

### Benefits and Actuarial Committee (B&A) Meeting

VRS, 1111 E. Main St., 3rd Floor Board Room Wednesday, 6/14/2023 1:00 - 3:30 PM ET

- 1. Welcome and Introductions
- 2. Approve Meeting Minutes B&A Minutes 02.07.2023 FINAL - Page 2
- 3. Election of Committee Vice Chair
- 4. Information Items
  - a. Actuarial Principles 101 Actuarial Principles 101 6.1.23 Final - Page 6
  - b. Group Life Insurance VRS Optional & Basic Premium Rate Letter - Page 28
  - c. Upcoming B&A Committee Meetings
- 5. Other Business



### Minutes

A regular meeting of the Benefits and Actuarial Committee was held on February 7, 2023, in Richmond, Virginia with the following members participating:

William A. Garrett, Chair John M. Bennett, Vice Chair Lindsey K. Pantele

Board members present: Hon. J. Brandon Bell, II (remotely under § 2.2-3708.3(B)(3))

VRS Staff:

Patricia Bishop, Jennifer Schreck, Rory Badura, Judy Bolt, Ty Bowers, Caroline Cardwell, Jeanne Chenault, Michael Cooper, Sara Denson, Andy Feagans, Jon Farmer, Krystal Groff, Robert Irving, Wendy Jenkins, Angela Payne, Steven Ramirez, Andrew Ringle, Virginia Sowers, Leslie Weldon and Cindy Wilkinson.

Guests:

Bea Snidow, Virginia Education Association; Ira Astin.

The meeting convened at 1:00 p.m.

#### **Opening Remarks**

Mr. Garrett called the meeting to order and welcomed everyone to the February 7, 2023, meeting of the Benefits and Actuarial Committee.

After noting that the meeting was being held in accordance with § 2.2-3708.3(B)(3) of the *Code of Virginia* and the VRS Remote Meeting Attendance Policy, Mr. Garrett took a roll call for attendance:

Mr. Bennett: Here Ms. Pantele: Here Mr. Bell: Here Mr. Garrett: Here

#### **Approval of Minutes**

Upon a motion by Mr. Bennett, with a second by Ms. Pantele, the Committee approved the minutes of its November 14, 2022, meeting upon the following roll call vote:

Mr. Bennett: Aye Ms. Pantele: Aye Mr. Bell: Aye Mr. Garrett: Aye



#### **Cost of Living Adjustments**

#### Virginia Sickness and Disability Program

Rory Badura, Senior Staff Actuary, presented the recommendations of Gabriel, Roeder, Smith & Company (GRS), the plan actuary, regarding statutory annual adjustments to Virginia Sickness and Disability Program (VSDP) creditable compensation for members on long-term disability. For VSDP, Mr. Badura advised that the Plan Actuary recommends an increase in the creditable compensation for VRS pension benefit purposes of 4.00%, effective July 1, 2023, for members who have been recipients of LTD benefits for at least one year. In addition, a cost of living adjustment (COLA) in the amount of 5.00% shall be applied to long-term disability (LTD) benefit payments for Plan 1 members vested prior to January 1, 2013. A COLA of 3.00% shall be applied for Plan 1 members not vested prior to January 1, 2013, and all Plan 2 and Hybrid Retirement Plan members. The calculations were reviewed by VRS staff and Internal Audit.

### RBA: Approval of July 1, 2023, increase relating to VSDP creditable compensation and VSDP COLA.

### **Request for Board Action:** Effective July 1, 2023, the following increases shall apply:

- The creditable compensation used in calculating the member's average final compensation at retirement shall be increased in the amount of 4.00% for a Plan 1, Plan 2 or Hybrid member who has been the recipient of long-term disability (LTD) benefits for at least one calendar year under the Virginia Sickness and Disability Program (VSDP); and
- A cost of living adjustment shall be applied to the net LTD benefit payment of 5.00% for Plan 1 members vested prior to January 1, 2013, or 3.00% for Plan 1 members not vested by January 1, 2013, and all Plan 2 and Hybrid members.

