

Station 17 108 E County Road 66 Fort Collins, CO 80524

Wellington Fire Protection District PENSION BOARD MEETING AGENDA

The **Pension Board Meeting** of the Wellington Fire Protection District will be called to order at 4:00 pm and the Regular Board Meeting to immediately follow. On **June 21, 2023**, the meeting will be held at **Station 16** located at 8130 3rd St., Wellington, CO 80549. Any member of the public who chooses to attend the meeting in person may do so. Please contact our administrative office for social distancing guidelines or additional attendance accommodations. **Zoom Meeting information is listed below**.

Pledge of Allegiance Roll Call

Additions/Deletions to the Agenda Conflicts of Interest Correspondence Guests or Presentations

Treasurer's Report

Pension Board Business:

- 1. Official welcome to new Board Members
- 2. Pension Board Meeting Minutes for March 8, 2023

Other

Adjournment

Future Meetings:

September 13 December 13

Zoom Meeting Information



Station 17 108 E County Road 66 Fort Collins, CO 80524

Wellington Fire Protection District

Wellington Fire Protection District is inviting you to a scheduled Zoom meeting.

Join Zoom Meeting

https://us02web.zoom.us/j/87628852491?pwd=d0ZFRDJrZ2liemp1SG5yOFJtcmRBZz09

Meeting ID: 876 2885 2491

Passcode: 292290 One tap mobile

+17209289299,,87628852491#,,,,*292290# US (Denver)

+13017158592,,87628852491#,,,,*292290# US (Washington DC)

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+1 720 928 9299 US (Denver)

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Meeting ID: 876 2885 2491

Passcode: 292290

Find your local number: https://us02web.zoom.us/u/kdnkPZFlqR

Agenda Posted to www.wfpd.org & at 8130 3rd St by Michael Patterson on 05/31/2023 @ 03:00PM



MEMORANDUM

To: Affiliated Volunteer Pension Plan Employers

From: Peggy Job, Senior Accountant

Re: Three months ended March 31, 2023

Allocation Report, Annual Contributions Received & Direct Expense Allocation Summary

Date: April 25, 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 12/31/2022	Quarter	Year to Date	1 Year	3 Years	5 Years
Total Pool Net of Investment Expense*	3.95%	3.95%	(0.18)%	11.25%	7.53%

^{*}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
Q1-2023	0.04%	0.14%	0.18%
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 May 31, 2023. If FPPA does not receive a response by May 31,2023, you are confirming that these report items are correct.

Annual Contributions Received

FPPA provides a schedule of your 2022 contributions received by FPPA year to date. This schedule compares contributions received in the current year to the actuarial required contributions for 2022. **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 Direct Inflows and Outflows

Member Contributions

Employer Contributions

Contributions from the SWDD Plan

Refunds

Affiliations/(Disaffiliations)

Net Benefits

Plan Directed Expenses

State Funding

Plan Direct Inflows and Outflows Sub-Total

Allocated Income and Expense

Interest*

Dividends*

Other Income*

Net Change Accrued Income*

Unrealized Gain/Loss*

Realized Gain/Loss*

Defined Contribution Earnings (Net)

Investment Expenses

Direct Expense Allocation

Other Expenses

Allocated Income and Expense Sub-Total

Ending Balance

Plan assets at the beginning of the year

Member Contributions made to the plan

Employer Contributions made to the plan

Contributions received for a member on disability rolling to a normal retirement

Member withdrawal of funds from the plan

Plan affiliation or disaffiliation or idle funds distribution (typically a Volunteer Fire Plan matter)

Benefits paid to retired members

Payments from plan assets directed by the department Examples: legal, actuarial, and insurance expense

