



**Municipal Pensions
Oversight Board**

**City of Bluefield
West Virginia
Policemen's Pension and Relief Fund**

GASB 68 Actuarial Information for the
Measurement Period Ending
June 30, 2020

Bolton

Submitted by:

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Employee Benefits, Actuarial & Investment Consulting

October 27, 2020

Ms. Kelly Davis
City Treasurer
City of Bluefield
200 Rogers Street
Bluefield, WV 24701

Chief Dennis Dillow, Jr.
Pension Board Secretary
City of Bluefield
Policemen's Pension and Relief Fund

Re: City of Bluefield Policemen's Pension and Relief Fund
GASB 68 Actuarial Information for the Measurement Period Ending June 30, 2020

Dear Kelly,

The following report contains the GASB 67 and GASB 68 actuarial information for the City of Bluefield Policemen's Pension and Relief Fund to be included in the City's financial statements for FY 2020. The GASB 67 information has been provided as of June 30, 2020 (the GASB 68 measurement date for FY 2020).

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, 2020 (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, 2019 actuarial valuation rolled forward to June 30, 2020. The methods, assumptions, and participant data used are detailed in the July 1, 2019 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, 2020 is contained in the July 1, 2018 actuarial valuation report. The discount rate assumption may have changed if a blended rate was used for GASB purposes.

The included calculations are based on the valuation discount rate of 6.00%. The plan's expected gross rate of investment return of 6.00% has been blended with the 2.45% 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, 2020. The development of the blended discount rate is included within this report. Since the plan assets are estimated to be sufficient to cover benefit payments throughout the projection period, the liability discount rate used for this June 30, 2020 measurement date is equal to the plan's expected rate of investment return.

The long-term nominal expected rate of return on pension plan investments was determined using a methodology approved by the Municipal Pensions Oversight Board (MPOB) and is based on the fund's current funding ratio, liquidity ratio, equity exposure and expected funded status in 15 years.

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.

Methodology, Reliance and Certification (cont.)

These calculations and comparisons with assets are applicable for the valuation date only. The future is uncertain, and the plan may become better funded or more poorly funded in the future. This valuation does not provide any guarantee that the plan will be able to provide the promised benefits in the future.

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. These calculations are complex. Despite our best efforts, we may make a mistake. 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.

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.



Methodology, Reliance and Certification (cont.)

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.

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.

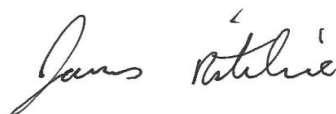
The calculation of actuarial liabilities for valuation purposes is based on a current estimate of future benefit payments. The calculation includes a computation of the "present value" of those estimated future benefit payments using an assumed discount rate; the higher the discount rate assumption, the lower the estimated liability will be. For purposes of estimating the liabilities (future and accrued) in this report, an assumption based on the expected long-term rate of return on plan investments is used. If the plan is expected to become insolvent, the return assumption is blended with a long-term municipal bond rate. Using a lower discount rate assumption, such as a rate solely based on long-term bond yields, could substantially increase the estimated present value of future and accrued liabilities.

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, 2019 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



City of Bluefield, West Virginia Policemen’s Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2020 Measurement Date



Net Pension Liability of the Employer

The components of the net pension liability of the Employer at June 30, 2020, were as follows:

Total pension liability	\$ 14,341,116
Plan fiduciary net position	(7,104,226)
Employer’s net pension liability	<u>\$ 7,236,890</u>
Plan fiduciary net position as a percentage of the total pension liability	49.54%

Actuarial assumptions. The total pension liability was determined by an actuarial valuation as of July 1, 2019 rolled forward to June 30, 2020 using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.75 percent
Salary increases	Rates vary by years of service
Single discount rate (BOY)	6.00%
Single discount rate (EOY)	6.00%
Investment rate of return (BOY)	6.00%, net of pension plan investment expense, including inflation
Investment rate of return (EOY)	6.00%, net of pension plan investment expense, including inflation
Long-term municipal bond rate (BOY)	3.13%
Long-term municipal bond rate (EOY)	2.45%
Mortality	RP-2014 Blue Collar Mortality Table with generational projection using Scale MP-2014
Year Fund is projected to be fully funded	2040
Year assets are expected to be depleted for a closed plan	N/A

The above is a summary of key actuarial assumptions. Full descriptions of the actuarial assumptions are available in the July 1, 2019 actuarial valuation report.

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

	1% Decrease 5.00%	Current Discount Rate 6.00%	1% Increase 7.00%
Employer’s net pension liability	\$ 9,367,423	\$ 7,236,890	\$ 5,533,785

City of Bluefield, West Virginia Policemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2020 Measurement Date



Changes in the Net Pension Liability

	Total Pension Liability (a)	Increase (Decrease) Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances at 6/30/19	\$ 13,301,812	\$ 6,669,806	\$ 6,632,006
Changes for the year:			
Service cost	407,114		407,114
Interest	775,860		775,860
Changes of benefit terms	-		-
Differences between expected and actual experience	597,973		597,973
Changes of assumptions	-		-
Contributions - employer (including Premium Tax Allocation)		687,020	(687,020)
Contributions - member		113,231	(113,231)
Net investment income		376,112	(376,112)
Benefit payments, including refunds of member contributions	(741,643)	(741,643)	-
Administrative expense		(300)	300
Other		-	-
Net Changes	<u>1,039,304</u>	<u>434,420</u>	<u>604,884</u>
Balances at 6/30/20	<u>\$ 14,341,116</u>	<u>\$ 7,104,226</u>	<u>\$ 7,236,890</u>
Return on Investments		5.6%	

City of Bluefield, West Virginia Policemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2020 Measurement Date



Components of Employer's Pension Expense for the Fiscal Year Ended June 30, 2020

Note	Description	Amount
A	Service cost	\$ 407,114
B	Interest on the total pension liability	775,860
A	Changes of benefit terms	-
C	Differences between expected and actual experience	4,291
C	Changes of assumptions	181,409
A	Employee contributions	(113,231)
D	Projected earnings on pension plan investments	(401,938)
C	Differences between expected and actual earnings on plan investments	(47,212)
A	Pension plan administrative expense	300
A	Other changes in fiduciary net position	-
Total Pension Expense		\$ 806,593

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	\$ 13,301,812	100%	6.00%	\$ 798,109
Service cost (End of Year)	407,114	0%	6.00%	-
Benefit payments, including refunds of employee contributions	(741,643)	50%	6.00%	(22,249)
Total interest on the total pension liability				\$ 775,860

C Provided in the Schedules of Deferrals.

