



**Municipal Pensions
Oversight Board**

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

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

Bolton

Submitted by:

James Ritchie, ASA, EA, FCA, MAAA
Senior Consulting Actuary
443.573.3924
jritchie@boltonusa.com

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

November 4, 2020

Mrs. Kimberly Karakiozis
Finance Director
City of Clarksburg
222 W. Main Street
Clarksburg, WV 26301

Lieutenant Richard White
Pension Board Secretary
City of Clarksburg
Policemen's Pension and Relief Fund

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

Dear Kimberly,

The following report contains the GASB 67 and GASB 68 actuarial information for the City of Clarksburg 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 5.50%. The plan's expected gross rate of investment return of 5.50% 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 Clarksburg, 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	\$ 29,678,990
Plan fiduciary net position	(11,329,558)
Employer's net pension liability	<u>\$ 18,349,432</u>
Plan fiduciary net position as a percentage of the total pension liability	38.17%

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)	5.00%
Single discount rate (EOY)	5.50%
Investment rate of return (BOY)	5.00%, net of pension plan investment expense, including inflation
Investment rate of return (EOY)	5.50%, 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	2037
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 4.50%	Current Discount Rate 5.50%	1% Increase 6.50%
Employer's net pension liability	\$ 22,886,733	\$ 18,349,432	\$ 14,723,088

City of Clarksburg, 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	\$ 31,171,073	\$ 9,371,819	\$ 21,799,254
Changes for the year:			
Service cost	826,002		826,002
Interest	1,520,547		1,520,547
Changes of benefit terms	-		-
Differences between expected and actual experience	(180,582)		(180,582)
Changes of assumptions	(2,137,778)		(2,137,778)
Contributions - employer (including Premium Tax Allocation)		2,268,729	(2,268,729)
Contributions - member		200,742	(200,742)
Net investment income		1,016,297	(1,016,297)
Benefit payments, including refunds of member contributions	(1,520,272)	(1,520,272)	-
Administrative expense		(8,300)	8,300
Other		543	(543)
Net Changes	<u>(1,492,083)</u>	<u>1,957,739</u>	<u>(3,449,822)</u>
Balances at 6/30/20	<u>\$ 29,678,990</u>	<u>\$ 11,329,558</u>	<u>\$ 18,349,432</u>
Return on Investments		10.3%	

City of Clarksburg, 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	\$ 826,002
B	Interest on the total pension liability	1,520,547
A	Changes of benefit terms	-
C	Differences between expected and actual experience	(344,967)
C	Changes of assumptions	198,232
A	Employee contributions	(200,742)
D	Projected earnings on pension plan investments	(492,127)
C	Differences between expected and actual earnings on plan investments	(109,987)
A	Pension plan administrative expense	8,300
A	Other changes in fiduciary net position	(543)
Total Pension Expense		\$ 1,404,715

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	\$ 31,171,073	100%	5.00%	\$ 1,558,554
Service cost (End of Year)	826,002	0%	5.00%	-
Benefit payments, including refunds of employee contributions	(1,520,272)	50%	5.00%	(38,007)
Total interest on the total pension liability				\$ 1,520,547

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	\$ 9,371,819	100%	5.00%	\$ 468,591
Employer contributions	2,268,729	50%	5.00%	56,718
Employee contributions	200,742	50%	5.00%	5,019
Benefit payments, including refunds of employee contributions	(1,520,272)	50%	5.00%	(38,007)
Administrative expense and other	(7,757)	50%	5.00%	(194)
Total Projected Earnings				\$ 492,127

City of Clarksburg, 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	\$ 168,754	\$ 719,700
Changes of assumptions	189,011	1,710,222
Net difference between projected and actual earnings on pension plan investments	-	453,740
Total	\$ 357,765	\$ 2,883,662

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	\$ (731,559)
2022	(693,327)
2023	(532,505)
2024	(568,506)
2025	-
Thereafter	-

