberland Hill Fire	C,D	---	---	---	---	11	42.6	14.9	69,355
4096	1014	Bristol Police	C,D	39	41.1	14.2	80,046	40	39.8	12.9	76,720
4098	1095	Coventry Fire	C,D	9	41.9	13.4	70,305	7	44.6	15.9	75,287
4099	1505	South Kingstown EMT	C,D	18	41.5	7.0	58,238	19	40.7	6.7	53,838
4101	1365	North Cumberland	C,D	---	---	---	---	10	52.1	19.8	66,178
4102	45 1235 1525 15	Central Coventry Fire	C,D	27	41.6	13.0	64,112	31	39.6	10.7	61,734
4103	1255	Hopkins Hill Fire	C,D	15	49.2	10.9	63,597	15	51.6	11.8	63,416
4104	1114	Cranston Police	C,D,4	140	42.3	15.5	87,300	145	41.6	14.6	83,244
4105	1115	Cranston Fire	C,D,4	179	44.5	16.1	88,113	185	43.7	15.2	84,224
4106	1125	Cumberland Fire	B,D	43	42.6	13.6	65,112	22	37.7	8.9	59,935
4107	1305	Lincoln Rescue	C	16	39.8	9.9	58,014	15	39.1	9.7	55,902
4108	1344	New Shoreham Police	B,D	6	52.1	13.1	81,336	6	47.2	12.3	67,605
4109	1324	Middletown Police & Fire	C,D	75	35.8	9.0	69,694	62	36.3	9.5	70,906
4110	1715	Harrisville Fire District	C,D	8	43.6	13.7	63,239	8	42.6	12.7	62,007
4111	1705	Albion Fire District	C	5	39.7	7.8	62,144	5	38.7	6.6	60,516
1054	1054	Central Falls Police & Fire New	C	12	32.5	1.2	57,700	10	27.6	0.4	44,646
1055	1055	Central Falls Police & Fire Legacy	C	69	42.2	13.8	62,466	71	41.6	13.2	61,040
1284	1284	Johnston Police		25	34.7	5.9	62,461	21	35.3	5.9	62,496
1364	1364	Newport Police Dept		24	31.5	4.6	65,096	24	30.5	3.6	59,988
1424	1424	Portsmouth Police Department	C,2	25	29.1	4.5	62,910	---	---	---	---
1425	1425	Portsmouth Fire Department	C	23	32.2	4.4	63,122	10	29.9	3.5	62,984
1465	1465	Smithfield Fire	C	34	30.5	5.4	60,278	31	30.1	4.7	56,569
1484	1484	Scituate Police Dept COLA	C	9	31.5	3.5	63,902	6	33.4	3.8	62,655
1805	1805	Pascoag Fire District COLA	C	5	48.2	16.3	55,273	6	47.6	14.4	53,661
1815	1815	Saylesville Fire (NO COLA)	C	3	39.2	3.5	58,844	3	38.2	2.5	56,813
All Police & Fire Units				1,773	40.6	12.6	\$ 72,849	1,707	40.5	12.6	\$ 71,028
All MERS Units				7,559	49.0	12.2	\$ 51,548	7,643	49.2	12.3	\$ 50,102

B - Municipality has adopted COLA Plan B

C - Municipality has adopted COLA Plan C

D - Municipality has adopted the "20-year" optional Police & Fire Plan

1 - S.Kingstown Police have a unique plan that provides 2.0% of salary for service prior to July 1, 1993, and 2.5% of salary for service on or after July 1, 1993.

2 - New unit since prior valuation.

3 - Closed unit.

4 - Historically, Cranston Fire and Police are contributing 10% due to special plan provision. 5 - This unit has no active members.

6 - Historically, Special plan provisions apply to this unit.



Table 10

Retired Member Statistics

Old Unit Number	New Unit Number	Unit	Code(s)	Retirees and Beneficiaries As of June 30, 2021			Retirees and Beneficiaries As of June 30, 2020		
				Number	Average Age	Average Monthly Benefit	Number	Average Age	Average Monthly Benefit
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
General Employee Units									
3001	1002 1003	Barrington		---	---	---	---	---	---
3002	1012 1019	Bristol	B	73	75.5	\$ 1,788	71	75.3	\$ 1,717
3003	1032 1033	Burrillville	C	126	73.9	1,339	116	73.8	1,322
3004	1052	Central Falls		33	74.2	1,323	32	73.7	1,292
3005	1082	Charlestown	C	13	69.5	1,641	15	70.5	1,703
3007	1112 1113	Cranston	B	630	74.6	1,325	619	74.7	1,315
3008	1122 1123	Cumberland		182	75.2	902	171	75.6	882
3009	1152 1153	East Greenwich	C	38	81.4	987	41	82.0	903
3010	1162 1163	East Providence	B	426	73.7	1,512	421	73.5	1,518
3011	1183	Exeter/West Greenwich	B	41	72.3	1,327	41	72.0	1,273
3012	1192 1193	Foster		28	73.4	792	28	72.2	822
3013	1212 1213	Glocester	C	45	74.9	1,084	44	74.0	1,088
3014	1262	Hopkinton	C	19	73.9	1,462	16	74.5	1,283
3015	1272 1273	Jamestown	C	51	73.2	1,538	46	72.9	1,405
3016	1282 1283	Johnston	C	251	73.2	1,136	239	73.3	1,122
3017	1302 1303	Lincoln		7	76.7	1,393	6	77.2	1,427
3019	1322 1323	Middletown	C	73	68.7	1,519	66	68.3	1,503
3021	1352 1353 1354	Newport	B	273	72.9	1,630	267	72.7	1,643
3022	1342 1343	New Shoreham	B	33	74.8	1,332	30	75.2	1,313
3023	1372 1373	North Kingstown	C	272	73.9	1,404	261	73.6	1,393
3024	1382 1383	North Providence		192	75.5	849	184	75.0	843
3025	1392 1393	North Smithfield	B	68	76.4	1,156	76	77.0	1,102
3026	1412 1413	Pawtucket	C	470	74.7	1,348	469	74.5	1,323
3027	1515	Union Fire District		3	74.0	2,022	1	70.9	1,115
3029	1452	Richmond		15	73.2	877	20	76.3	688
3030	1462 1463	Scituate	B	59	77.0	1,248	58	76.6	1,245
3031	1472 1473	Smithfield	C	75	76.5	999	73	77.3	1,017
3032	1492 1493	South Kingstown	B	246	72.4	1,468	232	72.2	1,438
3033	1532 1533	Tiverton	C	61	74.0	1,139	59	74.1	1,097
3034	1562	Warren	C	27	77.9	1,184	29	79.9	1,029
3036	1622 1623	Westerly		7	87.9	1,481	7	86.9	1,481
3037	1602	West Greenwich	C	14	73.9	1,285	14	73.4	1,456
3039	1632 1633	Woonsocket	B	355	75.2	1,216	352	75.3	1,198
3040	1073	Chariho School District	C	83	71.7	1,340	79	71.6	1,311
3041	1203	Foster/Glocester	B	45	72.9	1,059	44	73.1	1,018
3042	1528	Tiogue Fire & Lighting	C,5	1	73.3	177	1	72.3	175
3043	1336	Narragansett Housing	C	---	---	---	---	---	---
3045	1098	Coventry Lighting District	C	2	80.3	2,664	2	79.3	2,640
3046	1242	Hope Valley Fire	C	1	79.0	1,837	1	78.0	1,809
3050	1156	East Greenwich Housing	C	4	67.8	1,494	3	69.5	2,538
3051	1116	Cranston Housing	C	21	74.9	1,614	22	75.1	1,538
3052	1166	East Providence Housing	B	11	77.3	1,570	11	77.9	1,904
3053	1416	Pawtucket Housing	B	30	74.9	1,839	28	74.8	1,772
3056	1126	Cumberland Housing	C	2	77.6	2,171	2	76.6	2,152
3057	1306	Lincoln Housing	B	8	73.9	1,470	8	72.9	1,451
3059	1016	Bristol Housing		9	76.9	1,299	8	77.5	1,166
3065	1036	Burrillville Housing	B	3	74.2	2,520	3	73.2	2,520
3066	1386	North Providence Housing	B	6	75.1	1,877	7	74.9	1,882
3067	1177	East Smithfield Water	C	4	76.6	1,079	4	75.6	1,079
3068	1227	Greenville Water	B	1	75.3	3,259	1	74.3	3,234



Table 10

Retired Member Statistics

Old Unit Number	New Unit Number	Unit	Code(s)	Retirees and Beneficiaries As of June 30, 2021			Retirees and Beneficiaries As of June 30, 2020		
				Number	Average Age	Average Monthly Benefit	Number	Average Age	Average Monthly Benefit
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
3069	1356	Newport Housing	C	34	73.3	1,862	34	72.3	1,894
3071	1566	Warren Housing	B	5	78.0	1,902	5	77.0	1,884
3072	1286	Johnston Housing		5	78.0	1,882	5	77.0	1,882
3077	1538	Tiverton Local 2670A	C	19	73.3	1,330	19	72.3	1,317
3078	1002 1003 1007 1009	Barrington COLA	C	137	75.0	1,511	130	75.5	1,561
3079	1096	Coventry Housing		5	81.3	614	6	82.1	549
3080	1496	South Kingstown Housing	C	1	64.7	1,798	1	63.7	1,798
3081	1403	N. RI Collaborative Adm. Services	C	20	69.5	855	17	69.4	885
3083	1616	West Warwick Housing	B	6	78.3	2,076	6	77.3	2,054
3084	1476	Smithfield Housing		---	---	---	---	---	---
3094	1478	Smithfield COLA	C	39	71.6	1,996	39	71.8	1,853
3096	1056	Central Falls Housing	C	10	74.2	1,428	11	74.6	1,385
3098	1293	Lime Rock Administrative Services		1	69.0	1,212	1	68.0	1,212
3099	1063	Central Falls Schools	C	83	72.7	1,001	81	72.2	990
3100	1023	Bristol/Warren Schools	B	128	73.3	1,069	130	73.1	1,024
3101	1157 1158	Town of E. Greenwich-COLA-NCE	C	71	71.0	1,536	65	70.3	1,554
3102	1712	Harrisville Fire District (ADMIN)	C	---	---	---	---	---	---
3103	1702	Albion Fire District (ADMIN)	C,5	1	63.9	790	1	62.9	790
3150	1159	East Greenwich Fire (ADMIN)	C	1	72.1	1,803	1	71.1	1,784
1802	1802	Pascoag Fire District (ADMIN) COLA	C	---	---	---	---	---	---
All General Employee Units				5,003	74.1	1,324	4,880	74.1	1,308
Police and Fire Units									
4016	1285	Johnston Fire	D	6	53.9	\$ 3,158	6	52.9	\$ 3,158
4029	1454	Richmond Police	6	1	60.8	2,199	1	59.8	2,199
4031	1474	Smithfield Police	C,D	11	52.2	3,726	9	50.4	3,259
4042	1555	Valley Falls Fire	D	10	60.7	2,354	10	59.7	2,354
4047	1395 1435	North Smithfield Voluntary Fire	B,D	15	65.7	2,732	13	66.0	2,785
4050	1155	East Greenwich Fire	C,D	34	63.5	2,745	34	62.5	2,738
4054	1154	East Greenwich Police	C,D	34	65.0	3,182	31	65.2	3,059
4055	1375	North Kingstown Fire	C,D	77	68.0	2,842	77	67.0	2,832
4056	1374	North Kingstown Police	C,D	44	63.7	3,005	44	62.6	2,994
4058	1385	North Providence Fire	D	92	61.9	2,755	88	61.1	2,732
4059	1008	Barrington Fire (25)	C	2	59.0	4,308	2	58.0	4,290
4060	1004	Barrington Police	C,D	24	69.8	2,508	24	70.1	2,356
4061	1005	Barrington Fire (20)	C,D	28	72.0	2,376	28	71.6	2,336
4062	1564 1565	Warren Police & Fire	C,D	27	69.1	2,587	27	68.5	2,620
4063	1494	South Kingstown Police	B,1	51	66.6	3,066	51	66.1	2,956
4073	1464	Scituate Police	5	1	90.6	301	1	89.6	301
4076	1394	North Smithfield Police	C,D	22	62.0	2,841	23	61.2	2,835
4077	1534	Tiverton Fire	C,D	30	65.4	2,221	30	64.4	2,218
4082	1194	Foster Police	C,D	9	65.6	2,295	9	64.6	2,290
4085	1634	Woonsocket Police	C,D	84	56.7	2,932	83	55.8	2,903
4086	1084	Charlestown Police	C,D	20	61.9	3,283	20	60.9	3,273
4087	1264	Hopkinton Police	C,D,6	14	61.2	2,844	14	60.2	2,834
4088	1214	Glocester Police	C,D	17	64.8	2,397	16	64.4	2,278
4089	1604	West Greenwich Police/Rescue	C,D	9	59.6	2,855	8	59.3	2,680
4090	1034	Burrillville Police	C,D,6	22	64.5	2,764	20	63.9	2,790
4091	1148	Cumberland Rescue	C,D	10	58.2	2,219	10	57.2	2,206



Table 10

Retired Member Statistics

Old Unit Number	New Unit Number	Unit	Code(s)	Retirees and Beneficiaries As of June 30, 2021			Retirees and Beneficiaries As of June 30, 2020		
				Number	Average Age	Average Monthly Benefit	Number	Average Age	Average Monthly Benefit
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
4093	1635	Woonsocket Fire	C,D	66	56.1	3,144	62	55.2	3,078
4094	1015	Bristol Fire	D	2	70.7	723	2	69.7	723
4095	1135	Cumberland Hill Fire	C,D	---	---	---	12	63.2	2,824
4096	1014	Bristol Police	C,D	1	56.4	3,289	1	55.4	3,265
4098	1095	Coventry Fire	C,D	12	59.5	2,537	12	58.5	2,532
4099	1505	South Kingstown EMT	C,D	5	52.3	2,468	5	51.3	2,446
4101	1365	North Cumberland	C,D	---	---	---	12	61.0	2,180
4102	1045 1235 1525 1585	Central Coventry Fire	C,D	28	57.2	2,441	29	58.4	2,414
4103	1255	Hopkins Hill Fire	C,D	6	60.0	1,610	3	62.3	1,600
4104	1114	Cranston Police	C,D,4	32	53.2	4,037	28	52.4	4,034
4105	1115	Cranston Fire	C,D,4	39	55.5	3,787	33	55.5	3,807
4106	1125	Cumberland Fire	B,D	34	64.2	2,571	11	66.1	2,691
4107	1305	Lincoln Rescue	C	11	58.3	2,514	12	58.6	2,473
4108	1344	New Shoreham Police	B,D	2	60.2	3,284	2	59.2	3,284
4109	1324	Middletown Police & Fire	C,D	2	44.6	2,265	1	40.7	3,213
4110	1715	Harrisville Fire District	C,D	---	---	---	---	---	---
4111	1705	Albion Fire District	C	3	63.7	2,368	3	63.4	2,368
1054	1054	Central Falls Police & Fire New	C	---	---	---	---	---	---
1055	1055	Central Falls Police & Fire Legacy	C	109	69.8	1,566	108	69.0	1,531
1284	1284	Johnston Police	---	---	---	---	---	---	---
1364	1364	Newport Police Dept	---	---	---	---	---	---	---
1424	1424	Portsmouth Police Department	C,2	---	---	---	---	---	---
1425	1425	Portsmouth Fire Department	C	---	---	---	---	---	---
1465	1465	Smithfield Fire	C	---	---	---	---	---	---
1484	1484	Scituate Police Dept COLA	C	---	---	---	---	---	---
1805	1805	Pascoag Fire District COLA	C	---	---	---	---	---	---
1815	1815	Saylesville Fire (NO COLA)	C	---	---	---	---	---	---
All Police & Fire Units				1,046	62.9	\$ 2,734	1,015	62.4	\$ 2,688
All MERS Units				6,049	72.2	\$ 1,568	5,895	72.1	\$ 1,545

B - Municipality has adopted COLA Plan B

C - Municipality has adopted COLA Plan C

D - Municipality has adopted the "20-year" optional Police & Fire Plan

1 - S.Kingstown Police have a unique plan that provides 2.0% of salary for service prior to July 1, 1993, and 2.5% of salary for service on or after July 1, 1993.

2 - New unit since prior valuation.

3 - Closed unit.

4 - Historically, Cranston Fire and Police are contributing 10% due to special plan provision.

5 - This unit has no active members.

6 - Historically, Special plan provisions apply to this unit.



Table 11

Distribution of Active Members by Age and by Years of Service (General Employees) As of June 30, 2021

Attained Age	Years of Credited Service												Total Count & Avg. Comp.
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	
Under 25	49 \$32,582	26 \$37,357	8 \$36,108	8 \$36,337	2 \$38,794	2 \$39,872	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	95 \$34,786
25-29	75 \$33,483	53 \$37,821	43 \$38,326	33 \$39,221	18 \$39,954	28 \$42,050	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	250 \$37,418
30-34	46 \$37,798	46 \$34,453	47 \$37,598	46 \$36,005	35 \$40,988	97 \$46,166	15 \$49,975	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	332 \$40,389
35-39	45 \$36,688	47 \$38,060	34 \$40,246	41 \$43,577	41 \$40,430	97 \$45,493	53 \$49,196	28 \$51,012	0 \$0	0 \$0	0 \$0	0 \$0	386 \$43,267
40-44	42 \$33,712	43 \$38,803	47 \$35,115	36 \$40,338	62 \$38,040	99 \$44,439	58 \$59,341	75 \$56,463	17 \$54,199	0 \$0	0 \$0	0 \$0	479 \$44,975
45-49	51 \$32,866	51 \$32,331	35 \$36,228	49 \$35,262	44 \$38,619	135 \$40,998	58 \$51,664	54 \$53,607	56 \$59,955	13 \$56,155	0 \$0	0 \$0	546 \$43,102
50-54	39 \$44,460	44 \$37,974	60 \$33,976	53 \$36,847	73 \$37,782	177 \$42,542	132 \$48,294	134 \$52,573	78 \$54,136	52 \$61,866	43 \$59,808	2 \$60,355	887 \$46,489
55-59	61 \$46,355	43 \$42,495	36 \$36,982	34 \$45,800	37 \$41,782	195 \$41,791	143 \$42,654	236 \$45,170	160 \$52,400	88 \$61,124	100 \$59,823	20 \$63,269	1,153 \$47,710
60-64	27 \$41,366	28 \$40,787	29 \$37,461	39 \$39,315	38 \$46,754	142 \$43,900	129 \$44,439	234 \$44,644	229 \$45,328	92 \$51,958	70 \$55,593	21 \$62,130	1,078 \$45,849
65-69	15 \$30,258	12 \$40,881	10 \$58,704	11 \$31,833	18 \$37,934	75 \$43,046	65 \$43,743	107 \$46,173	115 \$47,012	85 \$48,990	41 \$58,495	26 \$54,989	580 \$46,509
70 & Over	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
Total	450 \$37,160	393 \$37,653	349 \$37,347	350 \$38,861	368 \$39,973	1,047 \$43,194	653 \$47,237	868 \$47,984	655 \$49,881	330 \$55,364	254 \$58,440	69 \$59,718	5,786 \$45,021



Table 12

Distribution of Active Members by Age and by Years of Service (Police & Fire) As of June 30, 2021

Attained Age	Years of Credited Service												Total Count & Avg. Comp.
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	
Under 25	25 \$48,286	19 \$53,886	10 \$54,705	1 \$73,172	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	55 \$51,840
25-29	43 \$49,193	52 \$50,704	53 \$60,678	49 \$63,647	28 \$67,601	28 \$68,998	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	253 \$58,938
30-34	10 \$46,126	14 \$53,089	31 \$58,933	26 \$65,321	34 \$66,607	153 \$72,231	26 \$75,185	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	294 \$68,029
35-39	7 \$45,972	9 \$52,338	11 \$56,335	12 \$62,864	18 \$66,183	82 \$72,342	101 \$74,826	39 \$77,697	0 \$0	0 \$0	0 \$0	0 \$0	279 \$71,247
40-44	2 \$68,106	3 \$54,164	0 \$0	6 \$66,399	3 \$66,793	35 \$71,724	56 \$74,432	111 \$79,349	21 \$82,941	0 \$0	0 \$0	0 \$0	237 \$76,479
45-49	0 \$0	1 \$53,366	2 \$61,069	2 \$64,518	6 \$61,967	8 \$71,618	32 \$72,347	76 \$78,362	85 \$82,431	26 \$93,490	0 \$0	0 \$0	238 \$79,652
50-54	4 \$63,585	1 \$51,011	2 \$63,376	2 \$76,214	2 \$76,421	6 \$76,497	24 \$72,104	47 \$75,916	83 \$81,847	36 \$90,845	14 \$89,264	0 \$0	221 \$80,581
55-59	2 \$50,728	0 \$0	1 \$85,415	1 \$51,725	1 \$64,626	7 \$75,622	10 \$80,108	11 \$74,883	25 \$80,808	40 \$87,272	31 \$93,534	3 \$109,106	132 \$84,813
60-64	2 \$96,839	0 \$0	1 \$108,104	1 \$81,189	0 \$0	2 \$80,315	3 \$85,266	9 \$74,964	10 \$74,975	16 \$90,376	9 \$91,564	3 \$84,465	56 \$84,773
65-69	0 \$0	0 \$0	0 \$0	0 \$0	1 \$99,351	0 \$0	1 \$75,308	0 \$0	3 \$76,989	1 \$101,932	0 \$0	2 \$89,046	8 \$85,706
70 & Over	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
Total	95 \$50,434	99 \$51,935	111 \$59,928	100 \$64,573	93 \$67,073	321 \$72,111	253 \$74,538	293 \$78,020	227 \$81,686	119 \$90,252	54 \$92,098	8 \$94,851	1,773 \$72,849



Table 13**Membership Data (General Employee Units)**

	June 30, 2021 (1)	June 30, 2020 (2)
1. Active members		
a. Number	5,786	5,936
b. Number vested	3,876	3,958
c. Total payroll supplied by ERSRI	\$260,491,255	\$261,687,605
d. Average salary	\$45,021	\$44,085
e. Average age	51.5	51.7
f. Average service	12.1	12.2
2. Inactive members		
a. Number	3,467	3,231
3. Service retirees		
a. Number	4,222	4,116
b. Total annual benefits	\$69,570,718	\$67,084,549
c. Average annual benefit	\$16,478	\$16,298
d. Average age	74.3	74.3
4. Disabled retirees		
a. Number	259	260
b. Total annual benefits	\$4,285,564	\$4,164,218
c. Average annual benefit	\$16,547	\$16,016
d. Average age	67.2	66.7
5. Beneficiaries and spouses		
a. Number	522	504
b. Total annual benefits	\$5,646,390	\$5,318,931
c. Average annual benefit	\$10,817	\$10,553
d. Average age	76.1	76.1

Table 14**Membership Data (Police & Fire Units)**

	<u>June 30, 2021</u> (1)	<u>June 30, 2020</u> (2)
1. Active members		
a. Number	1,773	1,707
b. Number vested	1,275	1,244
c. Total payroll supplied by ERSRI	\$129,160,408	\$121,245,099
d. Average salary	\$72,849	\$71,028
e. Average age	40.6	40.5
f. Average service	12.6	12.6
2. Inactive members		
a. Number	260	232
3. Service retirees		
a. Number	646	629
b. Total annual benefits	\$23,989,592	\$22,880,998
c. Average annual benefit	\$37,136	\$36,377
d. Average age	63.1	62.4
4. Disabled retirees		
a. Number	224	220
b. Total annual benefits	\$7,607,098	\$7,414,875
c. Average annual benefit	\$33,960	\$33,704
d. Average age	59.4	58.9
5. Beneficiaries and spouses		
a. Number	176	166
b. Total annual benefits	\$2,715,255	\$2,440,516
c. Average annual benefit	\$15,428	\$14,702
d. Average age	66.4	66.5

Table 15**Membership Data (All MERS Units)**

	<u>June 30, 2021</u> (1)	<u>June 30, 2020</u> (2)
1. Active members		
a. Number	7,559	7,643
b. Number vested	5,151	5,202
c. Total payroll supplied by ERSRI	\$389,651,663	\$382,932,704
d. Average salary	\$51,548	\$50,102
e. Average age	49.0	49.2
f. Average service	12.2	12.3
2. Inactive members		
a. Number	3,727	3,463
3. Service retirees		
a. Number	4,868	4,745
b. Total annual benefits	\$93,560,310	\$89,965,547
c. Average annual benefit	\$19,219	\$18,960
d. Average age	72.8	72.8
4. Disabled retirees		
a. Number	483	480
b. Total annual benefits	\$11,892,662	\$11,579,093
c. Average annual benefit	\$24,622	\$24,123
d. Average age	63.6	63.1
5. Beneficiaries and spouses		
a. Number	698	670
b. Total annual benefits	\$8,361,645	\$7,759,447
c. Average annual benefit	\$11,979	\$11,581
d. Average age	73.7	73.7

APPENDIX 1

SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

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APPENDIX 1

Summary of Actuarial Methods and 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).

The employer normal cost rate is the total normal cost rate, less the member contribution rate. The total normal cost rate is the level percentage-of-pay contribution which would theoretically pay for all benefits if it had been made each year from the inception of the plan and if there had never been any changes of benefits, any changes of assumptions or methods, or any experience gains or losses. The normal costs are determined on an individual basis.

The actuarial accrued liability is the difference between the actuarial present value of all future benefits and the actuarial present value of future normal costs. It is the amount to which the normal costs would have accumulated under the assumptions described in the preceding paragraph. The unfunded actuarial accrued liability (UAAL) is the difference between the actuarial accrued liability and the actuarial value of assets.

The amortization contribution rate is the level percentage of payroll required to reduce the UAAL to zero over the remaining amortization period. 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 amortization payment for the applicable fiscal year is first determined based on the individual amortization bases. The covered payroll is projected forward for two years, and we then determine the amortization rate by dividing the amortization payment by the projected payroll. Contributions are assumed to be made monthly throughout the year.

For underfunded units, the amortization period for the UAAL as of June 30, 2010 was set to 25 years, or 16 years as of the current valuation date. In conjunction with the Article 21 legislation, employers were given the option to reset the amortization period for the UAAL existing as of June 30, 2014 to 25 years from June 30, 2014. All new gains and losses each year will be amortized over individual 20 year periods. At any time that a unit is in an overfunded status, the amortization schedule will be a rolling 20 year amortization of any surplus.



APPENDIX 1 (Continued)

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. The actuarial value is calculated in the aggregate for all units combined, and then it is allocated to each unit in proportion to that unit's market value.

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 general employees, 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), (ii) individual merit of 0.25%, and (iii) a service-related component as shown below:

General Employees		
Years of Service	Service-Related Component	Total Increase
1	4.00%	7.25%
2	3.00	6.25
3	2.75	6.00
4	2.50	5.75
5	2.25	5.50
6	2.00	5.25
7	1.25	4.50
8	0.75	4.00
9-10	0.50	3.75
11-15	0.25	3.50
16 or more	0.00	3.25

APPENDIX 1 (Continued)

For police/fire employees, 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), (ii) an individual merit component of 1.00%, and (iii) a service-related component as shown below:

Police/Fire Employees		
Years of Service	Service-Related Component	Total Increase
1	10.00%	14.00%
2	9.00	13.00
3	7.00	11.00
4	4.00	8.00
5	4.50	6.50
6	3.00	7.00
7	0.50	4.50
8	0.50	4.50
9 or more	0.00	4.00

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 3.00% 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 2.10%, 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 actual amount of the COLA is determined based on 50% of the plan's five-year average investment rate of return minus 5.00% which will range from zero to 4.0%, and 50% of the lesser of 3% or last year's CPI-U increase for a total maximum increase of 3.50%. It is known that the COLA for calendar years 2021 and 2022 will be 1.06% and 3.50% respectively, and this has been reflected in the valuation.

APPENDIX 1 (Continued)

B. Demographic Assumptions

1. Post-retirement mortality rates:

- a. Male employees: PUB(10) Median Table for Healthy General Employee Males, loaded by 115%, projected with Scale Ultimate MP16.
- b. Female employees: PUB(10) Median Table for Healthy General Employee Females, loaded by 111%, projected with Scale Ultimate MP16.
- c. Disabled males – PUB(10) Tables for Disabled Retirees by Occupation for males, projected with Scale Ultimate MP16.
- d. Disabled females – PUB(10) Tables for Disabled Retirees by Occupation for females, projected with Scale Ultimate MP16

2. Pre-retirement mortality (combined ordinary and duty):

- a. Male employees: PUB(10) Tables for Employees by Occupation for males, projected with Scale Ultimate MP16.
- b. Female employees: PUB(10) Tables for Employees by Occupation for females, projected with Scale Ultimate MP16.

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APPENDIX 1 (Continued)

3. Disability rates: Sample rates per 1,000 active members are shown below. Ordinary disability rates are not applied to members eligible for unreduced retirement.

Age	Number of Disabilities per 1,000					
	General Employees, Ordinary, Males	General Employees, Accidental, Males	General Employees, Ordinary, Females	General Employees, Accidental, Females	Police & Fire, Ordinary, Males and Females	Police & Fire, Accidental, Males and Females
25	0.45	0.14	0.18	0.04	0.26	1.36
30	0.55	0.17	0.22	0.04	0.33	1.76
35	0.75	0.23	0.30	0.06	0.44	2.32
40	1.1	0.33	0.44	0.09	0.66	3.52
45	1.8	0.54	0.72	0.14	1.08	5.76
50	3.05	0.92	1.22	0.24	1.82	9.68
55	5.05	1.52	2.02	0.40	1.82	9.68
60	7.05	2.12	2.82	0.56	1.82	9.68
65	11.55	3.47	4.62	0.92	1.82	9.68

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

APPENDIX 1 (Continued)

4. 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	General Employees, Males & Females	Police & Fire, Males & Females
1	0.175000	0.100000
2	0.118774	0.055650
3	0.101396	0.043890
4	0.086148	0.037012
5	0.072887	0.032131
6	0.061471	0.028346
7	0.051757	0.025253
8	0.043604	0.022637
9	0.036868	0.020372
10	0.031408	0.018374
11	0.027082	0.016586
12	0.023746	0.014969
13	0.021259	0.013493
14	0.019479	0.012135
15	0.018263	0.010878
16	0.017470	0.009708
17	0.016956	0.008613
18	0.016579	0.007584
19	0.016198	0.006615
20	0.015669	0.000000
21	0.014851	0.000000
22	0.013602	0.000000
23	0.011778	0.000000
24	0.009239	0.000000
25	0.005841	0.000000

APPENDIX 1 (Continued)

5. Retirement rates (unreduced):

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

Service	Units without the Optional 20-year retirement election
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%

100% of members eligible to retire as of June 30, 2012 are assumed to retire once they reach 35 years of service. All members not eligible to retire as of June 30, 2012 are assumed retire at SSNRA, if eligible.

Members are eligible to receive an enhanced benefit if they are at least age 57 with 30 or more years of service. In the year prior to becoming eligible for this provision, no members are assumed to retire.

APPENDIX 1 (Continued)

6. Reduced retirement rates: No early retirements are assumed for police and fire. Rates for general employees are based on the years from Retirement Eligibility for unreduced benefits, as shown below:

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

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: 80% of employees are assumed to be married.
3. For the special post-retirement police and fire survivor benefit, we have assumed 80% of members will have a spouse at the time of retirement and 10% of those members would choose option 1 or option 2.
4. 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.
5. 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 optional form conversion factors based on a unisex mortality table.
6. 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.
7. 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.
8. Recovery from disability: None assumed.
9. Remarriage: It is assumed that no surviving spouse will remarry and there will be no children's benefit.

APPENDIX 1 (Continued)

C. Other Assumptions:

10. 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.
11. Investment and administrative expenses: The assumed investment return rate represents the anticipated net return after payment of all investment and administrative expenses.
12. Inactive members: For members who terminated service prior to June 30, 2017 liabilities for inactive members are approximated as a multiple of their member contribution account balances. For nonvested 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. For members who terminated service after June 30, 2017, the expected liability at termination has been carried forward with interest from the last valuation the member was active.
13. Decrement timing: For all members, decrements are assumed to occur at the middle of the year.
14. 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.
15. Decrement relativity: Decrement rates are used directly from the experience study, without adjustment for multiple decrement table effects.
16. 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.
17. Benefit Service: All members are assumed to accrue one year of eligibility service each year.
18. All calculations were performed without regard to the compensation limit in IRC Section 401(a)(17) and the benefit limit under IRC Section 415.

APPENDIX 1 (Continued)

D. Participant Data

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

The data for active members included name, identification number, sex, a code indicating whether the member was active or inactive, date of birth, service, salary, unit indicator, date of last contribution, accumulated member contributions without interest, accrued benefit multiplier as of Valuation Date, Final Average Compensation as of June 30, 2012, and the Rhode Island Retirement Security Act Retirement Date. For retired members and beneficiaries, the data included date of birth, sex, spouse's date of birth (where applicable), amount of monthly benefit, date of retirement, and a form of payment code.

Salary supplied for the current year was based on the earnings for the year preceding the valuation date. This salary was adjusted by the salary increase rate for one year. 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. An additional adjustment was made so that a member's compensation would not be less than it was in the previous 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.

Beneficiary data for police and fire employees was completed, based on the Age Difference stated above, if the information was not originally supplied on the electronic files.

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

For members who transferred during the prior fiscal year adjustments were made for certain data records as needed. The active record for a member who transferred into a MERS unit was compared to the prior active record to test for reasonability of service and account balances relative to the prior year's active record and adjusted if needed. The inactive record for any member who transferred out of a MERS unit was deleted when calculating the inactive liability.

APPENDIX 2

SUMMARY OF BENEFIT PROVISIONS

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APPENDIX 2

Summary of Benefit Provisions

1. **Authority:** The Municipal Employees' Retirement System (MERS) covers employees of certain participating Rhode Island municipalities and other local governmental units, such as housing authorities, water districts, etc. Benefits are described in Rhode Island General Laws, Title 45, Chapters 19, 19.1, 21, 21.1, 21.2, and 21.3.
2. **Plan Year:** A twelve-month period ending June 30th.
3. **Administration:** MERS is administered by the State of Rhode Island Retirement Board. However, the State Investment Commission is responsible for the investment of the trust assets, including the establishment of the asset allocation policy.
4. **Type of Plan:** MERS is a qualified governmental defined benefit retirement plan. Separate contribution rates are determined for each participating governmental unit. For Governmental Accounting Standards Board purposes, it is an agent multiple-employer plan.
5. **Eligibility:** General employees, police officers and firefighters employed by electing municipalities participate in MERS. Teachers and administrators are covered by the separate Employees' Retirement System of Rhode Island, but other school employees may be covered by MERS. Eligible employees become members at their date of employment. Anyone employed by a municipality at the time the municipality joins MERS may elect not to be covered. Elected officials may opt to be covered by MERS. Employees covered under another plan maintained by the municipality may not become members of MERS. Police officers and/or firefighters may be designated as such by the municipality, in which case the special contribution and benefit provisions described below will apply to them, or they may be designated as general employees with no special benefits. Members designated as police officers and/or firefighters are treated as belonging to a unit separate from the general employees, with separate contribution rates applicable.
6. **Employee Contributions:** Effective July 1, 2012, General employees contribute 1.00% of their salary per year, and police officers and firefighters contribute 7.00%. General MERS active members with 20 years of service as of June 30, 2012 will contribute 8.25% beginning July 1, 2015. Also, beginning July 1, 2015, MERS Police and Fire active members will contribute 9.00%. In addition, if the municipality has elected one of the optional cost-of-living provisions, an additional member contribution of 1.00% of salary is required. The municipality, at its election, may choose to "pick up" the members' contributions for its employees under the provisions of Internal Revenue Code (IRC) Section 414(h).
7. **Salary:** Salary includes the member's base earnings plus any payments under a regular longevity or incentive plan. Salary excludes overtime, unused sick and vacation leave, severance pay, and other extraordinary compensation. Certain amounts that are excluded from taxable wages, such as amounts sheltered under a Section 125 plan or amounts picked up by the employer under IRC Section 414(h), are not excluded from salary.



APPENDIX 2 (Continued)

8. Employer Contributions: Each participating unit's contribution rate is determined actuarially. Contributions determined in a given actuarial valuation go into effect two years after the actuarial valuation.
9. Service: Employees receive credit for service while a member. In addition, a member may purchase credit for certain periods by making an additional contribution to purchase the additional service. Special rules and limits govern the purchase of additional service and the contribution required.
10. Final Average Compensation (FAC): Prior to July 1, 2012 and for general employee members eligible to retire as of June 30, 2012, the average was based on the member's highest three consecutive annual salaries. Effective July 1, 2012, the average was based on the member's highest five consecutive annual salaries. Once a member retires or is terminated, the applicable FAC will be the greater of the member's highest three year FAC as of July 1, 2012 or the five year FAC as of the retirement/termination date. Monthly benefits are based on one-twelfth of this amount.

11. Retirement

a. General employees: Eligibility

- (i) Members with less than five years of contributory service as of June 30, 2012 and members hired on or after that date are eligible for retirement on or after their Social Security normal retirement age.
- (ii) Members who had at least five years of contributory service as of June 30, 2012 will be eligible for retirement at an individually determined age. This age is the result of interpolating between the member's prior Retirement Date, described in Section (e) below, and the retirement age applicable to members hired after June 30, 2012 in (a) above. The interpolation is based on service as of June 30, 2012 divided by projected service at the member's prior Retirement Date. The minimum retirement age is 59.
- (iii) Members with 10 or more years of contributory service on June 30, 2012 may choose to retire at their prior Retirement Date if they continue to work and contribute until that date. If option is elected, the retirement benefit will be calculated using the benefits accrued as of June 30, 2012, i.e., the member will accumulate no additional defined benefits after this date, but the benefit will be paid without any actuarial reduction.
- (iv) Effective July 1, 2015, members will be eligible to retire with full benefits at the earlier of their current RIRSA date described in sections (a) – (c) above or upon the attainment of age 65 with 30 years of service, age 64 with 31 years of service, age 63 with 32 years of service, or age 62 with 33 years of service.
- (v) A member who is within five years of reaching their retirement eligibility date, as described in this section, and has 20 or more years of service, may elect to retire at any time with an actuarially reduced benefit.



APPENDIX 2 (Continued)

(vi) Prior to July 1, 2012, members were eligible for retirement on or after age 58 if they had credit for 10 or more years of service, or at any age if they had credit for at least 30 years of service. Members eligible to retire before July 1, 2012 were not impacted by the changes to retirement eligibility above.

b. General employees: Monthly Benefit

2.00% of the member's monthly FAC for each year of service prior to July 1, 2012 and 1.00% of the member's monthly FAC for each year of service from July 1, 2012 through June 30, 2105. 1.0% per year for all service after June 30, 2015 unless the member had 20 or more years of service as of June 30, 2012 in which case the benefit accrual is 2.0% per year for service after June 30, 2015. The benefit cannot exceed 75% of the member's monthly FAC

c. Police and Fire employees: Eligibility

- (i) Members are eligible to retire when they are at least 50 years old and have a minimum of 25 years of contributing service or if they have 27 years of contributing service at any age. Members with less than 25 years of contributing service are eligible for retirement on or after their Social Security normal retirement age.
- (ii) Members who, as of June 30, 2012, had at least 10 years of contributing service, had attained age 45, and had a prior Retirement Date (described in Section (e)) before age 52 may retire at age 52.
- (iii) Active members on June 30, 2012 may choose to retire at their prior Retirement Date if they continue to work and contribute until that date. If option is elected, the retirement benefit will be calculated using the benefits accrued as of June 30, 2012, i.e., the member will accumulate no additional defined benefits after this date, but the benefit will be paid without any actuarial reduction.
- (iv) A member who is within five years of reaching their retirement eligibility date, as described in this section, and has 20 or more years of service, may elect to retire at any time with an actuarially reduced benefit.
- (v) Prior to July 1, 2012, members designated as police officers or firefighters were eligible for retirement at or after age 55 with credit for at least 10 years of service or at any age with credit for 25 or more years of service. Members were also eligible to retire and receive a reduced benefit if they are at least age 50 and have at least 20 years of service. If the municipality elected to adopt the 20-year retirement provisions for police officers and/or firefighters, then such a member was eligible to retire at any age with 20 or more years of service. Members eligible to retire before July 1, 2012 were not impacted by the changes to retirement eligibility above.

APPENDIX 2 (Continued)

d. Police and Fire employees: Monthly Benefit

- (i) 2.00% of the member's monthly FAC for each year of service, up to 37.5 years (75% of FAC maximum)
- (ii) If the optional 20-year retirement provisions were adopted by the municipality prior to July 1, 2012: 2.50% of the member's monthly FAC for each year of service prior to July 1, 2012 and 2.00% of the member's monthly FAC for each year of service after July 1, 2012. The benefit cannot exceed 75% of the member's monthly FAC.
- (iii) Active members (including future hires), members who retire after July 1, 2015 and after attaining age 57 with 30 years of service will have a benefit equal to the greater of their current benefit described in (a) and (b) above and one calculated based on a 2.25% multiplier for all years of service.

e. Payment Form: Benefits are paid as a monthly life annuity. Optional forms of payment are available; see item 16. Below.

f. Death Benefit

- (i) After retirement, death benefits are based on the form of annuity elected. If no option is elected, i.e., if payments are made as a life annuity, there is a minimum death benefit equal to the sum of the member's contributions without interest, less the sum of the monthly benefit payments made before the member's death. In addition, a lump-sum death benefit is payable upon the death of any retired member, regardless of option elected. This lump sum is equal to a percentage of the lump-sum death benefit that was available to the member at the time of retirement. The percentage is 100% in the first year of retirement, 75% in the second year, 50% in the third year, and 25% in the fourth and subsequent years of retirement. However, in no event will the lump sum death benefit be less than \$4,000.
- (ii) Special Police/Fire Death Benefit: A member that does not elect an optional form of payment at retirement will be eligible the active member death benefit, which is an annuity of 30% of the member's salary that will be paid to the member's spouse upon death, for life or until remarriage. Children's benefits may also be payable.

APPENDIX 2 (Continued)

12. Disability Retirement

- a. Eligibility: A member is eligible for a disability retirement provided he/she has credit for at least five years of service or if the disability is work-related. Members are not eligible for an ordinary disability benefit if they are eligible for unreduced retirement.
- b. Ordinary Disability Benefit: The benefit payable under the retirement formula, using FAC and service at the time of disability, but not less than 10 years of service.
- c. Occupational Disability Benefit: An annual annuity equal to two-thirds of salary at the time of disability.
- d. Payment Form: The disability benefit commences immediately upon the member's retirement. Benefits cease upon recovery or reemployment. Disability benefits are payable as a monthly life annuity with a guarantee that, at the member's death, the sum of the member's contributions plus interest as of the date of retirement will be paid in a lump-sum to the member's beneficiary. All alternative forms of payment except for the Social Security Option are permitted in the case of disability retirement.

13. Deferred Termination Benefit

- a. Eligibility: A member with at least ten years of service is vested. Effective July 1, 2012, a member with at least 5 years of service is vested. A vested member who does not withdraw his/her contributions from the fund is eligible for a deferred termination benefit.
- b. Monthly Benefit: The monthly benefit is based on the retirement formula described above. Both FAC and service are determined at the time the member leaves active employment. Benefits may commence at Social Security normal retirement age provided that the member has met the requirements for a retirement benefit.
- c. Payment Form: The same as for Retirement above.
- d. Death Benefit before retirement: A member who dies after leaving active service but before retiring is entitled to receive a benefit as described below in Item 15.
- e. Death Benefit after Retirement: The same as for Retirement above.

14. Withdrawal (Refund) Benefit

- a. Eligibility: All members leaving covered employment with less than ten years (5 years, effective July 1, 2012) of service are eligible. Optionally, vested members (described in Item 13, above) may withdraw their accumulated contributions in lieu of the deferred benefits otherwise due.



APPENDIX 2 (Continued)

- b. Benefit: The member who withdraws receives a lump-sum payment equal to the sum of his/her employee contributions. No interest is credited on these contributions.

15. Death Benefit of Active or Inactive Members

- a. Eligibility: Death must have occurred while an active member or while an inactive, non-retired member. The basic benefit plus the lump-sum benefit are paid on behalf of an active, general employee, and the special police/fire benefit and the lump-sum benefit are paid on behalf of an active police officer or firefighter. If the death was due to accidental, duty-related causes, the accidental death benefit is paid regardless of whether the employee is a general employee, a police officer, or a firefighter. Inactive members receive a refund of their accumulated contributions without interest.
- b. Basic Benefit: Upon the death of a non-vested member, or upon the death of a vested, inactive member, or upon the death of an active, unmarried member, a refund of the member's contributions (without interest) is paid. Upon the death of a vested, married, active member, the spouse may elect (i) the refund benefit described above, or (ii) a life annuity paid to the spouse or beneficiary. The amount of the annuity is equal to the amount which would have been paid had the member retired at the time of his death and elected the Joint and 100% Survivor option. If the member was not eligible for retirement, the annuity benefit is reduced 9% per year from the date at which the member would have been eligible had he or she remained in service.
- c. Lump-sum Benefit: \$800 per year of service, with a maximum benefit of \$16,000 and a minimum of \$4,000. This benefit is only available to active members.
- d. Special Police/Fire Death Benefit: In lieu of the basic benefit above, if a police officer or firefighter dies while an active member, an annuity of 30% of the member's salary will be paid to the member's spouse, for life or until remarriage. Children's benefits may also be payable.
- e. Accidental Duty-related Death Benefit: If a member dies as the result of an accident while in the course of his or her duties, in lieu of the above benefits the member's spouse may elect to receive (i) a refund of all contributions made (including interest), and (ii) an annual life annuity equal to 50% of the member's salary at the time of death. The annuity benefit stops when the spouse remarries or dies, although it may be continued to any children under age 18 or to any dependent parents.



APPENDIX 2 (Continued)

16. Optional Forms of Payment: In addition to a life annuity, MERS offers members these optional forms of payment on an actuarially equivalent basis:

- a. Option 1 (Joint and 100% Survivor) - A life annuity payable while either the participant or his beneficiary is alive.
- b. Option 2 (Joint and 50% Survivor) - A life annuity payable to the member while both the member and beneficiary are alive, reducing to 50% of this amount if the member predeceases the beneficiary.
- c. Social Security Option – An annuity paid at one amount prior to age 62, and at a reduced amount after age 62, designed to provide a level total income when combined with the member's age 62 Social Security benefit. Benefits cease upon the member's death.

Actuarial equivalence is based on tables adopted by the Employees' Retirement Board.

17. Post-retirement Benefit Increase: For members who retire after June 30, 2012: members will be eligible to receive cost of living increases at the later of the member's third anniversary of retirement and the month following their SSNRA (age 55 for members designated as police officers and/or firefighters). When a municipality elects coverage, it may elect either COLA C (covering only current and future active members and excluding members already retired) or COLA B (covering current retired members as well as current and future active members).

- a. The COLA will be suspended for any unit whose funding level is less than 80%; however, an interim COLA may be granted in four-year intervals while the COLA is suspended. The first interim COLA may begin January 1, 2018.
- b. Effective July 1, 2015, the COLA is determined based on 50% of the plan's five-year average investment rate of return less 5.5% limited to a range of 0.0% to 4.0%, plus 50% of the lesser of 3.0% or last year's CPI-U increase for a total maximum increase of 3.50%. Previously, it was the plan's five-year average investment rate of return less 5.5% limited to a range of 0.0% to 4.0%.
- c. The COLA will be limited to the first \$25,000 of the member's annual pension benefit. For retirees and beneficiaries who retired on or before July 1, 2015, years in which a COLA is payable based on the every fourth year provision described in (i) above will be limited to the first \$30,000. These limits will be indexed annually to increase in the same manner as COLAs, with the known values of \$25,000 for 2013, \$25,000 for 2014, \$25,168 for 2015, \$25,855 for 2016, \$26,098 for 2017, \$26,290 for 2018, \$26,687 for 2019, \$27,184 for 2020, \$27,608 for 2021, and \$27,901 for 2022.



APPENDIX 2 (Continued)

18. Special Provisions Applying to Specific Units: Prior to July 1, 2012, some units had specific provisions that apply only to that unit. The transition rules outlined in Item 11, above, apply to these units in a similar manner.

The following summarizes those provisions:

- a. Rhode Island General Law §45-21.2-22.1 contains special provisions that apply to employees of Burrillville Police, but only if adopted by the Town of Burrillville. The Town adopted these provisions effective July 1, 2006. Under these special provisions, the retirement benefit for a member with 20 or more years of service is improved. The new formula is $60.00\% \times \text{Final Average Compensation (FAC)}$, plus $1.50\% \times \text{FAC} \times \text{Years of Service in Excess of 20}$, with a maximum benefit equal to 75% of FAC. In addition to this benefit change, the member contribution rate increased from 9.00% to 10.20%.
- b. Rhode Island General Law § 45-21.2-6.1, § 45-21.2-5(5), and § 45-21.2-14(d) contain special provisions that apply to members of the South Kingstown police department. Under these special provisions, the member receives a retirement allowance which is a life annuity terminable at the death of the annuitant, and is an amount equal to the sum of two and one-half percent (2.5%) of final compensation multiplied by the years of service accrued after July 1, 1993 and two percent (2%) of final compensation multiplied by the years of service accrued prior to July 1, 1993. The annual retirement allowance in no event shall exceed seventy-five percent (75%) of final compensation. The member contribution rate is 8.00%, plus 1.00% for the adoption of the optional COLA, for a total of 9.00%.
- c. Rhode Island General Law § 45-21.2-5 (9) contains special provisions that apply to members of the Hopkinton police department. Under these special provisions, the final compensation for benefit computation is based on the members' highest year of earnings. In addition, the members shall receive a three percent (3%) escalation of their pension payment compounded each year on January 1st following the year of retirement and continuing on an annual basis on that date. The member contribution rate is 9.00%. Compensation for benefit purposes includes base, longevity, and holiday pay.
- d. Rhode Island General Law § 45-21.2-5 (7) and § 45-21.2-14 contain special provisions that apply to members of the Cranston fire department hired after July 1, 1995 or with less than 5 years of service at that date. Under these special provisions, the final compensation for benefit computation is based on the members' highest year of earnings. In addition, the members shall receive a three percent (3%) escalation of their pension payment compounded each year on January 1st following the year of retirement and continuing on an annual basis on that date. The member contribution rate is 10.00%. Compensation for benefit purposes includes base, longevity, and holiday pay.



APPENDIX 2 (Continued)

- e. Rhode Island General Law §§ 45-21.2-5 (8) and § 45-21.2-14 contain special provisions that apply to members of the Cranston police department hired after July 1, 1995 or with less than 5 years of service at that date. Under these special provisions, the final compensation for benefit computation is based on the members' highest year of earnings. In addition, the members shall receive a three percent (3%) escalation of their pension payment compounded each year on January 1st following the year of retirement and continuing on an annual basis on that date. The member contribution rate is 10.00%. Compensation for benefit purposes includes base, longevity, and holiday pay.
- f. Rhode Island General Law §§ 45-21.2-6.3 contains special provisions that apply to employees of Richmond Police. The Town adopted these provisions on April 3, 2008, effective July 1, 2008. Under these special provisions, members are eligible to retire after attaining 22 years of service. The retirement benefit for a member with 22 or more years of service was improved to $50.00\% \times \text{Final Average Compensation (FAC)}$, plus $2.2727\% \times \text{FAC} \times \text{Years of Service in Excess of 22}$, with a maximum benefit equal to 75% of FAC.

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APPENDIX 3

OUTSTANDING AMORTIZATION BASES

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APPENDIX 3

Outstanding Amortization Bases

Old Unit Number	New Unit Number	Unit	Purpose	Remaining Balance as of June 30, 2021	Fiscal Year 2024 Amortization Payment	Years Remaining Beginning with Fiscal Year 2024
3002	1012 1019	Bristol	2014 Mediation Settlement	\$ 6,068,566	\$ 501,619	18
3002	1012 1019	Bristol	2015 Experience	\$ (288,524)	\$ (25,933)	16
3002	1012 1019	Bristol	2016 Assumption Change - FY20 Stagger	\$ 24,722	\$ 2,043	18
3002	1012 1019	Bristol	2016 Assumption Change - FY21 Stagger	\$ 407,421	\$ 32,446	19
3002	1012 1019	Bristol	2016 Assumption Change - FY22 Stagger	\$ 438,135	\$ 33,706	20
3002	1012 1019	Bristol	2016 Assumption Change - FY23 Stagger	\$ 438,135	\$ 35,015	20
3002	1012 1019	Bristol	2016 Assumption Change - FY24 Stagger	\$ 438,135	\$ 36,375	20
3002	1012 1019	Bristol	2016 Experience	\$ 526,074	\$ 45,269	17
3002	1012 1019	Bristol	2017 Experience	\$ 431,612	\$ 35,676	18
3002	1012 1019	Bristol	2018 Experience	\$ (292,771)	\$ (23,316)	19
3002	1012 1019	Bristol	2019 Assumption Change - FY23 Stagger	\$ (130,815)	\$ (11,694)	17
3002	1012 1019	Bristol	2019 Assumption Change - FY24 Stagger	\$ (130,814)	\$ (12,689)	16
3002	1012 1019	Bristol	2019 Experience	\$ (908,762)	\$ (69,911)	20
3002	1012 1019	Bristol	2020 Experience	\$ (326,643)	\$ (26,105)	20
3002	1012 1019	Bristol	2021 Experience	\$ (642,281)	\$ (53,323)	20
3003	1032 1033	Burrillville	2016 Assumption Change - FY21 Stagger	\$ 461,834	\$ 36,779	19
3003	1032 1033	Burrillville	2016 Assumption Change - FY22 Stagger	\$ 496,650	\$ 38,208	20
3003	1032 1033	Burrillville	2016 Assumption Change - FY23 Stagger	\$ 496,650	\$ 39,691	20
3003	1032 1033	Burrillville	2016 Assumption Change - FY24 Stagger	\$ 496,650	\$ 41,233	20
3003	1032 1033	Burrillville	2016 Experience	\$ 143,553	\$ 12,353	17
3003	1032 1033	Burrillville	2017 Experience	\$ (201,553)	\$ (16,660)	18
3003	1032 1033	Burrillville	2018 Experience	\$ 764,799	\$ 60,906	19
3003	1032 1033	Burrillville	2019 Assumption Change - FY23 Stagger	\$ (181,064)	\$ (16,186)	17
3003	1032 1033	Burrillville	2019 Assumption Change - FY24 Stagger	\$ (181,064)	\$ (17,563)	16
3003	1032 1033	Burrillville	2019 Experience	\$ (563,260)	\$ (43,332)	20
3003	1032 1033	Burrillville	2020 Experience	\$ 163,140	\$ 13,038	20
3003	1032 1033	Burrillville	2021 Experience	\$ (728,526)	\$ (60,483)	20
3004	1052	Central Falls	2014 Mediation Settlement	\$ 1,895,770	\$ 188,134	14
3004	1052	Central Falls	2015 Experience	\$ (76,436)	\$ (6,870)	16
3004	1052	Central Falls	2016 Assumption Change - FY20 Stagger	\$ 1,639	\$ 135	18
3004	1052	Central Falls	2016 Assumption Change - FY21 Stagger	\$ 113,129	\$ 9,009	19
3004	1052	Central Falls	2016 Assumption Change - FY22 Stagger	\$ 121,657	\$ 9,359	20
3004	1052	Central Falls	2016 Assumption Change - FY23 Stagger	\$ 121,657	\$ 9,723	20
3004	1052	Central Falls	2016 Assumption Change - FY24 Stagger	\$ 121,657	\$ 10,100	20
3004	1052	Central Falls	2016 Experience	\$ 570,832	\$ 49,120	17
3004	1052	Central Falls	2017 Experience	\$ (293,957)	\$ (24,298)	18
3004	1052	Central Falls	2018 Experience	\$ (160,292)	\$ (12,765)	19
3004	1052	Central Falls	2019 Assumption Change - FY23 Stagger	\$ (18,567)	\$ (1,660)	17
3004	1052	Central Falls	2019 Assumption Change - FY24 Stagger	\$ (18,566)	\$ (1,801)	16
3004	1052	Central Falls	2019 Experience	\$ 141,831	\$ 10,911	20
3004	1052	Central Falls	2020 Experience	\$ (1,585)	\$ (127)	20
3004	1052	Central Falls	2021 Experience	\$ (470,437)	\$ (39,056)	20
3005	1082	Cumberland	2021 Overfunded Base	\$ (502,900)	\$ (41,752)	20
3007	1112 1113	Cranston	2014 Mediation Settlement	\$ 5,661,312	\$ 561,821	14
3007	1112 1113	Cranston	2015 Experience	\$ (2,778,152)	\$ (249,703)	16
3007	1112 1113	Cranston	2016 Assumption Change - FY20 Stagger	\$ 332,499	\$ 27,484	18
3007	1112 1113	Cranston	2016 Assumption Change - FY21 Stagger	\$ 2,359,380	\$ 187,895	19
3007	1112 1113	Cranston	2016 Assumption Change - FY22 Stagger	\$ 2,537,247	\$ 195,191	20
3007	1112 1113	Cranston	2016 Assumption Change - FY23 Stagger	\$ 2,537,247	\$ 202,772	20
3007	1112 1113	Cranston	2016 Assumption Change - FY24 Stagger	\$ 2,537,247	\$ 210,646	20
3007	1112 1113	Cranston	2016 Experience	\$ 2,825,241	\$ 243,112	17
3007	1112 1113	Cranston	2017 Experience	\$ 813,464	\$ 67,240	18
3007	1112 1113	Cranston	2018 Experience	\$ 139,812	\$ 11,134	19
3007	1112 1113	Cranston	2019 Assumption Change - FY23 Stagger	\$ (1,010,484)	\$ (90,329)	17
3007	1112 1113	Cranston	2019 Assumption Change - FY24 Stagger	\$ (1,010,484)	\$ (98,015)	16
3007	1112 1113	Cranston	2019 Experience	\$ (650,005)	\$ (50,005)	20
3007	1112 1113	Cranston	2020 Experience	\$ 509,865	\$ 40,747	20
3007	1112 1113	Cranston	2021 Experience	\$ (5,267,372)	\$ (437,306)	20
3008	1122 1123	Cumberland	2014 Mediation Settlement	\$ 8,047,568	\$ 665,201	18
3008	1122 1123	Cumberland	2015 Experience	\$ (1,134,613)	\$ (101,980)	16
3008	1122 1123	Cumberland	2016 Assumption Change - FY21 Stagger	\$ 442,274	\$ 35,222	19
3008	1122 1123	Cumberland	2016 Assumption Change - FY22 Stagger	\$ 475,616	\$ 36,589	20
3008	1122 1123	Cumberland	2016 Assumption Change - FY23 Stagger	\$ 475,616	\$ 38,010	20
3008	1122 1123	Cumberland	2016 Assumption Change - FY24 Stagger	\$ 475,616	\$ 39,486	20
3008	1122 1123	Cumberland	2016 Experience	\$ (899,795)	\$ (77,427)	17
3008	1122 1123	Cumberland	2017 Experience	\$ (741,014)	\$ (61,251)	18
3008	1122 1123	Cumberland	2018 Experience	\$ (130,545)	\$ (10,396)	19
3008	1122 1123	Cumberland	2019 Assumption Change - FY23 Stagger	\$ (187,535)	\$ (16,764)	17
3008	1122 1123	Cumberland	2019 Assumption Change - FY24 Stagger	\$ (187,535)	\$ (18,190)	16
3008	1122 1123	Cumberland	2019 Experience	\$ (194,081)	\$ (14,931)	20
3008	1122 1123	Cumberland	2020 Experience	\$ (681,378)	\$ (54,454)	20
3008	1122 1123	Cumberland	2021 Experience	\$ (2,021,033)	\$ (167,790)	20
3009	1152 1153	East Greenwich	2021 Overfunded Base	\$ (914,943)	\$ (75,960)	20
3010	1162 1163	East Providence	2014 Mediation Settlement	\$ 42,847,934	\$ 3,541,752	18
3010	1162 1163	East Providence	2015 Experience	\$ (2,892,847)	\$ (260,012)	16
3010	1162 1163	East Providence	2016 Assumption Change - FY20 Stagger	\$ 375,127	\$ 31,007	18
3010	1162 1163	East Providence	2016 Assumption Change - FY21 Stagger	\$ 1,819,780	\$ 144,922	19
3010	1162 1163	East Providence	2016 Assumption Change - FY22 Stagger	\$ 1,956,967	\$ 150,550	20
3010	1162 1163	East Providence	2016 Assumption Change - FY23 Stagger	\$ 1,956,967	\$ 156,397	20
3010	1162 1163	East Providence	2016 Assumption Change - FY24 Stagger	\$ 1,956,967	\$ 162,471	20



APPENDIX 3 (Continued)

Old Unit		Unit	Purpose	Remaining Balance as of June 30, 2021	Fiscal Year 2024 Amortization Payment	Years Remaining Beginning with Fiscal Year 2024
Number	New Unit Number					
3010	1162 1163	East Providence	2016 Experience	\$ 159,638	\$ 13,737	17
3010	1162 1163	East Providence	2017 Experience	\$ (514,386)	\$ (42,518)	18
3010	1162 1163	East Providence	2018 Experience	\$ 1,755,037	\$ 139,766	19
3010	1162 1163	East Providence	2019 Assumption Change - FY23 Stagger	\$ (589,457)	\$ (52,693)	17
3010	1162 1163	East Providence	2019 Assumption Change - FY24 Stagger	\$ (589,459)	\$ (57,176)	16
3010	1162 1163	East Providence	2019 Experience	\$ (886,411)	\$ (68,192)	20
3010	1162 1163	East Providence	2020 Experience	\$ (1,145,034)	\$ (91,509)	20
3010	1162 1163	East Providence	2021 Experience	\$ (2,568,000)	\$ (213,200)	20
3011	1183	Exeter/West Greenwich	2014 Mediation Settlement	\$ 1,506,996	\$ 149,552	14
3011	1183	Exeter/West Greenwich	2015 Experience	\$ (288,659)	\$ (25,945)	16
3011	1183	Exeter/West Greenwich	2016 Assumption Change - FY21 Stagger	\$ 189,499	\$ 15,091	19
3011	1183	Exeter/West Greenwich	2016 Assumption Change - FY22 Stagger	\$ 203,784	\$ 15,677	20
3011	1183	Exeter/West Greenwich	2016 Assumption Change - FY23 Stagger	\$ 203,784	\$ 16,286	20
3011	1183	Exeter/West Greenwich	2016 Assumption Change - FY24 Stagger	\$ 203,784	\$ 16,919	20
3011	1183	Exeter/West Greenwich	2016 Experience	\$ 127,686	\$ 10,987	17
3011	1183	Exeter/West Greenwich	2017 Experience	\$ 625,675	\$ 51,717	18
3011	1183	Exeter/West Greenwich	2018 Experience	\$ (85,915)	\$ (6,842)	19
3011	1183	Exeter/West Greenwich	2019 Assumption Change - FY23 Stagger	\$ (58,825)	\$ (5,258)	17
3011	1183	Exeter/West Greenwich	2019 Assumption Change - FY24 Stagger	\$ (58,825)	\$ (5,706)	16
3011	1183	Exeter/West Greenwich	2019 Experience	\$ (480,371)	\$ (36,955)	20
3011	1183	Exeter/West Greenwich	2020 Experience	\$ (84,984)	\$ (6,792)	20
3011	1183	Exeter/West Greenwich	2021 Experience	\$ (407,177)	\$ (33,805)	20
3012	1192 1193	Foster	2014 Mediation Settlement	\$ 432,516	\$ 42,922	14
3012	1192 1193	Foster	2015 Experience	\$ 270,991	\$ 24,357	16
3012	1192 1193	Foster	2016 Assumption Change - FY21 Stagger	\$ 49,216	\$ 3,919	19
3012	1192 1193	Foster	2016 Assumption Change - FY22 Stagger	\$ 52,926	\$ 4,072	20
3012	1192 1193	Foster	2016 Assumption Change - FY23 Stagger	\$ 52,926	\$ 4,230	20
3012	1192 1193	Foster	2016 Assumption Change - FY24 Stagger	\$ 52,926	\$ 4,394	20
3012	1192 1193	Foster	2016 Experience	\$ (253,993)	\$ (21,856)	17
3012	1192 1193	Foster	2017 Experience	\$ 276,206	\$ 22,831	18
3012	1192 1193	Foster	2018 Experience	\$ 15,183	\$ 1,209	19
3012	1192 1193	Foster	2019 Assumption Change - FY23 Stagger	\$ (18,811)	\$ (1,682)	17
3012	1192 1193	Foster	2019 Assumption Change - FY24 Stagger	\$ (18,811)	\$ (1,825)	16
3012	1192 1193	Foster	2019 Experience	\$ 27,640	\$ 2,126	20
3012	1192 1193	Foster	2020 Experience	\$ (165,818)	\$ (13,252)	20
3012	1192 1193	Foster	2021 Experience	\$ (409,491)	\$ (33,997)	20
3013	1212 1213	Glocester	2014 Mediation Settlement	\$ 1,068,016	\$ 105,988	14
3013	1212 1213	Glocester	2015 Experience	\$ (65,321)	\$ (5,871)	16
3013	1212 1213	Glocester	2016 Assumption Change - FY21 Stagger	\$ 160,384	\$ 12,773	19
3013	1212 1213	Glocester	2016 Assumption Change - FY22 Stagger	\$ 172,475	\$ 13,269	20
3013	1212 1213	Glocester	2016 Assumption Change - FY23 Stagger	\$ 172,475	\$ 13,784	20
3013	1212 1213	Glocester	2016 Assumption Change - FY24 Stagger	\$ 172,475	\$ 14,319	20
3013	1212 1213	Glocester	2016 Experience	\$ 166,059	\$ 14,289	17
3013	1212 1213	Glocester	2017 Experience	\$ 12,209	\$ 1,009	18
3013	1212 1213	Glocester	2018 Experience	\$ 22,279	\$ 1,774	19
3013	1212 1213	Glocester	2019 Assumption Change - FY23 Stagger	\$ (54,289)	\$ (4,853)	17
3013	1212 1213	Glocester	2019 Assumption Change - FY24 Stagger	\$ (54,289)	\$ (5,266)	16
3013	1212 1213	Glocester	2019 Experience	\$ (348,215)	\$ (26,788)	20
3013	1212 1213	Glocester	2020 Experience	\$ (151,116)	\$ (12,077)	20
3013	1212 1213	Glocester	2021 Experience	\$ (586,723)	\$ (48,711)	20
3014	1262	Hopkinton	2021 Overfunded Base	\$ (922,969)	\$ (76,626)	20
3015	1272 1273	Jamestown	2014 Mediation Settlement	\$ 1,638,183	\$ 162,571	14
3015	1272 1273	Jamestown	2015 Experience	\$ (56,110)	\$ (5,043)	16
3015	1272 1273	Jamestown	2016 Assumption Change - FY21 Stagger	\$ 228,906	\$ 18,229	19
3015	1272 1273	Jamestown	2016 Assumption Change - FY22 Stagger	\$ 246,162	\$ 18,937	20
3015	1272 1273	Jamestown	2016 Assumption Change - FY23 Stagger	\$ 246,162	\$ 19,673	20
3015	1272 1273	Jamestown	2016 Assumption Change - FY24 Stagger	\$ 246,162	\$ 20,437	20
3015	1272 1273	Jamestown	2016 Experience	\$ 135,863	\$ 11,691	17
3015	1272 1273	Jamestown	2017 Experience	\$ 65,564	\$ 5,419	18
3015	1272 1273	Jamestown	2018 Experience	\$ 296,533	\$ 23,615	19
3015	1272 1273	Jamestown	2019 Assumption Change - FY23 Stagger	\$ (104,869)	\$ (9,374)	17
3015	1272 1273	Jamestown	2019 Assumption Change - FY24 Stagger	\$ (104,869)	\$ (10,172)	16
3015	1272 1273	Jamestown	2019 Experience	\$ (548,093)	\$ (42,165)	20
3015	1272 1273	Jamestown	2020 Experience	\$ (523,131)	\$ (41,808)	20
3015	1272 1273	Jamestown	2021 Experience	\$ 148,414	\$ 12,322	20
3016	1282 1283	Johnston	2014 Mediation Settlement	\$ 10,863,086	\$ 897,928	18
3016	1282 1283	Johnston	2015 Experience	\$ (42,066)	\$ (3,781)	16
3016	1282 1283	Johnston	2016 Assumption Change - FY20 Stagger	\$ 62,368	\$ 5,155	18
3016	1282 1283	Johnston	2016 Assumption Change - FY21 Stagger	\$ 721,661	\$ 57,471	19
3016	1282 1283	Johnston	2016 Assumption Change - FY22 Stagger	\$ 776,064	\$ 59,703	20
3016	1282 1283	Johnston	2016 Assumption Change - FY23 Stagger	\$ 776,064	\$ 62,022	20
3016	1282 1283	Johnston	2016 Assumption Change - FY24 Stagger	\$ 776,064	\$ 64,430	20
3016	1282 1283	Johnston	2016 Experience	\$ (294,300)	\$ (25,325)	17
3016	1282 1283	Johnston	2017 Experience	\$ 143,365	\$ 11,850	18
3016	1282 1283	Johnston	2018 Experience	\$ (415,217)	\$ (33,067)	19
3016	1282 1283	Johnston	2019 Assumption Change - FY23 Stagger	\$ (258,299)	\$ (23,090)	17
3016	1282 1283	Johnston	2019 Assumption Change - FY24 Stagger	\$ (258,297)	\$ (25,054)	16
3016	1282 1283	Johnston	2019 Experience	\$ 50,853	\$ 3,912	20
3016	1282 1283	Johnston	2020 Experience	\$ 1,393,357	\$ 111,354	20
3016	1282 1283	Johnston	2021 Experience	\$ 365,875	\$ 30,376	20



