

GASB 68 Actuarial Information for the Measurement Period Ending June 30, 2021



Submitted by:

James Ritchie, ASA, EA, FCA, MAAA
President of Bolton Retirement
443.573.3924
jritchie@boltonusa.com

Jordan McClane, FSA, EA, FCA, MAAA Actuary 667.218.6935 jmcclane@boltonusa.com



October 20, 2021

Ms. Priscilla Hamilton Finance Director City of Fairmont P.O. Box 1428 Fairmont, WV 26555 Firefighter Jason Barker
Pension Board Secretary
City of Fairmont
Firemen's Pension and Relief Fund

Re: City of Fairmont Firemen's Pension and Relief Fund
GASB 68 Actuarial Information for the Measurement Period Ending June 30, 2021

Dear Priscilla,

The following report contains the GASB 67 and GASB 68 actuarial information for the City of Fairmont Firemen's Pension and Relief Fund to be included in the City's financial statements for FY 2021. The GASB 67 information has been provided as of June 30, 2021 (the GASB 68 measurement date for FY 2021).

Methodology, Reliance and Certification

This report is prepared for the City. The report contains the actuarial information to be included with the City's financial statements for the year ending June 30, 2021 (the City's fiscal year end date) as required by GASB 68. This information has been prepared for use in the financial statements of the City. This information is not intended for, nor should it be used for, any additional purposes.

The total pension liability is based on the July 1, 2020 actuarial valuation rolled forward to June 30, 2021. The methods, assumptions, and participant data used are detailed in the July 1, 2020 actuarial valuation report with the exception of the actuarial cost method. These calculations are based on the Entry Age Normal cost method as required by GASB 67. The calculation of the Actuarially Determined Contribution (ADC) for the fiscal year ending June 30, 2021 is contained in the July 1, 2019 valuation report. The discount rate assumption may have changed if a blended rate was used for GASB purposes. The ADC and blended rate determination are based on the Plan using the Conservation funding policy as described in WV Code §8-22-20. Under this funding policy, the City makes contributions to two separate accounts: the Benefit Payment Account and the Accumulation Account. The Benefit Payment Account is used to pay benefits on a pay-as-you-go basis while the Accumulation Account cannot be used to pay benefits and expenses until assets equal or exceed actuarial liabilities.

The included calculations are based on a blended discount rate of 2.55%. A long-term expected rate of investment return of 4.25% has been blended with the 1.92% yield corresponding to the 20-year maturity on a municipal general obligation AA bond yield curve published on Fidelity's Fixed Income Market Data webpage as of June 30, 2021. We assumed benefits are discounted at the municipal bond rate when paid from the Benefit Payment Account and at the long-term rate of return when paid from the Accumulation Account. The development of the blended discount rate is included within this report.

Ms. Priscilla Hamilton October 20, 2021 Page 2

Methodology, Reliance and Certification (cont.)

The included calculations assume that the members and the City will continue to make all required contributions in accordance with the City's funding policy.

This is a deterministic valuation in that it is based on a single set of assumptions. This set of assumptions is one possible basis for our calculations. Other assumptions may be equally valid. The future is uncertain and the plan's actual experience will differ from the assumptions; the differences may be significant or material because the results are very sensitive to the assumptions made and, in some cases, to the interaction between the assumptions. We may consider that some factors are not material to the valuation of the plan and may not provide a specific assumption for those factors. We may have used other assumptions in the past. We will likely consider changes in assumptions at a future date.

The City is responsible for selecting the plan's funding policy based on four methods allowed for under state law. The actuarial valuation methods are chosen by the actuary in accordance with actuarial standards of practice promulgated by the Actuarial Standards Board of the American Academy of Actuaries and as required by GASB 67 & 68. The MPOB selects the asset valuation methods and assumptions; these selections are reviewed by a qualified actuary no less than every five years. The actuary shall provide a report to the Board with recommendations on any changes to the actuarial process. The policies, methods and assumptions used in this valuation are those that have been so prescribed and are described in this report. The City and MPOB are solely responsible for communicating to Bolton Partners, Inc. any changes required thereto.

The City could reasonably ask how the valuation would change if we used a different assumption set or if plan experience exhibited variations from our assumptions. This report does not contain such an analysis. That type of analysis would be a separate assignment.

The cost of this plan is determined by the benefits promised by the plan, the plan's participant population, the investment experience of the plan and many other factors. An actuarial valuation is a budgeting tool for the City or, in this case, a measure of accounting expense. It does not affect the cost of the plan. As the experience of the plan evolves, it is normal for the level of contributions and expense of the plan to change.

We make every effort to ensure that our calculations are accurately performed. We reserve the right to correct any potential errors by amending the results of this report or by including the corrections in a future valuation report.

Because modeling all aspects of a situation is not possible or practical, we may use summary information, estimates, or simplifications of calculations to facilitate the modeling of future events in an efficient and cost-effective manner. We may also exclude factors or data that are immaterial in our judgment. Use of such simplifying techniques does not, in our judgment, affect the reasonableness of valuation results for the plan.

This report is based on plan provisions, census data, and asset data submitted by the City. We have relied on this information for purposes of preparing this report, but have not performed an audit. The accuracy of the results presented in this report is dependent upon the accuracy and completeness of the underlying information. The plan sponsor is solely responsible for the validity and completeness of this information.



Ms. Priscilla Hamilton October 20, 2021 Page 3

Methodology, Reliance and Certification (cont.)