City of Clarksburg, 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	\$ 826,002	\$ 979,662	\$ 964,909	\$ 940,194	\$ 678,319	\$ 618,071	\$ 666,702	\$ -	\$ -	\$ -
Interest	1,520,547	1,458,048	1,429,392	1,404,357	1,370,741	1,338,559	1,332,234	-	-	-
Changes of benefit terms	-	-	-	-	-	-	-	-	-	-
Differences between expected and actual experience	(180,582)	281,256	(630,123)	(1,132,945)	(192,337)	(345,859)	-	-	-	-
Changes of assumptions	(2,137,778)	-	-	-	3,317,951	-	-	-	-	-
Benefit payments, including refunds of member contributions	(1,520,272)	(1,417,693)	(1,259,755)	(1,192,439)	(1,208,416)	(1,210,149)	(1,150,677)	-	-	-
Net change in total pension liability	(1,492,083)	1,301,273	504,423	19,167	3,966,258	400,622	848,259	-	-	-
Total pension liability - beginning	31,171,073	29,869,800	29,365,377	29,346,210	25,379,952	24,979,330	24,131,071	-	-	-
Total pension liability - ending (a)	\$ 29,678,990	\$ 31,171,073	\$ 29,869,800	\$ 29,365,377	\$ 29,346,210	\$ 25,379,952	\$ 24,979,330	\$ -	\$ -	\$ -
Plan fiduciary net position	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Contributions - employer (including Premium Tax Allocation)	\$ 2,268,729	\$ 2,024,660	\$ 2,015,709	\$ 1,758,504	\$ 1,333,490	\$ 1,261,009	\$ 1,189,034	\$ -	\$ -	\$ -
Contributions - member	200,742	192,160	176,039	168,474	157,241	154,449	151,027	-	-	-
Net investment income	1,016,297	297,401	469,963	669,529	(21,235)	133,494	632,587	-	-	-
Benefit payments, including refunds of member contributions	(1,520,272)	(1,417,693)	(1,259,755)	(1,192,439)	(1,208,416)	(1,210,149)	(1,150,677)	-	-	-
Administrative expense	(8,300)	(7,500)	(7,500)	(7,500)	(7,750)	(7,500)	(7,500)	-	-	-
Other	543	(30)	-	-	-	-	206	-	-	-
Net change in plan fiduciary net position	\$ 1,957,739	\$ 1,088,998	\$ 1,394,456	\$ 1,396,568	\$ 253,330	\$ 331,303	\$ 814,677	\$ -	\$ -	\$ -
Plan fiduciary net position - beginning	9,371,819	8,282,821	6,888,363	5,491,795	5,238,465	4,907,162	4,092,485	-	-	-
Plan fiduciary net position - ending (b)	\$ 11,329,558	\$ 9,371,819	\$ 8,282,821	\$ 6,888,363	\$ 5,491,795	\$ 5,238,465	\$ 4,907,162	\$ -	\$ -	\$ -
Employer's net pension liability - ending (a)-(b)	\$ 18,349,432	\$ 21,799,254	\$ 21,586,979	\$ 22,477,014	\$ 23,854,415	\$ 20,141,487	\$ 20,072,168	\$ -	\$ -	\$ -
Plan fiduciary net position as a percentage of the total pension liability	38.17%	30.07%	27.73%	23.46%	18.71%	20.64%	19.64%	0.00%	0.00%	0.00%
Covered payroll	\$ 1,852,849	\$ 2,250,404	\$ 2,118,610	\$ 2,085,929	\$ 1,989,442	\$ 1,808,232	\$ 1,958,068	\$ -	\$ -	\$ -
Employer's net pension liability as a percentage of covered payroll	990.34%	968.68%	1018.92%	1077.55%	1199.05%	1113.88%	1025.10%	0.00%	0.00%	0.00%
Expected average remaining service years of all participants	5.00	5.00	5.41	5.34	5.30	4.75	-	-	-	-

Notes to Schedule:

Benefit changes: There were no changes for FY2020.

Changes of assumptions: The discount rate changed from 5.00% to 5.50%.

City of Clarksburg, 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	\$ 2,134,042	\$ 2,139,078	\$ 1,878,699	\$ 1,864,693	\$ 1,802,392	\$ 1,392,630	\$ 1,419,464	\$ 1,517,921	\$ -	\$ -
Contributions in relation to the actuarially determined contribution										
Employer provided	1,850,032	1,573,002	1,583,840	1,337,055	929,217	860,386	796,654	737,643	-	-
State provided	418,697	451,658	431,869	421,449	404,273	400,623	392,380	525,982	-	-
Contribution deficiency (excess)	\$ (134,687)	\$ 114,418	\$ (137,010)	\$ 106,189	\$ 468,902	\$ 131,621	\$ 230,430	\$ 254,296	\$ -	\$ -
Covered payroll	\$ 1,852,849	\$ 2,250,404	\$ 2,118,610	\$ 2,085,929	\$ 1,989,442	\$ 1,808,232	\$ 1,958,068	\$ 2,017,329	\$ -	\$ -
Contributions as a percentage of covered employee payroll	122.45%	89.97%	95.14%	84.30%	67.03%	69.74%	60.72%	62.64%	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	5.00%, 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 Clarksburg, 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	\$ 316,901	5	\$ 63,380	63,380	63,380	63,380	63,381				
2017	(376,763)	5		\$ (75,353)	(75,353)	(75,353)	(75,353)	(75,351)			
2018	(102,433)	5			\$ (20,487)	(20,487)	(20,487)	(20,487)	(20,485)		
2019	136,531	5				\$ 27,306	27,306	27,306	27,306	27,307	
2020	(524,170)	5					\$ (104,834)	(104,834)	(104,834)	(104,834)	(104,834)
Net increase (decrease) in pension expense							\$ (109,987)	\$ (173,366)	\$ (98,013)	\$ (77,527)	\$ (104,834)

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	\$ 316,901	\$ -	\$ 316,901	\$ -	\$ -
2017	-	376,763	301,412	-	75,351
2018	-	102,433	61,461	-	40,972
2019	136,531	-	54,612	81,919	-
2020	-	524,170	104,834	-	419,336
				\$ 81,919	\$ 535,659