Upon a motion by Ms. Pantele, with a second by Mr. Bennett, the Committee recommended approval of the action to the full Board of Trustees upon the following roll call vote:

Mr. Bennett: Aye Ms. Pantele: Aye Mr. Bell: Aye Mr. Garrett: Aye

#### Virginia Local Disability Program

Next, Mr. Badura advised that for the VLDP program the plan actuary recommends an increase of 4.00% in the creditable compensation used at retirement, effective July 1, 2023. The VLDP plan does not provide for a COLA on LTD benefits being received. The calculations for the increase in creditable compensation were reviewed by VRS staff and Internal Audit.

### RBA: Approval of July 1, 2023, increase relating to VLDP creditable compensation.

**Request for Board Action:** Effective July 1, 2023, each recipient of LTD benefits under the Virginia Local Disability Program (VLDP) who has been receiving LTD benefits for at least one calendar year, and who ultimately retires directly from LTD, will have their creditable compensation at date of disability



increased by an amount set by the Board to be used in determining the member's average final compensation for disability retirement. The recommendation applicable to July 1, 2023, is an increase of 4.00% to be applied to a recipient's creditable compensation.

Upon a motion by Mr. Bennett, with a second by Ms. Pantele, the Committee recommended approval of the action upon the following roll call vote:

Mr. Bennett: Aye Ms. Pantele: Aye Mr. Bell: Aye Mr. Garrett: Aye

#### **Information Items**

#### 2023 COLAs Called for Under Statute Not Requiring Board Approval

Mr. Badura noted that, by statute, VRS cost of living increases are based on the consumer price index for all items, all urban consumers, as published by the Bureau of Labor Statistics of the U.S. Department of Labor. Mr. Badura advised that the COLA increase effective July 1, 2023, of 5.00% is applicable to eligible Plan 1 members vested prior to January 1, 2013. A COLA increase of 3.00% is applicable to Plan 1 members not vested prior to January 1, 2013, and all Plan 2 and Hybrid Plan members, effective July 1, 2023. This figure was calculated by GRS, the VRS plan actuary, and verified by VRS and Internal Audit staff. The COLA did not require action by the Committee.

Mr. Badura advised that the *Code of Virginia* requires the Hazardous Duty Supplement provided to hazardous duty employees be reviewed biennially, at which time it is to be increased by any applicable cost of living adjustments based on increases in Social Security benefits since the last applicable increase. Following a Social Security biennial increase of 15.11%, the annual Hazardous Duty Supplement will increase from \$14,664 to \$16,884 for fiscal years 2023 and 2024.

The Group Life Insurance Program minimum benefit for members retired with at least 30 years of service is to be increased by the same COLA applicable to VRS Plan 2 members, or 3.00%, effective July 1, 2023. The new minimum life insurance payout, effective July 1, 2023, will be \$9,254. The Group Life Insurance Program minimum did not require action by the Committee. The calculations were reviewed by VRS staff and Internal Audit.

Mr. Garrett thanked Mr. Badura for his presentation.

#### Legislative Update

Cindy Wilkinson, Director of Policy, Planning and Compliance, provided an update on VRS-related legislation in the 2023 General Assembly session.

In addition to other legislation, Ms. Wilkinson reviewed legislation related to the Health Insurance Credit (HIC), which is a benefit provided to state and many local employees who retire with at least 15 years of service. The HIC is a flat dollar amount that varies by employer, and proposed legislation would add the



Plan 2 COLA increase to certain HIC benefits for certain employees who retire with at least 30 years of service. The Committee discussed the fiscal impact on the unfunded liability and funded status of the plan.

Mr. Garrett thanked Ms. Wilkinson for her report.