State funding for volunteer plans

Sub-Total of the above activity

Interest on investments

Dividends on investments

Other investment income

Change in accrued earnings for interest and dividends

Unrealized Gain/Loss on investments

Realized Gain/Loss on investments

Not applicable for Defined Benefit plans

Allocated share of FPPA investment expense

Expenses directly allocated to the plan

Examples: actuarial and audit fees

Allocated share of FPPA administrative expense

Sub-Total of the above activity

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 WELLINGTON FPD 7369-5

For the Reporting Period: 01/01/2023 through 03/31/2023

Deposit Date	Employer Contributions	State Matching Funds	Total Remittance
	No deposits received fo	r the reporting period	
Total Remittance			\$0.00
Calculated Contribution per	the 01/01/2021 Actuarial Study		\$116,417.00
Difference Over/(Under)			\$(116,417.00)

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

Fire and Police Pension Association Wellington FPD Volunteers 7369-5 For the Three Months Ending March 31, 2023

Beginning Balance	\$1,688,855.44
Plan Direct Inflows and Outflows	
Member Contributions	
Employer Contributions	
Contributions from the SWDD Plan	
Refunds	
Affiliations/(Disaffiliations)	
Plan Transfers	
Net Benefits	(\$45,011.00)
Plan Directed Expenses	
State Funding	
Plan Direct Inflows and Outflows Sub-Total	(\$45,011.00)
Allocated Income and Expense	
Interest	\$2,782.15
Dividends	\$1,408.72
Other Income	(\$346.22)
Net Change Accrued Income	\$566.11
Unrealized Gain/Loss	\$66,539.50
Realized Gain/Loss	(\$4,082.11)
Defined Contribution Earnings (Net)	
Investment Expenses	(\$2,322.72)
Direct Expense Allocation	(\$330.78)
Other Expenses	(\$1,683.40)
Allocated Income and Expense Sub-Total	\$62,531.25
Ending Balance	\$1,706,375.69

Fire and Police Pension Association Direct Expense Allocation Summary Wellington FPD Volunteers 7369-5 For the Three Months Ending March 31, 2023

Type of Expense	2022 Budget	Year-to-Date Expenses	Payment of 2023 Expenses
Actuarial Expenses Audit Expenses	\$313.56 \$149.55	\$198.08 \$132.70	
Other Asset Allocation Study Expenses Total Direct Allocated Expenses & Payments	\$463.11	\$330.78	

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.



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Wellington Fire Protection District

PENSION BOARD MEETING MINUTES

The **Pension Board Meeting** of the Wellington Fire Protection District was called to order at approximately 4:03 PM on **March 8, 2023,** at **Station 16** located at 8130 3rd St., Wellington, CO 80549.

Pledge of Allegiance

Roll Call

Present: Member Reed, Gaiter, Meyers, Sarno

Absent: Member Tuerffs', Director Pettit, Director Pierson

M/S Reed/ Meyers to accept Director Pierson's absence as EXCUSED. Voice votes unanimous; motion APPROVED.

M/S Reed/ Meyers to declare Director Pettit's and member Tuerffs' absence as UNEXCUSED. Voice votes unanimous; motion APPROVED.

Director Pettit arrived at approximately 4:06pm. M/S Gaiter/ Sarno to accept Director Pettit's late arrival as EXCUSED. Voice votes unanimous; motion APPROVED.

Additions/Deletions to the Agenda- None
Conflicts of Interest- None
Correspondence - None
Guests or Presentations - None

Treasurer's Report

Director Gaiter provided an overview of the current FPPA reports included in the meeting packet.

M/S Pettit/ Gaiter to accept the Treasurer's Report. Voice votes unanimous; motion APPROVED.

Pension Board Business:

1. Pension Board Meeting Minutes for December 2022.

M/S Gaiter/REED to approve the Pension Board Meeting Minutes for December 2022 as presented. Voice votes unanimous; motion APPROVED.

2. Election Process for Pension Board Seats.



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Wellington Fire Protection District

The board discussed the sample ballot that was included in the packet. The board decided to award the two-year seat to the person with the most votes and the one-year seat would be awarded to the person with the next highest votes.