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	(345,859)	4.748459						\$ (72,836)	(72,836)	(72,836)	(72,836)	(54,515)							
2016	(192,337)	5.302034						\$ (36,276)	(36,276)	(36,276)	(36,276)	(36,276)	(36,276)	(10,957)					
2017	(1,132,945)	5.336196							\$ (212,313)	(212,313)	(212,313)	(212,313)	(212,313)	(212,313)	(71,380)				
2018	(630,123)	5.408155								\$ (116,513)	(116,513)	(116,513)	(116,513)	(116,513)	(116,513)	(47,558)			
2019	281,256	5.000000									\$ 56,251	56,251	56,251	56,251	56,251	56,252			
2020	(180,582)	5.000000										\$ (36,116)	(36,116)	(36,116)	(36,116)	(36,116)	(36,118)		
Net increase (decrease) in pension expense													\$ (344,967)	\$ (319,648)	\$ (167,758)	\$ (27,422)	\$ (36,118)	\$ -	\$ -

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	-	345,859	345,859	-	-
2016	-	192,337	181,380	-	10,957
2017	-	1,132,945	849,252	-	283,693
2018	-	630,123	349,539	-	280,584
2019	281,256	-	112,502	168,754	-
2020	-	180,582	36,116	-	144,466
				\$ 168,754	\$ 719,700

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	-	4.748459																	
2016	3,317,951	5.302034							\$ 625,788	625,788	625,788	625,788	625,788	189,011					
2017	-	5.336196																	
2018	-	5.408155																	
2019	-	5.000000																	
2020	(2,137,778)	5.000000											\$ (427,556)	(427,556)	(427,556)	(427,556)	(427,554)		
Net increase (decrease) in pension expense													\$ 198,232	\$ (238,545)	\$ (427,556)	\$ (427,556)	\$ (427,554)	\$ -	\$ -

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	-	-	-	-	-
2016	3,317,951	-	3,128,940	189,011	-
2017	-	-	-	-	-
2018	-	-	-	-	-
2019	-	-	-	-	-
2020	-	2,137,778	427,556	-	1,710,222
				\$ 189,011	\$ 1,710,222