APPENDIX 3 (Continued)

Old Unit Number	New Unit Number	Unit	Purpose	Remaining Balance as of June 30, 2021	Fiscal Year 2024 Amortization Payment	Years Remaining Beginning with Fiscal Year 2024
3017	1302 1303	Lincoln	2014 Mediation Settlement	\$ 492,314	\$ 48,857	14
3017	1302 1303	Lincoln	2015 Experience	\$ (17,136)	\$ (1,540)	16
3017	1302 1303	Lincoln	2016 Assumption Change - FY21 Stagger	\$ 46,667	\$ 3,716	19
3017	1302 1303	Lincoln	2016 Assumption Change - FY22 Stagger	\$ 50,185	\$ 3,861	20
3017	1302 1303	Lincoln	2016 Assumption Change - FY23 Stagger	\$ 50,185	\$ 4,011	20
3017	1302 1303	Lincoln	2016 Assumption Change - FY24 Stagger	\$ 50,185	\$ 4,166	20
3017	1302 1303	Lincoln	2016 Experience	\$ (28,892)	\$ (2,486)	17
3017	1302 1303	Lincoln	2017 Experience	\$ (22,872)	\$ (1,891)	18
3017	1302 1303	Lincoln	2018 Experience	\$ (96,451)	\$ (7,681)	19
3017	1302 1303	Lincoln	2019 Assumption Change - FY23 Stagger	\$ (14,105)	\$ (1,261)	17
3017	1302 1303	Lincoln	2019 Assumption Change - FY24 Stagger	\$ (14,104)	\$ (1,368)	16
3017	1302 1303	Lincoln	2019 Experience	\$ (162,213)	\$ (12,479)	20
3017	1302 1303	Lincoln	2020 Experience	\$ (30,505)	\$ (2,438)	20
3017	1302 1303	Lincoln	2021 Experience	\$ (143,876)	\$ (11,945)	20
3019	1322 1323	Middletown	2014 Mediation Settlement	\$ 3,568,712	\$ 294,985	18
3019	1322 1323	Middletown	2015 Experience	\$ (235,405)	\$ (21,158)	16
3019	1322 1323	Middletown	2016 Assumption Change - FY21 Stagger	\$ 333,750	\$ 26,579	19
3019	1322 1323	Middletown	2016 Assumption Change - FY22 Stagger	\$ 358,911	\$ 27,611	20
3019	1322 1323	Middletown	2016 Assumption Change - FY23 Stagger	\$ 358,911	\$ 28,683	20
3019	1322 1323	Middletown	2016 Assumption Change - FY24 Stagger	\$ 358,911	\$ 29,797	20
3019	1322 1323	Middletown	2016 Experience	\$ 276,513	\$ 23,794	17
3019	1322 1323	Middletown	2017 Experience	\$ (74,969)	\$ (6,197)	18
3019	1322 1323	Middletown	2018 Experience	\$ 193,884	\$ 15,440	19
3019	1322 1323	Middletown	2019 Assumption Change - FY23 Stagger	\$ (87,362)	\$ (7,809)	17
3019	1322 1323	Middletown	2019 Assumption Change - FY24 Stagger	\$ (87,363)	\$ (8,474)	16
3019	1322 1323	Middletown	2019 Experience	\$ (801,567)	\$ (61,665)	20
3019	1322 1323	Middletown	2020 Experience	\$ (470,314)	\$ (37,587)	20
3019	1322 1323	Middletown	2021 Experience	\$ (548,365)	\$ (45,526)	20
3021	1352 1353 1354	Newport	2014 Mediation Settlement	\$ 24,081,672	\$ 2,389,833	14
3021	1352 1353 1354	Newport	2015 Experience	\$ 159,053	\$ 14,296	16
3021	1352 1353 1354	Newport	2016 Assumption Change - FY20 Stagger	\$ 221,059	\$ 18,272	18
3021	1352 1353 1354	Newport	2016 Assumption Change - FY21 Stagger	\$ 1,188,949	\$ 94,685	19
3021	1352 1353 1354	Newport	2016 Assumption Change - FY22 Stagger	\$ 1,278,580	\$ 98,362	20
3021	1352 1353 1354	Newport	2016 Assumption Change - FY23 Stagger	\$ 1,278,580	\$ 102,182	20
3021	1352 1353 1354	Newport	2016 Assumption Change - FY24 Stagger	\$ 1,278,580	\$ 106,150	20
3021	1352 1353 1354	Newport	2016 Experience	\$ (268,488)	\$ (23,103)	17
3021	1352 1353 1354	Newport	2017 Experience	\$ 393,696	\$ 32,542	18
3021	1352 1353 1354	Newport	2018 Experience	\$ (1,310,571)	\$ (104,370)	19
3021	1352 1353 1354	Newport	2019 Assumption Change - FY23 Stagger	\$ (328,164)	\$ (29,335)	17
3021	1352 1353 1354	Newport	2019 Assumption Change - FY24 Stagger	\$ (328,165)	\$ (31,831)	16
3021	1352 1353 1354	Newport	2019 Experience	\$ (961,530)	\$ (73,971)	20
3021	1352 1353 1354	Newport	2020 Experience	\$ 214,957	\$ 17,179	20
3021	1352 1353 1354	Newport	2021 Experience	\$ (3,237,312)	\$ (268,767)	20
3022	1342 1343	New Shoreham	2016 Assumption Change - FY21 Stagger	\$ 114,306	\$ 9,103	19
3022	1342 1343	New Shoreham	2016 Assumption Change - FY22 Stagger	\$ 122,924	\$ 9,457	20
3022	1342 1343	New Shoreham	2016 Assumption Change - FY23 Stagger	\$ 122,924	\$ 9,824	20
3022	1342 1343	New Shoreham	2016 Assumption Change - FY24 Stagger	\$ 122,924	\$ 10,205	20
3022	1342 1343	New Shoreham	2016 Experience	\$ 66,376	\$ 5,712	17
3022	1342 1343	New Shoreham	2017 Experience	\$ 134,848	\$ 11,146	18
3022	1342 1343	New Shoreham	2018 Experience	\$ (2,133)	\$ (170)	19
3022	1342 1343	New Shoreham	2019 Assumption Change - FY23 Stagger	\$ (51,853)	\$ (4,635)	17
3022	1342 1343	New Shoreham	2019 Assumption Change - FY24 Stagger	\$ (51,853)	\$ (5,030)	16
3022	1342 1343	New Shoreham	2019 Experience	\$ (132,614)	\$ (10,202)	20
3022	1342 1343	New Shoreham	2020 Experience	\$ 176,555	\$ 14,110	20
3022	1342 1343	New Shoreham	2021 Experience	\$ (214,322)	\$ (17,793)	20
3023	1372 1373	North Kingstown	2014 Mediation Settlement	\$ 15,252,192	\$ 1,513,607	14
3023	1372 1373	North Kingstown	2015 Experience	\$ (1,385,549)	\$ (124,535)	16
3023	1372 1373	North Kingstown	2016 Assumption Change - FY20 Stagger	\$ 101,725	\$ 8,408	18
3023	1372 1373	North Kingstown	2016 Assumption Change - FY21 Stagger	\$ 1,052,028	\$ 83,781	19
3023	1372 1373	North Kingstown	2016 Assumption Change - FY22 Stagger	\$ 1,131,337	\$ 87,034	20
3023	1372 1373	North Kingstown	2016 Assumption Change - FY23 Stagger	\$ 1,131,337	\$ 90,414	20
3023	1372 1373	North Kingstown	2016 Assumption Change - FY24 Stagger	\$ 1,131,337	\$ 93,925	20
3023	1372 1373	North Kingstown	2016 Experience	\$ 1,105,579	\$ 95,135	17
3023	1372 1373	North Kingstown	2017 Experience	\$ 214,269	\$ 17,711	18
3023	1372 1373	North Kingstown	2018 Experience	\$ (1,949,520)	\$ (155,254)	19
3023	1372 1373	North Kingstown	2019 Assumption Change - FY23 Stagger	\$ (367,938)	\$ (32,891)	17
3023	1372 1373	North Kingstown	2019 Assumption Change - FY24 Stagger	\$ (367,938)	\$ (35,689)	16
3023	1372 1373	North Kingstown	2019 Experience	\$ (1,000,018)	\$ (76,932)	20
3023	1372 1373	North Kingstown	2020 Experience	\$ 689,446	\$ 55,099	20
3023	1372 1373	North Kingstown	2021 Experience	\$ (1,183,612)	\$ (98,265)	20
3024	1382 1383	North Providence	2016 Assumption Change - FY20 Stagger	\$ 3,356	\$ 277	18
3024	1382 1383	North Providence	2016 Assumption Change - FY21 Stagger	\$ 434,260	\$ 34,583	19
3024	1382 1383	North Providence	2016 Assumption Change - FY22 Stagger	\$ 466,997	\$ 35,926	20
3024	1382 1383	North Providence	2016 Assumption Change - FY23 Stagger	\$ 466,997	\$ 37,321	20
3024	1382 1383	North Providence	2016 Assumption Change - FY24 Stagger	\$ 466,997	\$ 38,771	20
3024	1382 1383	North Providence	2017 Experience	\$ (902,575)	\$ (74,606)	18
3024	1382 1383	North Providence	2018 Experience	\$ 87,302	\$ 6,952	19
3024	1382 1383	North Providence	2019 Assumption Change - FY23 Stagger	\$ (126,499)	\$ (11,308)	17
3024	1382 1383	North Providence	2019 Assumption Change - FY24 Stagger	\$ (126,498)	\$ (12,270)	16
3024	1382 1383	North Providence	2019 Experience	\$ (271,567)	\$ (20,892)	20



APPENDIX 3 (Continued)

Old Unit Number	New Unit Number	Unit	Purpose	Remaining Balance as of June 30, 2021	Fiscal Year 2024 Amortization Payment	Years Remaining Beginning with Fiscal Year 2024
3024	1382 1383	North Providence	2020 Experience	\$ 654,867	\$ 52,336	20
3024	1382 1383	North Providence	2021 Experience	\$ (546,351)	\$ (45,359)	20
3025	1392 1393	North Smithfield	2021 Overfunded Base	\$ (1,181,785)	\$ (98,114)	20
3026	1412 1413	Pawtucket	2014 Mediation Settlement	\$ 28,611,942	\$ 2,365,024	18
3026	1412 1413	Pawtucket	2015 Experience	\$ (3,943,611)	\$ (354,456)	16
3026	1412 1413	Pawtucket	2016 Assumption Change - FY20 Stagger	\$ 502,669	\$ 41,550	18
3026	1412 1413	Pawtucket	2016 Assumption Change - FY21 Stagger	\$ 2,034,805	\$ 162,046	19
3026	1412 1413	Pawtucket	2016 Assumption Change - FY22 Stagger	\$ 2,188,203	\$ 168,339	20
3026	1412 1413	Pawtucket	2016 Assumption Change - FY23 Stagger	\$ 2,188,203	\$ 174,877	20
3026	1412 1413	Pawtucket	2016 Assumption Change - FY24 Stagger	\$ 2,188,203	\$ 181,668	20
3026	1412 1413	Pawtucket	2016 Experience	\$ 1,726,039	\$ 148,526	17
3026	1412 1413	Pawtucket	2017 Experience	\$ 931,880	\$ 77,028	18
3026	1412 1413	Pawtucket	2018 Experience	\$ (5,240,437)	\$ (417,334)	19
3026	1412 1413	Pawtucket	2019 Assumption Change - FY23 Stagger	\$ (766,719)	\$ (68,538)	17
3026	1412 1413	Pawtucket	2019 Assumption Change - FY24 Stagger	\$ (766,719)	\$ (74,370)	16
3026	1412 1413	Pawtucket	2019 Experience	\$ (2,507,691)	\$ (192,918)	20
3026	1412 1413	Pawtucket	2020 Experience	\$ (2,145,853)	\$ (171,492)	20
3026	1412 1413	Pawtucket	2021 Experience	\$ (7,136,645)	\$ (592,496)	20
3027	1515	Union Fire District	2021 Overfunded Base	\$ (17,087)	\$ (1,419)	20
3029	1452	Richmond	2014 Mediation Settlement	\$ 289,941	\$ 28,773	14
3029	1452	Richmond	2015 Experience	\$ (122,299)	\$ (10,992)	16
3029	1452	Richmond	2016 Assumption Change - FY21 Stagger	\$ 37,526	\$ 2,988	19
3029	1452	Richmond	2016 Assumption Change - FY22 Stagger	\$ 40,355	\$ 3,105	20
3029	1452	Richmond	2016 Assumption Change - FY23 Stagger	\$ 40,355	\$ 3,225	20
3029	1452	Richmond	2016 Assumption Change - FY24 Stagger	\$ 40,355	\$ 3,350	20
3029	1452	Richmond	2016 Experience	\$ (65,968)	\$ (5,677)	17
3029	1452	Richmond	2017 Experience	\$ 306,897	\$ 25,368	18
3029	1452	Richmond	2018 Experience	\$ (93,742)	\$ (7,465)	19
3029	1452	Richmond	2019 Assumption Change - FY23 Stagger	\$ (15,939)	\$ (1,425)	17
3029	1452	Richmond	2019 Assumption Change - FY24 Stagger	\$ (15,939)	\$ (1,546)	16
3029	1452	Richmond	2019 Experience	\$ 115,096	\$ 8,854	20
3029	1452	Richmond	2020 Experience	\$ 1,332	\$ 106	20
3029	1452	Richmond	2021 Experience	\$ (263,566)	\$ (21,882)	20
3030	1462 1463	Scituate	2014 Mediation Settlement	\$ 2,622,688	\$ 260,272	14
3030	1462 1463	Scituate	2015 Experience	\$ (62,182)	\$ (5,589)	16
3030	1462 1463	Scituate	2016 Assumption Change - FY20 Stagger	\$ 39,101	\$ 3,232	18
3030	1462 1463	Scituate	2016 Assumption Change - FY21 Stagger	\$ 255,456	\$ 20,344	19
3030	1462 1463	Scituate	2016 Assumption Change - FY22 Stagger	\$ 274,714	\$ 21,134	20
3030	1462 1463	Scituate	2016 Assumption Change - FY23 Stagger	\$ 274,714	\$ 21,955	20
3030	1462 1463	Scituate	2016 Assumption Change - FY24 Stagger	\$ 274,714	\$ 22,807	20
3030	1462 1463	Scituate	2016 Experience	\$ 231,295	\$ 19,903	17
3030	1462 1463	Scituate	2017 Experience	\$ 639,966	\$ 52,899	18
3030	1462 1463	Scituate	2018 Experience	\$ (322,859)	\$ (25,712)	19
3030	1462 1463	Scituate	2019 Assumption Change - FY23 Stagger	\$ (98,963)	\$ (8,846)	17
3030	1462 1463	Scituate	2019 Assumption Change - FY24 Stagger	\$ (98,964)	\$ (9,599)	16
3030	1462 1463	Scituate	2019 Experience	\$ (392,671)	\$ (30,208)	20
3030	1462 1463	Scituate	2020 Experience	\$ (169,930)	\$ (13,580)	20
3030	1462 1463	Scituate	2021 Experience	\$ (284,798)	\$ (23,644)	20
3031	1472 1473	Smithfield	2014 Mediation Settlement	\$ 189,727	\$ 15,683	18
3031	1472 1473	Smithfield	2015 Experience	\$ (198,109)	\$ (17,806)	16
3031	1472 1473	Smithfield	2016 Assumption Change - FY21 Stagger	\$ 239,410	\$ 19,066	19
3031	1472 1473	Smithfield	2016 Assumption Change - FY22 Stagger	\$ 257,459	\$ 19,806	20
3031	1472 1473	Smithfield	2016 Assumption Change - FY23 Stagger	\$ 257,459	\$ 20,576	20
3031	1472 1473	Smithfield	2016 Assumption Change - FY24 Stagger	\$ 257,459	\$ 21,375	20
3031	1472 1473	Smithfield	2016 Experience	\$ 418,120	\$ 35,979	17
3031	1472 1473	Smithfield	2017 Experience	\$ 211,554	\$ 17,487	18
3031	1472 1473	Smithfield	2018 Experience	\$ 413,524	\$ 32,932	19
3031	1472 1473	Smithfield	2019 Assumption Change - FY23 Stagger	\$ (103,762)	\$ (9,275)	17
3031	1472 1473	Smithfield	2019 Assumption Change - FY24 Stagger	\$ (103,761)	\$ (10,065)	16
3031	1472 1473	Smithfield	2019 Experience	\$ (43,311)	\$ (3,332)	20
3031	1472 1473	Smithfield	2020 Experience	\$ 159,786	\$ 12,770	20
3031	1472 1473	Smithfield	2021 Experience	\$ (663,599)	\$ (55,093)	20
3032	1492 1493	South Kingstown	2014 Mediation Settlement	\$ 5,948,873	\$ 590,358	14
3032	1492 1493	South Kingstown	2015 Experience	\$ (127,151)	\$ (11,428)	16
3032	1492 1493	South Kingstown	2016 Assumption Change - FY21 Stagger	\$ 1,003,902	\$ 79,948	19
3032	1492 1493	South Kingstown	2016 Assumption Change - FY22 Stagger	\$ 1,079,583	\$ 83,053	20
3032	1492 1493	South Kingstown	2016 Assumption Change - FY23 Stagger	\$ 1,079,583	\$ 86,278	20
3032	1492 1493	South Kingstown	2016 Assumption Change - FY24 Stagger	\$ 1,079,583	\$ 89,629	20
3032	1492 1493	South Kingstown	2016 Experience	\$ 1,221,405	\$ 105,102	17
3032	1492 1493	South Kingstown	2017 Experience	\$ 736,340	\$ 60,865	18
3032	1492 1493	South Kingstown	2018 Experience	\$ 256,356	\$ 20,415	19
3032	1492 1493	South Kingstown	2019 Assumption Change - FY23 Stagger	\$ (321,223)	\$ (28,715)	17
3032	1492 1493	South Kingstown	2019 Assumption Change - FY24 Stagger	\$ (321,225)	\$ (31,158)	16
3032	1492 1493	South Kingstown	2019 Experience	\$ (583,378)	\$ (44,880)	20
3032	1492 1493	South Kingstown	2020 Experience	\$ 89,391	\$ 7,144	20
3032	1492 1493	South Kingstown	2021 Experience	\$ (948,957)	\$ (78,784)	20
3033	1532 1533	Tiverton	2021 Overfunded Base	\$ (822,893)	\$ (68,318)	20
3034	1562	Warren	2014 Mediation Settlement	\$ 1,750,187	\$ 144,668	18
3034	1562	Warren	2015 Experience	\$ (185,727)	\$ (16,693)	16
3034	1562	Warren	2016 Assumption Change - FY21 Stagger	\$ 112,931	\$ 8,993	19



APPENDIX 3 (Continued)

Old Unit					Remaining Balance	Fiscal Year 2024	Years Remaining
Number	New Unit Number	Unit	Purpose	as of June 30, 2021	Amortization Payment	Beginning with Fiscal Year 2024	
3034	1562	Warren	2016 Assumption Change - FY22 Stagger	\$ 121,444	\$ 9,343	20	
3034	1562	Warren	2016 Assumption Change - FY23 Stagger	\$ 121,444	\$ 9,706	20	
3034	1562	Warren	2016 Assumption Change - FY24 Stagger	\$ 121,444	\$ 10,082	20	
3034	1562	Warren	2016 Experience	\$ 3,247	\$ 279	17	
3034	1562	Warren	2017 Experience	\$ (86,752)	\$ (7,171)	18	
3034	1562	Warren	2018 Experience	\$ (47,768)	\$ (3,804)	19	
3034	1562	Warren	2019 Assumption Change - FY23 Stagger	\$ (42,367)	\$ (3,787)	17	
3034	1562	Warren	2019 Assumption Change - FY24 Stagger	\$ (42,366)	\$ (4,109)	16	
3034	1562	Warren	2019 Experience	\$ 103,333	\$ 7,949	20	
3034	1562	Warren	2020 Experience	\$ (102,652)	\$ (8,204)	20	
3034	1562	Warren	2021 Experience	\$ (289,936)	\$ (24,071)	20	
3036	1622 1623	Westerly	2021 Overfunded Base	\$ (34,596)	\$ (2,872)	20	
3037	1602	West Greenwich	2014 Mediation Settlement	\$ 1,371,624	\$ 113,377	18	
3037	1602	West Greenwich	2015 Experience	\$ (14,867)	\$ (1,336)	16	
3037	1602	West Greenwich	2016 Assumption Change - FY21 Stagger	\$ 72,291	\$ 5,757	19	
3037	1602	West Greenwich	2016 Assumption Change - FY22 Stagger	\$ 77,741	\$ 5,981	20	
3037	1602	West Greenwich	2016 Assumption Change - FY23 Stagger	\$ 77,741	\$ 6,213	20	
3037	1602	West Greenwich	2016 Assumption Change - FY24 Stagger	\$ 77,741	\$ 6,454	20	
3037	1602	West Greenwich	2016 Experience	\$ (36,065)	\$ (3,103)	17	
3037	1602	West Greenwich	2017 Experience	\$ 90,848	\$ 7,509	18	
3037	1602	West Greenwich	2018 Experience	\$ (135,931)	\$ (10,825)	19	
3037	1602	West Greenwich	2019 Assumption Change - FY23 Stagger	\$ (22,479)	\$ (2,009)	17	
3037	1602	West Greenwich	2019 Assumption Change - FY24 Stagger	\$ (22,479)	\$ (2,180)	16	
3037	1602	West Greenwich	2019 Experience	\$ 25,506	\$ 1,962	20	
3037	1602	West Greenwich	2020 Experience	\$ (266,428)	\$ (21,292)	20	
3037	1602	West Greenwich	2021 Experience	\$ (548,552)	\$ (45,542)	20	
3039	1632 1633	Woonsocket	2014 Mediation Settlement	\$ 5,643,416	\$ 560,045	14	
3039	1632 1633	Woonsocket	2015 Experience	\$ (1,660,495)	\$ (149,247)	16	
3039	1632 1633	Woonsocket	2016 Assumption Change - FY20 Stagger	\$ 213,665	\$ 17,661	18	
3039	1632 1633	Woonsocket	2016 Assumption Change - FY21 Stagger	\$ 1,223,199	\$ 97,412	19	
3039	1632 1633	Woonsocket	2016 Assumption Change - FY22 Stagger	\$ 1,315,412	\$ 101,195	20	
3039	1632 1633	Woonsocket	2016 Assumption Change - FY23 Stagger	\$ 1,315,412	\$ 105,125	20	
3039	1632 1633	Woonsocket	2016 Assumption Change - FY24 Stagger	\$ 1,315,412	\$ 109,208	20	
3039	1632 1633	Woonsocket	2016 Experience	\$ 2,004,211	\$ 172,462	17	
3039	1632 1633	Woonsocket	2017 Experience	\$ (108,173)	\$ (8,941)	18	
3039	1632 1633	Woonsocket	2018 Experience	\$ (423,998)	\$ (33,766)	19	
3039	1632 1633	Woonsocket	2019 Assumption Change - FY23 Stagger	\$ (500,053)	\$ (44,701)	17	
3039	1632 1633	Woonsocket	2019 Assumption Change - FY24 Stagger	\$ (500,052)	\$ (48,504)	16	
3039	1632 1633	Woonsocket	2019 Experience	\$ 70,207	\$ 5,401	20	
3039	1632 1633	Woonsocket	2020 Experience	\$ 711,675	\$ 56,876	20	
3039	1632 1633	Woonsocket	2021 Experience	\$ (1,819,162)	\$ (151,030)	20	
3040	1073	Chariho School District	2014 Mediation Settlement	\$ 2,966,473	\$ 294,389	14	
3040	1073	Chariho School District	2015 Experience	\$ (438,604)	\$ (39,422)	16	
3040	1073	Chariho School District	2016 Assumption Change - FY21 Stagger	\$ 359,326	\$ 28,616	19	
3040	1073	Chariho School District	2016 Assumption Change - FY22 Stagger	\$ 386,415	\$ 29,727	20	
3040	1073	Chariho School District	2016 Assumption Change - FY23 Stagger	\$ 386,415	\$ 30,882	20	
3040	1073	Chariho School District	2016 Assumption Change - FY24 Stagger	\$ 386,415	\$ 32,081	20	
3040	1073	Chariho School District	2016 Experience	\$ 150,294	\$ 12,933	17	
3040	1073	Chariho School District	2017 Experience	\$ (122,987)	\$ (10,166)	18	
3040	1073	Chariho School District	2018 Experience	\$ (85,754)	\$ (6,829)	19	
3040	1073	Chariho School District	2019 Assumption Change - FY23 Stagger	\$ (131,200)	\$ (11,728)	17	
3040	1073	Chariho School District	2019 Assumption Change - FY24 Stagger	\$ (131,201)	\$ (12,726)	16	
3040	1073	Chariho School District	2019 Experience	\$ 188,943	\$ 14,535	20	
3040	1073	Chariho School District	2020 Experience	\$ (153,968)	\$ (12,305)	20	
3040	1073	Chariho School District	2021 Experience	\$ (650,022)	\$ (53,966)	20	
3041	1203	Foster/Glocester	2014 Mediation Settlement	\$ 741,862	\$ 73,621	14	
3041	1203	Foster/Glocester	2015 Experience	\$ 95,300	\$ 8,566	16	
3041	1203	Foster/Glocester	2016 Assumption Change - FY21 Stagger	\$ 128,761	\$ 10,254	19	
3041	1203	Foster/Glocester	2016 Assumption Change - FY22 Stagger	\$ 138,467	\$ 10,652	20	
3041	1203	Foster/Glocester	2016 Assumption Change - FY23 Stagger	\$ 138,467	\$ 11,066	20	
3041	1203	Foster/Glocester	2016 Assumption Change - FY24 Stagger	\$ 138,467	\$ 11,496	20	
3041	1203	Foster/Glocester	2016 Experience	\$ (8,833)	\$ (760)	17	
3041	1203	Foster/Glocester	2017 Experience	\$ 76,229	\$ 6,301	18	
3041	1203	Foster/Glocester	2018 Experience	\$ (426,112)	\$ (33,934)	19	
3041	1203	Foster/Glocester	2019 Assumption Change - FY23 Stagger	\$ (65,559)	\$ (5,860)	17	
3041	1203	Foster/Glocester	2019 Assumption Change - FY24 Stagger	\$ (65,559)	\$ (6,359)	16	
3041	1203	Foster/Glocester	2019 Experience	\$ 171,018	\$ 13,156	20	
3041	1203	Foster/Glocester	2020 Experience	\$ 457,281	\$ 36,545	20	
3041	1203	Foster/Glocester	2021 Experience	\$ (196,470)	\$ (16,311)	20	
3042	1528	Tiogue Fire & Lighting	2021 Overfunded Base	\$ (28,863)	\$ (2,396)	20	
3043	1336	Narragansett Housing	2021 Overfunded Base	\$ (132,152)	\$ (10,971)	20	
3045	1098	Coventry Lighting District	2021 Overfunded Base	\$ (746,850)	\$ (62,005)	20	
3046	1242	Hope Valley Fire	2021 Overfunded Base	\$ (181,725)	\$ (15,087)	20	
3050	1156	East Greenwich Housing	2021 Overfunded Base	\$ (164,203)	\$ (13,632)	20	
3051	1116	Cranston Housing	2016 Assumption Change - FY21 Stagger	\$ 70,182	\$ 5,589	19	
3051	1116	Cranston Housing	2016 Assumption Change - FY22 Stagger	\$ 75,473	\$ 5,806	20	
3051	1116	Cranston Housing	2016 Assumption Change - FY23 Stagger	\$ 75,473	\$ 6,032	20	
3051	1116	Cranston Housing	2016 Assumption Change - FY24 Stagger	\$ 75,473	\$ 6,266	20	
3051	1116	Cranston Housing	2018 Experience	\$ (149,297)	\$ (11,890)	19	
3051	1116	Cranston Housing	2019 Assumption Change - FY23 Stagger	\$ (31,395)	\$ (2,806)	17	



APPENDIX 3 (Continued)

Old Unit Number	New Unit Number	Unit	Purpose	Remaining Balance as of June 30, 2021	Fiscal Year 2024 Amortization Payment	Years Remaining Beginning with Fiscal Year 2024
3051	1116	Cranston Housing	2019 Assumption Change - FY24 Stagger	\$ (31,395)	\$ (3,045)	16
3051	1116	Cranston Housing	2019 Experience	\$ 107,958	\$ 8,305	20
3051	1116	Cranston Housing	2020 Experience	\$ (58,270)	\$ (4,657)	20
3051	1116	Cranston Housing	2021 Experience	\$ (117,548)	\$ (9,759)	20
3052	1166	East Providence Housing	2021 Overfunded Base	\$ (129,423)	\$ (10,745)	20
3053	1416	Pawtucket Housing	2021 Overfunded Base	\$ (3,719,556)	\$ (308,804)	20
3056	1126	Cumberland Housing	2021 Overfunded Base	\$ (247,192)	\$ (20,522)	20
3057	1306	Lincoln Housing	2014 Mediation Settlement	\$ 113,725	\$ 9,400	18
3057	1306	Lincoln Housing	2015 Experience	\$ 134,926	\$ 12,127	16
3057	1306	Lincoln Housing	2016 Assumption Change - FY20 Stagger	\$ 2,992	\$ 247	18
3057	1306	Lincoln Housing	2016 Assumption Change - FY21 Stagger	\$ 40,567	\$ 3,231	19
3057	1306	Lincoln Housing	2016 Assumption Change - FY22 Stagger	\$ 43,625	\$ 3,356	20
3057	1306	Lincoln Housing	2016 Assumption Change - FY23 Stagger	\$ 43,625	\$ 3,486	20
3057	1306	Lincoln Housing	2016 Assumption Change - FY24 Stagger	\$ 43,625	\$ 3,622	20
3057	1306	Lincoln Housing	2016 Experience	\$ (109,445)	\$ (9,418)	17
3057	1306	Lincoln Housing	2017 Experience	\$ (69,003)	\$ (5,704)	18
3057	1306	Lincoln Housing	2018 Experience	\$ 170,036	\$ 13,541	19
3057	1306	Lincoln Housing	2019 Assumption Change - FY23 Stagger	\$ (6,370)	\$ (569)	17
3057	1306	Lincoln Housing	2019 Assumption Change - FY24 Stagger	\$ (6,371)	\$ (618)	16
3057	1306	Lincoln Housing	2019 Experience	\$ 40,231	\$ 3,095	20
3057	1306	Lincoln Housing	2020 Experience	\$ 8,892	\$ 711	20
3057	1306	Lincoln Housing	2021 Experience	\$ 8,899	\$ 739	20
3059	1016	Bristol Housing	2021 Overfunded Base	\$ (288,464)	\$ (23,949)	20
3065	1036	Burrillville Housing	2014 Mediation Settlement	\$ 65,689	\$ 5,430	18
3065	1036	Burrillville Housing	2015 Experience	\$ (19,429)	\$ (1,746)	16
3065	1036	Burrillville Housing	2016 Assumption Change - FY21 Stagger	\$ 19,178	\$ 1,527	19
3065	1036	Burrillville Housing	2016 Assumption Change - FY22 Stagger	\$ 20,624	\$ 1,587	20
3065	1036	Burrillville Housing	2016 Assumption Change - FY23 Stagger	\$ 20,624	\$ 1,648	20
3065	1036	Burrillville Housing	2016 Assumption Change - FY24 Stagger	\$ 20,624	\$ 1,712	20
3065	1036	Burrillville Housing	2016 Experience	\$ (10,752)	\$ (925)	17
3065	1036	Burrillville Housing	2017 Experience	\$ 114,858	\$ 9,494	18
3065	1036	Burrillville Housing	2018 Experience	\$ 13,727	\$ 1,093	19
3065	1036	Burrillville Housing	2019 Assumption Change - FY23 Stagger	\$ (9,506)	\$ (850)	17
3065	1036	Burrillville Housing	2019 Assumption Change - FY24 Stagger	\$ (9,506)	\$ (922)	16
3065	1036	Burrillville Housing	2019 Experience	\$ 7,636	\$ 587	20
3065	1036	Burrillville Housing	2020 Experience	\$ 22,266	\$ 1,779	20
3065	1036	Burrillville Housing	2021 Experience	\$ (3,148)	\$ (261)	20
3066	1386	North Providence Housing	2014 Mediation Settlement	\$ 838,712	\$ 69,327	18
3066	1386	North Providence Housing	2015 Experience	\$ (55,793)	\$ (5,015)	16
3066	1386	North Providence Housing	2016 Assumption Change - FY20 Stagger	\$ 4,799	\$ 397	18
3066	1386	North Providence Housing	2016 Assumption Change - FY21 Stagger	\$ 28,868	\$ 2,299	19
3066	1386	North Providence Housing	2016 Assumption Change - FY22 Stagger	\$ 31,044	\$ 2,388	20
3066	1386	North Providence Housing	2016 Assumption Change - FY23 Stagger	\$ 31,044	\$ 2,481	20
3066	1386	North Providence Housing	2016 Assumption Change - FY24 Stagger	\$ 31,044	\$ 2,577	20
3066	1386	North Providence Housing	2016 Experience	\$ (9,631)	\$ (829)	17
3066	1386	North Providence Housing	2017 Experience	\$ 49,661	\$ 4,105	18
3066	1386	North Providence Housing	2018 Experience	\$ (1,845)	\$ (147)	19
3066	1386	North Providence Housing	2019 Assumption Change - FY23 Stagger	\$ (10,765)	\$ (962)	17
3066	1386	North Providence Housing	2019 Assumption Change - FY24 Stagger	\$ (10,764)	\$ (1,044)	16
3066	1386	North Providence Housing	2019 Experience	\$ 143,288	\$ 11,023	20
3066	1386	North Providence Housing	2020 Experience	\$ 8,296	\$ 663	20
3066	1386	North Providence Housing	2021 Experience	\$ (192,110)	\$ (15,949)	20
3067	1177	East Smithfield Water	2016 Assumption Change - FY20 Stagger	\$ 4,499	\$ 372	18
3067	1177	East Smithfield Water	2016 Assumption Change - FY21 Stagger	\$ 9,193	\$ 732	19
3067	1177	East Smithfield Water	2016 Assumption Change - FY22 Stagger	\$ 9,886	\$ 761	20
3067	1177	East Smithfield Water	2016 Assumption Change - FY23 Stagger	\$ 9,886	\$ 790	20
3067	1177	East Smithfield Water	2016 Assumption Change - FY24 Stagger	\$ 9,886	\$ 821	20
3067	1177	East Smithfield Water	2017 Experience	\$ 84,187	\$ 6,959	18
3067	1177	East Smithfield Water	2018 Experience	\$ 4,909	\$ 391	19
3067	1177	East Smithfield Water	2019 Assumption Change - FY23 Stagger	\$ 2,480	\$ 222	17
3067	1177	East Smithfield Water	2019 Assumption Change - FY24 Stagger	\$ 2,480	\$ 241	16
3067	1177	East Smithfield Water	2019 Experience	\$ 82,010	\$ 6,309	20
3067	1177	East Smithfield Water	2020 Experience	\$ (203,878)	\$ (16,294)	20
3067	1177	East Smithfield Water	2021 Experience	\$ 4,317	\$ 358	20
3068	1227	Greenville Water	2021 Overfunded Base	\$ (207,104)	\$ (17,194)	20
3069	1356	Newport Housing	2014 Mediation Settlement	\$ 2,324,874	\$ 230,717	14
3069	1356	Newport Housing	2015 Experience	\$ (358,889)	\$ (32,257)	16
3069	1356	Newport Housing	2016 Assumption Change - FY20 Stagger	\$ 39,354	\$ 3,253	18
3069	1356	Newport Housing	2016 Assumption Change - FY21 Stagger	\$ 159,546	\$ 12,706	19
3069	1356	Newport Housing	2016 Assumption Change - FY22 Stagger	\$ 171,573	\$ 13,199	20
3069	1356	Newport Housing	2016 Assumption Change - FY23 Stagger	\$ 171,573	\$ 13,712	20
3069	1356	Newport Housing	2016 Assumption Change - FY24 Stagger	\$ 171,573	\$ 14,244	20
3069	1356	Newport Housing	2016 Experience	\$ 523,915	\$ 45,083	17
3069	1356	Newport Housing	2017 Experience	\$ 346,577	\$ 28,648	18
3069	1356	Newport Housing	2018 Experience	\$ (236,696)	\$ (18,850)	19
3069	1356	Newport Housing	2019 Assumption Change - FY23 Stagger	\$ (61,712)	\$ (5,517)	17
3069	1356	Newport Housing	2019 Assumption Change - FY24 Stagger	\$ (61,711)	\$ (5,986)	16
3069	1356	Newport Housing	2019 Experience	\$ (144,383)	\$ (11,107)	20
3069	1356	Newport Housing	2020 Experience	\$ 31,092	\$ 2,485	20
3069	1356	Newport Housing	2021 Experience	\$ (50,599)	\$ (4,201)	20



APPENDIX 3 (Continued)

Old Unit		Unit	Purpose	Remaining Balance as of June 30, 2021	Fiscal Year 2024 Amortization Payment	Years Remaining Beginning with Fiscal Year 2024
Number	New Unit Number					
3071	1566	Warren Housing	2016 Assumption Change - FY20 Stagger	\$ 9,022	\$ 746	18
3071	1566	Warren Housing	2016 Assumption Change - FY21 Stagger	\$ 20,064	\$ 1,598	19
3071	1566	Warren Housing	2016 Assumption Change - FY22 Stagger	\$ 21,576	\$ 1,660	20
3071	1566	Warren Housing	2016 Assumption Change - FY23 Stagger	\$ 21,576	\$ 1,724	20
3071	1566	Warren Housing	2016 Assumption Change - FY24 Stagger	\$ 21,576	\$ 1,791	20
3071	1566	Warren Housing	2018 Experience	\$ (74,959)	\$ (5,970)	19
3071	1566	Warren Housing	2019 Assumption Change - FY23 Stagger	\$ (18,100)	\$ (1,618)	17
3071	1566	Warren Housing	2019 Assumption Change - FY24 Stagger	\$ (18,100)	\$ (1,756)	16
3071	1566	Warren Housing	2019 Experience	\$ 49,985	\$ 3,845	20
3071	1566	Warren Housing	2020 Experience	\$ 52,050	\$ 4,160	20
3071	1566	Warren Housing	2021 Experience	\$ 11,809	\$ 980	20
3072	1286	Johnston Housing	2014 Mediation Settlement	\$ 197,905	\$ 16,359	18
3072	1286	Johnston Housing	2015 Experience	\$ (44,348)	\$ (3,986)	16
3072	1286	Johnston Housing	2016 Assumption Change - FY21 Stagger	\$ 25,727	\$ 2,049	19
3072	1286	Johnston Housing	2016 Assumption Change - FY22 Stagger	\$ 27,667	\$ 2,128	20
3072	1286	Johnston Housing	2016 Assumption Change - FY23 Stagger	\$ 27,667	\$ 2,211	20
3072	1286	Johnston Housing	2016 Assumption Change - FY24 Stagger	\$ 27,667	\$ 2,297	20
3072	1286	Johnston Housing	2016 Experience	\$ 120,187	\$ 10,342	17
3072	1286	Johnston Housing	2017 Experience	\$ 118,350	\$ 9,783	18
3072	1286	Johnston Housing	2018 Experience	\$ 551	\$ 44	19
3072	1286	Johnston Housing	2019 Assumption Change - FY23 Stagger	\$ (11,719)	\$ (1,048)	17
3072	1286	Johnston Housing	2019 Assumption Change - FY24 Stagger	\$ (11,720)	\$ (1,137)	16
3072	1286	Johnston Housing	2019 Experience	\$ (13,867)	\$ (1,067)	20
3072	1286	Johnston Housing	2020 Experience	\$ (9,962)	\$ (796)	20
3072	1286	Johnston Housing	2021 Experience	\$ (36,519)	\$ (3,032)	20
3077	1538	Tiverton Local 2670A	2014 Mediation Settlement	\$ 403,929	\$ 40,085	14
3077	1538	Tiverton Local 2670A	2015 Experience	\$ (220,033)	\$ (19,777)	16
3077	1538	Tiverton Local 2670A	2016 Assumption Change - FY21 Stagger	\$ 79,063	\$ 6,296	19
3077	1538	Tiverton Local 2670A	2016 Assumption Change - FY22 Stagger	\$ 85,023	\$ 6,541	20
3077	1538	Tiverton Local 2670A	2016 Assumption Change - FY23 Stagger	\$ 85,023	\$ 6,795	20
3077	1538	Tiverton Local 2670A	2016 Assumption Change - FY24 Stagger	\$ 85,023	\$ 7,059	20
3077	1538	Tiverton Local 2670A	2016 Experience	\$ 27,332	\$ 2,352	17
3077	1538	Tiverton Local 2670A	2017 Experience	\$ (73,917)	\$ (6,110)	18
3077	1538	Tiverton Local 2670A	2018 Experience	\$ 278,777	\$ 22,201	19
3077	1538	Tiverton Local 2670A	2019 Assumption Change - FY23 Stagger	\$ (31,581)	\$ (2,823)	17
3077	1538	Tiverton Local 2670A	2019 Assumption Change - FY24 Stagger	\$ (31,581)	\$ (3,063)	16
3077	1538	Tiverton Local 2670A	2019 Experience	\$ (427,002)	\$ (32,849)	20
3077	1538	Tiverton Local 2670A	2020 Experience	\$ (8,252)	\$ (660)	20
3077	1538	Tiverton Local 2670A	2021 Experience	\$ (66,646)	\$ (5,533)	20
3078	1002 1003 1007 1009	Barrington COLA	2014 Mediation Settlement	\$ 1,576,035	\$ 156,404	14
3078	1002 1003 1007 1009	Barrington COLA	2015 Experience	\$ (75,815)	\$ (6,814)	16
3078	1002 1003 1007 1009	Barrington COLA	2016 Assumption Change - FY21 Stagger	\$ 571,983	\$ 45,551	19
3078	1002 1003 1007 1009	Barrington COLA	2016 Assumption Change - FY22 Stagger	\$ 615,103	\$ 47,320	20
3078	1002 1003 1007 1009	Barrington COLA	2016 Assumption Change - FY23 Stagger	\$ 615,103	\$ 49,158	20
3078	1002 1003 1007 1009	Barrington COLA	2016 Assumption Change - FY24 Stagger	\$ 615,103	\$ 51,067	20
3078	1002 1003 1007 1009	Barrington COLA	2016 Experience	\$ 408,456	\$ 35,148	17
3078	1002 1003 1007 1009	Barrington COLA	2017 Experience	\$ 898,176	\$ 74,242	18
3078	1002 1003 1007 1009	Barrington COLA	2018 Experience	\$ 887,754	\$ 70,698	19
3078	1002 1003 1007 1009	Barrington COLA	2019 Assumption Change - FY23 Stagger	\$ (232,886)	\$ (20,818)	17
3078	1002 1003 1007 1009	Barrington COLA	2019 Assumption Change - FY24 Stagger	\$ (232,886)	\$ (22,589)	16
3078	1002 1003 1007 1009	Barrington COLA	2019 Experience	\$ 210,994	\$ 16,232	20
3078	1002 1003 1007 1009	Barrington COLA	2020 Experience	\$ (808,333)	\$ (64,600)	20
3078	1002 1003 1007 1009	Barrington COLA	2021 Experience	\$ (1,801,315)	\$ (149,548)	20
3079	1096	Coventry Housing	2021 Overfunded Base	\$ (156,596)	\$ (13,001)	20
3080	1496	South Kingstown Housing	2021 Overfunded Base	\$ (125,525)	\$ (10,421)	20
3081	1403	N. RI Collaborative Adm. Services	2014 Mediation Settlement	\$ 553,622	\$ 54,941	14
3081	1403	N. RI Collaborative Adm. Services	2015 Experience	\$ (84,691)	\$ (7,612)	16
3081	1403	N. RI Collaborative Adm. Services	2016 Assumption Change - FY21 Stagger	\$ 65,608	\$ 5,225	19
3081	1403	N. RI Collaborative Adm. Services	2016 Assumption Change - FY22 Stagger	\$ 70,554	\$ 5,428	20
3081	1403	N. RI Collaborative Adm. Services	2016 Assumption Change - FY23 Stagger	\$ 70,554	\$ 5,639	20
3081	1403	N. RI Collaborative Adm. Services	2016 Assumption Change - FY24 Stagger	\$ 70,554	\$ 5,858	20
3081	1403	N. RI Collaborative Adm. Services	2016 Experience	\$ 249,315	\$ 21,454	17
3081	1403	N. RI Collaborative Adm. Services	2017 Experience	\$ (17,423)	\$ (1,440)	18
3081	1403	N. RI Collaborative Adm. Services	2018 Experience	\$ 167,689	\$ 13,354	19
3081	1403	N. RI Collaborative Adm. Services	2019 Assumption Change - FY23 Stagger	\$ (19,724)	\$ (1,763)	17
3081	1403	N. RI Collaborative Adm. Services	2019 Assumption Change - FY24 Stagger	\$ (19,725)	\$ (1,913)	16
3081	1403	N. RI Collaborative Adm. Services	2019 Experience	\$ (353,629)	\$ (27,205)	20
3081	1403	N. RI Collaborative Adm. Services	2020 Experience	\$ (177,564)	\$ (14,191)	20
3081	1403	N. RI Collaborative Adm. Services	2021 Experience	\$ 311,124	\$ 25,830	20
3083	1616	West Warwick Housing	2014 Mediation Settlement	\$ 85,136	\$ 7,037	18
3083	1616	West Warwick Housing	2015 Experience	\$ 260,522	\$ 23,416	16
3083	1616	West Warwick Housing	2016 Assumption Change - FY20 Stagger	\$ 17,274	\$ 1,428	18
3083	1616	West Warwick Housing	2016 Assumption Change - FY21 Stagger	\$ 39,356	\$ 3,134	19
3083	1616	West Warwick Housing	2016 Assumption Change - FY22 Stagger	\$ 42,323	\$ 3,256	20
3083	1616	West Warwick Housing	2016 Assumption Change - FY23 Stagger	\$ 42,323	\$ 3,382	20
3083	1616	West Warwick Housing	2016 Assumption Change - FY24 Stagger	\$ 42,323	\$ 3,514	20
3083	1616	West Warwick Housing	2016 Experience	\$ 1,045	\$ 90	17
3083	1616	West Warwick Housing	2017 Experience	\$ 57,989	\$ 4,793	18
3083	1616	West Warwick Housing	2018 Experience	\$ 42,773	\$ 3,406	19
3083	1616	West Warwick Housing	2019 Assumption Change - FY23 Stagger	\$ (12,242)	\$ (1,094)	17



APPENDIX 3 (Continued)

Old Unit Number	New Unit Number	Unit	Purpose	Remaining Balance as of June 30, 2021	Fiscal Year 2024 Amortization Payment	Years Remaining Beginning with Fiscal Year 2024
3083	1616	West Warwick Housing	2019 Assumption Change - FY24 Stagger	\$ (12,241)	\$ (1,187)	16
3083	1616	West Warwick Housing	2019 Experience	\$ (337,860)	\$ (25,992)	20
3083	1616	West Warwick Housing	2020 Experience	\$ (26,136)	\$ (2,089)	20
3083	1616	West Warwick Housing	2021 Experience	\$ (79,932)	\$ (6,636)	20
3084	1476	Smithfield Housing	2021 Overfunded Base	\$ (102,530)	\$ (8,512)	20
3094	1478	Smithfield COLA	2014 Mediation Settlement	\$ 1,544,617	\$ 127,676	18
3094	1478	Smithfield COLA	2015 Experience	\$ (392,270)	\$ (35,258)	16
3094	1478	Smithfield COLA	2016 Assumption Change - FY21 Stagger	\$ 265,763	\$ 21,165	19
3094	1478	Smithfield COLA	2016 Assumption Change - FY22 Stagger	\$ 285,798	\$ 21,987	20
3094	1478	Smithfield COLA	2016 Assumption Change - FY23 Stagger	\$ 285,798	\$ 22,840	20
3094	1478	Smithfield COLA	2016 Assumption Change - FY24 Stagger	\$ 285,798	\$ 23,727	20
3094	1478	Smithfield COLA	2016 Experience	\$ (118,707)	\$ (10,215)	17
3094	1478	Smithfield COLA	2017 Experience	\$ 995,785	\$ 82,310	18
3094	1478	Smithfield COLA	2018 Experience	\$ (478,224)	\$ (38,084)	19
3094	1478	Smithfield COLA	2019 Assumption Change - FY23 Stagger	\$ (98,420)	\$ (8,798)	17
3094	1478	Smithfield COLA	2019 Assumption Change - FY24 Stagger	\$ (98,420)	\$ (9,547)	16
3094	1478	Smithfield COLA	2019 Experience	\$ 4,529	\$ 348	20
3094	1478	Smithfield COLA	2020 Experience	\$ (18,116)	\$ (1,448)	20
3094	1478	Smithfield COLA	2021 Experience	\$ (815,099)	\$ (67,671)	20
3096	1056	Central Falls Housing	2014 Mediation Settlement	\$ 799,499	\$ 66,085	18
3096	1056	Central Falls Housing	2015 Experience	\$ (30,490)	\$ (2,740)	16
3096	1056	Central Falls Housing	2016 Assumption Change - FY21 Stagger	\$ 46,966	\$ 3,740	19
3096	1056	Central Falls Housing	2016 Assumption Change - FY22 Stagger	\$ 50,507	\$ 3,886	20
3096	1056	Central Falls Housing	2016 Assumption Change - FY23 Stagger	\$ 50,507	\$ 4,036	20
3096	1056	Central Falls Housing	2016 Assumption Change - FY24 Stagger	\$ 50,507	\$ 4,193	20
3096	1056	Central Falls Housing	2016 Experience	\$ (125,259)	\$ (10,779)	17
3096	1056	Central Falls Housing	2017 Experience	\$ 479,512	\$ 39,636	18
3096	1056	Central Falls Housing	2018 Experience	\$ (52,015)	\$ (4,142)	19
3096	1056	Central Falls Housing	2019 Assumption Change - FY23 Stagger	\$ (16,840)	\$ (1,505)	17
3096	1056	Central Falls Housing	2019 Assumption Change - FY24 Stagger	\$ (16,839)	\$ (1,633)	16
3096	1056	Central Falls Housing	2019 Experience	\$ 51,435	\$ 3,957	20
3096	1056	Central Falls Housing	2020 Experience	\$ (2,182)	\$ (174)	20
3096	1056	Central Falls Housing	2021 Experience	\$ (125,205)	\$ (10,395)	20
3098	1293	Lime Rock Administrative Services	2014 Mediation Settlement	\$ 93,857	\$ 7,758	18
3098	1293	Lime Rock Administrative Services	2015 Experience	\$ 1,898	\$ 171	16
3098	1293	Lime Rock Administrative Services	2016 Assumption Change - FY21 Stagger	\$ 4,744	\$ 378	19
3098	1293	Lime Rock Administrative Services	2016 Assumption Change - FY22 Stagger	\$ 5,101	\$ 392	20
3098	1293	Lime Rock Administrative Services	2016 Assumption Change - FY23 Stagger	\$ 5,101	\$ 408	20
3098	1293	Lime Rock Administrative Services	2016 Assumption Change - FY24 Stagger	\$ 5,101	\$ 424	20
3098	1293	Lime Rock Administrative Services	2016 Experience	\$ (28,193)	\$ (2,426)	17
3098	1293	Lime Rock Administrative Services	2017 Experience	\$ 39,284	\$ 3,247	18
3098	1293	Lime Rock Administrative Services	2018 Experience	\$ (1,728)	\$ (138)	19
3098	1293	Lime Rock Administrative Services	2019 Assumption Change - FY23 Stagger	\$ (3,927)	\$ (351)	17
3098	1293	Lime Rock Administrative Services	2019 Assumption Change - FY24 Stagger	\$ (3,926)	\$ (381)	16
3098	1293	Lime Rock Administrative Services	2019 Experience	\$ (2,247)	\$ (173)	20
3098	1293	Lime Rock Administrative Services	2020 Experience	\$ (25,152)	\$ (2,010)	20
3098	1293	Lime Rock Administrative Services	2021 Experience	\$ (32,814)	\$ (2,724)	20
3099	1063	Central Falls Schools	2014 Mediation Settlement	\$ 612,362	\$ 60,770	14
3099	1063	Central Falls Schools	2015 Experience	\$ (232,711)	\$ (20,916)	16
3099	1063	Central Falls Schools	2016 Assumption Change - FY21 Stagger	\$ 251,919	\$ 20,062	19
3099	1063	Central Falls Schools	2016 Assumption Change - FY22 Stagger	\$ 270,910	\$ 20,841	20
3099	1063	Central Falls Schools	2016 Assumption Change - FY23 Stagger	\$ 270,910	\$ 21,651	20
3099	1063	Central Falls Schools	2016 Assumption Change - FY24 Stagger	\$ 270,910	\$ 22,491	20
3099	1063	Central Falls Schools	2016 Experience	\$ 402,275	\$ 34,616	17
3099	1063	Central Falls Schools	2017 Experience	\$ 169,047	\$ 13,973	18
3099	1063	Central Falls Schools	2018 Experience	\$ (880,017)	\$ (70,082)	19
3099	1063	Central Falls Schools	2019 Assumption Change - FY23 Stagger	\$ (90,612)	\$ (8,100)	17
3099	1063	Central Falls Schools	2019 Assumption Change - FY24 Stagger	\$ (90,613)	\$ (8,789)	16
3099	1063	Central Falls Schools	2019 Experience	\$ 1,000,890	\$ 76,999	20
3099	1063	Central Falls Schools	2020 Experience	\$ (139,617)	\$ (11,158)	20
3099	1063	Central Falls Schools	2021 Experience	\$ (552,999)	\$ (45,911)	20
3100	1023	Bristol/Warren Schools	2014 Mediation Settlement	\$ 5,513,121	\$ 455,707	18
3100	1023	Bristol/Warren Schools	2015 Experience	\$ (382,498)	\$ (34,379)	16
3100	1023	Bristol/Warren Schools	2016 Assumption Change - FY20 Stagger	\$ 9,488	\$ 784	18
3100	1023	Bristol/Warren Schools	2016 Assumption Change - FY21 Stagger	\$ 389,832	\$ 31,045	19
3100	1023	Bristol/Warren Schools	2016 Assumption Change - FY22 Stagger	\$ 419,220	\$ 32,251	20
3100	1023	Bristol/Warren Schools	2016 Assumption Change - FY23 Stagger	\$ 419,220	\$ 33,503	20
3100	1023	Bristol/Warren Schools	2016 Assumption Change - FY24 Stagger	\$ 419,220	\$ 34,804	20
3100	1023	Bristol/Warren Schools	2016 Experience	\$ 124,216	\$ 10,689	17
3100	1023	Bristol/Warren Schools	2017 Experience	\$ (511,200)	\$ (42,255)	18
3100	1023	Bristol/Warren Schools	2018 Experience	\$ 892,688	\$ 71,091	19
3100	1023	Bristol/Warren Schools	2019 Assumption Change - FY23 Stagger	\$ (137,238)	\$ (12,268)	17
3100	1023	Bristol/Warren Schools	2019 Assumption Change - FY24 Stagger	\$ (137,238)	\$ (13,312)	16
3100	1023	Bristol/Warren Schools	2019 Experience	\$ (99,517)	\$ (7,656)	20
3100	1023	Bristol/Warren Schools	2020 Experience	\$ (118,393)	\$ (9,462)	20
3100	1023	Bristol/Warren Schools	2021 Experience	\$ (797,601)	\$ (66,218)	20
3101	1157 1158	Town of E. Greenwich-COLA-NCE	2021 Overfunded Base	\$ (291,828)	\$ (24,228)	20
3102	1712	Harrisville Fire District (ADMIN)	2021 Overfunded Base	\$ (186,766)	\$ (15,506)	20
3103	1702	Albion Fire District (ADMIN)	2021 Overfunded Base	\$ (12,798)	\$ (1,062)	20
3150	1159	East Greenwich Fire (ADMIN)	2020 Experience	\$ 107,014	\$ 8,552	20



APPENDIX 3 (Continued)

Old Unit Number	New Unit Number	Unit	Purpose	Remaining Balance as of June 30, 2021	Fiscal Year 2024 Amortization Payment	Years Remaining Beginning with Fiscal Year 2024
3150	1159	East Greenwich Fire (ADMIN)	2021 Experience	\$ (3,399)	\$ (282)	20
1802	1802	Pascoag Fire District (ADMIN) COLA	2016 Assumption Change - FY21 Stagger	\$ 111	\$ 9	19
1802	1802	Pascoag Fire District (ADMIN) COLA	2016 Assumption Change - FY22 Stagger	\$ 120	\$ 9	20
1802	1802	Pascoag Fire District (ADMIN) COLA	2016 Assumption Change - FY23 Stagger	\$ 120	\$ 10	20
1802	1802	Pascoag Fire District (ADMIN) COLA	2016 Assumption Change - FY24 Stagger	\$ 120	\$ 10	20
1802	1802	Pascoag Fire District (ADMIN) COLA	2017 Experience	\$ 86,432	\$ 7,144	18
1802	1802	Pascoag Fire District (ADMIN) COLA	2018 Experience	\$ (3,175)	\$ (253)	19
1802	1802	Pascoag Fire District (ADMIN) COLA	2019 Experience	\$ (84,185)	\$ (6,476)	20
1802	1802	Pascoag Fire District (ADMIN) COLA	2020 Experience	\$ 11,563	\$ 924	20
1802	1802	Pascoag Fire District (ADMIN) COLA	2021 Experience	\$ 5,124	\$ 425	20
4016	1285	Johnston Fire	2016 Assumption Change - FY21 Stagger	\$ 165,182	\$ 13,155	19
4016	1285	Johnston Fire	2016 Assumption Change - FY22 Stagger	\$ 177,635	\$ 13,666	20
4016	1285	Johnston Fire	2016 Assumption Change - FY23 Stagger	\$ 177,635	\$ 14,196	20
4016	1285	Johnston Fire	2016 Assumption Change - FY24 Stagger	\$ 177,635	\$ 14,748	20
4016	1285	Johnston Fire	2017 Experience	\$ 577,040	\$ 47,697	18
4016	1285	Johnston Fire	2018 Experience	\$ (195,461)	\$ (15,566)	19
4016	1285	Johnston Fire	2019 Assumption Change - FY23 Stagger	\$ 46,189	\$ 4,129	17
4016	1285	Johnston Fire	2019 Assumption Change - FY24 Stagger	\$ 46,190	\$ 4,480	16
4016	1285	Johnston Fire	2019 Experience	\$ 1,156,077	\$ 88,937	20
4016	1285	Johnston Fire	2020 Experience	\$ (159,784)	\$ (12,770)	20
4016	1285	Johnston Fire	2021 Experience	\$ (850,470)	\$ (70,607)	20
4029	1454	Richmond Police	2014 Mediation Settlement	\$ 322,253	\$ 31,980	14
4029	1454	Richmond Police	2015 Experience	\$ (97,398)	\$ (8,754)	16
4029	1454	Richmond Police	2016 Assumption Change - FY21 Stagger	\$ 44,699	\$ 3,560	19
4029	1454	Richmond Police	2016 Assumption Change - FY22 Stagger	\$ 48,068	\$ 3,698	20
4029	1454	Richmond Police	2016 Assumption Change - FY23 Stagger	\$ 48,068	\$ 3,842	20
4029	1454	Richmond Police	2016 Assumption Change - FY24 Stagger	\$ 48,068	\$ 3,991	20
4029	1454	Richmond Police	2016 Experience	\$ (34,542)	\$ (2,972)	17
4029	1454	Richmond Police	2017 Experience	\$ 67,082	\$ 5,545	18
4029	1454	Richmond Police	2018 Experience	\$ (11,520)	\$ (917)	19
4029	1454	Richmond Police	2019 Assumption Change - FY23 Stagger	\$ 31,940	\$ 2,855	17
4029	1454	Richmond Police	2019 Assumption Change - FY24 Stagger	\$ 31,942	\$ 3,098	16
4029	1454	Richmond Police	2019 Experience	\$ (256,805)	\$ (19,756)	20
4029	1454	Richmond Police	2020 Experience	\$ 24,809	\$ 1,983	20
4029	1454	Richmond Police	2021 Experience	\$ (186,882)	\$ (15,515)	20
4031	1474	Smithfield Police	2016 Assumption Change - FY21 Stagger	\$ 229,734	\$ 18,295	19
4031	1474	Smithfield Police	2016 Assumption Change - FY22 Stagger	\$ 247,053	\$ 19,006	20
4031	1474	Smithfield Police	2016 Assumption Change - FY23 Stagger	\$ 247,053	\$ 19,744	20
4031	1474	Smithfield Police	2016 Assumption Change - FY24 Stagger	\$ 247,053	\$ 20,511	20
4031	1474	Smithfield Police	2016 Experience	\$ 287,918	\$ 24,775	17
4031	1474	Smithfield Police	2017 Experience	\$ 638,481	\$ 52,776	18
4031	1474	Smithfield Police	2018 Experience	\$ (412,759)	\$ (32,871)	19
4031	1474	Smithfield Police	2019 Assumption Change - FY23 Stagger	\$ (48,670)	\$ (4,351)	17
4031	1474	Smithfield Police	2019 Assumption Change - FY24 Stagger	\$ (48,671)	\$ (4,721)	16
4031	1474	Smithfield Police	2019 Experience	\$ 60,549	\$ 4,658	20
4031	1474	Smithfield Police	2020 Experience	\$ (83,671)	\$ (6,687)	20
4031	1474	Smithfield Police	2021 Experience	\$ (1,129,600)	\$ (93,781)	20
4042	1555	Valley Falls Fire	2014 Mediation Settlement	\$ 1,024,381	\$ 84,674	18
4042	1555	Valley Falls Fire	2015 Experience	\$ 75,477	\$ 6,784	16
4042	1555	Valley Falls Fire	2016 Assumption Change - FY21 Stagger	\$ 77,578	\$ 6,178	19
4042	1555	Valley Falls Fire	2016 Assumption Change - FY22 Stagger	\$ 83,426	\$ 6,418	20
4042	1555	Valley Falls Fire	2016 Assumption Change - FY23 Stagger	\$ 83,426	\$ 6,667	20
4042	1555	Valley Falls Fire	2016 Assumption Change - FY24 Stagger	\$ 83,426	\$ 6,926	20
4042	1555	Valley Falls Fire	2016 Experience	\$ 33,244	\$ 2,861	17
4042	1555	Valley Falls Fire	2017 Experience	\$ (23,944)	\$ (1,979)	18
4042	1555	Valley Falls Fire	2018 Experience	\$ 440,678	\$ 35,094	19
4042	1555	Valley Falls Fire	2019 Assumption Change - FY23 Stagger	\$ 16,819	\$ 1,503	17
4042	1555	Valley Falls Fire	2019 Assumption Change - FY24 Stagger	\$ 16,819	\$ 1,631	16
4042	1555	Valley Falls Fire	2019 Experience	\$ 5,721	\$ 440	20
4042	1555	Valley Falls Fire	2020 Experience	\$ (8,616)	\$ (689)	20
4042	1555	Valley Falls Fire	2021 Experience	\$ (190,361)	\$ (15,804)	20
4047	1395 1435	North Smithfield Voluntary Fire	2014 Mediation Settlement	\$ 1,292,644	\$ 128,280	14
4047	1395 1435	North Smithfield Voluntary Fire	2015 Experience	\$ (252,557)	\$ (22,700)	16
4047	1395 1435	North Smithfield Voluntary Fire	2016 Assumption Change - FY21 Stagger	\$ 157,763	\$ 12,564	19
4047	1395 1435	North Smithfield Voluntary Fire	2016 Assumption Change - FY22 Stagger	\$ 169,656	\$ 13,052	20
4047	1395 1435	North Smithfield Voluntary Fire	2016 Assumption Change - FY23 Stagger	\$ 169,656	\$ 13,559	20
4047	1395 1435	North Smithfield Voluntary Fire	2016 Assumption Change - FY24 Stagger	\$ 169,656	\$ 14,085	20
4047	1395 1435	North Smithfield Voluntary Fire	2016 Experience	\$ 43,198	\$ 3,717	17
4047	1395 1435	North Smithfield Voluntary Fire	2017 Experience	\$ (8,894)	\$ (735)	18
4047	1395 1435	North Smithfield Voluntary Fire	2018 Experience	\$ (150,105)	\$ (11,954)	19
4047	1395 1435	North Smithfield Voluntary Fire	2019 Assumption Change - FY23 Stagger	\$ 1,166	\$ 104	17
4047	1395 1435	North Smithfield Voluntary Fire	2019 Assumption Change - FY24 Stagger	\$ 1,166	\$ 113	16
4047	1395 1435	North Smithfield Voluntary Fire	2019 Experience	\$ 147,375	\$ 11,338	20
4047	1395 1435	North Smithfield Voluntary Fire	2020 Experience	\$ (262,208)	\$ (20,955)	20
4047	1395 1435	North Smithfield Voluntary Fire	2021 Experience	\$ (122,005)	\$ (10,129)	20
4050	1155	East Greenwich Fire	2014 Mediation Settlement	\$ 6,383,230	\$ 633,463	14
4050	1155	East Greenwich Fire	2015 Experience	\$ 75,946	\$ 6,826	16
4050	1155	East Greenwich Fire	2016 Assumption Change - FY21 Stagger	\$ 366,392	\$ 29,178	19
4050	1155	East Greenwich Fire	2016 Assumption Change - FY22 Stagger	\$ 394,013	\$ 30,312	20
4050	1155	East Greenwich Fire	2016 Assumption Change - FY23 Stagger	\$ 394,013	\$ 31,489	20



APPENDIX 3 (Continued)