D Based on the following calculation:

	Amount for Period (a)	Portion of Period (b)	Projected Rate of Return (c)	Projected Earnings (a) x (b) x (c)
Beginning plan fiduciary net position	\$ 6,669,806	100%	6.00%	\$ 400,188
Employer contributions	687,020	50%	6.00%	20,611
Employee contributions	113,231	50%	6.00%	3,397
Benefit payments, including refunds of employee contributions	(741,643)	50%	6.00%	(22,249)
Administrative expense and other	(300)	50%	6.00%	(9)
Total Projected Earnings				\$ 401,938

City of Bluefield, West Virginia Policemen’s Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2020 Measurement Date



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

At June 30, 2020, the Employer reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 724,768	\$ 303,642
Changes of assumptions	-	277,327
Net difference between projected and actual earnings on pension plan investments	-	137,158
Total	\$ 724,768	\$ 718,127

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:	
2021	\$ (207,833)
2022	(165,329)
2023	128,728
2024	151,412
2025	99,663
Thereafter	-

City of Bluefield, West Virginia Policemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2020 Measurement Date



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

Total pension liability	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Service cost	\$ 407,114	\$ 390,251	\$ 319,814	\$ 392,147	\$ 220,182	\$ 250,953	\$ 258,950	\$ -	\$ -	\$ -
Interest	775,860	735,057	722,124	679,543	700,256	670,364	662,929	-	-	-
Changes of benefit terms	-	-	-	-	-	-	-	-	-	-
Differences between expected and actual experience	597,973	279,504	89,417	(912,402)	(40,233)	(128,049)	-	-	-	-
Changes of assumptions	-	-	-	(833,335)	2,079,763	(696,283)	-	-	-	-
Benefit payments, including refunds of member contributions	(741,643)	(707,898)	(625,051)	(598,019)	(585,237)	(552,719)	(520,150)	-	-	-
Net change in total pension liability	1,039,304	696,914	506,304	(1,272,066)	2,374,731	(455,734)	401,729	-	-	-
Total pension liability - beginning	13,301,812	12,604,898	12,098,594	13,370,660	10,995,929	11,451,663	11,049,934	-	-	-
Total pension liability - ending (a)	\$ 14,341,116	\$ 13,301,812	\$ 12,604,898	\$ 12,098,594	\$ 13,370,660	\$ 10,995,929	\$ 11,451,663	\$ -	\$ -	\$ -
Plan fiduciary net position	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Contributions - employer (including Premium Tax Allocation)	\$ 687,020	\$ 633,528	\$ 600,582	\$ 583,904	\$ 520,935	\$ 659,543	\$ 543,351	\$ -	\$ -	\$ -
Contributions - member	113,231	109,496	100,599	97,183	88,383	71,722	67,170	-	-	-
Net investment income	376,112	517,785	407,572	486,123	157,192	181,170	379,653	-	-	-
Benefit payments, including refunds of member contributions	(741,643)	(707,898)	(625,051)	(598,019)	(585,237)	(552,719)	(520,150)	-	-	-
Administrative expense	(300)	-	(300)	(300)	(300)	(300)	(4,643)	-	-	-
Other	-	(300)	-	6,214	2,566	-	-	-	-	-
Net change in plan fiduciary net position	\$ 434,420	\$ 552,611	\$ 483,402	\$ 575,105	\$ 183,539	\$ 359,416	\$ 465,381	\$ -	\$ -	\$ -
Plan fiduciary net position - beginning	6,669,806	6,117,195	5,633,794	5,058,689	4,875,150	4,515,734	4,050,353	-	-	-
Plan fiduciary net position - ending (b)	\$ 7,104,226	\$ 6,669,806	\$ 6,117,195	\$ 5,633,794	\$ 5,058,689	\$ 4,875,150	\$ 4,515,734	\$ -	\$ -	\$ -
Employer's net pension liability - ending (a)-(b)	\$ 7,236,890	\$ 6,632,006	\$ 6,487,703	\$ 6,464,800	\$ 8,311,971	\$ 6,120,779	\$ 6,935,929	\$ -	\$ -	\$ -
Plan fiduciary net position as a percentage of the total pension liability	49.54%	50.14%	48.53%	46.57%	37.83%	44.34%	39.43%	0.00%	0.00%	0.00%
Covered payroll	\$ 1,121,382	\$ 1,135,170	\$ 955,341	\$ 1,025,108	\$ 841,730	\$ 834,851	\$ 837,491	\$ -	\$ -	\$ -
Employer's net pension liability as a percentage of covered payroll	645.35%	584.23%	679.10%	630.65%	987.49%	733.16%	828.18%	0.00%	0.00%	0.00%
Expected average remaining service years of all participants	6.00	6.00	5.44	6.00	4.73	4.74	-	-	-	-

Notes to Schedule:

Benefit changes: There were no changes for FY2020.

Changes of assumptions: There were no changes for FY2020.