The valuation was completed using both proprietary and third-party models (including software and tools). We have tested these models to ensure they are used for their intended purposes, within their known limitations, and without any known material inconsistencies unless otherwise stated.

The City is solely responsible for selecting the plan's investment policies, asset allocations and individual investments. Bolton Partners, Inc.'s actuaries have not provided any investment advice to the City.

The information in this report was prepared for the internal use of the City, the plan and their auditors in connection with our actuarial valuations of the pension plan as required by GASB 68. This report may not be used for any other purpose; Bolton Partners, Inc. is not responsible for the consequences of any unauthorized use or the reliance on this information by any other party.

The calculation of actuarial liabilities for valuation purposes is based on a current estimate of future benefit payments. The calculation includes a computation of the "present value" of those estimated future benefit payments using an assumed discount rate; the higher the discount rate assumption, the lower the estimated liability will be.

As described on page 1, the municipal bond rate is used to discount benefit payments assumed to be made from the Benefit Payment Account while the expected long-term rate of return on plan investments assumption is used to discount benefit payments made from the Accountlation Account. If, instead, the municipal bond rate were used to discount all benefit payments from both accounts, the estimated present value of future and accrued benefits could substantially increase.

This report provides certain financial calculations for use by the auditor. These values have been computed in accordance with our understanding of generally accepted actuarial principles and practices and fairly reflect the actuarial position of the plan. The various actuarial assumptions and methods which have been used are, in our opinion, appropriate for the purposes of this report.

The report is conditioned on the assumption of an ongoing plan and is not meant to present the actuarial position of the plan in the case of plan termination. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions, changes in economic or demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status), and changes in plan provisions or applicable law.

The undersigned enrolled actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The July 1, 2020 actuarial valuation report contains information that is integral to the results contained herein and a copy may be provided upon request.

Sincerely,

James Ritchie, ASA, EA, FCA, MAAA

Jordan McClane, FSA, EA, FCA, MAAA

ful Mile



Actuarial Information to Include in the Financial Statements for the June 30, 2021 Measurement Date



Net Pension Liability of the Employer

The components of the net pension liability of the Employer at June 30, 2021, were as follows:

Total pension liability	\$ 59,337,273
Plan fiduciary net position	 (6,765,072)
Employer's net pension liability	\$ 52,572,201
Plan fiduciary net position as a percentage of the total pension liability	11.40%

Actuarial assumptions. The total pension liability was determined by an actuarial valuation as of July 1, 2020 rolled forward to June 30, 2021 using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation 2.50 percent

Salary increases Rates vary by years of service

Single discount rate (BOY) 3.06% Single discount rate (EOY) 2.55%

Investment rate of return (BOY) 4.50%, net of pension plan investment expense, including inflation Investment rate of return (EOY) 4.25%, net of pension plan investment expense, including inflation

Long-term municpal bond rate (BOY) 2.45% Long-term municpal bond rate (EOY) 1.92%

Mortality SOA PubS-2010(B) with generational projection using Scale MP-2019

Year Fund is projected to be fully funded 2053 Year assets are expected to be depleted N/A

for a closed plan

The above is a summary of key actuarial assumptions. Full descriptions of the actuarial assumptions are available in the July 1, 2020 actuarial valuation report.

Sensitivity of the net pension liability to changes in the discount rate

		Current	
	1% Decrease 1.55%	Discount Rate 2.55%	1% Increase 3.55%
Employer's net pension liability	\$ 63,061,877	\$ 52,572,201	\$ 44,334,257

City of Fairmont, West Virginia Firemen's Pension and Relief Fund Actuarial Information to Include in the Financial Statements

for the June 30, 2021 Measurement Date



Changes in the Net Pension Liability

	I Total Pension Liability (a)	ncrease (Decrease Plan Fiduciary Net Position (b)) Net Pension Liability (a) - (b)
Balances at 6/30/20	\$ 55,022,747	\$ 4,506,717	\$ 50,516,030
Changes for the year:			
Service cost	1,578,074		1,578,074
Interest	1,658,429		1,658,429
Changes of benefit terms	-		-
Differences between expected and actual experience	2,753,275		2,753,275
Changes of assumptions	(23,799)		(23,799)
Contributions - employer (including Premium Tax Allocation)		2,540,912	(2,540,912)
Contributions - member		199,517	(199,517)
Net investment income*		1,170,623	(1,170,623)
Benefit payments, including refunds of member contributions	(1,651,453)	(1,651,453)	-
Administrative expense		(1,264)	1,264
Other		20	(20)
Net Changes	4,314,526	2,258,355	2,056,171
Balances at 6/30/21	\$ 59,337,273	\$ 6,765,072	\$ 52,572,201
Return on Investments		23.2%	

^{*}The Plan Fiduciary Net Position as of July 1, 2020 provided to Bolton by the City does not match the Plan Fiduciary Net Position as of June 30, 2020 as provided in the prior GASB report. A difference of \$6,558 has been excluded as investment income for the measurement period ending June 30, 2021.

Actuarial Information to Include in the Financial Statements for the June 30, 2021 Measurement Date



Components of Employer's Pension Expense for the Fiscal Year Ended June 30, 2021

Note	Description	Amount
Α	Service cost	\$ 1,578,074
В	Interest on the total pension liability	1,658,429
Α	Changes of benefit terms	-
С	Differences between expected and actual experience	1,090,666
С	Changes of assumptions	2,074,063
Α	Employee contributions	(199,517)
D	Projected earnings on pension plan investments	(227,276)
С	Differences between expected and actual earnings on	(233,742)
	plan investments	
Α	Pension plan administrative expense	1,264
Α	Other changes in fiduciary net position	(20)
	Total Pension Expense	\$ 5,741,941

Notes:

A Provided in the Changes in Net Pension Liability exhibit.

