# Wyoming Volunteer Firefighter, EMT, and Search and Rescue Pension Fund

Actuarial Valuation Report for the Year Beginning January 1, 2024





May 30, 2024

Board of Trustees

Wyoming Volunteer Firefighter, EMT, and Search and Rescue Pension Plan
6101 Yellowstone Road
Suite 500
Cheyenne, WY 82002

Dear Board of Trustees:

Subject: Actuarial Valuation as of January 1, 2024

We are pleased to present the report of the actuarial valuation of the Wyoming Volunteer Firefighter, EMT, and Search and Rescue Pension Plan ("the Fund") for the plan year commencing January 1, 2024. This report describes the current actuarial condition of the Fund and determines the calculated employer contribution amount (the actuarially determined contribution amount). Valuations are prepared annually, as of January 1, the first day of the Fund's plan year.

This report was prepared at the request of the Board and is intended for use by the Retirement System and those designated or approved by the Board. This report may be provided to parties other than the System only in its entirety and only with the permission of the Board. GRS is not responsible for unauthorized use of this report.

#### **Financing Objectives and Funding Policy**

The employee contribution amounts are specified in statute. Effective April 1, 2022, the state treasurer shall deposit into the Fund 60% of the gross tax levied upon fire insurance premiums paid to insurance companies for fire insurance in the state. Additionally, a one-time contribution of \$9,000,000 was made in 2023. The purpose of this actuarial valuation is to determine whether or not these contribution amounts are sufficient to meet the obligations of the Fund. This report should not be relied on for any purpose other than the purposes described herein. Determinations of financial results, associated with the benefits described in this report, for purposes other than those identified above may be significantly different.

This valuation assumed the continuing ability of the plan sponsor to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our scope of expertise and was not performed.

#### **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, based upon the assumption of no future cost-of-living adjustments as of January 1, 2024 is 93.06%. This compares to a funded ratio of 82.90% for the prior year. On a market value of assets basis, the funded ratio is 93.65% as of January 1, 2024, compared to a funded ratio of 80.21% for the prior year. 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.

#### **Benefit Provisions**

This fund was established as of July 1, 2015, created under House Bill 72 of the 2015 General Session, which replaces the Volunteer Firemen's Pension Fund and the Volunteer Firefighter Emergency Medical Technician Pension Fund. The benefit provisions reflected in this valuation are those, which were in effect on January 1, 2024. W.S. 9-3-454 prohibits benefit changes, including cost-of-living increases, unless the funded ratio stays above 100% plus a margin for adverse experience throughout the life of the benefit change. Therefore, this valuation does not include any liability for future cost-of-living increases. There were no benefit changes since the prior valuation.

The benefit provisions are summarized in Appendix B of the report.

#### **Assumptions and Methods**

Actuarial assumptions and methods are set by the Board, based upon recommendations made by the plan's actuary. The current assumptions used in the actuarial valuation were adopted by the Board effective November 17, 2021 and February 17, 2022 and were first utilized with the January 1, 2022 valuation report. For a detailed description of the experience related to these assumptions, as well as the rationale for any changes, please see our latest Wyoming Retirement System Actuarial Experience Study Report that covered the five-year investigation period ending December 31, 2020. All actuarial assumptions used in this report are reasonable for the purposes of this valuation. Furthermore, the assumptions and methods used in this valuation follow the guidance in the applicable Actuarial Standards of Practice and are expected to have no significant bias.

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, calculated contribution amounts and funding periods. The actuarial calculations presented in the report are intended to provide information for rational decision making.

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 and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.



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#### **Assumptions and Methods (Continued)**

The employer contribution requirement in Table 1 of this report is determined using the actuarial assumptions and methods disclosed in Appendix A of this report. This report does not include a detailed assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment. We encourage a review and assessment of investment and other significant risks that may have a material effect on the plan's financial condition.

All assumptions and methods are described in Appendix A of the report.

#### **Data**

Member data for retired, active and inactive members was supplied as of January 1, 2024 by the Fund's staff. 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.

Asset and financial information as of January 1, 2024 was prepared by Wyoming Retirement System and is the responsibility of management. Eide Bailly, LLP provided us the asset and financial information and will opine on Wyoming Retirement System's statements.

We are not responsible for the accuracy or completeness of the information provided by the System's staff.

#### **Plan Experience**

As part of each valuation, we examine the Fund's experience relative to the assumptions. As experience in a given year deviates from the assumptions, a gain occurs if the liabilities grow slower than the assumption set anticipates and a loss occurs if the liabilities grow faster. This past fiscal year, the Fund had a total experience gain of approximately \$11.97 million, composed of a \$2.26 million investment gain, a \$10.14 million contribution gain, and a \$0.43 million liability loss. The aggregate results of these analyses are disclosed in Tables 4 and 5 under Section III of the report.



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#### **Actuarial Certification**

All of the tables contained in this actuarial valuation report were prepared by Gabriel, Roeder, Smith & Company.

We certify that the information presented herein is accurate and fairly portrays the actuarial position of the Fund as of January 1, 2024.

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 state law and, where applicable, the Internal Revenue Code and ERISA.

The undersigned are independent actuaries and consultants.

Thomas Lyle, and Dana Woolfrey are Enrolled Actuaries and Paul Wood, Thomas Lyle, Dana Woolfrey and Karli Fehrman are Members of the American Academy of Actuaries, and all four meet all the Qualification Standards of the American Academy of Actuaries.

Finally, all of the undersigned are experienced in performing valuations for large public retirement systems.

Respectfully submitted,

Gabriel, Roeder, Smith & Company

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**EXECUTIVE SUMMARY** 

## **Executive Summary**

a b c c e f	<ul> <li>Employee contributions</li> <li>Other expected contributions</li> <li>Net employer normal cost</li> <li>Amortization payment</li> <li>Administrative expenses</li> </ul>	\$1,842,571 (550,575) - \$1,291,996 604,463 123,700	\$1,787,399 (543,825) - \$1,243,574 1,680,997
a b c c e f	<ul> <li>Total normal cost</li> <li>Employee contributions</li> <li>Other expected contributions</li> <li>Net employer normal cost</li> <li>Amortization payment</li> <li>Administrative expenses</li> </ul>	(550,575) - \$1,291,996 604,463	(543,825) - \$1,243,574
a b c c e f	<ul> <li>Total normal cost</li> <li>Employee contributions</li> <li>Other expected contributions</li> <li>Net employer normal cost</li> <li>Amortization payment</li> <li>Administrative expenses</li> </ul>	(550,575) - \$1,291,996 604,463	(543,825) - \$1,243,574
b c c e f	<ul> <li>Employee contributions</li> <li>Other expected contributions</li> <li>Net employer normal cost</li> <li>Amortization payment</li> <li>Administrative expenses</li> </ul>	(550,575) - \$1,291,996 604,463	(543,825) - \$1,243,574
c c e f	<ul> <li>Other expected contributions</li> <li>Net employer normal cost</li> <li>Amortization payment</li> <li>Administrative expenses</li> </ul>	\$1,291,996 604,463	<u> </u>
c e f	<ul><li>Net employer normal cost</li><li>Amortization payment</li><li>Administrative expenses</li></ul>	604,463	
e f	. Amortization payment Administrative expenses	604,463	
f g	Administrative expenses	· ·	1,680,997
g		123 700	
_	Actuarially determined contribution	123,700	110,200
	, riotadiran y determined continued con	\$2,020,159	\$3,034,771
r	. Estimated premium tax allocation*	(3,451,200)	(3,415,200)
i	Shortfall/(surplus)	(\$1,431,041)	(\$380,429)
2. F	unding Elements:		
а	. Market value of assets (MVA)	\$117,524,714	\$98,454,576
b	. Actuarial value of assets (AVA)	\$116,784,737	\$101,757,644
С	. Actuarial accrued liability (AAL)	\$125,489,684	\$122,744,358
C	. Unfunded/(overfunded) actuarial accrued liability	\$8,704,947	\$20,986,714
3. (	ontributions and Ratios:		
а	. Actuarially determined contribution	\$2,020,159	\$3,034,771
b	. Actual contributions	N/A	12,808,214
	i. Employer	N/A	-
	ii. Other	N/A	12,808,014
c	. Percentage contributed	N/A	422.05%
C	. Funded ratio on an actuarial basis (AVA/AAL)	93.06%	82.90%
e	. Funded ratio on a market basis (MVA/AAL)	93.65%	80.21%

 $<sup>^{*}</sup>$  The premium tax for 2024 has been estimated based on the average three-year inflation-adjusted premium tax paid.