Staff will update the ballot and will send out to all active and retired volunteers.

3. Pension Fund Investment Options Discussion.

The board discussed various options for pension fund investment in addition to the FPPA. No action was taken by the board.

Other- None

Adjournment

M/S PETTIT/GAITER for Adjournment @ 4:28 PM; *Voice votes unanimous; motion APPROVED and meeting adjourned.*

Future Meetings:

The board discussed potentially moving the June 14th meeting to June 21st. No decision was made.

June 14 September 13 December 13

FIRE AND POLICE PENSION ASSOCIATION WELLINGTON FIRE PROTECTION DISTRICT VOLUNTEER PENSION FUND

ACTUARIAL VALUATION REPORT AS OF JANUARY 1, 2021





To: Administrative Heads and Finance Officers of Wellington Fire Protection District;

administered by FPPA

Date: July 2021

Subject: Actuarial Valuation Results as of January 1, 2021

This report contains the actuarial valuation results as of January 1, 2021 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 \$113,437 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 16 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 Wellington 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, 2022.

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 2018 Experience Study and first effective in the January 1, 2019 valuations. A summary of those assumptions and methods can be found in Table 14. There were no actuarial assumption or method changes made for this valuation.

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, 2021 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 2019 actuarial valuation and this valuation. This was mainly due to actuarial gains from investment experience. 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. GASB Statement No. 67 was implemented in FPPA's Comprehensive Annual Financial Report beginning in fiscal year 2014. Employer reporting information for GASB Statement No. 68 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 2021 Actuarial Valuation Report is accurate and fairly presents the actuarial position of the Wellington Fire Protection District Volunteer Pension Fund as of January 1, 2021.

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. Mr. Newton and Mrs. Woolfrey are members of the American Academy of Actuaries, and are also Enrolled Actuaries. Both 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

Jos Start



Executive Summary

	Jo	anuary 1, 2021		Valuation as of lanuary 1, 2019
Membership				
Number of:				
- Active members		3		5
- Retired Members		15		14
- Disabled members		0		0
- Beneficiaries		1		2
- Terminated vested members		10		10
- Terminated members active in another fund		0		0
- Total	_	29	-	31
Assets				
Market value	\$	1,690,206	\$	1,460,614
Actuarial value	'	1,599,702	'	1,525,472
Employer contribution for prior year		102,896		40,000
 Employer contribution for prior year minus 1 		40,000		0
Ratio of actuarial value to market value		95%		104%
Actuarial Information				
Employer normal cost	\$	5,380	\$	8,493
Normal cost per active member		1,793		1,699
 Unfunded actuarial accrued liability / (Surplus) 		963,969		1,002,889
Calculated annual contribution		99,608		113,437
Assumed contribution from department		102,896		40,000
 Assumed contribution from state 		10,541		10,541
 Funding period based on assumed contributions 		16 years		Never
Funded ratio		62%		60%
 Funded ratio based on market value 		66%		58%
• Is current level of contributions adequate		Yes		No



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

		Current Plan		State Match	
			(1)		(2)
1.	Normal Retirement Benefit	\$	1,000.00	\$	300.00
2.	Normal Cost		5,380		1,480
3.	Present Value of Future Benefits		2,594,805		713,529
4.	Actuarial Accrued Liability		2,563,671		705,062
5.	Unfunded Accrued Liability / (Surplus)		963,969		(894,640)
6.	Administrative and other ongoing expenses		7,443		7,443
7.	Total Annual Calculated Contribution		99,608		(90,789)
8.	Assumed Contribution		113,437		113,437
9.	Funding Period Based on Assumed Contribution		16 years		0 years
10.	Funded Ratio		62%		227%



