CRESTED BUTTE FIRE PROTECTION DISTRICT
VOLUNTEER PENSION BOARD MEETING
Mt. Crested Butte Fire Station #2
Tuesday, September 12, 2023
6:15 PM

6:15 CALL MEETING TO ORDER
1. Review / Changes to Agenda

6:17 CONSENT AGENDA
1. Approval of Previous Minutes

6:20 NEW BUSINESS
1. Review FPPA Reports for Quarter 2 and 2023 Actuarial Report

6:40 UNSCHEDULED BUSINESS AND BOARD MEMBER COMMENTS
COMMENTS FROM AUDIENCE

6:45 ADJOURNMENT

Online Meeting Information
https://zoom.us/j/9703495333?pwd=ZUlNRFBCL253UzlxSGNhQ0laS29TQT09
One Tap Mobile +16699009128,,9703495333# US (San Jose)
+1 312 626 6799 US (Chicago) - Meeting ID: 970 349 5333
Password: 5333

CRESTED BUTTE FIRE PROTECTION DISTRICT
MINUTES OF VOLUNTEER PENSION BOARD MEETING
Mt. Crested Butte Fire Station 2
Tuesday, February 14, 2023
Approved _____

Attendance

Board Members Present: Chris McCann, Ken Lodovico, Tina Kempin, Eric Tunkey, Kent Cowherd, Andrew Gitin
Staff, Volunteers and Public: Sean Caffrey, Robert Weisbaum, Annie Tunkey, Beth Shaner, Tara Sweitzer, Corey Tibljas

Changes to Agenda

Meeting called to order at 7:00 by Board Chairman Chris McCann.
There were no changes to the agenda.

Consent Agenda

Approval of minutes September 2022 regular meeting
Motion to approve the consent agenda by McCann, seconded by Tunkey. Motion passes unanimously.

New Business

The FPPA 4th quarter financials were not available as of the meeting date. CEO Caffrey will send the financials to the board members upon their release by FPPA. The 2022 list of volunteer activity was reviewed for certification. Motion to certify the 2022 volunteer activity list by Gitin, seconded by McCann. Motion passes unanimously.
CEO Caffrey stated that FPPA will conduct an actuarial study in 2023 and asks the board members if they would like to pay an additional $1,400 to look at up to 3 additional benefit level projections. Board members agree that having additional information would be desirable and direct CEO Caffrey to run actuarial numbers based on $850, $900 and $1000 for full vested members.
Motion utilize funds to run the actuarial study at the stated funding levels by McCann, seconded by Kempin. Motion passes unanimously.
Board member McCann asks Chief Weisbaum to clarify how activity status would be determined if a volunteer is injured in a line of duty accident. Chief Weisbaum clarifies that as long as the member is able to attend training and achieve 36 hours of training time they would still qualify as active for FPPA qualifications.

Old Business

CEO Caffrey included a memo and Corey Tibljas' request for an additional year of activity status in the board packet. Caffrey verifies that in 1985 Allen Bailey was given one year of

activity status at the age of 17 and that Ben Somrak was given a year of credit when he was 19 years of age. Board members reviewed the information and McCann states that if credit was given to Allen Bailey then perhaps Tibljas should be granted credit as well. Several board members comment on Tibljas' exemplary activity as a member
Motion to grant Corey Tibljas an additional year of volunteer credit by Dietrich, seconded by McCann. Motion passes unanimously.

CEO Caffrey asks Corey if any other member might be in this same situation. Tibljas states he believes Jan Blewett may be the only other member.

Unscheduled Business

There was no unscheduled business or comments.

Motion to adjourn at 7:15 pm by McCann, seconded by Lodovico. Motion passes unanimously.

FPPA | Fire & Police Pension Association of Colorado

MEMORANDUM

To: Affiliated Volunteer Fire Department Employers
Sent via email to FPPA Actuarial Contact

From: FPPA

Re: Volunteer Fire Department Actuarial Valuation Results as of January 1, 2023

Date: Summer 2023

The actuarial valuation report as of January 1, 2023 for your volunteer fire department pension plan is available on the FPPA Employer Portal.

The actuarial valuation report has always played an important role as the basic source document for information regarding actuarially determined contributions and the funded status of pension plans. The Government Finance Officers Association (GFOA) recommends that state and local government finance officials and others with decision-making authority carefully review and understand their actuarial valuation report and use the information it contains to make policy decisions that ensure that pension benefits are funded in a sustainable manner. The purpose of an actuarial valuation is: 1) to determine the amount of actuarially determined contributions (i.e., an amount that, if contributed consistently and combined with investment earnings, would be sufficient to pay promised benefits in full over the long-term) and 2) to measure the plan's funding progress.

To assist you in your budgeting process for 2024 and 2025 on your volunteer fire department pension plan, please refer to the Calculated Annual Contribution amount within the Executive Summary of this report. The contribution may be achieved with a combination of your department contribution and state matching funds. However, your department is ultimately responsible for funding the plan appropriately.

FPPA's actuarial firm (Gabriel Roeder Smith) has created video presentations to assist the employer and the Volunteer Fire Pension Board in understanding the volunteer fire actuarial valuation report. You will find the video presentations on FPPA's website under the Employer Portal tab at:
http://www.FPPAco.org/volunteers.html

Please share this report and the video presentations with your Volunteer Fire Pension Board.

If you have any questions concerning this report, please contact FPPA at 303-770-3772 or 800-332-3772.

Note: If your Calculated Annual Contribution is $0, you may contribute your budgeted contribution to the volunteer fire department pension plan.

FPPA | Fire & Police Pension Association of Colorado

MEMORANDUM

To: Affiliated Volunteer Pension Plan Employers

From: Peggy Job, Senior Accountant

Re: Six months ended June 30, 2023

Allocation Report, Annual Contributions Received & Direct Expense Allocation Summary

Date: July 27, 2023

Allocation Report

Investment Performance

Your plan assets are commingled for investment purposes in the Members' Benefit Investment Fund – Long Term Pool ("Pool"). Returns for the Pool are as follows (returns for periods longer than one year are annualized):

As of 06/30/2023	Quarter	Year to Date	1 Year	3 Years	5 Years
Total Pool Net of Investment Expense*	2.73%	6.78%	8.92%	9.47%	7.81%

**FPPA Administrative Expenses* are not included in the *Total Pool Net of Investment Expense* percentages.

The table below summarizes expenses as a percentage of net assets for the Pool:

Year	FPPA Administrative Expense*	Investment Management Expense	Total Expense Ratio
Q2-2023	0.08%	0.33%	0.41%
2022	0.14%	0.80%	0.94%
2021	0.12%	0.81%	0.93%
2020	0.13%	0.79%	0.92%
2019	0.13%	0.80%	0.93%
2018	0.16%	0.88%	1.04%
2017	0.23%	0.89%	1.12%
2016	0.24%	0.79%	1.03%

How to Calculate Your Plan Specific Expense Ratio

Your Allocation Report may reflect expenses specific to your plan such as actuarial expense and legal fees as well as expenses you directed FPPA to pay from your plan assets. These expenses are reflected in the line items *Plan Directed Expenses* and *Direct Expense Allocation*. As such, your plan's administrative expenses may differ from the Pool. In order to calculate your plan's administrative expense ratio, you will need to add the line items *Plan Directed Expenses*, *Direct Expense Allocation* and *Allocated Fees & Expenses* and divide by the *Ending Balance*.