City of Bluefield, West Virginia Policemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2020 Measurement Date



Schedule of Employer Contributions
 Last 10 Fiscal Years

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Actuarially determined contribution	\$ 752,872	\$ 691,752	\$ 599,307	\$ 612,202	\$ 656,589	\$ 475,033	\$ 524,627	\$ 567,272	\$ -	\$ -
Contributions in relation to the actuarially determined contribution										
Employer provided	386,467	361,184	337,555	340,042	270,265	297,006	256,115	239,360	-	-
State provided	300,553	272,344	263,027	243,862	250,670	362,537	287,236	199,023	-	-
Contribution deficiency (excess)	<u>\$ 65,852</u>	<u>\$ 58,224</u>	<u>\$ (1,275)</u>	<u>\$ 28,298</u>	<u>\$ 135,654</u>	<u>\$ (184,510)</u>	<u>\$ (18,724)</u>	<u>\$ 128,889</u>	<u>\$ -</u>	<u>\$ -</u>
Covered payroll	\$ 1,121,382	\$ 1,135,170	\$ 955,341	\$ 1,025,108	\$ 841,730	\$ 834,851	\$ 837,491	\$ 811,266	\$ -	\$ -
Contributions as a percentage of covered employee payroll	61.27%	55.81%	62.87%	56.96%	61.89%	79.00%	64.88%	54.04%	N/A	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	31.5 years
Asset valuation method	Market Value
Inflation	2.75 percent
Salary increases	Rates vary by years of service
Investment rate of return	6.00%, 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

City of Bluefield, West Virginia Policemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2020 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.

Increase (Decrease) in Pension Expense Arising from the Recognition of Differences between Projected and Actual Earnings on Plan Investments											
Year	Differences between Projected and Actual Earnings on Pension Plan Investments	Recognition Period (Years)	2016	2017	2018	2019	2020	2021	2022	2023	2024
2016	\$ 160,549	5	\$ 32,110	32,110	32,110	32,110	32,109				
2017	(205,448)	5		\$ (41,090)	(41,090)	(41,090)	(41,090)	(41,088)			
2018	(67,269)	5			\$ (13,454)	(13,454)	(13,454)	(13,454)	(13,453)		
2019	(149,708)	5				\$ (29,942)	(29,942)	(29,942)	(29,942)	(29,940)	
2020	25,826	5					\$ 5,165	5,165	5,165	5,165	5,166
Net increase (decrease) in pension expense							\$ (47,212)	\$ (79,319)	\$ (38,230)	\$ (24,775)	\$ 5,166

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

Year	Investment Earnings Less than Projected (a)	Investment Earnings Greater Than Projected (b)	Amounts Recognized in Pension Expense Through June 30, 2020 (c)	Balances at June 30, 2020	
				Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
2016	\$ 160,549	\$ -	\$ 160,549	\$ -	\$ -
2017	-	205,448	164,360	-	41,088
2018	-	67,269	40,362	-	26,907
2019	-	149,708	59,884	-	89,824
2020	25,826	-	5,165	20,661	-
				\$ 20,661	\$ 157,819

City of Bluefield, West Virginia Policemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2020 Measurement Date



Schedule of Differences between Expected and Actual Experience

In conformity with paragraph 33a 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.

Increase (Decrease) in Pension Expense Arising from the Recognition of Differences between Expected and Actual Experience																			
Year	Differences between Expected and Actual Experience	Recognition Period (Years)	Prior	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Thereafter
Prior	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2015	(128,049)	4,740139	-	-	-	-	-	\$ (27,014)	(27,014)	(27,014)	(27,014)	(19,993)	-	-	-	-	-	-	-
2016	(40,233)	4,728475	-	-	-	-	-	\$ (8,509)	(8,509)	(8,509)	(8,509)	(8,509)	(6,197)	-	-	-	-	-	-
2017	(912,402)	5,995135	-	-	-	-	-	-	\$ (152,190)	(152,190)	(152,190)	(152,190)	(152,190)	(152,190)	(151,452)	-	-	-	-
2018	89,417	5,441766	-	-	-	-	-	-	-	\$ 16,432	16,432	16,432	16,432	16,432	16,432	7,257	-	-	-
2019	279,504	6,000000	-	-	-	-	-	-	-	-	\$ 46,584	46,584	46,584	46,584	46,584	46,584	46,584	-	-
2020	597,973	6,000000	-	-	-	-	-	-	-	-	-	\$ 99,662	99,662	99,662	99,662	99,662	99,662	99,663	-
Net increase (decrease) in pension expense													\$ 4,291	\$ 10,488	\$ 11,226	\$ 153,503	\$ 146,246	\$ 99,663	\$ -

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

Year	Experience Losses (a)	Experience Gains (b)	Amounts Recognized in Pension Expense Through June 30, 2020 (c)	Balances at June 30, 2020	
				Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
Prior	\$ -	\$ -	\$ -	\$ -	\$ -
2011	-	-	-	-	-
2012	-	-	-	-	-
2013	-	-	-	-	-
2014	-	-	-	-	-
2015	-	128,049	128,049	-	-
2016	-	40,233	40,233	-	-
2017	-	912,402	608,760	-	303,642
2018	89,417	-	49,296	40,121	-
2019	279,504	-	93,168	186,336	-
2020	597,973	-	99,662	498,311	-
				\$ 724,768	\$ 303,642



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.

Increase (Decrease) in Pension Expense Arising from the Effects of Changes of Assumptions																			
Year	Changes of Assumptions	Recognition Period (Years)	Prior	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Thereafter
Prior	\$ -	-																	-
2011	-	-																	-
2012	-	-																	-
2013	-	-																	-
2014	-	-																	-
2015	(696,283)	4,740,139						\$ (146,891)	(146,891)	(146,891)	(146,891)	(108,719)							-
2016	2,079,763	4,728,475						\$ 439,838	439,838	439,838	439,838	439,838	320,411						-
2017	(833,335)	5,995,135							\$ (139,002)	(139,002)	(139,002)	(139,002)	(139,002)	(139,002)	(138,325)				-
2018	-	5,441,766																	-
2019	-	6,000,000																	-
2020	-	6,000,000																	-
Net increase (decrease) in pension expense													\$ 181,409	\$ (139,002)	\$ (138,325)	\$ -	\$ -	\$ -	\$ -