Table 2 - Actuarial Valuation Information Checklist

			Current Plan	State Match Calc	Maximum Per State Statute
1.	Norr	mal Retirement Benefit (monthly):			
	a.	Regular	\$1,000.00	\$300.00	None
	b.	Extended Service			
		Amount Per Year of Service	\$50.00	\$0.00	5% of Regular, for 10 Additional years
2.	Vest	ed Retirement Benefit (monthly):			
	a.	With 10 to 20 Years of Service Amount Per Year of Service per	¢50.00	Ć45.00	Due yets Chave of Desider
		Minimum Vesting Years	\$50.00	·	Pro rata Share of Regular
	b.	Minimum Vesting Years	10	10	20 Years
3.	Disa	bility Retirement Benefit (monthly):			
	a.	Short Term Disability for line of duty injury			½ of Regular or \$225,
	L	Amount payable for not more than 1 year	\$500.00	\$150.00	whichever is greater
	b.	Long Term Disability for line of duty injury Lifetime Benefit	\$1,000.00	\$300.00	Regular or \$450 whichever is greater
		Linetime Benefit	φ <u>1</u> ,000.00	φοσοίσσ	S
4.	Surv	rivor Benefits (monthly):			
	a.	Following Death before Retirement Eligible;			1/ of Dogular or \$225
		Due to death in the line of duty as a volunteer firefighter	\$500.00	\$150.00	½ of Regular or \$225, whichever is greater
	b.	Following Death after Normal Retirement	\$500.00	•	50% of Regular
	с.	Following Death after Normal Retirement with	4300.00	Ψ130.00	
	О.	Extended Service Amount Per Year of Service	\$25.00	\$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	\$25.00	•	50% of Vested
	e.	Following Death after Disability Retirement	\$500.00	\$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.	Fune	eral Benefit (Required Benefit):			
	a.	Funeral Benefit Lump Sum, one time only	\$2,000.00	\$100.00	2 times Regular



Table 3 - Development of Annual Required Contribution

		Valuation as of 01/01/2021			Valuation as of 01/01/2019	
		<u> </u>	(1)		(2)	
1.	Total normal cost	\$	5,380	\$	8,493	
2.	 Actuarial accrued liability for active members a. Present value of future benefits for active members b. Less: present value of future normal costs c. Actuarial accrued liability 	\$ \$	212,107 (31,134) 180,973	\$ - \$	231,531 (51,269) 180,262	
3.	Total actuarial accrued liability for: a. Retirees and beneficiaries members b. Inactive members c. Active members (Item 2c) d. Total	\$	1,794,690 588,008 180,973 2,563,671	\$	1,709,383 638,716 180,262 2,528,361	
4.	Actuarial value of assets	\$	1,599,702	\$	1,525,472	
5.	Unfunded actuarial accrued liability / (Surplus) (Item 3 - Item 4)	\$	963,969	\$	1,002,889	
6.	Funded Ratio*		62%		60%	
7.	Required Payment to amortize the UAAL over the next 20 years	\$	86,785	\$	97,114	
8.	Administrative and other ongoing expenses	\$	7,443	\$	7,830	
9.	Calculated annual contribution (Item 1 + Item 7 + Item 8)	\$	99,608	\$	113,437	
10.	 Assumed contribution a. Budgeted department contribution b. Expected state funding c. Total assumed contribution 	\$	102,896 10,541 113,437	\$	40,000 10,541 50,541	
11.	Funding period based on assumed contribution	r	16 years	r	Never	

^{*} 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 01/01/2021		aluation as of 01/01/2019
		(1)		(2)
1.	Active members			
	a. Retirement benefits	\$ 117,473	\$	117,704
	b. Vested retirement benefits	89,019		106,029
	c. Death benefits	729		1,010
	d. Disability benefits	4,886		6,788
	e. Total	\$ 212,107	\$	231,531
2.	Retired members			
	a. Service retirements	\$ 1,773,061	\$	1,652,636
	b. Disability retirements	0		0
	c. Beneficiaries	21,629		56,747
	d. Total	\$ 1,794,690	\$	1,709,383
3.	Terminated vested members*	\$ 588,008	\$	638,716
4.	Total actuarial present value of future benefits	\$ 2,594,805	\$	2,579,630