City of Clarksburg, 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	\$ 691,053	\$ -	\$ 691,053	\$ 152,458	\$ -	\$ 152,458	\$ 538,595	\$ -	\$ 538,595	\$ 8,136	\$ -	\$ 8,136	\$ 1,151,896	\$ -	\$ 1,151,896	\$ 457,642	\$ -	\$ 457,642
2021	\$ 698,762	\$ 33,691	\$ 732,453	\$ 154,334	\$ 7,988	\$ 162,322	\$ 544,428	\$ 25,703	\$ 570,131	\$ 8,359	\$ -	\$ 8,359	\$ 1,206,129	\$ 26,400	\$ 1,232,529	\$ 460,990	\$ -	\$ 460,990
2022	\$ 695,013	\$ 82,059	\$ 777,072	\$ 153,775	\$ 19,467	\$ 173,242	\$ 541,238	\$ 62,592	\$ 603,830	\$ 8,293	\$ 296	\$ 8,589	\$ 1,254,220	\$ 64,586	\$ 1,318,806	\$ 465,039	\$ -	\$ 465,039
2023	\$ 693,668	\$ 126,837	\$ 820,505	\$ 153,717	\$ 30,107	\$ 183,824	\$ 539,951	\$ 96,730	\$ 636,681	\$ 8,420	\$ 405	\$ 8,825	\$ 1,311,363	\$ 99,759	\$ 1,411,122	\$ 485,518	\$ -	\$ 485,518
2024	\$ 692,334	\$ 174,554	\$ 866,888	\$ 153,812	\$ 41,459	\$ 195,271	\$ 538,522	\$ 133,095	\$ 671,617	\$ 8,443	\$ 625	\$ 9,068	\$ 1,372,570	\$ 137,331	\$ 1,509,901	\$ 499,049	\$ -	\$ 499,049
2025	\$ 689,264	\$ 220,415	\$ 909,679	\$ 153,757	\$ 52,381	\$ 206,138	\$ 535,507	\$ 168,034	\$ 703,541	\$ 8,354	\$ 963	\$ 9,317	\$ 1,442,038	\$ 173,556	\$ 1,615,594	\$ 512,953	\$ -	\$ 512,953
2026	\$ 681,951	\$ 271,627	\$ 953,578	\$ 153,003	\$ 64,593	\$ 217,596	\$ 528,948	\$ 207,034	\$ 735,982	\$ 8,474	\$ 1,099	\$ 9,573	\$ 1,514,936	\$ 213,750	\$ 1,728,686	\$ 528,834	\$ -	\$ 528,834
2027	\$ 674,297	\$ 325,832	\$ 1,000,129	\$ 152,091	\$ 77,533	\$ 229,624	\$ 522,206	\$ 248,299	\$ 770,505	\$ 8,481	\$ 1,355	\$ 9,836	\$ 1,593,303	\$ 256,391	\$ 1,849,694	\$ 543,547	\$ -	\$ 543,547
2028	\$ 669,938	\$ 382,548	\$ 1,052,486	\$ 151,883	\$ 91,082	\$ 242,965	\$ 518,055	\$ 291,466	\$ 809,521	\$ 8,482	\$ 1,624	\$ 10,106	\$ 1,678,175	\$ 300,998	\$ 1,979,173	\$ 562,402	\$ -	\$ 562,402
2029	\$ 657,658	\$ 435,481	\$ 1,093,139	\$ 150,476	\$ 103,736	\$ 254,212	\$ 507,182	\$ 331,745	\$ 838,927	\$ 8,596	\$ 1,671	\$ 10,267	\$ 1,775,298	\$ 342,417	\$ 2,117,715	\$ 580,286	\$ -	\$ 580,286
2030	\$ 637,741	\$ 511,626	\$ 1,149,367	\$ 147,868	\$ 121,958	\$ 269,826	\$ 489,873	\$ 389,668	\$ 879,541	\$ 8,710	\$ 1,959	\$ 10,669	\$ 1,863,756	\$ 402,199	\$ 2,265,955	\$ 596,403	\$ -	\$ 596,403
2031	\$ 632,160	\$ 580,755	\$ 1,212,915	\$ 147,910	\$ 138,508	\$ 286,418	\$ 484,250	\$ 442,247	\$ 926,497	\$ 8,823	\$ 2,139	\$ 10,962	\$ 1,968,187	\$ 456,385	\$ 2,424,572	\$ 612,963	\$ -	\$ 612,963
2032	\$ 627,307	\$ 645,976	\$ 1,273,283	\$ 148,232	\$ 154,128	\$ 302,360	\$ 479,075	\$ 491,848	\$ 970,923	\$ 8,807	\$ 2,456	\$ 11,263	\$ 2,086,643	\$ 507,649	\$ 2,594,292	\$ 629,978	\$ -	\$ 629,978