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, 2020 (c)	Balances at June 30, 2020	
				Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
Prior	\$ -	\$ -	\$ -	\$ -	\$ -
2011	-	-	-	-	-
2012	-	-	-	-	-
2013	-	-	-	-	-
2014	-	-	-	-	-
2015	-	696,283	696,283	-	-
2016	2,079,763	-	2,079,763	-	-
2017	-	833,335	556,008	-	277,327
2018	-	-	-	-	-
2019	-	-	-	-	-
2020	-	-	-	-	-
			\$ -	\$ -	\$ 277,327

City of Bluefield, West Virginia Policemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2020 Measurement Date



Projection of Pension Plan's Fiduciary Net Position

Fiscal Year	Gross Normal Cost (BOY)			Employee Contributions (BOY)			Employer Normal Cost (BOY)			Expenses (BOY)			Employer Contributions (MOY)			Premium Tax Allocation (MOY)		
	Current Members	Future Members	Total	Current Members	Future Members	Total	Current Members	Future Members	Total	Current Members	Future Members	Total	Current Members	Future Members	Total	Current Members	Future Members	Total
2020	\$ 384,070	\$ -	\$ 384,070	\$ 98,006	\$ -	\$ 98,006	\$ 286,064	\$ -	\$ 286,064	\$ 4,169	\$ -	\$ 4,169	\$ 386,465	\$ -	\$ 386,465	\$ 300,553	\$ -	\$ 300,553
2021	\$ 386,525	\$ 23,939	\$ 410,464	\$ 98,653	\$ 6,398	\$ 105,051	\$ 287,872	\$ 17,541	\$ 305,413	\$ 4,284	\$ -	\$ 4,284	\$ 395,458	\$ 18,060	\$ 413,518	\$ 300,406	\$ -	\$ 300,406
2022	\$ 389,185	\$ 50,176	\$ 439,361	\$ 99,280	\$ 13,416	\$ 112,696	\$ 289,905	\$ 36,760	\$ 326,665	\$ 4,320	\$ 82	\$ 4,402	\$ 404,535	\$ 37,929	\$ 442,464	\$ 307,674	\$ -	\$ 307,674
2023	\$ 385,467	\$ 75,858	\$ 461,325	\$ 98,864	\$ 20,294	\$ 119,158	\$ 286,603	\$ 55,564	\$ 342,167	\$ 4,355	\$ 168	\$ 4,523	\$ 416,061	\$ 57,375	\$ 473,436	\$ 315,558	\$ -	\$ 315,558
2024	\$ 379,901	\$ 113,153	\$ 493,054	\$ 98,187	\$ 30,295	\$ 128,482	\$ 281,714	\$ 82,858	\$ 364,572	\$ 4,389	\$ 341	\$ 4,730	\$ 420,928	\$ 85,649	\$ 506,577	\$ 323,659	\$ -	\$ 323,659
2025	\$ 381,829	\$ 144,265	\$ 526,094	\$ 99,002	\$ 38,646	\$ 137,648	\$ 282,827	\$ 105,619	\$ 388,446	\$ 4,421	\$ 439	\$ 4,860	\$ 432,857	\$ 109,180	\$ 542,037	\$ 331,983	\$ -	\$ 331,983
2026	\$ 385,788	\$ 173,473	\$ 559,261	\$ 100,231	\$ 46,494	\$ 146,725	\$ 285,557	\$ 126,979	\$ 412,536	\$ 4,361	\$ 545	\$ 4,906	\$ 448,702	\$ 131,278	\$ 579,980	\$ 340,535	\$ -	\$ 340,535
2027	\$ 391,497	\$ 201,641	\$ 593,138	\$ 101,810	\$ 54,070	\$ 155,880	\$ 289,687	\$ 147,571	\$ 437,258	\$ 4,388	\$ 653	\$ 5,041	\$ 467,992	\$ 152,587	\$ 620,579	\$ 354,171	\$ -	\$ 354,171
2028	\$ 398,442	\$ 229,562	\$ 628,004	\$ 103,649	\$ 61,587	\$ 165,236	\$ 294,793	\$ 167,975	\$ 462,768	\$ 4,413	\$ 767	\$ 5,180	\$ 490,312	\$ 173,708	\$ 664,020	\$ 363,310	\$ -	\$ 363,310
2029	\$ 406,154	\$ 257,553	\$ 663,707	\$ 105,708	\$ 69,126	\$ 174,834	\$ 300,446	\$ 188,427	\$ 488,873	\$ 4,534	\$ 788	\$ 5,322	\$ 515,716	\$ 194,785	\$ 710,501	\$ 372,701	\$ -	\$ 372,701