^{*} 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			\$ 1,002,889
2.	Total normal cost and administrative expenses for FY2019 & FY2020			31,872
3.	Contributions during FY2019			(40,000)
4.	Contributions during FY2020			(113,437)
5.	Interest at 7.00%			139,451
6.	Expected UAAL as of this valuation (1. + 2. + 3. + 4. + 5	5.)		\$ 1,020,775
7.	Actual UAAL at end of period			\$ 963,969
8.	Actuarial gain/(loss) for the period (6 7.)			\$ 56,806
	SOURCE OF GAINS/(LOSSES)			
9.	Asset gain/(loss)			\$ 31,364
10.	Benefit changes			0
11.	Assumption changes			0
12.	Net liability gain/(loss) for the period (8 9 $10 11$	L.)		\$ 25,442
Cha	nge in Calculated Annual Contribution			
1.	Calculated annual contribution 2019			\$ 113,437
2.	Expected changes (Contributions, Interest, etc)	\$	(4,726)	
3.	Benefit changes		0	
4.	Assumption/method changes		0	
5.	Investment experience		(3,141)	
6.	Change in normal cost		(3,113)	
7.	Other experience		(2,849)	
8.	Total change	\$	(13,829)	
9.	Calculated annual contribution 2021			\$ 99,608



Table 6 - History of Employer Contributions

The "Annual Required Contribution" (ARC) is the sum of the normal cost and the amortization of the UAAL. This is a historical standardized measure that was previously calculated in accordance with Statements No. 25 and No. 27 of the Governmental Accounting Standards Board (GASB).

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

	An	nual Required	Actual	
Fiscal Year Ending	C	Contribution*	 Contribution	Percent
(1)		(2)	 (3)	(4)
December 31, 2015	\$	110,541	\$ 110,541	100%
December 31, 2016	\$	37,077	\$ 10,541	28%
December 31, 2017	\$	37,077	\$ 0	0%
December 31, 2018	\$	93,272	\$ 40,000	43%
December 31, 2019	\$	93,272	\$ 40,000	43%
December 31, 2020	\$	113,437	\$ 113,437	100%
December 31, 2021	\$	113,437	N/A	

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



Table 7 - Reconciliation of Net Plan Assets

			Year	Endii	ng
		1	12/31/2020		12/31/2019
			(1)		(2)
1.	Market value of assets at beginning of year	\$	1,544,597	\$	1,460,614
2.	Revenue for the year				
	a. Plan direct inflows				
	i. Employer contributions	\$	102,896	\$	40,000
	ii. State funding		10,541		0
	iii. Affiliations		0		0
	iv. Plan directed expenses		0		(1,300)
	v. Total	\$	113,437	\$	38,700
	b. Allocated income				
	i. Interest	\$	4,914	\$	7,110
	ii. Dividends		7,591		9,286
	iii. Other income		5,861		5,726
	iv. Net change accrued income		(489)		333
	v. Unrealized gain/(loss)		122,730		63,335
	vi. Realized gain/(loss)		64,081		127,317
	vii. Total	\$	204,688	\$	213,107
	c. Total Revenue (Item 2a + Item 2b)	\$	318,125	\$	251,807
3.	Expenditures for the year				
	a. Net benefits	\$	155,100	\$	147,433
	b. Allocated expense				
	i. Investment expenses	\$	11,772	\$	12,449
	ii. Direct expense allocation		769		1,479
	iii. Allocated fees and expenses		4,875		6,463
	iv. Total allocated expenditures	\$	17,416	\$	20,391
4.	Increase/(Decrease) in net assets				
	(Item 2c - Item 3a - Item 3b)	\$	145,609	\$	83,983
5.	Market value of assets at end of year (Item 1 + Item 4)	\$	1,690,206	\$	1,544,597

Note: 2020 employer contributions of \$0 or state funding of \$10,541 received after 12/31/2020 are not included in this report.