Old Unit Number	New Unit Number	Unit	Purpose	Remaining Balance as of June 30, 2021	Fiscal Year 2024 Amortization Payment	Years Remaining Beginning with Fiscal Year 2024
4050	1155	East Greenwich Fire	2016 Assumption Change - FY24 Stagger	\$ 394,013	\$ 32,712	20
4050	1155	East Greenwich Fire	2016 Experience	\$ 540,426	\$ 46,504	17
4050	1155	East Greenwich Fire	2017 Experience	\$ (479,554)	\$ (39,639)	18
4050	1155	East Greenwich Fire	2018 Experience	\$ 6,973	\$ 555	19
4050	1155	East Greenwich Fire	2019 Assumption Change - FY23 Stagger	\$ 55,959	\$ 5,002	17
4050	1155	East Greenwich Fire	2019 Assumption Change - FY24 Stagger	\$ 55,960	\$ 5,428	16
4050	1155	East Greenwich Fire	2019 Experience	\$ (379,906)	\$ (29,226)	20
4050	1155	East Greenwich Fire	2020 Experience	\$ 440,582	\$ 35,210	20
4050	1155	East Greenwich Fire	2021 Experience	\$ (873,143)	\$ (72,490)	20
4054	1154	East Greenwich Police	2014 Mediation Settlement	\$ 5,560,558	\$ 551,822	14
4054	1154	East Greenwich Police	2015 Experience	\$ 14,714	\$ 1,323	16
4054	1154	East Greenwich Police	2016 Assumption Change - FY21 Stagger	\$ 382,268	\$ 30,443	19
4054	1154	East Greenwich Police	2016 Assumption Change - FY22 Stagger	\$ 411,086	\$ 31,625	20
4054	1154	East Greenwich Police	2016 Assumption Change - FY23 Stagger	\$ 411,086	\$ 32,853	20
4054	1154	East Greenwich Police	2016 Assumption Change - FY24 Stagger	\$ 411,086	\$ 34,129	20
4054	1154	East Greenwich Police	2016 Experience	\$ 237,019	\$ 20,396	17
4054	1154	East Greenwich Police	2017 Experience	\$ (232,329)	\$ (19,204)	18
4054	1154	East Greenwich Police	2018 Experience	\$ (49,015)	\$ (3,903)	19
4054	1154	East Greenwich Police	2019 Assumption Change - FY23 Stagger	\$ (31,576)	\$ (2,823)	17
4054	1154	East Greenwich Police	2019 Assumption Change - FY24 Stagger	\$ (31,576)	\$ (3,063)	16
4054	1154	East Greenwich Police	2019 Experience	\$ (581,222)	\$ (44,714)	20
4054	1154	East Greenwich Police	2020 Experience	\$ (475,698)	\$ (38,017)	20
4054	1154	East Greenwich Police	2021 Experience	\$ 81,268	\$ 6,747	20
4055	1375	North Kingstown Fire	2014 Mediation Settlement	\$ 10,702,008	\$ 1,062,053	14
4055	1375	North Kingstown Fire	2015 Experience	\$ (724,320)	\$ (65,103)	16
4055	1375	North Kingstown Fire	2016 Assumption Change - FY21 Stagger	\$ 764,059	\$ 60,848	19
4055	1375	North Kingstown Fire	2016 Assumption Change - FY22 Stagger	\$ 821,659	\$ 63,211	20
4055	1375	North Kingstown Fire	2016 Assumption Change - FY23 Stagger	\$ 821,659	\$ 65,665	20
4055	1375	North Kingstown Fire	2016 Assumption Change - FY24 Stagger	\$ 821,659	\$ 68,215	20
4055	1375	North Kingstown Fire	2016 Experience	\$ 1,635,693	\$ 140,751	17
4055	1375	North Kingstown Fire	2017 Experience	\$ 992,648	\$ 82,051	18
4055	1375	North Kingstown Fire	2018 Experience	\$ (1,733,476)	\$ (138,049)	19
4055	1375	North Kingstown Fire	2019 Assumption Change - FY23 Stagger	\$ (41,877)	\$ (3,743)	17
4055	1375	North Kingstown Fire	2019 Assumption Change - FY24 Stagger	\$ (41,877)	\$ (4,062)	16
4055	1375	North Kingstown Fire	2019 Experience	\$ (795,158)	\$ (61,172)	20
4055	1375	North Kingstown Fire	2020 Experience	\$ (135,757)	\$ (10,849)	20
4055	1375	North Kingstown Fire	2021 Experience	\$ (1,373,363)	\$ (114,019)	20
4056	1374	North Kingstown Police	2014 Mediation Settlement	\$ 7,771,804	\$ 771,263	14
4056	1374	North Kingstown Police	2015 Experience	\$ (172,127)	\$ (15,471)	16
4056	1374	North Kingstown Police	2016 Assumption Change - FY21 Stagger	\$ 497,764	\$ 39,641	19
4056	1374	North Kingstown Police	2016 Assumption Change - FY22 Stagger	\$ 535,288	\$ 41,180	20
4056	1374	North Kingstown Police	2016 Assumption Change - FY23 Stagger	\$ 535,288	\$ 42,779	20
4056	1374	North Kingstown Police	2016 Assumption Change - FY24 Stagger	\$ 535,288	\$ 44,441	20
4056	1374	North Kingstown Police	2016 Experience	\$ 313,921	\$ 27,013	17
4056	1374	North Kingstown Police	2017 Experience	\$ 1,080,853	\$ 89,342	18
4056	1374	North Kingstown Police	2018 Experience	\$ (671,691)	\$ (53,492)	19
4056	1374	North Kingstown Police	2019 Assumption Change - FY23 Stagger	\$ (63,506)	\$ (5,677)	17
4056	1374	North Kingstown Police	2019 Assumption Change - FY24 Stagger	\$ (63,506)	\$ (6,160)	16
4056	1374	North Kingstown Police	2019 Experience	\$ (796,741)	\$ (61,294)	20
4056	1374	North Kingstown Police	2020 Experience	\$ 203,296	\$ 16,247	20
4056	1374	North Kingstown Police	2021 Experience	\$ (1,091,004)	\$ (90,577)	20
4058	1385	North Providence Fire	2014 Mediation Settlement	\$ 11,365,411	\$ 939,449	18
4058	1385	North Providence Fire	2015 Experience	\$ 670,433	\$ 60,259	16
4058	1385	North Providence Fire	2016 Assumption Change - FY21 Stagger	\$ 847,978	\$ 67,531	19
4058	1385	North Providence Fire	2016 Assumption Change - FY22 Stagger	\$ 911,904	\$ 70,153	20
4058	1385	North Providence Fire	2016 Assumption Change - FY23 Stagger	\$ 911,904	\$ 72,878	20
4058	1385	North Providence Fire	2016 Assumption Change - FY24 Stagger	\$ 911,904	\$ 75,708	20
4058	1385	North Providence Fire	2016 Experience	\$ 2,139,091	\$ 184,069	17
4058	1385	North Providence Fire	2017 Experience	\$ (425,540)	\$ (35,175)	18
4058	1385	North Providence Fire	2018 Experience	\$ (1,092,048)	\$ (86,968)	19
4058	1385	North Providence Fire	2019 Assumption Change - FY23 Stagger	\$ 380,857	\$ 34,045	17
4058	1385	North Providence Fire	2019 Assumption Change - FY24 Stagger	\$ 380,856	\$ 36,942	16
4058	1385	North Providence Fire	2019 Experience	\$ 297,358	\$ 22,876	20
4058	1385	North Providence Fire	2020 Experience	\$ (962)	\$ (77)	20
4058	1385	North Providence Fire	2021 Experience	\$ (1,073,649)	\$ (89,136)	20
4059	1008	Barrington Fire (25)	2014 Mediation Settlement	\$ 188,324	\$ 18,689	14
4059	1008	Barrington Fire (25)	2015 Experience	\$ (54,290)	\$ (4,880)	16
4059	1008	Barrington Fire (25)	2016 Assumption Change - FY21 Stagger	\$ 81,337	\$ 6,477	19
4059	1008	Barrington Fire (25)	2016 Assumption Change - FY22 Stagger	\$ 87,469	\$ 6,729	20
4059	1008	Barrington Fire (25)	2016 Assumption Change - FY23 Stagger	\$ 87,469	\$ 6,990	20
4059	1008	Barrington Fire (25)	2016 Assumption Change - FY24 Stagger	\$ 87,469	\$ 7,262	20
4059	1008	Barrington Fire (25)	2016 Experience	\$ (5,957)	\$ (513)	17
4059	1008	Barrington Fire (25)	2017 Experience	\$ 70,484	\$ 5,826	18
4059	1008	Barrington Fire (25)	2018 Experience	\$ (25,782)	\$ (2,053)	19
4059	1008	Barrington Fire (25)	2019 Assumption Change - FY23 Stagger	\$ (15,895)	\$ (1,421)	17
4059	1008	Barrington Fire (25)	2019 Assumption Change - FY24 Stagger	\$ (15,895)	\$ (1,542)	16
4059	1008	Barrington Fire (25)	2019 Experience	\$ (47,704)	\$ (3,670)	20
4059	1008	Barrington Fire (25)	2020 Experience	\$ 360,381	\$ 28,801	20
4059	1008	Barrington Fire (25)	2021 Experience	\$ (448,435)	\$ (37,230)	20
4060	1004	Barrington Police	2014 Mediation Settlement	\$ 4,712,314	\$ 467,644	14



APPENDIX 3 (Continued)

Old Unit Number	New Unit Number	Unit	Purpose	Remaining Balance as of June 30, 2021	Fiscal Year 2024 Amortization Payment	Years Remaining Beginning with Fiscal Year 2024
4060	1004	Barrington Police	2015 Experience	\$ 17,700	\$ 1,591	16
4060	1004	Barrington Police	2016 Assumption Change - FY21 Stagger	\$ 236,317	\$ 18,820	19
4060	1004	Barrington Police	2016 Assumption Change - FY22 Stagger	\$ 254,133	\$ 19,551	20
4060	1004	Barrington Police	2016 Assumption Change - FY23 Stagger	\$ 254,133	\$ 20,310	20
4060	1004	Barrington Police	2016 Assumption Change - FY24 Stagger	\$ 254,133	\$ 21,099	20
4060	1004	Barrington Police	2016 Experience	\$ 352,797	\$ 30,358	17
4060	1004	Barrington Police	2017 Experience	\$ (66,651)	\$ (5,509)	18
4060	1004	Barrington Police	2018 Experience	\$ (255,332)	\$ (20,334)	19
4060	1004	Barrington Police	2019 Assumption Change - FY23 Stagger	\$ (53,871)	\$ (4,816)	17
4060	1004	Barrington Police	2019 Assumption Change - FY24 Stagger	\$ (53,870)	\$ (5,225)	16
4060	1004	Barrington Police	2019 Experience	\$ (327,052)	\$ (25,160)	20
4060	1004	Barrington Police	2020 Experience	\$ (519,806)	\$ (41,542)	20
4060	1004	Barrington Police	2021 Experience	\$ (555,555)	\$ (46,123)	20
4061	1005	Barrington Fire (20)	2014 Mediation Settlement	\$ 2,837,337	\$ 281,573	14
4061	1005	Barrington Fire (20)	2015 Experience	\$ 205,989	\$ 18,514	16
4061	1005	Barrington Fire (20)	2016 Assumption Change - FY20 Stagger	\$ 158,893	\$ 13,134	18
4061	1005	Barrington Fire (20)	2016 Assumption Change - FY21 Stagger	\$ 155,619	\$ 12,393	19
4061	1005	Barrington Fire (20)	2016 Assumption Change - FY22 Stagger	\$ 167,350	\$ 12,874	20
4061	1005	Barrington Fire (20)	2016 Assumption Change - FY23 Stagger	\$ 167,350	\$ 13,374	20
4061	1005	Barrington Fire (20)	2016 Assumption Change - FY24 Stagger	\$ 167,350	\$ 13,894	20
4061	1005	Barrington Fire (20)	2016 Experience	\$ (52,972)	\$ (4,558)	17
4061	1005	Barrington Fire (20)	2017 Experience	\$ 94,799	\$ 7,836	18
4061	1005	Barrington Fire (20)	2018 Experience	\$ 1,060	\$ 84	19
4061	1005	Barrington Fire (20)	2019 Assumption Change - FY23 Stagger	\$ 99,951	\$ 8,935	17
4061	1005	Barrington Fire (20)	2019 Assumption Change - FY24 Stagger	\$ 99,951	\$ 9,695	16
4061	1005	Barrington Fire (20)	2019 Experience	\$ (184,882)	\$ (14,223)	20
4061	1005	Barrington Fire (20)	2020 Experience	\$ 5,401	\$ 432	20
4061	1005	Barrington Fire (20)	2021 Experience	\$ (379,103)	\$ (31,474)	20
4062	1564 1565	Warren Police & Fire	2014 Mediation Settlement	\$ 4,420,498	\$ 365,392	18
4062	1564 1565	Warren Police & Fire	2015 Experience	\$ (293,630)	\$ (26,392)	16
4062	1564 1565	Warren Police & Fire	2016 Assumption Change - FY21 Stagger	\$ 263,968	\$ 21,022	19
4062	1564 1565	Warren Police & Fire	2016 Assumption Change - FY22 Stagger	\$ 283,867	\$ 21,838	20
4062	1564 1565	Warren Police & Fire	2016 Assumption Change - FY23 Stagger	\$ 283,867	\$ 22,686	20
4062	1564 1565	Warren Police & Fire	2016 Assumption Change - FY24 Stagger	\$ 283,867	\$ 23,567	20
4062	1564 1565	Warren Police & Fire	2016 Experience	\$ (893,245)	\$ (76,864)	17
4062	1564 1565	Warren Police & Fire	2017 Experience	\$ 912,892	\$ 75,458	18
4062	1564 1565	Warren Police & Fire	2018 Experience	\$ (183,422)	\$ (14,607)	19
4062	1564 1565	Warren Police & Fire	2019 Assumption Change - FY23 Stagger	\$ 50,938	\$ 4,553	17
4062	1564 1565	Warren Police & Fire	2019 Assumption Change - FY24 Stagger	\$ 50,938	\$ 4,941	16
4062	1564 1565	Warren Police & Fire	2019 Experience	\$ (6,227)	\$ (479)	20
4062	1564 1565	Warren Police & Fire	2020 Experience	\$ (148,153)	\$ (11,840)	20
4062	1564 1565	Warren Police & Fire	2021 Experience	\$ (684,767)	\$ (56,851)	20
4063	1494	South Kingstown Police	2014 Mediation Settlement	\$ 7,033,434	\$ 697,989	14
4063	1494	South Kingstown Police	2015 Experience	\$ (1,357,189)	\$ (121,985)	16
4063	1494	South Kingstown Police	2016 Assumption Change - FY21 Stagger	\$ 554,573	\$ 44,165	19
4063	1494	South Kingstown Police	2016 Assumption Change - FY22 Stagger	\$ 596,381	\$ 45,880	20
4063	1494	South Kingstown Police	2016 Assumption Change - FY23 Stagger	\$ 596,381	\$ 47,662	20
4063	1494	South Kingstown Police	2016 Assumption Change - FY24 Stagger	\$ 596,381	\$ 49,513	20
4063	1494	South Kingstown Police	2016 Experience	\$ (208,966)	\$ (17,982)	17
4063	1494	South Kingstown Police	2017 Experience	\$ 1,467,193	\$ 121,276	18
4063	1494	South Kingstown Police	2018 Experience	\$ (101,907)	\$ (8,116)	19
4063	1494	South Kingstown Police	2019 Assumption Change - FY23 Stagger	\$ 311,572	\$ 27,852	17
4063	1494	South Kingstown Police	2019 Assumption Change - FY24 Stagger	\$ 311,573	\$ 30,222	16
4063	1494	South Kingstown Police	2019 Experience	\$ (1,167,289)	\$ (89,800)	20
4063	1494	South Kingstown Police	2020 Experience	\$ 283,289	\$ 22,640	20
4063	1494	South Kingstown Police	2021 Experience	\$ (1,156,856)	\$ (96,044)	20
4073	1464	Scituate Police	2021 Overfunded Base	\$ (263,728)	\$ (21,895)	20
4076	1394	North Smithfield Police	2014 Mediation Settlement	\$ 2,693,434	\$ 267,293	14
4076	1394	North Smithfield Police	2015 Experience	\$ (110,614)	\$ (9,942)	16
4076	1394	North Smithfield Police	2016 Assumption Change - FY21 Stagger	\$ 221,517	\$ 17,641	19
4076	1394	North Smithfield Police	2016 Assumption Change - FY22 Stagger	\$ 238,217	\$ 18,326	20
4076	1394	North Smithfield Police	2016 Assumption Change - FY23 Stagger	\$ 238,217	\$ 19,038	20
4076	1394	North Smithfield Police	2016 Assumption Change - FY24 Stagger	\$ 238,217	\$ 19,777	20
4076	1394	North Smithfield Police	2016 Experience	\$ 89,429	\$ 7,695	17
4076	1394	North Smithfield Police	2017 Experience	\$ 109,510	\$ 9,052	18
4076	1394	North Smithfield Police	2018 Experience	\$ (86,595)	\$ (6,896)	19
4076	1394	North Smithfield Police	2019 Assumption Change - FY23 Stagger	\$ 50,842	\$ 4,545	17
4076	1394	North Smithfield Police	2019 Assumption Change - FY24 Stagger	\$ 50,843	\$ 4,932	16
4076	1394	North Smithfield Police	2019 Experience	\$ (293,466)	\$ (22,576)	20
4076	1394	North Smithfield Police	2020 Experience	\$ (37,503)	\$ (2,997)	20
4076	1394	North Smithfield Police	2021 Experience	\$ (599,298)	\$ (49,755)	20
4077	1534	Tiverton Fire	2014 Mediation Settlement	\$ 1,745,627	\$ 173,234	14
4077	1534	Tiverton Fire	2015 Experience	\$ (201,739)	\$ (18,132)	16
4077	1534	Tiverton Fire	2016 Assumption Change - FY21 Stagger	\$ 250,865	\$ 19,978	19
4077	1534	Tiverton Fire	2016 Assumption Change - FY22 Stagger	\$ 269,777	\$ 20,754	20
4077	1534	Tiverton Fire	2016 Assumption Change - FY23 Stagger	\$ 269,777	\$ 21,560	20
4077	1534	Tiverton Fire	2016 Assumption Change - FY24 Stagger	\$ 269,777	\$ 22,397	20
4077	1534	Tiverton Fire	2016 Experience	\$ 1,350,628	\$ 116,222	17
4077	1534	Tiverton Fire	2017 Experience	\$ (977)	\$ (81)	18
4077	1534	Tiverton Fire	2018 Experience	\$ 9,861	\$ 785	19



APPENDIX 3 (Continued)

Old Unit					Remaining Balance	Fiscal Year 2024	Years Remaining
Number	New Unit Number	Unit	Purpose	as of June 30, 2021	Amortization Payment	Beginning with Fiscal Year 2024	
4077	1534	Tiverton Fire	2019 Assumption Change - FY23 Stagger	\$ 105,430	\$ 9,425		17
4077	1534	Tiverton Fire	2019 Assumption Change - FY24 Stagger	\$ 105,429	\$ 10,226		16
4077	1534	Tiverton Fire	2019 Experience	\$ 27,550	\$ 2,119		20
4077	1534	Tiverton Fire	2020 Experience	\$ (625,886)	\$ (50,020)		20
4077	1534	Tiverton Fire	2021 Experience	\$ (273,077)	\$ (22,671)		20
4082	1194	Foster Police	2014 Mediation Settlement	\$ 872,161	\$ 86,552		14
4082	1194	Foster Police	2015 Experience	\$ (89,560)	\$ (8,050)		16
4082	1194	Foster Police	2016 Assumption Change - FY21 Stagger	\$ 74,293	\$ 5,917		19
4082	1194	Foster Police	2016 Assumption Change - FY22 Stagger	\$ 79,894	\$ 6,146		20
4082	1194	Foster Police	2016 Assumption Change - FY23 Stagger	\$ 79,894	\$ 6,385		20
4082	1194	Foster Police	2016 Assumption Change - FY24 Stagger	\$ 79,894	\$ 6,633		20
4082	1194	Foster Police	2016 Experience	\$ 500,869	\$ 43,100		17
4082	1194	Foster Police	2017 Experience	\$ (55,382)	\$ (4,578)		18
4082	1194	Foster Police	2018 Experience	\$ (193,063)	\$ (15,375)		19
4082	1194	Foster Police	2019 Assumption Change - FY23 Stagger	\$ 3,977	\$ 356		17
4082	1194	Foster Police	2019 Assumption Change - FY24 Stagger	\$ 3,979	\$ 386		16
4082	1194	Foster Police	2019 Experience	\$ (108,013)	\$ (8,309)		20
4082	1194	Foster Police	2020 Experience	\$ (129,165)	\$ (10,323)		20
4082	1194	Foster Police	2021 Experience	\$ (111,537)	\$ (9,260)		20
4085	1634	Woonsocket Police	2014 Mediation Settlement	\$ 14,613,677	\$ 1,450,242		14
4085	1634	Woonsocket Police	2015 Experience	\$ (1,020,152)	\$ (91,692)		16
4085	1634	Woonsocket Police	2016 Assumption Change - FY21 Stagger	\$ 915,441	\$ 72,903		19
4085	1634	Woonsocket Police	2016 Assumption Change - FY22 Stagger	\$ 984,454	\$ 75,734		20
4085	1634	Woonsocket Police	2016 Assumption Change - FY23 Stagger	\$ 984,454	\$ 78,676		20
4085	1634	Woonsocket Police	2016 Assumption Change - FY24 Stagger	\$ 984,454	\$ 81,731		20
4085	1634	Woonsocket Police	2016 Experience	\$ 1,376,835	\$ 118,477		17
4085	1634	Woonsocket Police	2017 Experience	\$ (141,093)	\$ (11,663)		18
4085	1634	Woonsocket Police	2018 Experience	\$ 3,115	\$ 248		19
4085	1634	Woonsocket Police	2019 Assumption Change - FY23 Stagger	\$ 277,942	\$ 24,846		17
4085	1634	Woonsocket Police	2019 Assumption Change - FY24 Stagger	\$ 277,943	\$ 26,960		16
4085	1634	Woonsocket Police	2019 Experience	\$ (1,236,685)	\$ (95,139)		20
4085	1634	Woonsocket Police	2020 Experience	\$ (413,914)	\$ (33,079)		20
4085	1634	Woonsocket Police	2021 Experience	\$ (1,613,635)	\$ (133,967)		20
4086	1084	Charlestown Police	2014 Mediation Settlement	\$ 3,120,990	\$ 309,723		14
4086	1084	Charlestown Police	2015 Experience	\$ (188,558)	\$ (16,948)		16
4086	1084	Charlestown Police	2016 Assumption Change - FY21 Stagger	\$ 237,846	\$ 18,941		19
4086	1084	Charlestown Police	2016 Assumption Change - FY22 Stagger	\$ 255,776	\$ 19,677		20
4086	1084	Charlestown Police	2016 Assumption Change - FY23 Stagger	\$ 255,776	\$ 20,441		20
4086	1084	Charlestown Police	2016 Assumption Change - FY24 Stagger	\$ 255,776	\$ 21,235		20
4086	1084	Charlestown Police	2016 Experience	\$ 452,680	\$ 38,953		17
4086	1084	Charlestown Police	2017 Experience	\$ 209,534	\$ 17,320		18
4086	1084	Charlestown Police	2018 Experience	\$ 422,254	\$ 33,627		19
4086	1084	Charlestown Police	2019 Assumption Change - FY23 Stagger	\$ 108,028	\$ 9,657		17
4086	1084	Charlestown Police	2019 Assumption Change - FY24 Stagger	\$ 108,028	\$ 10,478		16
4086	1084	Charlestown Police	2019 Experience	\$ (162,489)	\$ (12,500)		20
4086	1084	Charlestown Police	2020 Experience	\$ 448,627	\$ 35,853		20
4086	1084	Charlestown Police	2021 Experience	\$ (1,774,895)	\$ (147,355)		20
4087	1264	Hopkinton Police	2014 Mediation Settlement	\$ 2,737,702	\$ 271,686		14
4087	1264	Hopkinton Police	2015 Experience	\$ (55,659)	\$ (5,003)		16
4087	1264	Hopkinton Police	2016 Assumption Change - FY21 Stagger	\$ 137,854	\$ 10,978		19
4087	1264	Hopkinton Police	2016 Assumption Change - FY22 Stagger	\$ 148,246	\$ 11,405		20
4087	1264	Hopkinton Police	2016 Assumption Change - FY23 Stagger	\$ 148,246	\$ 11,848		20
4087	1264	Hopkinton Police	2016 Assumption Change - FY24 Stagger	\$ 148,246	\$ 12,308		20
4087	1264	Hopkinton Police	2016 Experience	\$ (155,279)	\$ (13,362)		17
4087	1264	Hopkinton Police	2017 Experience	\$ 99,245	\$ 8,203		18
4087	1264	Hopkinton Police	2018 Experience	\$ 129,578	\$ 10,319		19
4087	1264	Hopkinton Police	2019 Assumption Change - FY23 Stagger	\$ (5,853)	\$ (523)		17
4087	1264	Hopkinton Police	2019 Assumption Change - FY24 Stagger	\$ (5,854)	\$ (568)		16
4087	1264	Hopkinton Police	2019 Experience	\$ (101,737)	\$ (7,827)		20
4087	1264	Hopkinton Police	2020 Experience	\$ (111,443)	\$ (8,906)		20
4087	1264	Hopkinton Police	2021 Experience	\$ (468,603)	\$ (38,904)		20
4088	1214	Glocester Police	2014 Mediation Settlement	\$ 1,149,858	\$ 114,110		14
4088	1214	Glocester Police	2015 Experience	\$ 124,317	\$ 11,174		16
4088	1214	Glocester Police	2016 Assumption Change - FY21 Stagger	\$ 123,785	\$ 9,858		19
4088	1214	Glocester Police	2016 Assumption Change - FY22 Stagger	\$ 133,117	\$ 10,241		20
4088	1214	Glocester Police	2016 Assumption Change - FY23 Stagger	\$ 133,117	\$ 10,638		20
4088	1214	Glocester Police	2016 Assumption Change - FY24 Stagger	\$ 133,117	\$ 11,052		20
4088	1214	Glocester Police	2016 Experience	\$ 219,276	\$ 18,869		17
4088	1214	Glocester Police	2017 Experience	\$ 180,403	\$ 14,912		18
4088	1214	Glocester Police	2018 Experience	\$ 134,700	\$ 10,727		19
4088	1214	Glocester Police	2019 Assumption Change - FY23 Stagger	\$ 12,262	\$ 1,096		17
4088	1214	Glocester Police	2019 Assumption Change - FY24 Stagger	\$ 12,262	\$ 1,189		16
4088	1214	Glocester Police	2019 Experience	\$ (93,596)	\$ (7,200)		20
4088	1214	Glocester Police	2020 Experience	\$ (134,166)	\$ (10,722)		20
4088	1214	Glocester Police	2021 Experience	\$ (188,621)	\$ (15,660)		20
4089	1604	West Greenwich Police/Rescue	2014 Mediation Settlement	\$ 1,459,079	\$ 120,605		18
4089	1604	West Greenwich Police/Rescue	2015 Experience	\$ (141,537)	\$ (12,722)		16
4089	1604	West Greenwich Police/Rescue	2016 Assumption Change - FY21 Stagger	\$ 99,157	\$ 7,897		19
4089	1604	West Greenwich Police/Rescue	2016 Assumption Change - FY22 Stagger	\$ 106,632	\$ 8,203		20
4089	1604	West Greenwich Police/Rescue	2016 Assumption Change - FY23 Stagger	\$ 106,632	\$ 8,522		20



APPENDIX 3 (Continued)

Old Unit Number	New Unit Number	Unit	Purpose	Remaining Balance as of June 30, 2021	Fiscal Year 2024 Amortization Payment	Years Remaining Beginning with Fiscal Year 2024
4089	1604	West Greenwich Police/Rescue	2016 Assumption Change - FY24 Stagger	\$ 106,632	\$ 8,853	20
4089	1604	West Greenwich Police/Rescue	2016 Experience	\$ (27,735)	\$ (2,387)	17
4089	1604	West Greenwich Police/Rescue	2017 Experience	\$ 34,898	\$ 2,885	18
4089	1604	West Greenwich Police/Rescue	2018 Experience	\$ 399,820	\$ 31,841	19
4089	1604	West Greenwich Police/Rescue	2019 Assumption Change - FY23 Stagger	\$ 46,706	\$ 4,175	17
4089	1604	West Greenwich Police/Rescue	2019 Assumption Change - FY24 Stagger	\$ 46,705	\$ 4,530	16
4089	1604	West Greenwich Police/Rescue	2019 Experience	\$ (144,568)	\$ (11,122)	20
4089	1604	West Greenwich Police/Rescue	2020 Experience	\$ (329,645)	\$ (26,345)	20
4089	1604	West Greenwich Police/Rescue	2021 Experience	\$ (270,440)	\$ (22,452)	20
4090	1034	Burrillville Police	2014 Mediation Settlement	\$ 1,924,612	\$ 190,996	14
4090	1034	Burrillville Police	2015 Experience	\$ (364,893)	\$ (32,797)	16
4090	1034	Burrillville Police	2016 Assumption Change - FY21 Stagger	\$ 216,977	\$ 17,279	19
4090	1034	Burrillville Police	2016 Assumption Change - FY22 Stagger	\$ 233,334	\$ 17,950	20
4090	1034	Burrillville Police	2016 Assumption Change - FY23 Stagger	\$ 233,334	\$ 18,648	20
4090	1034	Burrillville Police	2016 Assumption Change - FY24 Stagger	\$ 233,334	\$ 19,372	20
4090	1034	Burrillville Police	2016 Experience	\$ 523,899	\$ 45,082	17
4090	1034	Burrillville Police	2017 Experience	\$ (126,612)	\$ (10,466)	18
4090	1034	Burrillville Police	2018 Experience	\$ 72,625	\$ 5,784	19
4090	1034	Burrillville Police	2019 Assumption Change - FY23 Stagger	\$ (29,985)	\$ (2,680)	17
4090	1034	Burrillville Police	2019 Assumption Change - FY24 Stagger	\$ (29,986)	\$ (2,909)	16
4090	1034	Burrillville Police	2019 Experience	\$ (300,968)	\$ (23,154)	20
4090	1034	Burrillville Police	2020 Experience	\$ (188,687)	\$ (15,080)	20
4090	1034	Burrillville Police	2021 Experience	\$ (336,145)	\$ (27,907)	20
4091	1148	Cumberland Rescue	2016 Assumption Change - FY21 Stagger	\$ 110,564	\$ 8,805	19
4091	1148	Cumberland Rescue	2016 Assumption Change - FY22 Stagger	\$ 118,899	\$ 9,147	20
4091	1148	Cumberland Rescue	2016 Assumption Change - FY23 Stagger	\$ 118,899	\$ 9,502	20
4091	1148	Cumberland Rescue	2016 Assumption Change - FY24 Stagger	\$ 118,899	\$ 9,871	20
4091	1148	Cumberland Rescue	2016 Experience	\$ 21,459	\$ 1,847	17
4091	1148	Cumberland Rescue	2017 Experience	\$ (421,469)	\$ (34,838)	18
4091	1148	Cumberland Rescue	2018 Experience	\$ 408,417	\$ 32,525	19
4091	1148	Cumberland Rescue	2019 Assumption Change - FY23 Stagger	\$ (2,792)	\$ (250)	17
4091	1148	Cumberland Rescue	2019 Assumption Change - FY24 Stagger	\$ (2,791)	\$ (271)	16
4091	1148	Cumberland Rescue	2019 Experience	\$ 211,817	\$ 16,295	20
4091	1148	Cumberland Rescue	2020 Experience	\$ (191,521)	\$ (15,306)	20
4091	1148	Cumberland Rescue	2021 Experience	\$ (353,442)	\$ (29,343)	20
4093	1635	Woonsocket Fire	2014 Mediation Settlement	\$ 2,440,540	\$ 242,196	14
4093	1635	Woonsocket Fire	2015 Experience	\$ (1,588,501)	\$ (142,776)	16
4093	1635	Woonsocket Fire	2016 Assumption Change - FY21 Stagger	\$ 772,735	\$ 61,539	19
4093	1635	Woonsocket Fire	2016 Assumption Change - FY22 Stagger	\$ 830,989	\$ 63,928	20
4093	1635	Woonsocket Fire	2016 Assumption Change - FY23 Stagger	\$ 830,989	\$ 66,411	20
4093	1635	Woonsocket Fire	2016 Assumption Change - FY24 Stagger	\$ 830,989	\$ 68,990	20
4093	1635	Woonsocket Fire	2016 Experience	\$ 1,489,181	\$ 128,144	17
4093	1635	Woonsocket Fire	2017 Experience	\$ 268,573	\$ 22,200	18
4093	1635	Woonsocket Fire	2018 Experience	\$ (978,760)	\$ (77,946)	19
4093	1635	Woonsocket Fire	2019 Assumption Change - FY23 Stagger	\$ 61,939	\$ 5,537	17
4093	1635	Woonsocket Fire	2019 Assumption Change - FY24 Stagger	\$ 61,939	\$ 6,008	16
4093	1635	Woonsocket Fire	2019 Experience	\$ 637,107	\$ 49,013	20
4093	1635	Woonsocket Fire	2020 Experience	\$ (344,634)	\$ (27,542)	20
4093	1635	Woonsocket Fire	2021 Experience	\$ (1,237,658)	\$ (102,752)	20
4094	1015	Bristol Fire	2021 Overfunded Base	\$ (30,668)	\$ (2,546)	20
4096	1014	Bristol Police	2021 Overfunded Base	\$ (1,063,721)	\$ (88,312)	20
4098	1095	Coventry Fire	2014 Mediation Settlement	\$ 2,157,316	\$ 178,321	18
4098	1095	Coventry Fire	2015 Experience	\$ (171,162)	\$ (15,384)	16
4098	1095	Coventry Fire	2016 Assumption Change - FY21 Stagger	\$ 94,042	\$ 7,489	19
4098	1095	Coventry Fire	2016 Assumption Change - FY22 Stagger	\$ 101,131	\$ 7,780	20
4098	1095	Coventry Fire	2016 Assumption Change - FY23 Stagger	\$ 101,131	\$ 8,082	20
4098	1095	Coventry Fire	2016 Assumption Change - FY24 Stagger	\$ 101,131	\$ 8,396	20
4098	1095	Coventry Fire	2016 Experience	\$ (658,969)	\$ (56,704)	17
4098	1095	Coventry Fire	2017 Experience	\$ 190,730	\$ 15,765	18
4098	1095	Coventry Fire	2018 Experience	\$ 186,649	\$ 14,864	19
4098	1095	Coventry Fire	2019 Assumption Change - FY23 Stagger	\$ 56,839	\$ 5,081	17
4098	1095	Coventry Fire	2019 Assumption Change - FY24 Stagger	\$ 56,839	\$ 5,513	16
4098	1095	Coventry Fire	2019 Experience	\$ (26,492)	\$ (2,038)	20
4098	1095	Coventry Fire	2020 Experience	\$ 1,092,076	\$ 87,277	20
4098	1095	Coventry Fire	2021 Experience	\$ (125,546)	\$ (10,423)	20
4099	1505	South Kingstown EMT	2021 Overfunded Base	\$ (929,324)	\$ (77,154)	20
4102	1045 1235 1525 1585	Central Coventry Fire	2014 Mediation Settlement	\$ 3,510,409	\$ 290,166	18
4102	1045 1235 1525 1585	Central Coventry Fire	2015 Experience	\$ 94,388	\$ 8,484	16
4102	1045 1235 1525 1585	Central Coventry Fire	2016 Assumption Change - FY21 Stagger	\$ 283,338	\$ 22,564	19
4102	1045 1235 1525 1585	Central Coventry Fire	2016 Assumption Change - FY22 Stagger	\$ 304,698	\$ 23,441	20
4102	1045 1235 1525 1585	Central Coventry Fire	2016 Assumption Change - FY23 Stagger	\$ 304,698	\$ 24,351	20
4102	1045 1235 1525 1585	Central Coventry Fire	2016 Assumption Change - FY24 Stagger	\$ 304,698	\$ 25,297	20
4102	1045 1235 1525 1585	Central Coventry Fire	2016 Experience	\$ 1,176,918	\$ 101,274	17
4102	1045 1235 1525 1585	Central Coventry Fire	2017 Experience	\$ 120,507	\$ 9,961	18
4102	1045 1235 1525 1585	Central Coventry Fire	2018 Experience	\$ 618,382	\$ 49,246	19
4102	1045 1235 1525 1585	Central Coventry Fire	2019 Assumption Change - FY23 Stagger	\$ 130,828	\$ 11,695	17
4102	1045 1235 1525 1585	Central Coventry Fire	2019 Assumption Change - FY24 Stagger	\$ 130,827	\$ 12,690	16
4102	1045 1235 1525 1585	Central Coventry Fire	2019 Experience	\$ (265,900)	\$ (20,456)	20
4102	1045 1235 1525 1585	Central Coventry Fire	2020 Experience	\$ (177,582)	\$ (14,192)	20
4102	1045 1235 1525 1585	Central Coventry Fire	2021 Experience	\$ (487,390)	\$ (40,464)	20



APPENDIX 3 (Continued)

Old Unit Number	New Unit Number	Unit	Purpose	Remaining Balance as of June 30, 2021	Fiscal Year 2024	Years Remaining
					Amortization Payment	Beginning with Fiscal Year 2024
4103	1255	Hopkins Hill Fire	2014 Mediation Settlement	\$ 271,584	\$ 22,449	18
4103	1255	Hopkins Hill Fire	2015 Experience	\$ (67,987)	\$ (6,111)	16
4103	1255	Hopkins Hill Fire	2016 Assumption Change - FY21 Stagger	\$ 54,491	\$ 4,340	19
4103	1255	Hopkins Hill Fire	2016 Assumption Change - FY22 Stagger	\$ 58,599	\$ 4,508	20
4103	1255	Hopkins Hill Fire	2016 Assumption Change - FY23 Stagger	\$ 58,599	\$ 4,683	20
4103	1255	Hopkins Hill Fire	2016 Assumption Change - FY24 Stagger	\$ 58,599	\$ 4,865	20
4103	1255	Hopkins Hill Fire	2016 Experience	\$ 15,040	\$ 1,294	17
4103	1255	Hopkins Hill Fire	2017 Experience	\$ (105,105)	\$ (8,688)	18
4103	1255	Hopkins Hill Fire	2018 Experience	\$ 206,367	\$ 16,435	19
4103	1255	Hopkins Hill Fire	2019 Assumption Change - FY23 Stagger	\$ (75,779)	\$ (6,774)	17
4103	1255	Hopkins Hill Fire	2019 Assumption Change - FY24 Stagger	\$ (75,780)	\$ (7,350)	16
4103	1255	Hopkins Hill Fire	2019 Experience	\$ (52,106)	\$ (4,009)	20
4103	1255	Hopkins Hill Fire	2020 Experience	\$ (127,689)	\$ (10,205)	20
4103	1255	Hopkins Hill Fire	2021 Experience	\$ 160,740	\$ 13,345	20
4104	1114	Cranston Police	2014 Mediation Settlement	\$ 2,783,141	\$ 276,195	14
4104	1114	Cranston Police	2015 Experience	\$ 14,326	\$ 1,288	16
4104	1114	Cranston Police	2016 Assumption Change - FY21 Stagger	\$ 791,631	\$ 63,043	19
4104	1114	Cranston Police	2016 Assumption Change - FY22 Stagger	\$ 851,310	\$ 65,492	20
4104	1114	Cranston Police	2016 Assumption Change - FY23 Stagger	\$ 851,310	\$ 68,035	20
4104	1114	Cranston Police	2016 Assumption Change - FY24 Stagger	\$ 851,310	\$ 70,677	20
4104	1114	Cranston Police	2016 Experience	\$ 3,876,752	\$ 333,595	17
4104	1114	Cranston Police	2017 Experience	\$ 353,884	\$ 29,252	18
4104	1114	Cranston Police	2018 Experience	\$ (220,960)	\$ (17,597)	19
4104	1114	Cranston Police	2019 Assumption Change - FY23 Stagger	\$ 369,578	\$ 33,037	17
4104	1114	Cranston Police	2019 Assumption Change - FY24 Stagger	\$ 369,578	\$ 35,848	16
4104	1114	Cranston Police	2019 Experience	\$ (1,158,293)	\$ (89,108)	20
4104	1114	Cranston Police	2020 Experience	\$ 1,854,413	\$ 148,201	20
4104	1114	Cranston Police	2021 Experience	\$ (2,209,964)	\$ (183,475)	20
4105	1115	Cranston Fire	2021 Overfunded Base	\$ (3,614,356)	\$ (300,070)	20
4106	1125	Cumberland Fire	2014 Mediation Settlement	\$ 5,204,416	\$ 430,190	18
4106	1125	Cumberland Fire	2015 Experience	\$ (172,829)	\$ (15,534)	16
4106	1125	Cumberland Fire	2016 Assumption Change - FY21 Stagger	\$ 328,657	\$ 26,173	19
4106	1125	Cumberland Fire	2016 Assumption Change - FY22 Stagger	\$ 353,434	\$ 27,190	20
4106	1125	Cumberland Fire	2016 Assumption Change - FY23 Stagger	\$ 353,434	\$ 28,246	20
4106	1125	Cumberland Fire	2016 Assumption Change - FY24 Stagger	\$ 353,434	\$ 29,343	20
4106	1125	Cumberland Fire	2016 Experience	\$ 480,817	\$ 41,374	17
4106	1125	Cumberland Fire	2017 Experience	\$ 247,939	\$ 20,494	18
4106	1125	Cumberland Fire	2018 Experience	\$ (244,423)	\$ (19,465)	19
4106	1125	Cumberland Fire	2019 Assumption Change - FY23 Stagger	\$ (85,904)	\$ (7,679)	17
4106	1125	Cumberland Fire	2019 Assumption Change - FY24 Stagger	\$ (85,904)	\$ (8,332)	16
4106	1125	Cumberland Fire	2019 Experience	\$ (295,869)	\$ (22,761)	20
4106	1125	Cumberland Fire	2020 Experience	\$ 114,811	\$ 9,175	20
4106	1125	Cumberland Fire	2021 Experience	\$ (1,123,390)	\$ (93,266)	20
4107	1305	Lincoln Rescue	2014 Mediation Settlement	\$ 1,328,711	\$ 131,859	14
4107	1305	Lincoln Rescue	2015 Experience	\$ (186,714)	\$ (16,782)	16
4107	1305	Lincoln Rescue	2016 Assumption Change - FY21 Stagger	\$ 131,675	\$ 10,486	19
4107	1305	Lincoln Rescue	2016 Assumption Change - FY22 Stagger	\$ 141,602	\$ 10,893	20
4107	1305	Lincoln Rescue	2016 Assumption Change - FY23 Stagger	\$ 141,602	\$ 11,317	20
4107	1305	Lincoln Rescue	2016 Assumption Change - FY24 Stagger	\$ 141,602	\$ 11,756	20
4107	1305	Lincoln Rescue	2016 Experience	\$ 343,632	\$ 29,570	17
4107	1305	Lincoln Rescue	2017 Experience	\$ 51,793	\$ 4,281	18
4107	1305	Lincoln Rescue	2018 Experience	\$ (170,473)	\$ (13,576)	19
4107	1305	Lincoln Rescue	2019 Assumption Change - FY23 Stagger	\$ 40,401	\$ 3,612	17
4107	1305	Lincoln Rescue	2019 Assumption Change - FY24 Stagger	\$ 40,401	\$ 3,919	16
4107	1305	Lincoln Rescue	2019 Experience	\$ 516,490	\$ 39,734	20
4107	1305	Lincoln Rescue	2020 Experience	\$ (3,448)	\$ (276)	20
4107	1305	Lincoln Rescue	2021 Experience	\$ (449,039)	\$ (37,280)	20
4108	1344	New Shoreham Police	2014 Mediation Settlement	\$ 493,946	\$ 49,019	14
4108	1344	New Shoreham Police	2015 Experience	\$ (45,705)	\$ (4,108)	16
4108	1344	New Shoreham Police	2016 Assumption Change - FY21 Stagger	\$ 33,028	\$ 2,630	19
4108	1344	New Shoreham Police	2016 Assumption Change - FY22 Stagger	\$ 35,518	\$ 2,732	20
4108	1344	New Shoreham Police	2016 Assumption Change - FY23 Stagger	\$ 35,518	\$ 2,839	20
4108	1344	New Shoreham Police	2016 Assumption Change - FY24 Stagger	\$ 35,518	\$ 2,949	20
4108	1344	New Shoreham Police	2016 Experience	\$ (15,043)	\$ (1,294)	17
4108	1344	New Shoreham Police	2017 Experience	\$ 25,467	\$ 2,105	18
4108	1344	New Shoreham Police	2018 Experience	\$ (3,725)	\$ (297)	19
4108	1344	New Shoreham Police	2019 Assumption Change - FY23 Stagger	\$ 3,755	\$ 336	17
4108	1344	New Shoreham Police	2019 Assumption Change - FY24 Stagger	\$ 3,755	\$ 364	16
4108	1344	New Shoreham Police	2019 Experience	\$ (36,988)	\$ (2,845)	20
4108	1344	New Shoreham Police	2020 Experience	\$ (100,815)	\$ (8,057)	20
4108	1344	New Shoreham Police	2021 Experience	\$ 105,897	\$ 8,792	20
4109	1324	Middletown Police & Fire	2021 Overfunded Base	\$ (797,520)	\$ (66,211)	20
4110	1715	Harrisville Fire District	2021 Overfunded Base	\$ (573,765)	\$ (47,635)	20
4111	1705	Albion Fire District	2014 Mediation Settlement	\$ 397,905	\$ 32,890	18
4111	1705	Albion Fire District	2015 Experience	\$ (42,214)	\$ (3,794)	16
4111	1705	Albion Fire District	2016 Assumption Change - FY21 Stagger	\$ 28,505	\$ 2,270	19
4111	1705	Albion Fire District	2016 Assumption Change - FY22 Stagger	\$ 30,654	\$ 2,358	20
4111	1705	Albion Fire District	2016 Assumption Change - FY23 Stagger	\$ 30,654	\$ 2,450	20
4111	1705	Albion Fire District	2016 Assumption Change - FY24 Stagger	\$ 30,654	\$ 2,545	20
4111	1705	Albion Fire District	2016 Experience	\$ (31,072)	\$ (2,674)	17



APPENDIX 3 (Continued)

Old Unit		Unit	Purpose	Remaining Balance as of June 30, 2021	Fiscal Year 2024	Years Remaining Beginning with Fiscal Year 2024
Number	New Unit Number				Amortization Payment	
4111	1705	Albion Fire District	2017 Experience	\$ (25,856)	\$ (2,137)	18
4111	1705	Albion Fire District	2018 Experience	\$ (15,896)	\$ (1,266)	19
4111	1705	Albion Fire District	2019 Assumption Change - FY23 Stagger	\$ (6,978)	\$ (624)	17
4111	1705	Albion Fire District	2019 Assumption Change - FY24 Stagger	\$ (6,979)	\$ (677)	16
4111	1705	Albion Fire District	2019 Experience	\$ (22,348)	\$ (1,719)	20
4111	1705	Albion Fire District	2020 Experience	\$ 1,970	\$ 157	20
4111	1705	Albion Fire District	2021 Experience	\$ (65,285)	\$ (5,420)	20
1054	1054	Central Falls Police & Fire New	2021 Overfunded Base	\$ (40,490)	\$ (3,362)	20
1055	1055	Central Falls Police & Fire Legacy	2020 Experience	\$ 29,435,642	\$ 2,352,439	20
1055	1055	Central Falls Police & Fire Legacy	2021 Experience	\$ (3,339,709)	\$ (277,268)	20
1284	1284	Johnston Police	2021 Overfunded Base	\$ (179,574)	\$ (14,909)	20
1364	1364	Newport Police Dept	2021 Overfunded Base	\$ (205,468)	\$ (17,058)	20
1425	1425	Portsmouth Fire Department	2021 Experience	\$ 25,133	\$ 2,087	20
1465	1465	Smithfield Fire	2021 Overfunded Base	\$ (398,429)	\$ (33,078)	20
1484	1484	Scituate Police Dept COLA	2021 Overfunded Base	\$ (45,506)	\$ (3,778)	20
1805	1805	Pascoag Fire District COLA	2016 Assumption Change - FY21 Stagger	\$ 2,279	\$ 182	19
1805	1805	Pascoag Fire District COLA	2016 Assumption Change - FY22 Stagger	\$ 2,451	\$ 189	20
1805	1805	Pascoag Fire District COLA	2016 Assumption Change - FY23 Stagger	\$ 2,451	\$ 196	20
1805	1805	Pascoag Fire District COLA	2016 Assumption Change - FY24 Stagger	\$ 2,451	\$ 203	20
1805	1805	Pascoag Fire District COLA	2017 Experience	\$ 611,374	\$ 50,535	18
1805	1805	Pascoag Fire District COLA	2018 Experience	\$ (104,713)	\$ (8,339)	19
1805	1805	Pascoag Fire District COLA	2019 Assumption Change - FY23 Stagger	\$ (13,899)	\$ (1,242)	17
1805	1805	Pascoag Fire District COLA	2019 Assumption Change - FY24 Stagger	\$ (13,898)	\$ (1,348)	16
1805	1805	Pascoag Fire District COLA	2019 Experience	\$ 61,551	\$ 4,735	20
1805	1805	Pascoag Fire District COLA	2020 Experience	\$ (19,349)	\$ (1,546)	20
1805	1805	Pascoag Fire District COLA	2021 Experience	\$ (151,728)	\$ (12,597)	20
1815	1815	Saylesville Fire (NO COLA)	2021 Overfunded Base	\$ (70,566)	\$ (5,859)	20
1424	1424	Portsmouth Police Department	2021 Overfunded Base	\$ (3,896)	\$ (323)	20

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APPENDIX 4

RISKS ASSOCIATED WITH MEASURING THE ACCRUED LIABILITY AND ACTUARIALLY DETERMINED CONTRIBUTION

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APPENDIX 4

Risks Associated with Measuring the Accrued Liability and Actuarially Determined Contribution

The determination of the accrued liability and the actuarially determined contribution requires the use of assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that result from the differences between actual experience and the actuarial assumptions.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions due to changing conditions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period, or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

1. Investment risk – actual investment returns may differ from the expected returns;
2. Asset/Liability mismatch – changes in asset values may not match changes in liabilities, thereby altering the gap between the accrued liability and assets and consequently altering the funded status and contribution requirements;
3. Contribution risk – actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
4. Salary and Payroll risk – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
5. Longevity risk – members may live longer or shorter than expected and receive pensions for a period of time other than assumed;
6. Other demographic risks – members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

APPENDIX 4 (Continued)

The effects of certain trends in experience can generally be anticipated. For example if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the cost of the plan can be expected to increase (or decrease). Likewise if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

The computed contribution rate shown on page 9 may be considered as a minimum contribution rate that complies with the Board's funding policy. The timely receipt of the actuarially determined contributions is critical to support the financial health of the plan. Users of this report should be aware that contributions made at the actuarially determined rate do not necessarily guarantee benefit security.

PLAN MATURITY MEASURES

Risks facing a pension plan evolve over time. A young plan with virtually no investments and paying few benefits may experience little investment risk. An older plan with a large number of members in pay status and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures include the following:

For General Employees	<u>June 30, 2021</u>	<u>June 30, 2020</u>	<u>June 30, 2019</u>
Ratio of the market value of assets to total payroll	4.9	4.0	4.1
Ratio of actuarial accrued liability to payroll	5.1	5.0	5.1
Ratio of actives to retirees and beneficiaries	1.2	1.2	1.2
Ratio of net cash flows to market value of assets	-3.8%	-3.5%	-3.6%
Duration of the actuarial accrued liability	10.9	11.5	10.6

For Police and Fire	<u>June 30, 2021</u>	<u>June 30, 2020</u>	<u>June 30, 2019</u>
Ratio of the market value of assets to total payroll	6.3	5.2	5.3
Ratio of actuarial accrued liability to payroll	6.8	6.9	6.7
Ratio of actives to retirees and beneficiaries	1.7	1.7	1.8
Ratio of net cash flows to market value of assets	1.2%	2.8%	0.2%
Duration of the actuarial accrued liability	16.2	16.1	10.4

RATIO OF MARKET VALUE OF ASSETS TO PAYROLL

The relationship between assets and payroll is a useful indicator of the potential volatility of contributions. For example, if the market value of assets is 4.0 times the payroll, a return on assets 5% different than assumed would equal 20% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in plan sponsor contributions as a percentage of payroll.

RATIO OF ACTUARIAL ACCRUED LIABILITY TO PAYROLL

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of contributions for a fully funded plan. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time.



APPENDIX 4 (Continued)

The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 5.5 times the payroll, a change in liability 2% other than assumed would equal 11% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also plan sponsor contributions) as a percentage of payroll.

RATIO OF ACTIVES TO RETIREES AND BENEFICIARIES

A young plan with many active members and few retirees will have a high ratio of active to retirees. A mature open plan may have close to the same number of actives to retirees resulting in a ratio near 1.0. A super-mature or closed plan may have significantly more retirees than actives resulting in a ratio below 1.0.

RATIO OF NET CASH FLOW TO MARKET VALUE OF ASSETS

A positive net cash flow means contributions exceed benefits and expenses. A negative cash flow means existing funds are being used to make payments. A certain amount of negative net cash flow is generally expected to occur when benefits are prefunded through a qualified trust. Large negative net cash flows as a percent of assets may indicate a super-mature plan or a need for additional contributions.

DURATION OF ACTUARIAL ACCRUED LIABILITY

The duration of the actuarial accrued liability may be used to approximate the sensitivity to a 1% change in the assumed rate of return. For example, duration of 10 indicates that the liability would increase approximately 10% if the assumed rate of return were lowered 1%.

ADDITIONAL RISK ASSESSMENT

Additional risk assessment is outside the scope of the annual actuarial valuation. Additional assessment may include scenario tests, sensitivity tests, stochastic modeling, stress tests, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability

GLOSSARY

DEFINITION OF ACTUARIAL TERMS

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GLOSSARY

1. Actuarial Accrued Liability (AAL) - That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of Future Plan Benefits which is not provided for by future Normal Costs. It is equal to the Actuarial Present Value of Future Plan Benefits minus the actuarial present value of future Normal Costs.
2. Actuarial Assumptions - Assumptions as to future experience under the Plan. These include assumptions about the occurrence of future events affecting costs or liabilities, such as:
 - mortality, withdrawal, disablement, and retirement;
 - future increases in salary;
 - future rates of investment earnings and future investment and administrative expenses;
 - characteristics of members not specified in the data, such as marital status;
 - characteristics of future members;
 - future elections made by members; and
 - other relevant items.
3. Actuarial Cost Method or Funding Method - A procedure for allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability. These items are used to determine the ARC.
4. Actuarial Gain or Actuarial Loss - A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. Through the actuarial assumptions, rates of decrements, rates of salary increases, and rates of fund earnings have been forecasted. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted, or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., the Plan's assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results that produce actuarial liabilities which are larger than projected. Actuarial gains will shorten the time required for funding of the actuarial balance sheet deficiency while actuarial losses will lengthen the funding period.
5. Actuarially Equivalent - Of equal actuarial present value, determined as of a given date and based on a given set of Actuarial Assumptions.

GLOSSARY (Continued)

6. Actuarial Present Value (APV) - The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:
 - a. adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.),
 - b. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and
 - c. discounted according to an assumed rate (or rates) of return to reflect the time value of money.
7. Actuarial Present Value of Future Plan Benefits - The Actuarial Present Value of those benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits. The Actuarial Present Value of Future Plan Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive, nonretired members either entitled to a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would be provide sufficient assets to pay all projected benefits and expenses when due.
8. Actuarial Valuation - The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB 25, such as the funded ratio and the ARC.
9. Actuarial Value of Assets or Valuation Assets - The value of the Plan's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly actuaries use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the ARC.
10. Actuarially Determined - Values which have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the law.

GLOSSARY (Continued)

11. Amortization Method - A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.
12. Amortization Payment - That portion of the pension plan contribution or ARC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.
13. Annual Required Contribution (ARC) - The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under GASB 25. The ARC consists of the Employer Normal Cost and the Amortization Payment.
14. Closed Amortization Period - A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc. See Funding Period and Open Amortization Period.
15. Decrements: Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or termination.
16. Defined Benefit Plan: An employer-sponsored retirement benefit that provides workers, upon attainment of designated age and service thresholds, with a monthly benefit based on the employee's salary and length of service. The value of a benefit from a defined benefit plan is generally not affected by the return on the assets that are invested to fund the benefit.
17. Defined Contribution Plan: An employer-sponsored retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, and the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.
18. Employer Normal Cost: The portion of the Normal Cost to be paid by the employers. This is equal to the Normal Cost less expected member contributions.
19. Experience Study: A periodic review and analysis of the actual experience of the Plan which may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified as deemed appropriate by the Actuary.

GLOSSARY (Continued)

20. **Funded Ratio:** The ratio of the actuarial value of assets (AVA) to the actuarial accrued liability (AAL). Plans sometimes calculate a market funded ratio, using the market value of assets (MVA), rather than the AVA, although GASB 25 reporting requires the use of the AVA.
21. **Funding Period or Amortization Period:** The term “Funding Period” is used in two ways. In the first sense, it is the period used in calculating the Amortization Payment as a component of the ARC. This funding period is chosen by the Board of Trustees. In the second sense, it is a calculated item: the number of years in the future that will theoretically be required to amortize (i.e., pay off or eliminate) the Unfunded Actuarial Accrued Liability, based on the statutory employer contribution rate, and assuming no future actuarial gains or losses.
22. **GASB:** Governmental Accounting Standards Board.
23. **GASB 67 and GASB 68:** Governmental Accounting Standards Board Statements No. 67 and No. 68. These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 67 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 68 sets the rules for the systems themselves.
24. **Normal Cost:** That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method. Any payment in respect of an Unfunded Actuarial Accrued Liability is not part of Normal Cost (see Amortization Payment). For pension plan benefits which are provided in part by employee contributions, Normal Cost refers to the total of employee contributions and employer Normal Cost unless otherwise specifically stated. Under the entry age normal cost method, the Normal Cost is intended to be the level cost (when expressed as a percentage of pay) needed to fund the benefits of a member from hire until ultimate termination, death, disability or retirement.
25. **Open Amortization Period:** An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered payroll.
26. **Unfunded Actuarial Accrued Liability:** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. This value may be negative in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus.
27. **Valuation Date or Actuarial Valuation Date:** The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Plan Benefits is determined. The expected benefits to be paid in the future are discounted to this date.



December 10, 2021

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

Re: Actuarial Valuation for Non-contributing Judges as of June 30, 2021

Dear Members of the Board:

This is the June 30, 2021 actuarial valuation of judges hired before January 1, 1990 who are currently employed or retired from employment by the State of Rhode Island. This report provides the calculation of the Actuarially Determined Contribution for fiscal year beginning July 1, 2021 assuming the State begins to advance fund the benefits. This valuation was performed as of June 30, 2021.

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Financing Objectives

Currently, Judges who do not participate in the Judicial Retirement Benefits Trust (JRBT) whose benefits are financed by annual contributions equal to the annual benefit payments of current retirees, also known as pay-as-you-go, are included in this valuation.

For the purpose of this valuation, the expected rate of return on pension plan investments is 1.92%; the municipal bond rate is 1.92% (based on fixed-income municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in Fidelity Index's "20-Year Municipal GO AA Index" as of June 30, 2021). Based on the pay-as-you-go nature of the financing for these benefits, we have used the 1.92% discount rate for all liabilities.

This report also develops the contribution requirement assuming the State begins to advance fund the benefits. This measurement is based on a higher discount rate of 7.00%.

Progress Towards Realization of Financing Objectives

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) is a standard measure of a plan's funded status. There has been minimal advanced funding for this closed group of seven Judges (two of which are now retired), so the funded ratio based on the 1.92% discount rate as of June 30, 2021 is 6.4%. As of June 30, 2021, the market value of assets is \$1,419,660 and the actuarial accrued liability is \$22,298,813, resulting in an unfunded actuarial accrued liability of \$20,879,153.

If the State were to advance fund the benefits over a period of 20 years beginning in fiscal year end 2022, then the actuarial determined contribution as a level dollar amount would be equal to \$1,190,045. Based on this contribution policy, if all actuarial assumptions are met (including the assumption of the plan earning 7.00% on the actuarial valuation of assets), it is expected that:

1. The employer contribution for fiscal years 2022 and beyond will remain level as a dollar amount,
2. The unfunded actuarial accrued liability will be fully amortized by 2041, and
3. In the absence of benefit improvements, the funded ratio should increase over time, until it reaches 100%.

Benefit provisions

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The benefit provisions reflected in this valuation are those which were in effect on June 30, 2021. The benefit provisions are summarized in Appendix B in the June 30, 2021 actuarial valuation of the JRBT dated December 7, 2011.

Assumptions and methods

The assumptions used in this valuation, with the exception of the 1.92% discount rate, are the same as those summarized in Appendix A in the June 30, 2021 actuarial valuation of the JRBT dated December 7, 2021. We believe the assumptions are internally consistent and are reasonable.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities and the calculated contribution rates.

Data

Data for the five active members and two retirees as of June 30, 2021 for this valuation was provided by the Staff at the Employees Retirement System of Rhode Island. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the data from the JRBT valuation

Certification

All of our work conforms with generally accepted actuarial principles and practices and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Rhode Island state law and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board.

The undersigned are independent actuaries. All are Members of the American Academy of Actuaries. They all meet the Qualification Standards of the American Academy of Actuaries, and they are experienced in performing valuations for large public retirement systems.

Respectfully submitted,



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

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

STATE POLICE RETIREMENT BENEFITS TRUST STATE OF RHODE ISLAND

ACTUARIAL VALUATION REPORT
AS OF JUNE 30, 2021

DRAFT





December 10, 2021

Retirement Board
40 Fountain Street, First Floor
Providence, RI 02903-1854

Dear Members of the Board:

Subject: Actuarial Valuation of the SPRBT as of June 30, 2021

This is the June 30, 2021 actuarial valuation of the State Police Retirement Benefits Trust (SPRBT). This report describes the current actuarial condition of the SPRBT, determines the recommended employer contribution rate, and analyzes changes in the contribution rate. Valuations are prepared annually, as of June 30, the last day of the SPRBT plan year. Benefits for State police officers hired before July 1, 1987 are funded by the State from general assets, on a pay-as-you-go basis, and are not included in this valuation.

Under Rhode Island General Laws, the employer contribution rate for the SPRBT is certified annually by the State of Rhode Island Retirement Board. This rate is determined actuarially, based on the plan provisions in effect as of the valuation date and the actuarial assumptions and methods adopted by the Board or set by statute. The Board's current policy is that the contribution rate determined by a given actuarial valuation becomes effective two years after the valuation date. For example, the rate determined by the June 30, 2021 actuarial valuation will be applicable for the year beginning July 1, 2023 and ending June 30, 2024.

Financing objectives and funding policy

The actuarial cost method and the amortization periods are set by statute. Normal cost rate (as a percent of pay) and actuarial accrued 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 employer normal cost rate is the difference between the normal cost rate and the member contribution rate. The amortization rate, also determined as a level percent of pay, 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.

Progress toward realization of financing objectives

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) is a standard measure of a plan's funded status. The funded status alone is not appropriate for assessing the need for future contributions. The funded status is also not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations. The funded ratio, as can be seen in Table 4 of this report, increased from 84.4% to 88.0% between the valuations. The funded ratio increased from the prior valuation primarily due to an asset gain due to a 10.2% return on the actuarial value compared to the assumed rate of 7.00% as well as gains from liability experience. If the market value of assets were used, rather than the actuarial value, the funded ratio would be 98.7%.

Given the plan's contribution allocation procedure, if all actuarial assumptions are met (including the assumption of the plan earning 7.00% on the actuarial valuation of assets), it is expected that:

1. The amortization payment as a percentage of pay will increase through fiscal year 2024 as annual payments begin for each of four staggered bases established in connection with the experience study after which it will remain level through fiscal year 2036,
2. The unfunded actuarial accrued liability will be fully amortized after 20 years from fiscal year 2020, and
3. In the absence of benefit improvements, the funded ratio should increase over time, until it reaches 100%.

The employer contribution rate decreased from 20.87% to 20.66% for fiscal year 2024.

An analysis of the changes in the employer contribution rate appears on Table 11a of this report. An analysis of the changes in the unfunded actuarial accrued liability appears on Table 11c.

Benefit provisions

The benefit provisions reflected in this valuation are those which were in effect on June 30, 2021. There have been no changes to the benefit provisions since the preceding valuation. All benefit provisions are summarized in Appendix B.

Assumptions and methods

The assumptions are unchanged from the last actuarial valuation and were approved by the Board on May 22, 2020. We believe the assumptions are internally consistent and are reasonable, based on the actual experience of ERSRI.

The results of the actuarial valuation are dependent upon the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities and the calculated contribution rates.

All assumptions and methods are described in Appendix A. The actuarial assumptions and methods used in this report comply with the parameters for disclosure that appear in Governmental Accounting Standards Board (GASB) Statement Number 67.

This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

Data

The System's staff supplied data for active, inactive, and retired members as of June 30, 2021. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the prior year's data. The System's staff also supplied asset data as of June 30, 2021.

Certification

All of our work conforms with generally accepted actuarial principles and practices and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with



the requirements of Rhode Island state law and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board.

The undersigned are independent actuaries. All are Members of the American Academy of Actuaries. They all meet the Qualification Standards of the American Academy of Actuaries, and they are experienced in performing valuations for large public retirement systems.

Respectfully submitted,



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



Brad Stewart, ASA, MAAA, EA
Consultant and Actuary



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

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Actuarial Standards of Practice Disclosure Statements

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

This report should not be relied on for any purpose other than the purpose described above. Determinations of the financial results associated with the benefits described in this report in a manner other than the intended purpose may produce significantly different results.

The valuation was based upon information furnished by the System's staff, concerning Retirement System benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by the System's staff.

The developed findings included in this report consider data or other information through June 30, 2021.

This is one of multiple documents comprising the actuarial report. The other document comprising the actuarial report is a PowerPoint presentation presented to the Board of Trustees following the publication of this report.

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SECTION I

EXECUTIVE SUMMARY

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Executive Summary

Item	June 30, 2021	June 30, 2020
Membership <ul style="list-style-type: none"> Number of <ul style="list-style-type: none"> - Active members - Retirees and beneficiaries - Inactive members - Total Payroll for benefits 	242 88 56 <hr/> 386 \$ 26,080,257	251 79 53 <hr/> 383 \$ 26,805,499
Contribution rates <ul style="list-style-type: none"> Member State 	8.75% 20.66%	8.75% 20.87%
Assets <ul style="list-style-type: none"> Market value Actuarial value Return on market value Return on actuarial value Employer contribution Ratio of actuarial value to market value 	\$ 196,304,642 175,036,771 27.0% 10.2% \$ 5,240,772 89.2%	\$ 153,908,600 158,212,175 3.7% 6.1% \$ 4,877,630 102.8%
Actuarial Information <ul style="list-style-type: none"> Employer normal cost % Unfunded actuarial accrued liability (UAAL) Amortization rate Funding period Funded ratio 	13.20% \$ 23,806,201 7.46% 16 years 88.0%	13.29% \$ 29,298,716 7.58% 21 years 84.4%
Projected employer contribution <ul style="list-style-type: none"> Fiscal year ending June 30, Projected payroll for contributions Projected employer contribution 	2024 \$ 28,889,751 5,968,623	2023 \$ 28,868,528 6,024,862

SECTION II

DISCUSSIONS

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Discussion (Contribution Rates)

The employer contribution rate for the SPRBT is determined actuarially. The rate determined in each valuation becomes effective two years after the valuation date, in this case as of July 1, 2023.