Allocation Methodology

Investment Expenses and *Allocated Fees & Expenses* are separately allocated and separately reported in the Allocation Report. The *Investment Expenses* are allocated to each plan based on the plan's proportion of total assets. The *Allocated Fees & Expenses* are allocated based on the plan's proportion of total membership, including active, inactive and retired members as of December 31 of the prior year as defined by the guidelines within the Annual Comprehensive Financial Report. Member counts may be adjusted during the year for plan affiliation, disaffiliation, or reentry.

Review of the Report
Review the items *Member Contributions, Employer Contributions, Refunds, Affiliations, Net Benefits, Plan Directed Expenses and State Funding* and confirm that these amounts are correct year-to-date. **If any amount is not correct, please send a written response to FPPA by September 15 2023. If FPPA does not receive a response by September 15 2023, you are confirming that these report items are correct.**

Annual Contributions Received

FPPA provides a schedule of your 2023 contributions received by FPPA year to date. This schedule compares contributions received in the current year to the actuarial required contributions for 2023. **Please be aware that this report shows contributions based on the date received by FPPA and does not consider if contributions relate to a prior year.**

Direct Expense Allocation Summary

Direct Expense Allocation
FPPA provides a summary of expenses directly allocated to your plan, payments received related to these expenses and the related annual budgeted amounts. These costs are identified as direct plan expenses and are charged directly to the plan as a reduction of plan assets. They are reflected in the *Direct Expense Allocation* row of your Allocation Report. You may contact me to request a detailed summary of these allocated expenses.

The direct expense allocation is comprised of costs for audit and actuarial services. The audit services relate to the SOC 1 Type 2 report over the operating effectiveness of FPPA's controls for processing data and transactions related to your plan. The SOC 1 Type 2 report has been provided since 2014 to assist employers in reporting in accordance with Governmental Accounting Standards Board Statement No. 68 (GASB 68), *Accounting and Financial Reporting for Pensions*. Actuarial services include the biennial funding valuation report (issued in odd years for Volunteer Firefighter plans and even years for Old Hire plans) and the annual GASB 68 report. Actuarial services are provided by Gabriel Roeder Smith & Co. Audit services are provided by Eide Bailly LLP.

Payment of Settlor Expenses
Please discuss these direct plan expenses with your legal counsel to determine if they are a "settlor" expense. The Department of Labor believes that the employer should bear the cost of settlor expenses. If you agree, you should reimburse the plan for these expenses. This payment is in addition to any employer contributions made to the plan or as determined by the actuary (the actuarially determined contribution).

To reimburse the plan for these costs, please send payment via ACH or wire to FPPA. These payments need to be identified separately from your actuarial required contribution in order to net out the expense. Please contact FPPA for ACH or wire Instructions.

If you have any questions regarding your allocation report or the direct allocated plan expenses, please call me at 303-770-3772 in Metro Denver or 800-332-3772 or email me at pjob@fppaco.org.

Allocation Report Descriptions

This report provides the beginning of year plan balance, year-to-date totals, and an ending plan balance as of the report date

Beginning Balance	Plan assets at the beginning of the year
Plan Direct Inflows and Outflows	
Member Contributions	Member Contributions made to the plan
Employer Contributions	Employer Contributions made to the plan
Contributions from the SWDD Plan	Contributions received for a member on disability rolling to a normal retirement
Refunds	Member withdrawal of funds from the plan
Affiliations/(Disaffiliations)	Plan affiliation or disaffiliation or idle funds distribution (typically a Volunteer Fire Plan matter)
Net Benefits	Benefits paid to retired members
Plan Directed Expenses	Payments from plan assets directed by the department Examples: legal, actuarial, and insurance expense
State Funding	State funding for volunteer plans
Plan Direct Inflows and Outflows Sub-Total	Sub-Total of the above activity
Allocated Income and Expense	
Interest*	Interest on investments
Dividends*	Dividends on investments
Other Income*	Other investment income
Net Change Accrued Income*	Change in accrued earnings for interest and dividends
Unrealized Gain/Loss*	Unrealized Gain/Loss on investments
Realized Gain/Loss*	Realized Gain/Loss on investments
Defined Contribution Earnings (Net)	Not applicable for Defined Benefit plans
Investment Expenses	Allocated share of FPPA investment expense
Direct Expense Allocation	Expenses directly allocated to the plan Examples: actuarial and audit fees
Other Expenses	Allocated share of FPPA administrative expense
Allocated Income and Expense Sub-Total	Sub-Total of the above activity
Ending Balance	Plan assets at period end

** Allocated from the Fire & Police Members' Benefit Investment Fund – Long Term Pool.*

Fire and Police Pension Association

Volunteer Fire Pension Plan Contributions
CRESTED BUTTE FPD 772-5

For the Reporting Period: 01/01/2023 through 06/30/2023

Deposit Date	Employer Contributions	State Matching Funds	Total Remittance
05/02/2023	$75,000.00	$0.00	$75,000.00
Total Remittance			$75,000.00
Calculated Contribution per the 01/01/2021 Actuarial Study			$105,121.00
Difference Over/(Under)			**$(30,121.00)**

Note: The Calculated Contribution amount is due to FPPA before 12/31/2023

Fire and Police Pension Association
Direct Expense Allocation Summary
Crested Butte FPD 772-5
For the Six Months Ending June 30, 2023

Type of Expense	2023 Budget	Year-to-Date Expenses	Payment of 2023 Expenses
Actuarial Expenses	$1,388.40	$578.50	
Audit Expenses	$160.32	$160.32	
Other Asset Allocation Study Expenses			
Total Direct Allocated Expenses & Payments	**$1,548.72**	**$738.82**	

Actuarial expenses may exceed the budget related to asset allocation studies and implementation.