#### 2023 B&A Committee Meeting Schedule:

Lastly, the Committee reviewed its 2023 meeting schedule:

- April 19
- June 14
- October 18
- November 16

Mr. Garrett advised that all meetings will begin at 1:00 p.m., apart from the November meeting, which is scheduled for 10:00 a.m. Mr. Garrett noted the Investment Policy Committee will hold a Brown Bag Lunch Session on February 9, 2023, at 11:45 a.m., followed by the full Board of Trustees meeting at 1:00 p.m.

#### Adjournment

Upon a motion by Ms. Pantele, with a second by Mr. Bennett, the Committee agreed to adjourn the meeting upon the following roll call vote:

Mr. Bennett: Aye Ms. Pantele: Aye Mr. Bell: Aye Mr. Garrett: Aye

There being no further business, the meeting concluded at 1:33 p.m.

Date

John M. Bennett, Chair Benefits and Actuarial Committee



# Actuarial Principles









- Funding Policy
- Actuarial Assumptions
- Actuarial Terminology
- Contribution Rates and Funded Ratio



# **Valuation Process**



# **Role of the Actuary**



- Assess and project the financial condition of pension and other post employment benefit (OPEB) plans
- Determine the timing and pattern of annual contributions
  - Help maintain the health of the plans
  - Ensure that future benefits can be paid
- Communicate to key decision makers
  - Actuarial recommended contribution delivery
  - Implications of the decisions made to determine the actuarial recommended contribution

# **Basic Pension Funding Equation**



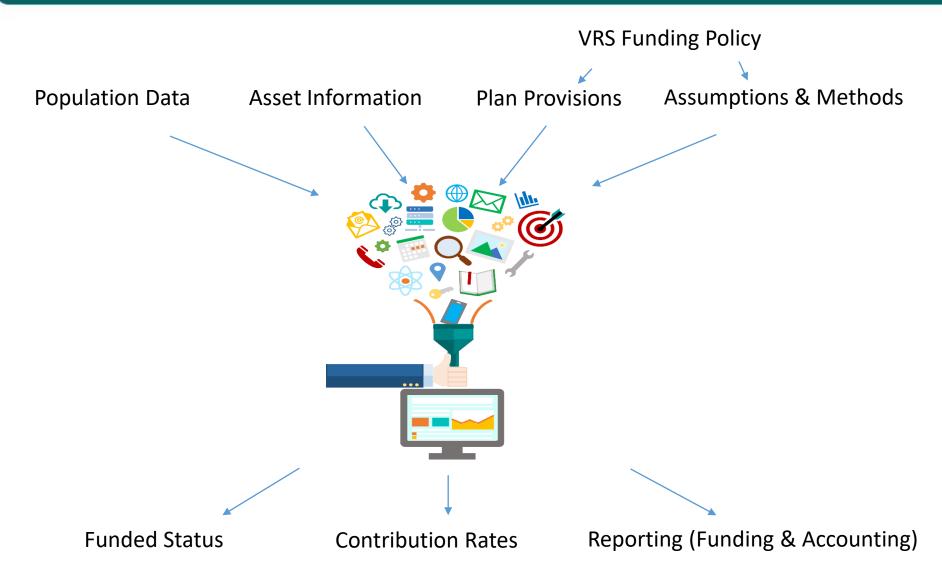
# Basic funding equation for benefits: C + I = B + E

### **Contributions + Investment returns = Benefits + Expenses**

- Over the short-term contributions will be influenced by actuarial assumptions and methods.
- Over the long-term contributions will be influenced by actual investment returns, benefits and expenses.