B Based on the following calculation:

	Amount for Period (a)	Portion of Period (b)	Interest Rate (c)	Projected Earnings (a) x (b) x (c)
Beginning total pension liability	\$ 55,022,747	100%	3.06%	\$ 1,683,696
Service cost (End of Year)	1,578,074	0%	3.06%	-
Benefit payments, including refunds of employee contributions	(1,651,453)	50%	3.06%	(25,267)
Total interest on the total pension liability				\$ 1,658,429

C Provided in the Schedules of Deferrals.

D Based on the following calculation:

	F	Amount for	Portion of	Projected		rojected
		Period	Period	Rate of Return		arnings
		(a)	(b)	(c)	(a)	x (b) x (c)
Beginning plan fiduciary net position	\$	4,506,717	100%	4.50%	\$	202,802
Employer contributions		2,540,912	50%	4.50%		57,171
Employee contributions		199,517	50%	4.50%		4,489
Benefit payments, including refunds of employee contributions		(1,651,453)	50%	4.50%		(37,158)
Administrative expense and other		(1,244)	50%	4.50%		(28)
Total Projected Earnings					\$	227,276





Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

At June 30, 2021, the Employer reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	red Outflows Resources	erred Inflows Resources
Differences between expected and actual experience	\$ 1,835,517	\$ 296,490
Changes of assumptions	955,775	15,866
Net difference between projected and actual earnings	-	
on pension plan investments		800,460
Total	\$ 2,791,292	\$ 1,112,816

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year ended June 30:	
2022	\$ 1,353,844
2023	706,258
2024	(192,955)
2025	(188,671)
2026	-
Thereafter	-

Actuarial Information to Include in the Financial Statements for the June 30, 2021 Measurement Date

Changes in the Employer's Net Pension Liability and Related Ratios Last 10 Fiscal Years



Total pension liability		2021		2020		2019		2018		2017		2016		2015		2014		2013		2012
Service cost	\$	1,578,074	\$	1,420,130	\$	1,407,671	\$	1,244,719	\$	1,383,404	\$	868,066	\$	812,884	\$	767,965	\$	-	\$	-
Interest		1,658,429		1,723,926		1,698,499		1,660,005		1,540,023		1,648,491		1,625,068		1,693,559		-		-
Changes of benefit terms		-		-		-		-		-		-		-		-		-		-
Differences between expected and actual experience		2,753,275		(889,472)		1,610,281		(517,413)		(1,654,431)		4,042		(1,337,486)		-		-		-
Changes of assumptions		(23,799)		2,867,323		3,507,534		(329,939)		(3,163,235)		9,497,572		593,316		1,099,407		-		-
Benefit payments, including refunds of member contributions		(1,651,453)		(1,605,737)		(1,526,654)		(1,524,211)		(1,529,229)		(1,547,140)		(1,595,187)		(1,563,490)		-		-
Net change in total pension liability		4,314,526		3,516,170		6,697,331		533,161		(3,423,468)		10,471,031		98,595		1,997,441		-		-
Total pension liability - beginning		55,022,747		51,506,577		44,809,246		44,279,085		47,699,553		37,228,522		37,129,927		35,132,486		-		-
Total pension liability - ending (a)	\$	59,337,273	\$	55,022,747	\$	51,506,577	\$	44,809,246	\$	44,276,085	\$	47,699,553	\$	37,228,522	\$	37,129,927	\$	-	\$	-
Plan fiduciary net position		2021		2020		2019		2018		2017		2016		2015		2014		2013		2012
Contributions - employer (including Premium Tax Allocation)	\$	2,540,912	\$	2,052,573	\$	1,725,736	\$	1,722,618	\$	1.422.301	\$	1.342.753	\$	1.324.270	\$	1,209,650	\$	-	\$	-
Contributions - member	•	199,517	•	195,246	-	174,216	7	180,003	•	165,937	•	165,382	7	164,249	•	162,770	*	-	7	-
Net investment income		1.170.623		181,604		185.580		155,499		165,421		21.071		51,321		258,994		-		-
Benefit payments, including refunds of member contributions		(1,651,453)		(1,605,737)		(1,526,654)		(1,524,211)		(1,529,229)		(1,547,140)		(1,595,187)		(1,563,490)		-		-
Administrative expense		(1,264)		(972)		(862)		(2,350)		(1,777)		(1,433)		(1,189)		(1,752)		-		-
Other		20		` 4		(675)		463,165		218,861		25,958		752		54,076		-		-
Net change in plan fiduciary net position	\$	2,258,355	\$	822,718	\$	557,341	\$	994,724	\$	441,514	\$	6,591	\$	(55,784)	\$	120,248	\$		\$	-
Plan fiduciary net position - beginning		4,506,717		3,683,999		3,126,658		2,131,934		1,690,420		1,683,829		1,739,613		1,619,365		-		-
Plan fiduciary net position - ending (b)	\$	6,765,072	\$	4,506,717	\$	3,683,999	\$	3,126,658	\$	2,131,934	\$	1,690,420	\$	1,683,829	\$	1,739,613	\$	-	\$	-
Employer's net pension liability - ending (a)-(b)	\$	52,572,201	\$	50,516,030	\$	47,822,578	\$	41,682,588	\$	42,144,151	\$	46,009,133	\$	35,544,693	\$	35,390,314	\$	-	\$	-
Plan fiduciary net position as a percentage of the total pension liability		11.40%		8.19%		7.15%		6.98%		4.82%		3.54%		4.25%		4.69%		0.00%		0.00%
Covered payroll	\$	1,962,217	\$	1,948,787	\$	1,958,395	\$	1,864,926	\$	1,831,847	\$	1,925,962	\$	1,841,996	\$	1,825,201	\$	-	\$	-
Employer's net pension liability as a percentage of covered payroll		2679.22%		2592.18%		2441.93%		2235.08%		2133.64%		2388.89%		1929.68%		1938.98%		0.00%		0.00%
Expected average remaining service years of all participants		3.00		3.00		3.00		3.45		3.59		3.80		3.73		3.86		-		