2030	\$ 416,833	\$ 285,907	\$ 702,740	\$ 108,396	\$ 76,767	\$ 185,163	\$ 308,437	\$ 209,140	\$ 517,577	\$ 4,557	\$ 911	\$ 5,468	\$ 544,002	\$ 216,234	\$ 760,236	\$ 382,349	\$ -	\$ 382,349
2031	\$ 429,295	\$ 313,995	\$ 743,290	\$ 111,534	\$ 84,338	\$ 195,872	\$ 317,761	\$ 229,657	\$ 547,418	\$ 4,682	\$ 936	\$ 5,618	\$ 576,071	\$ 237,382	\$ 813,453	\$ 392,263	\$ -	\$ 392,263
2032	\$ 443,198	\$ 342,107	\$ 785,305	\$ 115,055	\$ 91,920	\$ 206,975	\$ 328,143	\$ 250,187	\$ 578,330	\$ 4,704	\$ 1,068	\$ 5,772	\$ 611,744	\$ 258,651	\$ 870,395	\$ 402,449	\$ -	\$ 402,449
2033	\$ 452,785	\$ 370,969	\$ 823,754	\$ 117,625	\$ 99,707	\$ 217,332	\$ 335,160	\$ 271,262	\$ 606,422	\$ 4,614	\$ 1,211	\$ 5,825	\$ 650,831	\$ 280,492	\$ 931,323	\$ 418,337	\$ -	\$ 418,337
2034	\$ 458,397	\$ 407,667	\$ 866,064	\$ 119,173	\$ 109,620	\$ 228,793	\$ 339,224	\$ 298,047	\$ 637,271	\$ 4,741	\$ 1,244	\$ 5,985	\$ 688,414	\$ 308,102	\$ 996,516	\$ 429,232	\$ -	\$ 429,232
2035	\$ 465,469	\$ 446,711	\$ 912,180	\$ 121,058	\$ 120,171	\$ 241,229	\$ 344,411	\$ 326,540	\$ 670,951	\$ 4,755	\$ 1,283	\$ 6,038	\$ 728,795	\$ 337,477	\$ 1,066,272	\$ 440,426	\$ -	\$ 440,426
2036	\$ 428,713	\$ 485,105	\$ 913,818	\$ 113,144	\$ 130,550	\$ 243,694	\$ 315,569	\$ 354,555	\$ 670,124	\$ 4,647	\$ 1,557	\$ 6,204	\$ 774,317	\$ 366,594	\$ 1,140,911	\$ 451,928	\$ -	\$ 451,928
2037	\$ 422,283	\$ 550,192	\$ 972,475	\$ 111,943	\$ 148,176	\$ 260,119	\$ 310,340	\$ 402,016	\$ 712,356	\$ 4,775	\$ 1,718	\$ 6,493	\$ 805,156	\$ 415,619	\$ 1,220,775	\$ 463,746	\$ -	\$ 463,746
2038	\$ 400,786	\$ 605,786	\$ 1,006,572	\$ 107,303	\$ 163,228	\$ 270,531	\$ 293,483	\$ 442,558	\$ 736,041	\$ 4,906	\$ 1,766	\$ 6,672	\$ 848,822	\$ 457,407	\$ 1,306,229	\$ 475,889	\$ -	\$ 475,889
2039	\$ 310,186	\$ 674,323	\$ 984,509	\$ 86,983	\$ 181,802	\$ 268,785	\$ 223,203	\$ 492,521	\$ 715,724	\$ 4,912	\$ 2,068	\$ 6,980	\$ 888,516	\$ 509,149	\$ 1,397,665	\$ 488,366	\$ -	\$ 488,366
2040	\$ 259,339	\$ 781,568	\$ 1,040,907	\$ 75,396	\$ 210,902	\$ 286,298	\$ 183,943	\$ 570,666	\$ 754,609	\$ 5,047	\$ 2,381	\$ 7,428	\$ 905,584	\$ 589,918	\$ 1,495,502	\$ 511,817	\$ -	\$ 511,817
2041	\$ 223,353	\$ 865,515	\$ 1,088,868	\$ 66,888	\$ 233,674	\$ 300,562	\$ 156,465	\$ 631,841	\$ 788,306	\$ 5,049	\$ 2,715	\$ 7,764	\$ 166,139	\$ 653,235	\$ 819,374	\$ -	\$ -	\$ -
2042	\$ 195,314	\$ 950,401	\$ 1,145,715	\$ 59,711	\$ 256,745	\$ 316,456	\$ 135,603	\$ 693,656	\$ 829,259	\$ 5,188	\$ 2,790	\$ 7,978	\$ 144,799	\$ 716,953	\$ 861,752	\$ -	\$ -	\$ -
2043	\$ 174,698	\$ 1,025,202	\$ 1,199,900	\$ 54,406	\$ 277,134	\$ 331,540	\$ 120,292	\$ 748,068	\$ 868,360	\$ 5,187	\$ 3,149	\$ 8,336	\$ 129,036	\$ 773,332	\$ 902,368	\$ -	\$ -	\$ -
2044	\$ 152,537	\$ 1,088,107	\$ 1,240,644	\$ 48,278	\$ 294,352	\$ 342,630	\$ 104,259	\$ 793,755	\$ 898,014	\$ 5,182	\$ 3,383	\$ 8,565	\$ 112,523	\$ 820,604	\$ 933,127	\$ -	\$ -	\$ -