## **S**ECTION **II**

**DISCUSSION** 

#### **Contribution Requirements**

- Exhibits throughout this report are based primarily, unless stated otherwise, on the assumption of no future cost-of-living adjustments (COLA).
- W.S. 9-3-454 prohibits benefit changes, including cost-of-living increases, unless the funded ratio stays above 100% plus a margin for adverse experience throughout the life of the benefit change. The actuarial value funded ratio is 93.06% and the market value funded ratio is 93.65%.
- The estimated State premium tax allocation is \$3.45 million this year, as estimated based on the three-year average inflation-adjusted premium tax paid and the current allocation of 60%.
- There have not been any changes to the actuarial assumptions or methods since the prior valuation.
   For a detailed description of the experience related to these assumptions, as well as the rationale for any changes, please see our latest Wyoming Retirement System Actuarial Experience Study Report.
- An Actuarially Determined Contribution (ADC) is calculated as part of this valuation. Because
  contribution amounts are set in statutes, the ADC could be thought of as a metric to which one could
  compare the statutory rate. The amortization payment for the purpose of calculating the ADC is based
  upon the following assumptions:
  - The funding period is based on a 30-year closed period for the initial base as of January 1, 2018 and 20-year closed period layers for future gains and losses.
  - Amortization payment amounts are calculated in such a way that they will remain level as a dollar amount.
  - Future growth in the number of active members is not reflected in the annual valuation.
- The calculated funding period assuming an annual contribution of 60% of the premium tax allocation that increases with inflation at 2.25% per year is 4 years when projecting from the market value of assets.
- The calculated funding period assuming an annual contribution of 60% of the premium tax allocation that increases with inflation at 2.25% per year is 5 years when projecting from the actuarial value of assets.
- Benefit provisions effective July 1, 2015, as authorized by new legislation in HB 72 of the 2015 General Assembly, are summarized in Appendix B.



#### **Calculation of Contribution Amounts**

The funds available to pay benefits come from two sources, contributions and investment income on those contributions (the majority of the funds available to pay benefits typically come from investment income). The Fund receives contributions from two primary sources, state contributions equal to 60% of gross fire insurance premium taxes and member contributions of \$18.75 per month per Volunteer Fire and EMT member and \$37.50 per month per search and rescue member. In addition, the prior EMT "set-aside" funds were transferred to this plan. An Actuarially Determined Contribution (ADC) is calculated as part of this valuation. Because contribution amounts are set in Statutes, the ADC could be thought of as a metric to which one could compare the Statutory rate. As shown in Table 1 under Section III of the report, the calculated employer ADC has three components:

- The normal cost (NC)
- The amortization payment
- The administrative expenses

The NC is the theoretical amount, which would be required to pay the members' benefits if this amount had been contributed from each member's entry date and if the fund's experience exactly followed the actuarial assumptions. The NC is shown in Table 1 under Section III of the report.

The actuarial accrued liability (AAL) is the difference between (i) the actuarial present value of all future benefits for all current participants of the fund, including active, inactive and retired members, and (ii) the actuarial present value of future normal costs. Thus, the AAL represents the liability associated with past years. The unfunded actuarial accrued liability (UAAL) is the difference between the AAL and the actuarial value of assets (AVA). It is the shortfall/excess between the liability associated with prior years (the AAL) and the assets actually accumulated (the AVA). This shortfall/excess can arise from several sources, including actuarial gains and losses which are caused by differences between actual experience and the plan's assumptions, changes to the plan's actuarial assumptions, and amendments to the benefit provisions.

The amortization payment is the amount required to fund this difference. It is the amount, expressed as a level dollar amount, necessary to amortize the UAAL. Amortization bases are established each year and amortized based on the Board's policy. The Board's policy for purposes of calculating the ADC consists of amortizing the unfunded liability as of January 1, 2018, over a closed 30-year period with each subsequent amortization base created as a result of year to year experience changes over individual 20-year closed periods. The Executive Summary shows the Amortization Payment compared to that of last year.

Administrative expenses are the average of the actual expenses for the prior two years, with each year projected at 2.50% to the valuation date.

The ADC is calculated for the twelve-month period beginning January 1, 2024. The estimated State premium tax allocation for 2024 is \$1.4 million more than the ADC, creating a surplus. This is detailed in the executive summary. The calculated ADC under the Board's funding policy can be considered a "Reasonable Actuarially Determined Contribution" as required by the Actuarial Standards of Practice.



#### **Financial Data and Experience**

As of January 1, 2024, the Fund has a total market value of \$118 million. Financial information was received from Eide Bailly, LLP.

Table 7 under Section III of the report shows a reconciliation of the market values between the beginning and end of 2023.

During 2023, the total investment return on the market value of assets (MVA), as reported by Meketa Investment Group, Inc., was 13.84%, as shown in Table 10 under Section III of the report.

In determining the contribution rates and funded status of the Fund, an actuarial value of assets (AVA) is used rather than the market 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 (or less than) expected investment income. 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 investment expenses. An adjustment is made if the actuarial value is not within 20% of the Market Value. For any year following a year in which the 20% of market value adjustment was applied, the actuarial value is determined as if the adjustment was not applied in the previous year.

The development of the AVA is shown in Table 9 under Section III of the report. The AVA is \$116.8 million, compared to \$101.8 million last year. The AVA is 99.37% of the MVA as of December 31, 2023, compared to 103.35% last year. The difference between the AVA and the MVA is the deferred gains and losses. As of January 1, 2023, the total deferred loss was \$3.3 million. As of January 1, 2024, the total deferred gain was \$0.7 million. Having a deferred gain in the AVA is an indicator that the funded ratio will have an upward "tilt" in the near term, and the ADC will likewise have downward pressure.

In addition to the market return, Table 10 also shows the return on the actuarial value of assets for the Fund. For 2023, this return was 8.96%. Since this is greater than the assumed 6.80% investment return, an actuarial gain occurred, decreasing the unfunded actuarial accrued liabilities of the fund by \$2.3 million.



#### **Member Data**

Member data as of January 1, 2024 was supplied electronically by the Fund's staff. 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.

Table 15 under Section III of the report shows the number of members by category (active, inactive, retired, etc.) along with member statistics. Tables 16 through 24 show summaries of certain historical data and include membership statistics.

Of the 2,350 active participants, 352 are eligible or will become eligible for retirement in 2024. Furthermore, there are 97 search and rescue members.



#### **Benefit Provisions**

Appendix B of the report includes a more detailed summary of the benefit provisions for the Fund. These are the benefit provisions in effect July 1, 2015, per HB 72 as passed by the Wyoming General Assembly in the 2015 general session. A brief summary is as follows:

- Normal Retirement Eligibility
  - Age 60 with 5 years of service
- Normal Retirement Benefit
  - \$16 per month for each of the first 10 years of service and \$19 per month for each year of service over 10
- Spouse Benefits
  - 66% of the member's benefit payable prior to the member's death
- Employee Contributions are required
  - \$18.75 per month (\$37.50 per month for search and rescue employees)
- Post-retirement Cost-of-Living Adjustments (COLAs)
  - W.S. 9-3-454 prohibits benefit changes, including cost-of-living increases, unless the funded ratio stays above 100% plus a margin for adverse experience throughout the life of the benefit change.



### **Actuarial Methods and Assumptions**

Appendix A of the report includes a summary of the actuarial assumptions and methods used in this valuation. A few highlights are listed as follows:

- Costs are determined using the Entry Age Normal actuarial cost method, calculated as a level dollar amount.
- The unfunded actuarial accrued liability is amortized over an effective 45 year closed period as a level dollar amount. Future valuations will include additional amortization layers on a closed 20year bases.
- The assumed annual investment return rate is 6.80%, with assumed inflation of 2.25%.
- Inactive vested participants are assumed to retire at normal retirement eligibility or the valuation date if already eligible to retire.
- No benefit data is available for members entitled to deferred benefits. The present value of benefits expected to be paid to vested inactive non-retired members is approximated using the data provided.

The average future lifetime for current pensioners is 15.9 years.

The actuarial assumptions and methods were reviewed in detail as part of the 2021 Experience Study covering the five-year period ending December 31, 2020. Please see Appendix A for a summary of the assumptions.



### **GASB** and **Funding** Progress

Governmental Accounting Standards Board Statement Number 67 (GASB 67) contains certain accounting requirements for the Fund. Schedules, notes and required supplementary information are provided under separate cover.





**SUPPORTING EXHIBITS** 

# Table 1A Calculation of Employer Contribution Rate (Assumes No Future Cost-Of-Living Increases)

	ltem	January 1, 2024	January 1, 2023
1.	Employer normal cost	\$1,291,996	\$1,243,574
2.	<ul> <li>Actuarial accrued liability for active members</li> <li>a. Present value of future benefits for active members</li> <li>b. Less: present value of future employer normal costs</li> <li>c. Less: present value of future employee contributions</li> <li>d. Actuarial accrued liability</li> </ul>	\$50,706,231 (8,570,350) (2,942,678) \$39,193,203	\$51,252,061 (8,305,664) (2,907,594) \$40,038,803
3.	Total actuarial accrued liability for:  a. Retirees and beneficiaries  b. Disabled members  c. Inactive members  d. Active members (Item 2d)  e. Total	\$77,932,394 - 8,364,087 39,193,203 \$125,489,684	\$75,010,229 - 7,695,326 40,038,803 \$122,744,358
4.	Actuarial value of assets (Table 9)	\$116,784,737	\$101,757,644
5. 6.	Unfunded actuarial accrued liability (UAAL) (Item 3e - Item 4) Effective UAAL amortization period	\$8,704,947 45 years	\$20,986,714 27 years
7.	Assumed payroll growth rate	0.00%	0.00%
8.	Employer actuarially determined contribution (ADC)  a. UAAL amortization payment  b. Employer normal cost  c. Administrative expenses  d. Employer Contribution (a + b + c)	\$604,463 1,291,996 123,700 \$2,020,159	\$1,680,997 1,243,574 110,200 \$3,034,771