2033	\$ 626,214	\$ 716,441	\$ 1,342,655	\$ 149,238	\$ 171,017	\$ 320,255	\$ 476,976	\$ 545,424	\$ 1,022,400	\$ 8,916	\$ 2,657	\$ 11,573	\$ 2,213,013	\$ 562,879	\$ 2,775,892	\$ 647,462	\$ -	\$ 647,462
2034	\$ 609,581	\$ 782,145	\$ 1,391,726	\$ 146,989	\$ 186,769	\$ 333,758	\$ 462,592	\$ 595,376	\$ 1,057,968	\$ 9,024	\$ 2,867	\$ 11,891	\$ 2,355,807	\$ 614,397	\$ 2,970,204	\$ 669,567	\$ -	\$ 669,567
2035	\$ 569,008	\$ 870,726	\$ 1,439,734	\$ 139,393	\$ 208,029	\$ 347,422	\$ 429,615	\$ 662,697	\$ 1,092,312	\$ 9,132	\$ 3,086	\$ 12,218	\$ 2,494,355	\$ 683,763	\$ 3,178,118	\$ 691,432	\$ -	\$ 691,432
2036	\$ 531,655	\$ 969,611	\$ 1,501,266	\$ 132,326	\$ 231,776	\$ 364,102	\$ 399,329	\$ 737,835	\$ 1,137,164	\$ 9,239	\$ 3,315	\$ 12,554	\$ 2,639,417	\$ 761,169	\$ 3,400,586	\$ 725,281	\$ -	\$ 725,281
2037	\$ 487,489	\$ 1,062,578	\$ 1,550,067	\$ 123,684	\$ 254,105	\$ 377,789	\$ 363,805	\$ 808,473	\$ 1,172,278	\$ 9,196	\$ 3,703	\$ 12,899	\$ 2,804,516	\$ 834,111	\$ 3,638,627	\$ 825,502	\$ -	\$ 825,502
2038	\$ 452,774	\$ 1,171,004	\$ 1,623,778	\$ 116,844	\$ 280,165	\$ 397,009	\$ 335,930	\$ 890,839	\$ 1,226,769	\$ 9,449	\$ 3,954	\$ 13,403	\$ 354,493	\$ 918,963	\$ 1,273,456	\$ -	\$ -	\$ -
2039	\$ 423,437	\$ 1,272,608	\$ 1,696,045	\$ 111,084	\$ 304,588	\$ 415,672	\$ 312,353	\$ 968,020	\$ 1,280,373	\$ 9,396	\$ 4,376	\$ 13,772	\$ 330,224	\$ 998,660	\$ 1,328,884	\$ -	\$ -	\$ -
2040	\$ 383,768	\$ 1,377,730	\$ 1,761,498	\$ 102,557	\$ 329,867	\$ 432,424	\$ 281,211	\$ 1,047,863	\$ 1,329,074	\$ 9,493	\$ 4,658	\$ 14,151	\$ 298,334	\$ 1,080,952	\$ 1,379,286	\$ -	\$ -	\$ -
2041	\$ 339,234	\$ 1,494,368	\$ 1,833,602	\$ 92,157	\$ 357,929	\$ 450,086	\$ 247,077	\$ 1,136,439	\$ 1,383,516	\$ 9,589	\$ 4,951	\$ 14,540	\$ 263,369	\$ 1,172,224	\$ 1,435,593	\$ -	\$ -	\$ -
2042	\$ 301,265	\$ 1,613,666	\$ 1,914,931	\$ 83,056	\$ 386,683	\$ 469,739	\$ 218,209	\$ 1,226,983	\$ 1,445,192	\$ 9,683	\$ 5,257	\$ 14,940	\$ 233,812	\$ 1,265,530	\$ 1,499,342	\$ -	\$ -	\$ -
2043	\$ 271,212	\$ 1,725,702	\$ 1,996,914	\$ 75,553	\$ 413,769	\$ 489,322	\$ 195,659	\$ 1,311,933	\$ 1,507,592	\$ 9,775	\$ 5,576	\$ 15,351	\$ 210,743	\$ 1,353,104	\$ 1,563,847	\$ -	\$ -	\$ -
2044	\$ 232,172	\$ 1,828,834	\$ 2,061,006	\$ 65,636	\$ 438,805	\$ 504,441	\$ 166,536	\$ 1,390,029	\$ 1,556,565	\$ 9,685	\$ 6,088	\$ 15,773	\$ 180,740	\$ 1,433,831	\$ 1,614,571	\$ -	\$ -	\$ -
2045	\$ 193,005	\$ 1,935,873	\$ 2,128,878	\$ 55,272	\$ 464,824	\$ 520,096	\$ 137,733	\$ 1,471,049	\$ 1,608,782	\$ 9,767	\$ 6,620	\$ 16,387	\$ 151,238	\$ 1,517,581	\$ 1,668,819	\$ -	\$ -	\$ -
2046	\$ 158,468	\$ 2,046,155	\$ 2,204,623	\$ 45,802	\$ 491,644	\$ 537,446	\$ 112,666	\$ 1,554,511	\$ 1,667,177	\$ 9,846	\$ 6,992	\$ 16,838	\$ 125,568	\$ 1,603,680	\$ 1,729,248	\$ -	\$ -	\$ -