The rate consists of two pieces: the normal cost rate and the amortization rate. The normal cost rate is the employer's Entry Age normal cost, expressed as a percentage of active member payroll. The amortization rate is the contribution required to amortize each of the laddered bases that comprise the unfunded actuarial accrued liability over closed periods as a level percentage of payroll. Payment for each base is generally calculated based on a 20 year amortization period beginning 2 years after they are established. The impact of the 2016 Experience Study and 2019 Experience Study were divided into separate "stagers" with the first payment beginning in FY2020 over a 20 year period. Other stagers will begin payment in FY2021 through FY2024 with amortization periods decreasing by one year for each year past FY2020 in which payment begins (e.g. the FY2024 stagger will have a 16 year amortization period). The amortization rate is adjusted for the fact that the contribution rate set by this valuation is deferred for two years. Should the SPRBT become overfunded, the UAAL will be amortized using a single base over a period of 20 years.

The decrease in the employer contribution rate from 20.87% to 20.66% of payroll was primarily due gains on assets due to the return on the actuarial of assets of 10.2% being higher than the assumed rate of 7.0% as well as liability gains. The impact of these gains was partially offset by the payments beginning for the FY2024 stagers described above.

An analysis of the changes in the employer contribution rate appears in Table 11a of this report and a history of the employer contribution rates appears in Table 11b. Table 11c shows a reconciliation of the UAAL.

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Discussion (Financial Data and Experience)

Assets for the SPRBT are held in trust and are commingled with those of several other plans and programs—including the Employees' Retirement System of Rhode Island—for investment purposes. The State Treasurer is responsible for setting the asset allocation policy and for investing the funds.

Table 6 shows the net plan assets for the SPRBT. Table 7 shows a reconciliation of the assets between the previous valuation and this valuation. Table 8 shows the development of the actuarial value of assets. Table 9 shows the distribution of investments by category — 60% of assets are held in equities, including real estate and private equity — and Table 10 shows a historical summary of the return rates. As can be seen, the market value rate of return was 27.0% for the year ended June 30, 2021, and the return on an actuarial asset basis was 10.2%.

The average annual return based on the market value of assets over the last ten years (July 1, 2011 – June 30, 2021) was 8.4%. This is more than the current 7.00% annual investment return assumption. The average annual return based on the actuarial value of assets over the same period was 7.1%.

All returns above are net of both investment and administrative expenses, and may differ from other information provided by the General Treasurer's office or the investment managers and advisors.

The System's staff provided all of the financial information used in this report.

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Discussion (Member Data)

The System's staff supplied member data as of June 30, 2021. While we did not audit this data, we did perform various tests to ensure that it was internally consistent, consistent with the prior year's data, and was reasonable overall. Information provided for active members includes: name, identification number, sex, a code indicating whether the member was active or inactive, date of birth, service, salary, date of last contribution, and accumulated member contributions without interest. For retired members, data includes: name, an identification number, sex, date of birth, date of retirement, amount of benefit (original, COLA, gross), 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 sex.

Table 12 and Table 13 show information and statistics about the members. Table 14 shows the distribution of active members by age and service.

The total number of active members is 242 which is a decrease of 9 active members compared to this time last year. Total compensation used for determining benefits decreased from \$26.805 million to \$26.080 million.

Since the last valuation, there have been the following changes in active membership:

- One member terminated
- Eight members retired
- Zero new members were hired

The total payroll shown on the statistical tables as of June 30, 2012 is the amount that is used for determining benefits, and includes 400 hours of overtime and other adjustments. Effective June 30, 2013, the total payroll shown on the statistical tables is the amount only including holiday pay and clothing allowance but excluding 400 hours of overtime and other adjustments. An overtime adjustment (if applicable) was applied when determining benefits.

Discussion (Benefit Provisions)

Appendix B includes a summary of the benefit provisions for the SPRBT. There were no changes in the benefit provisions since the preceding valuation. There are no ancillary benefits—e.g., cost of living benefits—that are currently provided by a source independent of the SPRBT but that might be deemed a liability of the SPRBT if continued beyond the availability of funding by the current funding source.

The COLA provided to retired members is contingent on the investment performance, the annual change in the CPI-U, and funded status of the System. The amount of the COLA is determined based on 50% of the plan's five-year average investment rate of return minus 5.0% and will range from zero to 4.0%, and 50% of the lesser of 3% or last year's CPI-U increase for a total maximum increase of 3.50%. This calculation produces a 3.50% COLA for Calendar Year 2022. The COLA will be limited and this limit will be indexed annually to increase in the same manner as COLAs, with the known values as follows:

<u>Year</u>	<u>COLA Limit</u>
2014	\$ 25,000
2015	\$ 25,168
2016	\$ 25,855
2017	\$ 26,098
2018	\$ 26,291
2019	\$ 26,687
2020	\$ 27,184
2021	\$ 27,608
2022	\$ 27,901
2023	\$ 28,878

Furthermore, the COLA will be suspended for all state employees, teachers, BHDDH nurses, correctional officers, judges and state police until the aggregate funding level of their plans exceeds 80%; however, an interim COLA will be granted in four-year intervals while the COLA is suspended. The first interim COLA was during the Calendar Year beging January 1, 2017. Also, for current retirees and beneficiaries retired on or before July 1, 2015 the \$25,000 cap will be increased to \$30,000 (indexed) for any COLA payable based on the every fourth year provision.

Actuarial Methods and Assumptions

Appendix A of this report includes a summary of the actuarial assumptions and methods used in this valuation. Costs are determined using the Entry Age Normal actuarial cost method. This method was initially adopted effective June 30, 1999 and was modified, effective June 30, 2011, to be consistent with the Act and the standards outlined in the GASB Statement No. 67 exposure draft, which has now been finalized.

The method used to determine the actuarial value of assets is the five-year smoothed market method. This technique is further described in Section III of Appendix A. The development of the actuarial value of assets utilizing this method is shown on Table 8.

The assumptions were adopted by the Board on May 22, 2020, We believe the assumptions are internally consistent and are reasonable, based on the actual experience of the SPRBT.

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SECTION III

TABLES

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Table 1

Development of Contribution Rate (State Police)

	June 30, 2021 (1)	June 30, 2020 (2)
1. Base Pay from prior fiscal year supplied by ERSRI	\$ 26,438,215	\$ 26,418,793
2. Compensation projected to next fiscal year	27,231,361	27,211,356
3. Actuarial accrued liability	198,842,972	187,510,891
4. Actuarial value of assets	175,036,771	158,212,175
5. Unfunded actuarial accrued liability (UAAL) (3 - 4)	23,806,201	29,298,716
6. Remaining amortization period at valuation date	20	20
7. Contribution effective for fiscal year ending:	June 30, 2024	June 30, 2023
8. Total pay projected for two-year delay	28,889,751	28,868,528
9. Amortization of UAAL	2,155,860	2,189,521
10. Normal cost		
(a) Total normal cost rate	21.95%	22.04%
(b) Employee contribution rate	8.75%	8.75%
(c) Employer normal cost rate (a - b)	13.20%	13.29%
11. Employer contribution rate as percent of payroll		
(a) Employer normal cost rate	13.20%	13.29%
(b) Amortization payments (9 / 8)	7.46%	7.58%
(c) Total (a + b)	20.66%	20.87%
12. Estimated employer contribution amount (8 * 11(c))	\$ 5,968,623	\$ 6,024,862

Table 2

Summary of Unfunded Liability

Purpose	Remaining Balance as of June 30, 2021	Fiscal Year 2022 Amortization Payment *	Fiscal Year 2023 Amortization Payment *	Fiscal Year 2024 Amortization Payment *	Years Remaining Beginning with Fiscal Year 2024
Original 2011 RIRSA Base	8,709,864	814,738	839,179	864,355	12
2014 Experience Base	(5,040,659)	(447,761)	(461,194)	(475,030)	13
2014 Mediation Settlement	(1,376,009)	(122,230)	(125,897)	(129,675)	13
2015 Experience Base	(1,741,604)	(147,552)	(151,979)	(156,537)	14
2016 Experience Base	12,106,661	981,976	1,011,435	1,041,779	15
2016 Assumption Change - FY21 Stagger **	3,002,022	233,899	240,916	248,143	16
2016 Assumption Change - FY22 Stagger **	3,236,922	252,201	259,767	267,560	16
2016 Assumption Change - FY23 Stagger **	3,236,922	-	280,927	289,355	16
2016 Assumption Change - FY24 Stagger **	3,236,922	-	-	313,974	16
2017 Experience Base	2,876,355	224,107	230,830	237,755	16
2018 Experience Base	1,270,878	95,400	98,262	101,209	17
2019 Experience Base	(2,263,018)	(164,101)	(169,024)	(174,095)	18
2019 Assumption Change - FY23 Stagger**	792,053	-	68,741	70,803	16
2019 Assumption Change - FY24 Stagger**	792,053	-	-	76,827	16
2020 Experience Base	870,699	-	67,558	69,585	19
New Experience Base This Fiscal Year	(5,903,860)	-	-	(490,148)	20
Unfunded Actuarial Accrued Liability	\$ 23,806,201	\$ 1,720,677	\$ 2,189,521	\$ 2,155,860	

* Assuming payment made at the middle of the year.

** Assumption change staggers will begin in the fiscal year indicated.

Table 3

Actuarial Present Value of Future Benefits

	June 30, 2021 (1)	June 30, 2020 (2)
1. Active members		
a. Service retirement benefits	\$ 137,201,103	\$ 139,714,654
b. Deferred termination benefits	0	0
c. Refunds	363,579	373,180
d. Pre-retirement death benefits	903,750	956,282
e. Disability retirement benefits	13,274,826	14,025,208
f. Total	<u>\$ 151,743,258</u>	<u>\$ 155,069,324</u>
2. Retired members		
a. Service retirements	\$ 90,028,814	\$ 80,269,615
b. Disability retirements	5,339,168	5,347,675
c. Beneficiaries	3,703,379	3,157,876
d. Post-retirement death benefits	0	0
e. Total	<u>\$ 99,071,361</u>	<u>\$ 88,775,166</u>
3. Inactive members	\$ 390,334	\$ 207,138
4. Total actuarial present value of future benefits	\$ 251,204,953	\$ 244,051,628
5. Determination of actuarial accrued liability		
a. Total actuarial present value of future benefits	\$ 251,204,953	\$ 244,051,628
b. Less present value of future normal costs	<u>(52,361,981)</u>	<u>(56,540,737)</u>
c. Actuarial accrued liability (a + b)	<u>\$ 198,842,972</u>	<u>\$ 187,510,891</u>

Table 4

Schedule of Funding Progress

Valuation Date (1)	Actuarial Value of Assets (AVA) (2)	Actuarial Accrued Liability (3)	Unfunded Actuarial Accrued Liability (UAAL) (3)-(2) (4)	Funded Ratio (2)/(3) (5)	Annual Covered Payroll (6)	UAAL as % of Payroll (4)/(6) (7)
June 30, 2005	\$ 29,616,896	\$ 37,510,992	\$ 7,894,096	79.0%	\$ 13,225,400	59.7%
June 30, 2006	36,314,689	42,216,142	5,901,453	86.0%	13,474,588	43.8%
June 30, 2007 ¹	45,996,910	60,427,947	14,431,037	76.1%	15,836,354	91.1%
June 30, 2008	54,927,390	69,029,513	14,102,123	79.6%	16,698,764	84.5%
June 30, 2009	60,232,045	75,480,005	15,247,960	79.8%	17,096,202	89.2%
June 30, 2010	65,760,284	94,300,302	28,540,018	69.7%	19,715,070	144.8%
June 30, 2010 ²	65,760,284	73,048,680	7,288,396	90.0%	19,715,070	37.0%
June 30, 2011	73,151,768	74,185,705	1,033,937	98.6%	19,711,694	5.2%
June 30, 2012	84,293,968	94,031,687	9,737,719	89.6%	23,669,619	41.1%
June 30, 2013	92,916,758	102,259,438	9,342,680	90.9%	19,904,363	46.9%
June 30, 2014 ³	104,781,384	108,363,537	3,582,153	96.7%	20,814,621	17.2%
June 30, 2015	115,585,013	117,056,727	1,471,714	98.7%	19,940,052	7.4%
June 30, 2016	123,788,498	135,505,152	11,716,654	91.4%	22,555,315	51.9%
June 30, 2017	131,320,263	156,060,856	24,740,593	84.1%	22,612,234	109.4%
June 30, 2018	139,008,754	166,507,483	27,498,729	83.5%	23,455,654	117.2%
June 30, 2019	148,085,853	174,511,310	26,425,457	84.9%	26,467,266	99.8%
June 30, 2019 ⁴	148,085,853	175,894,929	27,809,076	84.2%	26,467,266	105.1%
June 30, 2020	158,212,175	187,510,891	29,298,716	84.4%	26,805,499	109.3%
June 30, 2021	175,036,771	198,842,972	23,806,201	88.0%	26,080,257	91.3%

¹ Restated for Article 22 (2008).

² Restated after reflecting the Rhode Island Retirement Security Act of 2011.

³ Restated after reflecting impact of Article 21.

⁴ June 30, 2019 actuarial value after changes of actuarial assumptions.

Table 5

Notes to Required Supplementary Information

Valuation date	June 30, 2021
Actuarial cost method	Entry Age Normal
Amortization method	Level percentage, closed
Remaining amortization period	16 years
Asset valuation method	5-Year smoothed market
Actuarial assumptions:	
Investment rate of return *	7.00%
Projected salary increase *	3.75% to 11.75%
Cost of living adjustment **	2.10%

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* Includes inflation at 2.50%.

** COLAs are currently suspended for all state employees, teachers, BHDDH nurses, correctional officers, judges and state police until the aggregate funding level of their plans exceeds 80%. It is assumed that the COLAs will be suspended through 2027 due to the current funding level of the plans; however, an interim COLA may be granted in four-year intervals while the COLA is suspended.

Table 6

Plan Net Assets
(Assets at Market or Fair Value)

Item	June 30, 2021	June 30, 2020
(1)	(2)	(3)
1. Cash and cash equivalents	\$ 1,464,107	\$ 969,070
2. Receivables:		
a. Employer and member contributions	\$ 188	\$ 259
b. Transfers receivable	0	0
c. Miscellaneous	39,127	38,155
d. Total receivables	\$ 39,315	\$ 38,414
3. Investments		
a. Pooled trust	\$ 194,867,679	\$ 153,010,098
b. Plan specific investments	0	0
c. Total	\$ 194,867,679	\$ 153,010,098
4. Invested securities lending collateral	\$ 0	\$ 0
5. Property and equipment (net of depreciation)	\$ 0	\$ 0
6. Total assets	\$ 196,371,101	\$ 154,017,582
7. Liabilities		
a. Other post-employment benefit liability, net	\$ 0	\$ 0
b. Securities lending liability	0	0
c. Other reserves and payables	66,459	108,982
d. Total liabilities	\$ 66,459	\$ 108,982
8. Total market value of assets available for benefits		
Total (Item 6 - Item 7)	\$ 196,304,642	\$ 153,908,600

Table 7**Reconciliation of Plan Net Assets**

	<u>June 30, 2021</u>	<u>June 30, 2020</u>
1. Market value of assets as of beginning of year		
a. Market value of assets as of beginning of year	\$ 153,908,600	\$ 147,405,372
b. Adjustment for market value of assets	<u>0</u>	<u>0</u>
c. Adjusted market value of assets as of beginning of year	\$ 153,908,600	\$ 147,405,372
2. Contributions		
a. Members	\$ 2,313,660	\$ 2,309,020
b. State	5,240,772	4,877,630
c. Service purchases	26,438	57,476
d. Miscellaneous revenue	<u>91</u>	<u>4,291</u>
e. Total	\$ 7,580,961	\$ 7,248,417
3. Investment earnings, net of investment and administrative expenses	\$ 41,686,838	\$ 5,483,735
4. Expenditures for the year		
a. Benefit payments	\$ (6,828,358)	\$ (6,132,911)
b. Cost-of-living adjustments	(43,399)	(41,477)
c. Death benefits	0	0
d. Social security supplements	0	0
e. Supplemental pensions	0	0
f. Refunds	<u>0</u>	<u>(54,536)</u>
g. Total expenditures	\$ (6,871,757)	\$ (6,228,924)
5. Transfers and other adjustments	\$ 0	\$ 0
6. Market value of assets at end of year	\$ 196,304,642	\$ 153,908,600

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Table 8

Development of Actuarial Value of Assets

	Year Ending June 30, 2021	
1. Market value of assets at beginning of year	\$	153,908,600
2. Net new investments		
a. Contributions (includes misc revenues)	\$	7,580,961
b. Benefits paid		(6,871,757)
c. Refunds		0
e. Subtotal		709,204
3. Market value of assets at end of year	\$	196,304,642
4. Net earnings (3-1-2)	\$	41,686,838
5. Assumed investment return rate for fiscal year		7.00%
6. Expected return	\$	10,798,424
7. Excess return (4-6)	\$	30,888,414
8. Development of amounts to be recognized as of June 30, 2021:		
	DRAFT	
	Remaining Deferrals	
Fiscal	of Excess (Shortfall)	
Year	of Investment	Offsetting of
End	Income*	Gains/(Losses)
	(1)	(2)
		(3) = (1) + (2)
		(4)
		(5) = (3) / (4)
		(6) = (3) - (5)
2017	\$ 0	\$ 0
2018	0	0
2019	(407,317)	407,317
2020	(3,896,258)	3,896,258
2021	30,888,414	(4,303,575)
Total	\$ 26,584,839	\$ 0
		\$ 26,584,839
		\$ 5,316,968
		\$ 21,267,871
9. Actuarial value of assets as of June 30, 2021 (Item 3 - Item 8)	\$	175,036,771
10. Ratio of actuarial value to market value		89.2%

*Values of \$0 result from the beginning balance being offset by future gains or losses in the opposite direction.



Table 9

Distribution of Assets at Market Value (Percentage of Total Investments)

Item (1)	June 30, 2021 (2)
US Equity	24.3%
International Developed Equity	11.1%
Emerging Markets Equity	4.6%
Private Equity and Opportunistic Private Credit	12.5%
Non-Core Real Estate	2.5%
Equity Options	2.0%
EMD (50/50 Blend)	2.0%
Liquid Credit	3.0%
Private Credit	3.0%
CLOs	2.0%
Treasury Duration	5.0%
Systematic Trend	5.0%
Core Real Estate	4.0%
Private Infrastructure	4.0%
IG Corp Credit	3.3%
Securitized Credit	3.3%
Absolute Return	6.5%
Cash	2.0%
Total investments	100.0%

Table 10

History of Investment Return Rates

Year Ending June 30 of (1)	Market (2)	Actuarial (3)
1996	13.7%	13.7%
1997	19.1%	19.1%
1998	16.1%	16.5%
1999	10.1%	14.7%
2000	9.1%	8.8%
2001	-11.0%	4.9%
2002	-8.4%	0.9%
2003	4.5%	1.5%
2004	18.0%	4.2%
2005	10.2%	5.9%
2006	11.6%	8.8%
2007	18.1%	12.2%
2008	-5.9%	9.0%
2009	-19.1%	2.0%
2010	12.8%	1.6%
2011	19.0%	3.8%
2012	1.8%	5.9%
2013	10.7%	6.8%
2014	15.0%	8.7%
2015	2.2%	7.7%
2016	0.0%	5.8%
2017	11.7%	6.2%
2018	7.9%	6.8%
2019	6.5%	6.8%
2020	3.7%	6.1%
2021	27.0%	10.2%
Average Returns:		
Last 5 Years	11.1%	7.2%
Last 10 Years	8.4%	7.1%
Since 1996	7.3%	7.5%

Table 11a

Analysis of Change in Employer Cost

Basis	Employer Cost
1. Employer contribution rates from prior valuation	20.87%
2. Impact of changes, gains and losses	
a. Non-salary liability experience (gain)/loss	-0.29%
b. Salary (gain)/loss	-0.08%
c. Total payroll growth (gain)/loss	0.25%
d. Investment experience (gain)/loss	-1.44%
e. Phase In of 2016 & 2019 Assumption Changes	1.35%
f. Changes in assumptions	0.00%
g. Changes in plan provisions	<u>0.00%</u>
i. Total	-0.21%
3. Employer contribution rates from current valuation	20.66%

Table 11b

History of Employer Contribution Rates

Valuation Date as of June 30, (1)	Effective for Fiscal Year Ending June 30, (2)	Employer Contribution Rate (3)
1999	2002	27.67%
2000	2003	27.48%
2001	2004	26.77%
2002	2005	28.87%
2003	2006	31.35%
2004	2007	31.78%
2005	2008	31.00%
2006	2009	26.03% ¹
2007	2010	26.03% ¹
2008	2011	24.58%
2009	2012	25.39%
2010	2013	11.07% ²
2011	2014	14.45%
2012	2015	17.24%
2013	2016	17.22%
2014	2017	12.66% ³
2015	2018	12.22%
2016	2019	14.74%
2017	2020	18.48%
2018	2021	19.82%
2019	2022	19.24%
2020	2023	20.87%
2021	2024	20.66%

¹ Revised pursuant to Article 22 (2008).

² Restated after reflecting the Rhode Island Retirement Security Act of 2011.

³ Restated to reflect impact of Article 21.

Table 11c

Analysis of Change in UAAL

Basis (1)	June 30, 2021 (2)
1. UAAL as of June 30, 2020	\$ 29,299
2. Impact of changes, gains and losses	
a. Interest at 7.00% for one year	1,996
b. Expected amortization payments	(1,585)
c. Investment experience (gain)/loss	(5,016)
d. Salary (gain)/loss	(297)
e. Non-salary liability experience (gain)/loss	(591)
f. Changes in assumptions	0
g. Changes in plan provisions	0
i. Total	\$ (5,493)
3. UAAL as of June 30, 2021	\$ 23,806

Note: All dollar figures are shown in thousands.

Table 12

Membership Data (State Police)

	June 30, 2021 (1)	June 30, 2020 (2)
1. Active members		
a. Number	242	251
b. Number eligible to retire	61	53
c. Total payroll supplied by State (for benefits)	\$ 26,080,257	\$ 26,805,499
d. Average salary	\$ 107,770	\$ 106,795
e. Average age	40.1	39.5
f. Average service	12.8	12.2
2. Inactive members		
a. Number	56	53
3. Service retirees		
a. Number	76	68
b. Total annual benefits	\$ 6,697,821	\$ 5,952,490
c. Average annual benefit	88,129	87,537
d. Average age	56.5	55.7
4. Disabled retirees		
a. Number	5	5
b. Total annual benefits	\$ 384,089	\$ 383,036
c. Average annual benefit	76,818	76,607
d. Average age	56.0	55.0
5. Beneficiaries and spouses		
a. Number	7	6
b. Total annual benefits	\$ 270,811	\$ 229,474
c. Average annual benefit	38,687	38,246
d. Average age	56.2	55.5

Table 13

Historical Summary of Active Member Data

Valuation as of June 30,	Active Members		Covered Payroll*		Average Salary*		Average Age	Average Service
	Number	Percent Increase	Amount	Percent Increase	Amount	Percent Increase		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1998	130	35.4%	\$7,211,874	34.3%	\$55,476	-0.8%	32.3	4.4
1999	130	0.0%	\$7,502,433	4.0%	\$57,711	4.0%	33.3	5.4
2000	152	16.9%	\$8,916,914	18.9%	\$58,664	1.7%	33.7	5.5
2001	151	-0.7%	\$9,139,418	2.5%	\$60,526	3.2%	34.7	6.6
2002	150	-0.7%	\$10,933,360	19.6%	\$72,889	20.4%	35.5	7.5
2003	150	0.0%	\$11,286,365	3.2%	\$75,242	3.2%	36.6	8.4
2004	148	-1.3%	\$11,421,880	1.2%	\$77,175	2.6%	37.6	9.5
2005	181	22.3%	\$13,225,400	15.8%	\$73,069	-5.3%	36.9	8.6
2006	179	-1.1%	\$13,474,588	1.9%	\$75,277	3.0%	37.9	9.6
2007	179	0.0%	\$15,836,354	17.5%	\$88,471	17.5%	38.9	10.6
2008	177	-1.1%	\$16,698,764	5.4%	\$94,343	6.6%	39.9	11.6
2009	176	-0.6%	\$17,096,202	2.4%	\$97,138	3.0%	40.9	12.6
2010	211	19.9%	\$19,715,070	15.3%	\$93,436	-3.8%	39.5	11.5
2011	206	-2.4%	\$19,711,694	0.0%	\$95,688	2.4%	40.7	12.6
2012	231	12.1%	\$23,669,619	20.1%	\$102,466	7.1%	39.6	12.0
2013	222	-3.9%	\$19,904,363	-15.9%	\$89,659	-12.5%	40.3	12.6
2014	250	12.6%	\$20,814,621	4.6%	\$83,258	-7.1%	39.1	11.6
2015	237	-5.2%	\$19,940,052	-4.2%	\$84,135	1.1%	39.5	12.0
2016	246	3.8%	\$22,555,315	13.1%	\$91,688	9.0%	38.2	10.9
2017	232	-5.7%	\$22,612,234	0.3%	\$97,467	6.3%	38.5	11.1
2018	226	-2.6%	\$23,455,654	3.7%	\$103,786	6.5%	39.5	12.1
2019	260	15.0%	\$26,467,266	12.8%	\$101,797	-1.9%	38.7	11.4
2020	251	-3.5%	\$26,805,499	1.3%	\$106,795	4.9%	39.5	12.2
2021	242	-3.6%	\$26,080,257	-2.7%	\$107,770	0.9%	40.1	12.8

*Based on salary used for benefits prior to year 2012. Effective 2013, only base salary, holiday pay and clothing allowance are recorded in salary.

Table 14

Distribution of Active Members by Age and by Years of Service As of June 30, 2021

Attained Age	Years of Credited Service												Total
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	Count & Avg. Comp.	
Under 25	0 \$0	0 \$0	1 \$73,375	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	1 \$73,375
25-29	0 \$0	0 \$0	24 \$76,593	0 \$0	0 \$0	9 \$91,314	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	33 \$80,608
30-34	0 \$0	0 \$0	9 \$74,767	0 \$0	0 \$0	32 \$87,929	12 \$90,524	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	53 \$86,281
35-39	0 \$0	0 \$0	2 \$73,375	0 \$0	0 \$0	14 \$91,118	27 \$94,389	4 \$107,739	0 \$0	0 \$0	0 \$0	0 \$0	47 \$93,656
40-44	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	2 \$89,504	12 \$98,829	9 \$116,016	2 \$114,498	0 \$0	0 \$0	0 \$0	25 \$105,524
45-49	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	1 \$98,455	13 \$108,731	12 \$146,246	0 \$0	0 \$0	0 \$0	26 \$125,650
50-54	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	7 \$110,807	17 \$147,826	9 \$168,589	0 \$0	0 \$0	33 \$145,636
55-59	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	1 \$106,388	13 \$154,813	5 \$169,148	0 \$0	0 \$0	19 \$156,037
60-64	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	2 \$132,139	3 \$144,026	0 \$0	0 \$0	5 \$139,272
65 & Over	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0
Total	0 \$0	0 \$0	36 \$75,868	0 \$0	0 \$0	57 \$89,302	52 \$94,600	34 \$110,901	46 \$147,257	17 \$164,419	0 \$0	0 \$0	242 \$107,770

APPENDIX A

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

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APPENDIX A

SUMMARY OF ACTUARIAL METHODS AND 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 Normal 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, sex 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.

APPENDIX A (Continued)

6. The amortization contribution rate is the level percentage of payroll required to reduce the UAAL to zero over the remaining amortization period. 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 amortization payment for the applicable fiscal year is first determined based on the individual amortization bases. The covered payroll is projected forward for two years, and we then determine the amortization rate by dividing the amortization payment by the projected payroll. Contributions are assumed to be made monthly throughout the year.

- (a) In conjunction with The Rhode Island Retirement Security Act of 2011, the amortization period was reset to 25 years as of June 30, 2010 for the UAAL that existed at that time. New gains and losses each year will be amortized over individual 20 year periods. At any time that the System is in an overfunded status, the amortization schedule will be a rolling 20 year amortization of any surplus.

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.



APPENDIX A (Continued)

2. Salary increase rate: 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 below:

Years of Service	Service-Related Component	Total Increase
0	5.00%	8.00%
1	4.75	7.75
2	4.75	7.75
3	8.75	11.75
4	5.75	8.75
5	4.00	7.00
6	2.00	5.00
7	2.00	5.00
8	1.75	4.75
9	1.50	4.75
10-14	1.50	4.50
15-19	1.25	4.25
20-24	1.00	4.00
25&up	0.75	3.75

Salary increases are assumed to occur once a year, on July 1. Therefore the pay used for the period between the valuation date and the first anniversary of the valuation date is equal to the reported pay for the prior year, increased by the salary increase assumption.

3. Payroll growth rate: In the amortization of the unfunded frozen liability, payroll is assumed to increase 3.00% per year. This assumption includes no allowance for future membership growth.
4. Post-retirement Benefit Increase: Post-retirement benefit increases are assumed to be 2.10%, 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, 2021, it is assumed that the COLAs will be suspended through 2027 due to the current funding level of the plans. The actual amount of the COLA is determined based on 50% of the plan's five-year average investment rate of return minus 5.00% which will range from zero to 4.0%, and 50% of the lesser of 3% or last year's CPI-U increase for a total maximum increase of 3.50%.

APPENDIX A (Continued)

B. Demographic Assumptions

1. Post-termination mortality rates

- a. Healthy males – PUB(10) Median Table for Healthy General Employee Males, loaded by 115%, projected with Scale Ultimate MP16.
- b. Healthy females - PUB(10) Median Table for Healthy General Employee Females, loaded by 111%, projected with Scale Ultimate MP16.
- c. Disabled males – PUB(10) Tables for Disabled Retirees by Occupation for males, projected with Scale Ultimate MP16.
- d. Disabled females – PUB(10) Tables for Disabled Retirees by Occupation for females, projected with Scale Ultimate MP16.

2. Pre-retirement mortality

- a. Males – PUB(10) Tables for Employees by Occupation for males, projected with Scale Ultimate MP16.
- b.. Females - PUB(10) Tables for Employees by Occupation for females, projected with Scale Ultimate MP16.

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3. Disability rates – Rates are applied, with 75% of disabilities considered work related, and no recoveries assumed once disabled:

Age	Rate
20	0.12%
25	0.17
30	0.22
35	0.29
40	0.44
45	0.72
50	1.21

Disabilities that are not work-related are assumed to result in a refund. The disability rates for non work-related causes stop once the member is eligible for retirement.

4. Termination rates – None



APPENDIX A (Continued)

5. Retirement rates – State police are assumed to retire in accordance with the probabilities as shown below. Any member of the State police, other than the superintendent of State police may retire at any time subsequent to the date the member's retirement allowance equals or exceeds 50% of average compensation, provided that a member may retire at or after the date of the attainment of a 50% benefit multiplier. 100% are assumed to retire upon the first to occur of (i) the date the member's retirement allowance equals 65%; or (ii) the age 70 if still active.

State Police Employed Before July 1, 2007	
Service	Ret. Rate
20	5.0%
21	8.0%
22	11.0%
23	14.0%
24	17.0%
25+	45.0%

State Police Employed On or After July 1, 2007	
Service	Ret. Rate
25	35.0%
26	25.0%
27	20.0%
28	30.0%
29+	40.0%

APPENDIX A (Continued)

C. Other Assumptions

1. Percent married: 85% of employees are assumed to be married.
2. 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.
3. Remarriage: It is assumed that no surviving spouse will remarry and there will be no children's benefit.
4. Investment and administrative expenses: The assumed investment return rate represents the anticipated net return after payment of all investment and administrative expenses.
5. Overtime: Members eligible for overtime are assumed to work and contribute on 400 hours of overtime during their final averaging period.

V. Participant Data

Participant data was supplied in electronic files for active and retired members. The data for active members included birth date, sex, service, salary and employee contribution account balance. For retired members and beneficiaries, the data included date of birth, sex, spouse's date of birth (where applicable), amount of monthly benefit, date of retirement, and a form of payment code.

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APPENDIX B

SUMMARY OF BENEFIT PROVISIONS

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APPENDIX B

Summary of Benefit Provisions

1. Effective Date and Authority: The State Police Retirement Benefits Trust (SPRBT) became effective on July 1, 1989 for State police officers originally hired on or after July 1, 1987. Benefits are described in Rhode Island General Laws, Title 42, Chapter 28.
2. Plan Year: A twelve-month period ending June 30th.
3. Administration: The State Police Retirement Benefits Trust is administered by the State of Rhode Island Retirement Board. However, the State Treasurer is responsible for the investment of the trust assets, including the establishment of the asset allocation policy. Assets are commingled for investment purposes with those of the Employees' Retirement System of Rhode Island and various other plans and programs.
4. Type of Plan: The State Police Retirement Benefits Trust is a qualified governmental defined benefit retirement plan. For Governmental Accounting Standards Board purposes, it is a single-employer plan.
5. Eligibility: All State police officers, and the Superintendent of State Police, hired on or after July 1, 1987, participate in this plan. Benefits for State police officers hired before July 1, 1987 are being paid by the State from the general assets of the State, on a pay-as-you-go basis. Eligible employees become members at their date of employment.
6. Salary for Contribution Purposes: Salary includes the member's base earnings plus any payments under a regular longevity or incentive plan. Salary excludes, unused sick and vacation leave, severance pay, and other extraordinary compensation. Members may contribute on up to 400 hours of overtime during their final averaging period to be included in the determination of their benefit. Certain amounts that are excluded from taxable wages, such as amounts sheltered under a Section 125 plan or amounts picked up by the employer under IRC Section 414(h), are not excluded from salary.
7. Employee Contributions: State police officers contribute 8.75% of their salary per year. The State "picks up" the members' contributions for its employees under the provisions of Internal Revenue Code (IRC) Section 414(h).
8. Employer Contributions: The State contributes an actuarially determined percentage of the member's annual salary. Contributions determined in a given actuarial valuation go into effect two years after the actuarial valuation.
9. Service: Employees receive credit for service while a member. In addition, a member may purchase credit for certain periods by making an additional contribution to purchase the additional service. Special rules and limits govern the purchase of additional service and the contribution required.
10. Final Salary (Salary for Benefit Purposes): Final Salary includes base pay, longevity increases, up to 400 hours of overtime pay, holiday pay and the member's clothing allowance. For members who work more than 25 years, their Final Salary shall not be more than the Final Salary in the 25th year.



APPENDIX B (Continued)

11. Final Average Compensation (FAC): For members eligible to retire after June 30, 2012, their FAC will be based on the average of the highest five consecutive years of compensation, which includes base pay, longevity, up to 400 hours of overtime pay and holiday pay.
12. Retirement
 - a. Eligibility:
 - (i) Members other than Superintendent of State Police can retire on or after the attainment of a 50% benefit multiplier.
 - (ii) The Superintendent of State Police may retire on or after age 60 if he has credit for 10 years of service.
 - b. Monthly Benefit:
 - (i) For members hired before June 30, 2007:
 - (1) For members eligible to retire as of June 30, 2012, their benefit multiplier will be two and one half percent (2.5%) for a member's first twenty (20) total years, plus three percent (3%) for years after 20. Their monthly benefit will be Final Salary times the benefit multiplier divided by 12.
 - (2) For members who become eligible to retire after July 1, 2012, their benefit multiplier will be two and one half percent (2.5%) for a member's years of service prior to July 1, 2012, plus two percent (2%) for years thereafter. Their monthly benefit will be FAC times the benefit multiplier divided by 12.
 - (ii) For members hired after June 30, 2007: Their benefit multiplier is two percent (2.0%) for all years of service. Their monthly benefit will be FAC times the benefit multiplier divided by 12.
 - (iii) The Superintendent of State Police receives a minimum benefit of 50% of FAC. The member also earns an additional 3% of FAC for each year of service in excess of 25.
 - (iv) In no event shall a member's original retirement allowance exceed sixty-five percent (65%) of FAC.
 - (v) Benefits accrued as of June 30, 2012 are protected.
 - c. Payment Form: Benefits are paid as a monthly life annuity. There are no optional forms of payment available.
 - d. Death benefit: After the death of a retired member, if the member was married, a benefit will be paid to the spouse equal to 2.00% of the member's Final Salary for each year of service. There is a minimum benefit of 25% of Final Salary. Benefits are increased one-third for each dependent child. The maximum benefit is 50% of Final Salary. Benefits may not begin before the spouse is age 40, and benefits stop upon the spouse's death or remarriage. Effective July 1, 2012, death benefits will be based on FAC, and not Final Salary.



APPENDIX B (Continued)

13. Disability Retirement

- a. Eligibility: A member is eligible if the disability is work-related. (Non work-related disabilities result in a refund.)
- b. Occupational Disability Benefit: 75% of Final Salary.
- c. Payment Form: The disability benefit commences immediately upon the member's retirement. Benefits cease upon recovery or reemployment. Disability benefits are payable as a monthly life annuity. The same provisions that apply upon the death of a retired member apply upon the death of a disabled member.

14. Refunds

- a. Eligibility: All members leaving covered employment prior to eligibility for other benefits.
- b. Benefit: A lump-sum payment equal to the sum of his/her employee contributions. No interest is credited on these contributions.

15. Death Benefit of Active Members

- a. Eligibility: Death must have occurred from a service-related cause, or the member must have 10 or more years of service.
- b. Ordinary Benefit: After the death of an active member, if the member was married, a benefit will be paid to the spouse equal to 2.00% of the member's Final Salary for each year of service. There is a minimum benefit of 25% of Final Salary. Benefits are increased one-third for each dependent child. The maximum benefit is 50% of Final Salary. Benefits may not begin before the spouse is age 40 without a dependent child, and benefits stop upon the spouse's death or remarriage. Effective July 1, 2012, death benefits will be based on FAC, and not Final Salary.
- c. Duty-related Death Benefit: 75% of Final Salary, paid to the spouse or other dependent relative. Benefits cease when the spouse or other relatives die or are no longer dependent.

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APPENDIX B (Continued)

16. Post-retirement Benefit Increase:

- a. The first COLA will be granted at the later of age 55 and the member's third anniversary of retirement for retirees as of June 30, 2012 and the later of SSNRA and the member's third anniversary of retirement for all other current and future retirees.
- b. Effective July 1, 2012, the following provisions will apply to all members:
 - (i) The COLA will be suspended for all state employees, teachers, BHDDH nurses, correctional officers, judges and state police until the aggregate funding level of their plans exceeds 80%; however, an interim COLA will be granted in four-year intervals while the COLA is suspended. The first interim COLA may begin January 1, 2017.
 - (ii) Effective July 1, 2015, the COLA is determined based on 50% of the plan's five-year average investment rate of return less 5.5% limited to a range of 0.0% to 4.0%, plus 50% of the lesser of 3.0% or last year's CPI-U increase for a total maximum increase of 3.50%. Previously, it was the plan's five-year average investment rate of return less 5.5% limited to a range of 0.0% to 4.0%
 - (iii) The COLA will be limited to the first \$25,000 of the member's annual pension benefit. For retirees and beneficiaries who retired on or before July 1, 2015, years in which a COLA is payable based on the every fourth year provision described in (i) above will be limited to the first \$30,000. These limits will be indexed annually to increase in the same manner as COLAs, with the known values as follows:

<u>Year</u>	<u>COLA Limit</u>
2014	\$ 25,000
2015	\$ 25,168
2016	\$ 25,855
2017	\$ 26,098
2018	\$ 26,291
2019	\$ 26,687
2020	\$ 27,184
2021	\$ 27,608
2022	\$ 27,901
2023	\$ 28,878

- c. In addition to the increases described in section (b) above, there will be a one-time 2% COLA paid in FY2016 on the first \$25,000 of pension benefit for all retirees and beneficiaries who retired on or before June 30, 2012. There will also be two one-time stipends of \$500 payable in FY2016 and FY2017 to retirees and beneficiaries who retired on or before June 30, 2015.



APPENDIX C

RISKS ASSOCIATED WITH MEASURING THE ACCRUED LIABILITY AND ACTUARIALLY DETERMINED CONTRIBUTION

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APPENDIX C

Risks Associated with Measuring the Accrued Liability and Actuarially Determined Contribution

The determination of the accrued liability and the actuarially determined contribution requires the use of assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that result from the differences between actual experience and the actuarial assumptions.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions due to changing conditions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period, or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

1. Investment risk – actual investment returns may differ from the expected returns;
2. Asset/Liability mismatch – changes in asset values may not match changes in liabilities, thereby altering the gap between the accrued liability and assets and consequently altering the funded status and contribution requirements;
3. Contribution risk – actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
4. Salary and Payroll risk – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
5. Longevity risk – members may live longer or shorter than expected and receive pensions for a period of time other than assumed;
6. Other demographic risks – members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

APPENDIX C (Continued)

The effects of certain trends in experience can generally be anticipated. For example if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the cost of the plan can be expected to increase (or decrease). Likewise if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

The computed contribution rate shown on page 9 may be considered as a minimum contribution rate that complies with the Board's funding policy. The timely receipt of the actuarially determined contributions is critical to support the financial health of the plan. Users of this report should be aware that contributions made at the actuarially determined rate do not necessarily guarantee benefit security.

PLAN MATURITY MEASURES

Risks facing a pension plan evolve over time. A young plan with virtually no investments and paying few benefits may experience little investment risk. An older plan with a large number of members in pay status and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures include the following:

	<u>June 30, 2021</u>	<u>June 30, 2020</u>	<u>June 30, 2019</u>
Ratio of the market value of assets to total payroll	7.5	5.7	5.6
Ratio of actuarial accrued liability to payroll	7.6	7.0	6.6
Ratio of actives to retirees and beneficiaries	2.8	3.2	3.6
Ratio of net cash flows to market value of assets	0.5%	0.7%	-0.3%
Duration of the actuarial accrued liability	11.3	11.3	11.4

RATIO OF MARKET VALUE OF ASSETS TO PAYROLL

The relationship between assets and payroll is a useful indicator of the potential volatility of contributions. For example, if the market value of assets is 4.0 times the payroll, a return on assets 5% different than assumed would equal 20% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in plan sponsor contributions as a percentage of payroll.

RATIO OF ACTUARIAL ACCRUED LIABILITY TO PAYROLL

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of contributions for a fully funded plan. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time.

The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 5.5 times the payroll, a change in liability 2% other than assumed would equal 11% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also plan sponsor contributions) as a percentage of payroll.



APPENDIX C (Continued)

RATIO OF ACTIVES TO RETIREES AND BENEFICIARIES

A young plan with many active members and few retirees will have a high ratio of active to retirees. A mature open plan may have close to the same number of actives to retirees resulting in a ratio near 1.0. A super-mature or closed plan may have significantly more retirees than actives resulting in a ratio below 1.0.

RATIO OF NET CASH FLOW TO MARKET VALUE OF ASSETS

A positive net cash flow means contributions exceed benefits and expenses. A negative cash flow means existing funds are being used to make payments. A certain amount of negative net cash flow is generally expected to occur when benefits are prefunded through a qualified trust. Large negative net cash flows as a percent of assets may indicate a super-mature plan or a need for additional contributions.

DURATION OF ACTUARIAL ACCRUED LIABILITY

The duration of the actuarial accrued liability may be used to approximate the sensitivity to a 1% change in the assumed rate of return. For example, duration of 10 indicates that the liability would increase approximately 10% if the assumed rate of return were lowered 1%.

ADDITIONAL RISK ASSESSMENT

Additional risk assessment is outside the scope of the annual actuarial valuation. Additional assessment may include scenario tests, sensitivity tests, stochastic modeling, stress tests, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability

GLOSSARY

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Glossary

Actuarial Accrued Liability (AAL): That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of Future Plan Benefits which is not provided for by future Normal Costs. It is equal to the Actuarial Present Value of Future Plan Benefits minus the actuarial present value of future Normal Costs.

Actuarial Assumptions: Assumptions as to future experience under the Fund. These include assumptions about the occurrence of future events affecting costs or liabilities, such as:

- mortality, withdrawal, disablement, and retirement;
- future increases in salary;
- future rates of investment earnings and future investment and administrative expenses;
- characteristics of members not specified in the data, such as marital status;
- characteristics of future members;
- future elections made by members; and
- other relevant items.

Actuarial Cost Method or Funding Method: A procedure for allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability. These items are used to determine the ARC.

Actuarial Gain or Actuarial Loss: A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. Through the actuarial assumptions, rates of decrements, rates of salary increases, and rates of fund earnings have been forecasted. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted, or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., the Fund's assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results that produce actuarial liabilities which are larger than projected. Actuarial gains will shorten the time required for funding of the actuarial balance sheet deficiency while actuarial losses will lengthen the funding period.

Actuarially Equivalent: Of equal actuarial present value, determined as of a given date and based on a given set of Actuarial Assumptions.

Actuarial Present Value (APV): The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:

- a. adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.)
- b. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and
- c. discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Glossary (Continued)

Actuarial Present Value of Future Plan Benefits: The Actuarial Present Value of those benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits. The Actuarial Present Value of Future Plan Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive, nonretired members either entitled to a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.

Actuarial Valuation: The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB 67, such as the funded ratio and the ADC.

Actuarial Value of Assets or Valuation Assets: The value of the Fund's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly actuaries use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the ADC.

Actuarially Determined: Values which have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the law.

Amortization Method: A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.

Amortization Payment: That portion of the pension plan contribution or ARC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

Actuarially Determined Contribution (ADC): The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation, calculated to systematically fund the Plan following the funding policy adopted by the Plan. The ADC consists of the Employer Normal Cost and the Amortization Payment.

Closed Amortization Period: A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc. See Funding Period and Open Amortization Period.

Decrements: Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or termination.



Glossary (Continued)

Defined Benefit Plan: A retirement plan that is not a Defined Contribution Plan. Typically a defined benefit plan is one in which benefits are defined by a formula applied to the member's compensation and/or years of service.

Defined Contribution Plan: A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, and the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.

Employer Normal Cost: The portion of the Normal Cost to be paid by the employers. This is equal to the Normal Cost less expected member contributions.

Experience Study: A periodic review and analysis of the actual experience of the Fund which may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified as deemed appropriate by the Actuary.

Funded Ratio: The ratio of the actuarial value of assets (AVA) to the actuarial accrued liability (AAL). Plans sometimes calculate a market funded ratio, using the market value of assets (MVA), rather than the AVA.

Funding Period or Amortization Period: The term "Funding Period" is used in two ways. In the first sense, it is the period used in calculating the Amortization Payment as a component of the ARC. This funding period is chosen by the Board of Trustees. In the second sense, it is a calculated item: the number of years in the future that will theoretically be required to amortize (i.e., pay off or eliminate) the Unfunded Actuarial Accrued Liability, based on the statutory employer contribution rate, and assuming no future actuarial gains or losses.

GASB: Governmental Accounting Standards Board.

GASB 67 and GASB 68: Governmental Accounting Standards Board Statements No. 67 and No. 68. These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 67 sets the rules for the systems themselves.

Normal Cost: That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method. Any payment in respect of an Unfunded Actuarial Accrued Liability is not part of Normal Cost (see Amortization Payment). For pension plan benefits which are provided in part by employee contributions, Normal Cost refers to the total of employee contributions and employer Normal Cost unless otherwise specifically stated. Under the entry age normal cost method, the Normal Cost is intended to be the level cost (when expressed as a percentage of pay) needed to fund the benefits of a member from hire until ultimate termination, death, disability or retirement.

Open Amortization Period: An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered payroll.



Glossary (Continued)

Unfunded Actuarial Accrued Liability: The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. This value may be negative in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus.

Valuation Date or Actuarial Valuation Date: The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Plan Benefits is determined. The expected benefits to be paid in the future are discounted to this date.

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December 10, 2021

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

Re: Actuarial Valuation for State Police Hired Before July 1, 1987 as of June 30, 2021

Dear Members of the Board:

This is the June 30, 2021 actuarial valuation of the State police hired before July 1, 1987 and who have all retired from employment by the State of Rhode Island. This report provides disclosure information for fiscal year beginning July 1, 2023 according to 42-28-22.2 of the Rhode Island General Laws. This valuation was performed as of June 30, 2021.

Financing Objectives

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Currently, State police who do not participate in the State Police Retirement Benefits Trust (SPRBT) whose benefits were previously financed by annual contributions equal to the annual benefit payment of current retirees are included in this valuation. The original legislation stipulated an actuarially appropriate contribution amount of \$16,387,092 based on an eighteen (18) year funding period beginning July 1, 2015, plus an initial supplemental contribution from the State to start the Trust. The initial supplemental contribution was \$15.0 million. It is our understanding that the amount determined above was to remain level until the UAAL was fully amortized. Subsequent to the original statute the Board lowered the assumed investment return from 7.5% to 7.0% and that has pushed the anticipated year the UAAL will be fully amortized out slightly more than 2 years, with a small required payment expected in 2036. Due to very positive asset experience, the UAAL is expected to be fully amortized by 2035. However, the actual experience over the remaining amortization period will ultimately determine when the UAAL is amortized and contributions can cease.

Progress Towards Realization of Financing Objectives

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) is a standard measure of a plan's funded status. There has been multiple years of advanced funding for this closed group of retirees, so the funded ratio as of June 30, 2021 is 14.2% and the unfunded actuarial accrued liability for this group as of June 30, 2021, is \$141,930,750.

Given the plan's contribution allocation procedure, if all actuarial assumptions are met (including the assumption of the plan earning 7.00% on the actuarial valuation of assets), it is expected that:

1. The employer contribution for fiscal years 2022 and beyond will remain level as a dollar amount at \$16,387,092,
2. The unfunded actuarial accrued liability will be fully amortized by 2035, and
3. In the absence of benefit improvements, the funded ratio should increase over time, until it reaches 100%.

Benefit provisions

The benefit provisions reflected in this valuation are those which were in effect on June 30, 2021. The benefit provisions are summarized in Appendix B in the June 30, 2021 actuarial valuation of the SPRBT dated December 7, 2021.

Assumptions and methods

The assumptions used in this valuation, including the 7.00% discount rate, are the same as those summarized in Appendix A in the June 30, 2021 actuarial valuation of the SPRBT dated December 7, 2021. We believe the assumptions are internally consistent and are reasonable.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities and the calculated contribution rates.

Data

Data for the 243 retirees as of June 30, 2021 for this valuation was provided by the Staff at the Employees Retirement System of Rhode Island. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the data from the SPRBT valuation.



Certification

All of our work conforms with generally accepted actuarial principles and practices and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Rhode Island state law and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board.

The undersigned are independent actuaries. All are Members of the American Academy of Actuaries. They all meet the Qualification Standards of the American Academy of Actuaries, and they are experienced in performing valuations for large public retirement systems.

Respectfully submitted,



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



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

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Rhode Island Teachers' Survivors Benefit Plan

ACTUARIAL VALUATION REPORT

As of June 30, 2021

DRAFT





December 10, 2021

Retirement Board
40 Fountain Street, First Floor
Providence, RI 02903-1854

Dear Members of the Board:

Subject: Teachers' Survivors Benefit Plan as of June 30, 2021

This is the June 30, 2021 actuarial valuation of the Rhode Island Teachers' Survivors Benefit Plan (TSB). The TSB provides survivor benefits for teachers who do not participate in Social Security. This report describes the current actuarial condition of TSB. The last valuation was prepared as of June 30, 2020.

Current Actuarial Conditions

As of June 30, 2021, the market value of TSB assets was \$423,973,743. The actuarial present value of future benefits under the plan, measured at this same date, is \$233,914,863. Therefore, the plan has an asset surplus of \$190,058,880. This surplus ignores the present value of future member and employer contributions. These results are summarized in Table 1.

Therefore, if future plan experience followed exactly the expected experience based on the actuarial assumptions, the plan would have more than enough funds to continue paying benefits for the current membership, even if no further contributions were made. The actuarial present value of future member and employer contributions for the current active membership is \$13.7 million, and these contributions will serve to increase this surplus.

Contributions to the Fund now cover only about 12.9% of the benefit payments and refunds. This implies that the funds needed to cover the rest of the benefit payments are coming from investment earnings. This is not necessarily a problem, however, since the intent of prefunding is to use investment earnings to pay part of the cost of the benefit.

Progress toward realization of financing objectives

The actuarial accrued liability (AAL) is \$221,346,139. With \$423,973,743 in assets, the plan has a funded surplus of \$202,627,604, and a funded ratio of 192%. As shown, the plan is very well funded. Please note that the funded status alone is not appropriate for assessing the need for future contributions. The funded status is also not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.

The normal cost under the entry age normal method is \$1,604,634. Because the plan is over-funded (assets are greater than the liabilities), the 30-year amortization payment is a credit of \$15,827,436. Therefore, the Actuarially Determined Employer Contribution (ADEC) is \$0 because the sum of the normal cost and the amortization credit is less than zero.

Assets

Exhibit 4 summarizes the TSB assets for the last ten years. All assets are shown at fair market value. The TSB is commingled with the assets of ERSRI for investment purposes. It shows a reconciliation of the assets between years, and it shows the funds net rate of return and the ratio of contributions to benefit payments and refunds.

Benefit Provisions

The plan's provisions are summarized in Appendix B. There were no changes to the benefit provisions since the prior report.

Assumptions and Methods

Assumptions and methods are described in Appendix A. Except for the assumptions specific to this plan, they are the same as the assumptions used for the teachers in the Employees' Retirement System of Rhode Island (ERSRI). In particular, a 7.00% investment return assumption is used.

The assumptions are unchanged from the last actuarial valuation and were approved by the Board on May 22, 2020. We believe the assumptions are internally consistent and are reasonable, based on the actual experience of ERSRI.

The results of the actuarial valuation are dependent upon the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities and the calculated contribution rates.

This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

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We should note that, unlike ERSRI, we used the level-dollar version of the entry age normal actuarial cost method, because the spouse's benefit is \$1,375/month for almost all active members, and determining a level dollar normal cost seemed more appropriate for a plan with an essentially level benefit and an essentially fixed \$115/year employer contribution. The market value of assets was used as the actuarial value, in part because of the fixed nature of the TSB contributions and the significantly overfunded position of the plan. In determining the ADEC (actuarially determined employer contribution) the UAAL, which is actually a surplus, was amortized as a level dollar amount over 30 years. Because the plan is overfunded, the use of a 30-year amortization period is conservative. Appendix A is a summary of the actuarial assumptions and methods used in this valuation report.

Data

The System's staff supplied member data for covered active members, covered retirees and beneficiaries receiving benefits. This data was prepared as of June 30, 2021. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent. The System's staff also supplied asset data as of June 30, 2021. Exhibits 5 and 6 summarize the member data.

Certification

All of our work conforms with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Rhode Island law, and, where applicable, with the Statements of the Governmental Accounting Standards Board.

The undersigned are independent actuaries. All three are Enrolled Actuaries and/or Members of the American Academy of Actuaries. They all meet the Qualification Standards of the American Academy of Actuaries and they are experienced in performing valuations for large public retirement systems.

Respectfully submitted,



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



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



Bradley E. Stewart, ASA, MAAA, EA
Consultant and Actuary

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EXHIBITS

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Summary of Actuarial Valuation Results

Summary of Actuarial Valuation Results

Exhibit 1

	06/30/2021	06/30/2020
1. Actuarial present value of future benefits		
a. Current covered active members	\$ 59,277,847	\$ 53,456,653
b. Current covered retired teachers	78,429,737	85,357,323
c. Beneficiaries receiving benefits	95,182,712	95,151,267
d. Deferred members	739,676	624,222
e. NonVested Inactive members	284,891	271,423
f. Totals	\$ 233,914,863	\$ 234,860,888
2. Actuarial Accrued Liability		
a. Present value of benefits for active members (Item 1a)	\$ 59,277,847	\$ 53,456,653
b. Less: Present value of future normal costs	(12,568,724)	(11,890,467)
c. Actuarial accrued liability for active members	\$ 46,709,123	\$ 41,566,186
d. Actuarial accrued liability for all other members (Sum of Items 1b, 1c, 1d, and 1e)	174,637,016	181,404,235
e. Total (Item 2c + Item 2d)	221,346,139	222,970,421
3. Market value of assets	\$ 423,973,743	\$ 342,259,317
4. Unfunded actuarial accrued liability (UAAL) (Item 2.e. - Item 3.)	\$ (202,627,604)	\$ (119,288,896)
5. Funded Ratio	192%	153%
6. Actuarially determined employer contribution		
a. Normal Cost	\$ 1,604,635	\$ 1,506,774
b. Amortization of UAAL	(15,827,436)	(9,317,770)
c. Total (a + b)	\$ (14,222,801)	\$ (7,810,996)
d. Employer Contribution (Item 6c, not less than zero)	\$ 0	\$ 0



Schedule of Funding Progress

Schedule of Funding Progress Exhibit 2

Date	Actuarial Value of Assets (AVA)	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liability (UAAL) (3) - (2)	Funded Ratio (2)/(3)	Annual Covered Payroll	UAAL as a Percent of Payroll (4)/(6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
July 1, 2002	\$ 159,723,350	\$ 83,399,488	\$ (76,323,862)	192%	\$ 327,658,099	-23%
July 1, 2005	204,844,810	126,416,468	(78,428,342)	162%	432,219,020	-18%
July 1, 2007	259,851,904	116,599,601	(143,252,303)	223%	466,208,437	-31%
July 1, 2009	186,737,083	129,110,000	(57,627,083)	145%	509,416,780	-11%
July 1, 2011	242,885,805	133,569,376	(109,316,429)	182%	537,264,193	-20%
July 1, 2013	261,365,155	175,233,723	(86,131,432)	149%	544,090,898	-16%
July 1, 2014	293,921,803	192,124,126	(101,797,677)	153%	542,756,917	-19%
July 1, 2016	286,485,057	186,913,175	(99,571,882)	153%	522,968,886	-19%
July 1, 2017	311,960,433	230,838,179	(81,122,254)	135%	544,320,446	-15%
July 1, 2018	327,793,239	219,909,971	(107,883,268)	149%	562,365,576	-19%
July 1, 2019	339,417,231	226,678,677	(112,738,554)	150%	575,889,277	-20%
July 1, 2019 ¹	339,417,231	218,083,861	(121,333,370)	156%	575,889,277	-21%
July 1, 2020	342,259,317	222,970,421	(119,288,896)	153%	588,439,146	-20%
July 1, 2021	423,973,743	221,346,139	(202,627,604)	192%	592,624,822	-34%

¹June 30, 2019 actuarial value after changes of actuarial assumptions



Notes for Financing Statements

Exhibit 3

Valuation Date	June 30, 2021
Actuarial cost method	Entry Age Normal
Amortization method	Level dollar, open
Remaining amortization period	30 Years
Asset valuation method	Market
Actuarial assumptions:	
Investment rate of return *	7.00%
Projected salary increase *	3.00% to 13.00%
* Includes inflation at:	2.50%
Cost-of-living adjustment:	2.50%

Fund Assets

Exhibit 4

Fiscal Year Ended June 30:	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Market value (beginning of year)	\$ 242,885,805	\$ 240,635,808	\$ 261,365,155	\$ 293,921,803	\$ 293,811,653	\$ 286,485,057	\$ 311,960,433	\$ 327,793,239	\$ 339,417,231	\$ 342,259,317
Current year prior period adjustments	-	-	(435,451)	-	-	-	-	-	-	1
Adjusted market value of assets at BOY	\$ 242,885,805	\$ 240,635,808	\$ 260,929,704	\$ 293,921,803	\$ 293,811,653	\$ 286,485,057	\$ 311,960,433	\$ 327,793,239	\$ 339,417,231	\$ 342,259,318
Member contributions	664,900	630,222	609,168	603,388	642,276	589,883	744,035	745,856	745,760	736,193
Employer contributions	664,899	654,781	609,168	603,388	642,276	589,883	744,035	745,856	745,760	736,193
Misc.	35	-	-	-	-	4	-	-	-	-
Total contributions	1,329,834	1,285,003	1,218,336	1,206,776	1,284,552	1,179,770	1,488,070	1,491,712	1,491,520	1,472,386
Benefits paid	(6,708,490)	(7,127,856)	(7,421,004)	(7,750,955)	(8,097,068)	(8,405,648)	(9,602,180)	(10,236,365)	(10,436,948)	(10,650,980)
Refunds	(369,108)	(341,232)	(74,619)	(241,426)	(195,600)	(266,523)	(275,134)	(454,153)	(592,550)	(805,371)
Total benefits and refunds	(7,077,598)	(7,469,088)	(7,495,623)	(7,992,381)	(8,292,668)	(8,672,171)	(9,877,314)	(10,690,518)	(11,029,498)	(11,456,351)
Net investment income	3,497,767	26,913,432	39,269,386	6,675,455	(318,480)	32,967,777	24,222,050	20,822,798	12,380,064	91,698,390
Market value (end of year)	\$ 240,635,808	\$ 261,365,155	\$ 293,921,803	\$ 293,811,653	\$ 286,485,057	\$ 311,960,433	\$ 327,793,239	\$ 339,417,231	\$ 342,259,317	\$ 423,973,743
Net return	1.5%	11.3%	15.2%	2.3%	-0.1%	11.7%	7.9%	6.4%	3.7%	27.2%
Ratio of contributions to disbursements	18.8%	17.2%	16.3%	15.1%	15.5%	13.6%	15.1%	14.0%	13.5%	12.9%



Distribution of Covered Active Members by Age and by Years of Service

As of 06/30/2021

Exhibit 5

Attained Age	Years of Credited Service												Total
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
Under 25	16	25	7	1	0	0	0	0	0	0	0	0	49
25-29	43	76	108	75	55	54	0	0	0	0	0	0	411
30-34	17	34	41	41	75	373	47	0	0	0	0	0	628
35-39	17	27	38	38	38	246	322	78	0	0	0	0	804
40-44	12	27	22	18	23	140	211	504	118	0	0	0	1,075
45-49	11	10	15	11	26	116	121	299	512	55	0	0	1,176
50-54	6	11	10	17	13	100	107	210	404	289	66	0	1,233
55-59	5	8	4	9	2	44	73	147	192	165	244	23	916
60-64	0	3	1	2	5	21	35	106	185	109	100	38	605
65 & Over	0	3	2	2	1	8	20	51	76	51	44	21	279
Total	127	224	248	214	238	1,102	936	1,395	1,487	669	454	82	7,176
Average: Age				46.68	Number of employees:				Males	1,521			
Service				16.17					Females	5,655			



Membership Data

Exhibit 6

	06/30/2021	06/30/2020
1. Covered active members		
a. Number	7,176	7,217
b. Total payroll	\$ 592,624,822	\$ 588,439,146
c. Average salary	\$ 82,584	\$ 81,535
d. Average age	46.68	46.56
e. Average service	16.17	15.92
f. Total of member contribution accounts	\$ 10,206,213	\$ 10,036,857
g. Average contributions	\$ 1,422	\$ 1,391
2. Covered retired members		
a. Number	3,166	3,460
b. Average age	72.75	72.20
c. Total annual benefits	\$ 52,110,300	\$ 56,547,150
d. Average annual benefit	\$ 16,459	\$ 16,343
3. Survivors receiving benefits		
a. Number	599	611
b. Average age	78.10	78.30
c. Total benefits	\$ 11,089,943	\$ 11,328,225
d. Average benefit	\$ 18,514	\$ 18,540
4. Inactive, nonretired vested members		
a. Number	639	568
b. Average age	51.02	50.69
c. Total of member contribution accounts	\$ 739,676	\$ 624,222
d. Average contributions	\$ 1,158	\$ 1,099
5. Inactive, nonretired nonvested members		
a. Number	1,322	1,271
b. Average age	48.73	48.36
c. Total of member contribution accounts	\$ 284,891	\$ 271,423
d. Average contributions	\$ 216	\$ 214

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APPENDIX A

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

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APPENDIX A

Summary of Actuarial Methods and Assumptions

A. Basic Actuarial Assumptions

Except for special assumptions that are specific to the Teachers' Survivors Benefit Plan, described below, the actuarial assumptions used in this valuation are the same as the ones used for Teachers in the June 30, 2020 actuarial valuation of the Employees' Retirement System of Rhode Island (ERSRI). I.e., this valuation uses the same 7.00% investment return rate, the same salary increase rates, the same mortality, disability, and retirement rates used in that valuation.

B. Special TSB Assumptions

1. Family Makeup: The following schedule shows the assumptions about the makeup of the member's family at the time of death:

Family Makeup	Probability (By Attained Age)								
	20	25	30	35	40	45	50	60	65
Spouse Only	5%	14%	14%	10%	11%	15%	32%	75%	70%
Spouse and 1 Child	5%	12%	20%	17%	22%	23%	18%	0%	0%
Spouse and 2 or More Children	4%	13%	36%	46%	41%	35%	24%	0%	0%
One Child Alone	5%	6%	3%	7%	8%	10%	6%	0%	0%
Two Children Alone	3%	7%	4%	7%	6%	3%	1%	0%	0%
Three or More Children Alone	1%	4%	4%	5%	4%	1%	1%	0%	0%
Dependent Parent Alone	0%	0%	0%	0%	0%	0%	0%	0%	0%
No Dependents	77%	44%	19%	8%	8%	13%	18%	25%	30%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%

2. Ages: 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. Parents are assumed to be 30 years older than the member, and children are assumed to be 30 years younger than the member. All children are assumed to remain in school until age 23.
3. Remarriage: It was assumed that no spouses would remarry after the member's death.

APPENDIX A (Continued)

4. Refunds at Retirement: Please refer to the Family Makeup grid above for the assumed percentage of members will elect a refund at retirement. (it is the proportion of the membership assumed to be without an eligible dependent.)
5. Deferred beneficiaries: No specific data was available for deferred beneficiaries—those spouses of deceased members who are not yet age 60 and who are not receiving family benefits. They will be entitled to receive a spouse's benefit upon reaching age 60. To estimate this liability, we assumed that these members would receive an immediate refund of their TSB contributions.
6. Inactive members with contributions on deposit: It was assumed that 100% of members who are inactive, nonretired, and nonvested would receive an immediate refund of their TSB contributions.
7. Cost-of-living adjustment (COLA): COLAs are assumed to be 2.50% per year, since that is the ERSRI inflation assumption.

C. Actuarial Methods

1. Valuation date: The TSB plan is valued as of June 30, the last day of the plan's fiscal year. Valuations in the future will be done biennially, in every odd year.
2. Actuarial cost method: The Entry Age Normal actuarial cost method is used to determine the normal cost and actuarial accrued liability. The normal cost is the level dollar amount (not the level percentage of pay used for ERSRI) required to fund a members benefit from entry age to ultimate retirement. The level-dollar version of the Entry Age Normal method was used for consistency with the current contribution requirement of \$115.00/year for almost all members.
3. Actuarial asset method: The market value of fund assets is used as the actuarial value, rather than using a smoothed value.

D. Participant Data

Participant data was supplied on electronic files. There were separate files for (i) covered active and inactive, nonretired members, (ii) retirees who had left their contributions on deposit, and (iii) survivors receiving benefits. For active and inactive/nonretired members, we used the same participant data that we used for the valuation of ERSRI, but excluded members not covered under the TSB. For covered retirees, we received a file showing each member's date of birth, sex, TSB contribution account balance (without interest), and final average salary. For beneficiaries receiving benefits, we received a file that included for each deceased member the spouse's (or child's) date of birth, sex, the amount of the monthly benefit, and a code indicating the kind of benefit being paid (e.g., spouse's benefit, family benefit with two or more children, child's benefit, etc.).