Notes to Schedule:

Benefit changes: There were no changes for FY2021.

Changes of assumptions: The discount rates, termination rates, disability rates, marital status, and sumptions, inflation, cost-of-living increases, mortality rates, retirement rates, termination rates, disability rates, marital status, and

non-spouse beneficiary loads.

*The Plan Fiduciary Net Position as of July 1, 2020 provided to Bolton by the City does not match the Plan Fiduciary Net Position as of June 30, 2020 as provided in the prior GASB report. A difference of \$6,558 has been excluded as investment income for the measurement period ending June 30, 2021.

"The Plan Fiduciary Net Position as of July 1, 2019 provided to Bolton by the City does not match the Plan Fiduciary Net Position as of June 30, 2019 as provided in the prior GASB report. The difference of \$5,730 has been included as investment income for the measurement period ending June 30, 2020.

Actuarial Information to Include in the Financial Statements for the June 30, 2021 Measurement Date

Schedule of Employer Contributions

Last 10 Fiscal Years



	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Actuarially determined contribution	\$ 3,215,582	\$ 3,359,710	\$ 3,229,422	\$ 2,833,286	\$ 2,721,289	\$ 2,677,659	\$ 1,974,513	\$ 19,252,499	\$ 1,875,854	\$ -
Contributions in relation to the actuarially determined contribution										
Employer provided	2,060,902	1,584,784	1,282,498	1,288,135	988,285	924,310	907,479	805,791	753,076	-
State provided	480,010	467,789	443,238	434,483	434,016	418,443	416,791	403,859	432,491	
Contribution deficiency (excess)	\$ 674,670	\$ 1,307,137	\$ 1,503,686	\$ 1,110,668	\$ 1,298,988	\$ 1,334,906	\$ 650,243	\$ 18,042,849	\$ 690,287	\$ -
Covered payroll	\$ 1,962,217	\$ 1,948,787	\$ 1,958,395	\$ 1,864,926	\$ 1,831,847	\$ 1,925,962	\$ 1,841,996	\$ 1,825,201	\$ 1,781,502	\$ -
Contributions as a percentage of covered employee payroll	129.49%	105.33%	88.12%	92.37%	77.64%	69.72%	71.89%	66.27%	66.55%	N/A

Notes to Schedule

Valuation date:

Actuarially determined contribution amounts are calculated as of the beginning of the fiscal year (July 1) for the year immediately following the fiscal year. Actuarial valuations are performed every year.

Methods and assumptions used to determine contribution rates:

Actuarial cost method Entry Age Normal
Amortization method Level Dollar
Remaining amortization period 30.5 years
Asset valuation method Market Value
Inflation 2.75 percent

Salary increases Rates vary by years of service

Investment rate of return 4.50%, net of pension plan investment expense, including inflation

Retirement age Rates vary by age

Mortality RP-2014 Blue Collar Mortality Table with generational projection using Scale MP-2014

Actuarial Information to Include in the Financial Statements for the June 30, 2021 Measurement Date



Schedule of Differences between Projected and Actual Earnings on Pension Plan Investments

In conformity with paragraph 33b of Statement 68, the effects of differences between projected and actual earnings on pension plan investments are recognized in pension expense using a systematic and rational method over a closed five-year period, beginning in the current reporting period. The following table illustrates the application of this requirement.

Year	betv and / on	Differences veen Projected Actual Earnings Pension Plan nvestments	Recognition Period (Years)	2017	2018	2019	2020	2021	20)22	2023	2024	2025
2017	\$	(92,386)	5	\$ (18,477)	(18,477)	(18,477)	(18,477)	(18,478)					
2018		(58,477)	5		\$ (11,695)	(11,695)	(11,695)	(11,695)		(11,697)			
2019		(53,079)	5			\$ (10,616)	(10,616)	(10,616)		(10,616)	(10,615)		
2020		(21,422)	5				\$ (4,284)	(4,284)		(4,284)	(4,284)	(4,286)	
2021		(943,347)	5					\$ (188,669)	(188,669)	(188,669)	(188,669)	(188,67
et increa	se (dec	rease) in pension	expense					\$ (233,742)	\$ (215,266)	\$ (203,568)	\$ (192,955)	\$ (188,67

Deferred Outflows of Resources and Deferred Inflows of Resources Arising from Differences between Projected and Actual Earnings on Pension Plan Investments