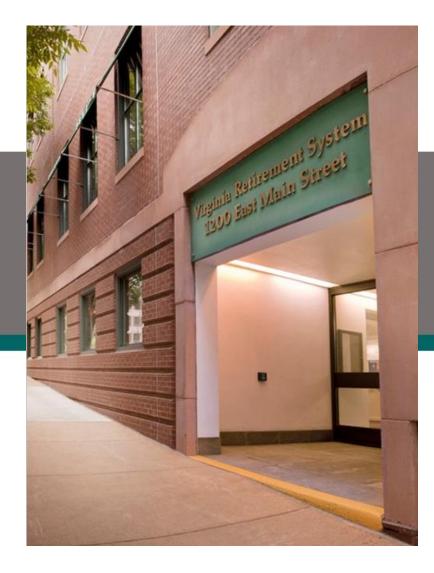
# **Actuarial Valuation Process**







# VRS Funding Policy



### **Funding Policy Purpose**



### The principal goal of a funding policy

Ensure that future contributions along with current plan assets are sufficient to provide for all benefits expected to be paid to members and their beneficiaries when due. The policy determines how much should be contributed each year by employers and participants to provide for the secure funding of benefits in a systematic fashion.

The VRS Funding Policy memorializes the methods by which the Board has elected to govern how it funds each plan.

# **Funding Policy Objectives**



Contributions will be actuarially determined.

Build in funding discipline to ensure that promised benefits can be paid.

Maintain intergenerational equity so that cost of employee benefits is paid by the generation of those who receive services.

As required by the Code of Virginia, make employer costs a relatively consistent percentage of payroll.

Require clear reporting to show how and when pension plans will be fully funded.

# **Funding Policy Core Elements**



### Actuarial Cost Method

Method used to allocate the plan costs and contributions over an employee's career.

### **ENTRY-AGE**

# Asset smoothing method

Method used to recognize gains or losses in plan assets over some period of time to reduce the effects of market volatility and provide stability to contributions.

> 5-YEAR SMOOTHING

### Amortization Policy

Determines the length of time and structure of payments required to systematically fund accrued employee benefits not covered by actuarial value of assets (unfunded liability).

### **20-YEAR CLOSED**



# **Actuarial Assumptions**

1	3,345,345.00	23,442.00	534,454.00	34,534.00	
1	345.00	234,768.00	42,343.00	342.00	
00	42,456.00	234,234.00	5,564.00	23,442.00	31
.00	5,345.00	634,567.00	234,676.00	46,456.00	1,03
.00	16,164.00	10,776.00	234,423.00	4,234,467.00	4,54
.00	3,423.00	34 422-00	42,234.00	34,233.00	17
.00	2,342.00	and the second second	00.4	564,523.00	1,33
00.5	3,423.00	23,423.00	11	246,723.00	35
0.00	234,423	234,233.00	45,344	24,423.00	6
3.00	31,4 00	534,457.00	45,573.00	442,344,00	4,1
00.5	10 00	14,772.00	14,772.00	0,334.00	2
00.5	92.00	16,392.00	16,392.00	2,744.00	2
8.00	168.00	15,168.00	15,168.00	096.00	2
0.00	680.00	58,680.00	58,680.00	100.00	7
4.00	3,704.00	13,704.00	13,704.00	562.00	1
4.00	,924.00	15,924.00	15,924.00	465.00	- 14
0.00	000.00	51,000.00	51,000.00	1, 000.00	1,4
4.00	884.00	46,884.00	46,884.00	1,448.00	1,3
2.00	3 12.00	37,872.00	37,872.00	3,184.00	1,0
9.00	3,955 00	2,580,255.00	1,835,094.00	88,520.00	22,1



# **Selection of Assumptions**



What A	Are They?	How are They Determined?			
Economic	Demographic	Economic	Demographic		
<ul> <li>Investment Return</li> <li>Payroll Growth</li> <li>Wage Inflation</li> <li>Price Inflation</li> </ul>	<ul> <li>Mortality</li> <li>Retirement</li> <li>Turnover</li> <li>Disability</li> <li>Pay Increases</li> </ul>	<ul> <li>Investment Staff</li> <li>Investment Managers</li> <li>Other Advisors</li> <li>Actuary</li> <li>Board Approves</li> </ul>	<ul> <li>Recommended by Actuary based on quadrennial study of plan experience.</li> <li>Board Approves</li> </ul>		