APPENDIX B

SUMMARY OF BENEFIT PROVISIONS

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APPENDIX B

Summary of Benefit Provisions

1. Plan: The Teachers' Survivors Benefit Plan (TSB) is a qualified governmental plan designed to provide death benefits in the form of a monthly annuity to survivors of covered employees and retirees.
2. Authority: Benefits under the TSB are established by the Rhode Island General Laws, Sections 16-16-25 through 16-16-38
3. Administration: The TSB is administered by the Retirement Board for the Employees' Retirement System of Rhode Island (ERSRI). However, the State investment commission is responsible for the investment of the trust assets, including the establishment of the asset allocation policy.
4. Trust Fund: All contributions are credited to the Teachers' Survivors Benefits Fund, and all benefit payments and refunds are paid from this fund. The fund is commingled with ERSRI for investment purposes.
5. Plan Year: A twelve-month period ending June 30.
6. Coverage and Eligibility: The TSB covers Rhode Island teachers who are (i) covered by the Employees' Retirement System of Rhode Island (ERSRI) but (ii) are not covered under Social Security. State employees, school support personnel, and teachers whose employment is covered by Social Security may not participate. Participation is mandatory for eligible teachers, and all teachers covered by the plan must make contributions. Survivors are eligible for benefits if the member has made contributions for at least six months prior to death or retirement. A covered teacher remains covered after retirement unless the teacher withdraws his or her contributions.
7. Districts Covered: The following school districts are not covered under Social Security, so all of their teachers participate in this plan:

Barrington	Johnston
Bristol/Warren Regional	Lincoln
Burrillville	Little Compton
Central Falls Collaborative	Middletown
Coventry	Newport
Cranston	North Smithfield
Cumberland	Northern RI Collaborative
East Greenwich	Portsmouth
East Providence	Scituate
Foster	Smithfield
Foster-Glocester	Tiverton
Glocester	Westerly

In addition, there are a number of active teachers who teach for districts that are now covered by Social Security, but at one time were not covered. When the district elected to be covered by Social Security, some teachers opted to remain outside that system. These teachers continue to participate in the TSB.



APPENDIX B (Continued)

8. Contributions: An annual contribution of 2% of salary, up to \$230 per year, is required. This contribution is divided equally between members and their employers. I.e., members contribute 1.00% of salary, up to \$115 per year.
9. Salary: For TSB, the salary used for contribution purposes and to determine the amount of the survivor benefit is the same salary used for ERSRI.
10. Benefit Schedule: Benefits are paid as a monthly annuity to survivors upon the death of a covered active teacher or a covered retiree. To determine the benefit payable in any situation, the basic monthly spouse's benefit must first be determined. The basic monthly spouse's benefit is a function of the member's highest annual salary, as shown in the following schedule:

Highest Annual Salary	Basic Monthly Spouse's Benefit
\$17,000 or less	\$ 825.00
\$17,001 - \$25,000	\$ 962.50
\$25,001 - \$33,000	\$ 1,100.00
\$33,001 - \$40,000	\$ 1,237.50
More than \$40,000	\$ 1,375.00

If the member is retired at the time of death, the salary used is the highest annual salary that the member earned while teaching.

11. Spouse's benefit: If a covered, married, active or retired member dies, the spouse is entitled to receive the basic monthly spouse's benefit. If there are other survivors entitled to benefits, as described below, this benefit may be increased. The benefit paid to the spouse may not begin prior to age 60, unless family benefits are payable. Benefits to the spouse cease if the spouse remarries.
12. Family Benefit: If at the time of the member's death, the member is married and there are one or more eligible children, then a monthly benefit is payable to the spouse, even if younger than age 60. An eligible child is one under age 18, or under age 23 if a full-time student, or any age, if disabled prior to age 18. The family benefit is a multiple of the basic monthly spouse's benefit. If there is only one eligible child, then the multiple is 150%. If there are two or more eligible children, the multiple is 175%. The benefit continues as long as the spouse is alive and there is at least one eligible child. If the spouse remarries, benefits cease, although children's benefits will be due if there are still eligible children. If family benefits cease because there are no children who remain eligible, spouse's benefits will be paid when the spouse reaches age 60, if he or she has not remarried.
13. Children's Benefits: If a covered member dies, and there is no eligible spouse but there are one or more eligible children, then a child's benefit is payable. The amount payable by the plan is a multiple of the basic monthly spouse's benefit: 75% if there is only one eligible child, 150% if there are two eligible children, and 175% if there are three or more eligible children. Benefits cease when there are no children eligible.



APPENDIX B (Continued)

14. Dependent Parent's Benefits: If a member dies with no surviving spouse and no eligible children, but the member has a dependent parent, a benefit equal to the basic monthly spouse's benefit is paid to the dependent parent for life. For this purpose, a dependent parent is one who:
- Is at least 60 years of age,
 - Was dependent on the member for at least half his or her support,
 - Has not remarried since the member's death, and
 - Is not entitled to Social Security benefit from his or her own earnings equal to or greater the TSB benefit
15. Summary of benefits: The following table summarizes the benefit multiples that apply in the different family situations:

Recipients	Multiple of Basic Spouse's Benefit
Spouse alone	100%
Spouse and 1 Child	150%
Spouse and 2 or More Children	175%
One Child Alone	75%
Two Children Alone	150%
Three or More Children Alone	175%
Dependent Parent	100%

16. Refunds: If, prior to retirement, a member terminates service in ERSRI or ceases to be covered under TSB for any other reason, a refund equal to the sum of the member's TSB contributions will be paid to him or her. No interest is credited on these contributions.

If a covered, active teacher dies without an eligible spouse, eligible child or dependent parent, the accumulated member contribution balance, with interest credited at 5.00%, is refunded to the member's beneficiary or estate.

At the time a member retires, the member must choose whether or not to remain covered under the TSB during retirement. If the member chooses not to remain covered, then a refund of the member's contributions, accumulated with interest at 5.00%, is paid to the member. If the member chooses to remain covered, no action is necessary. Retired members who do not elect a refund at the time of retirement may not later elect a refund.

If a covered retired teacher dies without an eligible spouse, eligible child or dependent parent, no benefit is payable, and the member's contribution account remains in the fund.



APPENDIX B (Continued)

17. Post-retirement Benefit Increases: Spouses over age 60 receive a cost-of-living adjustment (COLA), each year, in January. The COLA is expressed as a percentage increase in the benefit, equal to the percentage cost-of-living increase provided to Social Security recipients. This increase is a function of increases in the Consumer Price Index. No COLA is paid on children's or family benefits.

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APPENDIX C

RISKS ASSOCIATED WITH MEASURING THE ACCRUED LIABILITY AND ACTUARIALLY DETERMINED CONTRIBUTION

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APPENDIX C

Risks Associated with Measuring the Accrued Liability and Actuarially Determined Contribution

The determination of the accrued liability and the actuarially determined contribution requires the use of assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that result from the differences between actual experience and the actuarial assumptions.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions due to changing conditions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period, or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

1. Investment risk – actual investment returns may differ from the expected returns;
2. Asset/Liability mismatch – changes in asset values may not match changes in liabilities, thereby altering the gap between the accrued liability and assets and consequently altering the funded status and contribution requirements;
3. Contribution risk – actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
4. Salary and Payroll risk – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
5. Longevity risk – members may live longer or shorter than expected and receive pensions for a period of time other than assumed;
6. Other demographic risks – members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

APPENDIX C (Continued)

The effects of certain trends in experience can generally be anticipated. For example if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the cost of the plan can be expected to increase (or decrease). Likewise if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

The computed contribution rate shown on page 9 may be considered as a minimum contribution rate that complies with the Board's funding policy. The timely receipt of the actuarially determined contributions is critical to support the financial health of the plan. Users of this report should be aware that contributions made at the actuarially determined rate do not necessarily guarantee benefit security.

PLAN MATURITY MEASURES

Risks facing a pension plan evolve over time. A young plan with virtually no investments and paying few benefits may experience little investment risk. An older plan with a large number of members in pay status and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures include the following:

	<u>June 30, 2021</u>	<u>June 30, 2020</u>	<u>June 30, 2019</u>
Ratio of the market value of assets to total payroll	0.7	0.6	0.6
Ratio of actuarial accrued liability to payroll	0.4	0.4	0.4
Ratio of actives to retirees and beneficiaries	1.9	1.8	1.8
Ratio of net cash flows to market value of assets	-2.9%	-2.8%	-2.8%
Duration of the actuarial accrued liability	14.5	13.5	13.9

RATIO OF MARKET VALUE OF ASSETS TO PAYROLL

The relationship between assets and payroll is a useful indicator of the potential volatility of contributions. For example, if the market value of assets is 4.0 times the payroll, a return on assets 5% different than assumed would equal 20% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in plan sponsor contributions as a percentage of payroll.

RATIO OF ACTUARIAL ACCRUED LIABILITY TO PAYROLL

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of contributions for a fully funded plan. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time.

The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 5.5 times the payroll, a change in liability 2% other than assumed would equal 11% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also plan sponsor contributions) as a percentage of payroll.

APPENDIX C (Continued)

RATIO OF ACTIVES TO RETIREES AND BENEFICIARIES

A young plan with many active members and few retirees will have a high ratio of active to retirees. A mature open plan may have close to the same number of actives to retirees resulting in a ratio near 1.0. A super-mature or closed plan may have significantly more retirees than actives resulting in a ratio below 1.0.

RATIO OF NET CASH FLOW TO MARKET VALUE OF ASSETS

A positive net cash flow means contributions exceed benefits and expenses. A negative cash flow means existing funds are being used to make payments. A certain amount of negative net cash flow is generally expected to occur when benefits are prefunded through a qualified trust. Large negative net cash flows as a percent of assets may indicate a super-mature plan or a need for additional contributions.

DURATION OF ACTUARIAL ACCRUED LIABILITY

The duration of the actuarial accrued liability may be used to approximate the sensitivity to a 1% change in the assumed rate of return. For example, duration of 10 indicates that the liability would increase approximately 10% if the assumed rate of return were lowered 1%.

ADDITIONAL RISK ASSESSMENT

Additional risk assessment is outside the scope of the annual actuarial valuation. Additional assessment may include scenario tests, sensitivity tests, stochastic modeling, stress tests, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability

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GLOSSARY

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Glossary

Actuarial Accrued Liability (AAL): That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of Future Plan Benefits which is not provided for by future Normal Costs. It is equal to the Actuarial Present Value of Future Plan Benefits minus the actuarial present value of future Normal Costs.

Actuarial Assumptions: Assumptions as to future experience under the Fund. These include assumptions about the occurrence of future events affecting costs or liabilities, such as:

- mortality, withdrawal, disablement, and retirement;
- future increases in salary;
- future rates of investment earnings and future investment and administrative expenses;
- characteristics of members not specified in the data, such as marital status;
- characteristics of future members;
- future elections made by members; and
- other relevant items.

Actuarial Cost Method or Funding Method: A procedure for allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability. These items are used to determine the ARC.

Actuarial Gain or Actuarial Loss: A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. Through the actuarial assumptions, rates of decrements, rates of salary increases, and rates of fund earnings have been forecasted. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted, or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., the Fund's assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results that produce actuarial liabilities which are larger than projected. Actuarial gains will shorten the time required for funding of the actuarial balance sheet deficiency while actuarial losses will lengthen the funding period.

Actuarially Equivalent: Of equal actuarial present value, determined as of a given date and based on a given set of Actuarial Assumptions.

Glossary (Continued)

Actuarial Present Value (APV): The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:

- a. adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.)
- b. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and
- c. discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Actuarial Present Value of Future Plan Benefits: The Actuarial Present Value of those benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits. The Actuarial Present Value of Future Plan Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive, nonretired members either entitled to a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would be provide sufficient assets to pay all projected benefits and expenses when due.

Actuarial Valuation: The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial valuation for a governmental retirement system typically also includes calculations of items needed reporting purposes, such as the funded ratio and the ADEC.

Actuarial Value of Assets or Valuation Assets: The value of the Fund's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly actuaries use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the ARC.

Actuarially Determined: Values which have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the law.

Amortization Method: A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.



Glossary (Continued)

Amortization Payment: That portion of the pension plan contribution or ARC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

Actuarially Determined Employer Contribution (ADEC): The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation. The ADEC consists of the Employer Normal Cost and the Amortization Payment

Closed Amortization Period: A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc. See Funding Period and Open Amortization Period.

Decrements: Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or termination.

Defined Benefit Plan: A retirement plan that is not a Defined Contribution Plan. Typically a defined benefit plan is one in which benefits are defined by a formula applied to the member's compensation and/or years of service.

Defined Contribution Plan: A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, and the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.

Employer Normal Cost: The portion of the Normal Cost to be paid by the employers. This is equal to the Normal Cost less expected member contributions.

Experience Study: A periodic review and analysis of the actual experience of the Fund which may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified as deemed appropriate by the Actuary.

Funded Ratio: The ratio of the actuarial value of assets (AVA) to the actuarial accrued liability (AAL). Plans sometimes calculate a market funded ratio, using the market value of assets (MVA), rather than the AVA.

Funding Period or Amortization Period: The term "Funding Period" is used it two ways. In the first sense, it is the period used in calculating the Amortization Payment as a component of the ARC. This funding period is chosen by the Board of Trustees. In the second sense, it is a calculated item: the number of years in the future that will theoretically be required to amortize (i.e., pay off or eliminate) the Unfunded Actuarial Accrued Liability, based on the statutory employer contribution rate, and assuming no future actuarial gains or losses.

Glossary (Continued)

GASB: Governmental Accounting Standards Board.

GASB 67 and **GASB 68:** Governmental Accounting Standards Board Statements No. 67 and No. 68. These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 67 sets the rules for the systems themselves.

Normal Cost: That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method. Any payment in respect of an Unfunded Actuarial Accrued Liability is not part of Normal Cost (see Amortization Payment). For pension plan benefits which are provided in part by employee contributions, Normal Cost refers to the total of employee contributions and employer Normal Cost unless otherwise specifically stated. Under the entry age normal cost method, the Normal Cost is intended to be the level cost (when expressed as a percentage of pay) needed to fund the benefits of a member from hire until ultimate termination, death, disability or retirement.

Open Amortization Period: An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered payroll.

Unfunded Actuarial Accrued Liability: The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. This value may be negative in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus.

Valuation Date or Actuarial Valuation Date: The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Plan Benefits is determined. The expected benefits to be paid in the future are discounted to this date.



Employees' Retirement System of Rhode Island



Administration, Audit, Risk & Compliance Committee Recommendation on Actuarial Valuations as of June 30, 2021

For Discussion and Recommendation to the Full
Board

Presented by Paul Dion

Employees' Retirement System of Rhode Island



6. Approval of the October and November Pensions as Presented by ERSRI

For Vote

Presented by Treasurer Seth Magaziner

OCTOBER 2021 NEW RETIREE REPORT

NAME	RTMT TYPE	RTMT OPTION	RTMT DATE	PLAN CODE	PLAN	EMPLOYER	AGE	MONTHLY PENSION	ANNUAL PENSION	CREDITED SERVICE
ALLARD, DAVID	Service	Option2	09/01/21	ERS	Correctional Officer	DOC	57.00	\$ 4,120.29	\$ 49,443.48	33.21
HAIBON JR, FREDERICK	Service	Option2	08/28/21	ERS	Correctional Officer	DOC	64.00	\$ 5,405.76	\$ 64,869.12	38.86
STILLSON, KENNETH	Service	Option1	09/05/21	ERS	Correctional Officer	DOC	57.00	\$ 4,584.27	\$ 55,011.24	36.30
VITI JR, JOHN	Service	SRA	09/01/21	ERS	Correctional Officer	DOC	63.00	\$ 4,938.36	\$ 59,260.32	33.46
CHAMBERLAND, FLORENCE	Service	SRA	06/01/21	ERS	Nurse	BHDDH	68.00	\$ 4,855.76	\$ 58,269.12	30.29
MITCHELL, KEITH	Service	Option2	09/01/21	ERS	Nurse	BHDDH	65.00	\$ 2,567.85	\$ 30,814.20	25.06
ADAMOVA, LYUBOV	Service	SRA	07/31/21	ERS	State Employee	OHHS	68.00	\$ 361.94	\$ 4,343.28	8.53
ADEEKO, JULIUS	Disability	Option1	08/15/21	ERS	State Employee	DOA	66.00	\$ 863.49	\$ 10,361.88	16.74
ALMEIDA, LUIS	Service	Option2	08/24/21	ERS	State Employee	DOA	67.00	\$ 422.62	\$ 5,071.44	12.82
BLANCHETTE, LOUISE	Service	SRA	08/14/21	ERS	State Employee	BHDDH	65.00	\$ 2,238.18	\$ 26,858.16	30.87
CATALDO, JANICE	Service	Option1	07/01/21	ERS	State Employee	OHHS	63.00	\$ 8,078.32	\$ 96,939.84	36.79
CONATY, SHIRLEY	Service	SRA	08/20/21	ERS	State Employee	BHDDH	67.00	\$ 257.97	\$ 3,095.64	7.49
DANIELL, SUSAN	Service	SRA	09/01/21	ERS	State Employee	DOH	69.00	\$ 274.04	\$ 3,288.48	7.60
DELUCA, ELAINE	Service	SRA	07/01/21	ERS	State Employee	ATTORNEY GENERAL	64.00	\$ 2,474.01	\$ 29,688.12	30.67
DENNARD, KATHLEEN	Service	SRA	06/16/21	ERS	State Employee	DHS	72.00	\$ 1,749.79	\$ 20,997.48	22.17
FINE, MICHAEL	Service	SRA	08/01/21	ERS	State Employee	DOH	68.00	\$ 773.38	\$ 9,280.56	5.17
FLORES, HOLLY	Service	SRA	08/31/21	ERS	State Employee	URI	72.00	\$ 2,278.64	\$ 27,343.68	32.37
GOLD, MARION	Service	Option2	10/11/21	ERS	State Employee	PUC	66.00	\$ 861.18	\$ 10,334.16	8.20
GRAHAM, PRINCE	Disability	Option1	11/03/20	ERS	State Employee	DOT	56.00	\$ 1,829.44	\$ 21,953.28	30.20
HALL-WALKER, CAROL	Service	Option2	09/01/21	ERS	State Employee	DOH	62.00	\$ 4,699.56	\$ 56,394.72	29.06
HOWARD, PHILLIP	Service	SRA	09/01/21	ERS	State Employee	BHDDH	63.00	\$ 1,530.70	\$ 18,368.40	28.68
KAINE, KIMBERLY	Service	SRA	08/28/21	ERS	State Employee	URI	64.00	\$ 1,390.72	\$ 16,688.64	23.28
MACKINNON, DEBORAH	Disability	Option1	09/01/21	ERS	State Employee	DLT	63.00	\$ 443.92	\$ 5,327.04	9.24
MARTIN, PAUL	Service	SRA	08/15/21	ERS	State Employee	DEM	66.00	\$ 436.26	\$ 5,235.12	6.85
MCCAUGHY-BOYD, KERRI-ANN	Service	SRA	10/01/21	ERS	State Employee	DOC	62.00	\$ 2,074.36	\$ 24,892.32	20.39
NADA, HAMDY	Service	Option1	09/01/21	ERS	State Employee	RIC	76.00	\$ 210.06	\$ 2,520.72	8.27
NELSON, KEVIN	Service	SRA	09/26/21	ERS	State Employee	DOA	67.00	\$ 5,018.32	\$ 60,219.84	35.49
PEREIRA, ARMAND	Service	SRA	08/29/21	ERS	State Employee	DOA	65.00	\$ 874.64	\$ 10,495.68	12.92
REARDON, HELEN	Disability	SRA	02/27/21	ERS	State Employee	DHS	49.00	\$ 735.83	\$ 8,829.96	15.84
ROGERS, SHARON	Service	SRA	09/01/21	ERS	State Employee	RIC	73.00	\$ 966.82	\$ 11,601.84	20.41
ROYSTER, JINERO	Disability	SRA	10/01/21	ERS	State Employee	DPS	52.00	\$ 1,060.57	\$ 12,726.84	16.00
SHEA, DEBORAH	Service	SRA	09/01/21	ERS	State Employee	URI	69.00	\$ 523.40	\$ 6,280.80	13.95
STONEFIELD, MARSHA	Service	SRAP	08/28/21	ERS	State Employee	DOE	59.00	\$ 4,953.89	\$ 59,446.68	29.65
VALENTI, LISA	Disability	SRA	04/11/20	ERS	State Employee	RIC	44.00	\$ 1,643.03	\$ 19,716.36	12.56
ANDREOZZI, JUDITH	Service	SRA	08/04/21	ERS	Teacher	Providence School Dept.	69.00	\$ 4,406.87	\$ 52,882.44	33.50
ARIAS, DINA	Service	Option2	07/01/21	ERS	Teacher	Providence School Dept.	69.00	\$ 3,639.02	\$ 43,668.24	31.00
ARONNE ROHAN, JANE	Disability	Option2	07/01/21	ERS	Teacher	Providence School Dept.	57.00	\$ 1,768.80	\$ 21,225.63	20.37
CAPOBIANCO, MARIANNE	Service	SRA	10/02/21	ERS	Teacher	Cranston School Dept.	66.00	\$ 1,656.22	\$ 19,874.64	17.95
GIORLANO, PETER	Disability	Option1	07/01/21	ERS	Teacher	Providence School Dept.	66.00	\$ 513.47	\$ 6,161.64	7.77
CONLIN, MARTHA	Service	SRA	07/01/21	ERS	Teacher	Providence School Dept.	73.00	\$ 2,587.29	\$ 31,047.48	22.50
CONNOR, THERESA	Service	SRA	07/01/21	ERS	Teacher	Providence School Dept.	66.00	\$ 4,723.81	\$ 56,685.72	32.69
CONNOR, THOMAS	Service	Option2	08/04/21	ERS	Teacher	Providence School Dept.	67.00	\$ 5,403.45	\$ 64,841.40	43.50
CULPEPPER, KATHERINE	Service	SRA	07/01/21	ERS	Teacher	Providence School Dept.	68.00	\$ 2,216.59	\$ 26,599.08	22.50
CUSHING, KATHLEEN	Service	SRA	07/01/21	ERS	Teacher	Providence School Dept.	68.00	\$ 2,826.12	\$ 33,913.44	26.00
DAVIDSON, MARIANNE	Service	Option2	07/01/21	ERS	Teacher	Providence School Dept.	61.00	\$ 5,619.61	\$ 67,435.32	39.00
DELROSARIO, PABLO	Service	Option2	07/01/21	ERS	Teacher	Providence School Dept.	65.00	\$ 1,509.39	\$ 18,112.68	20.00
DESANO-SANTOS, PAULA	Service	SRA	07/01/21	ERS	Teacher	Providence School Dept.	65.00	\$ 3,746.60	\$ 44,959.20	29.64
FASCIA, ANTHONY	Service	Option1	07/01/21	ERS	Teacher	Providence School Dept.	61.00	\$ 3,962.90	\$ 47,554.80	32.50
FLYNN, KATHLEEN	Service	SRA	07/01/21	ERS	Teacher	Providence School Dept.	84.00	\$ 5,477.62	\$ 65,731.44	58.89
GERAGHTY, MICHAEL	Service	Option1	07/01/21	ERS	Teacher	Providence School Dept.	71.00	\$ 1,329.84	\$ 15,958.08	16.00
GLATTER, MYLES	Service	Option2	09/09/21	ERS	Teacher	Northern Rhode Island Collaborative	64.00	\$ 3,744.09	\$ 44,929.08	33.03
GROSSI, LINDA	Service	SRA	07/01/21	ERS	Teacher	Providence School Dept.	66.00	\$ 1,891.39	\$ 22,696.68	20.80
HAWKINS, JANICE	Service	Option1	07/01/21	ERS	Teacher	PROVIDENCE 12 MONTH BI-WEEKLY	62.00	\$ 4,457.75	\$ 53,493.00	28.81
HOLM, ELLEN	Disability	SRA	07/01/21	ERS	Teacher	Providence School Dept.	64.00	\$ 2,139.73	\$ 25,676.76	22.98
HOYLE, NOREEN	Service	Option1	08/04/21	ERS	Teacher	Providence School Dept.	65.00	\$ 2,586.41	\$ 31,036.92	27.00
KIBARIAN, ARLENE	Service	SRA	07/01/21	ERS	Teacher	Providence School Dept.	69.00	\$ 1,482.29	\$ 17,787.48	16.19
LARKIN, RICHARD	Service	Option1	07/01/21	ERS	Teacher	Providence School Dept.	63.00	\$ 3,098.00	\$ 37,176.00	29.00
LOPEZ, CARMEN	Service	SRA	08/02/21	ERS	Teacher	Providence School Dept.	75.00	\$ 4,100.69	\$ 49,208.28	31.00
MAHAMA, MATILDA	Service	SRA	08/31/21	ERS	Teacher	Providence School Dept.	62.00	\$ 1,587.56	\$ 19,050.72	23.34
MAKAROVA, NELLIE	Service	SRA	07/01/21	ERS	Teacher	Providence Long Term Subs	66.00	\$ 1,917.53	\$ 23,010.36	20.50
MICELI, DEBBI	Service	SRA	09/01/21	ERS	Teacher	Chariho Regional School Dist.	65.00	\$ 5,192.74	\$ 62,312.88	36.75
MOORE, ELISE	Service	SRA	07/01/21	ERS	Teacher	Providence School Dept.	65.00	\$ 4,371.37	\$ 52,456.44	32.25
MORRIS, ELIZABETH	Service	SRA	07/01/21	ERS	Teacher	Providence School Dept.	71.00	\$ 1,047.69	\$ 12,572.28	13.50

OCTOBER 2021 NEW RETIREE REPORT

NAME	RTMT TYPE	RTMT OPTION	RTMT DATE	PLAN CODE	PLAN	EMPLOYER	AGE	MONTHLY PENSION	ANNUAL PENSION	CREDITED SERVICE
PALIZZA, LEONARD	Service	SRA	07/01/21	ERS	Teacher	Providence School Dept.	67.00	\$ 1,410.36	\$ 16,924.32	16.25
PEREZ, ROSA	Service	Option2	07/01/21	ERS	Teacher	Providence School Dept.	65.00	\$ 1,802.80	\$ 21,633.60	20.50
PODBROS, DEBRA	Service	SRA	07/01/21	ERS	Teacher	Providence School Dept.	66.00	\$ 1,858.90	\$ 22,306.80	20.54
RESENDES, PAMELA	Service	SRA	07/01/21	ERS	Teacher	Providence School Dept.	58.00	\$ 1,771.70	\$ 21,260.40	26.75
ROBBIN, LOIS	Service	SRA	09/14/21	ERS	Teacher	Highlander Charter School	66.00	\$ 571.44	\$ 6,857.28	7.89
RUSTIGIAN, ARTHUR	Service	Option1	07/01/21	ERS	Teacher	Providence School Dept.	66.00	\$ 3,512.68	\$ 42,152.16	32.00
SCORPIO, NANCY	Service	Option2	07/01/21	ERS	Teacher	Providence School Dept.	66.00	\$ 3,353.88	\$ 40,246.56	28.73
SHULTZ, LINDSAY	Disability	SRA	07/16/21	ERS	Teacher	Pawtucket School Dept.	45.00	\$ 1,782.85	\$ 21,394.20	20.00
SKOBY, SUSAN	Service	SRA	07/01/21	ERS	Teacher	Providence School Dept.	66.00	\$ 4,147.57	\$ 49,770.84	33.00
SOUTHARD, MARSHA	Service	Option1	08/30/21	ERS	Teacher	Warwick School Dept.	65.00	\$ 879.41	\$ 10,552.92	16.56
SWANSON, VIRGINIA	Service	SRA	10/23/21	ERS	Teacher	North Smithfield School Dept.	65.00	\$ 1,726.26	\$ 20,727.12	19.00
TARDIEU, REGINE	Service	SRA	07/01/21	ERS	Teacher	Providence School Dept.	67.00	\$ 4,239.12	\$ 50,869.44	33.00
VIZCAINO, MAYRA	Service	SRA	07/01/21	ERS	Teacher	Providence School Dept.	63.00	\$ 1,767.80	\$ 21,213.60	22.75
XIA, QIUPING	Service	Option2	07/01/21	ERS	Teacher	Providence School Dept.	66.00	\$ 1,802.98	\$ 21,635.76	21.50
ZARRELLA, JUDI	Service	SRA	09/01/21	ERS	Teacher	Cranston School Dept.	65.00	\$ 2,216.52	\$ 26,598.24	23.25
CADIEUX, DIANE	Service	Option2	08/02/21	MERS	General Municipal	Exeter/West Greenwich Reg. Schools (NC)	63.00	\$ 1,716.74	\$ 20,600.88	27.11
CHARETTE, PATRICIA	Service	SRA	09/03/21	MERS	General Municipal	Barrington COLA NonCertifieds	64.00	\$ 903.36	\$ 10,840.32	23.85
CINTRON, ELAINE	Service	SRA	09/01/21	MERS	General Municipal	Pawtucket School Dept. (NC)	68.00	\$ 216.94	\$ 2,603.28	8.49
COULTER, ISABELLE	Service	SRA	09/01/21	MERS	General Municipal	Cranston School Dept. (NC)	72.00	\$ 204.99	\$ 2,459.88	10.49
DAVIES, JOHN	Service	Option1	09/18/21	MERS	General Municipal	City of Pawtucket	58.00	\$ 3,397.06	\$ 40,764.72	37.00
DELLEFEMINE, DONNA	Service	SRA	08/21/21	MERS	General Municipal	East Providence Schools (NC)	66.00	\$ 1,135.73	\$ 13,628.76	17.83
DIONNE, ELIZABETH	Service	Option1	10/16/21	MERS	General Municipal	North Providence School Dept. (NC)	66.00	\$ 180.08	\$ 2,160.96	9.96
LABBADIA, LYNDIA	Service	SRA	02/01/21	MERS	General Municipal	Town of North Providence	64.00	\$ 1,794.73	\$ 21,536.76	25.51
LAPIERRE, RICHARD	Service	SRA	07/31/21	MERS	General Municipal	Town of Burrillville	72.00	\$ 749.99	\$ 8,999.88	13.27
MASSEMINO, CATHERINE	Service	SRA	09/01/21	MERS	General Municipal	Cranston School Dept. (NC)	66.00	\$ 1,586.88	\$ 19,042.56	26.03
MASSON, PATRICIA	Service	Option1	08/02/21	MERS	General Municipal	South Kingstown School Dept. (NC)	63.00	\$ 1,136.81	\$ 13,641.72	30.27
PARRILLO, MARIA	Service	SRA	08/24/21	MERS	General Municipal	South Kingstown School Dept. (NC)	64.00	\$ 3,315.91	\$ 39,790.92	26.92
PEZZULLO, RAYMOND	Service	SRA	10/23/21	MERS	General Municipal	EAST GREENWICH-COLA	66.00	\$ 1,031.68	\$ 12,380.16	9.83
RESNICK, JOANNE	Service	Option1	08/28/21	MERS	General Municipal	City of Cranston	65.00	\$ 1,849.85	\$ 22,198.20	30.06
SACKAL, CYNTHIA	Service	Option1	07/01/21	MERS	General Municipal	Central Falls School Dist. (NC)	67.00	\$ 1,138.55	\$ 13,662.60	29.13
SCHERZA, DANNY	Service	SRA	06/01/21	MERS	General Municipal	Chariho Regional School Dist. (NC)	63.00	\$ 785.18	\$ 9,422.16	14.93
SISTO, NANCY	Service	SRA	08/15/21	MERS	General Municipal	East Providence Schools (NC)	65.00	\$ 476.45	\$ 5,717.40	14.88
SMITH, RONALD	Service	Option1	09/11/21	MERS	General Municipal	Town of Richmond	66.00	\$ 2,597.05	\$ 31,164.60	29.56
TANNER, JUDITH	Service	Option2	09/02/21	MERS	General Municipal	Bristol Warren Reg. School Dist. (NC)	66.00	\$ 990.45	\$ 11,885.40	25.46
BERGANTINO, SCOTT	Disability	Option1	07/05/21	MERS	Police and Fire	Cranston Fire	56.00	\$ 4,990.72	\$ 59,888.64	26.41
BIRRELL, JOSH	Service	SRA	09/18/21	MERS	Police and Fire	Barrington Police Dept.	50.00	\$ 4,384.02	\$ 52,608.24	26.55
BROWN, RICHARD	Service	Option1	08/07/21	MERS	Police and Fire	West Greenwich Police/Rescue	60.00	\$ 4,207.98	\$ 50,495.76	31.19
MONTVILLE, KENNETH	Service	SRA	08/11/21	MERS	Police and Fire	East Greenwich Fire Dist.	51.00	\$ 3,638.98	\$ 43,667.76	24.19
PRINTER, KEITH	Disability	Option1	10/10/20	MERS	Police and Fire	Cranston Fire	57.00	\$ 3,275.50	\$ 39,306.00	23.57
ST ONGE, STEVEN	Service	SRA	08/21/21	MERS	Police and Fire	North Kingstown Police Dept.	57.00	\$ 6,405.69	\$ 76,868.28	33.52
FURTADO, JOHN	Service	SRA	08/19/21	SPRBT	State Police	RISP	62.00	\$ 7,406.19	\$ 88,874.28	27.20

NOVEMBER 2021 NEW RETIREE REPORT

NAME	RTMT TYPE	RTMT OPTION	RTMT DATE	PLAN CODE	PLAN	EMPLOYER	AGE	MONTHLY PENSION	ANNUAL PENSION	CREDITED SERVICE
CHAMBERLAIN, IRVING	Service	Option2	08/31/21	ERS	Correctional Officer	DOC	72.00	\$ 3,437.99	\$ 41,255.88	30.16
PIERCE, THOMAS	Service	SRAP	10/24/21	ERS	Correctional Officer	DOC	57.00	\$ 3,744.30	\$ 44,931.60	27.98
ANDERSON, TERRIE	Disability	Option2	07/19/20	ERS	State Employee	BHDDH--RICLAS	62.00	\$ 2,505.05	\$ 30,060.60	27.20
ANTONIZIO, CAROL	Service	SRA	10/01/21	ERS	State Employee	BHDDH	59.00	\$ 5,068.75	\$ 60,825.00	41.14
BLAZER, STEVEN	Service	Option1	10/01/21	ERS	State Employee	DOA	70.00	\$ 6,081.11	\$ 72,973.32	43.78
BORST, DEBRA	Service	Option2	10/01/21	ERS	State Employee	DCYF	71.00	\$ 6,203.16	\$ 74,437.92	35.31
BRAY, MARY	Service	SRA	10/01/21	ERS	State Employee	COMMERCE	69.00	\$ 1,668.91	\$ 20,026.92	16.10
BUTTERWORTH, MILINDA	Disability	SRA	11/23/19	ERS	State Employee	BHDDH	64.00	\$ 3,548.22	\$ 42,578.64	7.38
CAMPBELL, THOMAS	Service	SRA	10/01/21	ERS	State Employee	DEM	61.00	\$ 5,161.56	\$ 61,938.72	36.64
CANDON, CYNTHIA	Service	SRA	10/01/21	ERS	State Employee	URI	66.00	\$ 282.51	\$ 3,390.12	8.54
CASSIDY, GREGG	Service	SRA	10/01/21	ERS	State Employee	DEM	60.00	\$ 4,265.10	\$ 51,181.20	33.81
CEPRANO, DONNA	Service	Option2	10/01/21	ERS	State Employee	DOH	63.00	\$ 5,043.87	\$ 60,526.44	42.72
CHAUVIN, LAURA	Service	SRAP	09/01/21	ERS	State Employee	VETERANS HOME	59.00	\$ 5,595.90	\$ 67,150.80	33.30
COOK, GARY	Service	SRAP	10/23/21	ERS	State Employee	NARRAGANSETT BAY COMMISSION	60.00	\$ 6,358.11	\$ 76,297.32	39.06
COTE, BRIAN	Service	Option1	09/03/21	ERS	State Employee	DOIT	65.00	\$ 1,677.11	\$ 20,125.32	19.14
CROFT, KRISTINE	Service	SRA	10/01/21	ERS	State Employee	BHDDH	68.00	\$ 197.63	\$ 2,371.56	7.35
CROSS, STEVEN	Service	Option1	09/22/21	ERS	State Employee	ETHICS COMMISSION	71.00	\$ 3,041.74	\$ 36,500.88	25.40
DARELIUS, SHEILA	Service	Option1	10/17/21	ERS	State Employee	DHS	60.00	\$ 2,100.90	\$ 25,210.80	23.95
ELLIS, BARBARA	Service	SRAP	10/01/21	ERS	State Employee	DCYF	56.00	\$ 3,749.92	\$ 44,999.04	29.25
FRIEDRICH, STEPHEN	Service	SRA	10/01/21	ERS	State Employee	DPS	61.00	\$ 1,048.98	\$ 12,587.76	21.73
GALLOGLY, WILLIAM	Service	Option2	09/30/21	ERS	State Employee	AUDITOR GENERAL	62.00	\$ 6,946.80	\$ 83,361.60	37.30
GARG, SHRI	Service	Option1	10/10/21	ERS	State Employee	JUDICIARY	65.00	\$ 1,301.35	\$ 15,616.20	12.86
GARRICK, SHARON	Service	SRA	10/01/21	ERS	State Employee	DEM	66.00	\$ 2,254.94	\$ 27,059.28	31.36
GAUDLAP JR, JOSEPH	Service	Option2	10/23/21	ERS	State Employee	DOT	60.00	\$ 3,734.53	\$ 44,814.32	42.45
HATTON, DIANE	Service	SRA	09/26/21	ERS	State Employee	RIC	66.00	\$ 1,110.64	\$ 13,327.68	19.78
HEISS, JEAN	Service	SRA	10/01/21	ERS	State Employee	DOA	61.00	\$ 4,907.10	\$ 58,885.20	35.76
HERETH, ADAM	Service	Option1	09/15/21	ERS	State Employee	BHDDH	59.00	\$ 1,973.06	\$ 23,676.72	33.61
HOLLINGWORTH, CHERYL	Service	SRA	10/20/21	ERS	State Employee	RI SCHOOL FOR THE DEAF	65.00	\$ 1,742.03	\$ 20,904.36	16.90
JOHARJIAN, LINDA	Service	Option1	10/01/21	ERS	State Employee	DOIT	62.00	\$ 4,862.96	\$ 58,355.52	44.88
KELLY, NEIL	Service	Option1	10/01/21	ERS	State Employee	ATTORNEY GENERAL	65.00	\$ 7,553.90	\$ 90,646.80	35.56
LINHARES, STEVEN	Service	Option1	10/01/21	ERS	State Employee	DOT	59.00	\$ 3,672.80	\$ 44,073.60	33.83
MANNING, JOHN	Service	SRA	10/01/21	ERS	State Employee	DEM	60.00	\$ 5,600.26	\$ 67,203.12	36.55
MARSELLA, ANTHONY	Service	SRA	11/01/21	ERS	State Employee	DCYF	62.00	\$ 4,420.94	\$ 53,051.28	31.05
MASTRATI, GAIL	Service	Option1	10/01/21	ERS	State Employee	DEM	66.00	\$ 3,277.45	\$ 39,329.40	27.41
MCCONAGHY, MARILYN	Service	Option1	10/01/21	ERS	State Employee	DOR	68.00	\$ 4,425.87	\$ 53,110.44	26.82
MIGNANELLI, KATHLEEN	Service	SRA	10/01/21	ERS	State Employee	PUC	62.00	\$ 1,147.50	\$ 13,770.00	21.83
MINETTI, GERALD	Service	SRA	10/03/21	ERS	State Employee	DCYF	68.00	\$ 1,937.67	\$ 23,252.04	25.98
MITCHELL, JANICE	Service	SRA	10/23/21	ERS	State Employee	DCYF	75.00	\$ 2,099.37	\$ 25,192.44	29.85
MORGAN, BRENDA	Service	SRA	11/21/21	ERS	State Employee	DCYF	62.00	\$ 615.21	\$ 7,382.52	18.29
MORRIS, STEPHEN	Service	Option1	10/01/21	ERS	State Employee	DOH	70.00	\$ 5,087.06	\$ 61,044.72	32.05
MUCCINO, RICHARD	Service	Option1	10/01/21	ERS	State Employee	DOH	64.00	\$ 4,469.70	\$ 53,636.40	34.99
MULLANEY, THOMAS	Service	SRA	10/01/21	ERS	State Employee	DOA	60.00	\$ 10,110.47	\$ 121,325.64	33.90
PETRONE, LAURIE	Service	SRA	10/01/21	ERS	State Employee	DOA	64.00	\$ 6,951.82	\$ 83,421.84	33.69
PINKEY, MARGARET	Service	Option1	09/13/21	ERS	State Employee	LEGISLATIVE SERVICES	66.00	\$ 453.89	\$ 5,446.68	10.06
PIVA, PATTI	Service	SRA	07/10/21	ERS	State Employee	BHDDH	64.00	\$ 3,290.51	\$ 39,486.12	41.91
QUEENAN III, THOMAS	Service	Option1	09/04/21	ERS	State Employee	DOT	62.00	\$ 6,245.66	\$ 74,947.92	32.66
RAICHE, SHARON	Service	SRA	09/30/21	ERS	State Employee	COURTS	66.00	\$ 1,339.81	\$ 16,077.72	18.52
RICCI, ROBERT	Service	Option1	10/21/21	ERS	State Employee	LEGISLATIVE	60.00	\$ 1,975.10	\$ 23,701.20	19.95
ROSSI, DOMENIC	Service	SRA	09/30/21	ERS	State Employee	DOT	63.00	\$ 3,873.92	\$ 46,487.04	34.93
SANDBACH, JOHN	Service	Option1	10/01/21	ERS	State Employee	DPS	61.00	\$ 754.08	\$ 9,048.96	22.78
SILVA, ANTHONY	Service	Option1	09/01/21	ERS	State Employee	GOVERNOR'S OFFICE	65.00	\$ 3,403.52	\$ 40,842.24	21.69
SIMON, CAROLINE	Service	Option2	09/15/21	ERS	State Employee	RI JUDICIARY	61.00	\$ 2,163.48	\$ 25,961.76	28.38
SINDONI, LISA	Disability	SRA	12/12/20	ERS	State Employee	Exeter/West Greenwich Reg. Schools	61.00	\$ 1,045.45	\$ 12,545.40	20.02
SPREMULLI, MICHAEL	Service	Option1	10/01/21	ERS	State Employee	DOT	66.00	\$ 539.33	\$ 6,471.96	15.89
STALTARE, EILEEN	Service	SRA	10/01/21	ERS	State Employee	DLT	62.00	\$ 3,291.97	\$ 39,503.64	33.22
TORTOLANNI, LYNN DEE	Service	Option1	06/27/21	ERS	State Employee	DPS	61.00	\$ 2,670.81	\$ 32,049.72	31.72
TRAMONTI, MARY	Disability	SRA	02/02/21	ERS	State Employee	DHS	56.00	\$ 3,683.02	\$ 44,196.24	26.97
VOSE-GREEN, CARLA	Service	SRA	07/30/21	ERS	State Employee	DHS	65.00	\$ 1,940.16	\$ 23,281.92	24.90

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NAME	RTMT TYPE	RTMT OPTION	RTMT DATE	PLAN CODE	PLAN	EMPLOYER	AGE	MONTHLY PENSION	ANNUAL PENSION	CREDITED SERVICE
WHALLEY, THOMAS	Service	SRA	08/31/21	ERS	State Employee	DPS	65.00	\$ 1,235.96	\$ 14,831.52	19.86
WILKES, CHERYL	Service	Option2	10/01/21	ERS	State Employee	DOT	73.00	\$ 5,414.35	\$ 64,972.20	38.00
ADAMS, PATRICIA	Service	SRA	07/01/21	ERS	Teacher	Providence School Dept.	71.00	\$ 2,616.36	\$ 31,396.32	25.75
ARCHIBALD, ROXANNE	Disability	SRA	07/01/21	ERS	Teacher	PROVIDENCE 12 MONTH BI-WEEKLY	53.00	\$ 4,095.55	\$ 49,146.60	27.78
BIRRELL, JEAN	Service	SRA	10/08/21	ERS	Teacher	Lincoln School Dept.	65.00	\$ 1,832.28	\$ 21,987.36	20.86
CARROLL-CHIULLI, CATHERINE	Service	Option1	09/18/21	ERS	Teacher	Johnston School Dept.	68.00	\$ 1,729.06	\$ 20,748.72	20.07
CARUSO, DEBRA	Service	SRA	09/01/21	ERS	Teacher	Johnston School Dept.	65.00	\$ 4,574.38	\$ 54,892.56	35.00
CLARKIN, KATHLEEN	Disability	Option1	06/26/21	ERS	Teacher	Warwick School Dept.	56.00	\$ 4,274.81	\$ 51,297.72	33.50
CURRY-SARUBBI, SUSAN	Service	Option2	11/20/21	ERS	Teacher	Exeter/West Greenwich Reg. Schools	65.00	\$ 766.72	\$ 9,200.64	13.03
DAURAY, JOSEPH	Service	SRA	08/15/21	ERS	Teacher	Providence School Dept.	58.00	\$ 1,762.63	\$ 21,151.56	26.99
DION, DAWN	Disability	Option2	07/01/21	ERS	Teacher	Providence School Dept.	59.00	\$ 2,044.39	\$ 24,532.68	22.98
DUVAL, MARY-ANN	Service	Option1	10/27/21	ERS	Teacher	East Providence Schools	65.00	\$ 1,536.47	\$ 18,437.64	17.64
FERRARA-CONTI, CHERYL	Service	Option1	07/01/21	ERS	Teacher	Providence School Dept.	55.00	\$ 2,506.00	\$ 30,072.00	31.00
FOURNIER, DENISE	Disability	SRA	10/15/21	ERS	Teacher	Exeter/West Greenwich Reg. Schools	58.00	\$ 4,822.63	\$ 57,871.56	33.14
HEMENWAY, KEITH	Service	Option1	10/27/21	ERS	Teacher	Pawtucket School Dept.	65.00	\$ 1,446.18	\$ 17,354.16	11.75
LARSON, JAMES	Service	Option1	07/01/21	ERS	Teacher	PROVIDENCE 12 MONTH BI-WEEKLY	74.00	\$ 2,154.71	\$ 25,856.52	22.19
MARCELLO, CAROLYNE	Service	SRA	10/09/21	ERS	Teacher	Pawtucket School Dept.	64.00	\$ 3,676.12	\$ 44,113.44	30.55
MARCOTTE, DAVID	Service	SRA	10/16/21	ERS	Teacher	Woonsocket School Dept.	59.00	\$ 4,019.51	\$ 48,234.12	33.00
MORELAND, MARY	Service	SRA	11/21/20	ERS	Teacher	Providence School Dept.	66.00	\$ 1,053.89	\$ 12,646.68	10.91
OXX, SANDRA	Service	SRA	11/04/21	ERS	Teacher	Portsmouth School Dept.	65.00	\$ 1,425.76	\$ 17,109.12	15.50
REGO, CAROLE	Service	SRA	10/03/21	ERS	Teacher	East Providence Schools	61.00	\$ 3,635.94	\$ 43,631.28	31.22
ROBERTS, NEWELL	Service	Option2	07/01/21	ERS	Teacher	Providence School Dept.	67.00	\$ 1,838.08	\$ 22,056.96	28.87
SCHMELLER, DEBORAH	Service	SRA	10/10/21	ERS	Teacher	Providence School Dept.	65.00	\$ 1,906.97	\$ 22,883.64	21.12
SMITH, PATRICIA	Service	Option1	09/25/21	ERS	Teacher	Exeter/West Greenwich Reg. Schools	65.00	\$ 2,133.48	\$ 25,601.76	21.82
STERN, SHARON	Disability	SRA	07/01/21	ERS	Teacher	Providence School Dept.	62.00	\$ 2,745.80	\$ 32,949.60	25.27
SUMMERLY, AGNES	Service	SRA	07/01/21	ERS	Teacher	Providence School Dept.	59.00	\$ 2,467.79	\$ 29,613.48	28.75
THAKE, MARY	Service	SRA	09/04/21	ERS	Teacher	Providence School Dept.	75.00	\$ 1,307.66	\$ 15,691.92	15.81
THURBER, NORA	Service	SRAP	07/01/21	ERS	Teacher	Providence School Dept.	61.00	\$ 4,328.36	\$ 51,940.32	26.00
TORO, LOUIS	Service	Option1	07/01/21	ERS	Teacher	PROVIDENCE 12 MONTH BI-WEEKLY	68.00	\$ 5,717.36	\$ 68,608.32	45.89
VALENTIN-SPAULDING, ILEANA	Service	SRA	08/28/21	ERS	Teacher	Providence School Dept.	67.00	\$ 491.71	\$ 5,900.52	7.00
VUOLO-FECTEAU, CHRISTINE	Service	SRA	10/05/21	ERS	Teacher	Portsmouth School Dept.	65.00	\$ 2,509.07	\$ 30,108.84	25.00
WALTON, LESLIE	Service	Option2	07/01/21	ERS	Teacher	Providence School Dept.	70.00	\$ 2,975.85	\$ 35,710.20	31.75
MCGUIRL, SUSAN	Service	SRA	11/01/21	JRBT	Judge	Superior Court	69.00	\$ 16,729.51	\$ 200,754.12	20.37
BARBIERI, LOIS	Service	SRAP	10/01/21	MERS	General Municipal	Town of North Providence	60.00	\$ 4,173.03	\$ 50,076.36	23.35
BRISSETTE, PATRICIA	Service	SRA	09/01/21	MERS	General Municipal	Bristol Warren Reg. School Dist. (NC)	64.00	\$ 1,571.29	\$ 18,855.48	16.63
BURTON, ROSALIE	Service	SRA	09/11/21	MERS	General Municipal	Tiverton Local 2670A	81.00	\$ 444.36	\$ 5,332.32	19.72
CAMPBELL, JANICE	Service	SRAP	10/11/21	MERS	General Municipal	Pawtucket School Dept. (NC)	59.00	\$ 4,307.04	\$ 51,684.48	32.72
CARVALHO, ANTONIO	Service	SRA	10/06/21	MERS	General Municipal	Town of Warren	70.00	\$ 303.44	\$ 3,641.28	5.12
COLVIN, GEORGIANNA	Disability	SRA	12/01/20	MERS	General Municipal	City of Pawtucket	60.00	\$ 2,490.57	\$ 29,886.84	23.56
DENARDO, ROSEMARIE	Service	SRA	11/06/21	MERS	General Municipal	City of Cranston	64.00	\$ 886.81	\$ 10,641.72	18.64
GRIFFITH, CHRISTINE	Service	SRA	08/31/21	MERS	General Municipal	Town of North Kingstown	66.00	\$ 1,462.39	\$ 17,548.68	20.83
HONE, BEATRIZ	Service	SRA	02/01/20	MERS	General Municipal	North Kingstown School Dept. (NC)	68.00	\$ 134.81	\$ 1,617.72	7.26
MANCINHO, RHONDA	Service	SRA	10/09/21	MERS	General Municipal	East Providence Schools (NC)	65.00	\$ 2,546.27	\$ 30,555.24	30.79
MASSON, MICHAEL	Service	Option1	08/21/21	MERS	General Municipal	Town of South Kingstown	69.00	\$ 2,162.32	\$ 25,947.84	30.02
MATHIEU, KEVIN	Service	Option1	09/11/21	MERS	General Municipal	North Smithfield School Dept. (NC)	65.00	\$ 2,856.53	\$ 34,278.34	29.46
MILLER, VALERIE	Service	Option2	09/04/21	MERS	General Municipal	Town of South Kingstown	66.00	\$ 2,913.63	\$ 34,963.56	31.65
MOREAU, PATRICIA	Service	Option1	09/30/21	MERS	General Municipal	Town of Foster	67.00	\$ 314.46	\$ 3,773.52	11.14
ORR, RANDY	Service	SRA	07/01/21	MERS	General Municipal	EAST GREENWICH-COLA-NC	67.00	\$ 165.05	\$ 1,980.60	6.42
PARKER, GUY	Service	Option1	09/21/21	MERS	General Municipal	Middletown Public Schools (NC)	61.00	\$ 1,252.10	\$ 15,025.20	23.00
PLACIDO, LINDA	Service	SRA	10/01/21	MERS	General Municipal	Smithfield School Dept. (NC)	64.00	\$ 728.23	\$ 8,738.76	13.99
RAMOS, NELSON	Disability	Option1	11/02/20	MERS	General Municipal	Pawtucket School Dept. (NC)	60.00	\$ 1,315.92	\$ 15,791.04	25.05
SCOTT, MERRIE	Service	SRA	02/01/21	MERS	General Municipal	City of Newport	62.00	\$ 1,079.95	\$ 12,959.40	15.84
SIMMONS, JAMES	Service	Option1	09/02/21	MERS	General Municipal	South Kingstown School Dept. (NC)	67.00	\$ 738.12	\$ 8,857.44	13.01
USCIO, JOSEPH	Service	SRA	09/11/21	MERS	General Municipal	Town of North Providence	65.00	\$ 3,313.89	\$ 39,766.68	35.82
VAUDREUIL, KENNETH	Service	Option1	10/01/21	MERS	General Municipal	Central Falls Housing Auth.	65.00	\$ 936.85	\$ 11,242.20	19.51
WAHL, MICHAEL	Service	SRA	08/14/21	MERS	General Municipal	Foster/Glocester Reg. School Dist. (NC)	67.00	\$ 835.76	\$ 10,029.12	16.40
WILSON, ROBERT	Service	SRA	09/08/21	MERS	General Municipal	Town of South Kingstown	62.00	\$ 3,083.93	\$ 37,007.16	38.48
WOODRUFF, SCOTT	Service	SRA	11/05/21	MERS	General Municipal	Town of North Kingstown	59.00	\$ 3,016.82	\$ 36,201.84	35.97

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NAME	RTMT TYPE	RTMT OPTION	RTMT DATE	PLAN CODE	PLAN	EMPLOYER	AGE	MONTHLY PENSION	ANNUAL PENSION	CREDITED SERVICE
ALLEN, SHANE	Service	SRA	10/02/21	MERS	Police and Fire	Barrington Police Dept.	52.00	\$ 3,722.85	\$ 44,674.20	27.10
BLANDING, MARK	Service	Option1	10/02/21	MERS	Police and Fire	Central Coventry Fire Dist.	60.00	\$ 3,651.58	\$ 43,818.96	27.08
BOYER, JOHN	Disability	Option1	10/23/21	MERS	Police and Fire	Cranston Fire	63.00	\$ 5,299.59	\$ 63,595.08	30.29
CASALE, JAMES	Service	SRA	09/25/21	MERS	Police and Fire	Cranston Fire	58.00	\$ 5,379.04	\$ 64,548.48	33.01
GARRETT, CRAIG	Disability	Option1	10/03/21	MERS	Police and Fire	SMITHFIELD FIREFIGHTERS	46.00	\$ 3,198.83	\$ 38,385.96	9.60
O'ROURKE, PATRICK	Disability	SRA	10/23/21	MERS	Police and Fire	Cranston Fire	53.00	\$ 5,424.82	\$ 65,097.84	32.08
RICH, CHRISTOPHER	Disability	SRA	09/15/21	MERS	Police and Fire	New Shoreham Police Dept.	51.00	\$ 3,544.91	\$ 42,538.92	12.15

Employees' Retirement System of Rhode Island



7. Legal Counsel Report

For Report

Presented by Michael P. Robinson

**EMPLOYEES' RETIREMENT SYSTEM OF THE STATE OF RHODE ISLAND
REPORT AS OF DECEMBER 2021
ON LITIGATED MATTERS FILED BY OR AGAINST ERSRI**

I. MATTERS WITH PROCEDURAL OR SUBSTANTIVE CHANGES

Timothy Koback v. Employees' Retirement System of Rhode Island

Workers' Compensation Court; No. 201607082

Supreme Court C.A. No. SU-2019-0423-MP

Change. Timothy Koback, a Woonsocket firefighter, appealed the denial of his application for an accidental disability pension pursuant to R.I. Gen. Laws § 45-21.2-9 to the Workers' Compensation Court. Trial was conducted on August 2, 2017, and on February 8, 2018, the Court issued a decision granting Mr. Koback an accidental disability pension and awarding a counsel fee to Mr. Koback's counsel. MERS objected to the awarding of a counsel fee and filed an appeal with the Appellate Division of the Workers' Compensation Court. In October of 2019, the Appellate Division issued a decision affirming the trial court and awarded an additional attorneys' fee to Mr. Koback's counsel for successful prosecution of the appeal at the Appellate Division. MERS filed a petition for certiorari with the Rhode Island Supreme Court and requested an emergency stay of the order awarding a counsel fee. On November 18, 2019, the Supreme Court granted a stay and granted the petition for writ of certiorari. Oral argument before the Supreme Court took place on May 13, 2021. The Supreme Court issued its decision on June 24, 2021, quashing the decree of the Appellate Division and holding that the Workers' Compensation Court does not have the authority to award attorneys' fees and costs to a prevailing litigant in an appeal from the Retirement Board's denial of an accidental disability pension pursuant to R.I. Gen. Laws § 45-21.2-9. On August 5, 2021, the Appellate Division issued an Order of Remand to the trial judge for the purpose of issuing an amended decree that does not include an award of attorneys' fees and reimbursement of costs. **A Decision and Amended Decree were entered on November 2, 2021 which did not award attorneys' fees.**

Damon Borrelli v. Employees' Retirement System of Rhode Island (ERSRI).

Providence Superior Court; C.A. No. PC-2016-2817; PC-2019-4972

Change. Plaintiff, a South Kingstown Police Officer, appeals the denial of his application for an accidental disability pension. ERSRI filed an Answer to Mr. Borelli's First Amended Complaint, and the Designation of Record of Administrative Appeal with the court. The Town of South Kingstown filed a motion to intervene in the action, which motion was granted. On August 9, 2018, the Court (Lanphear, J.) issued a decision vacating the Retirement Board's decision and remanding the matter to ERSRI for further proceedings. Following remand, the Retirement Board again denied Mr. Borrelli's application. Mr. Borrelli filed a new appeal to the Superior Court. On August 17, 2020, Judge McGuirl issued a Decision sustaining Mr. Borrelli's appeal, vacating the

decision of the Board. Final judgment has entered. The Retirement Board contemporaneously filed a Petition for Issuance of a Writ of Certiorari in the Rhode Island Supreme Court and a Motion for Stay of Enforcement of the Judgment Pending Appeal. Borrelli and the Town of South Kingstown have filed objections to the Petition for Issuance of Writ of Certiorari and the Motion for Stay. **The hearing on the Motion to Stay was conducted on October 19, 2021 and remains under advisement.**

Sandra Tiernan v. Frank Caprio *et al.*

**Providence County Superior Court; CA No. PC-2009-7242
Supreme Court C.A. No. SU-2019-101-MP, consolidated with SU-2019-306-A**

Change. This declaratory judgment action arises out of the setoff of workers compensation benefits from disability pension benefits. On July 10, 2018, the Court issued a decision on the agency appeal fully affirming the Retirement Board's administrative determinations. On November 26, 2018, the Court issued a supplemental decision ruling in favor of the Retirement Board on all counts. Ms. Tiernan filed a petition for writ of certiorari and an appeal with the Rhode Island Supreme Court. A pre-briefing conference was held on March 5, 2020. On April 10, 2020, the Court granted the writ and consolidated the actions. The parties filed Rule 12A Statements and the Court set a schedule for full briefing. After multiple extensions, Ms. Tiernan filed her Brief with the Rhode Island Supreme Court on October 25, 2020. ERSRI filed its brief on February 1, 2021. **Oral argument before the Supreme Court was conducted on October 6, 2021.**

Joseph Palombo v. Employees' Retirement System of Rhode Island

Providence County Superior Court; C.A. No. PC-2021-02807

No change. Plaintiff, a former State Building and Grounds Coordinator with Rhode Island College, appeals the denial of his application for an accidental disability pension pursuant to R.I. Gen. Laws § 36-10-14. ERSRI filed an Answer and the Designation of Record with the Court on July 1, 2021. **The parties are in the process of briefing the issues.**

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

No change. Plaintiffs seek a declaratory judgment and brings 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. **Judge McGuirl issued a decision on November 4, 2021 granting ERSRI's motion for summary judgment and affirming the position that ERSRI is not responsible for adjudicating trooper disability applications. The decision denied ERSRI's motion for entry of separate and final judgment.**

Adele Goss v. Frank J. Karpinski, in his official Capacity as Executive Director of the Employees' Retirement System of Rhode Island

**Providence County Superior Court; C.A. No. PC-2019-4844
Supreme Court C.A. No. SU-2020-0212-MP**

Change. Plaintiff challenges the Retirement Board's denial of her application for an accidental disability pension pursuant to R.I.G.L. § 36-10-14. On August 5, 2020, Judge Montalbano issued a decision affirming the Retirement Board's denial of Ms. Goss' application for an accidental disability pension. On September 11, 2020, Plaintiff filed a petition for writ of certiorari with the Rhode Island Supreme Court. ERSRI subsequently filed its opposition. **On October 15, 2021, the Rhode Island Supreme Court denied Ms. Goss' petition for certiorari. This matter will be removed from future litigation reports.**

Frank Andre, et al. v. Employees' Retirement System of Rhode Island

Providence County Superior Court; PC-2019-7971

Change. Appellants are retired North Providence Firefighters whose pension payments were overpaid because the city had included amounts paid for longevity including overtime as a component in the calculation of their compensation. The Appellants contest the exclusion of the amounts paid for longevity including overtime as a component, and ERSRI's plan to recoup the overpayments. **A decision was issued by Justice McGuirl on October 25, 2021, in which the Court concluded that the Retirement Board was correct in determining that longevity payments based on overtime were properly excluded from the calculation of firefighter pension benefits. However, the Court reversed the actions of the Board to recoup the overpaid benefits.**

Cheryl Bailey v. Employees' Retirement System of the State of Rhode Island

Providence County Superior Court; PC-2021-06635

New Case. Plaintiff, a former Registered Nurse with the Rhode Island Department of Corrections, appeals the denial of her Application for Accidental Disability Retirement pursuant to R.I. Gen. Laws § 36-10-14.

II. MATTERS WITH NO PROCEDURAL OR SUBSTANTIVE CHANGES

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.

Richard P. D'Addario v. Employees' Retirement System of Rhode Island and Rhode Island State Employee's 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 parties are in the process of coordinating service of process. The Designation of Record and Answer have been filed with the Court.

Paula McVeigh v. Employees' Retirement System of Rhode Island, By and through its Executive Director, Frank Karpinski

Providence Superior Court; C.A. No. PC-2019-10719

No change. Plaintiff, a Corrections Officer with the Rhode Island Department of Corrections, appeals from the denial of her application for an accidental disability pension. The Designation of Record and an Answer have been filed with the Court.

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.

Wayne Cushman v. Employees' Retirement System of Rhode Island and the City of Cranston

Providence County Superior Court; C.A. No. PC-2017-1727

No change. Plaintiff, a Cranston police officer, is challenging a decision of the Retirement Board to deny his application for an accidental disability pension. ERSRI has filed an Answer and the Designation of Record with the Court.

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 Subcommittee for the consideration of additional evidence. ERSRI filed an objection, and on October 28, 2016, the Superior Court denied the motion to remand.

Albert DelMastro, Jr. v. Employee's 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.

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.

**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.

Robert E. Falvey v. Seth Magaziner, et al.

Providence County Superior Court; C.A. No. PC-2016-0232

No change. Plaintiff is a disability retiree who brought this action against the Retirement Board, the General Treasurer in his capacity as chair of the Board, the Executive Director, and the State of Rhode Island, seeking, *inter alia*, damages, and a determination that the Retirement System cannot make adjustments to his disability allowance based on earned income. The parties have stipulated that no Answer or other response shall be required to be filed until 30 days after Plaintiff's counsel states in writing that an Answer or other response is being requested.

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.

**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.

Alfred Benjamin v. Seth Magaziner, et al.

Providence County Superior Court; C.A. No. PC-2016-4467

No change. Plaintiff is a disability retiree who brought this action against the Retirement Board, the General Treasurer in his capacity as chair of the Board, the Executive Director, and the State of Rhode Island, seeking, *inter alia*, damages, and a determination that the Retirement System cannot make adjustments to his disability allowance based on earned income. The parties have stipulated that no Answer or other response shall be required to be filed until 30 days after Plaintiff's counsel states in writing that an Answer or other response is being requested.

**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

No 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.

STATE OF RHODE ISLAND

PROVIDENCE, SC.

SUPERIOR COURT

(FILED: November 4, 2021)

**RHODE ISLAND TROOPERS
ASSOCIATION and JAMES DONNELLY-
TAYLOR,**

Plaintiffs,

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,**

Defendants.

C.A. No. PC-2019-11054

DECISION

MCGUIRL, J. Before this Court are cross-motions for summary judgment by the Rhode Island Troopers Association and Trooper James Donnelly-Taylor (collectively, Plaintiffs), the State of Rhode Island, Division of the State Police, James Manni, in his official capacity as Colonel of the Rhode Island State Police, and former Governor Gina Raimondo,¹ in her official capacity (collectively, State Defendants), as well as the Employees' Retirement System of Rhode Island, by and through General Treasurer Seth Magaziner, and the Retirement Board (collectively, ERSRI). (Pls.' Mot. Summ. J., Aug. 12, 2020 (Pls.' Mot.); State Defs.' Mot. Summ. J., July 9, 2020 (State Defs.' Mot.); ERSRI Mot. Summ. J., Sept. 8, 2020 (ERSRI Mot.).) These cross-motions relate to a state trooper's appeal from the denial of disability pension benefits to which he

¹ Current Governor Daniel McKee has not been substituted in this action.

and his union believe he is entitled. Jurisdiction is pursuant to Rule 56 of the Superior Court Rules of Civil Procedure and G.L. 1956 §§ 8-2-17, 9-30-1, 28-8-2, and 42-28-21.

For the reasons provided herein, the Court grants summary judgment to the State Defendants and ERSRI with regard to Count I of the Complaint and remands the decision of the Superintendent for further findings of fact and law consistent with this Decision.

I

Facts and Travel

The underlying facts related to the injury of former State Trooper James Donnelly-Taylor (Mr. Donnelly-Taylor) were set forth in part by the Rhode Island Supreme Court in *State ex rel. Kilmartin v. Rhode Island Troopers Association*, 187 A.3d 1090 (R.I. 2018). *Rhode Island Troopers Association*, 187 A.3d at 1093-94. In January 2014, Mr. Donnelly-Taylor was involved in an incident during which he fired his service weapon at a “suspect vehicle” which was driving “directly at [him].” (Admin. Ex., Div. 6, at 2.) Then, in February 2014, Mr. Donnelly-Taylor was involved in the arrest and transport of Lionel Monsanto (Mr. Monsanto), who had been speeding in Pawtucket, Rhode Island. *Rhode Island Troopers Association*, 187 A.3d at 1093. After Mr. Monsanto was processed and escorted to a cellblock, Mr. Donnelly-Taylor entered the cellblock and physically assaulted him, which assault was captured on video. *Id.* at 1093-94.

In March and April 2014, Mr. Donnelly-Taylor reported that he had been injured by “work related incidents” and “work related stress” and submitted a doctor’s report recommending a month of sick leave because Mr. Donnelly-Taylor was “under significant stress due to multiple personal and work-related issues.” (Admin. Ex., Div. 1, at 600-01, 606.) Mr. Donnelly-Taylor was then placed on injured-on-duty (IOD) status for the first time relevant to this case and remained out of work “due to a job related injury” until early August 2014. *Id.* at 605, 230; *see* Admin. Ex.,

Div. 11, at 6 ¶¶ 5-7. During this time, Mr. Donnelly-Taylor was indicted by a grand jury on a charge of assault related to the February incident and subsequently pled nolo contendere to misdemeanor assault in the Sixth Division District Court. *Rhode Island Troopers Association*, 187 A.3d at 1094; *see* Admin. Ex., Div. 11, at 4. As a result of his plea, Mr. Donnelly-Taylor was ordered to perform twenty-five hours of community service, and his criminal disposition was expunged from his record. *Rhode Island Troopers Association*, 187 A.3d at 1094; *see* Admin. Ex., Div. 11, at 4.