						Balan June 3		
Year	Investment Earnings Less than Projected Year (a)		ment Earnings Than Projected (b)	Amounts Recognized in Pension Expense Through June 30, 2021 (c)	Ou Re	Deferred utflows of esources (a) - (c)	ا	Deferred nflows of tesources (b) - (c)
2017	\$	-	\$ 92,386	\$ 92,386	\$	-	\$	
2018		-	58,477	46,780		-		11,697
2019		-	53,079	31,848		-		21,231
2020		-	21,422	8,568		-		12,854
2021		-	943,347	188,669		-		754,678
					\$	-	\$	800,460

for the June 30, 2021 Measurement Date

B

Schedule of Differences between Expected and Actual Experience

In conformity with paragraph 33 a of Statement 68, the effects of differences between expected and actual experience are recognized in pension expense, beginning in the current reporting period, using a systematic and rational method over a closed period equal to the average of the remaining service lives of all employees that are provided with pensions through the pension plan (active and inactive employees), determined as of the beginning of the measurement period. The following table illustrates the application of this requirement.

Year	Differences between Expected and Actual Experience	Recognition Period (Years)	Increase (Decrease) in Pension Expense Arising from the Recognition of Differences between Expected and Actual Experience															Thereafter	
Prior																			
2012	-																		
2013	-	-																	
2014	-	3.860970																	
2015	(1,337,486)	3.726428					\$ (358,919)	(358,919)	(358,919)	(260,729)									
2016	4,042	3.803432						\$ 1,063	1,063	1,063	853								
2017	(1,654,431)	3.592531							\$ (460,520)	(460,520)	(460,520)	(272,871)							
2018	(517,413)	3.449032								\$ (150,017)	(150,017)	(150,017)	(67,362)						
2019	1,610,281	3.000000									\$ 536,760	536,760	536,761						
2020	(889,472)	3.000000										\$ (296,491)	(296,491)	(296,490)					
2021	2,753,275	3.000000											\$ 917,758	917,758	917,759				
Net increase	se (decrease) in per	sion expense											\$ 1,090,666	\$ 621,268	\$ 917,759	\$ -	\$ -	\$ -	\$ -

Deferred Outflows of Resources and Deferred Inflows of Resources Arising from Differences between Expected and Actual Experience

			Balances at June 30, 2021							
Year	Experience Losses (a)	Experience Gains (b)	Amounts Recognized in Pension Expense Through June 30, 2021 (c)	Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)					
Prior	\$ -	\$ -	\$ -	\$ -	\$					
2012	-	-	-	-						
2013	-	-	-	-						
2014	-	-	-	-						
2015	-	1,337,486	1,337,486	-						
2016	4,042	-	4,042	-						
2017	-	1,654,431	1,654,431	-						
2018	-	517,413	517,413	-						
2019	1,610,281	-	1,610,281	-						
2020	-	889,472	592,982	-	296,490					
2021	2,753,275		917,758	1,835,517						
				\$ 1,835,517	\$ 296,490					

Actuarial Information to Include in the Financial Statements

for the June 30, 2021 Measurement Date

B

Schedule of Changes of Assumptions

In conformity with paragraph 33a of Statement 68, the effects of changes of assumptions should be recognized in pension expense, beginning in the current reporting period, using a systematic and rational method over a closed period equal to the average of the remaining service lives of all employees that are provided with pensions through the pension plan (active and inactive employees), determined as of the beginning of the measurement period. The following table illustrates the application of this requirement.

		Recognition			Increase (Decrease) in Pension Expense Arising from the Effects of Changes of Assumptions															
Year	Changes of Assumptions	Period (Years)	Prior	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2	025	2026	Thereaft
Prior	\$ -																			
2012	-	-																		
2013	-	-																		
2014	1,099,407	3.860970				\$ 284,749	284,749	284,749	245,160											
2015	593,316	3.726428					\$ 159,218	159,218	159,218	115,662										
2016	9,497,572	3.803432						\$ 2,497,106	2,497,106	2,497,106	2,006,254									
2017	(3,163,235)	3.592531							\$ (880,503)	(880,503)	(880,503)	(521,726)								
2018	(329,939)	3.449032								\$ (95,661)	(95,661)	(95,661)	(42,956)							
2019	3,507,534	3.000000									\$ 1,169,178	1,169,178	1,169,178							
2020	2,867,323	3.000000										\$ 955,774	955,774	955,775						
2021	(23,799)	3.000000											\$ (7,933)	(7,933)	(7,933)					
Net increas	e (decrease) in pen	sion expense											\$ 2,074,063	\$ 947,842	\$ (7,933)	\$	- \$	-	\$	\$

Deferred Outflows of Resources and Deferred Inflows of Resources Arising from Changes of Assumptions

Year	Increases in the Total Pension Liability (a)	Decreases in the Total Pension Liability (b)	Amounts Recognized in Pension Expense Through June 30, 2021 (c)	Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)				
Prior	\$ -	\$ -	\$ -	\$ -	\$ -				
2012	-	-	-	-	-				
2013	-	-	-	-	-				
2014	1,099,407	-	1,099,407	-	-				
2015	593,316	-	593,316	-	-				
2016	9,497,572	-	9,497,572	-	-				
2017	-	3,163,235	3,163,235	-	-				
2018	-	329,939	329,939	-	-				
2019	3,507,534	-	3,507,534	-	-				
2020	2,867,323	-	1,911,548	955,775	-				
2021	-	23,799	7,933	-	15,866				
				\$ 955,775	\$ 15,866				