2045	\$ 116,056	\$ 1,161,257	\$ 1,277,313	\$ 37,669	\$ 314,388	\$ 352,057	\$ 78,387	\$ 846,869	\$ 925,256	\$ 5,325	\$ 3,476	\$ 8,801	\$ 86,029	\$ 875,381	\$ 961,410	\$ -	\$ -	\$ -
2046	\$ 90,733	\$ 1,238,330	\$ 1,329,063	\$ 29,718	\$ 335,519	\$ 365,237	\$ 61,015	\$ 902,811	\$ 963,826	\$ 5,315	\$ 3,879	\$ 9,194	\$ 68,133	\$ 933,380	\$ 1,001,513	\$ -	\$ -	\$ -
2047	\$ 65,700	\$ 1,308,865	\$ 1,374,565	\$ 21,694	\$ 354,884	\$ 376,578	\$ 44,006	\$ 953,981	\$ 997,987	\$ 5,301	\$ 4,301	\$ 9,602	\$ 50,608	\$ 986,485	\$ 1,037,093	\$ -	\$ -	\$ -
2048	\$ 45,111	\$ 1,385,470	\$ 1,430,581	\$ 14,830	\$ 375,888	\$ 390,718	\$ 30,281	\$ 1,009,582	\$ 1,039,863	\$ 5,447	\$ 4,578	\$ 10,025	\$ 36,623	\$ 1,044,006	\$ 1,080,629	\$ -	\$ -	\$ -
2049	\$ 31,558	\$ 1,457,871	\$ 1,489,429	\$ 10,450	\$ 395,746	\$ 406,196	\$ 21,108	\$ 1,062,125	\$ 1,083,233	\$ 5,427	\$ 4,874	\$ 10,301	\$ 27,159	\$ 1,098,399	\$ 1,125,558	\$ -	\$ -	\$ -
2050	\$ 22,627	\$ 1,529,568	\$ 1,552,195	\$ 7,503	\$ 415,410	\$ 422,913	\$ 15,124	\$ 1,114,158	\$ 1,129,282	\$ 5,402	\$ 5,182	\$ 10,584	\$ 20,972	\$ 1,152,278	\$ 1,173,250	\$ -	\$ -	\$ -
2051	\$ 15,047	\$ 1,601,355	\$ 1,616,402	\$ 5,052	\$ 435,095	\$ 440,147	\$ 9,995	\$ 1,166,260	\$ 1,176,255	\$ 5,372	\$ 5,503	\$ 10,875	\$ 15,662	\$ 1,206,241	\$ 1,221,903	\$ -	\$ -	\$ -
2052	\$ 10,020	\$ 1,674,866	\$ 1,684,886	\$ 3,385	\$ 455,246	\$ 458,631	\$ 6,635	\$ 1,219,620	\$ 1,226,255	\$ 5,520	\$ 5,831	\$ 11,351	\$ 12,350	\$ 1,261,507	\$ 1,273,857	\$ -	\$ -	\$ -
2053	\$ 6,866	\$ 1,750,492	\$ 1,757,358	\$ 2,322	\$ 475,964	\$ 478,286	\$ 4,544	\$ 1,274,528	\$ 1,279,072	\$ 5,483	\$ 6,180	\$ 11,663	\$ 10,161	\$ 1,318,387	\$ 1,328,548	\$ -	\$ -	\$ -
2054	\$ 3,538	\$ 1,828,778	\$ 1,832,316	\$ 1,227	\$ 497,395	\$ 498,622	\$ 2,311	\$ 1,331,383	\$ 1,333,694	\$ 5,440	\$ 6,544	\$ 11,984	\$ 7,819	\$ 1,377,287	\$ 1,385,106	\$ -	\$ -	\$ -
2055	\$ 1,708	\$ 1,910,862	\$ 1,912,570	\$ 597	\$ 519,862	\$ 520,459	\$ 1,111	\$ 1,391,000	\$ 1,392,111	\$ 5,590	\$ 6,724	\$ 12,314	\$ 6,734	\$ 1,438,846	\$ 1,445,580	\$ -	\$ -	\$ -
2056	\$ 805	\$ 1,995,626	\$ 1,996,431	\$ 292	\$ 543,067	\$ 543,359	\$ 513	\$ 1,452,559	\$ 1,453,072	\$ 5,539	\$ 7,114	\$ 12,653	\$ 6,068	\$ 1,502,615	\$ 1,508,683	\$ -	\$ -	\$ -
2057	\$ -	\$ 2,081,883	\$ 2,081,883	\$ -	\$ 566,680	\$ 566,680	\$ -	\$ 1,515,203	\$ 1,515,203	\$ 5,481	\$ 7,520	\$ 13,001	\$ 5,481	\$ 1,567,517	\$ 1,572,998	\$ -	\$ -	\$ -
2058	\$ -	\$ 2,169,534	\$ 2,169,534	\$ -	\$ 590,693	\$ 590,693	\$ -	\$ 1,578,841	\$ 1,578,841	\$ 5,632	\$ 7,727	\$ 13,359	\$ 5,632	\$ 1,633,243	\$ 1,638,875	\$ -	\$ -	\$ -
2059	\$ -	\$ 2,259,371	\$ 2,259,371	\$ -	\$ 615,322	\$ 615,322	\$ -	\$ 1,644,049	\$ 1,644,049	\$ 5,564	\$ 8,162	\$ 13,726	\$ 5,564	\$ 1,700,814	\$ 1,706,378	\$ -	\$ -	\$ -
2060	\$ -	\$ 2,346,321	\$ 2,346,321	\$ -	\$ 639,185	\$ 639,185	\$ -	\$ 1,707,136	\$ 1,707,136	\$ 5,488	\$ 8,615	\$ 14,103	\$ 5,488	\$ 1,766,219	\$ 1,771,707	\$ -	\$ -	\$ -