#### **Table 1B**

### **Calculation of UAAL Amortization Payment**

### (Assumes No Future Cost-Of-Living Increases)

UAAL as of January 1, 2024							\$8,704,947
Total Prior Remaining Amo		\$20,676,600					
2024 Amortization Base as of January 1, 2024							(\$11,971,653)
2024 Payment (20 years, level percent of pay amortization)							(\$1,076,534)
				A	As of January 1, 2024	ļ	
						1	Amortization
Base Year	Base Year Initial Base		R	emaining Base	Years Remaining		Payment
2024 Experience Gain	\$	(11,971,653)	\$	(11,971,653)	20		(1,076,534)
2023 Experience Gain		(1,240,512)		(1,209,584)	19		(111,551)
2022 Experience Gain		(5,563,315)		(5,276,489)	18		(500,273)
2022 Assumption Changes		590,222		559,792	18		53,075
2021 Experience Gain		(3,357,456)		(3,090,586)	17		(302,081)
2020 Experience Loss		1,632,016		1,453,529	16		146,921
2019 Experience Loss		2,859,262		2,455,152	15		257,554
2018 Experience Loss		27,923,023		25,784,786	24		2,137,352
Total				8 704 947		\$	604 463



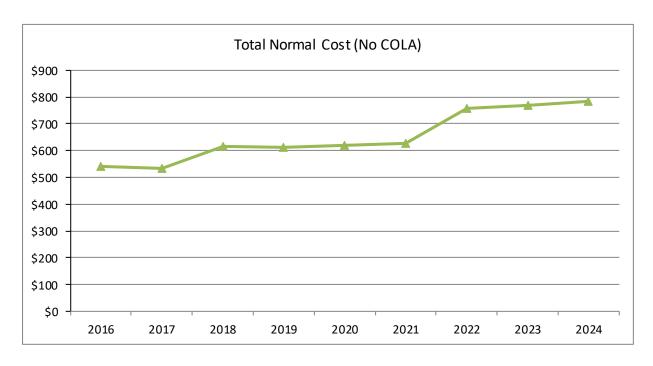
# Table 2 Cost Breakdown (Assumes No Future Cost-Of-Living Increases)

	Present Value of Future Normal Costs	Actuarial Accrued Liabilities	Total Present Value of Benefits
ltom	(1)	(2)	
Item	(1)	(2)	(3) = (1) + (2)
Age and service allowances based on total service and disability benefits likely to be rendered by present active members	\$9,853,446	\$37,309,162	\$47,162,608
Death-in-service benefits likely to be paid on behalf of present active members (employer financed portion)	186,380	436,745	623,125
Separation benefits (refunds of contributions and deferred allowances) likely to be paid to present active members	1,473,202	1,447,296	2,920,498
Benefits likely to be paid to vested inactive members	-	7,624,285	7,624,285
Benefits to be paid to members due refunds	-	739,802	739,802
Benefits to be paid to current retirees, disabled members, beneficiaries, and future beneficiaries of current retirees	-	77,932,394	77,932,394
Total	\$11,513,028	\$125,489,684	\$137,002,712
Actuarial value of assets	\$0	\$116,784,737	\$116,784,737
Liabilities to be covered by future contributions	\$11,513,028	\$8,704,947	\$20,217,975



Table 3
History of Total Normal Cost
(Assumes No Future Cost-Of-Living Increases)

	Total Normal Cost Per
Fiscal Year Ending December 31	Active
(1)	(2)
2016	\$540
2017	\$535
2018	\$615
2019	\$610
2020	\$621
2021	\$628
2022	\$758
2023	\$769
2024	\$784





# Table 4 Calculation of Total Actuarial Gain/(Loss)

Item	January 1, 2024
1. Derivation of experience gain/(loss)	
a. Unfunded actuarial accrued liability (UAAL) - previous valuation	20,986,714
b. Normal cost (NC) for fiscal year ending December 31, 2023	1,787,399
c. Expected adminstrative expenses for fiscal year ending December 31, 2023	110,200
d. Actuarially determined contribution for fiscal year ending December 31, 2023	3,578,596
e. Interest accrual:	
(i) For whole year on (a)	1,427,097
(ii) For half year on (b) + (c) - (d)	(56,214)
(iii) Total interest: (e)(i) + (e)(ii)	1,370,883
f. Change in UAAL due to programming enhancement	-
g. Change in UAAL due to assumption change	-
h. Expected UAAL current year: (a) + (b) + (c) - (d) + (e)(iii) + (f) + (g)	20,676,600
i. Actual UAAL current year	8,704,947
j. Experience gain/(loss): (h) - (i)	11,971,653
k. Experience gain/(loss) as a % of actuarial accrued liability	9.54%
Approximate portion of gain/(loss) due to investments	
(at actuarial value)	\$2,261,892
3. Approximate portion of gain/(loss) due to contributions and administrative	
expenses higher or lower than expected*	\$10,136,496
4. Approximate portion of gain/(loss) due to liabilities: (1)(j) - (2) - (3)	(\$426,735)
a. Age & service retirements	125,325
b. Death-in-service	3,173
c. Withdrawal from employment	(201,646)
d. Rehires and new hires	(279,656)
e. Death after retirement	(81,118)
f. Service purchases	(24,462)
g. Other	31,649
h. Other as a % of actuarial accrued liability	0.03%

<sup>\*</sup>Includes \$24,462 in additional employee contributions for service purchases. These additional contributions offset the liability loss due to service purchases.



# Table 5 Change in Calculated Contribution Amount Since the Prior Valuation

Item	January 1, 2024
1. Calculated contribution amount as of January 1, 2023	\$3,034,771
<ul> <li>2. Change in contribution amount during year</li> <li>a. Change in employer normal cost</li> <li>b. Actuarial (gain) loss from investments on actuarial value of assets</li> <li>c. Actuarial (gain) loss from liability sources</li> <li>d. Difference between contributions made and ADC</li> <li>e. Other changes</li> <li>f. Total change</li> </ul>	\$48,422 (\$203,397) \$38,373 (\$898,010)  (\$1,014,612)
3. Calculated contribution amount as of January 1, 2024	\$2,020,159



# Table 6 Statement of Plan Net Assets

	Assets at Market Value							
	Item FYE 2023							
1. Cash a	and cash equivalents (operating cash)	\$4,938,530	\$4,977,481					
2. Receiv	vables							
a.	Insurance premium tax	\$1,440,000	\$1,200,000					
b.	Employee contributions	39,904	36,025					
C.	Securities sold	2,657,528	42,385					
d.	Accrued interest and dividends	227,951	179,308					
e.	Currency contract receivable	6,883,146	5,886,660					
f.	Other	-	-					
g.	Rebate and fee income receivable							
h.	h. Total receivables		\$7,344,378					
3. Invest	3. Investments, at fair value		\$97,077,686					
4. Liabili	ties							
a.	Benefits and refunds payable	(\$14)	(\$17,537)					
b.	Securities purchased	(198,730)	(140,959)					
C.	Administrative and consulting fees payable	(187,290)	(141,753)					
d.	Currency contract payable	(7,068,996)	(6,041,986)					
e.	Securities lending collateral	(3,246,035)	(4,602,734)					
f.	Total liabilities	(\$10,701,065)	(\$10,944,969)					
5. Total	market value of assets available for benefits	\$117,524,714	\$98,454,576					



# Table 7 Reconciliation of Plan Net Assets

	Assets at Market Value					
	Item	FYE 2023	FYE 2022			
Α.	Market value of assets at beginning of year	\$98,454,576	\$108,686,819			
В.	Contribution income:					
	1. Contributions					
	a. Employee	\$569,045	\$548,347			
	b. Employer	-	-			
	c. Other	12,832,476	3,876,549			
	d. Total	\$13,401,521	\$4,424,896			
	2. Investment income					
	a. Interest, dividends, and other income	\$2,433,295	\$1,910,598			
	b. Net appreciation	11,572,451	(8,573,110)			
	c. Investment expenses	(605,651)	(550,992)			
	d. Net investment income	\$13,400,095	(\$7,213,504)			
	3. Securities lending					
	a. Gross income	\$240,013	\$83,461			
	b. Deductions	(226,492)	(73,529)			
	c. Net investment income	\$13,521	\$9,932			
	4. Benefits and refunds					
	a. Refunds	(\$58,393)	(\$57,233)			
	b. Regular monthly benefits	(7,561,973)	(7,282,386)			
	c. Total	(\$7,620,366)	(\$7,339,619)			
	5. Administrative and miscellaneous expenses	(\$124,633)	(\$113,948)			
C.	Market value of assets at end of year	\$117,524,714	\$98,454,576			



Table 8
Progress of Fund Through December 31, 2023

Plan Year Ending	Employer	Employee	Administrative and Other	Net Investment	Benefit		Actuarial Value
December 31	Contributions*	Contributions**	Expenses	Income***	Payments	Transfers	of Assets
Total	\$41,662,935	\$4,418,875	(\$867,584)	\$55,247,454	(\$57,706,320)	-	
2015	\$2,238,612	\$417,406	(\$76,882)	\$4,356,336	(\$4,867,630)	-	\$76,097,619
2016	3,198,930	459,363	(84,357)	4,047,102	(5,541,861)	-	78,176,796
2017	3,290,994	425,592	(92,288)	5,181,716	(5,813,888)	-	81,168,922
2018	2,959,943	434,522	(94,396)	3,477,678	(6,145,822)	-	81,800,847
2019	3,118,824	437,255	(92,906)	4,770,526	(6,506,775)	-	83,527,771
2020	5,510,379	519,791	(89,809)	7,408,210	(6,810,666)	-	90,065,676
2021	4,670,469	573,113	(98,565)	9,848,632	(7,059,693)	-	97,999,632
2022	3,866,570	558,326	(113,948)	6,786,683	(7,339,619)	-	101,757,644
2023	12,808,214	593,507	(124,433)	9,370,571	(7,620,366)	-	116,784,737

<sup>\*</sup> Employer contributions equal to 50% of the gross fire insurance premium taxes from fire insurance policies written in Wyoming prior to July 1, 2015, 70% of the gross premium taxes between July 1, 2015 and July 1, 2019, 80% of the gross premium taxes between July 1, 2019 and July 1, 2020, 100% between July 1, 2020 and April 1, 2022 and 60% of the gross premium taxes after April 1, 2022.