# **Actuarial Terminology**



# **Measures of Cost**



- **Present Value of Benefits** Value, using actuarial assumptions, of all benefits expected to be paid to current employees & retirees.
- Actuarial Accrued Liability (AAL) Liability for benefits "earned" for past service.
- Normal Cost (NC) Value of benefits "earned" during the current year.
- Unfunded Actuarial Accrued Liability (UAAL) Amount of actuarial accrued liabilities not covered by plan assets.
- **Funded Status** Plan assets divided by actuarial accrued liability (AAL). Measure using actuarial value of assets used for funding, while measure using market value of assets used for accounting.



# Developing Contribution Rates & Funded Ratio



# **Timing of Employer Contribution**



- Contribution rates developed in odd years are used to set employer rates for the next biennium.
- Therefore, there is a two-year lag period between the valuation date and the collection of contributions.
- For example:
  - The June 30, 2023 valuation is used to determine rates that will be collected beginning July 1, 2024 through June 30, 2026.
- Even year valuations are informational only.

# **Development of Employer Contributions**



### **Normal Cost Rate**

Cost to provide current year annual accrual of benefits. Members pay a portion of normal cost and employers pay the balance.

### **UAAL** Rate

Accrued liabilities not covered by current assets are paid down over 20-year closed periods. Conversely excess assets may also be recognized over 20year closed periods creating employer credits.

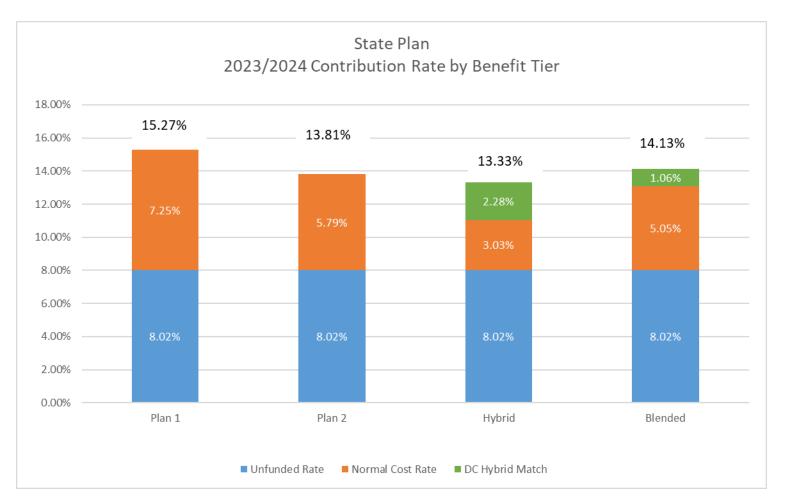
### **Hybrid DC Match**

Employers with Hybrid eligible members will also have mandatory and voluntary matching contributions.

In some instances, an additional surcharge or supplemental rate may also apply to certain political subdivision plans that the plan actuary has deemed to be "at-risk".

# State Plan – Blended Employer Rate Impact of Pension Reforms





State rate funded for fiscal years 2023/2024 was maintained at higher rate developed for fiscal years 2021/2022 of 14.46%.

Page 23 of 32

## Funded Ratio – Market Value of Assets



- Funded Ratio Plan assets divided by actuarial accrued liability (AAL)
  - Often used to measure the "health" of plan
  - Difficult to compare from one system to another due to assumptions not being uniform
  - Trend in funded ratio can be more important than the absolute value
  - Market value basis used for accounting (ACFR)