Table 8 - Development of Actuarial Value of Assets

	Year Ending			ng
		12/31/2020		12/31/2019
		(1)		(2)
1. Actuarial value of assets at beginning of year	\$	1,518,116	\$	1,525,472
2. Cash flow for the year a. Contributions b. State funding c. Affiliation contributions d. Net benefits	\$	102,896 10,541 0 (155,100)	\$	40,000 0 0 (147,433)
e. Administrative and other ongoing expenses		(5,644)		(9,242)
f. Net cash flow	\$	(47,307)	\$	(116,675)
3. Expected investment earnings	\$	104,612	\$	102,699
4. Expected actuarial value of assets at end of year	\$	1,575,421	\$	1,511,496
5. Actual market value of assets at end of year	\$	1,690,206	\$	1,544,597
6. Excess earnings/(shortfall)	\$	114,785	\$	33,101
7. Excess earnings/(shortfall) recognized (Table 9, Item 6)	\$	24,281	\$	6,620
8. Final actuarial value of assets (Item 4 + Item 7)	\$	1,599,702	\$	1,518,116



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

		Year	Endin	g	
	12	2/31/2020	12	12/31/2019	
		(1)		(2)	
Remaining deferrals of excess (shortfall) of investment income from prior years					
a. Current year - 4	\$	0	\$	0	
b. Current year - 3		0		0	
c. Current year - 2		0		0	
d. Current year - 1		26,481		(64,858)	
e. Total	\$	26,481	\$	(64,858)	
2. Current year (Table 8, Item 6 - Table 9, Item 1)	\$	88,304	\$	97,959	
3. Amounts to be immediately recognized due to an offsetting experience					
a. Current year - 4	\$	0	\$	0	
b. Current year - 3		0		0	
c. Current year - 2		0		0	
d. Current year - 1		0		64,858	
e. Current year		0		(64,858)	
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		0	
d. Current year - 1		26,481		0	
e. Current year		88,304		33,101	
f. Total	\$	114,785	\$	33,101	
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		0	
d. Current year - 1		19,861		0	
e. Current year		70,643		26,481	
f. Total	\$	90,504	\$	26,481	
6. Total amount recognized in actuarial value of assets (Item 3.f + Item 4.f Item 5.f.)	\$	24,281	\$	6,620	



Table 10 - Historical Summary

				aluation as of 01/01/2021		aluation as of 01/01/2019		aluation as of 01/01/2017
				(1)		(2)		(3)
1.		ember Data		2		_		0
	a.			3		5		8
	b. c.	Retired Members Disabled Members		15 0		14 0		14 0
	d.	Beneficiaries		1		2		2
		Terminated Vested Members		10		10		9
	f.	Terminated Members Active in Another						_
		Fund		0		0		1
	g.	Total Members		29		31		34
	h.	Average Age – Actives Only		39.3		35.0		30.3
	i.	Average Service – Actives Only		10.7		7.8		5.5
2.		ancial Data	_		_		_	
	a. b.	Market Value of Assets Actuarial Value of Assets	\$ \$	1,690,206 1,599,702	\$ \$	1,460,614 1,525,472	\$ \$	1,515,508 1,578,303
3.	Act	tuarial Data						
٥.		Accrued Liability	\$	2,563,671	Ś	2,528,361	\$	2,313,638
	b.	Unfunded Accrued Liability / (Surplus)	\$	963,969	\$	1,002,889	\$	735,335
	c.	Normal Cost						
		i. Total Amount	\$	5,380	\$	8,493	\$	11,437
		ii. Amount per Active Member		1,793		1,699		1,430
	d.	Amortization Contribution						
		i. Total Amount	\$	86,785	\$	97,114	\$	78,127
		ii. Amount per Active Member		28,928		19,423		9,766
	e.	Administrative and Ongoing Expenses						
		i. Total Amount	\$	7,443	\$	7,830	\$	3,708
		ii. Amount per Active Member		2,481		1,566		464
	f.	Calculated Annual Contribution		00.500		442.42		02.272
		i. Total Amount	\$	99,608	\$	113,437	\$	93,272
		ii. Amount per Active Member		33,203		22,687		11,659