<sup>\*\*</sup> Employee contributions may include member redeposits and member service purchase contributions

<sup>\*\*\*</sup> Net of investment expenses

# Table 9 Development of Actuarial Value of Assets

ltem	FYE 2023	FYE 2022
1. Actuarial value of assets, beginning of year (before corridor)	\$101,757,644	\$97,999,632
2. Market value, end of year	\$117,524,714	\$98,454,576
3. Market value, beginning of year	\$98,454,576	\$108,686,819
<ol><li>Non-investment/administrative net cash flow:</li></ol>		
a. Employee contributions	\$569,045	\$548,347
b. Employer contributions	-	-
c. Other contributions	12,832,476	3,876,549
d. Refund of employee accounts	(58,393)	(57,233)
e. Retirement benefits	(7,561,973)	(7,282,386)
f. Administrative and other expenses	(124,633)	(113,948)
g. Total net cash flow: [sum of (4a) through (4f)]	\$5,656,522	(\$3,028,671)
<ol><li>Investments and securities lending:</li></ol>		
a. Interest and dividends on investments	\$2,433,295	\$1,910,598
<ul> <li>b. Gross income from securities lending</li> </ul>	240,013	83,461
c. Fees and expenses	(832,143)	(624,521)
d. Total net income: [sum of (5a) through (5c)]	\$1,841,165	\$1,369,538
6. Investment income:		
a. Actual market return: (2) - (3) - (4g) - (5d)	\$11,572,451	(\$8,573,110)
b. Assumed rate of return	6.80%	6.80%
c. Assumed amount of return	5,042,905	5,919,884
d. Amount subject to phase-in: (6a) - (6c)	\$6,529,546	(\$14,492,994)
7. Phase-in recognition of investment income:		
a. Current year: 0.20 * (6d)	\$1,305,909	(\$2,898,599)
b. First prior year	(2,898,599)	1,826,594
c. Second prior year	1,826,594	558,951
d. Third prior year	558,951	1,693,646
e. Fourth prior year	1,693,646	(1,683,331)
f. Total recognition	\$2,486,501	(\$502,739)
8. Actuarial value of assets, end of year		
<ul> <li>a. Preliminary actuarial value of assets, end of year:</li> </ul>		
(1) + (4g) + (5c) + (6c) + (7f)	\$116,784,737	\$101,757,644
b. Upper corridor limit: 120% * (2)	\$141,029,657	\$118,145,491
c. Lower corridor limit: 80% * (2)	\$94,019,771	\$78,763,661
d. Actuarial value of assets, end of year	\$116,784,737	\$101,757,644
9. Difference between market and actuarial value of assets	\$739,977	(\$3,303,068)
10. Actuarial rate of return	8.96%	7.03%
11. Market rate of return*	13.84%	-6.99%
12. Ratio of actuarial value to market value of assets	99.37%	103.35%

<sup>\*</sup> Current year market rate of return is based on unaudited data and is supplied by the plan's investment consultant.



Table 10
History of Investment Returns

Plan Year	Market Value	Actuarial Value
(1)	(2)	(3)
2015	-0.26%	6.03%
2016	7.60%	5.44%
2017	14.20%	6.72%
2018	-3.52%	4.36%
2019	18.72%	5.94%
2020	11.03%	8.92%
2021	17.19%	11.05%
2022	-6.99%	7.03%
2023	13.84%	8.96%
Average returns:		
Last five years:	10.34%	8.37%

The market returns above are gross of investment expenses and were provided by the plan's investment consultant. The actuarial returns above are based on the financial information provided by the plan's auditors.

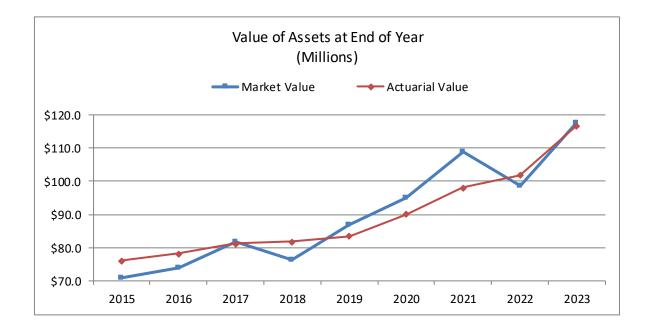




Table 11
Solvency Test

	Total Active	Inactive and	Employer							
Valuation	Member	Pensioner	Financed Active	Actualia		Percentage of Liabilities Covered				
Date	Contributions	Liability	Accrued Liability	Value of		by Assets				
January 1	(1)	(2)	(3)	Assets	(1)	(2)	(3)			
2016	\$5,369,518	\$60,709,865	\$36,199,040	\$76,097,619	100%	100%	27.7%			
2017	5,467,501	61,194,577	35,582,775	78,176,796	100%	100%	32.4%			
2018	5,544,708	67,352,453	36,194,784	81,168,922	100%	100%	22.9%			
2019	5,542,717	71,400,879	35,343,932	81,800,847	100%	100%	13.7%			
2020	5,603,713	74,093,449	35,563,263	83,527,771	100%	100%	10.8%			
2021	5,660,334	78,098,747	34,228,917	90,065,676	100%	100%	18.4%			
2022	5,753,779	81,311,226	33,481,179	97,999,632	100%	100%	32.7%			
2023	5,951,071	82,705,555	34,087,732	101,757,644	100%	100%	38.4%			
2024	6,073,572	86,296,481	33,119,631	116,784,737	100%	100%	73.7%			



Table 12
Schedule of Funding Progress

(1)	(2) (3)		(4) (5)		(6)
Valuation Date	Actuarial Value of	Actuarial Accrued	Unfunded AAL (UAAL)	Funded Ratio	UAAL per Active
January 1	Assets	Liability (AAL)	[(3) - (2)]	[(2)/(3)]	Member
2016	\$76,097,619	\$102,278,423	\$26,180,804	74.40%	\$11,005
2017	78,176,796	102,244,853	24,068,057	76.46%	10,374
2018	81,168,922	109,091,945	27,923,023	74.40%	12,046
2019	81,800,847	112,287,528	30,486,681	72.85%	12,990
2020	83,527,771	115,260,425	31,732,654	72.47%	13,129
2021	90,065,676	117,987,998	27,922,322	76.33%	11,678
2022	97,999,632	120,546,184	22,546,552	81.30%	9,529
2023	101,757,644	122,744,358	20,986,714	82.90%	9,030
2024	116,784,737	125,489,684	8,704,947	93.06%	3,704

Liabilities are calculated assuming no future cost-of-living increases.



Table 13
Schedule of Contributions from the Employer(s) and Other Contributing Entities

(1)	(2)	(3)	(4)
			Percentage of
			Actuarially
			Determined
	Actuarially		Contribution
Fiscal Year Ending	Determined	Employer	Contributed
December 31	Contribution	Contributions*	[(3)/(2)]
2016	\$3,128,272	\$3,198,930	102.26%
2017	2,923,585	3,290,994	112.57%
2018	3,275,465	2,959,943	90.37%
2019	3,543,372	3,118,824	88.02%
2020	3,669,138	5,510,379	150.18%
2021	3,318,686	4,670,469	140.73%
2022	3,130,017	3,866,570	123.53%
2023	3,034,771	12,808,214	422.05%
2024	2,020,159	-	-

<sup>\* 70%</sup> of the gross fire insurance premium taxes from fire insurance policies written in Wyoming before July 1, 2019, 80% of the gross fire insurance premium taxes from fire insurance policies written in Wyoming on or after July 1, 2019, 100% of the gross fire insurance premium taxes from fire insurance policies written in Wyoming between July 1, 2020 and April 1, 2022, and 60% of the gross fire insurance premium taxes from fire insurance policies written in Wyoming on or after April 1, 2022.

The employer contribution for 2023 reflects a one-time contribution of \$9 million per Enrolled Act No. 6.