	2021			2022		
System		AL based on MVA lars in Thousands)	Funded Status		AL based on MVA llars in Thousands)	Funded Status
PENSIONS						
State	\$	3,615,554	86.5%	\$	5,199,844	81.3%
Teachers	\$	7,129,718	86.5%	\$	10,550,802	81.1%
SPORS	\$	276,498	79.2%	\$	387,081	72.7%
VaLORS	\$	538,229	77.6%	\$	666,103	73.4%
Judicial	\$	60,256	91.8%	\$	91,593	87.8%
Total State-wide systems	\$	11,620,255	86.2%	\$	16,895,423	80.8%
Political Subdivisions	\$	609,465	97.8%	\$	2,448,840	91.4%
Total Pensions		12,229,720	89.0%	\$	19,344,262	83.4%

## Funded Ratio – Actuarial Value of Assets



- Funded Ratio Plan assets divided by actuarial accrued liability (AAL)
  - Uses "smoothed-value" of assets
  - Actuarial basis associated with plan funding

	2021			2022		
System		AL based on AVA lars in Thousands)	Funded Status		AL based on AVA llars in Thousands)	Funded Status
PENSIONS						
State	\$	6,112,670	77.1%	\$	5,861,321	78.9%
Teachers	\$	12,021,814	77.2%	\$	11,792,090	78.9%
SPORS	\$	389,314	70.7%	\$	416,642	70.6%
VaLORS	\$	738,351	69.3%	\$	718,017	71.4%
Judicial	\$	132,738	81.9%	\$	110,861	85.2%
Total State-wide systems	\$	19,394,887	76.9%	\$	18,898,932	78.6%
Political Subdivisions	\$	3,480,933	87.2%	\$	3,205,143	88.8%
Total Pensions		22,875,820	79.4%	\$	22,104,075	81.1%



# VRS Plans Requiring Actuarial Valuations



# **Types of Benefit Plans**



### **Pension Plans**

### **Pooled Cost Sharing Plans**

State

Teachers

State Police Officers Retirement System (SPORS)

Virginia Law Enforcement Officers' System (VaLORS)

Judicial Retirement System (JRS)

### **Single Employer Plans**

Counties – 93

Cities & Towns – 159

Authorities, Commissions, Districts, Regional Institutions, and Service Boards – 207

Non-Teacher School Plans - 132

**OPEB Plans** Other Post Employment Benefit Plans

### **Pooled Cost Sharing Plans**

Group Life Insurance State Health Insurance Credit Teacher Health Insurance Credit Constitutional Officers Health Insurance Credit Social Services Health Insurance Credit Registrars Health Insurance Credit Virginia Sickness and Disability Program (VSDP) Virginia Local Disability Program (VLDP) Line of Duty (LODA)

Single Employer Plans

Health Insurance Credit Plans

securian.com



March 28, 2023

Patricia Bishop Director Virginia Retirement System P.O. Box 2500 Richmond, VA 23218-2500

### **RE: GROUP LIFE INSURANCE PREMIUM RATE RECOMMENDATION**

Dear Patricia:

This letter presents the proposed premium rate recommendation for basic life and optional life and AD&D insurance for fiscal year 2024.

There is no change to the basic maximum premium rates. Mortality experience and future expectation increased from last year driven by retirees; however, given the three-year pricing horizon, the rates will be held at their current level.

Mortality experience and future expectation on the optional plan remain good. The adjusted loss ratio of 80.1% over the last five-year period (2018-2022) allows us to offer a 5% premium rate reduction.

The following premium rate table is proposed. The proposed rates will be effective July 1, 2023, and are guaranteed through June 30, 2025:

Age	<u>Current</u>	Proposed	% Reduction
Under 30	\$0.05	\$0.05	0
30-34	0.05	0.05	0
35-39	0.06	0.06	0
40-44	0.08	0.08	0
45-49	0.14	0.12	14
50-54	0.20	0.20	0
55-59	0.33	0.31	6
60-64	0.59	0.54	8
65-69	1.06	1.02	4
70-74	2.06	2.06	0
75+	2.06	2.06	0
		Overall Reduction	5

Monthly Premium per \$1,000 of Insurance

Securian Financial is the marketing name for Securian Financial Group, Inc. and its affiliates. Insurance products are issued by its affiliated insurance companies. Securities and investment advisory services offered through Securian Financial Services, Inc., registered investment advisor, member FINRA/SIPC

Patricia Bishop March 28, 2023 Page 2

Consistent with our rate setting principles for the optional plan, the rate changes reflect experience by age band in order to have equity in pricing among the various age brackets.