Contact Peggy Job at 720-479-2345 to obtain a detailed expense listing.

Fire and Police Pension Association
Crested Butte FPD 772-5
For the Six Months Ending June 30, 2023

Beginning Balance	$4,111,578.94
Plan Direct Inflows and Outflows	
Member Contributions	
Employer Contributions	$75,000.00
Contributions from the SWDD Plan	
Refunds	
Affiliations/(Disaffiliations)	
Plan Transfers	
Net Benefits	($146,220.00)
Plan Directed Expenses	
State Funding	
Plan Direct Inflows and Outflows Sub-Total	($71,220.00)
Allocated Income and Expense	
Interest	$13,891.83
Dividends	$9,982.44
Other Income	$1,554.22
Net Change Accrued Income	$1,499.34
Unrealized Gain/Loss	$227,327.36
Realized Gain/Loss	$29,444.41
Defined Contribution Earnings (Net)	
Investment Expenses	($13,769.06)
Direct Expense Allocation	($738.82)
Other Expenses	($8,080.01)
Allocated Income and Expense Sub-Total	$261,111.71
Ending Balance	$4,301,470.65

FIRE AND POLICE PENSION ASSOCIATION
CRESTED BUTTE FIRE PROTECTION DISTRICT VOLUNTEER PENSION FUND

ACTUARIAL VALUATION REPORT AS OF JANUARY 1, 2023

P: 469.524.0000 | www.grsconsulting.com

To:	Administrative Heads and Finance Officers of Crested Butte Fire Protection District; administered by FPPA
Date:	July 2023
Subject:	**Actuarial Valuation Results as of January 1, 2023**

This report contains the actuarial valuation results as of January 1, 2023 for your department as determined by Gabriel, Roeder, Smith & Company (GRS), actuary for the Fire and Police Pension Association (FPPA). Questions about this report should be directed to FPPA, rather than to Gabriel, Roeder, Smith & Company.

Financing Objectives

This valuation was prepared to determine if the current annual assumed contributions of $115,500 are adequate for funding the current benefits provided by the department. Contributions into the pension fund can come from two sources: contributions directly from the department and contributions from the State based on assessed property values and other formulas. The "Assumed Contribution" referred to throughout this report is the sum of the contributions from the aforementioned two sources. With the current assumed contribution amount, the UAAL will be eliminated in 8 years.

The calculated annual contribution shown in Table 3 is the sum of the normal cost, an amount available to amortize the Unfunded Actuarial Accrued Liability (UAAL), and any ongoing administrative and miscellaneous expenses that are paid out of the pension fund. The minimum contribution the department must pay is the calculated annual contribution, but not less than $0.

Benefit Provisions

This actuarial valuation reflects the provisions that were applicable to the Crested Butte Fire Protection District Volunteer Pension Fund as of the valuation date. The details of the actuarial calculations, based on the current benefit provisions, are described in this report. Departments are allowed to model three alternative benefit packages, if desired. If alternatives were requested, a summary of the actuarial results based on those packages is shown in Table 16. A summary of the alternatives requested is shown in Table 15. If an alternative is adopted that increases the calculated annual contribution, the new calculated annual contribution will become effective beginning January 1, 2024.

This actuarial valuation is based upon coverage data given in the required checklist, which was completed by the department, returned to FPPA, and supplied to GRS. Any changes in coverage adopted but not included in the required checklist are not reflected in the current results. Once the adopted coverage data is provided, subsequent valuation results will be reflective of the change in coverage.

Actuarial Assumptions and Methods

This actuarial valuation uses the assumptions and methods that were adopted by the Board of Directors of FPPA based upon the actuary's analysis and recommendations resulting from the 2022 Experience Study and first effective in the January 1, 2023 valuations. A summary of those assumptions and methods can be found in Table 14. The mortality assumptions were updated to use the Pub-2010 Public Safety Mortality tables, projected with the ultimate rates of the MP-2020 projection scale.

Liabilities were determined under the Entry Age Normal actuarial cost method. This is the same funding method that has been used in prior years.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated annual contribution and funding periods. The actuarial calculations are intended to provide information for rational decision making.

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

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.

The calculated employer contribution consists of the sum of three pieces: the normal cost, the amortization of the Unfunded Actuarial Accrued Liability (UAAL), and any administrative and other ongoing expenses to be paid out of the pension fund (e.g. insurance contracts). The calculated annual contribution is shown in Table 3, Item 9. The normal cost (shown in detail in Table 3, Item 1) can be viewed as the regular, ongoing cost of the plan. The UAAL is the amount by which the actuarial value of assets falls short of, or exceeds, the actuarial accrued liability for this plan. The UAAL has been amortized under a level dollar method over 20 years. The required payment to amortize the UAAL in 20 years is shown in Table 3, Item 7.

Assets

Table 10, Item 2 shows the market and actuarial values of assets for this department. The actuarial value is an adjusted market value. It reflects only a portion of the excess (or shortfall) between recent investment returns and the corresponding expected returns based on the annual investment return assumption. The actuarial value recognizes 20% of the difference between the projected actuarial value and the market value at the valuation date. This smoothed average approach dampens the year-to-year fluctuations in the calculated annual contribution.

Member Data

Member data as of January 1, 2023 was supplied by FPPA, as verified by the department. GRS did not subject the data to any auditing procedures but reviewed it and tested it for reasonableness and consistency. The member count is shown in Table 10, Item 1. This count includes members who have worked for this employer at one time, but who are now active at another employer. Your share of the benefits for such former employees is reflected in the liabilities and in the contribution calculation. The number of retirees shown includes those who retired from this employer, as well as those who retired from another employer but has service attributed to this employer. The liabilities take into account your share of the benefits for these former, active members.

Experience

Many employers experienced a decrease in their calculated annual contribution between the 2021 actuarial valuation and this valuation. This was mainly due to actuarial gains from investment experience. The recognition of the outstanding asset gains at the prior valuation, in combination with good investment experience during 2021, was enough to offset the partial recognition of the poor investment experience during 2022 for overall investment gains on the actuarial value of assets. Table 5 details the changes in the UAAL and the calculated annual contribution since the prior valuation.

Actuarial experience is measured by comparing the expected valuation results with the actual valuation results at the valuation date. The expected valuation results are calculated as if all of the actuarial assumptions had been met.

- A Gain/(Loss) attributable to Investment Experience is realized when the pension fund assets earn over/(under) the actuarial assumed earnings rate.

- A Gain/(Loss) attributable to Membership Changes is realized when the pension fund liabilities are less/(greater) than the actuarial assumptions predicted (e.g. higher terminations, members remaining after eligible for normal retirement benefits, members not living as long as expected). See Table 14 for a description of the actuarial assumptions.