Table 14
Reconciliation of Participant Data

	Active Participants	Vested Former Participants	Retired Participants	Beneficiaries	Participants Due Refunds	Total	
Number as of January 1, 2023	umber as of January 1, 2023 2,324 520		1,388 290		1,878	6,400	
New participants	261	-	-	-	27	288	
Vested terminations	(77)	77	-	-	-	-	
Retirements	(62)	(21)	83	-	-	-	
Disability	-	-	-	-	-	-	
Deceased with beneficiary	(1)	-	(18)	19	-	-	
Deceased without beneficiary	-	-	(9)	(15)	(8)	(32)	
Due refunds	(114)	(1)	-	-	115	-	
Lump sum payoffs	(3)	(7)	-	-	(53)	(63)	
Rehires/return to active	25	(11)	-	-	(14)	-	
Certain period expired	-	-	-	-	-	-	
Reclassifications	-	-	-	-	-	-	
Data corrections	(3)	-	-			(3)	
Number as of January 1, 2024	2,350	557	1,444	294	1,945	6,590	



Table 15
Demographic Statistics

_	Januar		
_	2024	2023	Change
Active Participants			
Number	2,350	2,324	1.1%
Vested	1,483	1,483	
Not vested	867	841	
Average age (years)	45.45	45.29	0.4%
Average service (years)	10.61	10.88	-2.5%
Average entry age (years)	34.84	34.41	1.2%
Total employee contributions with interest	\$6,073,572	\$5,951,071	2.1%
Average employee contributions with interest	\$2,584	\$2,561	0.9%
<u>Vested Former Participants</u>			
Number	557	520	7.1%
Average age (years)	49.53	49.39	0.3%
Total employee contributions with interest	\$1,230,278	\$1,128,863	9.0%
Average employee contributions with	\$2,209	\$2,171	1.7%
interest			
<u>Retirees</u>			
Number	1,444	1,388	4.0%
Average age (years)	72.06	71.80	0.4%
Total annual benefits	\$6,751,808	\$6,445,341	4.8%
Average annual benefit	\$4,676	\$4,644	0.7%
<u>Beneficiaries</u>			
Number	294	290	1.4%
Average age (years)	74.76	74.25	0.7%
Total annual benefits	\$822,761	\$801,897	2.6%
Average annual benefit	\$2,799	\$2,765	1.2%
Participants Due Refunds			
Number	1,945	1,878	3.6%
Total Refunds Due	\$739,802	\$700,467	5.6%



Table 16
Distribution of Male Active Members by Age and by Years of Service

Average Age = 45.5 Average Service = 11.2

	Age			Whol	e Years of Service	e at Valuation Da	te		
La	Last Birthday		5-9	10-14	15-19	20-24	25-29	30 Plus	Totals
Less than 20	Count	13	-	-	-	-	-	-	13
	Total Contributions	\$2,393	-	-	-	-	-	-	\$2,393
	Avg. Contributions	\$184	-	-	-	-	-	-	\$184
20-24	Count	69	1	-	-	-	-	-	70
	Total Contributions	33,731	\$1,187	-	-	-	-	-	34,918
	Avg. Contributions	489	\$1,187	-	-	-	-	-	499
25-29	Count	84	40	4	-	-	-	-	128
	Total Contributions	48,579	64,261	\$9,547	-	-	-	-	122,387
	Avg. Contributions	578	1,607	\$2,387	-	-	-	-	956
30-34	Count	114	54	31	-	-	-	-	199
	Total Contributions	65,611	82,158	81,319	-	-	-	-	229,089
	Avg. Contributions	576	1,521	2,623	-	-	-	-	1,151
35-39	Count	104	74	52	25	3	-	-	258
	Total Contributions	66,764	126,860	140,444	95,666	\$16,215	-	-	445,948
	Avg. Contributions	642	1,714	2,701	3,827	\$5,405	-	-	1,728
40-44	Count	102	70	68	60	26	1	-	327
	Total Contributions	74,918	112,690	194,063	231,651	132,096	\$6,721	-	752,139
	Avg. Contributions	734	1,610	2,854	3,861	5,081	\$6,721	-	2,300
45-49	Count	66	46	45	51	42	17	2	269
	Total Contributions	49,805	76,867	127,613	207,024	225,891	114,661	\$19,615	821,475
	Avg. Contributions	755	1,671	2,836	4,059	5,378	6,745	\$9,807	3,054
50-54	Count	47	29	43	31	40	30	25	245
	Total Contributions	38,639	49,563	115,791	121,676	217,729	201,840	216,475	961,713
	Avg. Contributions	822	1,709	2,693	3,925	5,443	6,728	8,659	3,925
55-59	Count	35	28	26	44	36	26	74	269
	Total Contributions	24,596	46,605	72,509	182,067	202,572	179,518	693,329	1,401,195
	Avg. Contributions	703	1,664	2,789	4,138	5,627	6,905	9,369	5,209
60-64	Count	27	22	9	16	19	11	10	114
	Total Contributions	17,828	35,273	25,861	71,764	97,377	78,943	90,425	417,471
	Avg. Contributions	660	1,603	2,873	4,485	5,125	7,177	9,043	3,662
65-69	Count	24	12	11	10	6	1	6	70
	Total Contributions	18,240	21,465	30,355	49,075	30,603	6,260	50,117	206,116
	Avg. Contributions	760	1,789	2,760	4,907	5,100	6,260	8,353	2,945
70 & Over	Count	16	12	1	1	-	-	-	30
	Total Contributions	14,410	19,997	2,929	3,706	-	-	-	41,042
	Avg. Contributions	901	1,666	2,929	3,706	-		-	1,368
Totals	Count	701	388	290	238	172	86	117	1,992
	Total Contributions	\$455,516	\$636,926	\$800,431	\$962,627	\$922,482	\$587,943	\$1,069,961	\$5,435,886
	Avg. Contributions	\$650	\$1,642	\$2,760	\$4,045	\$5,363	\$6,837	\$9,145	\$2,729



Table 17
Distribution of Female Active Members by Age and by Years of Service

Average Age = 45.4 Average Service = 7.5

Age Last Birthday				Whole	e Years of Service	at Valuation Da	te		
		0-4	5-9	10-14	20-24	25-29	30 Plus	Totals	
Less than 20	Count	3	-	-	-	-	-	-	
	Total Contributions	\$1,262	-	-	-	-	-	-	\$1,26
	Avg. Contributions	\$421	-	-	-	-	-	-	\$42
20-24	Count	15	-	-	-	-	-	-	1
	Total Contributions	6,187	-	-	-	-	-	-	6,18
	Avg. Contributions	412	-	-	-	-	-	-	41
25-29	Count	15	7	1	-	-	-	-	2
	Total Contributions	9,261	10,805	\$2,477	-	-	-	-	22,54
	Avg. Contributions	617	1,544	\$2,477	-	-	-	-	98
30-34	Count	29	7	5	-	-	-	-	4
	Total Contributions	12,920	10,751	12,858	-	-	-	-	36,52
	Avg. Contributions	446	1,536	2,572	-	-	-	-	89
35-39	Count	19	17	5	2	-	-	-	4
	Total Contributions	9,917	24,172	12,667	\$7,470	-	-	-	54,22
	Avg. Contributions	522	1,422	2,533	\$3,735	-	-	-	1,26
40-44	Count	28	14	13	3	2	-	-	6
	Total Contributions	20,253	20,747	34,844	10,598	10,581	-	-	97,02
	Avg. Contributions	723	1,482	2,680	3,533	5,291	-	-	1,61
45-49	Count	12	11	9	1	3	-	-	3
	Total Contributions	7,676	15,652	22,917	3,331	17,592	-	-	67,16
	Avg. Contributions	640	1,423	2,546	3,331	5,864	-	-	1,86
50-54	Count	20	11	6	8	5	-	1	5
	Total Contributions	16,083	20,058	16,001	31,056	27,460	-	\$8,343	119,00
	Avg. Contributions	804	1,823	2,667	3,882	5,492	-	\$8,343	2,33
55-59	Count	11	9	2	11	1	1	1	3
	Total Contributions	9,508	14,211	5,964	51,659	7,281	6,544	11,781	106,94
	Avg. Contributions	864	1,579	2,982	4,696	7,281	6,544	11,781	2,97
60-64	Count	4	2	5	10	-	-	3	2
	Total Contributions	2,843	2,770	13,084	35,122	-	-	27,564	81,38
	Avg. Contributions	711	1,385	2,617	3,512	-	-	9,188	3,39
65-69	Count	6	4	4	6	-	-	-	2
	Total Contributions	1,971	6,032	11,374	20,207	-	-	-	39,58
	Avg. Contributions	328	1,508	2,844	3,368	-	-	-	1,97
70 & Over	Count	4	1	1	-	-	-	-	
	Total Contributions	2,208	1,152	2,473	-	-	-	-	5,83
	Avg. Contributions	552	1,152	2,473					97
Totals	Count	166	83	51	41	11	1	5	35
	Total Contributions	\$100,088	\$126,351	\$134,659	\$159,442	\$62,914	\$6,544	\$47,687	\$637,68
	Avg. Contributions	\$603	\$1,522	\$2,640	\$3,889	\$5,719	\$6,544	\$9,537	\$1,78