After a meeting on August 5, 2014, during which Mr. Donnelly-Taylor admitted that his actions in February 2014 constituted violations of the Division Rules and Regulations, he was suspended without pay for a full calendar month. (Admin. Ex., Div. 11, at 4.) On his return, he underwent an independent psychiatric evaluation at the request of the Rhode Island State Police. *Id.* The evaluation stated that he was not ready to return to full time duty that “require[s] the use of a firearm” and needed to address his “lack of insight” into his culpability in the February 2014 incident. *Id.* at 18. In October 2014, Mr. Donnelly-Taylor was put on light duty status for a three-month period due to “the need for further treatment,” during which time he was required to and did receive treatment. (Admin. Ex., Div. 1, at 333-35; Admin. Ex., Div. 11, at 19.) In December 2014, Mr. Donnelly-Taylor’s treating physician recommended he be returned to full duty status. (Admin. Ex., Div. 11, at 2.) He was subsequently authorized to return to full duty status in January 2015. (Admin. Ex., Div. 1, at 611-12.)

In March 2016, Mr. Monsanto brought civil charges against Mr. Donnelly-Taylor, in both his official and personal capacities, related to the assault and, in May 2016, the Department of the Attorney General declined to represent Mr. Donnelly-Taylor in his individual capacity, stating that his behavior fell outside of the scope of his employment and amounted to willful misconduct. *See*

Admin. Ex., Div. 3, at 34-35; *Rhode Island Troopers Association*, 187 A.3d at 1094-95.² Nine months later, on the evening of February 15, 2017, Mr. Donnelly-Taylor sent out a division-wide e-mail from his phone in which he asked the other troopers to watch a video purportedly recorded by Mr. Monsanto “several hours before we arrested him” that he claimed would give them “a glimpse of what [we] had to deal with the night in question.”³ (Admin. Ex., Div. 7, at 1.) He ended the e-mail by saying that, “with no one able to make public comments as to the ACTUAL facts of this case, I am left to defend myself[,]” and thanked the recipients for their time. *Id.* As a result, Colonel Ann C. Assumpico (Col. Assumpico) requested that the Professional Standards Unit (PSU) investigate Mr. Donnelly-Taylor’s “unauthorized use of the Division email system[.]” *Id.* at 2. In the subsequent report on the incident, the PSU stated that the “civil suit has taken a mental toll on Trooper Donnelly-Taylor which has resulted in concern by his immediate supervisors and members of the Command Staff that [he] is not fit for duty and should be placed on sick leave and referred to Dr. Pickett for evaluation.” *Id.* at 3. Consequently, Mr. Donnelly-Taylor was put on sick leave and his status was changed to IOD for a second time on February 16, 2017. *Id.* at 4.

² The Supreme Court ultimately determined that the Attorney General had the authority to decline to defend Mr. Donnelly-Taylor under G.L. 1956 §§ 9-31-8 and 9-31-9, an issue that was not arbitrable. *Rhode Island Troopers Association*, 187 A.3d at 1101-02.

³ The video in question is a recording from February 25, 2014, the night prior to the arrest and assault, showing several radio hosts of “3rd Society Radio” discussing an incident in which one of the hosts was told by a police officer he would receive a ticket for parking his car on the street during a city parking ban for snow removal. *See 3rd Society Radio 2.25.2014*, Vimeo (Feb. 25, 2014, 8:04 PM), <https://vimeo.com/87628073/>. The hosts’ commentary contains frequent profanity and evidences significant skepticism regarding local law enforcement’s discretion to ticket, claiming that the city does not provide equal provision of municipal snow removal services to black neighborhoods and complaining of the ubiquity of Rhode Island potholes. *See id.* Plaintiffs characterize this video as one in which “Monsanto essentially brags about his negative interactions with police officers (including statements about assaulting police officers) and his belief that they are racist.” (Pls.’ Mem. Supp. Obj. Defs.’ Mot. Summ. J. (Pls.’ Mem.) 7.)

For the next two years, Mr. Donnelly-Taylor remained on IOD status and received treatment for his trauma and stress, which was paid for by the Rhode Island State Police (RISP). *See* Admin. Ex., Div. 1, at 501-80 (treatment and progress notes from Dr. Kaufmann), 628 (critical expense request form, for payment of Mr. Donnelly-Taylor’s medical treatment from Dr. Kaufmann); Admin. Ex., Trooper 1, at 9. In February 2018, his treating physician stated that Mr. Donnelly-Taylor “continue[d] to exhibit symptoms of post-traumatic stress disorder” and characterized his condition as having been “recent[ly] exacerbat[ed.]” Admin. Ex., Div. 1, at 625. In November 2018, his doctor stated that “[g]iven the chronicity of his symptoms, I consider him to be medically disabled from his prior work capacity.” *Id.* at 627.

In December 2018, Mr. Donnelly-Taylor sent an e-mail to the Superintendent of the State Police, Col. Assumpico, stating that, after reaching out to ERSRI and notifying them of his intention to apply for a work-related disability pension, he was told to submit his request to the Superintendent. (Admin. Ex., Trooper 1, at 11.) Consequently, Mr. Donnelly-Taylor stated that he was “respectfully asking you to review all pertinent information involved in my Injured on Duty (IOD) status and award me a full disability pension” as well as “all the benefits which have been granted to past recipients.” *Id.* In March 2019, Colonel James Manni (Col. Manni) was sworn in as the new Superintendent of the State Police. (Compl. ¶ 20; State Defs.’ Answer ¶ 20.) In June 2019, Col. Manni notified Mr. Donnelly-Taylor that a hearing would be held “[i]n order to afford [him] a full and fair opportunity to state and support [his] claim to a disability pension from the Rhode Island State Police, and in order to facilitate the proper exercise of [Col. Manni’s] discretion as superintendent[.]” (Admin. Ex., Joint 1.)

The hearing was held on August 8, 2019. *See* Compl., App. A (Decision), at 1. On October 17, 2019, Col. Manni issued his decision as Superintendent (Decision), denying Mr. Donnelly-

Taylor's application for disability pension benefits. (Decision at 1, 27.) In his Decision, the Superintendent listed excerpts from the treatment notes and assessments submitted to the RISP by Mr. Donnelly-Taylor's treating psychiatrist as evidence supporting his determination. *Id.* at 6-10. The Superintendent then found that Mr. Donnelly-Taylor had suffered injury causing disability, because "he has been diagnosed by a duly qualified psychiatrist with 'major depressive disorder and post-traumatic stress disorder (PTSD)[,]'" and that such disability is permanent, because "his psychiatrist found that '[g]iven the chronicity of his symptoms, I consider him to be medically disabled from his prior work capacity.'" *Id.* at 12.

However, the Superintendent distinguished between "injuries suffered 'as a direct consequence to experiences while employed as a Rhode Island State Trooper'" and those "suffered 'in the course of performance of [his] . . . duties[,]'" based on his "informed judgment acquired over the course of his long career in law enforcement, including over 25 years as a Rhode Island State Trooper," and relying on the reasoning used by the Rhode Island Supreme Court in *Canario v. Culhane*, 752 A.2d 476 (R.I. 2000). *Id.* at 12-13 (citing *Canario*, 752 A.2d at 479).

The Decision went on to locate the "impetus for Trooper Donnelly-Taylor's disability-pension request" as the February 2014 arrest and assault of Mr. Monsanto. *Id.* at 13. Referencing the decision in *Rhode Island Troopers Association*, cited *supra*, the Superintendent went on to find that Mr. Donnelly-Taylor's assault of Mr. Monsanto "was not within the scope of his duties as a Rhode Island State Trooper." *Id.* at 14 (citing *Rhode Island Troopers Association*, 187 A.3d at 1103-04). The Superintendent then found that Mr. Donnelly-Taylor's "disabling stress resulted not from his arrest of Mr. Monsanto but from his assault of Mr. Monsanto and its consequent fallout." *Id.* at 15. In doing so, the Superintendent referenced the progress notes of the psychiatrist, citing incidents related to the assault and litigation as experiences that affected Mr. Donnelly-Taylor and

caused him stress. *Id.* The Superintendent emphasized that these events occurred when Mr. Donnelly-Taylor was on IOD status, not “performing any duties for the Rhode Island State Police[.]” *Id.* at 16. Therefore, the Superintendent found that the “disabling injury . . . is not duty-related and not properly the basis for a disability pension.” *Id.*

The Superintendent also rejected several arguments made by Mr. Donnelly-Taylor that his discretion was constrained by expert testimony and the plain language of § 42-28-21(a), stating that the limits on his discretion “do not extend to reducing his role to that of a rubber stamp.” *Id.* at 18-20. The Superintendent also addressed Mr. Donnelly-Taylor’s argument that the RISP, by granting him IOD status, should be estopped from denying that he had “PTSD caused by events that occurred in the performance of his duty[.]” given the “parallel legal standards in [G.L. 1956] § 45-19-1 and § 42-28-21(a)[.]” *Id.* at 22. In doing so, the Superintendent distinguished the two statutes, citing the Supreme Court’s statement that “§ 45-19-1 is not a retirement act,” and extrapolating that a decision under that statute thus “does not have life-long implications.” *Id.* at 23 (quoting *Webster v. Perrotta*, 774 A.2d 68, 80 (R.I. 2001)).

Mr. Donnelly-Taylor filed his Complaint, seeking declaratory judgment and appealing the Decision, on November 15, 2019. *See* Compl. He claimed jurisdiction under both the Administrative Procedures Act (APA) and Uniform Declaratory Judgments Act (UDJA). *Id.* ¶ 2. He was joined in Count I (Declaratory Judgment) by Plaintiff Rhode Island Trooper’s Association (RITA). *Id.* ¶¶ 3, 25-26. Effective December 14, 2019, Mr. Donnelly-Taylor was removed from service by the Superintendent for non-disciplinary reasons under § 42-28-10. (State Defs.’ Answer ¶ 8; State Defs.’ Mem. Supp. Mot. Summ. J. (State Defs.’ Mem.) 4 n.5.) State Defendants filed their Answer on December 16, 2019, and ERSRI filed its Answer on February 6, 2020. The parties

filed motions for summary judgment on the following dates: State Defendants on July 9, 2020, the Plaintiffs on August 11, 2020, and ERSRI on September 8, 2020.

II

Standards of Review

A

Summary and Declaratory Judgment

Summary judgment shall issue when the evidence demonstrates that “there is no genuine issue as to any material fact and that the moving party is entitled to judgment as matter of law.” Super. R. Civ. P. 56(c). The moving party “bears the initial burden of establishing the absence of a genuine issue of fact.” *McGovern v. Bank of America, N.A.*, 91 A.3d 853, 858 (R.I. 2014) (citation omitted). The Court “views the evidence in the light most favorable to the nonmoving party[.]” *Mruk v. Mortgage Electronic Registration Systems, Inc.*, 82 A.3d 527, 532 (R.I. 2013), and “does not pass upon the weight or the credibility of the evidence.” *Palmisciano v. Burrillville Racing Association*, 603 A.2d 317, 320 (R.I. 1992). Thereafter, “the nonmoving party bears the burden of proving by competent evidence the existence of a disputed issue of material fact and cannot rest upon mere allegations or denials in the pleadings, mere conclusions or mere legal opinions.” *Mruk*, 82 A.3d at 532 (quoting *Daniels v. Fluette*, 64 A.3d 302, 304 (R.I. 2013)) (internal quotations removed).

A party may request summary judgment when seeking a declaratory judgment “upon all or any part thereof.” Super. R. Civ. P. 56(a). Furthermore, under the UDJA, the Superior Court possesses the “power to declare rights, status, and other legal relations whether or not further relief is or could be claimed.” Section 9-30-1; *see also P.J.C. Realty, Inc. v. Barry*, 811 A.2d 1202, 1207 (R.I. 2002) (quoting § 9-30-1). Thus, “the Superior Court has jurisdiction to construe the rights

and responsibilities of any party arising from a statute pursuant to the powers conferred upon [it] by G.L. 1956 chapter 30 of title 9, the [UDJA].” *Canario*, 752 A.2d at 478-79. Section 9-30-2 of the UDJA provides as follows:

“Any person interested under a deed, will, written contract, or other writings constituting a contract, or *whose rights, status, or other legal relations are affected by a statute*, municipal ordinance, contract, or franchise, *may have determined any question of construction or validity arising under the instrument, statute, ordinance, contract, or franchise and obtain a declaration of rights, status, or other legal relations thereunder.*” Section 9-30-2 (emphasis added).

A trial court’s “decision to grant or to deny declaratory relief under the [UDJA] is purely discretionary.” *Sullivan v. Chafee*, 703 A.2d 748, 751 (R.I. 1997). The purpose of the UDJA is “to allow the trial justice to ‘facilitate the termination of controversies,’” *Bradford Associates v. R.I. Division of Purchases*, 772 A.2d 485, 489 (R.I. 2001) (citations omitted), because “[i]t is the policy of this state to encourage the settlement of controversies in lieu of litigation.” *Skaling v. Aetna Insurance Co.*, 799 A.2d 997, 1012 (R.I. 2002). *See also Arruda v. Sears, Roebuck & Co.*, 273 B.R. 332, 345 (D.R.I. 2002) (“[I]n Rhode Island, courts favor the settlement of litigation disputes.”).

B

Final Judgment

As a general rule, an appeal may be taken only from a “final judgment, decree, or order of the superior court[.]” G.L. 1956 § 9-24-1. However, Rule 54(b) creates an exception, providing in pertinent part:

“When more than one (1) claim for relief is presented in an action . . . or when multiple parties are involved, the court may direct the entry of a final judgment as to one (1) or more but fewer than all of the claims or parties only upon an express determination that there

is no just reason for delay and upon an express direction for the entry of judgment.”

Rule 54(b)’s objective is to “avoid the possible injustice of a delay in entering judgment on a distinctly separate claim . . . until the final adjudication of the entire case by making an immediate appeal available.” 10 Wright & Miller, *Federal Practice and Procedure*, Civil 3d § 2654 at 33 (1998); *see also Astro-Med, Inc. v. R. Moroz, Ltd.*, 811 A.2d 1154, 1156 (R.I. 2002) (finding that, due to the substantial similarity between our Rule 54(b) and Federal Rule of Civil Procedure 54(b), “this Court may properly look to a federal court interpretation of the analogous federal rule for guidance in applying our own state’s rule”). The rule achieves this by balancing two factors: (1) “the undesirability of more than one appeal in a single action” and (2) “the need for making review available in multiple-party or multiple-claim situations at a time that best serves the needs of the litigants.” Wright & Miller, cited *supra*, at 35.

III

Analysis

In their Complaint,⁴ Plaintiffs challenge the denial of Mr. Donnelly-Taylor’s application for a disability pension, but they also challenge the prevailing understanding in Rhode Island of

⁴ The State Defendants argue that it is procedurally inappropriate for Plaintiffs to include both their declaratory judgment action and Mr. Donnelly-Taylor’s appeal in one complaint. (State Defs.’ Mem. 4-5.) The Court notes that in *Ferreira v. Culhane*, 736 A.2d 96 (R.I. 1999), the Rhode Island Supreme Court found no fault with a Superior Court justice’s decision to consolidate two similar claims to facilitate their consideration. *Id.* at 97 (noting that “plaintiff filed two actions . . . a complaint for declaratory relief and an administrative appeal” and that “[t]he two matters were consolidated”). Additionally, under § 8-2-17, this Court has jurisdiction over “such appeals and statutory proceedings as may be provided by law[.]” As detailed herein, the caselaw in Rhode Island interpreting § 42-28-21 makes it clear that this Court has an established appellate review function relative to decisions of the Superintendent regarding disability pensions for state troopers. Consequently, this Court will consider both the propriety of summary judgment for the declaratory judgment claims and the merits of Mr. Donnelly-Taylor’s appeal herein, in the interest of judicial economy.

who has the authority to determine these matters and what standard the Court should utilize in reviewing these determinations. *See* Compl. ¶¶ 25-26; *Canario*, 752 A.2d at 478-79. In doing so, the Plaintiffs request that this Court utilize its jurisdiction under the UDJA to declare that ERSRI, not the Superintendent, has this authority, and that consequently the standard utilized in the review of ERSRI decisions should apply here. *See* Compl. ¶¶ 26D & 26E; Pls.’ Consolidated Mem. 7-9. Mr. Donnelly-Taylor also appeals the Decision of the Superintendent, alleging that the hearing provided to him violated his due process rights and that the RISP’s earlier grant of IOD benefits means the Superintendent was estopped from denying his claim for a disability pension due to parallel legal standards in the two governing statutes. *See* Compl. ¶¶ 27-34; Pls.’ Mem. 19-24, 41-44. All parties having requested summary judgment, the Court will address each of these questions in turn before taking up the claims for final judgment under Rule 54(b) by the State Defendants and ERSRI.

A

Declaratory Judgment: The Authority of the Superintendent

1

Arguments

In Count I of the Complaint, Plaintiffs request that the Court declare that the Superintendent of the RISP is not a fiduciary of the State Police Retirement Benefits Trust (SPRBT) and thus has no authority to determine eligibility for pension benefits under either state law or the collective bargaining agreement (CBA). (Compl. ¶¶ 26A, 26B; *see* State Defs.’ Answer ¶ 11.) Plaintiffs further request that the Court declare that ERSRI has either the statutory authority to make such eligibility determinations or has been delegated by the Governor to have such authority, which determinations should be resolved under the grievance and arbitration provisions of the CBA.

(Compl. ¶¶ 26C, 26D, 26E.) Additionally, Plaintiffs seek a declaration that such determinations, whether by the Superintendent or ERSRI, should be subject to the review of the Superior Court, either *de novo* or under an arbitrary and capricious standard. *Id.* ¶¶ 26F, 26G. Finally, Plaintiffs seek a declaration that Mr. Donnelly-Taylor is entitled to either the disability pension benefits he was denied or the continuing receipt of IOD benefits until he retires or leaves his employment with the RISP. *Id.* ¶¶ 26H, 26I.

The State Defendants argue that it was the Superintendent's statutory duty to decide Mr. Donnelly-Taylor's application for a disability pension, referencing the legislative history of the statute and multiple decisions from the Rhode Island courts. (State Defs.' Mem. 6-11; State Defs.' Reply Mem. 6.) The State Defendants also contend that the appropriate standard of review for this Court when evaluating the Superintendent's Decision is whether that Decision was arbitrary and capricious. (State Defs.' Mem. 11-16.) Plaintiffs, however, question whether the Superintendent has the authority to decide pension applications, based on ERSRI's administrative duties related to the state police pension system, an inter-agency letter agreement, and what they argue are deficiencies in the statutory language of § 42-28-21. (Pls.' Mem. 17-19.)

The State Defendants argue that this is an invalid basis for ERSRI's purported authority, i.e., based on an inter-agency letter agreement, and cite caselaw to support the argument that statutory responsibilities cannot be lost in the manner Plaintiffs seem to argue has happened here. (State Defs.' Reply Mem. 7-8.) ERSRI likewise argues that the relevant statutes neither require nor authorize ERSRI to administer trooper disability pensions. (ERSRI's Mem. Supp. Mot. Summ. J. (ERSRI's Mem.) 6-10.) ERSRI also maintains that the Rhode Island Supreme Court has traditionally afforded great deference to disability determinations made by the Superintendent. *Id.*

at 10. Additionally, ERSRI argues that the inter-agency letter agreement cited to by the Plaintiffs also does not authorize or require ERSRI to administer trooper disability pensions. *Id.* at 10-12.

Plaintiffs claim that ERSRI has ignored state law dictating that it enact rules and regulations relative to the pension fund. (Pls.’ Consolidated Mem. 2-7.) Plaintiffs then explicitly dispute the standard of review provided by the State Defendants and provide one relative to the review an ERSRI decision. *Id.* at 7-9.

2

Analysis

Section 42-28-21(a) governs state police disability pensions and provides that:

“If any member of the division whose service is terminated on or after January 1, 1960, shall have in the course of performance of his or her duties suffered injury causing disability or causing death, that member or his or her surviving dependent relatives, whose dependence shall be determined from time to time by the superintendent subject to confirmation by the governor, shall be entitled to an annual pension of seventy-five percent (75%) of the annual salary paid to that member at the time of his or her termination of service by reason of injury or death.”

The Rhode Island Supreme Court has interpreted this statute as “provid[ing] that a member of the State Police who has suffered injury causing disability or death in the performance of his or her duties shall be entitled to a disability pension.” *Ferreira*, 736 A.2d at 97.

Discussing this provision in *Canario*, cited *supra*, our Supreme Court also implicitly held that it confers authority onto the Superintendent to decide police disability pension eligibility. The Supreme Court noted that “[s]ection 42-28-21 does not provide any specific method of review of a determination by the superintendent in respect to a disability pension” and “approved . . . as a matter of law that the superintendent had great discretion in determining an officer’s eligibility for a disability pension, and that plaintiff had failed to establish any abuse of discretion by the

superintendent.” *Canario*, 752 A.2d at 478-79. The prior year, the Supreme Court upheld a decision by the Superintendent to deny a state police officer’s request for a disability pension. *Ferreira*, 736 A.2d at 97; *see also Culhane v. DeRobbio*, 649 A.2d 507, 508 (R.I. 1994) (noting that the disability pension application under § 42-28-21 was “denied by the [superintendent] on the ground that the disability . . . had not been shown to have been incurred in the course of performance of his duty” but noting that the question of entitlement to such pension was not then before the Rhode Island Supreme Court).

Plaintiffs provide an inter-agency letter agreement from 2012 as part of their argument, in which United States Secretary of Commerce Gina Raimondo—then the General Treasurer of Rhode Island—wrote to the Superintendent that “[e]ffective November 1, 2012, retirement eligibility and benefits administration will be addressed by ERSRI staff.” (Pls.’ Mem., Ex. B, at 1.) However, the letter in question states only that this delegation was done in the name of “efficienc[y]” and “oversight of contributions received by and benefits paid from the Trust[,]” *see id.*, never expressing an intention to remove the Superintendent’s statutory authority to determine disability pensions or operate in contradiction to previous Rhode Island Supreme Court decisions upholding such determinations.⁵

Moreover, to the extent that the General Treasury contracted with the RISP as to pension administration, “state law will trump contrary contract provisions when the statute provides for nondelegable or nonmodifiable duties and responsibilities in connection with the functions of state government.” *State v. Rhode Island Council 94*, 925 A.2d 939, 945 (R.I. 2007) (citations omitted). Here, the statute as it has been interpreted by the courts clearly provides for such duties and

⁵ Plaintiffs also argue that the Superintendent cannot make pension determinations because he is not a fiduciary of the police pension fund. *See* Compl. ¶ 26A; Pls.’ Mem. 19. However, it is unclear how such a status or lack thereof would affect the Superintendent’s authority under § 42-28-21.

responsibilities. Therefore, while the Superintendent may not be the exclusive decision maker as to police disability pensions, there is no evidence that the General Assembly or the courts have removed such authority as has been previously confirmed in our caselaw. Consequently, the power to alter or remove this established authority remains with the Legislature.

Furthermore, in each of the cases cited above where the Rhode Island Supreme Court reviewed decisions to deny disability pensions to state troopers, the standard of review utilized was the arbitrary and capricious standard. *Ferreira*, 736 A.2d at 97 (finding that the Superintendent’s “decision not to reclassify plaintiff’s pension status was neither arbitrary nor capricious” and there was “no abuse of discretion whatsoever in his decision”); *Canario*, 752 A.2d at 479 (clarifying that, in *Ferreira*, “we specifically approved of the application by the Superior Court of a standard of review based upon a determination that the superintendent’s decision was neither arbitrary nor capricious” and “see[ing] no reason to depart from the standard of review applied . . . because it was identical to the standard of review that we specifically approved in *Ferreira*”). The principle of *stare decisis* thus dictates that the appropriate standard of review remains the arbitrary and capricious standard. *See State v. Hampton-Boyd*, 253 A.3d 418, 423 (R.I. 2021) (“Under the principle of *stare decisis*, this Court always makes a concerted effort to adhere to existing legal precedent.”) (quoting *Pastore v. Samson*, 900 A.2d 1067, 1077 (R.I. 2006)).

Consequently, the Court grants summary judgment to the State Defendants and ERSRI with respect to Count I of the Complaint, declaring that it is clear that the Superintendent has the statutory authority to decide disability pension eligibility for state troopers and that the standard of review for such decisions is the arbitrary and capricious standard.

B

Mr. Donnelly-Taylor's Appeal

Under both the APA and the common law of the State of Rhode Island, Mr. Donnelly-Taylor also appeals the Decision of the Superintendent, contending that the Decision was in violation of constitutional or statutory provisions, in excess of the statutory authority of the agency, made upon unlawful procedure, affected by other errors of law, clearly erroneous in view of the reliable, probative, and substantial evidence contained in the record, or arbitrary, capricious, or characterized by an abuse or clearly unwarranted exercise of discretion. (Compl. ¶¶ 29, 31, 33.) Mr. Donnelly-Taylor is seeking a reversal of the Decision in light of these contentions. *Id.* ¶¶ 29A, 34A.

As an initial matter, it appears that the APA is inapplicable here, as this matter concerns the state police. There is a long legal and statutory history across jurisdictions that illustrates that the state treats its administrative and police divisions differently, due to the paramilitary nature of the police. *See generally* § 45:10. Status, organization and powers, 16A McQuillin Mun. Corp. § 45:10 (3d ed.) (noting that “[t]he police force of a community has been described as resembling, in many respects, a military force”); § 45:11. Police boards and commissions, 16A McQuillin Mun. Corp. § 45:11 (3d ed.) (describing the “separate and independent” nature of police leadership, as distinct from that of other municipal or local employees); § 45:13. Police boards and commissions—Powers and duties, 16A McQuillin Mun. Corp. § 45:13 (3d ed.) (describing the statutory origin of police powers and the large measure of discretion accorded to police leadership). This distinction is also apparent in Rhode Island law, given the history of police officers’ exclusion from the state workers’ compensation statute and the subsequent enactment of § 45-19-1, with its

greater protection and benefits for injured police officers and firefighters. *See Webster*, 774 A.2d at 79-80 (describing such history).

Consequently, the Court will review Mr. Donnelly-Taylor's appeal from the Decision of the Superintendent under the appropriate arbitrary and capricious standard after first addressing his due process and estoppel arguments.

1

Due Process

(i)

Arguments

Mr. Donnelly-Taylor alleges that the process utilized with regard to his application violated his due process rights under the state and federal constitutions. (Pls.' Mem. 19-24.) He also contends that this Court should reverse the Decision because the record of the hearing indicates there were violations of Rule 408 of the Rhode Island Rules of Evidence related to the admission of mediation-related communications and materials. *Id.* at 24-26.

The State Defendants argue that Mr. Donnelly-Taylor's due process arguments are without merit given the non-adversarial nature of the hearing provided at the Superintendent's discretion. (State Defs.' Reply 8-9.) Furthermore, the State Defendants contend that the notice received and the hearing itself provided sufficient due process. *Id.* at 9-12. The State Defendants then argue that Mr. Donnelly-Taylor's claims regarding Rule 408 and G.L. 1956 § 42-35-10 do not apply to the hearing, which was not a "contested case" under the APA, and that any argument under Rule 408 was waived as the only objections made at the hearing were with regard to relevance. *Id.* at 12-13. In reply, Mr. Donnelly-Taylor argues that the lack of rules or procedure rendered the hearing he was given a violation of due process. (Pls.' Consolidated Mem. 14.) He also disputes

the State Defendants’ characterization of the documents admitted as part of the hearing record as merely containing his personnel file and medical file, arguing that there were many additional documents included. *Id.* at 16.

(ii)

Analysis

To begin with, the Rhode Island Rules of Evidence did not apply at the hearing under appeal for two reasons. First, the Superintendent explicitly notified the parties, on the record, that the Rules of Evidence would not apply. (Hr’g Tr. at 7:25-8:4.) Second, the Rules themselves address when they are applicable, stating as follows: “To the extent and with the exceptions stated below, these rules govern proceedings *in the courts of this state and to the extent provided by the Administrative Procedure Act to contested administrative actions and proceedings.*” R.I. R. Evid. 101(a) (emphasis added). The hearing in question was neither a proceeding in a court nor a contested administrative action under the APA, as explained above. Furthermore, Mr. Donnelly-Taylor has failed to allege how such evidence prejudiced his claim or resulted in an unfair ruling. *See Thibaudeau v. Thibaudeau*, 947 A.2d 243, 247 (R.I. 2008) (holding consideration of improperly admitted evidence “harmless error” where “hearing justice relied on sufficient evidence independent of the [improper evidence]”). Therefore, Mr. Donnelly-Taylor’s argument regarding Rule 408 is without merit.

Both the Fourteenth Amendment to the United States Constitution and the Rhode Island Constitution prohibit state actors from depriving a person “of life, liberty, or property, without due process of law.” U.S. Const. Amend. XIV, §1; *see* R.I. Const. art. I, § 2 (“No person shall be deprived of life, liberty or property without due process of law[.]”). Due process claims “are examined in two steps”: “First, a plaintiff must have a protected liberty or property interest[.]” and

“[o]nly then do we inquire whether the procedures afforded were ‘constitutionally sufficient.’” *DiCiantis v. Wall*, 795 A.2d 1121, 1126 (R.I. 2002) (citation omitted). “To have a property interest in a benefit, a person clearly must have more than an abstract need or desire for it” and “more than a unilateral expectation of it” but “must, instead, have a legitimate claim of entitlement to it.” *Board of Regents of State Colleges v. Roth*, 408 U.S. 564, 577 (1972). Such state benefit property interests are “created and defined by statutory terms[.]” *Id.* at 578.

Here, the statute in question, § 42-28-21(a), “provides that a member of the State Police who has suffered injury causing disability or death in the performance of his or her duties *shall* be entitled to a disability pension.” *Ferreira*, 736 A.2d at 97 (emphasis added). While the Superintendent’s discretion in these matters is broad, the statute does constrain it somewhat through its use of mandatory language. *See Quality Court Condominium Association v. Quality Hill Development Corp.*, 641 A.2d 746, 751 (R.I. 1994) (approving as a “general rule of statutory construction regarding the words ‘may’ and ‘shall[.]’” the distinction between “a discretionary rather than a mandatory provision”) (citing *Carlson v. McLyman*, 77 R.I. 177, 74 A.2d 853 (1950)). Therefore, subject to the resolution of whether Mr. Donnelly-Taylor “in the course of performance of his . . . duties suffered injury causing disability[.]” he had a statutorily protected property interest in his disability pension. Sec. 42-28-21(a); *see Board of Pardons v. Allen*, 482 U.S. 369, 381 (1987); *Lynch v. Gontarz*, 120 R.I. 149, 156-57, 386 A.2d 184, 188 (1978).

Nevertheless, it is clear to this Court that state troopers applying for disability pensions under § 42-28-21(a) are not necessarily entitled to a hearing under the statute. *See Canario*, 752 A.2d at 478, 480 (affirming a Superior Court decision determining that the Superintendent’s denial of a disability pension *without holding a hearing* was neither arbitrary nor capricious). Having granted one, however, the Superintendent is obligated to meet the requirements of due process.

See Hr’g Tr. at 7:6-7 (Superintendent acknowledging his “quasi-judicial role in this matter”); cf. *Town of Richmond v. Wawaloam Reservation, Inc.*, 850 A.2d 924, 933 (R.I. 2004) (“An administrative tribunal acts in a quasi-judicial capacity when it affords the parties substantially the same rights as those available in a court of law, such as the opportunity to present evidence, to assert legal claims and defenses, and to appeal from an adverse decision.”).

It is instructive to note that, although our Supreme Court has found that “the due-process requirements of a fair trial apply to the procedures of administrative agencies[,]” it has held that such requirements merely entitle an individual to “an opportunity to be heard at a meaningful time and in a meaningful manner.”⁶ *Bourque v. Dettore*, 589 A.2d 815, 823 (R.I. 1991); see also *Boyer v. Bedrosian*, 57 A.3d 259, 273 (R.I. 2012) (“[T]he fundamental requisite of due process is the opportunity to be heard at a meaningful time and in a meaningful manner; this certainly requires one to be forewarned about the subject matter of the hearing with sufficient detail so an intelligent explanation or rebuttal can be formulated.”). It is only common sense that where, as here, there is

⁶ The Rhode Island Supreme Court has stated that another part of the procedural due process analysis is asking whether an individual was afforded an “‘opportunity to respond adequately before a governmental agency may effectively deprive [that] individual of life, liberty, or property.’” *East Bay Community Development Corp. v. Zoning Board of Review of Town of Barrington*, 901 A.2d 1136, 1153 (R.I. 2006) (quoting *State v. Manocchio*, 448 A.2d 761, 764 n.3 (R.I. 1982)). In the context of other types of appeals, our courts have consequently required that individuals be provided with an adequate rationale that will allow them to make such an adequate response. See, e.g., *Akebia Therapeutics, Inc. v. Azar*, 976 F.3d 86, 100 (1st Cir. 2020) (noting, in context of administrative appeal, that “to avoid arbitrary and capricious outcomes,” a given “agency cannot significantly depart from its own prior precedent without adequately explaining its rationale”); *Environmental Scientific Corp. v. Durfee*, 621 A.2d 200, 208 (R.I. 1993) (interpreting a statute to require an administrative agency to provide “an adequate rationale” when rejecting a hearing officer’s findings). Likewise, in the context of its review of a trial court’s denial of a motion for a new trial, the Rhode Island Supreme Court has required that the trial justice “‘compl[y] with the requisite procedure and articulate[] an adequate rationale’” *State v. Golembewski*, 808 A.2d 622, 625 (R.I. 2002) (quoting *State v. Otero*, 788 A.2d 469, 472 (R.I. 2002)). The question of whether the Decision in this matter contained an adequate rationale is afforded extensive review below, as part of this Court’s consideration of Mr. Donnelly-Taylor’s appeal.

no entitlement to a hearing under the statute, the requirements of due process cannot reasonably exceed those that apply in contested cases under the APA.

Mr. Donnelly-Taylor was provided with a letter notifying him that he would be granted a hearing, “non-adversarial in conduct and informal in tone,” at which he would have the “burden to present such evidence as [he] deem[ed] material and relevant to support [his] request.” (Admin. Ex., Joint 1.) The letter also made clear that it would be appropriate to submit “medical records and to testify as to how ‘in the course of performance of [your] duties . . . [you] suffered injury causing disability[.]’” *Id.* Finally, the letter stated that Mr. Donnelly-Taylor could “bring legal counsel and any witnesses” and that, if he had questions, he should direct them to the RISP’s counsel. *Id.* This letter provided adequate notice under the due process standard articulated above, as Mr. Donnelly-Taylor was “forewarned about the subject matter of the hearing with sufficient detail so an intelligent explanation or rebuttal [could] be formulated.” *Boyer*, 57 A.3d at 273.

Furthermore, the Court’s examination of the hearing transcript shows that it provided Mr. Donnelly-Taylor with an adequate opportunity to be heard. *See* Hr’g Tr. at 10:1-12:8 (containing argument by Mr. Donnelly-Taylor’s attorney regarding several procedural matters); 28:12-29:1 (containing argument by Mr. Donnelly-Taylor’s attorney objecting to “a large pile of documents” in the context that “I understand that over my objection the stuff is coming in anyway”); 51:10-60:20 (containing statement by Mr. Donnelly-Taylor’s attorney reserving legal argument for written submission before proceeding to argue at length regarding the various points to be made in that submission). Consequently, the Court finds that the hearing provided to Mr. Donnelly-Taylor met the requirements of due process by giving him “an opportunity to be heard at a meaningful time and in a meaningful manner.” *Bourque*, 589 A.2d at 823.

Estoppel

(i)

Arguments

Mr. Donnelly-Taylor also contends that the Superintendent was estopped from denying his application based on the RISP's prior determination to grant him IOD status, which he argues is a parallel legal standard. (Pls.' Mem. 41-44.) The State Defendants adopt the Decision's analysis of the estoppel argument raised by Mr. Donnelly-Taylor and also argue that the RISP should not be penalized for granting IOD status to an employee for policy reasons. (State Defs.' Reply Mem. 16-17.) In reply, Mr. Donnelly-Taylor disputes the applicability of a Superior Court case cited by the State Defendants relevant to his estoppel argument, arguing that the case does not address estoppel except in dicta. (Pls.' Consolidated Mem. 17-19.)

(ii)

Analysis

In *Webster v. Perrotta*, cited *supra*, our Supreme Court has held that § 45-19-1, “often referred to as the [IOD] provision[,]” “is not a retirement act” and is only intended to apply to an officer entitled to compensation and benefits “*while he or she remains a member of the department.*” *Webster*, 774 A.2d at 71, 80 (emphasis in original). It is true that the IOD provision is remedial legislation and, as such, should be liberally construed. *See McCain v. Town of North Providence ex rel. Lombardi*, 41 A.3d 239, 244 (R.I. 2012). However, *Webster* made clear that the statute “is a substitute for workers’ compensation” and does not regulate retirement benefits or compensation for those who leave the police department. *Webster*, 774 A.2d at 80. Likewise, in his Decision, the Superintendent found that while both statutes “speak in terms of injuries received

in the performance of duties,” they serve different functions and a determination under one should not be binding on the other. (Decision at 26.)

Mr. Donnelly-Taylor does not specify in his argument which form of estoppel he believes should apply to the RISP’s IOD determination. However, both judicial and equitable estoppel “[are] extraordinary relief, which will not be applied unless the equities clearly are balanced in favor of the party seeking relief.” *See State v. Parrillo*, 158 A.3d 283, 292 (R.I. 2017) (quotation omitted); *Gaumont v. Trinity Repertory Co.*, 909 A.2d 512, 519 (R.I. 2006).

“A trial justice has the discretion to invoke judicial estoppel ‘when he or she finds that a party’s inconsistent positions would create an unfair advantage.’” *Iadevaia v. Town of Scituate Zoning Board of Review*, 80 A.3d 864, 870 (R.I. 2013) (quoting *State v. Lead Industries Association, Inc.*, 69 A.3d 1304, 1310 (R.I. 2013)). The Rhode Island Supreme Court has stated that the “[invocation] [of] judicial estoppel [is] . . . driven by the important motive of promoting truthfulness and fair dealing in court proceedings.” *D & H Therapy Associates v. Murray*, 821 A.2d 691, 693 (R.I. 2003). “Unlike equitable estoppel, which focuses on the relationship between the parties, judicial estoppel focuses on the relationship between the litigant and the judicial system as a whole.” *Iadevaia*, 80 A.3d at 870-71 (quoting *D & H Therapy Associates*, 821 A.2d at 693). Moreover, “the rule is intended to prevent improper use of judicial machinery,” which is why “judicial estoppel is an equitable doctrine invoked by a court at its discretion.” *Gaumont*, 909 A.2d at 519 (quoting *New Hampshire v. Maine*, 532 U.S. 742, 750 (2001)).

“One of the primary factors courts typically look to[,] in determining whether to invoke the doctrine in a particular case[,] is whether the party seeking to assert an inconsistent position would derive an unfair advantage . . . if not estopped.” *Iadevaia*, 80 A.3d at 871 (quoting *Lead Industries Association, Inc.*, 69 A.3d at 1310). As such, this Court will “inquire whether the party

who has taken an inconsistent position had succeeded in persuading a court to accept that party's earlier position, so that judicial acceptance of an inconsistent position in a later proceeding would create the perception that either the first or the second court was misled.” *Id.* (quoting *Lead Industries Association, Inc.*, 69 A.3d at 1310).

Here, there has been only one court proceeding involving Mr. Donnelly-Taylor and the Superintendent's Decision: the present one. Moreover, “[e]ven ‘[a]ssuming without deciding that the [doctrine] of . . . estoppel . . . can properly be invoked by [Mr. Donnelly-Taylor] in the circumstances presently before us, we cannot agree that on this record the only inference which may be reached . . . must be resolved in favor of [Mr. Donnelly-Taylor].” *Faella v. Chiodo*, 111 A.3d 351, 358 (R.I. 2015) (quoting *Lichtenstein v. Parness*, 81 R.I. 135, 138, 99 A.2d 3, 5 (1953)). In fact, just as “the standards for receiving [workers’ compensation] benefits are less demanding than the requirements for accidental disability” because “workers’ compensation is not intended as a substitute for retirement,” it is perfectly reasonable that the standards for the receipt of IOD benefits may be less exacting than those applied by the Superintendent to determine eligibility for a disability pension. *Rossi v. Employees’ Retirement System*, 895 A.2d 106, 112 (R.I. 2006). Consequently, Mr. Donnelly-Taylor has not demonstrated that his previous award of IOD benefits should warrant estoppel, nor has he provided evidence that the State Defendants “would derive an unfair advantage . . . if not estopped” by asserting “an inconsistent position.” *Gaumont*, 909 A.2d at 519.

Accordingly, the Court finds that the determination to place a state trooper such as Mr. Donnelly-Taylor on IOD status is not dispositive as to their entitlement to a disability pension and declines to exercise its discretion to invoke judicial estoppel under these circumstances. Nevertheless, the inconsistencies here—between the RISP’s factual determination that Mr.

Donnelly-Taylor was eligible for IOD status *based on his injury in the performance of his duties* and the Superintendent’s later determination that Mr. Donnelly-Taylor’s disabling injury is distinct from this prior injury—should be addressed on remand. In particular, the Decision claims that Mr. Donnelly-Taylor’s disabling injury occurred while he was already on IOD status, *see* Decision at 16, seeming to reject the medical opinion that later events “exacerbat[ed]” Mr. Donnelly-Taylor’s pre-existing PTSD, *see* Admin. Ex., Div. 1, at 625. On remand, the Superintendent must address this inconsistency and distinguish this case from the circumstances described in *Webster*, cited *supra*. *Webster*, 774 A.2d at 80 (“Although [officers that suffer career-ending injuries or illnesses] may never return to active duty, as long as they are receiving benefits in accordance with § 45-19-1, . . . they remain employed by the department . . .”).

3

Arbitrary and Capricious

(i)

Arguments

The State Defendants argue that the Superintendent’s denial of Mr. Donnelly-Taylor’s application for a disability pension was neither arbitrary nor capricious and therefore should be affirmed. (State Defs.’ Mem. 16-23.) In contrast, Mr. Donnelly-Taylor argues that the Decision was wrong on the merits, affected by legal error, and not supported by substantial evidence.⁷ (Pls.’ Mem. 26-40; Pls.’ Consolidated Mem. 10-14.) Specifically, Mr. Donnelly-Taylor claims the

⁷ The Court notes that Mr. Donnelly-Taylor is referencing the standard for its review under the APA. *See Turcotte v. Retirement Board of the Employees’ Retirement System of Rhode Island*, No. PC-2010-5531, 2013 WL 1364018, at *4 (R.I. Super. Mar. 28, 2013). As discussed *supra*, this standard is inapplicable here. Therefore, the Court will instead confine its review of the Decision to the arbitrary and capricious standard, assessing the rationality of the legal conclusions of the Superintendent and the reasonableness of his Decision.

undisputed medical evidence supports a determination that his disability was directly caused by experiences that occurred while he was employed as a Rhode Island State Trooper, and that the Superintendent was constrained by the lack of an opposing expert opinion to make findings in keeping with the medical evidence. (Pls.’ Mem. 26-32.) He also claims that the Superintendent’s statutory authority under these circumstances is constrained by the mandatory language used in the statute. *Id.* at 33-35.

Mr. Donnelly-Taylor then argues that, to the extent that he engaged in an impermissible use of force related to the Monsanto arrest, it nevertheless cannot be a factor in the Superintendent’s review of his pension application, citing the Rhode Island Public Employee Pension Revocation and Reduction Act (Pension Revocation Act). *Id.* at 35-41. He argues that if a given crime, such as simple assault, “does not provide a basis to revoke a pension, it cannot justify denying the benefit in the first place.” (Pls.’ Consolidated Mem. 15.)

The State Defendants argue in reply that the expert opinions referenced by Mr. Donnelly-Taylor and attached as an exhibit to his memorandum are not part of the record. (State Defs.’ Reply Mem. 5.) The State Defendants also dispute the applicability of the Pension Revocation Act to the case at bar. *Id.* at 14-16.

(ii)

Analysis

Under the UDJA, “the Superior Court [has] jurisdiction to determine whether plaintiff[s] [are] entitled to a disability pension under [§ 42-28-21.]” *Canario*, 752 A.2d at 479. The Court applies an “arbitrary and capricious” standard of review when examining findings made by the Superintendent of the State Police, as in the case of appeals made under § 42-35-15. *See id.* at 478; *see also Ferreira*, 736 A.2d at 97. Under “the deferential standard of review . . . approved” by the

Supreme Court, Rhode Island courts “have given great deference to the discretionary authority of the superintendent” when reviewing findings made under § 42-28-21. *Canario*, 752 A.2d at 479, 480. This review has been described as asking whether, “in the light of the facts of the case[,] the superintendent’s decision constituted a rational determination.” *Id.* at 478.

In another context, our Supreme Court has held that “[u]se of the arbitrary and capricious standard means that reviewing courts will uphold . . . decisions interpreting the plan as long as the . . . interpreters have acted within their authority to make such decisions and their decisions were rational, logical, and supported by substantial evidence.” *Goncalves v. NMU Pension Trust*, 818 A.2d 678, 682-83 (R.I. 2003). Furthermore, in that context, “the rationality of the . . . interpretation of the plan is deemed to be a question of law.” *Id.* at 684.

Initially, this is not a case where the fact that Mr. Donnelly-Taylor “suffered [an] injury causing disability” is in dispute. Sec. 42-28-21(a). Nor is this a case where the extent of the injury is in dispute. *Contra Ferreira*, 736 A.2d at 97 (“Although plaintiff may have been diagnosed with hypertension while he was a member of the police force, there is no evidence at all that he was disabled because of that condition.”); *Frost v. City of Newport*, 706 A.2d 1354, 1354-55 (R.I. 1998) (affirming the decision of a Superior Court justice in declining to vacate an arbitration award, where a plaintiff was denied IOD status and benefits because he failed to prove his workplace stress exceeded the typical “day-to-day emotional strain and tension which all employees experience”).

Instead, while the Superintendent found that Mr. Donnelly-Taylor suffered injury causing permanent disability, i.e., PTSD and major depressive disorder, he went on to find that Mr. Donnelly-Taylor’s disabling injury was caused by his assault of Mr. Monsanto, identifying the assault, attendant court cases, and subsequent publicity as the events “from which his injuries

arose.” (Decision at 12, 13.) As a result, the Superintendent’s Decision to deny Mr. Donnelly-Taylor’s disability pension application was based on the determination that his disabling injury did not occur “in the course of performance of his . . . duties[.]” Sec. 42-28-21(a); Decision at 16 (finding that the “disabling injury . . . is not duty-related and not properly the basis for a disability pension”). Consequently, it is this determination that the Court must now examine for arbitrariness, capriciousness, or abuse of discretion.

In *Kaya v. Partington*, 681 A.2d 256 (R.I. 1996), our Supreme Court noted that the remedy provided to police officers by the IOD provision

“allows a recovery without showing of fault and is not subject to the various tort defenses (contributory negligence, assumption of the risk, lack of foreseeability, lack of a duty or breach of a duty, lack of notice, and intervening causes) that would be available to any alleged tortfeasor, including a municipality, to defeat the claims of a police officer seeking damages under the State Tort Claims Act.”
Kaya, 681 A.2d at 260.

“Functionally tied though the doctrine [of respondeat superior] is to tort law, it has long been classified as an element of agency doctrine.” Restatement (Third) *Agency* § 2.04 (2006). Rhode Island courts have also made prior determinations as to whether an incident occurs within the “scope of employment” under the Workers’ Compensation Act and §§ 42-28-21 and 45-19-1. *See, e.g., McGloin v. Trammellcrow Services, Inc.*, 987 A.2d 881, 886 (R.I. 2010); *Canario*, 752 A.2d at 480; *Cruz v. Town of North Providence*, 833 A.2d 1237, 1240 (R.I. 2003). Notably, in *Cruz*, the Rhode Island Supreme Court stated that “[a]n employer, such as a municipality, can be held liable for an employee’s intentional tort committed against a third party only if the misconduct falls within the scope of employment” and that “[a]cts of police brutality, . . . whether committed by one or more police officers, do not generally fall within the scope of their employment.” *Cruz*, 833 A.2d at 1240 (further citation omitted).

Additionally, in *Aversa v. United States*, 99 F.3d 1200 (1st Cir. 1996), the First Circuit clarified that, within the context of federal law, an intentional tort might fall within the scope of employment under certain circumstances. *Aversa*, 99 F.3d at 1209. In *Aversa*, the court noted that, under New Hampshire law related to assault and Restatement (Second) *Agency*,

“[a]n act is within the scope of employment . . . if it was authorized by the employer or incidental to authorized duties; if it was done within the time and space limits of the employment; and if it was actuated at least in part by a purpose to serve an objective of the employer.” *Aversa*, 99 F.3d at 1210 (citing *Daigle v. City of Portsmouth*, 534 A.2d 689, 698-700, 701-02 (N.H. 1987); Restatement (Second) *Agency* § 228(1) (1958)).

The court also noted that, even when “an employee’s intentionally tortious act was not authorized,” an assault could fall within the scope of employment where it was “incidental to authorized duties,” citing three requirements:

“(1) the employer authorized or could foresee that the employee would use a reasonable degree of force as a means of carrying out an authorized duty; (2) the employee used excessive force, although wrongly, as a means of accomplishing an authorized duty; and (3) the employee’s purpose was, at least in part, to carry out an authorized duty.” *Id.* at 1211.

Here, in making his determination, the Superintendent relied on the legal analysis of the “scope of employment” from several notable Rhode Island cases, including *Rhode Island Troopers Association* and *Canario*, both cited *supra*. See Decision at 13-17. Preliminarily, while it is true that our Supreme Court held that Mr. Donnelly-Taylor’s assault of Mr. Monsanto “fell outside the scope of his employment as a Rhode Island State Trooper and that a jury could conclude that he acted willfully[,]” this holding was within the context of whether the Attorney General had discretion to refuse to defend him under § 9-31-9. *Rhode Island Troopers Association*, 187 A.3d at 1104. The Superintendent gave no explanation in his Decision as to why the standard applied by the Supreme Court in making this representation related to the Attorney General’s discretion

would be applicable in the context of whether Mr. Donnelly-Taylor’s disabling injury obligated his employer to provide him with a disability pension.

In fact, the Rhode Island Supreme Court, in making its decision in *Rhode Island Troopers Association*, specifically addressed the narrow nature of its holding, stating as follows:

“We begin by noting that the declaratory judgment that was requested by the state, and issued by the Superior Court, is unnecessarily broad because it extends beyond the question of the statutory authority of the Attorney General set forth in the Governmental Tort Liability Act. Therefore, we deem it appropriate to narrow the issues raised on appeal to: . . . whether . . . the Attorney General is vested with the statutory authority to determine whether a state employee is entitled to legal representation when sued in his or her individual capacity ‘on account of an act or omission that occurred within the scope of his or her employment with the state’” *Rhode Island Troopers Association*, 187 A.3d at 1098-99.

Rhode Island Troopers Association went on to engage in statutory construction related to “§ 9-31-9, titled ‘Refusal to defend—Attorney general,’” as well as outlining the judicial and legislative history relevant to its consideration of the Governmental Tort Liability Act. *Id.* at 1100, 1102-03. The narrow and explicitly limited holding was premised upon the Attorney General’s “independen[ce] from other branches of government, including the judiciary.” *Id.* at 1103 (quoting *Mottola v. Cirello*, 789 A.2d 421, 424 (R.I. 2002)).

The Superintendent may be arguing that his statutory discretion is similar to that accorded to the Attorney General by the Legislature and the Rhode Island Supreme Court. *But see Mottola*, 789 A.2d at 424 (“The Attorney General of the State of Rhode Island holds a constitutional office with specific and significant responsibilities to the people of Rhode Island.”). However, it is not clear to this Court how a decision by the Attorney General not to represent a state employee in his individual capacity, based on a determination that certain conduct was outside the scope of

employment, should provide a legally preclusive justification for or binding precedent supporting the Superintendent's refusal to grant a disability pension.

Additionally, the holding in *Canario*, also relied upon by the Superintendent, was based on findings that a state police officer was not injured during the performance of his duties when he had a car accident while driving home “on his privately owned motorcycle” after having completed his “cursory assignment” to check the flags at the police barracks. *Canario*, 752 A.2d at 480 (holding that “he was performing no duty related to his office as a lieutenant of the state police”). However, unlike the plaintiff in *Canario*, Mr. Donnelly-Taylor's injuries are not obviously the result of an incident that occurred when he was off duty. *See Canario*, 752 A.2d at 477, 480.

The Superintendent also cites to several other opinions from the courts of other states wherein a police officer's stress from disciplinary action against him was not an injury in the line of duty. *See* Decision at 16-17; *see, e.g., Youngs v. Village of Penn Yan*, 737 N.Y.S.2d 186, 187 (N.Y. App. Div. 2002) (holding that because the “frustration” and “disciplinary action” that officer experienced at work involved dispute with superior officer, it did not relate to the performance of duties as police officer) (overruled on other grounds by *Gallante v. Reilly*, 778 N.Y.S.2d 179 (N.Y. App. Div. 2004)); *Woldrich v. Vancouver Police Pension Board*, 928 P.2d 423, 426 (Wash. App. 1996) (holding that officer's mental disability was caused by his merit-based demotion, which did not qualify as an injury in the line of duty). All of the cases cited by the Superintendent stand for the proposition that there is a reasonable legal distinction between injuries caused in the line of duty and those caused by incidents that are unrelated to the performance of a police officer's duties.

However, the Rhode Island Supreme Court has long “recognized that a judge or one acting in a quasi-judicial function may not reject uncontradicted testimony arbitrarily.” *Hughes v. Saco Casting Company, Inc.*, 443 A.2d 1264, 1266 (R.I. 1982) (citations omitted). Here, Mr. Donnelly-

Taylor cites to medical statements that his disability was incurred due to his work as a state trooper. Dr. Kaufmann, a psychiatrist who treated Mr. Donnelly-Taylor, wrote to the RISP that he “developed PTSD and trauma-related symptoms as a direct consequence to experiences while employed as a Rhode Island State Trooper.” (Trooper Ex. 1 at 9.) Moreover, as Mr. Donnelly-Taylor argues, the remaining medical evidence on the record does not contradict this finding. Yet, in his Decision, the Superintendent used his discretion to distinguish between Dr. Kaufmann’s findings of causal “experiences” that occurred while working as a trooper and the actual *performance of duties* as a trooper. (Decision at 12-13.) The Superintendent also found that the medical evidence showed “no other conclusion” other than that Mr. Donnelly-Taylor’s disability was caused by his ongoing legal issues, including the litigation filed against him by Mr. Monsanto, the decision by the State not to defend him, and the increased public scrutiny. *Id.* at 15. It is not at all clear to this Court what evidence the Superintendent relied on in coming to this conclusion.

To the extent that the Superintendent relied on his own experience and personal knowledge as a police officer in making his Decision, this is not *per se* inappropriate. After all, as the United States Supreme Court said in *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137 (1999), “there are many different kinds of experts, and many different kinds of expertise.” *Kumho Tire Co., Ltd.*, 526 U.S. at 150.

However, the Superintendent’s Decision does not adequately explain its causation determination. In the context of determining eligibility for workers’ compensation benefits, the Rhode Island Supreme Court has stated that “an employee must demonstrate that an incapacitating injury is causally related to his or her job-related *duties*.” *Tavares v. Aramark Corp.*, 841 A.2d 1124, 1128 (R.I. 2004) (emphasis added). This “causal relationship” standard is different from the requirement of “proximate cause in negligence actions” because it is “less exacting”: where

proximate cause requires a “showing that but for the negligence of the tortfeasor, injury to the plaintiff would not have occurred[.]” a causal relationship requires that “the conditions and nature of the employment merely contribute to the injury.” *Tavares*, 841 A.2d at 1128 (citing *Mulcahey v. New England Newspapers, Inc.*, 488 A.2d 681, 684 (R.I. 1985); *Skaling v. Aetna Insurance Co.*, 742 A.2d 282, 288 (R.I. 1999)). Again, in discussing the history of Rhode Island police officers’ exclusion from the state workers’ compensation statute and the subsequent enactment of § 45-19-1, our Supreme Court has noted that the injured *on duty* provision provides greater protection and benefits for injured police officers and firefighters than that provided to other employees by the workers’ compensation statute. *See Webster*, 774 A.2d at 79-80.

Here, Mr. Donnelly-Taylor was first granted IOD (injured *on duty*) status based on his report, in March and April 2014, that he had been injured by “work related incidents” and “work related stress”—supported by a doctor’s report recommending a month of sick leave because Mr. Donnelly-Taylor was “under significant stress due to multiple personal and work-related issues.” (Admin. Ex., Div. 1, at 600-01, 606.) Mr. Donnelly-Taylor was then placed on IOD status and remained out of work until early August 2014. *Id.* at 605, 230; *see* Admin. Ex., Div. 11, at 6 ¶¶ 5-7. This Court’s review of the record shows that Mr. Donnelly-Taylor received a second grant of IOD status in February 2017, after the onset of the federal litigation related to the Monsanto case and the Attorney General’s refusal to represent him individually, instigated based on a PSU determination that the “civil suit has taken a mental toll on Trooper Donnelly-Taylor which has resulted in concern by his immediate supervisors and members of the Command Staff that [he] is not fit for duty and should be placed on sick leave and referred to Dr. Pickett for evaluation.” (Admin. Ex., Div. 7, at 3, 4.)

Mr. Donnelly-Taylor remained on injured *on duty* status for two years before applying for a disability pension, receiving treatment for his trauma and stress, which was paid for by the RISP without any question. *See* Admin. Ex., Div. 1, at 501-80, 628; Admin. Ex., Trooper 1, at 9. In 2018, Dr. Kaufmann described the “recent exacerbation” of Mr. Donnelly-Taylor’s post-traumatic stress disorder in his February report and, by November, was reporting that “[g]iven the chronicity of his symptoms, I consider him to be medically disabled from his prior work capacity.” (Admin. Ex., Div. 1, at 625, 627.)

The Superintendent does not adequately explain how, without relevant medical expertise himself or a contradictory medical opinion from another expert, his opinion regarding the causation of a medical condition or the relation of the condition to the job may prevail over the uncontradicted testimony of a medical expert. *See Rocha v. State*, 705 A.2d 965, 967-69 (R.I. 1998) (upholding reversal of trial judge’s denial of benefits in a workers’ compensation case when medical testimony in support of benefits was uncontroverted). Statements in the Decision such as the one that “because Trooper Donnelly-Taylor was cleared for full duty by a psychologist in December 2014 and by a psychiatrist in January 2015 the superintendent does not find that the January 2014 shooting incident contributed to Trooper Donnelly-Taylor’s stress-related injury in 2017” require more legal and factual explanation in order to be appropriately reviewable by this Court. (Decision at 14, n.6.)

The Superintendent also never indicated that he questioned the credibility of the expert relied upon by Mr. Donnelly-Taylor in his Decision. This creates another unexplained inconsistency because the Superintendent references and relies on Dr. Kaufmann’s progress notes and periodic assessments, without distinguishing statements such as the one from February 13, 2018, that Mr. Donnelly-Taylor suffered “a recent exacerbation of his condition[.]” *See* Decision

at 6-10 (quote at 9); *see also Black's Law Dictionary* (11th ed. 2019) (defining “exacerbate” as “[t]o make worse; specif., to render more violent, severe, or seriously upsetting”); *Stedman's Medical Dictionary* (Nov. 2014 update) (defining “exacerbation” as “[i]ncreased severity of a disease or any of its signs or symptoms”). Consequently, the Court finds that the causation finding of the Superintendent here is unclear. The Decision therefore provides an insufficient explanation of its rationale, which renders it unreasonable and irrational under the relevant arbitrary and capricious standard of review.

In other areas where this Court has a right of review for an appeal, it typically has a right to remand the matter for further consideration. *See, e.g.,* § 42-35-15(g) (providing that the Superior Court may “remand [a] case for further proceedings” under the APA); G.L. 1956 § 45-24-69(d) (providing that the Superior Court may “remand [a zoning] case for further proceedings”). Here, this Court has no doubt that the Superintendent has been granted broad discretion under the relevant statute and caselaw to make determinations regarding the eligibility of a state trooper for a disability pension. Nevertheless, having utilized that discretion to provide Mr. Donnelly-Taylor with both a hearing and a written decision, the Superintendent must also provide an adequate explanation in that Decision. Therefore, because the Court has found that the Decision in this matter contained insufficient explanation of its rationale, and mindful of the Superintendent's authority to make such determinations under our law, this Court remands this matter to the Superintendent.

On remand, the Superintendent must produce findings of fact and law that support his Decision. Specifically, the Superintendent must provide: (1) a sufficient rationale supporting his conclusions regarding what activities are within a state trooper's scope of employment; (2) a sufficient rationale supporting his conclusions as to what standard of medical causation applies in

such cases; and (3) sufficient findings of fact, either drawn from the medical testimony in evidence or explaining and justifying his disregard for such evidence, to support his determination of medical causation with respect to Mr. Donnelly-Taylor's disabling injury.

C

Rule 54(b)

Having determined that summary judgment in favor of State Defendants and ERSRI is appropriate on Count I, the Court now turns to whether final judgment should be granted under Rule 54(b).

“Pursuant to Rule 54(b), a motion justice may certify an interlocutory disposition as a final judgment if two considerations provided for in the rule are met.” *Metro Properties, Inc. v. National Union Fire Insurance Co. of Pittsburgh, Pa.*, 934 A.2d 204, 207 (R.I. 2007). First, the Court must “determine[] that the action . . . involve[s] either multiple parties or multiple claims” and that the requested disposition would “adjudicate[] one or more but fewer than all of the claims before it.” *See Cathay Cathay, Inc. v. Vindalu, LLC*, 136 A.3d 1113, 1118-19 (R.I. 2016) (quoting *Metro Properties, Inc.*, 934 A.2d at 207). Second, this Court must use its discretion to determine whether there is “no just reason for delay.” Rule 54(b); *see also Cathay Cathay, Inc.*, 136 A.3d at 1119.

It is clear to this Court that this case involves multiple Defendants and multiple claims, in that it contains both an action seeking declaratory judgment and an appeal. Furthermore, this Court's grant of summary judgment to the State Defendants and ERSRI on Count I will clearly “adjudicate[] one or more but fewer than all of the claims before it.” *See Cathay Cathay, Inc.*, 136 A.3d at 1118-19 (quoting *Metro Properties, Inc.*, 934 A.2d at 207). Consequently, the Court will use its discretion to determine whether there is any just cause for delay. *Id.* at 1119.

In exercising this discretion, the Court “‘must take into account judicial administrative interests as well as the equities involved.’” *Astro-Med, Inc.*, 811 A.2d at 1156 (quoting *Curtiss-Wright Corp. v. General Electric Co.*, 446 U.S. 1, 8 (1980)). Given Rhode Island’s interest in the economic and efficient use of judicial resources, “if the claims in an action are closely related and there is a risk of repetitive appeals, the [trial] court may decide that this is a reason for delaying review and refuse to make the determination required by Rule 54(b).” Wright & Miller, cited *supra*, at 36; see also *Spiegel v. Trustees of Tufts College*, 843 F.2d 38, 44 (1st Cir. 1988) (holding that federal Rule 54(b) certification is rarely appropriate where “the contestants on appeal remain, simultaneously, contestants below”).

The Court has remanded Mr. Donnelly-Taylor’s appeal to the Superintendent. As a result, it is possible that Mr. Donnelly-Taylor will again receive a ruling from the Superintendent with which he takes issue. The Court notes that Mr. Donnelly-Taylor has not requested final judgment under Rule 54(b). Consequently, because the claims here are closely related and our Supreme Court has made clear its “strong preference for ‘avoid[ing] piecemeal appellate review by delaying entry of judgment until all claims involving all parties are ripe for disposition and entering judgment as to all only when that time arrives[.]’” this Court will decline to enter final judgment in this case. *Cathay Cathay, Inc.*, 136 A.3d at 1121 (quoting *Metro Properties, Inc.*, 934 A.2d at 207).

IV

Conclusion

For the reasons stated herein, this Court grants summary judgment to the State Defendants and ERSRI with respect to Count I.

This Court also finds that the Superintendent's Decision in this matter is not supported by the facts or law and therefore was arbitrary and capricious. The Superintendent has broad authority regarding these matters, but due process requires an adequate basis for and explanation of his Decision. The current Decision fails in that regard. Accordingly, the matter is remanded for findings of fact and conclusions of law consistent with this Decision and for further hearing if necessary. Counsel shall submit the appropriate judgment for entry.



RHODE ISLAND SUPERIOR COURT

Decision Addendum Sheet

TITLE OF CASE: Rhode Island Troopers Association, et al. v. State of Rhode Island, Division of the State Police, et al.

CASE NO: PC-2019-11054

COURT: Providence County Superior Court

DATE DECISION FILED: November 4, 2021

JUSTICE/MAGISTRATE: McGuirl, J.

ATTORNEYS:

For Plaintiff: Carly B. Iafrate, Esq.

For Defendant: Michael P. Robinson, Esq.; Chrisanne E. Wyrzykowski, Esq.; Adam Sholes, Esq.; D. Peter DeSimone, Esq.; Vincent F. Ragosta, Jr., Esq.

**STATE OF RHODE ISLAND
PROVIDENCE, SC.**

SUPERIOR COURT

**RHODE ISLAND TROOPERS
ASSOCIATION and JAMES DONNELLY-
TAYLOR,**

Plaintiffs,

vs.

**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,**

Defendants.

C.A. No. PC 19-

COMPLAINT

1. This is an action for declaratory judgment concerning the rights and obligations of the parties pursuant the Uniform Declaratory Judgments Act, G.L. 1956 § 9-30-1 et seq. as well as an administrative appeal challenging a decision of the Colonel of the Division of State Police concerning disability pension benefits pursuant to § 42-28-21.

JURISDICTION

2. The jurisdiction of this Court is invoked, in part, pursuant to the Uniform Declaratory Judgments Act ("UDJA"), G.L. 1956 § 9-30-1 et seq., the Administrative Procedures Act ("APA"), G.L. 1956 § 42-35-15, G.L. 1956 § 28-8-2 and G.L. 1956 § 42-28-21.

PARTIES

3. Plaintiff, Rhode Island State Troopers Association (herein "RITA" or "Association"), is the sole and exclusive bargaining agent for full-time sworn members of the Rhode Island State Police (herein "RISP") below the rank of lieutenant (i.e. troopers, corporals and sergeants). Such full-time sworn members are represented by RITA and hereinafter are referred to as "Troopers."

4. Plaintiff RITA is recognized as the sole and exclusive bargaining agent for its members pursuant to the State Police Arbitration Act codified at Chapter 9.5 of Title 28 of the General Laws.

5. Accordingly, Plaintiff RITA is a labor organization empowered by state law to represent state troopers and other bargaining unit members for purposes of collective bargaining.

6. In this action, Plaintiff RITA seeks relief on its own behalf and on behalf of its members.

7. This action is brought by the Association pursuant to G.L. 1956 § 28-8-1 as the certified bargaining agent under G.L. 1956 § 28-9.5-5, and Rhode Island common law,

8. Plaintiff, James Donnelly-Taylor (“Donnelly-Taylor”) is a trooper employed by the State of Rhode Island, Division of State Police (“Division”), who, at all relevant times, has been covered by and receiving injured-on-duty (“IOD”) benefits pursuant to G.L. 1956 § 45-19-1 and the Collective Bargaining Agreement (“CBA”).

9. Defendant State of Rhode Island, Division of State Police, is Plaintiff Donnelly-Taylor’s employer, and is required by state law to bargain with the RITA over the terms and conditions of employment for its members.

10. Defendant Colonel James Manni is the Superintendent of the State Police (“Colonel Manni”).

11. Defendant, Employees’ Retirement System of Rhode Island (“ERSRI”), is the administrator of the State Police Benefits Trust (“SPBT”), the pension plan of which troopers, including Donnelly-Taylor, are contributing members.

12. Defendant, General Treasurer Seth Magaziner (“Treasurer”) is the chairperson of the State of Rhode Island Retirement Board and the head of the Department of Treasury.