City of Fairmont, West Virginia Firemen's Pension and Relief Fund Actuarial Information to Include in the Financial Statements

for the June 30, 2021 Measurement Date

Projection of Pension Plan's Fiduciary Net Position



	Numb	er (BOY)						Bene	fit Pa	yment Acco	ount						Accumulation Account															
Fiscal Year	Active	Non-Active	Ass	sets (BO	Y)	Net Benefit Pmts and Expenses	(Employer Contributions		mployee ntributions	Prei	5.33% of mium Tax location		restment ncome	Ac	Transfer (To)/From ccumulation Account	As	sets (BOY)	Pm	Benefit its and penses		Employer contributions	En	% of Pay nployee tributions	Pren	.67% of nium Tax ocation	Inves Inco			Accrued Liability	Unfunded Liability	Funded Ratio
2022	30	54	\$	320,36	61	\$ 1,923,505	5 \$	1,395,937	\$	126,964	\$	400,604	\$	13,615	\$	(333,976)	\$	6,444,711	\$	-	\$	-	\$	26,843	\$	63,427	\$ 2	75,799	\$	47,366,585 \$	40,221,8	29 15%
2023	28	55	\$	-		\$ 1,989,23	1 \$	1,466,056	\$	119,436	\$	403,739	\$	-	\$	-	\$	7,144,756	\$	-	\$	-	\$	25,244	\$	63,923	\$ 3	05,527	\$	48,301,700 \$	40,762,2	50 16%
2024	26	55	\$	-		\$ 2,064,49	1 \$	1,532,192	\$	110,902	\$	421,397	\$	-	\$	-	\$	7,539,450	\$	-	\$	-	\$	23,413	\$	66,719	\$ 3	22,322	\$	49,137,843 \$	41,185,9	39 16%
2025	23	56	\$	-		\$ 2,172,59	1 \$	1,642,031	\$	98,775	\$	431,785	\$	-	\$	-	\$	7,951,904	\$	-	\$	-	\$	20,820	\$	68,364	\$ 3	39,831	\$	49,803,627 \$	41,422,7	08 17%
2026	20	58	\$	-		\$ 2,292,176	6 \$	1,763,540	\$	86,203	\$	442,433	\$	-	\$	-	\$	8,380,919	\$	-	\$	-	\$	18,131	\$	70,050	\$ 3	58,043	\$	50,275,203 \$	41,448,0	60 18%
2027	17	60	\$	-		\$ 2,398,593	3 \$	1,869,423	\$	74,935	\$	454,235	\$	-	\$	-	\$	8,827,143	\$	-	\$	-	\$	15,725	\$	71,918	\$ 3	76,997	\$	50,568,045 \$	41,276,2	62 18%
2028	15	61	\$	-		\$ 2,526,578	в \$	1,996,689	\$	61,487	\$	468,402	\$	-	\$	-	\$	9,291,783	\$	-	\$	-	\$	12,848	\$	74,161	\$ 3	96,730	\$	50,629,004 \$	40,853,4	32 19%
2029	12	63	\$	-		\$ 2,615,79	1 \$	2,082,175	\$	51,804	\$	481,812	\$	-	\$	-	\$	9,775,522	\$	-	\$	-	\$	10,781	\$	76,284	\$ 4	17,291	\$	50,523,928 \$	40,244,0	50 20%
2030	10	64	\$	-		\$ 2,695,258	в \$	2,154,914	\$	43,357	\$	496,987	\$	-	\$	-	\$	10,279,878	\$	-	\$	-	\$	8,973	\$	78,687	\$ 4	38,738	\$	50,265,944 \$	39,459,6	68 21%
2031	8	64	\$	-		\$ 2,758,897	7 \$	2,214,062	\$	35,597	\$	509,238	\$	-	\$	-	\$	10,806,276	\$	-	\$	-	\$	7,320	\$	80,627	\$ 4	61,116	\$	49,866,884 \$	38,511,5	15 23%
2032	7	64	\$	-		\$ 2,796,203	3 \$	2,243,985	\$	30,423	\$	521,795	\$	-	\$	-	\$	11,355,339	\$	-	\$	-	\$	6,215	\$	82,615	\$ 4	84,470	\$	49,368,930 \$	37,440,2	91 24%
2033	6	64	\$	-		\$ 2,805,113	3 \$	2,241,815	\$	27,225	\$	536,073	\$	-	\$	-	\$	11,928,639	\$	-	\$	-	\$	5,536	\$	84,876	\$ 5	08,868	\$	48,816,569 \$	36,288,6	50 26%
2034	5	63	\$	-		\$ 2,805,27	1 \$	2,228,017	\$	24,217	\$	553,037	\$	-	\$	-	\$	12,527,919	\$	-	\$	-	\$	4,920	\$	87,562	\$ 5	34,381	\$	48,216,812 \$	35,062,0	30 27%
2035	4	62	\$			\$ 2,835,26	1 \$	2,247,256	\$	19,082	\$	568,923	\$	-	\$		\$	13,154,782	\$	-	\$	-	\$	3,854	\$	90,077	\$ 5	61,053	\$	47,519,577 \$	33,709,8	11 29%
2036	3	62	\$			\$ 2,839,473	3 \$	2,223,099	\$	15,211	\$	601,163	\$	-	\$		\$	13,809,766	\$	-	\$	-	\$	3,044	\$	95,181	\$ 5	88,981	\$	46,759,260 \$	32,262,2	38 31%