Table 18

Distribution of Total Active Members by Age and by Years of Service

Average Age = 45.5 Average Service = 10.6

	Age Whole Years of Service at Valuation Date								
La	st Birthday	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	Totals
Less than 20	Count	16	-	-	-	-	-	-	16
	Total Contributions	\$3,655	-	-	-	-	-	-	\$3,655
	Avg. Contributions	\$228	-	-	-	-	-	-	\$228
20-24	Count	84	1	-	-	-	-	-	85
	Total Contributions	39,918	\$1,187	-	-	-	-	-	41,105
	Avg. Contributions	475	\$1,187	-	-	-	-	-	484
25-29	Count	99	47	5	-	-	-	-	151
	Total Contributions	57,840	75,066	\$12,024	-	-	-	-	144,930
	Avg. Contributions	584	1,597	\$2,405	-	-	-	-	960
30-34	Count	143	61	36	-	-	-	-	240
	Total Contributions	78,531	92,909	94,177	-	-	-	-	265,618
	Avg. Contributions	549	1,523	2,616	-	-	-	-	1,107
35-39	Count	123	91	57	27	3	-	-	301
	Total Contributions	76,681	151,032	153,110	103,136	\$16,215	-	-	500,174
	Avg. Contributions	623	1,660	2,686	3,820	\$5,405	-	-	1,662
40-44	Count	130	84	81	63	28	1	-	387
	Total Contributions	95,171	133,437	228,907	242,249	142,677	\$6,721	-	849,162
	Avg. Contributions	732	1,589	2,826	3,845	5,096	\$6,721	-	2,194
45-49	Count	78	57	54	52	45	17	2	305
	Total Contributions	57,481	92,519	150,530	210,355	243,483	114,661	\$19,615	888,644
	Avg. Contributions	737	1,623	2,788	4,045	5,411	6,745	\$9,807	2,914
50-54	Count	67	40	49	39	45	30	26	296
	Total Contributions	54,722	69,622	131,792	152,732	245,189	201,840	224,818	1,080,714
	Avg. Contributions	817	1,741	2,690	3,916	5,449	6,728	8,647	3,651
55-59	Count	46	37	28	55	37	27	75	305
	Total Contributions	34,104	60,816	78,473	233,726	209,852	186,062	705,109	1,508,142
	Avg. Contributions	741	1,644	2,803	4,250	5,672	6,891	9,401	4,945
60-64	Count	31	24	14	26	19	11	13	138
	Total Contributions	20,672	38,043	38,945	106,886	97,377	78,943	117,989	498,855
	Avg. Contributions	667	1,585	2,782	4,111	5,125	7,177	9,076	3,615
65-69	Count	30	16	15	16	6	1	6	90
	Total Contributions	20,211	27,497	41,730	69,281	30,603	6,260	50,117	245,699
	Avg. Contributions	674	1,719	2,782	4,330	5,100	6,260	8,353	2,730
70 & Over	Count	20	13	2	1	-	-	-	36
	Total Contributions	16,618	21,149	5,402	3,706	-	-	-	46,875
	Avg. Contributions	831	1,627	2,701	3,706	-		-	1,302
Totals	Count	867	471	341	279	183	87	122	2,350
	Total Contributions	\$555,604	\$763,276	\$935,090	\$1,122,069	\$985,396	\$594,487	\$1,117,648	\$6,073,572
	Avg. Contributions	\$641	\$1,621	\$2,742	\$4,022	\$5,385	\$6,833	\$9,161	\$2,584



Table 19
Schedule of Pensions Recipients Added to and Removed from Rolls

							Percent	
Fiscal Year	Added	to Rolls*	Remove	Removed from Rolls		<b>Total</b>	Increase in	Average
Ending		Annual		Annual		Annual	Annual	Annual
December		Pension		Pension		Pension	Pension	Pension
31	Count	Benefits	Count	Benefits	Count	Benefits	Benefits	Benefit
2014	106	\$368,168	35	\$114,448	1,251	\$4,250,343		\$3,398
2015	81	1,113,515	25	74,858	1,307	5,289,000	24.44%	4,047
2016	108	461,121	40	130,252	1,375	5,619,869	6.26%	4,087
2017	99	414,899	41	139,273	1,433	5,895,495	4.90%	4,114
2018	101	459,658	39	123,709	1,495	6,231,444	5.70%	4,168
2019	92	379,616	32	109,286	1,555	6,501,774	4.34%	4,181
2020	107	527,633	54	185,445	1,608	6,843,962	5.26%	4,256
2021	94	416,106	56	190,996	1,646	7,069,072	3.29%	4,295
2022	77	334,587	45	156,421	1,678	7,247,238	2.52%	4,319
2023	102	475,273	42	147,941	1,738	7,574,570	4.52%	4,358

<sup>\*</sup> Added to amounts in 2015 include increased benefit amounts under the provisions of the new plan.



Table 20
Retirees by Monthly Benefit and Age

Males			Age	Last Birt	hday		
Benefit Amount	Under 60	60-64	65-69	70-74	75-79	80 & over	Total
Under \$50	-	-	1	-	-	-	1
<b>\$50 - 99</b>	-	4	5	2	3	1	15
\$100 - 149	-	7	12	16	13	10	58
\$150 - 199	-	4	12	25	21	24	86
\$200 - 249	-	2	15	34	19	44	114
\$250 - 299	-	10	16	21	25	23	95
\$300 - 349	-	15	16	31	27	20	109
\$350 - 399	-	16	20	36	37	17	126
\$400 & Over	-	164	229	174	74	45	686
Total	-	222	326	339	219	184	1,290
Females							
Benefit Amount	Under 60	60-64	65-69	70-74	75-79	80 & over	Total
Under \$50	-	-	-	-	-	-	-
\$50 - 99	-	-	1	2	2	4	9
\$100 - 149	-	2	7	4	3	7	23
<b>\$150 - 199</b>	-	2	5	8	2	4	21
\$200 - 249	-	6	6	6	5	5	28
\$250 - 299	-	2	1	3	2	-	8
\$300 - 349	-	2	3	4	2	3	14
\$350 - 399	-	1	5	5	3	2	16
\$400 & Over	-	6	14	13	2	-	35
Total	-	21	42	45	21	25	154
Males & Females							
Benefit Amount	Under 60	60-64	65-69	70-74	75-79	80 & over	Total
Under \$50	-	-	1	-	-	-	1
<b>\$50 - 99</b>	-	4	6	4	5	5	24
<b>\$100 - 149</b>	-	9	19	20	16	17	81
<b>\$150 - 199</b>	-	6	17	33	23	28	107
\$200 - 249	-	8	21	40	24	49	142
\$250 - 299	-	12	17	24	27	23	103
\$300 - 349	-	17	19	35	29	23	123
\$350 - 399	-	17	25	41	40	19	142
\$400 & Over	-	170	243	187	76	45	721
Total	-	243	368	384	240	209	1,444



Table 21
Beneficiaries by Monthly Benefit and Age

Males				Age	Last Birt	hday			
Benefit Amount	Under 50	50-54	55-59	60-64	65-69	70-74	75-79	80 & over	Total
Under \$50	-	-	-	-	-	-	-	-	-
<b>\$50 - 99</b>	-	-	-	-	-	1	-	-	1
\$100 - 149	-	-	-	1	-	1	-	2	4
<b>\$150 - 199</b>	-	-	-	-	-	1	-	1	2
\$200 - 249	-	-	-	-	2	-	-	-	2
\$250 - 299	-	-	-	-	-	1	-	-	1
\$300 - 349	-	-	-	-	-	-	-	-	-
\$350 - 399	-	-	-	-	-	-	-	-	-
\$400 & Over	-	-	-	-	-	-	-	-	-
Total	-	-	-	1	2	4	-	3	10
Females									
Benefit Amount	Under 50	50-54	55-59	60-64	65-69	70-74	75-79	80 & over	Total
Under \$50	-	-	-	-	1	-	-	-	1
<b>\$50 - 99</b>	-	1	1	-	1	1	-	1	5
\$100 - 149	1	-	-	-	4	8	1	27	41
<b>\$150 - 199</b>	2	2	1	-	4	6	9	38	62
\$200 - 249	1	3	3	2	8	7	13	21	58
\$250 - 299	1	-	2	3	10	15	6	13	50
\$300 - 349	-	2	2	5	6	6	2	7	30
\$350 - 399	1	3	1	3	5	9	3	1	26
\$400 & Over	-	-	-	4	3	1	3	-	11
Total	6	11	10	17	42	53	37	108	284
Males & Females									
Benefit Amount	Under 50	50-54	55-59	60-64	65-69	70-74	75-79	80 & over	Total
Under \$50	-	-	-	-	1	-	-	-	1
<b>\$50 - 99</b>	-	1	1	-	1	2	-	1	6
\$100 - 149	1	-	-	1	4	9	1	29	45
\$150 - 199	2	2	1	-	4	7	9	39	64
\$200 - 249	1	3	3	2	10	7	13	21	60
\$250 - 299	1	-	2	3	10	16	6	13	51
\$300 - 349	-	2	2	5	6	6	2	7	30
\$350 - 399	1	3	1	3	5	9	3	1	26
\$400 & Over	-	-	-	4	3	1	3	-	11
Total	6	11	10	18	44	57	37	111	294



# Table 22 Pensions Awarded in 2023 by Status

Average Age = 61.8

Males & Females		Status	
Benefit Amount	Retirees	Beneficiaries	Total
Under \$50	0	0	0
\$50-\$99	2	1	3
\$100-\$149	8	3	11
\$150-\$199	6	3	9
\$200-\$249	4	4	8
\$250-\$299	4	3	7
\$300-\$349	7	4	11
\$350-\$399	5	0	5
\$400 & over	47	1	48
Total	83	19	102
Males & Females			
Age Last Birthday	Retirees	Beneficiaries	Total
Under 50	0	0	0
50-54	0	0	0
55-59	0	0	0
60-64	64	1	65
65-69	17	5	22
70-74	1	1	2
75-79	1	2	3
80-84	0	6	6
85 & over	0	4	4
Total	83	19	102