Table 11 - Membership Data

		(01/01/2021		01/01/2019		01/01/2017	
			(1)		(2)		(3)	
1.	Active members a. Number b. Average age c. Average service		3 39.3 10.7		5 35.0 7.8		8 30.3 5.5	
2.	Service retirees a. Number b. Total annual benefits c. Average annual benefit d. Average age	\$ \$	15 151,800 10,120 62.4	\$ \$	14 139,800 9,986 61.2	\$ \$	14 139,800 9,986 59.2	
3.	Disabled retirees a. Number b. Total annual benefits c. Average annual benefit d. Average age	\$ \$	0 0 0	\$ \$	0 0 0	\$ \$	0 0 0	
4.	Beneficiaries and spouses a. Number b. Total annual benefits c. Average annual benefit d. Average age	\$ \$	1 3,300 3,300 82.0	\$ \$	2 6,300 3,150 72.0	\$ \$	2 6,300 3,150 70.0	
5.	Terminated vested members a. Number b. Average age		10 42.3		10 42.5		9 40.1	
6.	Terminated members active in another fund		0		0		1	
7.	Total number of members		29		31		34	



Table 12 - Distribution of Membership by Age and Service

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

	Reti	rees	Disabled Members		Benefi	ciaries	All	
		Average Monthly		Average Monthly		Average Monthly		Average Monthly
Age	Number	Pension	Number	Pension	Number	Pension	Number	Pension
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Less than 50	0	\$ 0	0	\$ 0	0	\$ 0	0	\$0
50-59	7	914	0	0	0	0	7	914
60-69	5	910	0	0	0	0	5	910
70-79	3	567	0	0	0	0	3	567
Greater than 80	0	0	0	0	1	275	1	275
All	15	\$ 843	0	\$0	1	\$ 275	16	\$ 808



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:

	01/01/2021	01/01/2019	01/01/2017
Ratio of actives to retirees and beneficiaries	0.2	0.3	0.5
Ratio of net cash flows to market value of assets	-3%	-8%	-8%
Duration of the actuarial accrued liability	12.4	12.9	17.4

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:

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

compounded annually

2. Rates of Decrement due to:

c) Pre-Retirement Mortality

Age 50 and 20 years of service. a) Retirement

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

55

2006 central rates from the RP-2014 Employee Mortality Tables for males and females projected to 2018 using the MP-2017 projection scales, and then projected prospectively using the ultimate rates of the scale for all years, 50% multiplier for off-duty mortality.

6.50

8.10

Annual Rate Per 1,000

	(for 2	2021)
<u>Age</u>	<u>Males</u>	<u>Females</u>
20	0.187	0.082
25	0.241	0.091
30	0.246	0.114
35	0.293	0.159
40	0.337	0.219
45	0.482	0.326
50	0.817	0.528
55	1.373	0.862



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 Withdrawais				
<u>Service</u>	<u>Rates</u>	<u>Service</u>	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

2006 central rates from the RP-2014 Annuitant Mortality Tables for males and females projected to 2018 using the MP-2017 projection scales, and then projected prospectively using the ultimate rates of the scale for all years.

	Annual Rate Per 1,	Annual Rate Per 1,000 (for 2021)		
<u>Age</u>	Males	<u>Females</u>		
50	3.938	2.654		
55	5.649	3.733		
60	7.925	5.581		
65	11.352	8.240		
70	16.833	12.741		
75	26.878	20.925		
80	45.392	35.814		



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

b) Disabled Retirees

2006 central rates from the RP-2014 Disabled Mortality Tables for males and females projected to 2018 using the MP-2017 projection scales, and then projected prospectively using the ultimate rates of the scale for all years.