2037	3	61	\$			\$ 2,831,997	7 \$	2,196,837	\$	12,630	\$	622,530	\$	-	\$	-	\$	14,496,972	\$	-	\$	-	\$	2,497	\$	98,564	\$ 6	18,247	\$	45,955,076 \$	30,738,7	96 33%
2038	2	60	\$			\$ 2,823,877	7 \$	2,176,643	\$	9,361	\$	637,873	\$	-	\$	-	\$	15,216,280	\$	-	\$	-	\$	1,829	\$	100,993	\$ 6	48,854	\$	45,099,987 \$	29,132,0	31 35%
2039	1	59	\$			\$ 2,800,597	7 \$	2,124,448	\$	6,965	\$	669,184	\$	-	\$		\$	15,967,956	\$	-	\$	_	\$	1,356	\$	105,951	\$ 6	80,895	\$	44,214,017 \$	27,457,8	59 38%
2040	1	58	\$			\$ 2,763,767	7 \$	2,072,424	\$	5,671	\$	685,672	\$	-	\$		\$	16,756,158	\$	-	\$	-	\$	1,095	\$	108,561	\$ 7	14,443	\$	43,317,758 \$	25,737,5	01 41%
2041	1	56	\$			\$ 2,726,863	3 \$			4,106	\$	702,572	s		\$		s	17,580,257	\$	_	\$		\$	792	\$	111,237	\$ 7	49,517	\$	42,409,528 \$		
2042	0	55	\$			\$ 2.686.435				2,410			s	-	\$	_	s	18.441.803		_	s		\$		\$	113,980		86.183	\$	41.490.958 \$		
2043	0	53	\$			\$ 2.634.46	1 \$	1.874.773	\$	1.682	\$	758.006	s	-	\$	_	s	19.342.433	\$	_	\$		\$	327	\$	120.014	\$ 8	24.584	\$	40.580.779 \$		
2044	0	52	\$			\$ 2.578.660				1,128	\$,	s	-	\$	_	s	20.287.358		_	s		\$		\$	122,975		64.803	\$	39.684.167 \$	-,,	
2045	0	50	\$			\$ 2,520,157		,,	•	704	\$	803,746		-	\$	_	s	21,275,356		_	\$		\$		\$,		06,882	\$	38,805,434 \$		
2046	0	48	\$			\$ 2,457,693					\$	857.300			\$		s	22.309.629			\$		\$	101	\$	135,735		51,016	\$	37,951,649 \$		
2047	0	47	\$			\$ 2,394,823				329	\$,	s		\$		s	23.396.481	\$		s		\$		\$			97,319	\$	37,123,946 \$		
2048	0	45	\$			\$ 2,331,084		,,		168	\$		s	_	\$	_	s	24.534.966	-	_	\$	_	\$		\$	149,477			\$	36,324,576 \$,,	
2049	0	43	\$			\$ 2,266,205		,		127	\$	971.606			\$		s	25,730,355			s		\$		\$			96,776	\$	35,557,092 \$		
2050	0	42	\$			\$ 2,200,200				95	*	. ,	s	_	\$	-	s	26,980,988			\$		\$		\$	208.561	\$ 1,1		\$	34.822.735 \$		
2050	0	40	\$			\$ 2,201,340			•	-			s		\$		s	28,340,645			\$	-	\$		\$,	\$ 1,1		\$	34,121,166 \$		
2052	0	39	\$			\$ 2,073,890							s		\$		s	29.764.817	\$		s		\$		\$	225,155		69.739	\$	33,455,125 \$		
2052	0	37	\$					/-			\$, , ,	s		\$	7	-	31,259,711	•		\$		\$		\$	-,	\$ 1,3	,	\$	32,825,550 \$	2,100,4	100%
2053	0	36	\$ \$	-		\$ 2,010,416 \$ -	о ф \$		ş S	-	\$	1,407,907	s	-	\$,	S	32.825.550		.947.459		1.246			\$	232,421		54.159	\$	32,025,550 \$	-	100%
	-		-	-		*	_		-	-		-	*	-	_	•		. ,,	•			, ,				-	. ,.			. , ,	-	
2055 2056	0	35 33	\$ \$	-		\$ - \$ -	\$		\$ \$	-	\$	-	\$ \$	-	\$	-	\$ \$	32,233,496		,884,855		1,242	\$		\$	-		30,313 08.111	\$ \$	31,680,196 \$	-	100% 100%
	-		-	-		*	_		-	-	*	-	*	-	_	-		31,680,196				,			\$	-	. ,.			. , . ,		
2057	0	32	\$	-		\$ -	\$		\$	-	\$	-	\$	-	\$	-	\$	31,167,126		,759,815		,	\$		\$	-	. ,	87,621	\$	30,696,125 \$		100%
2058	0	31	\$	-		\$ -	\$		\$	-	\$	-	\$	-	\$	-	\$	30,696,125		,696,825		1,185			\$	-	. ,	68,928	\$	30,269,413 \$	-	100%
2059	0	29	\$	-		\$ -	\$		\$	-	\$	-	\$	-	\$	-	\$	30,269,413		,633,076		,			\$	-		52,132	\$	29,889,605 \$	-	100%
2060	0	28	\$	-		\$ -	\$		\$	-	\$	-	\$	-	\$	-	\$	29,889,605	•	,568,420		1,124			\$	-		37,350	\$	29,559,659 \$	-	100%
2061	0	27	\$	-		\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	29,559,659	\$ 1	,502,626	\$	1,111	\$	-	\$	-	\$ 1,2	24,710	\$	29,282,854 \$	-	100%

Actuarial Information to Include in the Financial Statements for the June 30, 2021 Measurement Date