13. Defendant, Retirement Board (“Retirement Board”) is responsible for the administration of various state retirement systems.

14. Defendant, Gina Raimondo is the Governor of the State of Rhode Island (“Governor”) and has supervisory authority over the Superintendent.

STATEMENT OF FACTS

15. State troopers, including the Plaintiff Donnelly-Taylor are contributing members of the SPBT.

16. Plaintiff RITA has negotiated a series of CBA that include provisions related to retirement, including disability pension benefits.

17. In or about December 2018, Plaintiff Donnelly-Taylor contacted ERSRI concerning his intention to apply for a work-related disability pension.

18. Donnelly-Taylor was told his request needed to be made to the Superintendent of the State Police.

19. Accordingly, in December 2018, Donnelly-Taylor directed a request that he be granted a disability pension to then-Colonel Ann Assumpico.

20. No response was forthcoming, until early 2019 when Colonel Manni assumed control of the Division.

21. In early 2019, Plaintiff Donnelly-Taylor was told that Colonel Manni would conduct a hearing on his pension request.

22. The Division has no written policies that govern pension applications, nor has it promulgated any regulations on the same, nor has it promulgated any rules governing pension hearings.

23. The Division represented that Colonel Manni had the sole discretion concerning whether the application would be granted, and that as such, he could rely on any facts outside the hearing record and otherwise had complete unfettered discretion over the decision.

24. On or about October 17, 2019, Colonel Manni issued a decision rejecting Plaintiff Donnelly-Taylor's application for a work-related disability pension pursuant to § 42-28-21. Appendix A, *Decision*.

COUNT I

Declaratory Judgment G.L. 1956 § 9-30-1

25. Plaintiffs hereby incorporate by reference Paragraphs 1 through 24 of the Complaint as if fully set forth herein.

26. The Plaintiffs respectfully request the following declarations:

A. That the Superintendent of the State Police is not a fiduciary of the SPBT;

B. That the Superintendent of the State Police has no authority to determine eligibility for pension benefits pursuant to state law or the collective bargaining agreement;

C. That the grievance and arbitration provisions made part of the CBA between RITA and the State/DSP are binding, available and applicable to resolve the question of whether Donnelly-Taylor was in fact injured on the job and/or permanently and totally disabled;

D. That, in the alternative, ERSRI has the statutory authority to determine eligibility for state trooper pension benefits pursuant to state law;

E. That, in the alternative, ERSRI has been delegated the authority to determine eligibility for state trooper pension benefits by the Governor.

F. That even if the Superintendent has authority to make initial eligibility decisions pursuant to § 42-28-21, this Court has the authority to review that decision de novo.

G. That in the alternative, even if the Superintendent has decision making authority over trooper pensions, this Court has the authority to review that decision based on an arbitrary and capricious standard.

H. That Defendant Donnelly-Taylor is entitled to benefits pursuant to § 42-28-21 under any standard of review.

I. That, in the alternative, in the event Donnelly-Taylor is determined to not be entitled to benefits under § 42-28-21 that he is instead entitled to continue receiving injury-on-duty benefits until such time as he retires or otherwise legally separates from employment with the Division.

J. Grant the Plaintiffs such other relief as this court deems just and proper.

COUNT II

Administrative Procedures Act G.L. 1956 § 42-35-15

27. Plaintiff Donnelly-Taylor incorporates by reference Paragraphs 1 through 26 as if fully set forth herein.

28. Plaintiff Donnelly-Taylor is aggrieved by the decision of the Superintendent.

29. The decision and order of the Superintendent is:

- a. In violation of constitutional or statutory provisions;
- b. In excess of the statutory authority of the agency;
- c. Made upon unlawful procedure;
- d. Affected by other error of law;
- e. Clearly erroneous in view of the reliable, probative and substantial evidence on the whole record; or
- f. Arbitrary or capricious or characterized by an abuse of discretion or clearly unwarranted exercise of discretion.

WHEREFORE, Plaintiff Donnelly-Taylor prays that this Honorable Court:

A. Reverse the decision of the Superintendent;

B. Find that Plaintiff is entitled to benefits under G.L. 1956 § 42-28-21;

C. Grant such other and further relief as this Court deems just and proper.

COUNT III

Petition for Judicial Review (Rhode Island Common Law)

30. Plaintiff Donnelly-Taylor incorporates by reference Paragraphs 1 through 29 as if fully set forth herein.

31. In the event that there is not right to review pursuant to the APA, Plaintiff Donnelly-Taylor alternatively pleads for judicial review pursuant to Rhode Island Common Law.

32. Plaintiff Donnelly-Taylor is aggrieved by the decision of the Superintendent.

33. The decision and order of the Superintendent is:

- a. In violation of constitutional or statutory provisions;
- b. In excess of the statutory authority of the agency;
- c. Made upon unlawful procedure;
- d. Affected by other error of law;
- e. Clearly erroneous in view of the reliable, probative and substantial evidence on the whole record; or
- f. Arbitrary or capricious or characterized by an abuse of discretion or clearly unwarranted exercise of discretion.

34. Pursuant to Rhode Island Supreme Court decisions a right to seek review of the denial of a state trooper's request for a disability retirement pension exists and jurisdiction for such appeal lies with this Honorable Court.

WHEREFORE, Plaintiff Donnelly-Taylor prays that this Honorable Court:

- A. Reverse the decision of the Superintendent;
- B. Find that Plaintiff is entitled to benefits under G.L. 1956 § 42-28-21;
- C. Grant such other and further relief as this Court deems just and proper.

PLAINTIFF,
JAMES DONNELLY-TAYLOR
By his Attorney,

/s/ Carly Beauvais Iafrate

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Dated: November 15, 2019

Employees' Retirement System of Rhode Island



* Discussion and Consideration of litigation regarding Frank Andre et.al. vs Employees' Retirement System Of Rhode Island, By and through its Executive Director, Frank Karpinski; C.A. No. PC-2019-7971

*Board members may seek to convene in Executive Session pursuant to Rhode Island General Laws §42-46-5 (a) (2) to discuss pending and potential litigation

RESTRICTED PAGE

Employees' Retirement System of Rhode Island



8. Committee Reports

Employees' Retirement System of Rhode Island



8.1. Disability Committee

For Vote

Presented by Dr. Laura Shawhughes

Employees' Retirement System of Rhode Island



November 5, 2021 Disability Committee Recommendations

For Vote

Presented by Dr. Laura Shawhughes

Disability Committee Recommendations

November 5, 2021

Postponed

Union Affiliation

1. **Russell Arcand**

Firefighter, North Providence Fire Department (estimated service credits, 22 years, 7 months, 21 days)
Approved
VOTE: 3-0

Local 2334

Accidental-New

2. **Cortney Lancaster**

Firefighter/EMT, Bristol Fire Department (estimated service credits, 15 years, 10 months, 21 days)
Approved
VOTE: 3-0

Non-Union

3. **Cheryl Osborne**

Registered Nurse, Eleanor Slater Hospital (estimated service credits, 17 years, 9 months, 14 days)
Approved at 50%
VOTE: 3-0

NAGE

Michael Lowery

Firefighter, Cranston Fire Department (estimated service credits, 18 years, 7 months, 7 days)
Accidental Denied
VOTE: 3-0

Local 1363 IAFF

NO RECOMMENDATION

4. **Michael Lowery**

Firefighter, Cranston Fire Department (estimated service credits, 18 years, 7 months, 7 days) **(66 2/3%)**
Denied Accidental
Ordinary Approved
VOTE: 3-0

Local 1363 IAFF

5. **Maximiano Ferreira**

Detective Police Sergeant, Woonsocket Police Department (estimated service credits, 21 years, 6 months, 3 days)
Approved
VOTE: 3-0

IBOP #404

6. **Michael Ochteau**

Firefighter, Johnston Fire Department (estimated service credits, 19 years, 3 months, 5 days)
Approved
VOTE: 3-0

Local 1950

Normanda Alves

Custodian, North Smithfield School
Department (estimated service credits, 10
years, 7 months, 23 days)

NEARI

NO RECOMMENDATION

Accidental Denied
VOTE: 3-0

7. **Normanda Alves**

Custodian, North Smithfield School
Department (estimated service credits, 10
years, 7 months, 23 days)
Ordinary Approved
VOTE: 3-0

Ordinary-New

8. **Lonnie Maldonado**

Technical Staff Assistant, CCRI, (estimated
service credits, 14 years, 11 months, 21
days)
Ordinary Approved
VOTE: 3-0

ESPA

9. **Sheila Joost**

Business Officer, Department of Labor and
Training, (estimated service credits, 11 years,
4 months, 16 days)
Ordinary Approved
VOTE: 3-0

Unknown

10. **Cheryl DeCotis-
Thomas**

Guidance Counselor, North Kingstown
School Department, (estimated service
credits, 24 years, 0 months, 20 days)
Ordinary Approved
VOTE: 3-0

NEA NK

11. **Tanya Alderman**

Clinical Psychologist. DCYF, (estimated
service credits, 19 years, 3 months, 3 days)
Ordinary Approved
VOTE: 3-0

Unknown

12. **Erin Riordan**

Higher Education Administrative Assistant I,
Rhode Island College, (estimated service
credits, 15 years, 4 months, 17 days)
Ordinary Approved
VOTE: 3-0

**Council 94 –
Local 2879**

Consideration and Approval of Decisions

Approved
VOTE: 3-0

13. **Robert Bell**

Fire Captain, North Providence Department
(estimated service credits 25 years, 4
months, 22 days)
The Committee voted to uphold the

**IAFF
Local 2334**

previous denial of Mr. Bradley's application for an accidental disability retirement.

VOTE: 5-0

14. Christine Chase

Probation and Parole Officer II, Department of Corrections (estimated service credits 26 years, 2 months, 12 days)

The Committee voted to overturn the previous decision and approve Ms. Chase's application for an accidental disability at 66 2/3%

VOTE: 5-0

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RESTRICTED PAGE

Employees' Retirement System of Rhode Island



December 3, 2021 Disability Committee Recommendations

For Vote

Presented by Dr. Laura Shawhughes

Disability Committee
Recommendations

December 3, 2021

Hearings

Union Affiliation

Michael Bronson

Municipal Police Officer, Town of South
Kingstown (estimated service credits, 13
years, 7 months, 21 days) Reconsideration
**The Committee voted to uphold the
previous denial of Mr. Bronson's
application for an accidental disability
retirement.**
VOTE: 4-0

IBPO

NO RECOMMENDATION

1. **Vito Martinelli**

Deputy Sheriff, Department of Public Safety
division of Sheriffs (estimated service credits
18 years, 9 months, 18 days) (66 2/3% or
50%)
**The Committee voted to deny Mr.
Martinelli's request for an extension of
time for the hearing of the appeal on
denial of his application for an accidental
disability retirement.**
VOTE: 4-0
**The Committee voted to approve Mr.
Martinelli's request to amend his
application for an accidental disability
retirement.**
VOTE: 4-0

Council 94

Postponed

Lori Gesualdi

Accounts and Control Centralized Accounting
Specialist, Department of Administration
(estimated service credits, 18 years 4
months, 1 day)
Ordinary Denied
VOTE: 3-0
1 Recusal

Council 94

NO RECOMMENDATION

Accidental-New

2. **Stephanie Carroll**

Paraprofessional, East Providence School
Department (estimated service credits, 4
years, 1 months, 21 days)
Approved at 50%
VOTE: 4-0

NERI

- | | | | |
|----|-----------------------|--|--------------------------|
| 3. | Donald Lapp | Carpenter, URI Facilities Services (estimated service credits, 34 years, 2 months, 3 days)
Approved at 50%
VOTE: 4-0 | Council 94 |
| 4. | David Broccoli | Fire Lieutenant, North Providence Fire Department (estimated service credits, 23 years, 5 months, 6 days)
Approved
VOTE: 4-0 | Police & Fire |
| 5. | Meagan Fiske | Juvenile Program Worker, DCYF (estimated service credits, 6 years, 4 months, 14 days)
Approved at 50%
VOTE: 4-0 | Council 94 |
| 6. | Diane Antaya | Registered Nurse A, RICLAS (estimated service credits, 23 years, 8 months, 26 days)
Approved at 66 2/3%
VOTE: 4-0 | UNAP |
| 7. | Richard Renzi | Firefighter, North Providence Fire Department (estimated service credits, 24 years, 2 months, 14 days)
Approved
VOTE: 4-0 | Police & Fire |
| 8. | Kevin Proulx | Police Officer, Smithfield Police Department (estimated service credits, 31 years, 7 months, 26 days)
Approved
VOTE: 4-0 | Police & Fire |

Ordinary-New

- | | | | |
|-----|----------------------------|--|-------------------|
| 9. | Sara Smith | Certified Nursing Assistant, BHDDH/Zambarano (estimated service credits, 19 years, 9 months, 5 days)
Approved
VOTE: 4-0 | Council 94 |
| 10. | Douglas Pendergrass | Maintenance Laborer I, Central Falls Housing Authority (estimated service credits, 11 years, 2 months, 5 days)
Approved
VOTE: 4-0 | Non-Union |
| 11. | Christiana Matley | Coding Specialist Abstractor, BHDDH – Eleanor Slater Hospital (estimated service credits, 20 years, 9 months, 5 days)
Approved
VOTE: 4-0 | EGPA |

Consideration and Approval of Decisions

Approved
VOTE: 4-0

12. **Michael Lowery**

Firefighter, Cranston Fire Department
(estimated service credits, 18 years, 7 months, 7 days)
Accidental Denied
VOTE: 3-0

13. **Normanda Alves**

Custodian, North Smithfield School
Department (estimated service credits, 10 years, 7 months, 23 days)
Accidental Denied
VOTE: 3-0

Review and Consideration for Accidental Death benefit

Gino Caputo

NO RECOMMENDATION

Police Sergeant, Barrington Police
Department

**The Committee voted to gather additional
information regarding this matter**
VOTE: 4-0

Police & Fire

RESTRICTED PAGE

Employees' Retirement System of Rhode Island



8.2. Governance Committee - Update on Board Training

For Report

Presented by John P. Maguire

Employees' Retirement System of Rhode Island



9. Adjournment

For Vote

Employees' Retirement System of Rhode Island



10. Appendix

Employees' Retirement System of Rhode Island



10.1. Post-Retirement Employment - November and December 2021

For Report



ERSRI Memorandum

ERSRI Board:

Seth Magaziner
General Treasurer
Chair

John P. Maguire
Vice Chair

Roger P. Boudreau

Joseph Codega

Mark A. Carruolo

Paul L. Dion

Thomas M. Lambert

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: December 8, 2021

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.

The Governor issued Executive Order (EO) #21-96 on September 8, 2021, with the purpose of increasing teaching and administrative staff capacity of the local school districts and other local educational agencies throughout the State of Rhode Island. The intent of the order is to remove any disincentive to reemployment of skilled and knowledgeable retirees by the State for limited periods and for limited personnel in order to address this health emergency.

The EO applies to the 21-22 school year ending June 25, 2022.

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 2021-2022 SCHOOL YEAR
PRSB--SUBSTITUTE AND IN A STATE SCHOOL SUB; PRAM--VACANCY; PRMS--MUNICIPAL IN A SCHOOL REPORT DTD 11-04-2021

First Name	Initial	Last Name	Employer Code	Employer	Title/Function	Number of Days	Footnote
JANICE	E	DEFRANCES	1781	South Side Elementary Charter School	PRAM	51.00	
CAROL		LANOIE	1631	Woonsocket School Dept.	PRSB	46.00	
DAVID	F	DESJARDINS	1781	South Side Elementary Charter School	PRSB	44.50	
CAROL	A	MITOLA	1391	North Smithfield School Dept.	PRAM	43.00	
ZITA		BUTLER	1411	Pawtucket School Dept.	PRSB	43.00	
GERARD	J	NARKIEWICZ	1091	Coventry Public Schools	PRSB	41.00	
ANDY		BARNES	1631	Woonsocket School Dept.	PRAM	40.00	
RICHARD		ZAGRODNY	1631	Woonsocket School Dept.	PRSB	39.00	
CAROLE	D	PECKHAM	1631	Woonsocket School Dept.	PRSB	38.00	
KENNETH	L	PECKHAM	1631	Woonsocket School Dept.	PRSB	37.00	
TERRENCE	J	MERKEL	1371	North Kingstown School Dept.	PRSB	35.00	
ANNE	M	BOBOLA	1381	North Providence School Dept.	PRSB	34.50	
MICHAEL		TOPAZIO	1001	Barrington Public Schools	PRSB	34.50	
ANN		BARRY	1411	Pawtucket School Dept.	PRSB	34.00	
RICHARD	D	D'AGOSTINO	1411	Pawtucket School Dept.	PRSB	33.00	
PAULEEN	M	SLATER	1401	Northern Rhode Island Collaborative	PRSB	30.00	
MARY		ASQUITH	1471	Smithfield School Dept.	PRSB	28.00	
LORNA		O'CONNELL	1411	Pawtucket School Dept.	PRSB	27.00	
DOUGLAS		FULFORD	1183	Exeter/West Greenwich Reg. Schools (NC)	PRMS	26.00	
DONNA		TOBIN	1091	Coventry Public Schools	PRSB	25.00	
HAROLD	J	SMITH	2000	State	PRSB	25.00	
ROBERTA	A	MILLETTE	1091	Coventry Public Schools	PRSB	25.00	
STEVEN	B	KENNY	1091	Coventry Public Schools	PRSB	25.00	
DIANNE	E	PERETTI	1401	Northern Rhode Island Collaborative	PRAM	23.00	
ELEANOR		VANHOUWE	1631	Woonsocket School Dept.	PRSB	23.00	
FRANK		PALLOTTA JR	1491	South Kingstown School Dept.	PRAM	23.00	
DOROTHY		MURRAY	1031	Burrillville School Dept.	PRAM	22.50	
ALAN	M	MONACCHIO	1381	North Providence School Dept.	PRSB	22.00	
LINDA		COLVIN	1031	Burrillville School Dept.	PRSB	22.00	
ROBERT	A	HICKS	1021	Bristol Warren Reg. School Dist.	PRAM	22.00	
JOHN	A	ABBATE	1033	Burrillville School Dept. (NC)	PRMS	21.50	
JOSEPH		CROWLEY	1491	South Kingstown School Dept.	PRSB	21.00	
LINDA	M	LOMAX	1411	Pawtucket School Dept.	PRSB	21.00	
MARCIA	A	LINBACK	1123	Cumberland School Dept. (NC)	PRMS	21.00	
SANDRA	A	SHAW	1121	Cumberland School Dept.	PRSB	21.00	
CHRISTINE	A	GEISELMAN	1411	Pawtucket School Dept.	PRSB	20.00	
DIANE		ENGELS	1631	Woonsocket School Dept.	PRSB	20.00	

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First Name	Initial	Last Name	Employer Code	Employer	Title/Function	Number of Days	Footnote
FRANCES		LANDRY	1691	Blackstone Academy Charter School, Inc.	PRAM	20.00	
GAIL	M	ROBINSON	1091	Coventry Public Schools	PRSB	20.00	
CAROLYN	J	ROSEMAN	1281	Johnston School Dept.	PRSB	19.50	
DEBRA	L	MORIARTY	1121	Cumberland School Dept.	PRSB	19.50	
CAROLYN	C	LEPORE	1391	North Smithfield School Dept.	PRAM	18.50	
DEBRA		MCCLELLAND	1411	Pawtucket School Dept.	PRSB	18.00	
DEBRA		MILLER	1411	Pawtucket School Dept.	PRSB	18.00	
EMILY		SAFFORD	1007	Barrington COLA NonCertifieds	PRMS	18.00	
MICHELLE	C	JAQUES	1031	Burrillville School Dept.	PRSB	18.00	
CHARLES	M	MOREAU	1007	Barrington COLA NonCertifieds	PRMS	17.50	
DONNA		LANGTON	1411	Pawtucket School Dept.	PRSB	17.00	
WILLIAM	L	SMITH	1091	Coventry Public Schools	PRAM	17.00	
CINDY	A	NORMAND	1341	New Shoreham School Dist.	PRAM	16.50	
LINDA	A	TERRANOVA	1621	Westerly School Dept.	PRSB	16.00	
LORI	A	MILLER	1401	Northern Rhode Island Collaborative	PRAM	16.00	
MARIA	J	MANSELLA	1031	Burrillville School Dept.	PRAM	16.00	
ROSLYN		BIRKE	1641	Highlander Charter School	PRAM	16.00	
THELMA	E	BURBANK	1411	Pawtucket School Dept.	PRSB	16.00	
JOHN		JASIONOWSKI	1413	Pawtucket School Dept. (NC)	PRMS	15.50	
PAUL	C	MELARAGNO	1391	North Smithfield School Dept.	PRAM	15.50	
GEORGIA		FORTUNATO	1401	Northern Rhode Island Collaborative	PRAM	15.00	
MARY	B	CULLEN	1281	Johnston School Dept.	PRSB	14.50	
ANN MARIE		MOLLO	1381	North Providence School Dept.	PRSB	14.00	
CLAUDIA		VIEIRA	1411	Pawtucket School Dept.	PRSB	14.00	
KAREN	L	SHEWCOV	1413	Pawtucket School Dept. (NC)	PRMS	14.00	
MICHAEL		JAMES	1491	South Kingstown School Dept.	PRSB	14.00	
RUSSELL	D	NOBLE	1001	Barrington Public Schools	PRSB	14.00	
SANDRA	M	REGO	1091	Coventry Public Schools	PRSB	14.00	
NANCY	L	GAGLIARDI	1411	Pawtucket School Dept.	PRSB	13.50	
OLGA		GARIEPY	1631	Woonsocket School Dept.	PRSB	13.50	
DEBORAH	A	MANCUSO	1281	Johnston School Dept.	PRSB	13.00	
ELIZABETH	S	STONER	1001	Barrington Public Schools	PRSB	12.00	
SUSAN	K	DI ORIO	1471	Smithfield School Dept.	PRSB	12.00	
JANICE	E	ABRAHAM	1091	Coventry Public Schools	PRSB	11.50	
MARILYN	A	LADD	1373	North Kingstown School Dept. (NC)	PRMS	11.50	
ERIC	S	PETTINE	1621	Westerly School Dept.	PRSB	11.00	
KATHRYN		MANSFIELD	1631	Woonsocket School Dept.	PRSB	11.00	

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First Name	Initial	Last Name	Employer Code	Employer	Title/Function	Number of Days	Footnote
LORRAINE	L	FUSCO	1411	Pawtucket School Dept.	PRSB	11.00	
PAMELA	L	LAW	1071	Chariho Regional School Dist.	PRSB	11.00	
MARGUERITE	T	SAVICKAS	1123	Cumberland School Dept. (NC)	PRMS	10.70	
CATHERINE	E	FOX	1281	Johnston School Dept.	PRSB	10.50	
JANICE	L	MOWRY	1371	North Kingstown School Dept.	PRSB	10.50	
BARBARA		RIX	1001	Barrington Public Schools	PRSB	10.00	
GINA	M	ZANNI	1383	North Providence School Dept. (NC)	PRMS	10.00	
HELEN		SISCO	1471	Smithfield School Dept.	PRSB	10.00	
JOSEPH	R	PIRRAGLIA	1281	Johnston School Dept.	PRSB	10.00	
MAUREEN	A	DEL SESTO	1381	North Providence School Dept.	PRSB	10.00	
BETTY	A	NADROWSKI	1091	Coventry Public Schools	PRSB	9.50	
MICHELLE		GAUTREAU	1631	Woonsocket School Dept.	PRSB	9.50	
ANN	C	CAMPBELL	1121	Cumberland School Dept.	PRSB	9.00	
BETSY		VONSPRECKELSEN	1411	Pawtucket School Dept.	PRSB	9.00	
CONSTANCE		EASDON	1373	North Kingstown School Dept. (NC)	PRMS	9.00	
STEVEN	A	ENRIGHT	1371	North Kingstown School Dept.	PRSB	9.00	
SHARON		DUNN	1341	New Shoreham School Dist.	PRAM	8.50	
BARBARA		KELLY	1411	Pawtucket School Dept.	PRSB	8.00	
FRANCIS		LALIBERTE	1411	Pawtucket School Dept.	PRAM	8.00	
GARY	W	BEAUDOIN	1091	Coventry Public Schools	PRSB	8.00	
MADLYN	C	MCARDLE	1021	Bristol Warren Reg. School Dist.	PRAM	8.00	
MARGUERITE		DELPONTE	1381	North Providence School Dept.	PRSB	8.00	
KEITH		DANIELS	1121	Cumberland School Dept.	PRSB	7.50	
CLAIRE		LAQUERRE	1631	Woonsocket School Dept.	PRSB	7.00	
DONNA	H	CARREIRO	1001	Barrington Public Schools	PRAM	7.00	
EDWARD	J	FERRARIO	1371	North Kingstown School Dept.	PRSB	7.00	
ELIZABETH		LESPERANCE	1411	Pawtucket School Dept.	PRSB	7.00	
FRANCIS	C	MCCARTIN	1411	Pawtucket School Dept.	PRSB	7.00	
GISELE	M	HUMBLE	1611	West Warwick School Dept.	PRSB	7.00	
JANET		TARPEY	1411	Pawtucket School Dept.	PRSB	7.00	
OTELINDA	L	CHARPENTIER	1411	Pawtucket School Dept.	PRSB	7.00	
JAMES	H	DILLON	1091	Coventry Public Schools	PRAM	6.50	
LINDA		KARSULAVITCH	1411	Pawtucket School Dept.	PRSB	6.50	
DEBORAH		BOLTON	1411	Pawtucket School Dept.	PRSB	6.00	
JAMES	M	PARENTE	1471	Smithfield School Dept.	PRSB	6.00	
STEPHEN	M	MCCARTY	1491	South Kingstown School Dept.	PRSB	6.00	
WANDA	V	MULLEN	1001	Barrington Public Schools	PRSB	6.00	

TEACHER RETIREES AND NON-CERTIFIED RETIREES WORKING 2021-2022 SCHOOL YEAR
PRSB--SUBSTITUTE AND IN A STATE SCHOOL SUB; PRAM--VACANCY; PRMS--MUNICIPAL IN A SCHOOL REPORT DTD 11-04-2021

First Name	Initial	Last Name	Employer Code	Employer	Title/Function	Number of Days	Footnote
PAMELA	J	YOUNG	1121	Cumberland School Dept.	PRSB	5.50	
FRANCES	D	BEAUPRE	1621	Westerly School Dept.	PRSB	5.00	
KAREN	M	DODD	1611	West Warwick School Dept.	PRSB	5.00	
LORI ANN		LUSSIER	1381	North Providence School Dept.	PRSB	5.00	
MARIE	L	CASWELL	1611	West Warwick School Dept.	PRSB	5.00	
MICHAEL	L	CONVERY	1341	New Shoreham School Dist.	PRAM	5.00	
LINDA	L	RUDDY	1413	Pawtucket School Dept. (NC)	PRMS	4.50	
SUSAN		MCKEE	1641	Highlander Charter School	PRAM	4.50	
FRANK		KENDRA	1631	Woonsocket School Dept.	PRSB	4.00	
PATRIZIA		DEWEY	1321	Middletown Public Schools	PRSB	4.00	
RAYMOND		PITA	1411	Pawtucket School Dept.	PRSB	4.00	
SHEILA		MORGAN	1091	Coventry Public Schools	PRSB	4.00	
SUSAN	A	EMERSON	1611	West Warwick School Dept.	PRSB	4.00	
CAROLYN	M	PELZMAN	1471	Smithfield School Dept.	PRSB	3.00	
DOLORES	E	O'ROURKE	1091	Coventry Public Schools	PRSB	3.00	
LISA	J	TUTAJ-HARPIN	1031	Burrillville School Dept.	PRAM	3.00	
RAYMOND	F	DOYLE	1611	West Warwick School Dept.	PRSB	3.00	
SALLY ANN		ANDREOZZI	1073	Chariho Regional School Dist. (NC)	PRMS	3.00	
SHIRLEY		ST. AMAND	1091	Coventry Public Schools	PRSB	3.00	
BRENDA		MACLEAN	1611	West Warwick School Dept.	PRSB	2.50	
DEBORAH	D	MELLION	1631	Woonsocket School Dept.	PRSB	2.50	
PATRICIA		LYNCH	1321	Middletown Public Schools	PRSB	2.50	
DOLLEEN		LACOMBE	1183	Exeter/West Greenwich Reg. Schools (NC)	PRMS	2.00	
DOMENIC	N	MARCONE	1371	North Kingstown School Dept.	PRSB	2.00	
GIUSEPPE		DISERIO	1473	Smithfield School Dept. (NC)	PRMS	2.00	
GORDON		DAVIGNON	1631	Woonsocket School Dept.	PRSB	2.00	
HOLLY	J	COLE	1091	Coventry Public Schools	PRSB	2.00	
JAMES	H	DILLON	1021	Bristol Warren Reg. School Dist.	PRAM	2.00	
JOHN	E	LALLI	1371	North Kingstown School Dept.	PRSB	2.00	
JUDITH		GUGEL	1411	Pawtucket School Dept.	PRSB	2.00	
ROSINA	J	GUISE	1411	Pawtucket School Dept.	PRSB	2.00	
SANDRA	E	CASAVANT	1413	Pawtucket School Dept. (NC)	PRMS	2.00	
VIRGINIA	R	DIMASI	1611	West Warwick School Dept.	PRSB	2.00	
ANN		JANKOWSKI	1321	Middletown Public Schools	PRAM	1.50	
JACLYNN		DIPIETRO	1203	Foster/Glocester Reg. School Dist. (NC)	PRMS	1.50	
BARBARA		KEEGAN	1491	South Kingstown School Dept.	PRSB	1.00	
CLAUDE	M	WATSKY	1491	South Kingstown School Dept.	PRSB	1.00	

TEACHER RETIREES AND NON-CERTIFIED RETIREES WORKING 2021-2022 SCHOOL YEAR
PRSB--SUBSTITUTE AND IN A STATE SCHOOL SUB; PRAM--VACANCY; PRMS--MUNICIPAL IN A SCHOOL REPORT DTD 11-04-2021

First Name	Initial	Last Name	Employer Code	Employer	Title/Function	Number of Days	Footnote
CYNTHIA	A	WAHL	1611	West Warwick School Dept.	PRSB	1.00	
JOHANNA	L	CADORET	1321	Middletown Public Schools	PRSB	1.00	
NANCY		LAVOIE	1203	Foster/Glocester Reg. School Dist. (NC)	PRMS	1.00	
STEVEN		DECURTIS	1471	Smithfield School Dept.	PRSB	1.00	
THOMAS	R	HINES	1471	Smithfield School Dept.	PRSB	1.00	
LORI		DESIMONE	1381	North Providence School Dept.	PRSB	0.50	

PRME--RETIREEES WORKING MUNICIPALITIES IN 2021 CALENDAR YEAR --REPORT DTD 11-04-2021

First Name	Initial	Last Name	Employer Code	Employer	Title/Function	Number of Days	Footnote
EMERSON	J	MARVEL	1162	City of East Providence	PRME	161.50	Suspended Pension
MICHAEL	A	DEMELLO	1015	Bristol Fire Dept.	PRME	158.00	Suspended Pension
LORRAINE	A	DEROIS	1012	Town of Bristol	PRME	76.00	verified w/ employer - 1 day to recoup
WALTER	V	BURKE	1012	Town of Bristol	PRME	75.00	At limit
LOUIS	A	LANNI	1382	Town of North Providence	PRME	73.50	Close to limit
ARTHUR	E	BOUCHARD	1632	City of Woonsocket	PRME	68.00	Close to limit
MICHAEL		MARSHALL	1162	City of East Providence	PRME	65.00	Close to limit
THEODORE	J	PRZYBYLA	1462	Town of Scituate	PRME	65.00	Close to limit
RICHARD	J	DENICE	1154	East Greenwich Police Dept.	PRME	63.50	
CAROL ANN		AQUILANTE	1382	Town of North Providence	PRME	62.50	
JOHN N	N	BUCCI	1112	City of Cranston	PRME	60.00	
ROBERTA	A	TURCHETTA	1112	City of Cranston	PRME	58.00	
WILLIAM	A	PILKINGTON	1478	Town of Smithfield (COLA)	PRME	55.50	
PAULINE	S	PAYEUR	1632	City of Woonsocket	PRME	55.00	
WILLIAM	S	HIGGINS	1154	East Greenwich Police Dept.	PRME	54.00	
EDWARD	R	FRATELLI	1478	Town of Smithfield (COLA)	PRME	53.00	
FRANK	J	LANNING	1166	East Providence Housing Authority	PRME	48.50	
FRANK	E	JUDGE	1082	Town of Charlestown	PRME	48.00	
KENNETH	A	BROWN JR	1474	Smithfield Police Dept.	PRME	47.50	
THOMAS	E	DUQUETTE	1602	Town of West Greenwich	PRME	47.50	
DIANE	M	WALSH	1112	City of Cranston	PRME	44.50	
RUSSELL	W	BROWN	1452	Town of Richmond	PRME	44.50	
LOUIS	J	CHARELLO	1705	ALBION FIRE DISTRICT	PRME	44.00	
ROBERT	J	LEMOI	1154	East Greenwich Police Dept.	PRME	43.00	
BRENDA	C	PANNONE	1382	Town of North Providence	PRME	42.00	
WILLIAM	J	RABIDEAU	1019	Town of Bristol EE Highway	PRME	41.50	
MADELYN		GERMANI	1382	Town of North Providence	PRME	41.00	
GAIL		TOPAKIAN	1112	City of Cranston	PRME	40.50	
RICHARD	J	DELFINO JR.	1282	Town of Johnston	PRME	40.00	
JOHN	M	CARPINELLI	1492	Town of South Kingstown	PRME	39.50	
ANNA	E	MARINO	1112	City of Cranston	PRME	39.00	
LINDA	M	DIPRETE	1112	City of Cranston	PRME	38.50	
DEBRA	A	TODD	1392	Town of North Smithfield	PRME	37.50	
DENNIS	W	BROD	1492	Town of South Kingstown	PRME	37.50	
JOHN	J	TOOLAN	1009	Barrington COLA Group	PRME	33.50	
ROMANA	H	RAMOS	1412	City of Pawtucket	PRME	30.00	
GARY	F	LONERGAN	1474	Smithfield Police Dept.	PRME	29.00	
GARY	F	LONERGAN	1478	Town of Smithfield (COLA)	PRME	29.00	
JOSEPH	D	ANDREOZZI	1386	North Providence Hsg. Auth.	PRME	29.00	
LARETO	P	GUGLIETTA	1032	Town of Burrillville	PRME	26.00	

PRME--RETIREEES WORKING MUNICIPALITIES IN 2021 CALENDAR YEAR --REPORT DTD 11-04-2021

First Name	Initial	Last Name	Employer Code	Employer	Title/Function	Number of Days	Footnote
PAUL	F	FREDRICK	1162	City of East Providence	PRME	24.50	
PAUL		FAGAN	1352	City of Newport	PRME	23.00	
BERNARD	J	NASCENZI	1282	Town of Johnston	PRME	20.00	
JOANNE		TOLCHINSKY	1116	Cranston Housing Auth.	PRME	20.00	
WILLIAM	J	FLATLEY	1492	Town of South Kingstown	PRME	20.00	
MARY ANN		PACKER	1492	Town of South Kingstown	PRME	17.50	
DAVID	M	BEAUCHEMIN	1034	Burrillville Police Dept.	PRME	17.00	
JOHN	T	OHARA	1154	East Greenwich Police Dept.	PRME	15.50	
PAMELA	G	BRENNAN	1452	Town of Richmond	PRME	15.00	
DAVID	E	DESJARLAIS	1154	East Greenwich Police Dept.	PRME	14.00	
DONNA		CONWAY	1386	North Providence Hsg. Auth.	PRME	14.00	
MICHAEL	L	HOULE	1634	Woonsocket Police Dept.	PRME	13.50	
ROBERT	W	VANNIEUWENHUYZE	1474	Smithfield Police Dept.	PRME	12.50	
EDWARD	A	BURNETT	1352	City of Newport	PRME	12.00	
JOHN		HOLE	1352	City of Newport	PRME	12.00	
CAROL		MULHOLLAND	1412	City of Pawtucket	PRME	11.00	
WARREN	L	STEERE	1032	Town of Burrillville	PRME	11.00	
MARY	C	LANGLOIS	1032	Town of Burrillville	PRME	10.50	
JANET	A	EBERTS	1478	Town of Smithfield (COLA)	PRME	10.00	
JEREMY	A	FAGUE	1154	East Greenwich Police Dept.	PRME	10.00	
LYNN	L	BURKHARDT	1009	Barrington COLA Group	PRME	10.00	
HILDING	T	MUNSON	1492	Town of South Kingstown	PRME	9.50	
ARTHUR	M	RHODES	1154	East Greenwich Police Dept.	PRME	9.00	
JANET	C	RICHARDSON	1009	Barrington COLA Group	PRME	8.50	
MICHAEL	D	CASSIDY	1412	City of Pawtucket	PRME	8.00	
LINDA	C	ARCHETTO	1112	City of Cranston	PRME	7.50	
SALLY	A	INGEGNERI-SIMONE	1282	Town of Johnston	PRME	7.50	
TORRE	A	BENSON	1154	East Greenwich Police Dept.	PRME	7.50	
ANGELA	M	JALETTE	1032	Town of Burrillville	PRME	7.00	
DAVID	A	CARPENTER	1392	Town of North Smithfield	PRME	6.00	
PATRICIA	A	TONDREAU	1212	Town of Glocester	PRME	6.00	
JON		CHIRNSIDE	1154	East Greenwich Police Dept.	PRME	5.50	
ANGELA	M	JALETTE	1034	Burrillville Police Dept.	PRME	5.00	
DONNA		CONWAY	1016	Bristol Housing Authority	PRME	4.00	
DONNA		CONWAY	1166	East Providence Housing Authority	PRME	4.00	
MICHAEL	L	HOULE	1632	City of Woonsocket	PRME	4.00	
LARETO	P	GUGLIETTA	1154	East Greenwich Police Dept.	PRME	3.00	
LAURA	A	SILVIA	1009	Barrington COLA Group	PRME	2.50	
PATRICK	A	MURRAY	1634	Woonsocket Police Dept.	PRME	2.00	
WILLIAM	A	DORNEY III	1004	Barrington Police Dept.	PRME	2.00	

PRME--RETIREEES WORKING MUNICIPALITIES IN 2021 CALENDAR YEAR --REPORT DTD 11-04-2021

First Name	Initial	Last Name	Employer Code	Employer	Title/Function	Number of Days	Footnote
DONNA		CONWAY	1566	Warren Housing Auth.	PRME	1.75	
WILLIAM	A	DORNEY III	1009	Barrington COLA Group	PRME	1.00	

RETIREES WORKING UNDER 18K AT STATE COLLEGES/UNIVS (EMPLOYER CODE = 2000)
PRIS--State colleges/univs/--Instructor at a state school - Calendar Year 2021--Report dtd -11-04-2021

First Name	Initial	Last Name	Employer Code	Employer	Title/Function	Earnings	Footnote
MANUEL	E	GRACE	2000	CCRI	PRIS	\$ 15,526.40	Close to limit
RICHARD	G	SWEARINGEN	2000	CCRI	PRIS	\$ 12,753.40	
CHARLES		STIMPSON	2000	CCRI	PRIS	\$ 12,311.40	
MARIE	H	BAGUCHINSKY	2000	URI	PRIS	\$ 12,184.39	
BRUNA	M	BOYLE	2000	URI	PRIS	\$ 12,129.34	
GAIL	S	O'ROURKE	2000	CCRI	PRIS	\$ 11,500.50	
WILLIAM	T	BEHREND JR	2000	URI	PRIS	\$ 11,487.99	
MICHAEL	W	WESTKOTT	2000	URI	PRIS	\$ 10,434.80	
ANDREW		EGAN	2000	CCRI	PRIS	\$ 9,564.20	
DAVID		NEVES	2000	URI	PRIS	\$ 9,395.23	
PAUL	B	CARTY	2000	CCRI	PRIS	\$ 9,254.00	
JOHN ALAN	A	LONGIARU	2000	CCRI	PRIS	\$ 7,684.35	
NORMAN	P	FORTIN	2000	URI	PRIS	\$ 6,795.00	
PETER	J	PETRONE	2000	CCRI	PRIS	\$ 6,378.40	
MICHELLE		BROUSSEAU	2000	CCRI	PRIS	\$ 6,376.70	
PATRICIA	A	ROSE	2000	CCRI	PRIS	\$ 6,326.94	
DONNA M		PATCH	2000	CCRI	PRIS	\$ 6,287.76	
ALFRED	L	PERROTTI	2000	CCRI	PRIS	\$ 6,246.87	
ALFRED	R	CRUDALE	2000	URI	PRIS	\$ 5,064.66	
ANDRES	R	ZUNIGA	2000	CCRI	PRIS	\$ 5,045.70	
CAROL	A	SPAZIANO	2000	CCRI	PRIS	\$ 4,260.20	
BRIGID	A	BALBONI	2000	CCRI	PRIS	\$ 3,189.20	
GEORGE		PAGE	2000	CCRI	PRIS	\$ 3,189.20	
GERALD		SILBERMAN	2000	CCRI	PRIS	\$ 3,189.20	
JAMES	V	STRAVATO	2000	CCRI	PRIS	\$ 3,189.20	
SUSAN	L	HAWKSLEY	2000	CCRI	PRIS	\$ 3,189.20	
LAWRENCE	P	BYRNE	2000	CCRI	PRIS	\$ 3,187.50	
LORRAINE	E	BELLO	2000	CCRI	PRIS	\$ 2,985.20	
DAVID	C	MARANDOLA	2000	CCRI	PRIS	\$ 2,358.11	
KARIN	E	LUKOWICZ	2000	CCRI	PRIS	\$ 2,054.96	
RAYMOND	M	MEDEIROS	2000	CCRI	PRIS	\$ 1,856.40	
KIRK		LAMBOY	2000	CCRI	PRIS	\$ 1,643.72	
JAMES	E	GUARINO	2000	CCRI	PRIS	\$ 1,489.59	

RETIREES WORKING UNDER 18K AT STATE COLLEGES/UNIVS (EMPLOYER CODE = 2000)
PRIS--State colleges/univs/--Instructor at a state school - Calendar Year 2021--Report dtd -11-04-2021

First Name	Initial	Last Name	Employer Code	Employer	Title/Function	Earnings	Footnote
RICHARD	J	BENEDUCE	2000	CCRI	PRIS	\$ 655.05	
WILLIAM	A	TRIBELLI	2000	CCRI	PRIS	\$ 519.82	
GARY	C	COMUNALE	2000	URI	PRIS	\$ 478.67	
PAUL	C	MELARAGNO	2000	CCRI	PRIS	\$ 448.18	
JO-ANN		PHILLIPS	2000	URI	PRIS	\$ 400.75	
WENDY		ARONOFF	2000	CCRI	PRIS	\$ 254.33	

**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 (PRNR--TITLE FUNCTION) (EMPLOYER CODE --2000)--REPORT DTD 11-4-2021**

First Name	Initial	Last Name	Employer Code	Employer	Title/Function	Earnings	Footnote
KATHLEEN	D	HUDSON	2000	CCRI	PRDE	\$ 14,350.29	Close to limit
PETER	V	RIVELLI	2000	CCRI	PRDE	\$ 12,945.78	Close to limit
KATHLEEN		CRESCENZO	2000	CCRI	PRDE	\$ 3,908.16	
DAYUS		METTS	2000	CCRI	PRDE	\$ 1,384.14	

TEACHER RETIREES AND NON-CERTIFIED RETIREES WORKING 2021-2022 SCHOOL YEAR
PRSB--SUBSTITUTE AND IN A STATE SCHOOL SUB; PRAM--VACANCY; PRMS--MUNICIPAL IN A SCHOOL REPORT DTD 12-01-2021

First Name	Initial	Last Name	Employer Code	Employer	Title/Function	Number of Days	Footnote
CAROL	A	MITOLA	1391	North Smithfield School Dept.	PRAM	61.00	
JANICE	E	DEFRANCES	1781	South Side Elementary Charter School	PRAM	51.00	
CAROL		LANOIE	1631	Woonsocket School Dept.	PRSB	46.00	
DAVID	F	DESJARDINS	1781	South Side Elementary Charter School	PRSB	44.50	
BETSY		MCNEIL	1031	Burrillville School Dept.	PRSB	44.00	
ZITA		BUTLER	1411	Pawtucket School Dept.	PRSB	43.00	
GERARD	J	NARKIEWICZ	1091	Coventry Public Schools	PRSB	41.00	
ANDY		BARNES	1631	Woonsocket School Dept.	PRAM	40.00	
RICHARD		ZAGRODNY	1631	Woonsocket School Dept.	PRSB	39.00	
CAROLE	D	PECKHAM	1631	Woonsocket School Dept.	PRSB	38.00	
KENNETH	L	PECKHAM	1631	Woonsocket School Dept.	PRSB	37.00	
TERRENCE	J	MERKEL	1371	North Kingstown School Dept.	PRSB	35.00	
ANNE	M	BOBOLA	1381	North Providence School Dept.	PRSB	34.50	
MICHAEL		TOPAZIO	1001	Barrington Public Schools	PRSB	34.50	
ANN		BARRY	1411	Pawtucket School Dept.	PRSB	34.00	
RICHARD	D	D'AGOSTINO	1411	Pawtucket School Dept.	PRSB	33.00	
PAULEEN	M	SLATER	1401	Northern Rhode Island Collaborative	PRSB	30.00	
CAROLYN	C	LEPORE	1391	North Smithfield School Dept.	PRAM	28.00	
MARY		ASQUITH	1471	Smithfield School Dept.	PRSB	28.00	
LORNA		O'CONNELL	1411	Pawtucket School Dept.	PRSB	27.00	
DOUGLAS		FULFORD	1183	Exeter/West Greenwich Reg. Schools (NC)	PRMS	26.00	
DONNA		TOBIN	1091	Coventry Public Schools	PRSB	25.00	
HAROLD	J	SMITH	2000	State	PRSB	25.00	
ROBERTA	A	MILLETTE	1091	Coventry Public Schools	PRSB	25.00	
STEVEN	B	KENNY	1091	Coventry Public Schools	PRSB	25.00	
PAUL	C	MELARAGNO	1391	North Smithfield School Dept.	PRAM	23.50	
DIANNE	E	PERETTI	1401	Northern Rhode Island Collaborative	PRAM	23.00	
ELEANOR		VANHOUWE	1631	Woonsocket School Dept.	PRSB	23.00	
FRANK		PALLOTTA JR	1491	South Kingstown School Dept.	PRAM	23.00	
DOROTHY		MURRAY	1031	Burrillville School Dept.	PRAM	22.50	
MICHAEL		PETRARCA	1191	Foster School Dist.	PRAM	22.50	
ALAN	M	MONACCHIO	1381	North Providence School Dept.	PRSB	22.00	
LINDA		COLVIN	1031	Burrillville School Dept.	PRSB	22.00	
ROBERT	A	HICKS	1021	Bristol Warren Reg. School Dist.	PRAM	22.00	
JOHN	A	ABBATE	1033	Burrillville School Dept. (NC)	PRMS	21.50	
JOSEPH		CROWLEY	1491	South Kingstown School Dept.	PRSB	21.00	
LINDA	M	LOMAX	1411	Pawtucket School Dept.	PRSB	21.00	
MARCIA	A	LINBACK	1123	Cumberland School Dept. (NC)	PRMS	21.00	
SANDRA	A	SHAW	1121	Cumberland School Dept.	PRSB	21.00	
CHRISTINE	A	GEISELMAN	1411	Pawtucket School Dept.	PRSB	20.00	
DIANE		ENGELS	1631	Woonsocket School Dept.	PRSB	20.00	

TEACHER RETIREES AND NON-CERTIFIED RETIREES WORKING 2021-2022 SCHOOL YEAR
PRSB--SUBSTITUTE AND IN A STATE SCHOOL SUB; PRAM--VACANCY; PRMS--MUNICIPAL IN A SCHOOL REPORT DTD 12-01-2021

First Name	Initial	Last Name	Employer Code	Employer	Title/Function	Number of Days	Footnote
EMILY		SAFFORD	1007	Barrington COLA NonCertifieds	PRMS	20.00	
FRANCES		LANDRY	1691	Blackstone Academy Charter School, Inc.	PRAM	20.00	
GAIL	M	ROBINSON	1091	Coventry Public Schools	PRSB	20.00	
CAROLYN	J	ROSEMAN	1281	Johnston School Dept.	PRSB	19.50	
DEBRA	L	MORIARTY	1121	Cumberland School Dept.	PRSB	19.50	
DEBRA		MCCLELLAND	1411	Pawtucket School Dept.	PRSB	18.00	
DEBRA		MILLER	1411	Pawtucket School Dept.	PRSB	18.00	
MICHELLE	C	JAQUES	1031	Burrillville School Dept.	PRSB	18.00	
CHARLES	M	MOREAU	1007	Barrington COLA NonCertifieds	PRMS	17.50	
DONNA		LANGTON	1411	Pawtucket School Dept.	PRSB	17.00	
WILLIAM	L	SMITH	1091	Coventry Public Schools	PRAM	17.00	
CINDY	A	NORMAND	1341	New Shoreham School Dist.	PRAM	16.50	
KAREN	A	KING	1191	Foster School Dist.	PRSB	16.50	
LINDA	A	TERRANOVA	1621	Westerly School Dept.	PRSB	16.00	
LORI	A	MILLER	1401	Northern Rhode Island Collaborative	PRAM	16.00	
MARIA	J	MANSELLA	1031	Burrillville School Dept.	PRAM	16.00	
ROSLYN		BIRKE	1641	Highlander Charter School	PRAM	16.00	
THELMA	E	BURBANK	1411	Pawtucket School Dept.	PRSB	16.00	
JOHN		JASIONOWSKI	1413	Pawtucket School Dept. (NC)	PRMS	15.50	
GEORGIA		FORTUNATO	1401	Northern Rhode Island Collaborative	PRAM	15.00	
MARY	B	CULLEN	1281	Johnston School Dept.	PRSB	14.50	
ANN MARIE		MOLLO	1381	North Providence School Dept.	PRSB	14.00	
CLAUDIA		VIEIRA	1411	Pawtucket School Dept.	PRSB	14.00	
KAREN	L	SHEWCOV	1413	Pawtucket School Dept. (NC)	PRMS	14.00	
MICHAEL		JAMES	1491	South Kingstown School Dept.	PRSB	14.00	
RUSSELL	D	NOBLE	1001	Barrington Public Schools	PRSB	14.00	
SANDRA	M	REGO	1091	Coventry Public Schools	PRSB	14.00	
NANCY	L	GAGLIARDI	1411	Pawtucket School Dept.	PRSB	13.50	
OLGA		GARIEPY	1631	Woonsocket School Dept.	PRSB	13.50	
DEBORAH	A	MANCUSO	1281	Johnston School Dept.	PRSB	13.00	
ELIZABETH	S	STONER	1001	Barrington Public Schools	PRSB	12.00	
SUSAN	K	DI ORIO	1471	Smithfield School Dept.	PRSB	12.00	
JANICE	E	ABRAHAM	1091	Coventry Public Schools	PRSB	11.50	
MARILYN	A	LADD	1373	North Kingstown School Dept. (NC)	PRMS	11.50	
ERIC	S	PETTINE	1621	Westerly School Dept.	PRSB	11.00	
KATHRYN		MANSFIELD	1631	Woonsocket School Dept.	PRSB	11.00	
LORRAINE	L	FUSCO	1411	Pawtucket School Dept.	PRSB	11.00	
PAMELA	L	LAW	1071	Chariho Regional School Dist.	PRSB	11.00	
MARGUERITE	T	SAVICKAS	1123	Cumberland School Dept. (NC)	PRMS	10.70	
CATHERINE	E	FOX	1281	Johnston School Dept.	PRSB	10.50	
JANICE	L	MOWRY	1371	North Kingstown School Dept.	PRSB	10.50	

TEACHER RETIREES AND NON-CERTIFIED RETIREES WORKING 2021-2022 SCHOOL YEAR
PRSB--SUBSTITUTE AND IN A STATE SCHOOL SUB; PRAM--VACANCY; PRMS--MUNICIPAL IN A SCHOOL REPORT DTD 12-01-2021

First Name	Initial	Last Name	Employer Code	Employer	Title/Function	Number of Days	Footnote
BARBARA		RIX	1001	Barrington Public Schools	PRSB	10.00	
GINA	M	ZANNI	1383	North Providence School Dept. (NC)	PRMS	10.00	
HELEN		SISCO	1471	Smithfield School Dept.	PRSB	10.00	
JOSEPH	R	PIRRAGLIA	1281	Johnston School Dept.	PRSB	10.00	
MAUREEN	A	DEL SESTO	1381	North Providence School Dept.	PRSB	10.00	
BETTY	A	NADROWSKI	1091	Coventry Public Schools	PRSB	9.50	
MICHELLE		GAUTREAU	1631	Woonsocket School Dept.	PRSB	9.50	
ANN	C	CAMPBELL	1121	Cumberland School Dept.	PRSB	9.00	
BETSY		VONSPRECKELSEN	1411	Pawtucket School Dept.	PRSB	9.00	
CONSTANCE		EASDON	1373	North Kingstown School Dept. (NC)	PRMS	9.00	
STEVEN	A	ENRIGHT	1371	North Kingstown School Dept.	PRSB	9.00	
SHARON		DUNN	1341	New Shoreham School Dist.	PRAM	8.50	
BARBARA		KELLY	1411	Pawtucket School Dept.	PRSB	8.00	
FRANCIS		LALIBERTE	1411	Pawtucket School Dept.	PRAM	8.00	
GARY	W	BEAUDOIN	1091	Coventry Public Schools	PRSB	8.00	
MADLYN	C	MCARDLE	1021	Bristol Warren Reg. School Dist.	PRAM	8.00	
MARGUERITE		DELPONTE	1381	North Providence School Dept.	PRSB	8.00	
KEITH		DANIELS	1121	Cumberland School Dept.	PRSB	7.50	
CLAIRE		LAQUERRE	1631	Woonsocket School Dept.	PRSB	7.00	
DONNA	H	CARREIRO	1001	Barrington Public Schools	PRAM	7.00	
EDWARD	J	FERRARIO	1371	North Kingstown School Dept.	PRSB	7.00	
ELIZABETH		LESPERANCE	1411	Pawtucket School Dept.	PRSB	7.00	
FRANCIS	C	MCCARTIN	1411	Pawtucket School Dept.	PRSB	7.00	
GISELE	M	HUMBLE	1611	West Warwick School Dept.	PRSB	7.00	
JANET		TARPEY	1411	Pawtucket School Dept.	PRSB	7.00	
OTELINDA	L	CHARPENTIER	1411	Pawtucket School Dept.	PRSB	7.00	
JAMES	H	DILLON	1091	Coventry Public Schools	PRAM	6.50	
LINDA		KARSULAVITCH	1411	Pawtucket School Dept.	PRSB	6.50	
DEBORAH		BOLTON	1411	Pawtucket School Dept.	PRSB	6.00	
JAMES	M	PARENTE	1471	Smithfield School Dept.	PRSB	6.00	
STEPHEN	M	MCCARTY	1491	South Kingstown School Dept.	PRSB	6.00	
WANDA	V	MULLEN	1001	Barrington Public Schools	PRSB	6.00	
PAMELA	J	YOUNG	1121	Cumberland School Dept.	PRSB	5.50	
FRANCES	D	BEAUPRE	1621	Westerly School Dept.	PRSB	5.00	
KAREN	M	DODD	1611	West Warwick School Dept.	PRSB	5.00	Less than 45 days after retirement
LORI ANN		LUSSIER	1381	North Providence School Dept.	PRSB	5.00	
MARIE	L	CASWELL	1611	West Warwick School Dept.	PRSB	5.00	
MICHAEL	L	CONVERY	1341	New Shoreham School Dist.	PRAM	5.00	
LINDA	L	RUDDY	1413	Pawtucket School Dept. (NC)	PRMS	4.50	
SUSAN		MCKEE	1641	Highlander Charter School	PRAM	4.50	
FRANK		KENDRA	1631	Woonsocket School Dept.	PRSB	4.00	

TEACHER RETIREES AND NON-CERTIFIED RETIREES WORKING 2021-2022 SCHOOL YEAR
PRSB--SUBSTITUTE AND IN A STATE SCHOOL SUB; PRAM--VACANCY; PRMS--MUNICIPAL IN A SCHOOL REPORT DTD 12-01-2021

First Name	Initial	Last Name	Employer Code	Employer	Title/Function	Number of Days	Footnote
PATRIZIA		DEWEY	1321	Middletown Public Schools	PRSB	4.00	
RAYMOND		PITA	1411	Pawtucket School Dept.	PRSB	4.00	
SHEILA		MORGAN	1091	Coventry Public Schools	PRSB	4.00	
SUSAN	A	EMERSON	1611	West Warwick School Dept.	PRSB	4.00	
CAROLYN	M	PELZMAN	1471	Smithfield School Dept.	PRSB	3.00	
DOLORES	E	O'ROURKE	1091	Coventry Public Schools	PRSB	3.00	
LISA	J	TUTAJ-HARPIN	1031	Burrillville School Dept.	PRAM	3.00	
RAYMOND	F	DOYLE	1611	West Warwick School Dept.	PRSB	3.00	
SALLY ANN		ANDREOZZI	1073	Chariho Regional School Dist. (NC)	PRMS	3.00	
SHIRLEY		ST. AMAND	1091	Coventry Public Schools	PRSB	3.00	
BRENDA		MACLEAN	1611	West Warwick School Dept.	PRSB	2.50	
DEBORAH	D	MELLION	1631	Woonsocket School Dept.	PRSB	2.50	
PATRICIA		LYNCH	1321	Middletown Public Schools	PRSB	2.50	
DOLLEEN		LACOMBE	1183	Exeter/West Greenwich Reg. Schools (NC)	PRMS	2.00	
DOMENIC	N	MARCONE	1371	North Kingstown School Dept.	PRSB	2.00	
GIUSEPPE		DISERIO	1473	Smithfield School Dept. (NC)	PRMS	2.00	
GORDON		DAVIGNON	1631	Woonsocket School Dept.	PRSB	2.00	
HOLLY	J	COLE	1091	Coventry Public Schools	PRSB	2.00	
JAMES	H	DILLON	1021	Bristol Warren Reg. School Dist.	PRAM	2.00	
JOHN	E	LALLI	1371	North Kingstown School Dept.	PRSB	2.00	
JUDITH		GUGEL	1411	Pawtucket School Dept.	PRSB	2.00	
ROSINA	J	GUISE	1411	Pawtucket School Dept.	PRSB	2.00	
SANDRA	E	CASAVANT	1413	Pawtucket School Dept. (NC)	PRMS	2.00	
VIRGINIA	R	DIMASI	1611	West Warwick School Dept.	PRSB	2.00	
ANN		JANKOWSKI	1321	Middletown Public Schools	PRAM	1.50	
JACLYNN		DIPIETRO	1203	Foster/Glocester Reg. School Dist. (NC)	PRMS	1.50	
BARBARA		KEEGAN	1491	South Kingstown School Dept.	PRSB	1.00	
CLAUDE	M	WATSKY	1491	South Kingstown School Dept.	PRSB	1.00	
CYNTHIA	A	WAHL	1611	West Warwick School Dept.	PRSB	1.00	
JOHANNA	L	CADORET	1321	Middletown Public Schools	PRSB	1.00	
NANCY		LAVOIE	1203	Foster/Glocester Reg. School Dist. (NC)	PRMS	1.00	
STEVEN		DECURTIS	1471	Smithfield School Dept.	PRSB	1.00	
THOMAS	R	HINES	1471	Smithfield School Dept.	PRSB	1.00	
LORI		DESIMONE	1381	North Providence School Dept.	PRSB	0.50	

PRME--RETIREES WORKING MUNICIPALITIES IN 2021 CALENDAR YEAR --REPORT DTD 12-01-2021

First Name	Initial	Last Name	Employer Code	Employer	Title/Function	Footnote	Footnote
EMERSON	J	MARVEL	1162	City of East Providence	PRME	192.50	Suspended Pension
MICHAEL	A	DEMELLO	1015	Bristol Fire Dept.	PRME	158.00	Suspended Pension
LOUIS	A	LANNI	1382	Town of North Providence	PRME	78.00	At limit
LORRAINE	A	DEROIS	1012	Town of Bristol	PRME	76.00	Deduction from Nov.'s pension
WALTER	V	BURKE	1012	Town of Bristol	PRME	75.00	At limit
ARTHUR	E	BOUCHARD	1632	City of Woonsocket	PRME	74.00	Close to limit
RICHARD	J	DENICE	1154	East Greenwich Police Dept.	PRME	68.50	Close to limit
CAROL ANN		AQUILANTE	1382	Town of North Providence	PRME	65.00	Close to limit
MICHAEL		MARSHALL	1162	City of East Providence	PRME	65.00	Close to limit
THEODORE	J	PRZYBYLA	1462	Town of Scituate	PRME	65.00	Close to limit
PAUL	F	FREDRICK	1162	City of East Providence	PRME	63.50	
ROBERTA	A	TURCHETTA	1112	City of Cranston	PRME	63.50	
WILLIAM	A	PILKINGTON	1478	Town of Smithfield (COLA)	PRME	61.00	
DENNIS	W	BROD	1492	Town of South Kingstown	PRME	60.50	
JOHN N	N	BUCCI	1112	City of Cranston	PRME	60.00	
WILLIAM	J	FLATLEY	1492	Town of South Kingstown	PRME	58.50	
EDWARD	R	FRATELLI	1478	Town of Smithfield (COLA)	PRME	58.00	
PAULINE	S	PAYEUR	1632	City of Woonsocket	PRME	57.50	
RUSSELL	W	BROWN	1452	Town of Richmond	PRME	57.00	
WILLIAM	S	HIGGINS	1154	East Greenwich Police Dept.	PRME	57.00	
FRANK	J	LANNING	1166	East Providence Housing Authority	PRME	56.50	
KENNETH	A	BROWN JR	1474	Smithfield Police Dept.	PRME	55.50	
BRENDA	C	PANNONE	1382	Town of North Providence	PRME	49.00	
JOHN	M	CARPINELLI	1492	Town of South Kingstown	PRME	49.00	
FRANK	E	JUDGE	1082	Town of Charlestown	PRME	48.00	
THOMAS	E	DUQUETTE	1602	Town of West Greenwich	PRME	47.50	
LARETO	P	GUGLIETTA	1032	Town of Burrillville	PRME	46.00	
LINDA	M	DIPRETE	1112	City of Cranston	PRME	45.50	
MADELYN		GERMANI	1382	Town of North Providence	PRME	45.00	
DIANE	M	WALSH	1112	City of Cranston	PRME	44.50	
GAIL		TOPAKIAN	1112	City of Cranston	PRME	44.50	
LOUIS	J	CHARELLO	1705	ALBION FIRE DISTRICT	PRME	44.00	
ANNA	E	MARINO	1112	City of Cranston	PRME	43.00	
ROBERT	J	LEMOI	1154	East Greenwich Police Dept.	PRME	43.00	
WILLIAM	J	RABIDEAU	1019	Town of Bristol EE Highway	PRME	42.50	
JOHN	J	TOOLAN	1009	Barrington COLA Group	PRME	40.50	
RICHARD	J	DELFINO JR.	1282	Town of Johnston	PRME	40.00	

PRME--RETIREEES WORKING MUNICIPALITIES IN 2021 CALENDAR YEAR --REPORT DTD 12-01-2021

First Name	Initial	Last Name	Employer Code	Employer	Title/Function	Footnote	Footnote
DEBRA	A	TODD	1392	Town of North Smithfield	PRME	37.50	
DAVID	M	BEAUCHEMIN	1034	Burrillville Police Dept.	PRME	32.50	
Joanne		Tolchinsky	1116	Cranston Housing Auth.	PRME	32.00	
GLEN		BIDDISCOMBE	1032	Town of Burrillville	PRME	31.00	
ROMANA	H	RAMOS	1412	City of Pawtucket	PRME	30.00	
GARY	F	LONERGAN	1474	Smithfield Police Dept.	PRME	29.00	
GARY	F	LONERGAN	1478	Town of Smithfield (COLA)	PRME	29.00	
JOSEPH	D	ANDREOZZI	1386	North Providence Hsg. Auth.	PRME	29.00	
HILDING	T	MUNSON	1492	Town of South Kingstown	PRME	28.50	
RONALD	J	WOODS	1032	Town of Burrillville	PRME	26.00	
CAROL		MULHOLLAND	1412	City of Pawtucket	PRME	25.50	
PAUL		FAGAN	1352	City of Newport	PRME	23.00	
BERNARD	J	NASCENZI	1282	Town of Johnston	PRME	20.00	
LYNN	L	BURKHARDT	1009	Barrington COLA Group	PRME	18.00	
JOHN	T	OHARA	1154	East Greenwich Police Dept.	PRME	17.50	
MARY ANN		PACKER	1492	Town of South Kingstown	PRME	17.50	
WILLIAM	J	GATELY	1032	Town of Burrillville	PRME	17.00	Accidental Disability
Mary	C	Langlois	1032	Town of Burrillville	PRME	15.50	
PAMELA	G	BRENNAN	1452	Town of Richmond	PRME	15.00	
DAVID	E	DESJARLAIS	1154	East Greenwich Police Dept.	PRME	14.00	
DONNA		CONWAY	1386	North Providence Hsg. Auth.	PRME	14.00	
MICHAEL	L	HOULE	1634	Woonsocket Police Dept.	PRME	13.50	
ANGELA	M	JALETTE	1032	Town of Burrillville	PRME	13.00	
MICHAEL	D	CASSIDY	1412	City of Pawtucket	PRME	12.50	
ROBERT	W	VANNIEUWENHUYZE	1474	Smithfield Police Dept.	PRME	12.50	
EDWARD	A	BURNETT	1352	City of Newport	PRME	12.00	
JOHN		HOLE	1352	City of Newport	PRME	12.00	
JEREMY	A	FAGUE	1154	East Greenwich Police Dept.	PRME	11.00	
PATRICIA	A	TONDREAU	1212	Town of Glocester	PRME	11.00	
WARREN	L	STEERE	1032	Town of Burrillville	PRME	11.00	
ARTHUR	M	RHODES	1154	East Greenwich Police Dept.	PRME	10.50	
JANET	A	EBERTS	1478	Town of Smithfield (COLA)	PRME	10.00	
JANET	C	RICHARDSON	1009	Barrington COLA Group	PRME	9.50	
JON		CHIRNSIDE	1154	East Greenwich Police Dept.	PRME	9.50	
LINDA	C	ARCHETTO	1112	City of Cranston	PRME	7.50	
SALLY	A	INGEGNERI-SIMONE	1282	Town of Johnston	PRME	7.50	
TORRE	A	BENSON	1154	East Greenwich Police Dept.	PRME	7.50	

PRME--RETIREEES WORKING MUNICIPALITIES IN 2021 CALENDAR YEAR --REPORT DTD 12-01-2021

First Name	Initial	Last Name	Employer Code	Employer	Title/Function	Footnote	Footnote
Laura	A	Silvia	1009	Barrington COLA Group	PRME	6.50	
DAVID	A	CARPENTER	1392	Town of North Smithfield	PRME	6.00	
ROSANNA		DOUGHTY	1032	Town of Burrillville	PRME	6.00	
JOSEPH	L	DINOBILO	1492	Town of South Kingstown	PRME	5.50	
ANGELA	M	JALETTE	1034	Burrillville Police Dept.	PRME	5.00	
Donna		Conway	1166	East Providence Housing Authority	PRME	5.00	
Donna		Conway	1016	Bristol Housing Authority	PRME	4.00	
MICHAEL	L	HOULE	1632	City of Woonsocket	PRME	4.00	
LARETO	P	GUGLIETTA	1154	East Greenwich Police Dept.	PRME	3.00	
PATRICK	A	MURRAY	1634	Woonsocket Police Dept.	PRME	2.00	
WILLIAM	A	DORNEY III	1004	Barrington Police Dept.	PRME	2.00	
Donna		Conway	1566	Warren Housing Auth.	PRME	1.75	
LAURIE	S	SIMPSON	1412	City of Pawtucket	PRME	1.50	
WILLIAM	A	DORNEY III	1009	Barrington COLA Group	PRME	1.00	

RETIREES WORKING UNDER 18K AT STATE COLLEGES/UNIVS (EMPLOYER CODE = 2000)
PRIS--State colleges/univs/--Instructor at a state school - Calendar Year 2021--Report dtd -12-01-2021

First Name	Initial	Last Name	Employer Code	Employer	Title/Function	Earnings	Footnote
BRUNA	M	BOYLE	2000	URI	PRIS	\$ 18,784.26	At limit--verifying data
MARIE	H	BAGUCHINSKY	2000	URI	PRIS	\$ 17,351.27	Close to limit
WILLIAM	T	BEHREND JR	2000	URI	PRIS	\$ 17,265.77	Close to limit
MICHAEL	W	WESTKOTT	2000	URI	PRIS	\$ 16,664.10	Close to limit
MANUEL	E	GRACE	2000	CCRI	PRIS	\$ 15,526.40	Close to limit
DAVID		NEVES	2000	URI	PRIS	\$ 15,156.12	Close to limit
NORMAN	P	FORTIN	2000	URI	PRIS	\$ 13,185.00	
RICHARD	G	SWEARINGEN	2000	CCRI	PRIS	\$ 12,753.40	
CHARLES		STIMPSON	2000	CCRI	PRIS	\$ 12,311.40	
GAIL	S	O'ROURKE	2000	CCRI	PRIS	\$ 11,500.50	
ANDREW		EGAN	2000	CCRI	PRIS	\$ 9,564.20	
PAUL	B	CARTY	2000	CCRI	PRIS	\$ 9,254.00	
ALFRED	R	CRUDALE	2000	URI	PRIS	\$ 8,392.13	
JOHN ALAN	A	LONGIARU	2000	CCRI	PRIS	\$ 7,684.35	
PETER	J	PETRONE	2000	CCRI	PRIS	\$ 6,378.40	
MICHELLE		BROUSSEAU	2000	CCRI	PRIS	\$ 6,376.70	
PATRICIA	A	ROSE	2000	CCRI	PRIS	\$ 6,326.94	
DONNA M		PATCH	2000	CCRI	PRIS	\$ 6,287.76	
ALFRED	L	PERROTTI	2000	CCRI	PRIS	\$ 6,246.87	
ANDRES	R	ZUNIGA	2000	CCRI	PRIS	\$ 5,045.70	
CAROL	A	SPAZIANO	2000	CCRI	PRIS	\$ 4,260.20	
JO-ANN		PHILLIPS	2000	URI	PRIS	\$ 4,252.62	
GARY	C	COMUNALE	2000	URI	PRIS	\$ 3,367.57	
BRIGID	A	BALBONI	2000	CCRI	PRIS	\$ 3,189.20	
GEORGE		PAGE	2000	CCRI	PRIS	\$ 3,189.20	
GERALD		SILBERMAN	2000	CCRI	PRIS	\$ 3,189.20	
JAMES	V	STRAVATO	2000	CCRI	PRIS	\$ 3,189.20	
SUSAN	L	HAWKSLEY	2000	CCRI	PRIS	\$ 3,189.20	
LAWRENCE	P	BYRNE	2000	CCRI	PRIS	\$ 3,187.50	
LORRAINE	E	BELLO	2000	CCRI	PRIS	\$ 2,985.20	
DAVID	C	MARANDOLA	2000	CCRI	PRIS	\$ 2,358.11	
KARIN	E	LUKOWICZ	2000	CCRI	PRIS	\$ 2,054.96	
RAYMOND	M	MEDEIROS	2000	CCRI	PRIS	\$ 1,856.40	

RETIREES WORKING UNDER 18K AT STATE COLLEGES/UNIVS (EMPLOYER CODE = 2000)
PRIS--State colleges/univs/--Instructor at a state school - Calendar Year 2021--Report dtd -12-01-2021

First Name	Initial	Last Name	Employer Code	Employer	Title/Function	Earnings	Footnote
KIRK		LAMBOY	2000	CCRI	PRIS	\$ 1,643.72	
JAMES	E	GUARINO	2000	CCRI	PRIS	\$ 1,489.59	
RICHARD	J	BENEDUCE	2000	CCRI	PRIS	\$ 655.05	
WILLIAM	A	TRIBELLI	2000	CCRI	PRIS	\$ 519.82	
PAUL	C	MELARAGNO	2000	CCRI	PRIS	\$ 448.18	
WENDY		ARONOFF	2000	CCRI	PRIS	\$ 254.33	

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

PRDE--State colleges/univs/ - Calendar Year 2021--Report dtd -12-02-2021

First Name	Initial	Last Name	Employer Code	Employer	Title/Function	Earnings	Footnote
KATHLEEN	D	HUDSON	2000	CCRI	PRDE	\$ 14,350.29	Close to limit
PETER	V	RIVELLI	2000	CCRI	PRDE	\$ 12,945.78	Close to limit
KATHLEEN		CRESCENZO	2000	CCRI	PRDE	\$ 3,908.16	
DAYUS		METTS	2000	CCRI	PRDE	\$ 1,384.14	

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State of Rhode Island

Daniel J. McKee
Governor

EXECUTIVE ORDER

21-111

November 19, 2021

EXTENSION OF EXECUTIVE ORDERS 21-89 AND 21-90

WHEREAS, on March 9, 2020, Executive Order 20-02 was issued for a declaration of a state of emergency due to the dangers to health and life posed by COVID-19 and that Order has been extended through at least November 27, 2021;

WHEREAS, on November 12, 2021, I issued Executive Order 21-109 affirming the disaster emergency for new COVID-19 variants that was first declared on August 19, 2021;

WHEREAS, on August 26, 2021, I issued Executive Order 21-89 increasing State response capacity for Covid-19 variants and that Order has been extended through at least November 20, 2021; and

WHEREAS, on August 26, 2021, I issued Executive Order 21-90 on student transportation order and that Order has been extended through at least November 20, 2021.