2047	\$ 127,809	\$ 2,153,985	\$ 2,281,794	\$ 37,403	\$ 517,895	\$ 555,298	\$ 90,406	\$ 1,636,090	\$ 1,726,496	\$ 9,728	\$ 7,573	\$ 17,301	\$ 102,588	\$ 1,688,053	\$ 1,790,641	\$ -	\$ -	\$ -
2048	\$ 97,185	\$ 2,267,895	\$ 2,365,080	\$ 28,668	\$ 545,634	\$ 574,302	\$ 68,517	\$ 1,722,261	\$ 1,790,778	\$ 9,996	\$ 7,976	\$ 17,972	\$ 80,372	\$ 1,776,965	\$ 1,857,337	\$ -	\$ -	\$ -
2049	\$ 68,053	\$ 2,383,448	\$ 2,451,501	\$ 20,058	\$ 573,791	\$ 593,849	\$ 47,995	\$ 1,809,657	\$ 1,857,652	\$ 9,860	\$ 8,606	\$ 18,466	\$ 59,158	\$ 1,867,362	\$ 1,926,520	\$ -	\$ -	\$ -
2050	\$ 46,371	\$ 2,497,923	\$ 2,544,294	\$ 13,707	\$ 601,687	\$ 615,394	\$ 32,664	\$ 1,896,236	\$ 1,928,900	\$ 9,920	\$ 9,260	\$ 19,180	\$ 43,470	\$ 1,956,945	\$ 2,000,415	\$ -	\$ -	\$ -
2051	\$ 31,916	\$ 2,608,646	\$ 2,640,562	\$ 9,480	\$ 628,694	\$ 638,174	\$ 22,436	\$ 1,979,952	\$ 2,002,388	\$ 9,759	\$ 9,948	\$ 19,707	\$ 32,803	\$ 2,043,620	\$ 2,076,423	\$ -	\$ -	\$ -
2052	\$ 21,842	\$ 2,719,630	\$ 2,741,472	\$ 6,532	\$ 655,778	\$ 662,310	\$ 15,310	\$ 2,063,852	\$ 2,079,162	\$ 9,805	\$ 10,444	\$ 20,249	\$ 25,531	\$ 2,130,292	\$ 2,155,823	\$ -	\$ -	\$ -
2053	\$ 15,003	\$ 2,828,243	\$ 2,843,246	\$ 4,477	\$ 682,295	\$ 686,772	\$ 10,526	\$ 2,145,948	\$ 2,156,474	\$ 9,846	\$ 10,960	\$ 20,806	\$ 20,658	\$ 2,215,132	\$ 2,235,790	\$ -	\$ -	\$ -
2054	\$ 9,262	\$ 2,940,945	\$ 2,950,207	\$ 2,808	\$ 709,765	\$ 712,573	\$ 6,454	\$ 2,231,180	\$ 2,237,634	\$ 9,881	\$ 11,227	\$ 21,108	\$ 16,511	\$ 2,303,443	\$ 2,319,954	\$ -	\$ -	\$ -
2055	\$ 5,289	\$ 3,060,692	\$ 3,065,981	\$ 1,627	\$ 738,824	\$ 740,451	\$ 3,662	\$ 2,321,768	\$ 2,325,430	\$ 9,911	\$ 12,291	\$ 22,202	\$ 13,672	\$ 2,397,053	\$ 2,410,725	\$ -	\$ -	\$ -
2056	\$ 3,182	\$ 3,183,699	\$ 3,186,881	\$ 979	\$ 768,880	\$ 769,859	\$ 2,203	\$ 2,414,819	\$ 2,417,022	\$ 9,935	\$ 12,878	\$ 22,813	\$ 12,198	\$ 2,493,216	\$ 2,505,414	\$ -	\$ -	\$ -
2057	\$ 1,636	\$ 3,310,275	\$ 3,311,911	\$ 521	\$ 799,714	\$ 800,235	\$ 1,115	\$ 2,510,561	\$ 2,511,676	\$ 9,953	\$ 13,487	\$ 23,440	\$ 11,098	\$ 2,592,164	\$ 2,603,262	\$ -	\$ -	\$ -
2058	\$ 439	\$ 3,437,411	\$ 3,437,850	\$ 136	\$ 830,701	\$ 830,837	\$ 303	\$ 2,606,710	\$ 2,607,013	\$ 9,964	\$ 14,121	\$ 24,085	\$ 10,275	\$ 2,691,556	\$ 2,701,831	\$ -	\$ -	\$ -
2059	\$ -	\$ 3,566,455	\$ 3,566,455	\$ -	\$ 862,129	\$ 862,129	\$ -	\$ 2,704,326	\$ 2,704,326	\$ 9,699	\$ 15,048	\$ 24,747	\$ 9,699	\$ 2,792,748	\$ 2,802,447	\$ -	\$ -	\$ -
2060	\$ -	\$ 3,702,791	\$ 3,702,791	\$ -	\$ 895,300	\$ 895,300	\$ -	\$ 2,807,491	\$ 2,807,491	\$ 9,689	\$ 15,739	\$ 25,428	\$ 9,689	\$ 2,899,403	\$ 2,909,092	\$ -	\$ -	\$ -