City of Bluefield, West Virginia Policemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2020 Measurement Date



Projection of Pension Plan's Fiduciary Net Position

Fiscal Year	Actuarial Accrued Liability (BOY)			Closed Group Asset Projection						
	Current Members	Future Members	Total	Fiduciary Net Position (BOY)	Funded Ratio (BOY)	Projected EEC Contributions (MOY)	Projected ER Contrib + Premium Tax (MOY)	Projected BP (MOY)	Projected Admin Expenses (MOY)	Projected Investment Earnings
2020	\$ 13,865,938	\$ -	\$ 13,865,938	\$ 6,669,806	48.10%	\$ 100,903	\$ 687,018	\$ 764,955	\$ 4,169	\$ 400,744
2021	\$ 14,316,821	\$ -	\$ 14,316,821	\$ 7,089,347	49.52%	\$ 101,569	\$ 695,864	\$ 779,446	\$ 4,284	\$ 425,766
2022	\$ 14,783,058	\$ 25,117	\$ 14,808,175	\$ 7,528,816	50.93%	\$ 102,215	\$ 712,209	\$ 790,657	\$ 4,320	\$ 452,304
2023	\$ 15,268,546	\$ 78,869	\$ 15,347,415	\$ 8,000,568	52.40%	\$ 101,787	\$ 731,619	\$ 820,480	\$ 4,355	\$ 480,287
2024	\$ 15,748,518	\$ 161,997	\$ 15,910,515	\$ 8,489,426	53.91%	\$ 101,090	\$ 744,587	\$ 852,613	\$ 4,389	\$ 509,031
2025	\$ 16,218,305	\$ 288,107	\$ 16,506,412	\$ 8,987,133	55.41%	\$ 101,929	\$ 764,840	\$ 873,980	\$ 4,421	\$ 538,884
2026	\$ 16,696,325	\$ 452,704	\$ 17,149,029	\$ 9,514,384	56.98%	\$ 103,194	\$ 789,237	\$ 880,810	\$ 4,361	\$ 571,078
2027	\$ 17,200,190	\$ 655,714	\$ 17,855,904	\$ 10,092,722	58.68%	\$ 104,820	\$ 822,163	\$ 897,418	\$ 4,388	\$ 606,308
2028	\$ 17,723,240	\$ 897,981	\$ 18,621,221	\$ 10,724,208	60.51%	\$ 106,713	\$ 853,622	\$ 911,211	\$ 4,413	\$ 644,774
2029	\$ 18,270,834	\$ 1,181,441	\$ 19,452,275	\$ 11,413,693	62.47%	\$ 108,833	\$ 888,417	\$ 922,499	\$ 4,534	\$ 686,897
2030	\$ 18,847,836	\$ 1,508,627	\$ 20,356,463	\$ 12,170,806	64.57%	\$ 111,601	\$ 926,351	\$ 930,153	\$ 4,557	\$ 733,301
2031	\$ 19,462,898	\$ 1,882,595	\$ 21,345,493	\$ 13,007,349	66.83%	\$ 114,831	\$ 968,334	\$ 936,206	\$ 4,682	\$ 784,647
2032	\$ 20,121,842	\$ 2,305,972	\$ 22,427,814	\$ 13,934,273	69.25%	\$ 118,456	\$ 1,014,193	\$ 942,787	\$ 4,704	\$ 841,530
2033	\$ 20,828,284	\$ 2,781,402	\$ 23,609,686	\$ 14,960,961	71.83%	\$ 121,102	\$ 1,069,168	\$ 959,780	\$ 4,614	\$ 904,335
2034	\$ 21,569,779	\$ 3,312,460	\$ 24,882,239	\$ 16,091,172	74.60%	\$ 122,696	\$ 1,117,646	\$ 986,175	\$ 4,741	\$ 972,844
2035	\$ 22,334,537	\$ 3,910,288	\$ 26,244,825	\$ 17,313,441	77.52%	\$ 124,637	\$ 1,169,221	\$ 997,423	\$ 4,755	\$ 1,047,429
2036	\$ 23,141,097	\$ 4,580,587	\$ 27,721,684	\$ 18,652,551	80.60%	\$ 116,489	\$ 1,226,245	\$ 1,069,653	\$ 4,647	\$ 1,127,089
2037	\$ 23,882,723	\$ 5,326,349	\$ 29,209,072	\$ 20,048,074	83.94%	\$ 115,252	\$ 1,268,902	\$ 1,099,973	\$ 4,775	\$ 1,211,145
2038	\$ 24,630,815	\$ 6,179,448	\$ 30,810,263	\$ 21,538,625	87.45%	\$ 110,475	\$ 1,324,711	\$ 1,152,576	\$ 4,906	\$ 1,300,527
2039	\$ 25,346,847	\$ 7,135,227	\$ 32,482,074	\$ 23,116,856	91.20%	\$ 89,554	\$ 1,376,882	\$ 1,305,758	\$ 4,912	\$ 1,391,616
2040	\$ 25,852,095	\$ 8,212,483	\$ 34,064,578	\$ 24,664,238	95.41%	\$ 77,625	\$ 1,417,401	\$ 1,398,675	\$ 5,047	\$ 1,482,553
2041	\$ 26,238,096	\$ 9,457,940	\$ 35,696,036	\$ 26,238,095	100.00%	\$ 68,865	\$ 166,139	\$ 1,473,475	\$ 5,049	\$ 1,537,523
2042	\$ 26,532,101	\$ 10,858,412	\$ 37,390,513	\$ 26,532,098	100.00%	\$ 61,476	\$ 144,799	\$ 1,537,576	\$ 5,188	\$ 1,552,415
2043	\$ 26,748,029	\$ 12,418,680	\$ 39,166,709	\$ 26,748,024	100.00%	\$ 56,014	\$ 129,036	\$ 1,582,401	\$ 5,187	\$ 1,563,418
2044	\$ 26,908,909	\$ 14,127,505	\$ 41,036,414	\$ 26,908,904	100.00%	\$ 49,705	\$ 112,523	\$ 1,645,768	\$ 5,182	\$ 1,570,523
2045	\$ 26,990,711	\$ 15,960,593	\$ 42,951,304	\$ 26,990,705	100.00%	\$ 38,783	\$ 86,029	\$ 1,737,312	\$ 5,325	\$ 1,571,615
2046	\$ 26,944,501	\$ 17,913,256	\$ 44,857,757	\$ 26,944,495	100.00%	\$ 30,597	\$ 68,133	\$ 1,799,179	\$ 5,315	\$ 1,566,242
2047	\$ 26,804,980	\$ 19,983,879	\$ 46,788,859	\$ 26,804,974	100.00%	\$ 22,335	\$ 50,608	\$ 1,866,641	\$ 5,301	\$ 1,555,115
2048	\$ 26,561,096	\$ 22,158,101	\$ 48,719,197	\$ 26,561,090	100.00%	\$ 15,268	\$ 36,623	\$ 1,910,464	\$ 5,447	\$ 1,538,559
2049	\$ 26,235,636	\$ 24,440,395	\$ 50,676,031	\$ 26,235,629	100.00%	\$ 10,759	\$ 27,159	\$ 1,933,525	\$ 5,427	\$ 1,517,937
2050	\$ 25,852,540	\$ 26,831,386	\$ 52,683,926	\$ 25,852,532	100.00%	\$ 7,725	\$ 20,972	\$ 1,943,426	\$ 5,402	\$ 1,494,387
2051	\$ 25,426,797	\$ 29,334,593	\$ 54,761,390	\$ 25,426,788	100.00%	\$ 5,201	\$ 15,662	\$ 1,947,468	\$ 5,372	\$ 1,468,492
2052	\$ 24,963,314	\$ 31,954,426	\$ 56,917,740	\$ 24,963,303	100.00%	\$ 3,485	\$ 12,350	\$ 1,943,853	\$ 5,520	\$ 1,440,637
2053	\$ 24,470,415	\$ 34,698,206	\$ 59,168,621	\$ 24,470,402	100.00%	\$ 2,391	\$ 10,161	\$ 1,934,168	\$ 5,483	\$ 1,411,253
2054	\$ 23,954,570	\$ 37,575,172	\$ 61,529,742	\$ 23,954,556	100.00%	\$ 1,263	\$ 7,819	\$ 1,923,384	\$ 5,440	\$ 1,380,520
2055	\$ 23,415,349	\$ 40,596,719	\$ 64,012,068	\$ 23,415,335	100.00%	\$ 615	\$ 6,734	\$ 1,907,649	\$ 5,590	\$ 1,348,576
2056	\$ 22,858,036	\$ 43,776,011	\$ 66,634,047	\$ 22,858,021	100.00%	\$ 301	\$ 6,068	\$ 1,888,195	\$ 5,539	\$ 1,315,685
2057	\$ 22,286,356	\$ 47,123,147	\$ 69,409,503	\$ 22,286,341	100.00%	\$ -	\$ 5,481	\$ 1,867,316	\$ 5,481	\$ 1,281,977
2058	\$ 21,701,018	\$ 50,646,280	\$ 72,347,298	\$ 21,701,012	100.00%	\$ -	\$ 5,632	\$ 1,842,866	\$ 5,632	\$ 1,247,579
2059	\$ 21,105,732	\$ 54,345,477	\$ 75,451,209	\$ 21,105,714	100.00%	\$ -	\$ 5,564	\$ 1,817,188	\$ 5,564	\$ 1,212,621
2060	\$ 20,501,166	\$ 58,225,143	\$ 78,726,309	\$ 20,501,147	100.00%	\$ -	\$ 5,488	\$ 1,790,102	\$ 5,488	\$ 1,177,148