Table 23
Retirees by Service at Retirement and Years Since Retirement

Average Service at Retirement = 21.3 Average Years Since Retirement = 11.0

Service at				Years E	lapsed Sinc	e Retireme	nt		
Retirement		0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	Totals
Less than 5	Count	-	1	1	-	3	-	4	9
	Avg. Benefit	-	\$56	\$119	-	\$264	-	\$309	\$245
5-9	Count	21	47	37	8	9	9	5	136
	Avg. Benefit	\$118	\$126	\$125	\$151	\$132	\$161	\$131	\$129
10-14	Count	31	54	45	37	32	19	2	220
	Avg. Benefit	\$199	\$203	\$213	\$227	\$215	\$230	\$182	\$212
15-19	Count	38	27	52	55	30	9	3	214
	Avg. Benefit	\$304	\$305	\$309	\$300	\$305	\$286	\$283	\$303
20-24	Count	45	52	98	64	19	3	6	287
	Avg. Benefit	\$402	\$406	\$400	\$395	\$390	\$405	\$366	\$399
25-29	Count	57	91	79	32	10	12	-	281
	Avg. Benefit	\$501	\$492	\$488	\$486	\$471	\$458	-	\$490
30-34	Count	71	62	45	19	13	1	-	211
	Avg. Benefit	\$589	\$579	\$571	\$554	\$523	\$551	-	\$575
35 & Over	Count	44	33	7	1	1	-	-	86
	Avg. Benefit	\$682	\$668	\$628	\$669	\$720	-	-	\$673
Totals	Count	307	367	364	216	117	53	20	1,444
	Avg. Benefit	\$452	\$406	\$380	\$362	\$322	<b>\$296</b>	\$265	\$390



# Table 24 Retirees by Year of Retirement

January 1, 2024 Total = 1,444

Year of Retirement	Count	Year of Retirement	Count
Under 1981	-	2002	32
1981	-	2003	34
1982	-	2004	35
1983	-	2005	32
1984	-	2006	43
1985	-	2007	58
1986	2	2008	45
1987	-	2009	46
1988	-	2010	59
1989	-	2011	66
1990	1	2012	95
1991	3	2013	88
1992	3	2014	83
1993	2	2015	66
1994	2	2016	73
1995	7	2017	67
1996	9	2018	84
1997	13	2019	71
1998	18	2020	80
1999	7	2021	67
2000	16	2022	47
2001	21	2023*	69

<sup>\*</sup>May include retirements as of January 1, 2024

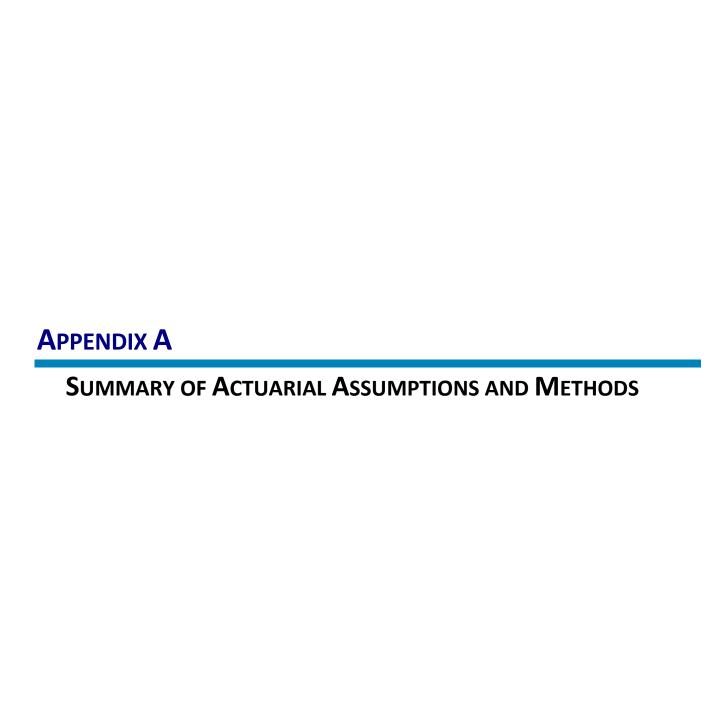


Table 25
Thirty Year Closed Group Projected Benefit Payments

Year Ending December 31	Actives	Retirees*	Total
2024	\$ 285,354	\$ 7,773,252	\$ 8,058,606
2025	641,365	7,716,990	8,358,355
2026	978,365	7,641,914	8,620,279
2027	1,277,715	7,553,933	8,831,648
2028	1,564,658	7,459,872	9,024,530
2029	1,852,642	7,360,266	9,212,908
2030	2,135,571	7,244,968	9,380,539
2031	2,418,268	7,125,058	9,543,327
2032	2,691,607	6,998,157	9,689,765
2033	2,953,523	6,856,551	9,810,074
2034	3,219,460	6,701,295	9,920,755
2035	3,467,408	6,526,903	9,994,310
2036	3,706,915	6,339,946	10,046,861
2037	3,971,856	6,153,210	10,125,066
2038	4,245,846	5,954,170	10,200,016
2039	4,506,631	5,748,122	10,254,753
2040	4,766,583	5,523,095	10,289,677
2041	5,032,023	5,296,327	10,328,350
2042	5,313,509	5,059,130	10,372,639
2043	5,594,385	4,817,274	10,411,658
2044	5,842,797	4,565,533	10,408,330
2045	6,061,188	4,303,637	10,364,825
2046	6,275,714	4,032,639	10,308,353
2047	6,454,146	3,764,434	10,218,580
2048	6,613,090	3,491,767	10,104,857
2049	6,770,636	3,226,803	9,997,439
2050	6,891,604	2,966,956	9,858,559
2051	6,982,840	2,710,468	9,693,307
2052	7,055,617	2,468,651	9,524,267
2053	7,108,279	2,233,500	9,341,779

<sup>\*</sup> Includes Disabled Members, Beneficiaries, and Deferred Vested Members.





## **Summary of Actuarial Assumptions and Methods**

The following methods and assumptions were used in preparing the January 1, 2024 actuarial valuation report.

#### 1. Valuation Date

The valuation date for any given year is January 1<sup>st</sup>, the first day 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.

#### 2. Actuarial Cost Method

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

- a. The valuation is prepared on the projected benefit basis, under which the present value, at the investment return rate assumed to be earned in the future (currently 6.80%), of each participant's expected benefit payable at retirement or death is determined, based on his/her age, service, and sex. The calculations take into account the probability of a participant's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his/her terminating with a service, or survivor's benefit. The present value of the expected benefits payable for the active participants 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 payable from the Fund on account of the present group of participants and beneficiaries.
- b. The employer contributions required to support the benefits of the Fund are determined using a level funding approach, and consist of a normal cost contribution and an unfunded accrued liability contribution.
- c. The normal cost contribution is determined using the "entry age normal" actuarial cost method. Under this method, a calculation is made to determine the average uniform and constant employer contribution amount which, if applied to each new participant during the entire period of his/her anticipated covered service, would be required to meet the cost of all benefits payable on his/her behalf based on the benefits provisions applicable for the individual member.
- d. The Board's policy consists of amortizing the unfunded liability as of January 1, 2018, over a closed 30-year period with each subsequent amortization base created as a result of year to year experience changes over individual 20-year closed periods. The current year amortization base is determined by taking the current unfunded liability less the outstanding amounts of prior year bases.



## **Summary of Actuarial Assumptions and Methods (continued)**

#### 3. 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, with interest, dividends, and other income recognized immediately. 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 investment expenses. An adjustment is made if the actuarial value is not within 20% of the Market Value. For any year following a year in which the 20% of market value adjustment was applied, the actuarial value is determined as if the adjustment was not applied in the previous year.

#### 4. Economic Assumptions

Investment return: 6.80% per year, compounded annually, composed of an assumed 2.25% inflation rate and a 4.55% net real rate of return. This rate represents the assumed return, net of investment expenses.

#### 5. Demographic Assumptions

#### a. Rates Before Retirement

Healthy Pre-Retirement Mortality:

Pub-2010 General Mortality Table, amount weighted, fully generational, projected with Scale MP-2020 Ultimate Scale

Males: No set back with a multiplier of 100%  $\,$ 

Females: No set back with a multiplier of 100%

Healthy Post-Retirement Mortality:

Pub-2010 General Healthy Annuitant Mortality Table, amount weighted, fully generational, projected with Scale MP-2020 Ultimate Scale

Males: No set back with a multiplier of 100% Females: No set back with a multiplier of 103%

	Pre-Retirement		Post-Retirement		
	Projected	to 2024 using th	e MP-2020 Ultimate Scale		
Age	Male	Female	Male	Female	
20	0.03%	0.01%	0.03%	0.01%	
25	0.02%	0.01%	0.02%	0.01%	
30	0.03%	0.01%	0.03%	0.01%	
35	0.04%	0.02%	0.04%	0.02%	
40	0.05%	0.03%	0.05%	0.03%	
45	0.08%	0.05%	0.09%	0.06%	
50	0.12%	0.07%	0.25%	0.19%	
55	0.18%	0.10%	0.36%	0.24%	
60	0.26%	0.15%	0.51%	0.33%	
65	0.39%	0.25%	0.76%	0.53%	
70	0.59%	0.41%	1.28%	0.92%	
75			2.27%	1.64%	
80			4.09%	2.96%	
85			7.60%	5.66%	
90			13.43%	10.83%	
95			21.64%	18.33%	
100			31.27%	27.81%	



## **Summary of Actuarial Assumptions and Methods (continued)**

#### b. <u>Withdrawal Rates</u>

	Withdrawal				
Age	Male	Female			
20	10.00%	10.00%			
25	6.00%	6.00%			
30	5.00%	5.00%			
35	4.00%	4.00%			
40	4.00%	4.00%			
45	3.00%	3.00%			
50	2.50%	2.50%			
55	1.50%	1.50%			
60	1.00%	1.00%			

#### c. <u>Retirement Rates</u>

Age	Rates
<60	0.0%
60	55.0%
61	25.0%
62	15.0%
63	15.0%
64	15.0%
65	25.0%
66	30.0%
67	20.0%
68	20.0%
69	20.0%
70	100.0%



## **Summary of Actuarial Assumptions and Methods (continued)**

#### 6. Other Assumptions

- a. Percent married: 85% of employees are assumed to be married. (No beneficiaries other than the spouse assumed.)
- b. 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.
- c. Percent electing annuity on death (when eligible): All of the spouses of vested, married participants are assumed to elect an annuity.
- d. Administrative expenses: Average of actual expenses for the prior two years, with each year projected at 2.50% to the valuation date.
- e. Decrement timing: Decrements of all types are assumed to occur mid-year.
- f. 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.
- g. Incidence of contributions: Contributions are assumed to be received continuously throughout the year.
- h. Benefit service: All members are assumed to accrue one year of service each year.
- i. Premium tax allocation: Provided by staff and based on booked total premium taxes.
- j. Percent of eligible deferred vested members electing a refund: 25% of all future deferred vested members are assumed to leave their contributions in the fund and elect a deferred vested annuity payable commencing at age 60.
- k. No benefit amount data is available for members entitled to deferred benefits. The benefit is estimated using the final average compensation and service provided by WRS.