Projection of Pension Plan's Fiduciary Net Position

Fiscal Year	Projected BP	"Funded" Portion of BP	"Ur	funded" Portion of BP	PV	of "Funded" Portion of BP	PV of "Unfunded" Portion of BP	PV	of BP Using a Single DR
2021	\$ 1,651,453	\$ -	\$	1,651,453	\$	-	\$ 1,635,824	\$	1,630,821
2022	\$ 1,922,188	\$ -	\$	1,922,188	\$	-	\$ 1,868,128	\$	1,851,041
2023	\$ 1,987,897	\$ -	\$	1,987,897	\$	-	\$ 1,895,594	\$	1,866,785
2024	\$ 2,063,157	\$ -	\$	2,063,157	\$	-	\$ 1,930,298	\$	1,889,352
2025	\$ 2,171,257	\$ -	\$	2,171,257	\$	-	\$ 1,993,168	\$	1,938,974
2026	\$ 2,290,826	\$ -	\$	2,290,826	\$	-	\$ 2,063,314	\$	1,994,955
2027	\$ 2,397,227	\$ -	\$	2,397,227	\$	-	\$ 2,118,473	\$	2,035,778
2028	\$ 2,525,196	\$ -	\$	2,525,196	\$	-	\$ 2,189,523	\$	2,091,204
2029	\$ 2,614,393	\$ -	\$	2,614,393	\$	-	\$ 2,224,159	\$	2,111,312
2030	\$ 2,693,844	\$ -	\$	2,693,844	\$	-	\$ 2,248,578	\$	2,121,457
2031	\$ 2,757,487	\$ -	\$	2,757,487	\$	-	\$ 2,258,342	\$	2,117,656
2032	\$ 2,794,778	\$ -	\$	2,794,778	\$	-	\$ 2,245,764	\$	2,093,001
2033	\$ 2,803,673	\$ -	\$	2,803,673	\$	-	\$ 2,210,470	\$	2,047,527
2034	\$ 2,803,837	\$ -	\$	2,803,837	\$	-	\$ 2,168,956	\$	1,996,803
2035	\$ 2,833,834	\$ -	\$	2,833,834	\$	-	\$ 2,150,864	\$	1,968,054
2036	\$ 2,838,032	\$ -	\$	2,838,032	\$	-	\$ 2,113,471	\$	1,922,030
2037	\$ 2,830,543	\$ -	\$	2,830,543	\$	-	\$ 2,068,185	\$	1,869,359
2038	\$ 2,822,433	\$ -	\$	2,822,433	\$	-	\$ 2,023,410	\$	1,817,720
2039	\$ 2,799,165	\$ -	\$	2,799,165	\$	-	\$ 1,968,926	\$	1,757,972
2040	\$ 2,762,324	\$ -	\$	2,762,324	\$	-	\$ 1,906,409	\$	1,691,758
2041	\$ 2,725,434	\$ -	\$	2,725,434	\$	-	\$ 1,845,515	\$	1,627,719
2042	\$ 2,685,022	\$ -	\$	2,685,022	\$	-	\$ 1,783,900	\$	1,563,766
2043	\$ 2,633,065	\$ -	\$	2,633,065	\$	-	\$ 1,716,425	\$	1,495,429
2044	\$ 2,577,256	\$ -	\$	2,577,256	\$	-	\$ 1,648,395	\$	1,427,388
2045	\$ 2,518,773	\$ -	\$	2,518,773	\$	-	\$ 1,580,641	\$	1,360,359
2046	\$ 2,456,331	\$ -	\$	2,456,331	\$	-	\$ 1,512,418	\$	1,293,694
2047	\$ 2,393,456	\$ -	\$	2,393,456	\$	-	\$ 1,445,942	\$	1,229,279
2048	\$ 2,329,742	\$ -	\$	2,329,742	\$	-	\$ 1,380,937	\$	1,166,844
2049	\$ 2,264,891	\$ -	\$	2,264,891	\$	-	\$ 1,317,207	\$	1,106,197
2050	\$ 2,200,229	\$ -	\$	2,200,229	\$	-	\$ 1,255,495	\$	1,047,933
2051	\$ 2,136,605	\$ -	\$	2,136,605	\$	-	\$ 1,196,223	\$	992,362
2052	\$ 2,072,606	\$ -	\$	2,072,606	\$	-	\$ 1,138,532	\$	938,734
2053	\$ 2,009,167	\$ -	\$	2,009,167	\$	-	\$ 1,082,892	\$	887,405
2054	\$ 1,946,213	\$ 1,946,213	\$	-	\$	482,661	\$ -	\$	838,256
2055	\$ 1,883,613	\$ 1,883,613	\$	-	\$	448,092	\$ -	\$	791,149
2056	\$ 1,821,181	\$ 1,821,181	\$	-	\$	415,578	\$ -	\$	745,933
2057	\$ 1,758,622	\$ 1,758,622	\$	-	\$	384,943	\$ -	\$	702,424
2058	\$ 1,695,640	\$ 1,695,640	\$	-	\$	356,026	\$ -	\$	660,451
2059	\$ 1,631,940	\$ 1,631,940	\$	-	\$	328,682	\$ -	\$	619,857
2060	\$ 1,567,296	\$ 1,567,296	\$	-	\$	302,793	\$ -	\$	580,522
2061	\$ 1,501,515	\$ 1,501,515	\$	-	\$	278,259	\$ -	\$	542,347