- A Gain/(Loss) attributable to Benefit Improvements is realized when benefit level improvements have been adopted since the prior valuation.

GASB Accounting

The Governmental Accounting Standards Board (GASB) Statement No. 67, *Financial Reporting for Pension Plans* (Issued 6/2012), replaced the requirements under GASB Statement No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans* (Issued 11/1994), effective for financial statements for fiscal years beginning after June 15, 2013. GASB Statement No. 68, *Accounting and Financial Reporting for Pensions* (Issued 6/2012), replaced GASB Statement No. 27, *Accounting for Pensions by State and Local Governmental Employers* (Issued 11/1994), effective for fiscal years beginning after June 15, 2014. Employer reporting information for GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*, is provided in a separate report.

Tables

This report includes one executive summary and up to sixteen tables.

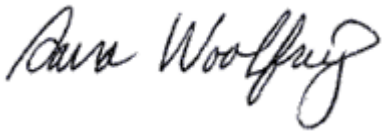
- The executive summary includes a condensed summary of the demographic, financial, and actuarial data.
- Table 1 is a comparison of the actuarial results of the report based on the current benefit provisions and the state match calculation if requested.
- Table 2 is a summary of the current benefit provisions and the state match calculation if requested.
- Table 3 provides the details of the development of the required contribution.
- Table 4 shows the actuarial present value of future benefits, broken down by membership category and type of benefit.
- Table 5 shows the sources of change in the calculated annual contribution since the prior valuation.
- Table 6 provides information that used to be required under the Governmental Accounting Standards Board Statement No. 25 (GASB 25) and No. 27 (GASB 27). These statements have been replaced by GASB 67 and GASB 68 and results under those standards will be provided in a separate report.
- Tables 7 thru 9 show the development of the financial information.
- Tables 10 and 11 show historical actuarial and demographic data for the department.
- Table 12 shows the current distribution of the membership by age and service.
- Table 13 shows the risks associated with measuring the accrued liability and actuarially determined contribution.
- Table 14 shows the actuarial assumptions and methods used to calculate the liabilities.
- Table 15 is a summary of the alternative benefit provisions requested, if any.
- Table 16 is a comparison of the actuarial results of the report based on the alternative benefit provisions requested, if any.
- Appendix provides definitions of several terms used throughout the report.

Certification

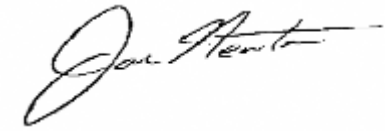
We certify that the information included herein and contained in the 2023 Actuarial Valuation Report is accurate and fairly presents the actuarial position of the Crested Butte Fire Protection District Volunteer Pension Fund as of January 1, 2023.

All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, the results presented comply with the requirements of the State of Colorado statutes and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board. The undersigned are independent actuaries. All are members of the American Academy of Actuaries, and are also Enrolled Actuaries. All are experienced in performing valuations for public retirement systems.

Respectfully submitted,
Gabriel Roeder Smith & Company



Dana Woolfrey, FSA, EA, MAAA
Senior Consultant



Joseph Newton, FSA, EA, MAAA
Senior Consultant

Bill Detweiler, ASA, EA, MAAA
Consultant

Executive Summary

Item	Valuation as of January 1, 2023	Valuation as of January 1, 2021
Membership		
• Number of:		
- Active members	18	24
- Retired Members	38	34
- Disabled members	0	0
- Beneficiaries	0	0
- Terminated vested members	17	14
- Terminated members active in another fund	0	0
- Total	73	72
Assets		
• Market value	$ 4,111,579	$ 4,194,995
• Actuarial value	4,278,891	3,952,418
• Employer contribution for prior year	75,000	75,000
• Employer contribution for prior year minus 1	75,000	50,002
• Ratio of actuarial value to market value	104%	94%
Actuarial Information		
• Employer normal cost	$ 34,500	$ 43,461
• Normal cost per active member	1,917	1,811
• Unfunded actuarial accrued liability / (Surplus)	377,594	533,642
• Calculated annual contribution	80,678	105,121
• Assumed contribution from department	75,000	75,000
• Assumed contribution from state	40,500	40,500
• Funding period based on assumed contributions	8 years	15 years
• Funded ratio	92%	88%
• Funded ratio based on market value	88%	94%
• Is current level of contributions adequate	Yes	Yes

Table 1 - Comparison of Actuarial Results Based on Alternate Benefit Levels

		Current Plan (1)	State Match Calc (2)
1.	Normal Retirement Benefit	$ 800.00	$ 300.00
2.	Normal Cost	34,500	12,706
3.	Present Value of Future Benefits	4,823,129	1,762,849
4.	Actuarial Accrued Liability	4,656,485	1,701,539
5.	Unfunded Accrued Liability / (Surplus)	377,594	(2,577,352)
6.	Administrative and other ongoing expenses	14,780	14,780
7.	Total Annual Calculated Contribution	80,678	(239,134)
8.	Assumed Contribution	115,500	115,500
9.	Funding Period Based on Assumed Contribution	8 years	0 years
10.	Funded Ratio	92%	251%

Table 2 - Actuarial Valuation Information Checklist

	Current Plan	State Match Calc	Maximum Per State Statute
1. Normal Retirement Benefit (monthly):			
a. Regular	$800.00	$300.00	None
b. Extended Service Amount Per Year of Service	$40.00	$0.00	5% of Regular, for 10 Additional years
2. Vested Retirement Benefit (monthly):			
a. With 10 to 20 Years of Service Amount Per Year of Service per Minimum Vesting Years	$40.00	$15.00	Pro rata Share of Regular
b. Minimum Vesting Years	10	10	20 Years
3. Disability Retirement Benefit (monthly):			
a. Short Term Disability for line of duty injury Amount payable for not more than 1 year	$400.00	$150.00	½ of Regular or $225, whichever is greater
b. Long Term Disability for line of duty injury Lifetime Benefit	$800.00	$300.00	Regular or $450 whichever is greater
4. Survivor Benefits (monthly):			
a. Following Death before Retirement Eligible; Due to death in the line of duty as a volunteer firefighter	$400.00	$150.00	½ of Regular or $225, whichever is greater
b. Following Death after Normal Retirement	$400.00	$150.00	50% of Regular
c. Following Death after Normal Retirement with Extended Service Amount Per Year of Service	$0.00	$0.00	50% of Extended
d. Following Death after Vested Retirement with 10 to 20 Years of Service Amount Per Year of Service per Minimum Vesting Years	$20.00	$7.50	50% of Vested
e. Following Death after Disability Retirement	$400.00	$150.00	50% of Long Term
f. Optional Survivor Benefits in lieu of 4a-e Following Death before or after Retirement Eligible due to death on or off duty as a volunteer firefighter (Purchase of Life Insurance Required)	$0.00	$0.00	100% of Regular
5. Funeral Benefit (Required Benefit):			
a. Funeral Benefit Lump Sum, one time only	$1,600.00	$100.00	2 times Regular