**SUMMARY OF PLAN PROVISIONS** 

## **Summary of Plan Provisions**

#### **Covered Members**

Any volunteer firefighter, EMT, or search and rescue employee for whom payments are received by the Volunteer Firefighter, EMT, and Search and Rescue pension account as prescribed in W.S. 35-9-621(e).

#### **Service Retirement**

Eligibility Age 60 with 5 years of service.

Monthly Benefit \$16 per month for each of the first 10 years of service and \$19 per month for each year of service over 10.

Normal Form of Payment is a 66% Joint & Survivor Annuity for married retirees and life annuity for unmarried retirees.

Any contributing member of the discontinued Volunteer Firefighter Pension Plan and the Volunteer Emergency Medical Technician Pension Plan on June 30, 2015 is grandfathered in certain provisions of the discontinued plans, including receiving the greater of the benefit under the previous plan and the service retirement benefit under this plan.

#### Vesting

Any member with five or more years of service who has left employment, and who has not withdrawn accumulated contributions, is eligible to receive the above benefit or can elect to receive a lump-sum refund of contributions with interest. In addition, a member with at least ten years of service may gain extra years of service by continuing to contribute, up to a maximum number of months served as an active member. A member who terminates with less than five years of service is only eligible for the lump-sum benefit.

#### **Pre-retirement Death Benefit**

Eligibility No age or service requirements.

Monthly Benefit

Upon the death of any participating member, the board shall authorize a monthly payment to the surviving spouse of the member during the spouse's remaining lifetime of an amount equal to 66% of the amount calculated above based on actual years of service, or five years of service if greater. Benefits are also payable to children under age 21, equal to 33% of the amount calculated above, upon death of the member and spouse.



## **Summary of Plan Provisions (continued)**

#### **Post-retirement Death Benefit**

Monthly Benefit 66% of the member's benefit payable prior to the member's death.

Benefits are also payable to children under age 21, equal to 33% of the amount calculated above, upon death of the member and

spouse.

#### **Lump Sum Death Benefit**

Benefit A lump sum payment of \$5,000, or \$2,500 for members who

contributed \$5.00 per month before July 1, 1989, less the amount of the monthly benefits paid to the estate upon the spouse's death. For a deceased member without an eligible survivor, the greater of the deceased member's account or \$5,000 (\$2,500 for certain

members) is payable to the estate of the deceased member.

#### **Contributions**

Employee \$18.75 per month for volunteer firefighters and EMT.

\$37.50 per month for search and rescue members.

State 60% of gross fire insurance premium taxes paid on fire insurance

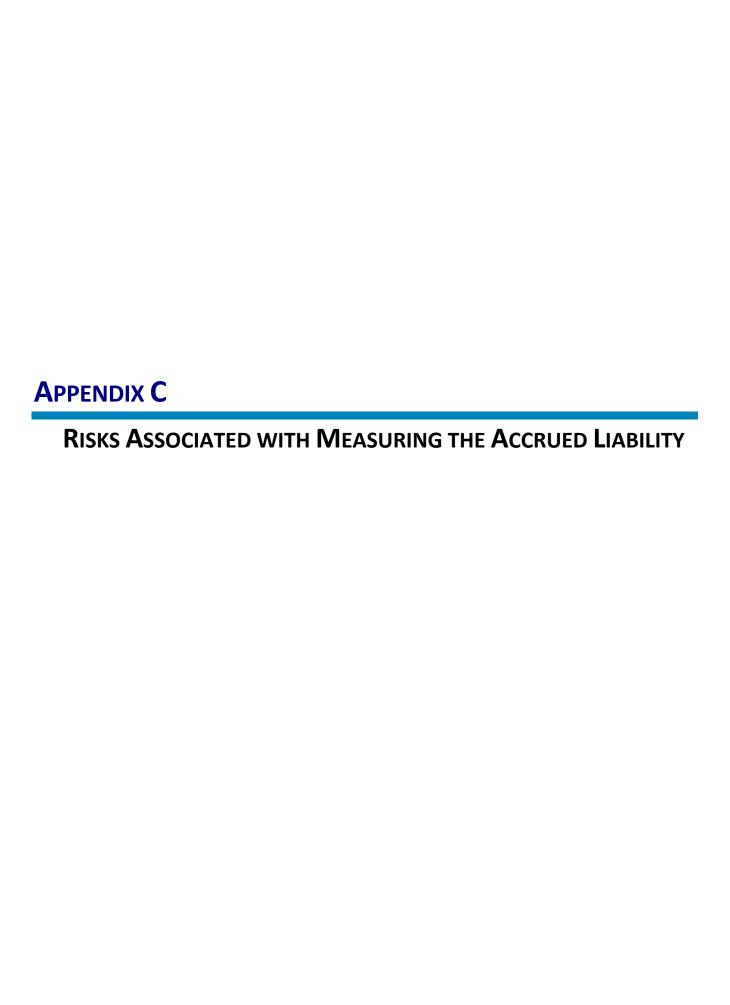
policies in Wyoming.

Interest 3.0% annually.

**Cost-of-Living Improvements** W.S. 9-3-454 prohibits benefit changes, including cost-of-living

increases, unless the funded ratio stays above 100% plus a margin for adverse experience throughout the life of the benefit change.





## 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;
- 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. Longevity risk members may live longer or shorter than expected and receive pensions for a period of time other than assumed;
- 5. 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.

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 Table 1b 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.



## Risks Associated With Measuring the Accrued Liability and Actuarially Determined Contribution

#### **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:

	January 1, 2024	January 1, 2023
Ratio of actives to retirees and beneficiaries	1.4	0.7
Ratio of net cash flows to market value of assets	5%	-3%
Duration of the actuarial accrued liability	11.9	12.0

#### 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.



## Risk Measures – Low Default Risk Obligation Measure

#### Introduction

In December 2021, the Actuarial Standards Board (ASB) adopted a revision to Actuarial Standard of Practice (ASOP) No. 4, Measuring Pension Obligations and Determining Pension Plan Costs or Contributions. The revised ASOP No. 4 requires the calculation and disclosure of a liability referred to by the ASOP as the "Low-Default-Risk Obligation Measure" (LDROM). The rationale that the ASB cited for the calculation and disclosure of the LDROM was included in the Transmittal Memorandum of ASOP No. 4 and is presented below (emphasis added):

"The ASB believes that the calculation and disclosure of this measure provides appropriate, useful information for the intended user regarding the funded status of a pension plan. The calculation and disclosure of this additional measure is not intended to suggest that this is the "right" liability measure for a pension plan. However, the ASB does believe that this additional disclosure provides a more complete assessment of a plan's funded status and provides additional information regarding the security of benefits that members have earned as of the measurement date."

#### **Comparing the Accrued Liabilities and the LDROM**

One of the fundamental financial objectives of the Wyoming Volunteer Firefighter, EMT, and Search and Rescue Pension Plan is to finance each member's retirement benefits over the period from the member's date of hire until the member's projected date of retirement (entry age actuarial cost method) as a level dollar amount. To fulfill this objective, the discount rate that is used to value the accrued liabilities of the Wyoming Volunteer Firefighter, EMT, and Search and Rescue Pension Plan is set equal to the expected return on the Fund's diversified portfolio of assets (referred to sometimes as the investment return assumption). For the Wyoming Volunteer Firefighter, EMT, and Search and Rescue Pension Plan, the investment return assumption is 6.80%.

The LDROM is meant to approximately represent the lump sum cost to a plan to purchase low-default-risk fixed income securities whose resulting cash flows essentially replicate in timing and amount the benefits earned (or the costs accrued) as of the measurement date. The LDROM is very dependent upon market interest rates at the time of the LDROM measurement. The lower the market interest rates, the higher the LDROM, and vice versa. The LDROM results presented in this report are based on the entry age actuarial cost method and discount rates based upon the intermediate rate from the FTSE Pension Discount Curve and Liability Index published by the Society of Actuaries. This rate is 4.80% as of December 31, 2023. This measure may not be appropriate for assessing the need for or amount of future contributions. This measure may not be appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligation.

The difference between the two measures (Valuation and LDROM) is one illustration of the savings the sponsor anticipates by taking on risk in a diversified portfolio.

Valuation Accrued Liabilities	LDROM
\$125,489,684	\$158,646,753