City of Bluefield, West Virginia Policemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2020 Measurement Date



Projection of Pension Plan's Fiduciary Net Position

Calculation of Single Equivalent Rate					
Fiscal Year	"Funded" Portion of BP	"Unfunded" Portion of BP	PV of "Funded" BP	PV of "Unfunded" BP	PV of BP Using a Single DR
2020	\$ 764,955	\$ -	\$ 742,990	\$ -	\$ 742,990
2021	\$ 779,446	\$ -	\$ 714,212	\$ -	\$ 714,212
2022	\$ 790,657	\$ -	\$ 683,476	\$ -	\$ 683,476
2023	\$ 820,480	\$ -	\$ 669,110	\$ -	\$ 669,110
2024	\$ 852,613	\$ -	\$ 655,957	\$ -	\$ 655,957
2025	\$ 873,980	\$ -	\$ 634,336	\$ -	\$ 634,336
2026	\$ 880,810	\$ -	\$ 603,107	\$ -	\$ 603,107
2027	\$ 897,418	\$ -	\$ 579,697	\$ -	\$ 579,697
2028	\$ 911,211	\$ -	\$ 555,289	\$ -	\$ 555,289
2029	\$ 922,499	\$ -	\$ 530,347	\$ -	\$ 530,347
2030	\$ 930,153	\$ -	\$ 504,479	\$ -	\$ 504,479
2031	\$ 936,206	\$ -	\$ 479,020	\$ -	\$ 479,020
2032	\$ 942,787	\$ -	\$ 455,083	\$ -	\$ 455,083
2033	\$ 959,780	\$ -	\$ 437,061	\$ -	\$ 437,061
2034	\$ 986,175	\$ -	\$ 423,661	\$ -	\$ 423,661
2035	\$ 997,423	\$ -	\$ 404,239	\$ -	\$ 404,239
2036	\$ 1,069,653	\$ -	\$ 408,974	\$ -	\$ 408,974
2037	\$ 1,099,973	\$ -	\$ 396,761	\$ -	\$ 396,761
2038	\$ 1,152,576	\$ -	\$ 392,203	\$ -	\$ 392,203
2039	\$ 1,305,758	\$ -	\$ 419,178	\$ -	\$ 419,178
2040	\$ 1,398,675	\$ -	\$ 423,591	\$ -	\$ 423,591
2041	\$ 1,473,475	\$ -	\$ 420,985	\$ -	\$ 420,985
2042	\$ 1,537,576	\$ -	\$ 414,433	\$ -	\$ 414,433
2043	\$ 1,582,401	\$ -	\$ 402,373	\$ -	\$ 402,373
2044	\$ 1,645,768	\$ -	\$ 394,798	\$ -	\$ 394,798
2045	\$ 1,737,312	\$ -	\$ 393,168	\$ -	\$ 393,168
2046	\$ 1,799,179	\$ -	\$ 384,122	\$ -	\$ 384,122
2047	\$ 1,866,641	\$ -	\$ 375,967	\$ -	\$ 375,967
2048	\$ 1,910,464	\$ -	\$ 363,013	\$ -	\$ 363,013
2049	\$ 1,933,525	\$ -	\$ 346,599	\$ -	\$ 346,599
2050	\$ 1,943,426	\$ -	\$ 328,654	\$ -	\$ 328,654
2051	\$ 1,947,468	\$ -	\$ 310,696	\$ -	\$ 310,696
2052	\$ 1,943,853	\$ -	\$ 292,565	\$ -	\$ 292,565
2053	\$ 1,934,168	\$ -	\$ 274,630	\$ -	\$ 274,630
2054	\$ 1,923,384	\$ -	\$ 257,640	\$ -	\$ 257,640
2055	\$ 1,907,649	\$ -	\$ 241,068	\$ -	\$ 241,068
2056	\$ 1,888,195	\$ -	\$ 225,104	\$ -	\$ 225,104
2057	\$ 1,867,316	\$ -	\$ 210,014	\$ -	\$ 210,014
2058	\$ 1,842,866	\$ -	\$ 195,532	\$ -	\$ 195,532
2059	\$ 1,817,188	\$ -	\$ 181,894	\$ -	\$ 181,894
2060	\$ 1,790,102	\$ -	\$ 169,040	\$ -	\$ 169,040