Table 3 - Development of Annual Required Contribution

		Valuation as of 01/01/2023	Valuation as of 01/01/2021
		(1)	(2)
1.	Total normal cost	$ 34,500	$ 43,461
2.	Actuarial accrued liability for active members		
	a. Present value of future benefits for active members	$ 653,284	$ 1,023,898
	b. Less: present value of future normal costs	(166,644)	(210,972)
	c. Actuarial accrued liability	$ 486,640	$ 812,926
3.	Total actuarial accrued liability for:		
	a. Retirees and beneficiaries members	$ 3,274,810	$ 2,973,094
	b. Inactive members	895,035	700,040
	c. Active members (Item 2c)	486,640	812,926
	d. Total	$ 4,656,485	$ 4,486,060
4.	Actuarial value of assets	$ 4,278,891	$ 3,952,418
5.	Unfunded actuarial accrued liability / (Surplus) (Item 3 - Item 4)	$ 377,594	$ 533,642
6.	Funded Ratio*	92%	88%
7.	Required Payment to amortize the UAAL over the next 20 years	$ 31,398	$ 47,803
8.	Administrative and other ongoing expenses	$ 14,780	$ 13,857
9.	Calculated annual contribution (Item 1 + Item 7 + Item 8)	$ 80,678	$ 105,121
10.	Assumed contribution		
	a. Budgeted department contribution	$ 75,000	$ 75,000
	b. Expected state funding	40,500	40,500
	c. Total assumed contribution	$ 115,500	$ 115,500
11.	Funding period based on assumed contribution	8 years	15 years

* The funded status measure may be appropriate for assessing the need for future contributions. The funded status is not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.

Table 4 - Actuarial Present Value of Future Benefits

		Valuation as of 01/01/2023	Valuation as of 01/01/2021
		(1)	(2)
1.	Active members		
	a. Retirement benefits	$ 240,224	$ 432,285
	b. Vested retirement benefits	385,492	557,144
	c. Death benefits	4,113	4,473
	d. Disability benefits	23,455	29,996
	e. Total	$ 653,284	$ 1,023,898
2.	Retired members		
	a. Service retirements	$ 3,274,810	$ 2,973,094
	b. Disability retirements	0	0
	c. Beneficiaries	0	0
	d. Total	$ 3,274,810	$ 2,973,094
3.	Terminated vested members*	$ 895,035	$ 700,040
4.	Total actuarial present value of future benefits	$ 4,823,129	$ 4,697,032

* Includes members active in another fund that have 'portable benefits' per the Colorado statutory requirements, if applicable.

Table 5 - Actuarial Experience

Change in UAAL

1.	Unfunded actuarial accrued liability (UAAL) as of January 1 of prior valuation year	$	533,642
2.	Total normal cost and administrative expenses for FY2021 & FY2022		116,481
3.	Contributions during FY2021		(156,000)
4.	Contributions during FY2022		(115,500)
5.	Interest at 7.00%		64,754
6.	Expected UAAL as of this valuation (1. + 2. + 3. + 4. + 5.)	$	443,377
7.	Actual UAAL at end of period	$	377,594
8.	Actuarial gain/(loss) for the period (6. - 7.)	$	65,783
	SOURCE OF GAINS/(LOSSES)		
9.	Asset gain/(loss)	$	101,904
10.	Benefit changes		0
11.	Assumption changes		(70,360)
12.	Net liability gain/(loss) for the period (8. - 9. - 10. – 11.)	$	34,239

Change in Calculated Annual Contribution

1.	Calculated annual contribution 2021			$ 105,121
2.	Expected changes (Contributions, Interest, etc)	$	(8,027)	
3.	Benefit changes		0	
4.	Assumption/method changes		7,046	
5.	Investment experience		(10,205)	
6.	Change in normal cost		(8,961)	
7.	Other experience		(4,296)	
8.	Total change	$	(24,443)	
9.	Calculated annual contribution 2023			$ 80,678

Table 6 - History of Employer Contributions

The calculated annual contribution is the sum of the normal cost, the amortization of the UAAL, and the administrative expenses.

The following exhibit shows a history of the calculated annual contributions and the actual contributions made to the Plan.

Fiscal Year Ending	Calculated Annual Contribution*	Actual Contribution	Percent
(1)	(2)	(3)	(4)
December 31, 2015	$ 186,447	$ 186,447	100%
December 31, 2016	$ 183,231	$ 183,231	100%
December 31, 2017	$ 43,012	$ 40,500	94%
December 31, 2018	$ 234,063	$ 234,063	100%
December 31, 2019	$ 50,002	$ 50,002	100%
December 31, 2020	$ 115,500	$ 115,500	100%
December 31, 2021	$ 156,000	$ 156,000	100%
December 31, 2022	$ 115,500	$ 115,500	100%
December 31, 2023	$ 115,500	N/A	

* Based on the greater of the actual/assumed contribution and the calculated annual contribution. If the actual contributions are different, this exhibit will need to be adjusted.

Table 7 - Reconciliation of Net Plan Assets

		Year Ending 12/31/2022 (1)	Year Ending 12/31/2021 (2)
1.	Market value of assets at beginning of year	$ 4,674,888	$ 4,194,995
2.	Revenue for the year		
a.	Plan direct inflows		
i.	Employer contributions	$ 75,000	$ 75,000
ii.	State funding	40,500	81,000
iii.	Affiliations	0	0
iv.	Plan directed expenses	0	0
v.	Total	$ 115,500	$ 156,000
b.	Allocated income		
i.	Interest	$ 15,449	$ 12,060
ii.	Dividends	21,417	21,449
iii.	Other income	10,655	13,632
iv.	Net change accrued income	1,761	(106)
v.	Unrealized gain/(loss)	(456,769)	260,424
vi.	Realized gain/(loss)	66,470	347,003
vii.	Total	$ (341,017)	$ 654,462
c.	Total Revenue (Item 2a + Item 2b)	$ (225,517)	$ 810,462
3.	Expenditures for the year		
a.	Net benefits	$ 288,480	$ 280,159
b.	Allocated expense		
i.	Investment expenses	$ 33,674	$ 36,489
ii.	Direct expense allocation	463	1,474
iii.	Allocated fees and expenses	15,175	12,447
iv.	Total allocated expenditures	$ 49,312	$ 50,410
4.	Increase/(Decrease) in net assets (Item 2c - Item 3a - Item 3b)	$ (563,309)	$ 479,893
5.	Market value of assets at end of year (Item 1 + Item 4)	$ 4,111,579	$ 4,674,888