City of Clarksburg, 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	\$ 28,921,335	\$ -	\$ 28,921,335	\$ 9,371,819	32.40%	\$ 156,594	\$ 1,609,538	\$ 1,480,878	\$ 8,136	\$ 522,969
2021	\$ 29,716,566	\$ -	\$ 29,716,566	\$ 10,171,906	34.23%	\$ 158,521	\$ 1,667,119	\$ 1,501,725	\$ 8,359	\$ 568,016
2022	\$ 30,545,701	\$ 35,223	\$ 30,580,924	\$ 11,055,478	36.19%	\$ 157,947	\$ 1,719,259	\$ 1,533,670	\$ 8,293	\$ 617,147
2023	\$ 31,383,672	\$ 122,453	\$ 31,506,125	\$ 12,007,867	38.26%	\$ 157,888	\$ 1,796,881	\$ 1,562,617	\$ 8,420	\$ 670,844
2024	\$ 32,236,580	\$ 260,136	\$ 32,496,716	\$ 13,062,443	40.52%	\$ 157,985	\$ 1,871,619	\$ 1,588,855	\$ 8,443	\$ 730,164
2025	\$ 33,108,041	\$ 453,589	\$ 33,561,630	\$ 14,224,913	42.97%	\$ 157,929	\$ 1,954,991	\$ 1,620,998	\$ 8,354	\$ 795,490
2026	\$ 33,991,178	\$ 703,314	\$ 34,694,492	\$ 15,503,971	45.61%	\$ 157,154	\$ 2,043,770	\$ 1,664,370	\$ 8,474	\$ 867,046
2027	\$ 34,870,624	\$ 1,017,469	\$ 35,888,093	\$ 16,899,096	48.46%	\$ 156,218	\$ 2,136,850	\$ 1,712,612	\$ 8,481	\$ 944,969
2028	\$ 35,740,813	\$ 1,402,131	\$ 37,142,944	\$ 18,416,041	51.53%	\$ 156,004	\$ 2,240,577	\$ 1,750,136	\$ 8,482	\$ 1,030,191
2029	\$ 36,615,722	\$ 1,863,429	\$ 38,479,151	\$ 20,084,195	54.85%	\$ 154,559	\$ 2,355,584	\$ 1,807,420	\$ 8,596	\$ 1,123,464
2030	\$ 37,466,957	\$ 2,401,462	\$ 39,868,419	\$ 21,901,786	58.46%	\$ 151,880	\$ 2,460,159	\$ 1,864,805	\$ 8,710	\$ 1,224,636
2031	\$ 38,285,056	\$ 3,044,724	\$ 41,329,780	\$ 23,864,945	62.33%	\$ 151,923	\$ 2,581,150	\$ 1,901,144	\$ 8,823	\$ 1,334,904
2032	\$ 39,104,937	\$ 3,791,325	\$ 42,896,262	\$ 26,022,955	66.55%	\$ 152,254	\$ 2,716,621	\$ 1,934,767	\$ 8,807	\$ 1,456,368
2033	\$ 39,930,256	\$ 4,642,073	\$ 44,572,329	\$ 28,404,624	71.14%	\$ 153,287	\$ 2,860,475	\$ 1,965,367	\$ 8,916	\$ 1,590,457
2034	\$ 40,768,385	\$ 5,607,374	\$ 46,375,759	\$ 31,034,560	76.12%	\$ 150,977	\$ 3,025,374	\$ 2,025,300	\$ 9,024	\$ 1,737,886
2035	\$ 41,573,504	\$ 6,687,681	\$ 48,261,185	\$ 33,914,473	81.58%	\$ 143,175	\$ 3,185,787	\$ 2,117,176	\$ 9,132	\$ 1,897,926
2036	\$ 42,285,731	\$ 7,912,510	\$ 50,198,241	\$ 37,015,053	87.54%	\$ 135,916	\$ 3,364,698	\$ 2,196,486	\$ 9,239	\$ 2,070,961
2037	\$ 42,916,261	\$ 9,299,441	\$ 52,215,702	\$ 40,380,903	94.09%	\$ 127,040	\$ 2,987,018	\$ 2,290,853	\$ 9,196	\$ 2,243,035
2038	\$ 43,437,948	\$ 10,850,001	\$ 54,287,949	\$ 43,437,947	100.00%	\$ 120,014	\$ 354,493	\$ 2,361,758	\$ 9,449	\$ 2,337,626
2039	\$ 43,878,875	\$ 12,588,211	\$ 56,467,086	\$ 43,878,873	100.00%	\$ 114,098	\$ 330,224	\$ 2,415,925	\$ 9,396	\$ 2,359,590
2040	\$ 44,257,465	\$ 14,515,783	\$ 58,773,248	\$ 44,257,463	100.00%	\$ 105,340	\$ 298,334	\$ 2,490,000	\$ 9,493	\$ 2,377,297
2041	\$ 44,538,942	\$ 16,645,460	\$ 61,184,402	\$ 44,538,942	100.00%	\$ 94,657	\$ 263,369	\$ 2,581,755	\$ 9,589	\$ 2,389,048
2042	\$ 44,694,673	\$ 19,002,314	\$ 63,696,987	\$ 44,694,672	100.00%	\$ 85,309	\$ 233,812	\$ 2,652,560	\$ 9,683	\$ 2,394,634
2043	\$ 44,746,186	\$ 21,595,817	\$ 66,342,003	\$ 44,746,184	100.00%	\$ 77,603	\$ 210,743	\$ 2,714,243	\$ 9,775	\$ 2,394,956
2044	\$ 44,705,469	\$ 24,416,457	\$ 69,121,926	\$ 44,705,467	100.00%	\$ 67,417	\$ 180,740	\$ 2,792,431	\$ 9,685	\$ 2,389,507
2045	\$ 44,541,016	\$ 27,436,744	\$ 71,977,760	\$ 44,541,015	100.00%	\$ 56,772	\$ 151,238	\$ 2,871,111	\$ 9,767	\$ 2,377,236
2046	\$ 44,245,382	\$ 30,638,248	\$ 74,883,630	\$ 44,245,383	100.00%	\$ 47,045	\$ 125,568	\$ 2,933,873	\$ 9,846	\$ 2,358,311
2047	\$ 43,832,587	\$ 34,016,403	\$ 77,848,990	\$ 43,832,588	100.00%	\$ 38,418	\$ 102,588	\$ 2,984,514	\$ 9,728	\$ 2,333,379
2048	\$ 43,312,728	\$ 37,564,885	\$ 80,877,613	\$ 43,312,731	100.00%	\$ 29,446	\$ 80,372	\$ 3,041,277	\$ 9,996	\$ 2,302,393
2049	\$ 42,673,666	\$ 41,287,531	\$ 83,961,197	\$ 42,673,668	100.00%	\$ 20,602	\$ 59,158	\$ 3,085,632	\$ 9,860	\$ 2,265,229
2050	\$ 41,923,162	\$ 45,182,602	\$ 87,105,764	\$ 41,923,165	100.00%	\$ 14,079	\$ 43,470	\$ 3,103,868	\$ 9,920	\$ 2,222,852
2051	\$ 41,089,775	\$ 49,249,330	\$ 90,339,105	\$ 41,089,778	100.00%	\$ 9,737	\$ 32,803	\$ 3,103,223	\$ 9,759	\$ 2,176,631
2052	\$ 40,195,965	\$ 53,480,037	\$ 93,676,002	\$ 40,195,967	100.00%	\$ 6,709	\$ 25,531	\$ 3,090,006	\$ 9,805	\$ 2,127,549
2053	\$ 39,255,943	\$ 57,873,711	\$ 97,129,654	\$ 39,255,945	100.00%	\$ 4,598	\$ 20,658	\$ 3,067,605	\$ 9,846	\$ 2,076,265
2054	\$ 38,280,013	\$ 62,421,599	\$ 100,701,612	\$ 38,280,015	100.00%	\$ 2,884	\$ 16,511	\$ 3,040,063	\$ 9,881	\$ 2,023,176
2055	\$ 37,272,639	\$ 67,125,420	\$ 104,398,059	\$ 37,272,642	100.00%	\$ 1,671	\$ 13,672	\$ 3,006,691	\$ 9,911	\$ 1,968,565
2056	\$ 36,239,946	\$ 72,005,303	\$ 108,245,249	\$ 36,239,948	100.00%	\$ 1,006	\$ 12,198	\$ 2,967,297	\$ 9,935	\$ 1,912,777
2057	\$ 35,188,695	\$ 77,070,846	\$ 112,259,541	\$ 35,188,697	100.00%	\$ 535	\$ 11,098	\$ 2,924,431	\$ 9,953	\$ 1,856,078
2058	\$ 34,122,023	\$ 82,327,666	\$ 116,449,689	\$ 34,122,024	100.00%	\$ 140	\$ 10,275	\$ 2,878,957	\$ 9,964	\$ 1,798,612
2059	\$ 33,042,129	\$ 87,772,596	\$ 120,814,725	\$ 33,042,130	100.00%	\$ -	\$ 9,699	\$ 2,829,546	\$ 9,699	\$ 1,740,546
2060	\$ 31,953,129	\$ 93,396,131	\$ 125,349,260	\$ 31,953,130	100.00%	\$ -	\$ 9,689	\$ 2,776,982	\$ 9,689	\$ 1,682,077