If you have any questions regarding this proposal, please let me know. I would be happy to review it with you in more detail.

Sincerely,

Susan Munson Negala

Susan Munson-Regala, FSA Vice President and Actuary Affinity Solutions

Cc: NaTosha Palmer Leslie Weldon Cassandra Coles

### VIRGINIA RETIREMENT SYSTEM Current and Proposed Rates

	Current Rates 7/1/2022-7/1/2023	Renewal Rates 7/1/2023-6/30/2025
Min Premium Rate - Active Basic Life	0.0075	0.0075
Max Premium Rate - Active Basic Life	0.1510	0.1510
Min Premium Rate - Active Basic AD&D <sup>1</sup>	0.0000	0.0000
Max Premium Rate - Active Basic AD&D	0.0110	0.0110
Min Premium Rate - Retiree Basic Life	0.0075	0.0075
Max Premium Rate - Retiree Basic Life	1.7500	1.7500
Optional Life - Employee & Spouse <sup>2</sup> Under 25 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65-69 70+	0.050 0.050 0.060 0.080 0.140 0.200 0.330 0.590 1.060 2.060	0.050 0.050 0.060 0.080 0.120 0.200 0.310 0.540 1.020 2.060
Child Life (per unit per month) Option 1 - \$10,000 Option 2 - \$10,000 Option 3 - \$20,000 Option 4 - \$30,000 Conversion Charges (per \$1,000 of insurance converted) Under 40 40-49 50-59 60 and Over	0.800 0.800 1.600 2.400 \$60.00 \$120.00 \$200.00 \$295.00	0.800 0.800 1.600 2.400 \$60.00 \$120.00 \$200.00 \$295.00

<sup>1</sup>The minimum premium for AD&D coverage is included in the rate for life coverage.

<sup>2</sup>The AD&D rate is included with the life rate. Combined rates are based on the combined life and AD&D experience.

\*Rate coverage period July 1, 2023 through June 30, 2025.

#### **Basic Life Premium Rate Recommendation**

	Monthly Maximum					
	Monthly Claim Rate Per \$1,000			Premiu		
					Current to	
	Expected	Observed	Projected	Current	Projected	Proj % Change
Active						
Life	0.129	0.132	0.126	0.151	0.147	-2.6%
AD&D	0.009	0.009	0.009	0.011	0.011	0.0%
Total	0.138	0.141	0.135	0.162	0.158	-2.5%
Retiree Life	1.5010	1.5940	1.5700	1.750	1.840	5.1%

**Total** 2.7%

- Claim rate definitions:
  - Expected: Claim rates used to determine the current max premium rates
  - Observed: Actual unadjusted experience for the 42-month period July 1, 2019 through December 31, 2022
  - Projected: Actual experience adjusted for the impact from COVID in both the experience and future mortality expectation
- No change based on current 3-year pricing projection horizon

#### **Optional Life Premium Rate Recommendation**

	Adj Loss
<u>Year</u>	<u>Ratio</u>
2018	85.6%
2019	83.8%
2020	73.0%
2021	81.8%
<u>2022</u>	<u>79.1%</u>
2018-22	80.5%
Projected loss ratio	80.1%

- Adjusted loss ratio is the loss ratio if the current rates were in effect for all years
- Projected loss ratio is the expected loss ratio under current rates
  - Equal to actual experience adjusted for the impact from COVID in both the experience and
- Propose a 5% premium rate reduction