Table 8 - Development of Actuarial Value of Assets

	Year Ending 12/31/2022 (1)	Year Ending 12/31/2021 (2)
1. Actuarial value of assets at beginning of year	$ 4,220,503	$ 3,952,418
2. Cash flow for the year		
a. Contributions	$ 75,000	$ 75,000
b. State funding	40,500	81,000
c. Affiliation contributions	0	0
d. Net benefits	(288,480)	(280,159)
e. Administrative and other ongoing expenses	(15,638)	(13,921)
f. Net cash flow	$ (188,618)	$ (138,080)
3. Expected investment earnings	$ 288,834	$ 271,836
4. Expected actuarial value of assets at end of year	$ 4,320,719	$ 4,086,174
5. Actual market value of assets at end of year	$ 4,111,579	$ 4,674,888
6. Excess earnings/(shortfall)	$ (209,140)	$ 588,714
7. Excess earnings/(shortfall) recognized (Table 9, Item 6)	$ (41,828)	$ 134,329
8. Final actuarial value of assets (Item 4 + Item 7)	$ 4,278,891	$ 4,220,503

Table 9 - Development of Amounts to be Recognized in the Actuarial Value of Assets

	Year Ending 12/31/2022 (1)	Year Ending 12/31/2021 (2)
1. Remaining deferrals of excess (shortfall) of investment income from prior years		
a. Current year - 4	$ 0	$ 0
b. Current year - 3	35,663	0
c. Current year - 2	141,812	53,494
d. Current year - 1	276,910	189,083
e. Total	$ 454,385	$ 242,577
2. Current year (Table 8, Item 6 - Table 9, Item 1)	$ (663,525)	$ 346,137
3. Amounts to be immediately recognized due to an offsetting experience		
a. Current year - 4	$ 0	$ 0
b. Current year - 3	(35,663)	0
c. Current year - 2	(141,812)	0
d. Current year - 1	(276,910)	0
e. Current year	454,385	0
f. Total	$ 0	$ 0
4. Remaining prior year deferrals		
a. Current year - 4	$ 0	$ 0
b. Current year - 3	0	0
c. Current year - 2	0	53,494
d. Current year - 1	0	189,083
e. Current year	(209,140)	346,137
f. Total	$ (209,140)	$ 588,714
5. Deferral of excess (shortfall) of investment income for:		
a. Current year - 4	$ 0	$ 0
b. Current year - 3	0	0
c. Current year - 2	0	35,663
d. Current year - 1	0	141,812
e. Current year	(167,312)	276,910
f. Total	$ (167,312)	$ 454,385
6. Total amount recognized in actuarial value of assets (Item 3.f + Item 4.f. - Item 5.f.)	$ (41,828)	$ 134,329

Table 10 - Historical Summary

	Valuation as of 01/01/2023	Valuation as of 01/01/2021	Valuation as of 01/01/2019
	(1)	(2)	(3)
1. Member Data			
a. Active Members	18	24	21
b. Retired Members	38	34	30
c. Disabled Members	0	0	0
d. Beneficiaries	0	0	0
e. Terminated Vested Members	17	14	16
f. Terminated Members Active in Another Fund	0	0	0
g. Total Members	73	72	67
h. Average Age – Actives Only	42.2	41.7	42.5
i. Average Service – Actives Only	5.8	7.0	6.5
2. Financial Data			
a. Market Value of Assets	$ 4,111,579	$ 4,194,995	$ 3,520,920
b. Actuarial Value of Assets	$ 4,278,891	$ 3,952,418	$ 3,675,448
3. Actuarial Data			
a. Accrued Liability	$ 4,656,485	$ 4,486,060	$ 3,555,964
b. Unfunded Accrued Liability / (Surplus)	$ 377,594	$ 533,642	$ (119,484)
c. Normal Cost			
i. Total Amount	$ 34,500	$ 43,461	$ 33,703
ii. Amount per Active Member	1,917	1,811	1,605
d. Amortization Contribution			
i. Total Amount	$ 31,398	$ 47,803	$ (16,116)
ii. Amount per Active Member	1,744	1,992	(767)
e. Administrative and Ongoing Expenses			
i. Total Amount	$ 14,780	$ 13,857	$ 13,939
ii. Amount per Active Member	821	577	664
f. Calculated Annual Contribution			
i. Total Amount	$ 80,678	$ 105,121	$ 31,526
ii. Amount per Active Member	4,482	4,380	1,501

Table 11 - Membership Data

	01/01/2023	01/01/2021	01/01/2019
	(1)	(2)	(3)
1. Active members			
a. Number	18	24	21
b. Average age	42.2	41.7	42.5
c. Average service	5.8	7.0	6.5
2. Service retirees			
a. Number	38	34	30
b. Total annual benefits	$ 288,480	$ 262,560	$ 197,880
c. Average annual benefit	$ 7,592	$ 7,722	$ 6,596
d. Average age	62.6	61.9	61.3
3. Disabled retirees			
a. Number	0	0	0
b. Total annual benefits	$ 0	$ 0	$ 0
c. Average annual benefit	$ 0	$ 0	$ 0
d. Average age			
4. Beneficiaries and spouses			
a. Number	0	0	0
b. Total annual benefits	$ 0	$ 0	$ 0
c. Average annual benefit	$ 0	$ 0	$ 0
d. Average age			
5. Terminated vested members			
a. Number	17	14	16
b. Average age	44.9	43.7	43.8
6. Terminated members active in another fund	0	0	0
7. Total number of members	73	72	67

Table 12 - Distribution of Membership by Age and Service

Attained Age	Years of Service to Valuation Date							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	
Under 20								0
20-29	2							2
30-39	4	1						5
40-49	1	6	1					8
50-59	1	1		1				3
Over 60								0
Totals	**8**	**8**	**1**	**1**	**0**	**0**	**0**	**18**

	Retirees		Disabled Members		Beneficiaries		All	
Age	Number	Average Monthly Pension	Number	Average Monthly Pension	Number	Average Monthly Pension	Number	Average Monthly Pension
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Less than 50	0	$ 0	0	$ 0	0	$ 0	0	$ 0
50-59	17	591	0	0	0	0	17	591
60-69	14	666	0	0	0	0	14	666
70-79	5	664	0	0	0	0	5	664
Greater than 80	2	680	0	0	0	0	2	680
All	38	$ 633	0	$ 0	0	$ 0	38	$ 633

Table 13 - Risks Associated with Measuring the Accrued Liability and Actuarially Determined Contribution

The determination of the accrued liability 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 that results from the differences between actual experience and the actuarial assumptions.