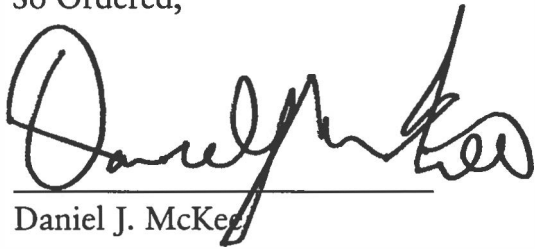
NOW, THEREFORE, I, DANIEL J. MCKEE, by virtue of the authority vested in me as Governor of the State of Rhode Island, pursuant to Article IX of the Rhode Island

Constitution and the Rhode Island General Laws, including, but not limited to, Title 30, Chapter 15, and Title 23, Chapter 8, do hereby extend the following Executive Orders:

1. Executive Order 21-89 (Increasing State Response Capacity for Covid-19 Variants).
2. Executive Order 21-90 (Student Transportation Order).

This Order shall take effect immediately and remain in full force and effect through December 18, 2021, unless renewed, modified or terminated by a subsequent Executive Order.

So Ordered,

A handwritten signature in black ink, appearing to read "Daniel J. McKee", is written over a horizontal line.

Daniel J. McKee
Governor

Memorandum

To: Frank Karpinski, Executive Director, Employees' Retirement System of RI

From: Jacqueline G. Kelley, Associate Director (Dept. of Administration on loan to the Dept. Of Health)

Re: Executive Order 20-37 and 20-54

Cc: Gayle Mambro-Martin, Cindy Flores

Date: December 10, 2021

The initial Executive Order regarding retirees continues to be extended by the Governor's Office. Below is the list of retirees who fall under this Executive Order and should not have impacts upon their respective pensions:

Susan Darby
Sandra Delack
Robert Farley
Wayne Hannon
Bernadette McDowell
Deborah Vannoy

The skills, training, and knowledge of the retirees being re-employed by the RI Dept. of Health have played a vital role in the COVID19 response. Supplemental staffing of nurses with knowledge of infectious diseases, conversant with the handling of pandemics, and availability has been and remains crucial to the appropriate addressing of this pandemic

Thank you and your staff for your assistance with this process and your cooperation. If there is any additional information that I can provide, please advise. Thank you.

SECRETARY OF STATE
PUBLIC INFORMATION
CENTER

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State of Rhode Island

Daniel J. McKee
Governor

EXECUTIVE ORDER

21-113

December 1, 2021

INCREASING ACCESS TO UNEMPLOYMENT INSURANCE

WHEREAS, on March 9, 2020, Executive Order 20-02 was issued for a declaration of a state of emergency due to the dangers to health and life posed by COVID-19, and that Order has been extended through at least December 23, 2021;

WHEREAS, on November 12, 2021, I issued Executive Order 21-109 affirming the disaster emergency that was first declared on August 19, 2021 for new COVID-19 variants;

WHEREAS, under the state of emergency, the State has been experiencing an unprecedented level of unemployment claims as well as other related issues and seeks to pay qualifying claims as soon as possible;

WHEREAS, as a result of this emergency, it may be advisable to call upon the knowledge, skills and expertise of certain Rhode Island Department of Labor and Training (DLT) workers and to bring them back into active state service;

WHEREAS, Rhode Island General Laws § 36-10-36 provides for the suspension of pension benefits of retirees who have retired under the provisions of titles 16 or 36 who return to state service;

WHEREAS, retirees who may have critical skills necessary to address this public health emergency may be reluctant to re-enter state service if their pension benefits will thereby be suspended; and

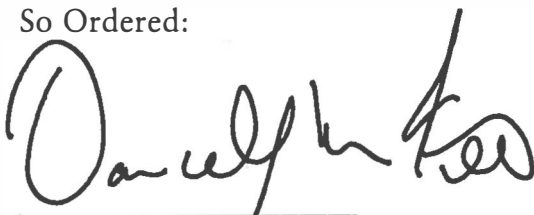
WHEREAS, it is advisable to remove any disincentive to re-employment of skilled and knowledgeable retirees by the state for limited periods and for limited personnel in order to address this health emergency.

NOW, THEREFORE, I, DANIEL J. MCKEE, by virtue of the authority vested in me as Governor of the State of Rhode Island, pursuant to Article IX of the Rhode Island Constitution and the Rhode Island General Laws, including, but not limited to, Title 30, Chapter 15, do hereby order and direct the following:

1. The prohibitions and restrictions on post-retirement employment by persons who have retired under the provisions of titles 16, 36 or 45 which are contained in Rhode Island General Laws§ 36-10-36, are hereby suspended with respect to those specific retirees identified by DLT, provided that with respect to each such retiree identified as possessing skills, training or knowledge necessary to address the public health crisis engendered by COVID-19, DLT executes and delivers to the State Retirement Board of the Employees Retirement System of the State of Rhode Island and the Municipal Employees Retirement System of the State of Rhode Island a written certification that the re-employment is of finite duration and is necessitated by the good faith belief that the skills, training or knowledge of the retiree are needed to address the public health crisis caused by COVID-19.

This Order, effective as of November 28, 2021, shall remain in full force and effect through December 27, 2021 unless renewed, modified or terminated by a subsequent Executive Order.

So Ordered:

A handwritten signature in black ink, appearing to read "Daniel J. McKee", written over a horizontal line.

Daniel J. McKee
Governor



STATE OF RHODE ISLAND

Department of Labor and Training

Center General Complex
1511 Pontiac Avenue
Cranston, RI 02920-4407

Telephone: (401) 462-8000
TTY: Via RI Relay 711

Daniel J. McKee
Governor
Matthew D. Weldon
Director

December 7, 2021

Mr. Frank Karpinski
Executive Director
Employees Retirement System of RI
50 Service Avenue
Warwick, RI 02886

Dear Mr. Karpinski:

On December 1, 2021 the Governor signed an Executive Order 21-113 that allows the Department to bring back retirees to address the demand created by the COVID-19 pandemic. Governor McKee has extended this Executive Order to December 27, 2021.

I certify that the skills, training and knowledge of the retiree being re-employed by the Rhode Island Department of Labor & Training (DLT) are due to the need created by the COVID-19 crisis and the duration of such re-employment shall be effective from December 1, 2021 to December 27, 2021.

The following is the name of the returning retiree:

Patricia O'Connor


Sue Trocina

William Harrington

The Department may seek an extension for the suspension of retiree pension benefits to allow for continued employment based on claim load demands.

Should you need any further information, please contact me.

Sincerely,



Matthew D. Weldon
Director


CC: LeeAnn Byrne – Treasurer's Office


Employees' Retirement System of Rhode Island





10.2. Report of Contributions


For Report

		Employees' Retirement System of Rhode Island			
		Report of Received Contributions			
		Period Ending: 10/31/2021			
Organization		Frequency	Received Employer/Employee Contributions	Delinquent Contributions	Delinquent Loss/Earnings Calculation
1001	Barrington Public Schools	BIWK	\$301,706.52		
1007	Barrington COLA Non-Certified	BIWK	\$36,656.56		
1009	Barrington COLA Group	BIWK	\$28,472.38		
1012	Town of Bristol	BIWK	\$10,740.39		
1014	Bristol Police Department	BIWK	\$12,688.06		
1016	Bristol Housing Authority	WKLY	\$2,161.24		
1019	Town of Bristol EE Highway	BIWK	\$9,249.41		
1021	Bristol Warren Reg. School District	BIWK	\$177,878.20		
1023	Bristol Warren Reg. School District (NC)	BIWK	\$23,931.97		
1031	Burrillville School Department	BIWK	\$117,053.00		
1032	Town of Burrillville	BIWK	\$17,005.63		
1033	Burrillville School Department (NC)	BIWK	\$12,805.53		
1036	Burrillville Housing Authority	WKLY	\$1,122.08		
1052	City of Central Falls	BIWK	\$9,842.61		
1056	Central Falls Housing Authority	WKLY	\$5,094.80		
1061	Central Falls Collaborative	BIWK	\$165,447.02	^	\$7,046.38
1063	Central Falls School District (NC)	BIWK	\$26,320.72	^	\$3,592.61
1071	Charlho Regional School District	BIWK	\$122,812.48		
1073	Charlho Regional School District (NC)	BIWK	\$26,759.49		
1082	Town of Charlestown	BIWK	\$12,432.39		
1091	Coventry Public Schools	BIWK	\$394,787.54		
1095	Coventry Fire District	BIWK	\$2,553.08		
1096	Coventry Housing Authority	BIWK	\$5,061.54		
1098	Coventry Lighting District	BIWK	\$222.74		
1111	Cranston School Department	BIWK	\$724,137.33		
1112	City of Cranston	BIWK	\$64,507.61		
1113	Cranston School Department (NC)	BIWK	\$75,015.81		
1114	Cranston Police Department	BIWK	\$77,822.60	*	
1115	Cranston Fire Department	BIWK	\$112,437.76	*	
1116	Cranston Housing Authority	BIWK	\$4,732.69		
1121	Cumberland School Department	BIWK	\$393,954.71		
1122	Town of Cumberland	BIWK	\$25,302.83		
1123	Cumberland School Department (NC)	BIWK	\$37,204.80		
1126	Cumberland Housing Authority	WKLY	\$3,006.32		
1151	East Greenwich School Department	BIWK	\$158,133.43		
1152	Town of East Greenwich	WKLY	\$5,725.68		
1153	East Greenwich School District (NC)	BIWK	\$2,119.38		
1156	East Greenwich Housing Authority	BIWK	\$2,076.62		
1157	East Greenwich - COLA	WKLY	\$10,467.40		
1158	East Greenwich - COLA - NC	BIWK	\$15,532.81		
1159	East Greenwich Fire District (NC)	WKLY	\$191.56		
1161	East Providence School Department	BIWK	\$291,078.90		
1162	City of East Providence	BIWK	\$49,480.65		
1163	East Providence School Department (NC)	BIWK	\$40,847.21		
1166	East Providence Housing Authority	WKLY	\$3,619.79		

		Employees' Retirement System of Rhode Island			
		Report of Received Contributions			
		Period Ending: 10/31/2021			
	Organization	Frequency	Received Employer/Employee Contributions	Delinquent Contributions	Delinquent Loss/Earnings Calculation
1181	Exeter/West Greenwich Reg. School Department	BIWK	\$59,642.69		
1183	Exeter/West Greenwich Reg. School Department (NC)	BIWK	\$15,751.17		
1191	Foster School District	BIWK	\$12,946.60		
1192	Town of Foster	WKLY	\$3,472.43		
1193	Foster School District (NC)	BIWK	\$2,524.19		
1201	Foster/Glocester Reg. School District	BIWK	\$80,498.09		
1203	Foster/Glocester Reg. School District (NC)	BIWK	\$13,613.85		
1211	Glocester School District	BIWK	\$23,016.08		
1212	Town of Glocester	BIWK	\$8,575.70		
1213	Glocester School District (NC)	BIWK	\$5,921.66		
1227	Greenville Water District	WKLY	\$2,291.25		
1242	Hope Valley-Wyoming Fire District	BIWK	\$801.44		
1255	Hopkins Hill Fire Department	BIWK	\$6,383.72		
1262	Town of Hopkinton	BIWK	\$8,775.78		
1271	Jamestown School Department	BIWK	\$21,659.34		
1272	Town of Jamestown	BIWK	\$13,182.94		
1273	Jamestown School Department (NC)	BIWK	\$6,608.84		
1281	Johnston School Department	BIWK	\$92,264.57		
1282	Town of Johnston	BIWK	\$16,788.71		
1283	Johnston School Department (NC)	BIWK	\$8,634.39		
1286	Johnston Housing Authority	WKLY	\$3,190.16		
1293	Limerock Adm. Services	WKLY	\$314.75		
1301	Lincoln School Department	BIWK	\$198,050.13		
1302	Town of Lincoln	BIWK	\$3,128.12		
1303	Lincoln School Department (NC)	BIWK	\$1,041.08		
1306	Lincoln Housing Authority	BIWK	\$1,471.13		
1311	Little Compton School Department	BIWK	\$21,965.55		
1321	Middletown Public Schools	BIWK	\$144,213.21		
1322	Town of Middletown	BIWK	\$9,828.99		
1323	Middletown Public School Department (NC)	BIWK	\$12,033.91		
1331	Narragansett School Department	BIWK	\$58,957.54		
1336	Narragansett Housing Authority	MNLY	\$1,138.87		
1341	New Shoreham School District	BIWK	\$16,325.61		
1342	Town of New Shoreham	BIWK	\$15,524.89		
1343	New Shoreham School District (NC)	BIWK	\$4,166.91		
1351	Newport School Department	BIWK	\$174,392.24		
1352	City of Newport	BIWK	\$63,946.60		
1353	Newport School Department (NC)	BIWK	\$21,980.98		
1354	City of Newport - Monthly	MNLY	\$21.67		
1356	Newport Housing Authority	WKLY	\$6,424.18		
1364	Newport Police Department	BIWK	\$7,620.36		
1371	North Kingstown School Department	BIWK	\$149,079.53		
1372	Town of North Kingstown	BIWK	\$31,253.53		
1373	North Kingstown School Department (NC)	BIWK	\$31,795.24		
1381	North Providence School Department	BIWK	\$172,897.77		
1382	Town of North Providence	BIWK	\$36,664.12		
1383	North Providence School Department (NC)	BIWK	\$25,173.95		

		Employees' Retirement System of Rhode Island				
		Report of Received Contributions				
		Period Ending: 10/31/2021				
Organization		Frequency	Received Employer/Employee Contributions	Delinquent Contributions	Delinquent Loss/Earnings Calculation	
1386	North Providence Housing Authority	BIWK	\$1,339.39			
1391	North Smithfield School Department	BIWK	\$100,159.86			

		Employees' Retirement System of Rhode Island			
		Report of Received Contributions			
		Period Ending: 10/31/2021			
Organization		Frequency	Received Employer/Employee Contributions	Delinquent Contributions	Delinquent Loss/Earnings Calculation
1392	Town of North Smithfield	BIWK	\$10,338.55		
1393	North Smithfield School Department (NC)	BIWK	\$10,653.44		
1401	Northern Rhode Island Collaborative	BIWK	\$23,710.47		
1403	Northern Rhode Island Collaborative (NC)	BIWK	\$10,401.93		
1411	Pawtucket School Department	BIWK	\$345,477.17		
1412	City of Pawtucket	WKLY	\$55,008.13		
1413	Pawtucket School Department (NC)	BIWK	\$41,121.24		
1416	Pawtucket Housing Authority	WKLY	\$11,992.85		
1421	Portsmouth School Department	BIWK	\$138,683.06		
1441	Providence School Department	BIWK	\$678,921.32		
1447	Providence School Department Long Term Subs	WKLY	\$6,622.83		
1448	Providence School Department - 12 Month Bi-Weekly	BIWK	\$65,322.30		
1452	Town of Richmond	BIWK	\$9,413.43		
1461	Scituate School Department	BIWK	\$84,878.55		
1462	Town of Scituate	BIWK	\$7,877.12		
1463	Scituate School Department (NC)	BIWK	\$10,219.03		
1471	Smithfield School Department	BIWK	\$144,144.99		
1473	Smithfield School Department (NC)	BIWK	\$17,137.70		
1476	Smithfield Housing Authority	BIWK	\$773.13		
1478	Town of Smithfield (COLA)	WKLY	\$17,216.56		
1491	South Kingstown School Department	BIWK	\$125,092.65		
1492	Town of South Kingstown	BIWK	\$35,322.37		
1493	South Kingstown School Department (NC)	BIWK	\$22,055.36		
1496	South Kingstown Housing Authority	WKLY	\$1,037.04		
1515	Union Fire District	BIWK	\$903.85		
1531	Tiverton School Department	BIWK	\$98,998.00		
1532	Town of Tiverton	BIWK	\$6,791.28		
1533	Tiverton School Department (NC)	BIWK	\$13,036.14		
1538	Tiverton Local 2670A	BIWK	\$5,587.40		
1541	Urban Collaborative Schools	BIWK	\$4,240.06		
1562	Town of Warren	BIWK	\$10,431.94		
1566	Warren Housing Authority	BIWK	\$2,142.32		
1571	Warwick School Department	BIWK	\$343,151.07		
1591	West Bay Collaborative	BIWK	\$7,058.72		
1602	Town of West Greenwich	WKLY	\$5,827.51		
1611	West Warwick School Department	BIWK	\$186,044.78		
1616	West Warwick Housing Authority	BIWK	\$3,014.07		
1621	Westerly School Department	BIWK	\$254,925.50		
1631	Woonsocket School Department	BIWK	\$202,153.48		
1632	City of Woonsocket	BIWK	\$49,773.83		
1633	Woonsocket School Department (NC)	BIWK	\$35,476.81		
1634	Woonsocket Police Department	WKLY	\$74,361.67		

		Employees' Retirement System of Rhode Island			
		Report of Received Contributions			
		Period Ending: 10/31/2021			
Organization		Frequency	Received Employer/Employee Contributions	Delinquent Contributions	Delinquent Loss/Earnings Calculation
1635	Woonsocket Fire Department	BIWK	\$80,853.62		
1641	Highlander Charter School	SMON	\$19,402.50		
1651	Paul Cuffee School	BIWK	\$41,399.28		
1661	Kingston Hill Academy School	BIWK	\$11,064.22		
1671	International Charter School	BIWK	\$21,888.18		
1681	The Compass School	SMON	\$7,384.89		
1691	Blackstone Academy Charter School, Inc.	SMON	\$16,223.43		
1701	Beacon Charter School of Woonsocket	SMON	\$19,493.98		
1711	The Learning Community Charter School	BIWK	\$18,862.54		
1712	Harrisville Fire District - Municipal	WKLY	\$872.84		
1721	Segue Institute of Learning	BIWK	\$6,537.17		
1731	The Greene School	BIWK			
1741	Trinity Academy	SMON	\$7,615.39		
1751	RI Nurses Institute	SMON	\$9,585.74		
1761	The Village Green Virtual Charter School	SMON	\$12,682.50		
1771	Nowell Leadership Academy	BIWK	\$10,927.26		
1781	South Side Elementary Charter School	BIWK	\$3,819.00		
1791	Charette Charter School	SMON	\$3,416.57		
2000	State	BIWK	\$3,971,804.72		
2100	R.I. Airport Corporation	BIWK			
2300	Narragansett Bay Commission	BIWK	\$36,545.01		
	Central Falls Police	BIWK	\$3,131.58		
			\$12,818,505.05		
	Column Definitions:				
	Frequency = BIWK = Bi-Weekly; WKLY = Weekly; SMON = Semi-Monthly				
	Received Employer/Employee contributions = Contributions received during the reporting period				
	* Cranston Police and Fire have not withheld DC plan contributions on holiday and longevity payments for its MERS police officers and holiday payments for its firefighters.				
	The City may be liable for loss earnings to employees for delayed contributions. Amounts due are currently under analysis.				
	^ Central Falls School Department has determined that the three employees (previously in question) are eligible to participate in the defined contribution plan. The CFSD is working with TIAA-CREF to calculate and post the required contributions for the prior periods. Once the contributions are posted TIAA-CREF will prepare a lost earnings calculation.				



Employees' Retirement System of Rhode Island

Employer Aging
Period Ending: 10/15/21

	Organization	Employer Group	Balance as of 10/15/2021	0 - 30 days Due under 30	30 - 60 days Due over 30	60 - 90 days Due over 60	90 + days	Comments
1001	Barrington School Department	ERS	204,200.97	0.00	(158.52)	0.00	(334.29)	
1031	Burrillville School Department	ERS	653.77	653.77	0.00	0.00	0.00	
1161	East Providence School Department	ERS	354,236.39	0.00	2,000.00	(1,446.64)	0.00	
1311	Little Compton School Department	ERS	195.00	0.00	0.00	0.00	0.00	
1351	Newport School Department	ERS	0.00	0.00	0.00	0.00	0.00	
1381	North Providence School Department	ERS	212,761.76	0.00	(240.43)	0.00	0.00	
1391	North Smithfield School Department	ERS	104,880.97	0.00	0.00	0.00	0.00	
1401	Northern RI Collaborative	ERS	15,226.56	0.00	0.00	0.00	0.00	
1448	Providence School Department 12	ERS	136.36	0.00	0.00	0.00	0.00	
1471	Smithfield School Department	ERS	155,556.89	0.00	0.00	0.00	0.00	
1491	South Kingstown School Department	ERS	211,360.02	0.00	0.00	0.00	0.00	
1571	Warwick School Department	ERS	635,219.35	(10.89)	0.00	0.00	0.00	
1651	Paul Cuffee School	ERS	223,977.14	0.00	0.00	0.00	0.00	
1671	International Charter School	ERS	33,695.77	0.00	0.00	0.00	0.00	
1731	The Greene School	ERS	0.80	0.80	0.00	0.00	0.00	
1771	Sheila C. Nowell Leadership Academy	ERS	10,717.87	0.00	0.00	0.00	0.00	
1901	Providence Preparatory Charter School	ERS	58,104.91	50,105.22	7,999.69	0.00	0.00	
2200	Economic Development Corporation	ERS	1,531.72	0.00	0.00	0.00	0.00	
Grand total			2,222,456.25	50,748.90	9,600.74	(1,446.64)	(334.29)	
			100.00%	2.28%	0.43%	-0.07%	-0.02%	



Employees' Retirement System of Rhode Island

Employer Aging
Period Ending: 10/15/21

	Organization	Employer Group	Balance as of 10/15/2021	0 - 30 days Due under 30	30 - 60 days Due over 30	60 - 90 days Due over 60	90 + days	Comments
1004	Barrington Police Department	MERS	30,104.50	0.00	0.00	0.00	0.00	
1007	Barrington School Department Non-Certified Employees - COLA	MERS	26,796.39	0.00	0.00	0.00	0.00	
1008	Barrington Fire Department (25 Year Plan)	MERS	15,648.56	0.00	0.00	0.00	0.00	
1009	Barrington DPW	MERS	22,631.41	0.00	0.00	0.00	0.00	
1023	Bristol/Warren Regional School Department Non-Certified Employees	MERS	35,740.16	0.00	36,884.78	0.00	(1,144.62)	
1045	Central Coventry Fire Department	MERS	15,530.91	0.00	0.00	0.00	0.00	
1122	Town of Cumberland	MERS	30,642.97	0.00	0.00	(0.40)	28.11	
1148	Cumberland Rescue	MERS	11,778.62	0.00	0.00	0.00	1,445.16	
1155	East Greenwich Fire District	MERS	18,408.60	0.00	0.00	0.00	0.00	
1163	East Providence School Department Non-Certified Employees	MERS	80,763.77	0.00	456.15	(1,021.61)	0.00	
1166	East Providence Housing Authority	MERS	2,107.48	0.00	0.00	0.00	0.00	
1242	Hope Valley/Wyoming Fire District	MERS	400.74	0.00	0.00	0.00	0.00	
1262	Town of Hopkinton	MERS	7,302.02	0.00	0.00	0.00	0.00	
1264	Hopkinton Police Department	MERS	34,655.17	0.00	0.00	0.00	0.00	
1286	Johnston Housing Authority	MERS	1,561.23	0.00	0.00	0.00	0.00	
1295	Limerock Fire District	MERS	21,570.53	0.00	0.00	0.00	0.00	
1302	Town of Lincoln	MERS	2,901.66	0.00	0.00	0.00	(335.98)	
1305	Lincoln Rescue	MERS	7,243.00	0.00	2,628.58	0.00	(9,024.66)	
1342	Town of New Shoreham	MERS	8,081.84	0.00	0.00	0.00	(2.59)	
1344	New Shoreham Police Department	MERS	5,447.58	0.00	0.00	0.00	0.00	
1352	City of Newport	MERS	95,252.54	0.00	0.00	0.00	0.00	
1354	City of Newport - Monthly	MERS	77.06	0.00	0.00	0.00	0.12	
1356	Newport Housing Authority	MERS	5,847.60	0.00	0.00	0.00	0.00	
1364	Newport Police Department	MERS	11,056.94	0.00	0.00	0.00	0.00	
1382	Town of North Providence	MERS	17,729.36	0.00	0.00	0.00	0.00	
1383	North Providence School Department Non-Certified Employees	MERS	10,397.07	0.00	0.00	0.00	0.00	
1385	North Providence Fire Department	MERS	87,776.73	0.00	0.00	0.00	0.00	



Employees' Retirement System of Rhode Island

Employer Aging
Period Ending: 10/15/21

1393	North Smithfield School Non-Certified Employees	MERS	7,970.76	0.00	0.00	0.00	0.00	
1395	North Smithfield Volunteer Fire Department	MERS	0.01	0.00	0.00	0.00	0.01	
1403	Northern RI Collaborative Non-Certified Employees	MERS	4,939.56	0.00	0.00	0.00	0.00	
1413	Pawtucket School Department Non-Certified Employees	MERS	280.09	0.00	(2.40)	(308.64)	0.00	
1416	Pawtucket Housing Authority	MERS	1,752.98	0.00	0.00	0.00	0.00	
1462	Town of Scituate	MERS	519.35	0.00	0.00	0.00	519.35	
1463	Scituate School Department Non-Certified Employees	MERS	21.10	0.00	0.00	0.00	21.10	
1465	Smithfield Fire Department	MERS	7,852.82	0.00	0.00	0.00	0.00	
1473	Smithfield School Department Non-Certified Employees	MERS	17,696.02	0.00	0.00	0.00	0.00	
1474	Smithfield Police Department	MERS	14,954.96	0.00	0.00	0.00	0.00	
1476	Smithfield Housing Authority	MERS	52.00	0.00	0.00	0.00	(301.77)	
1478	Town of Smithfield (COLA)	MERS	11,493.86	0.00	0.00	0.00	0.00	
1492	Town of South Kingstown	MERS	46,829.19	0.00	0.00	0.00	0.00	
1493	South Kingstown School Department Non-Certified Employees	MERS	29,386.62	0.00	0.00	0.00	0.00	
1494	South Kingstown Police Department	MERS	55,991.53	0.00	0.00	0.00	0.00	
1505	South Kingstown EMT	MERS	5,431.62	0.00	0.00	0.00	0.00	
1616	West Warwick Housing Authority	MERS	2,912.70	0.00	0.00	0.00	0.00	
1705	Albion Fire District	MERS	3,160.67	0.00	0.00	0.00	0.00	
1805	Pascoag Fire District	MERS	1,820.45	0.00	0.00	0.00	(0.22)	
1815	Saylesville Fire Department	MERS	29.01	0.00	0.00	0.00	29.01	
Grand total			820,549.74	0.00	39,967.11	(1,330.65)	(8,766.98)	
			100.00%	0.00%	4.87%	-0.16%	-1.07%	

Employees' Retirement System of Rhode Island



10.3. State Investment Commission (SIC)

For Report

MONTHLY PERFORMANCE REPORT - (NET)

State of Rhode Island Pension Plan

September 30, 2021

Will Forde, CFA, CAIA, Principal

Douglas W. Moseley, Partner

Brendan Heaney, CFA, Senior Analyst



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

SIC MEETING AGENDA AND MINUTES

NEPC, LLC



State of Rhode Island
Office of the General Treasurer

Seth Magaziner
General Treasurer

RHODE ISLAND STATE INVESTMENT COMMISSION MEETING NOTICE

The next meeting of the Rhode Island State Investment Commission has been scheduled for Wednesday, October 27th, 2021 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: 872 0233 6394; link: <https://bit.ly/3B2YG4Q>].**

AGENDA

- Chairperson Call to Order
- Membership Roll Call
- Appointment of Interim Chair ¹
- Approval of Draft Meeting Minutes ¹
 - State Investment Commission Meeting held August 25th, 2021
- Private Equity Recommendation, Clearlake Opportunities Fund III, L.P. ¹
 - Jon Popielarski, Staff
 - Tom Lynch, Cliffwater
- Lenox Park Annual Diversity, Equity & Inclusion Review
 - Jason Lamin & Chris Finley, Lenox Park Solutions
- Foreign Withholding Tax Recovery Provider Recommendation, WTax ¹
 - Andrew Junkin, Staff
- Liquid Credit Mandate Adjustments, PIMCO and Loomis Sayles ¹
 - Justin Maistrow, Staff
- Legal Counsel Report
- Chief Investment Officer Report



State of Rhode Island
Office of the General Treasurer

Seth Magaziner
General Treasurer

¹Commission members may be asked to vote on this item.

POSTED ON OCTOBER 22, 2021

Anyone wishing to attend this meeting who may have special needs for access or services such as an interpreter, please contact Justin Maistrow at (401) 574-9246 twenty-four hours in advance of the scheduled meeting.



State Investment Commission

Monthly Meeting Minutes

Wednesday, August 25th, 2021

9:00 a.m.

Executive Conference Room, Department of Administration

[dial-in: +1 312 626 6799, Webinar ID: 838 1660 3431; link: <https://bit.ly/3z2HTyO>]

The Monthly Meeting of the State Investment Commission (“SIC”) was called to order at 9:03 AM, Wednesday, August 25th, 2021, in the Executive Conference Room, Department of Administration.

I. Roll Call of Members

The following members were present, Mr. Frank Karpinski, Ms. Sylvia Maxfield, Ms. Karen Hammond, Mr. Michael Costello, Ms. Karen Hazard, Mr. Erik Carleton, Mr. Al Cumplido, Mr. Thomas Fay, Mr. Jim Thorsen¹, and Treasurer Seth Magaziner.

Also in attendance: Bob McClain, Brice Hafner, Cyndy Silverthorn, Mr. Matt Holberton, and Mr. Nathan Schubert, Crow Holdings; Ms. Tiffany Spudich, Capital Cities; Mr. Thomas Lynch, Cliffwater; Mr. Colin Hill and Mr. David Glickman, Meketa; Mr. Matthew Waters, Adler Pollock & Sheehan, legal counsel; Mr. Andrew Junkin, Chief Investment Officer; Mr. Jon Popielarski, Director of Private Assets; Mr. Justin Maistrow, Senior Investment Strategist; Ms. Kimberly Shockley, Defined Contribution Program Administrator; Mr. Saul Ioffe, Senior Investment Analyst; and other members of the Treasurer’s Staff.

Treasurer Magaziner called the meeting to order at 9:03 AM.

II. Approval of Minutes

On a motion by Mr. Thomas Fay and seconded by Mr. Erik Carleton, it was **VOTED²: to approve the draft meeting minutes of the July 28th, 2021, meeting of the State Investment Commission.**

III. Non-Core Real Estate Recommendation, Crow Holdings Realty Partners IX, L.P.

Mr. Justin Maistrow, Senior Investment Strategist, provided a brief introduction of Crow Holdings and noted that ERSRI had previously committed to a Crow-managed fund. Mr. Maistrow described the fit of Crow Holdings Realty Partners IX, L.P. (Crow IX) within ERSRI’s Non-Core Real Estate allocation, noting that the fund targets value-added investments. Mr. Maistrow highlighted Crow Holdings’ expertise in a broad set of diversified real estate sectors, including several niche markets. Mr. Maistrow concluded by highlighting the strong reputation of

¹ Mr. Jim Thorsen entered the meeting at 9:14 am. His temporary absence did not affect quorum.

² Mr. Jim Thorsen was not yet in attendance and therefore did not vote. His temporary absence did not affect quorum.

Crow Holdings' highly experienced real estate investment staff and their successful execution of a value-add strategy over twenty years.

Five members of Crow Holdings presented to the State Investment Commission. Mr. Bob McClain, Crow Holdings, discussed Crow IX's portfolio construction and provided detail regarding the fund's particular focus on industrial and apartment property types. Mr. McClain emphasized the consistent performance of Crow Holdings' previous funds. Ms. Cindy Silverthorn, Crow Holdings, discussed Crow Holdings' alignment with its partners. Mr. Nathan Schubert, Crow Holdings, highlighted the fund's intention to seek out properties that provide consistent returns and to reduce exposure to more volatile property types. Mr. Brice Hafner, Crow Holdings, described current real estate market conditions. Mr. Matt Holberton, Crow Holdings, reviewed the fund's terms.

Mr. David Glickman and Mr. Colin Hill, Meketa, reiterated the recommendation for a commitment to Crow IX. Mr. Glickman detailed the fund's terms.

The Board asked questions.

On a motion by Mr. Jim Thorsen and seconded by Mr. Michael Costello, it was **VOTED³: that the Rhode Island Employees Retirement Systems Pooled Trust make a commitment of up to \$40 million to Crow Holdings Realty Partners IX, L.P.**

IV. Private Equity Recommendation, The Baring Asia Private Equity Fund VIII, L.P.

Mr. Jon Popielarski, Director of Private Assets, introduced The Baring Asia Private Equity Fund VIII, L.P. Mr. Popielarski noted Baring's diversification across Asia and its core focus sector. Mr. Popielarski emphasized Baring's regional teams which provide on-the-ground presence in several Asian countries, complemented by a centralized investment committee which maintains portfolio construction. Mr. Popielarski concluded that The Baring Asia Private Equity Fund VIII, L.P. can create value-add through control deals, large team size, and cross-border abilities.

Mr. Thomas Lynch, Cliffwater, emphasized the recommendation and noted Baring's extensive experience and resources in major Asian markets. Mr. Lynch highlighted Baring's sourcing strategies and its focus on exits within deals. Mr. Lynch reviewed previous Baring successes and outlined the terms of The Baring Asia Private Equity Fund VIII, L.P.

The Board asked questions.

On a motion by Ms. Sylvia Maxfield and seconded by Mr. Al Cumplido, it was unanimously **VOTED: that the Rhode Island Employees Retirement Systems Pooled Trust make a commitment of up to \$50 million to The Baring Asia Private Equity Fund VIII, L.P.**

V. Private Equity Recommendation, Industry Ventures Partnership Holdings VI, L.P.

³ Mr. Erik Carleton recused himself from the vote on Crow Holdings Realty Partners IX, L.P.

Mr. Jon Popielarski, Director of Private Assets, discussed recommendation of a commitment to Industry Ventures Partnership Holdings VI, L.P. and summarized ERSRI's prior commitments to Industry Ventures funds. Mr. Popielarski provided an overview of ERSRI's historical approach to venture capital investing and described the strategy of Industry Ventures Partnership Holdings VI, L.P. Mr. Popielarski noted the fund's ability to identify early-stage emerging groups, as well as its involvement in secondary investments.

Mr. Thomas Lynch, Cliffwater, reiterated the recommendation, and highlighted Industry Ventures' experience, including its strong network, additive strategy, and history of generating realizations.

The Board asked questions.

On a motion by Ms. Karen Hammond and seconded by Mr. Al Cumplido, it was unanimously **VOTED: that the Rhode Island Employees Retirement Systems Pooled Trust make a commitment of up to \$30 million to Industry Ventures Partnership Holdings VI, L.P.**

VI. Defined Contribution & Deferred Compensation Annual Program Review

Ms. Kimberly Shockley, Defined Contribution Program Administrator, provided a brief introduction to the annual review of accounts concerning ERSRI's 401(a) and 457(b) retirement plans. Ms. Shockley noted that the majority of ERSRI's retirement funds are rated as good or excellent. Ms. Shockley then introduced Ms. Tiffany Spudich of Capital Cities to provide the Board with a deeper analysis of ERSRI's 401(a) and 457(b) retirement plans.

Ms. Spudich, Capital Cities, reviewed the current structure of the investment framework for the 401(a) and 457(b) retirement plans. Ms. Spudich highlighted differing investment options given to employees and the roles of each. Ms. Spudich provided a summary of how investment policies are monitored along with each menu and approach. Ms. Spudich then reviewed the trends of each retirement plan and emphasized that ERSRI employs a more conservative strategy compared to peers. Ms. Spudich provided an update concerning the target date fund management monitor and an analysis of fees. Ms. Spudich recommended transitioning from Vanguard FTSE Social Index Adm shares to Vanguard FTSE Social Index Instl shares within the TIAA 401(a) and 457(b) plans in order to reduce investment management expenses.

The Board asked questions.

On a motion by Mr. Jim Thorsen and seconded by Mr. Al Cumplido, it was unanimously **VOTED: to adopt the proposed recommendation with respect to the TIAA 401(a) and 457(b) Plans to transition from Vanguard FTSE Social Index Adm shares to Vanguard FTSE Social Index Instl shares in order to reduce investment management expenses.**

VII. Defined Benefit IPS Update, Benchmark Recommendation

Mr. Saul Ioffe, Senior Investment Analyst, provided a brief update concerning the defined benefit IPS benchmark for the Private Equity and Private Credit allocations. Mr. Ioffe delivered the recommendation that the ERSRI portfolio update its Private Equity and Private Credit benchmarks from two indexes provided by the Institutional Limited Partner Association (ILPA) to corresponding indexes provided by Cambridge Associates due to the discontinuation of the ILPA index product. Mr. Ioffe noted that the ILPA index fund universe was a subset of the Cambridge Associate index fund universe and that the Cambridge Associate indexes reflect more robust representations of the market.

On a motion by Ms. Sylvia Maxfield and seconded by Mr. Jim Thorsen, it was unanimously **VOTED: that the Rhode Island Employees Retirement Systems Pooled Trust adopt the proposed revisions to Investment Policy Statement so as to implement the Cambridge Associates Private Equity and Venture Capital Aggregated Index, 1Q Lag as the benchmark for the Private Equity asset class and the Cambridge Associates Senior Debt Index, 1Q Lag as the benchmark for the Private Credit asset class.**

VIII. Legal Counsel Report

There was no legal counsel report.

IX. Chief Investment Officer Report

Mr. Andrew Junkin, Chief Investment Officer, noted significant shifts in the yield curve following last month's report. Mr. Junkin highlighted the positive performance of fixed income and equity specifically. Mr. Junkin then reviewed the effects of ERSRI's overlay on its portfolio and discussed the weights of the portfolio's line items with subsequent monthly returns. Mr. Junkin concluded by noting that the CLO account managed by Neuberger Berman is now fully funded and that there has been one capital call for the commingled CLO fund managed by Sycamore Tree Capital Partners.

X. Treasurer's General Comments

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

On a motion by Ms. Sylvia Maxfield and seconded by Mr. Michael Costello, it was unanimously **VOTED: to adjourn the meeting at 11:59 AM.**

Respectfully submitted,

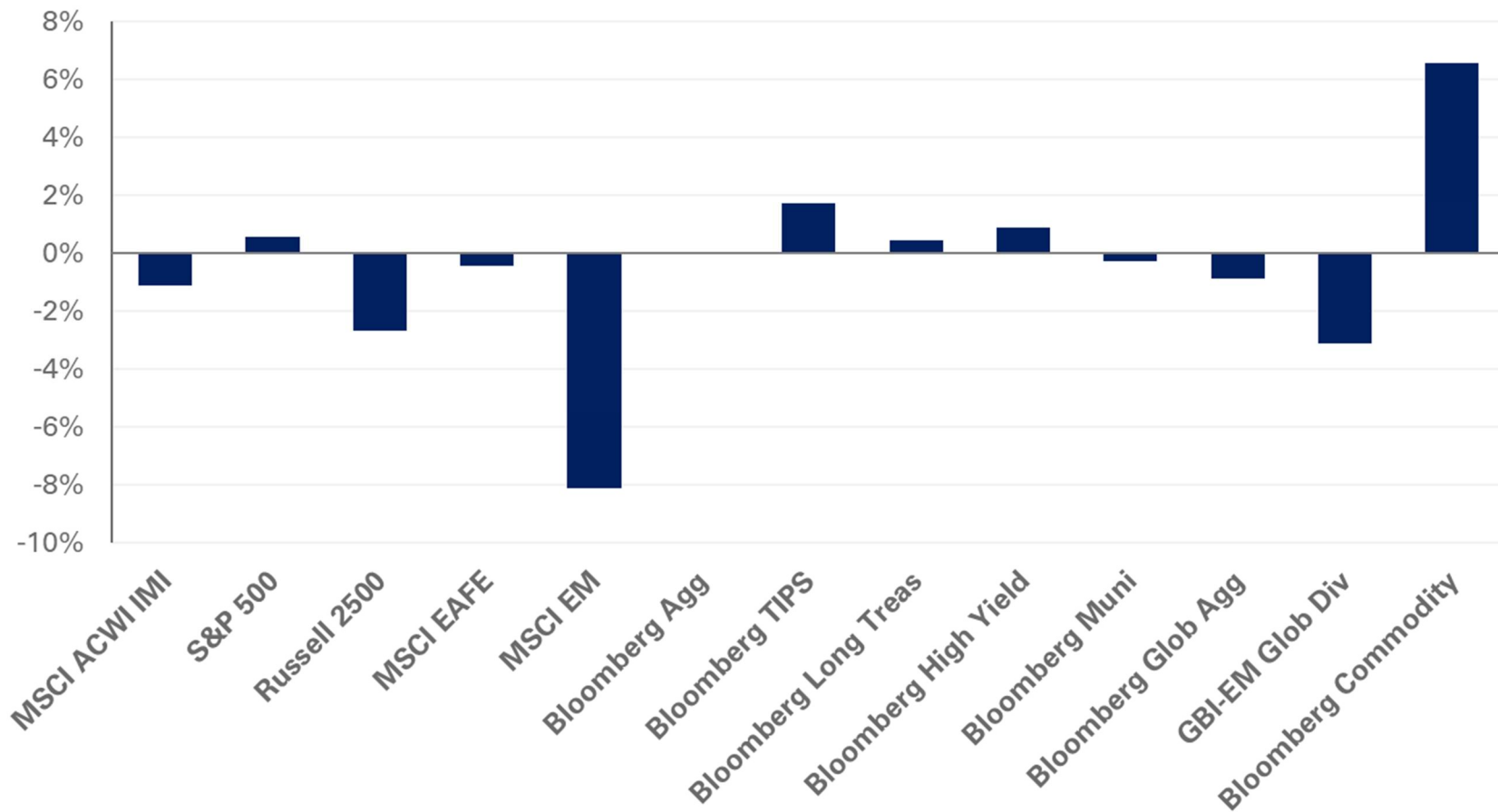
**Seth Magaziner,
General Treasurer**

MARKET OVERVIEW

NEPC, LLC

EMERGING MARKETS UNDERPERFORMED

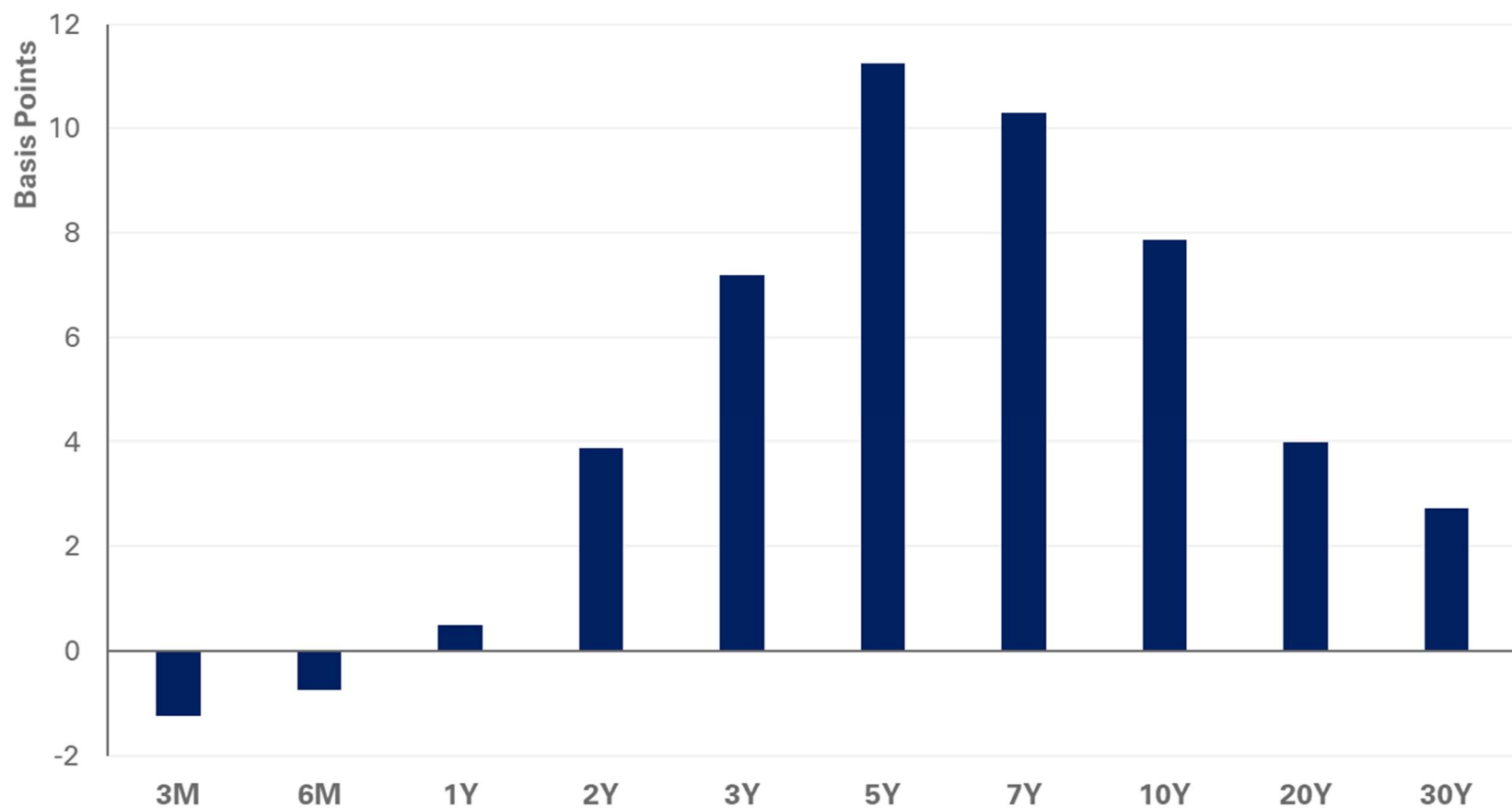
QUARTERLY TOTAL RETURNS



Source: MSCI, S&P, Russell, MSCI, Bloomberg, JPM, FactSet

U.S. TREASURY YIELDS SHIFTED HIGHER

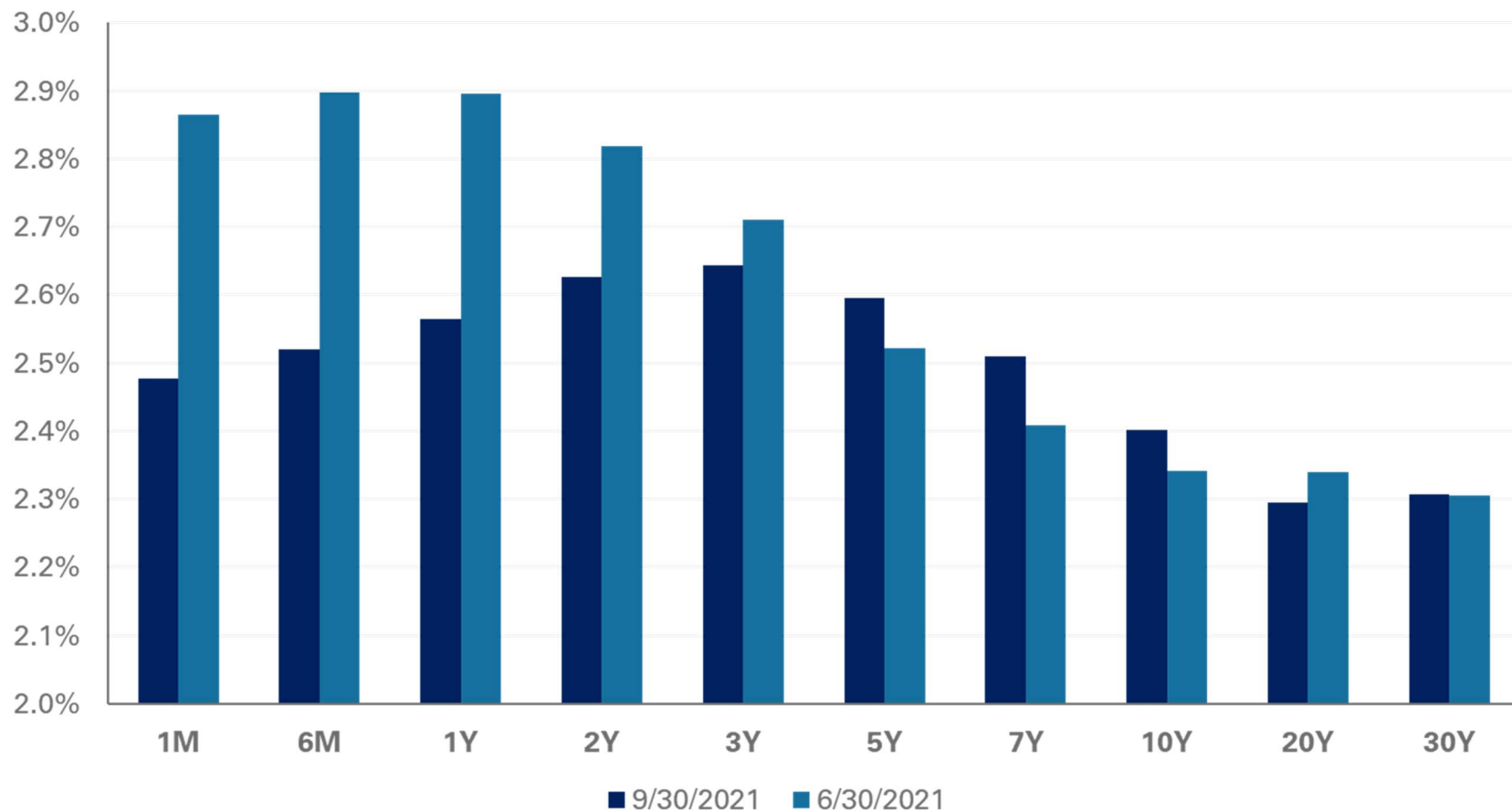
QUARTERLY CHANGE IN U.S. TREASURY YIELDS



Source: FactSet

NEAR-TERM INFLATION EXPECTATIONS SOFTENED

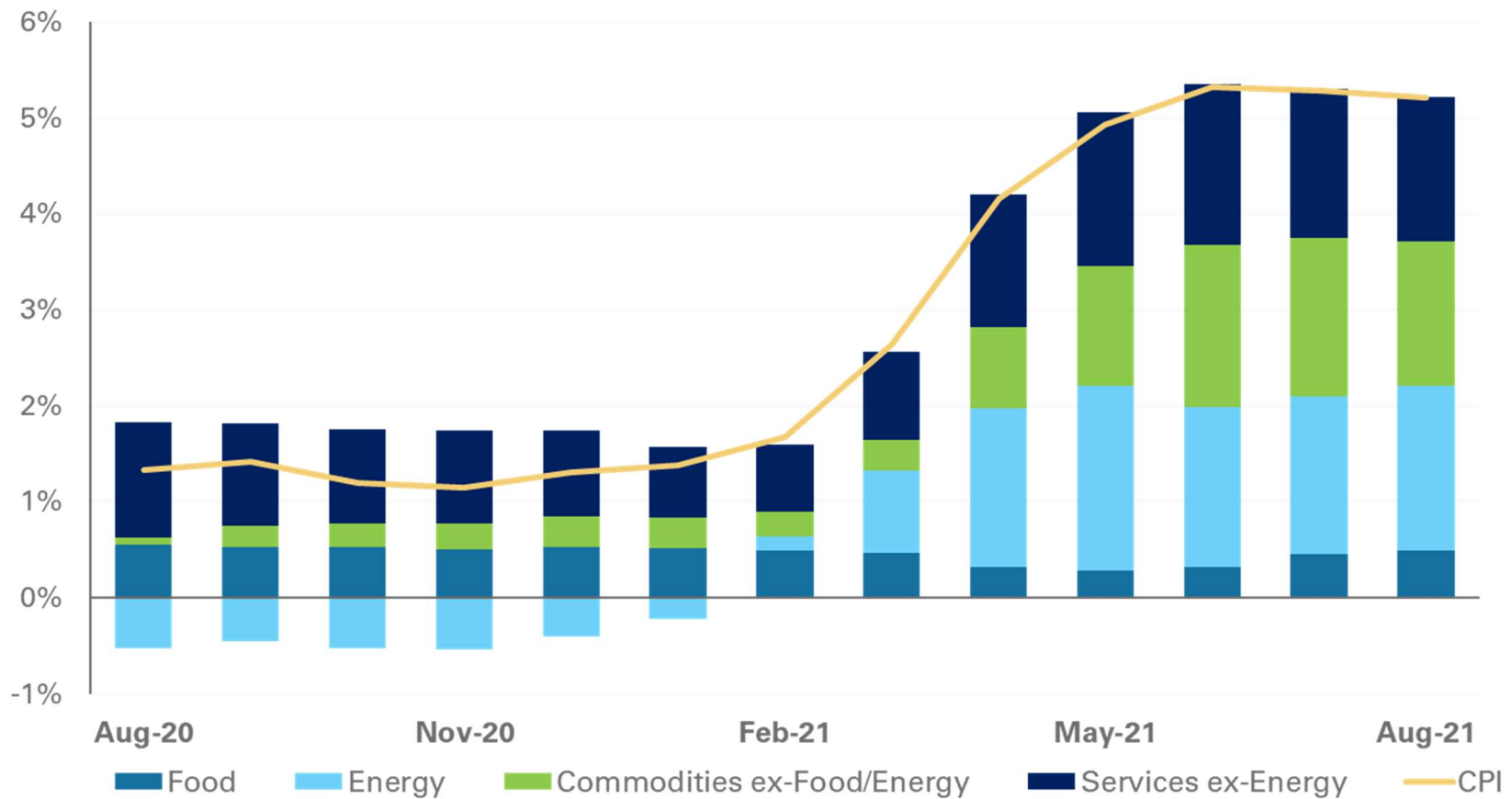
BREAKEVEN INFLATION CURVE



Source: FactSet

HEADLINE INFLATION REMAINED ELEVATED

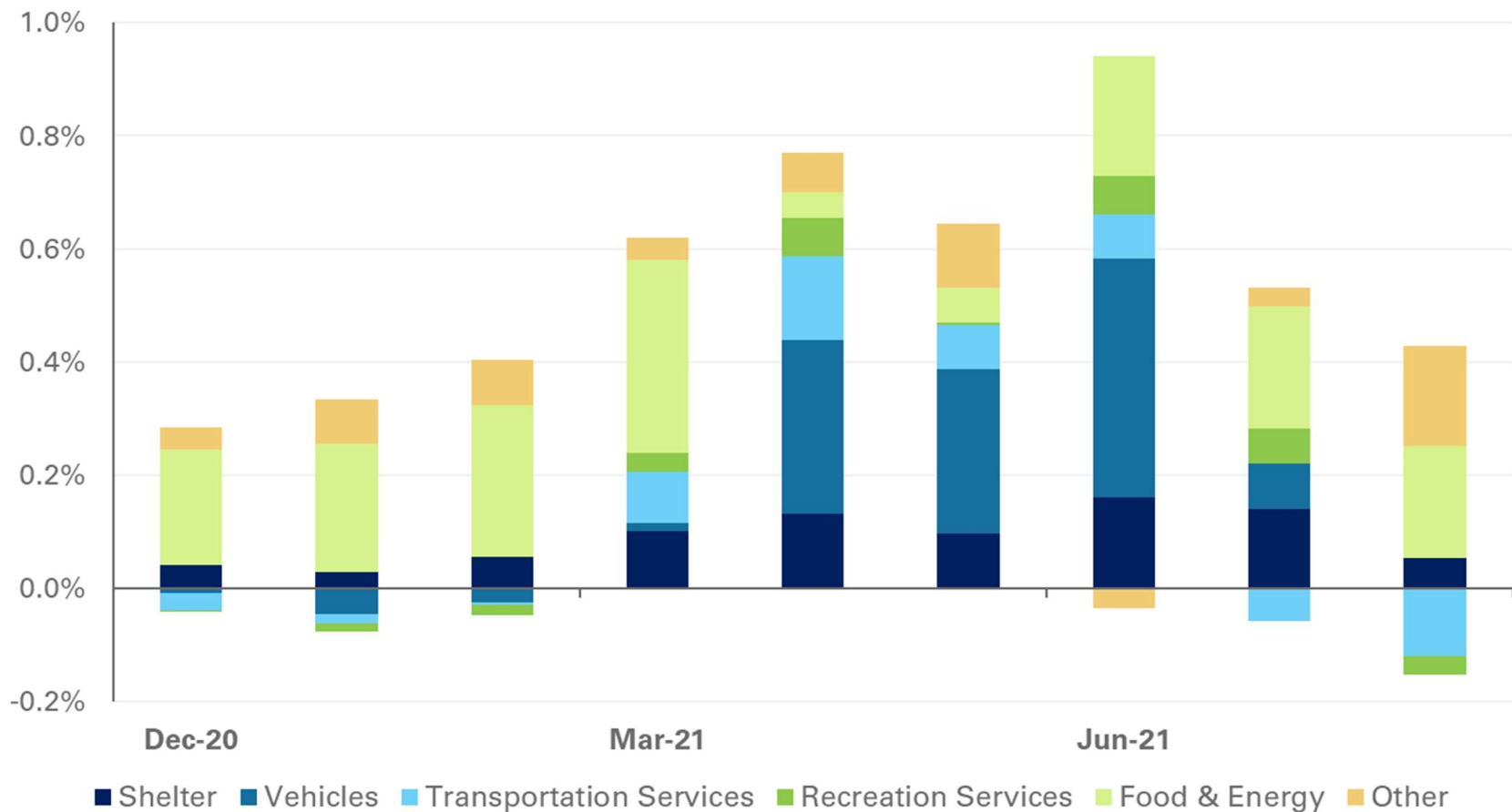
CONTRIBUTION TO YEAR-OVER-YEAR U.S. CPI-U



Source: FactSet

FOOD AND ENERGY PRICES TRENDED HIGHER

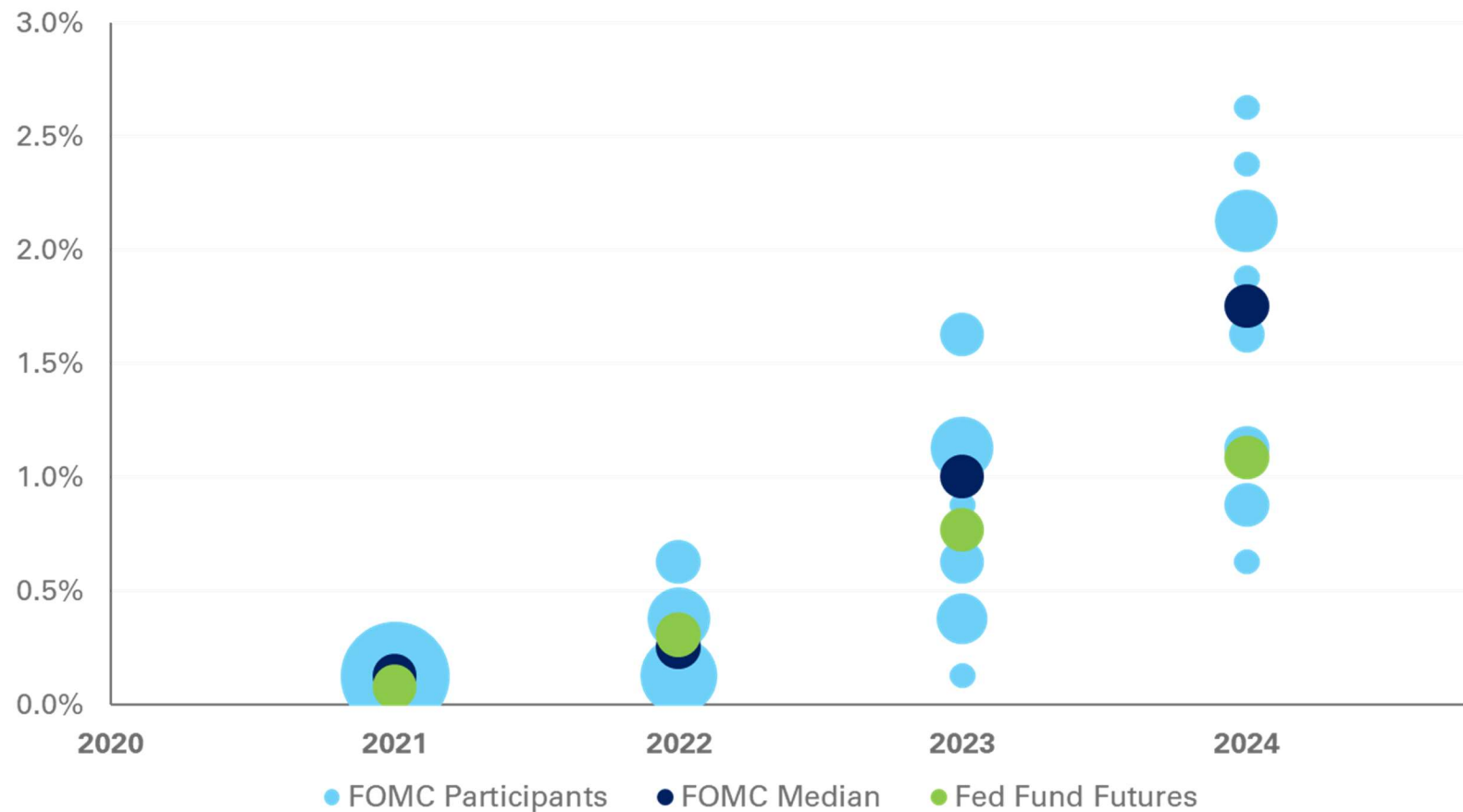
CONTRIBUTION TO MONTH-OVER-MONTH U.S. CPI-U



Source: FactSet

FED PROJECTING THREE RATE HIKES IN 2023

FED DOT PLOT VERSUS FED FUND FUTURES



FOMC Participant dot size reflects the number of policymakers forecasts of federal fund rate at the end of each calendar year
Source: FOMC, FactSet