	Annual Rate Per 1,	Annual Rate Per 1,000 (for 2021)		
<u>Age</u>	Males	<u>Females</u>		
50	30.000	20.000		
55	30.000	20.000		
60	30.000	20.000		
65	32.660	21.358		
70	40.499	27.925		
75	54.394	41.021		
80	77.763	62.736		

4. Administrative Expenses

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

5. Marital Status

90% male and female a) Percent married

b) Age difference Males are assumed to be two years older than females

6. Changes in Actuarial Assumptions None



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. Regularb. Extended Service	\$1,000.00	\$1,127.00	\$1,064.00	\$1,200.00	None
	Amount Per Year of Service	\$50.00	\$56.35	\$53.20	\$60.00	5% of Regular, for 10 Additional years
2.	Vested Retirement Benefit (monthly):					•
	 With 10 to 20 Years of Service Amount Per Year of Service per Minimum Vesting Years 	\$50.00	\$56.35	\$53.20	\$60.00	Pro rata Share of
	b. Minimum Vesting Years	10	10	10	10	Regular 20 Years
3.	Disability Retirement Benefit (monthly):	10	10	10	10	
	 Short Term Disability for line of duty injury 					½ of Regular or
	Amount payable for not more than 1					\$225, whichever
	year	\$500.00	\$563.50	\$532.00	\$600.00	is greater
	b. Long Term Disability for line of duty					Regular or \$450
	injury Lifetime Benefit	\$1,000.00	\$1,127.00	\$1,064.00	\$1,200.00	whichever is greater
4.	Survivor Benefit (monthly):	71,000.00	71,127.00	71,004.00	71,200.00	8. 22.25
	a. Following Death before Retirement					½ of Regular or
	Eligible; Due to death in the line					\$225, whichever
	of duty as a volunteer firefighter	\$500.00	\$563.50	\$532.00	\$600.00	is greater
	 Following Death after Normal Retirement 	\$500.00	\$563.50	\$532.00	\$600.00	50% of Regular
	c. Following Death after Normal	7500.00	7303.30	7552.00	7000.00	
	Retirement with Extended Service					
	Amount Per Year of Service	\$25.00	\$28.18	\$26.60	\$30.00	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	\$25.00	\$28.18	\$26.60	\$30.00	50% of Vested
	e. Following Death after Disability	\$500.00	\$563.50	\$532.00	\$600.00	50% of Long Term
	Retirement f. Optional Survivor Benefits in lieu of	\$0.00	\$0.00	\$0.00	\$0.00	100% of Regular
5.	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) Funeral Benefit (Required Benefit):	ÇSIGO	Çoloc	Çoloc	ÇOLGO	·
	a. Funeral Benefit Lump Sum, one time					
	only	\$2,000.00	\$2,254.00	\$2,128.00	\$2,400.00	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	\$ 1,000.00	\$ 1,127.00	\$ 1,064.00	\$ 1,200.00
2.	Normal Cost	5,380	6,062	5,726	6,456
3.	Present Value of Future Benefits	2,594,805	2,924,347	2,760,875	3,113,769
4.	Actuarial Accrued Liability	2,563,671	2,889,265	2,727,736	3,076,407
5.	Unfunded Accrued Liability / (Surplus)	963,969	1,289,563	1,128,034	1,476,705
6.	Administrative and other ongoing expenses	7,443	7,443	7,443	7,443
7.	Total Annual Calculated Contribution*	99,608	132,961	116,417	152,134
8.	Assumed Contribution	113,437	113,437	113,437	113,437
9.	Funding Period Based on Assumed Contribution	16 years	31 years	22 years	Never
10.	Funded Ratio	62%	55%	59%	52%

^{*} 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 Wellington were to adopt Plan A above, the Net Pension Liability and Pension Expense would increase by at least \$325,594 (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%.