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

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

1. Investment risk – actual investment returns may differ from the expected returns;

2. Asset/Liability mismatch – changes in asset values may not match changes in liabilities, thereby altering the gap between the accrued liability and assets and consequently altering the funded status and contribution requirements;

3. Contribution risk – actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees 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.

Table 13 - Risks Associated with Measuring the Accrued Liability and Actuarially Determined Contribution (Continued)

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 retirees and beneficiaries and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures include the following:

	01/01/2023	01/01/2021	01/01/2019
Ratio of actives to retirees and beneficiaries	0.5	0.7	0.7
Ratio of net cash flows to market value of assets	-5%	-3%	1%
Duration of the actuarial accrued liability	11.9	12.3	12.6

Ratio of Actives to Retirees and Beneficiaries

A ratio of actives to retirees and beneficiaries less than 1 typically indicates an older plan.

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 (see Table 8).

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.

Table 14 - Summary for Actuarial Assumptions, Methods, and Changes

The calculations set forth in this report are based on the following assumptions:

1. Investment Return Rate — 7.0% per annum (net of investment expenses), compounded annually

2. Rates of Decrement due to:

a) Retirement — Age 50 and 20 years of service.

Age	Annual Rate Per 100
50	50
55	50
60	50
65	100

b) Disability

Age	Annual Rate Per 1,000
20	0.10
25	0.16
30	0.26
35	0.45
40	0.97
45	3.50
50	6.50
55	8.10

c) Pre-Retirement Mortality — Pub-2010 Public Safety Healthy Employee Mortality Tables for males and females, amount-weighted, projected with the MP-2020 Ultimate projection scale, 60% multiplier.

	Annual Rate Per 1,000 (for 2023)	
Age	Males	Females
20	0.206	0.080
25	0.186	0.101
30	0.206	0.136
35	0.236	0.181
40	0.297	0.246
45	0.412	0.337
50	0.603	0.458
55	0.880	0.618

Table 14 - Summary for Actuarial Assumptions, Methods, and Changes (Continued)

d) Withdrawal (any reason other than retirement, death, or disability)

Annual Rate Per 1,000 Withdrawals			
Service	Rates	Service	Rates
1	182.37	11	83.96
2	169.99	12	77.23
3	158.17	13	71.06
4	146.92	14	65.45
5	136.21	15	60.41
6	126.12	16	55.94
7	116.56	17	52.02
8	107.56	18	48.68
9	99.13	19	45.89
10	91.27		

Twenty percent (20%) of members age 50 and eligible for a terminated vested benefit which would commence immediately are assumed to withdraw each year.

3. Post-Retirement Mortality

a) Healthy Retirees and Beneficiaries

Pub-2010 Public Safety Healthy Annuitant Mortality Tables for males and females, amount-weighted, projected with the ultimate values of the MP-2020 projection scale.

	Annual Rate Per 1,000 (for 2023)	
Age	Males	Females
50	1.609	1.249
55	2.564	2.162
60	4.257	3.738
65	7.422	6.487
70	13.332	11.300
75	24.251	19.694
80	44.195	34.314

Table 14 - Summary for Actuarial Assumptions, Methods, and Changes (Continued)

b) Disabled Retirees

Pub-2010 Public Safety Healthy Annuitant Mortality Tables for males and females, amount-weighted, set forward five years projected with the MP-2020 Ultimate projection scale, with minimum probability of 3.5% for males and 2.5% for females.

	Annual Rate Per 1,000 (for 2023)	
Age	Males	Females
50	35.000	25.000
55	35.000	25.000
60	35.000	25.000
65	35.000	25.000
70	35.000	25.000
75	43.791	33.999
80	79.115	59.256

4. Administrative Expenses

An explicit administrative expense equal to the average of the actual expenses for the two prior years.

5. Marital Status

a) Percent married

90% male and female

b) Age difference

Males are assumed to be two years older than females

6. Changes in Actuarial Assumptions

The global assumption set for plans administered by FPPA was changed in the 2022 Experience Study and effective as of January 1, 2023. This is the first valuation for this plan with the new assumptions. The mortality assumptions were updated to use the Pub-2010 Public Safety Mortality tables projected with the ultimate rates of the MP-2020 projection scale.

Table 14 - Summary for Actuarial Assumptions, Methods, and Changes (Continued)

7. Actuarial Cost Method

   Under the entry age actuarial cost method, the Normal Cost is computed as the level dollar amount which, if paid from the earliest time each member would have been eligible to join the plan if it then existed (thus, entry age) until his retirement or termination, would accumulate with interest at the rate assumed in the valuation to a fund sufficient to pay all benefits under the plan. The normal cost for the plan is determined by summing the normal cost of all members.

   The Actuarial Accrued Liability under this method at any point in time is the theoretical amount of the fund that should have been accumulated had annual contributions been made in prior years equaling to the normal cost. The Unfunded Actuarial Accrued Liability/(Surplus) is the excess of the actuarial accrued liability over the actuarial value of the plan assets as of the valuation date.

   The contribution requirements determined by this valuation will not be effective until one year later, and the determination of the calculated annual contribution reflects this deferral by amortizing the expected Unfunded Actuarial Accrued Liability/(Surplus) one year after the valuation date. It is assumed that there will be no change in the normal cost due to the deferral, and it is assumed that payments are made in the middle of the year.

   Under this method, experience gains and losses (i.e. decreases or increases in accrued liabilities), attributable to deviations in experience from the actuarial assumptions, adjust the unfunded actuarial accrued liability.

8. Asset Valuation Method

   The asset valuation method is based on a comparison of expected and actual asset values. The actuarial value of assets is equal to the market value of assets less a five-year phase in of the Excess (Shortfall) between expected investment return and actual income determined as follows:

   - At the beginning of each plan year, an expected actuarial asset value is calculated as the sum of the previous year's actuarial value increased with a year's interest at the Plan valuation rate plus net cash flow (excluding expenses) adjusted for interest (at the same rate) to the end of the previous plan year.
   - The difference between the expected actuarial value and the actual market value is the investment gain or loss for the previous plan year.
   - If the current year's difference is the opposite sign of any of the prior years' deferred Excesses/(Shortfalls), then the prior years' bases (starting with the oldest) are reduced dollar for dollar along with the current year's base. Any remaining bases are then recognized over five years (20% per year) from their initial creation.

Table 15 - Actuarial Valuation Information Checklist

	Current Plan	Proposed Plan A	Proposed Plan B	Proposed Plan C	Maximum Per State Statute
1. Normal Retirement Benefit (monthly):					
a. Regular	$800.00	$850.00	$900.00	$1,000.00	None
b. Extended Service Amount Per Year of Service	$40.00	$42.50	$45.00	$50.00	5% of Regular, for 10 Additional years
2. Vested Retirement Benefit (monthly):					
a. With 10 to 20 Years of Service Amount Per Year of Service per Minimum Vesting Years	$40.00	$42.50	$45.00	$50.00	Pro rata Share of Regular
b. Minimum Vesting Years	10	10	10	10	20 Years
3. Disability Retirement Benefit (monthly):					
a. Short Term Disability for line of duty injury Amount payable for not more than 1 year	$400.00	$425.00	$450.00	$500.00	½ of Regular or $225, whichever is greater
b. Long Term Disability for line of duty injury Lifetime Benefit	$800.00	$850.00	$900.00	$1,000.00	Regular or $450 whichever is greater
4. Survivor Benefit (monthly):					
a. Following Death before Retirement Eligible; Due to death in the line of duty as a volunteer firefighter	$400.00	$425.00	$450.00	$500.00	½ of Regular or $225, whichever is greater
b. Following Death after Normal Retirement	$400.00	$425.00	$450.00	$500.00	50% of Regular
c. Following Death after Normal Retirement with Extended Service Amount Per Year of Service	$0.00	$0.00	$0.00	$0.00	50% of Extended
d. Following Death after Vested Retirement with 10 to 20 Years of Service Amount Per Year of Service per Minimum Vesting Years	$20.00	$21.25	$22.50	$25.00	50% of Vested
e. Following Death after Disability Retirement	$400.00	$425.00	$450.00	$500.00	50% of Long Term
f. Optional Survivor Benefits in lieu of 4a-e Following Death before or after Retirement Eligible due to death on or off duty as a volunteer firefighter (Purchase of Life Insurance Required)	$0.00	$0.00	$0.00	$0.00	100% of Regular
5. Funeral Benefit (Required Benefit):					
a. Funeral Benefit Lump Sum, one time only	$1,600.00	$1,700.00	$1,800.00	$2,000.00	2 times Regular

Table 16 - Comparison of Actuarial Results Based on Alternate Benefit Levels

		Current Plan	Plan A	Plan B	Plan C
		(1)	(2)	(3)	(4)
1.	Normal Retirement Benefit	$ 800.00	$ 850.00	$ 900.00	$ 1,000.00
2.	Normal Cost	34,500	36,649	38,809	43,112
3.	Present Value of Future Benefits	4,823,129	5,124,571	5,426,016	6,028,908
4.	Actuarial Accrued Liability	4,656,485	4,947,540	5,238,559	5,820,671
5.	Unfunded Accrued Liability / (Surplus)	377,594	668,649	959,668	1,541,780
6.	Administrative and other ongoing expenses	14,780	14,780	14,780	14,780
7.	Total Annual Calculated Contribution*	80,678	112,181	143,693	206,705
8.	Assumed Contribution	115,500	115,500	115,500	115,500
9.	Funding Period Based on Assumed Contribution	8 years	19 years	Never	Never
10.	Funded Ratio	92%	86%	82%	74%

* Under Colorado statute, a benefit improvement is allowable only if the department commits to contribution levels at or above this amount for the next 20 years. However, this metric considers only whether current contribution levels are sufficient to amortize or pay off the unfunded liability within the stated amortization period, assuming all actuarial assumptions are met. In considering implementing a benefit improvement, this metric should be one of many considerations. Other considerations include, but are not limited to:

- The current funded status of the plan,
- Expectations regarding future membership in the plan,
- The department's ability to sustain current contribution levels for 20 or more years, and
- The department's ability to withstand adverse experience (potentially higher contribution levels), if actuarial assumptions are not met.

Table 16 - Comparison of Actuarial Results Based on Alternate Benefit Levels (Continued)

Note: Any changes to the Current Plan benefits will impact the employer's annual financial statements reports per Governmental Accounting Standards Board Statement No. 68 (GASB 68). Employers will report the change in benefits (improvements or reductions in benefits) within the total pension liability as pension expense in the year they occur (in other words, immediately). For example, if Crested Butte were to adopt Plan A above, the Net Pension Liability and Pension Expense would increase by at least $291,055 (the difference in row 4 between Plan A and the Current Plan). This amount could be larger depending on whether the Single Discount Rate used under GASB 68 for your Plan is different than the valuation's investment return assumption of 7.0%. If you have questions regarding GASB 68, you will find information at www.FPPAco.org/GASB/Overview.html or contact your auditor.

Appendix - Definition of Terms

1. Actuarial Cost Method

   A method for determining the actuarial present value of future benefits and allocating such value to time periods in the form of a normal cost and an actuarial accrued liability.

2. Present Value of Future Benefits

   This is computed by projecting the total future benefit cash flow from the Plan, using actuarial assumptions, and then discounting the cash flow to the valuation date.

3. Normal Cost

   Computed differently under different actuarial cost methods, the normal cost generally represents the value of the portion of the participant's anticipated retirement, termination, and/or death and disability benefits accrued during a year.

4. Actuarial Accrued Liability

   Computed differently under different actuarial cost methods. Generally actuarial accrued liability represents the value of the portion of the participant's anticipated retirement, termination, and/or death and disability benefits accrued as of the valuation date.

5. Entry Age Actuarial Cost Method

   A method under which a participant's actuarial present value of future benefits is allocated on a level basis over the earnings of the participant between his/her entry into the Plan and his/her assumed exit.

6. Unfunded Actuarial Accrued Liability

   The difference between total actuarial present value of future benefits over the sum of the tangible assets of the Plan and the actuarial present value of the members' future normal costs. The Plan is underfunded if the difference is positive and overfunded if the difference is negative.

7. Actuarial Value of Assets

   The value of cash, investments, and other property belonging to the Plan, as valued by the actuary for purposes of the actuarial valuation.

8. Actuarial Gain or Loss

   From one valuation to the next, if the experience of the plan differs from that anticipated by the actuarial assumptions, an actuarial gain or loss occurs. For example, an actuarial gain would occur if the assets in the trust had a yield of 12% based on actuarial value, while the assumed yield on the actuarial value of assets was 7.00%.