City of Clarksburg, 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	\$ 1,480,878	\$ -	\$ 1,441,760	\$ -	\$ 1,441,760	
2021	\$ 1,501,725	\$ -	\$ 1,385,836	\$ -	\$ 1,385,836	
2022	\$ 1,533,670	\$ -	\$ 1,341,531	\$ -	\$ 1,341,531	
2023	\$ 1,562,617	\$ -	\$ 1,295,594	\$ -	\$ 1,295,594	
2024	\$ 1,588,855	\$ -	\$ 1,248,671	\$ -	\$ 1,248,671	
2025	\$ 1,620,998	\$ -	\$ 1,207,519	\$ -	\$ 1,207,519	
2026	\$ 1,664,370	\$ -	\$ 1,175,192	\$ -	\$ 1,175,192	
2027	\$ 1,712,612	\$ -	\$ 1,146,214	\$ -	\$ 1,146,214	
2028	\$ 1,750,136	\$ -	\$ 1,110,263	\$ -	\$ 1,110,263	
2029	\$ 1,807,420	\$ -	\$ 1,086,828	\$ -	\$ 1,086,828	
2030	\$ 1,864,805	\$ -	\$ 1,062,876	\$ -	\$ 1,062,876	
2031	\$ 1,901,144	\$ -	\$ 1,027,098	\$ -	\$ 1,027,098	
2032	\$ 1,934,767	\$ -	\$ 990,770	\$ -	\$ 990,770	
2033	\$ 1,965,367	\$ -	\$ 953,972	\$ -	\$ 953,972	
2034	\$ 2,025,300	\$ -	\$ 931,813	\$ -	\$ 931,813	
2035	\$ 2,117,176	\$ -	\$ 923,302	\$ -	\$ 923,302	
2036	\$ 2,196,486	\$ -	\$ 907,952	\$ -	\$ 907,952	
2037	\$ 2,290,853	\$ -	\$ 897,592	\$ -	\$ 897,592	
2038	\$ 2,361,758	\$ -	\$ 877,132	\$ -	\$ 877,132	
2039	\$ 2,415,925	\$ -	\$ 850,473	\$ -	\$ 850,473	
2040	\$ 2,490,000	\$ -	\$ 830,852	\$ -	\$ 830,852	
2041	\$ 2,581,755	\$ -	\$ 816,558	\$ -	\$ 816,558	
2042	\$ 2,652,560	\$ -	\$ 795,216	\$ -	\$ 795,216	
2043	\$ 2,714,243	\$ -	\$ 771,287	\$ -	\$ 771,287	
2044	\$ 2,792,431	\$ -	\$ 752,137	\$ -	\$ 752,137	
2045	\$ 2,871,111	\$ -	\$ 733,014	\$ -	\$ 733,014	
2046	\$ 2,933,873	\$ -	\$ 709,988	\$ -	\$ 709,988	
2047	\$ 2,984,514	\$ -	\$ 684,591	\$ -	\$ 684,591	
2048	\$ 3,041,277	\$ -	\$ 661,243	\$ -	\$ 661,243	
2049	\$ 3,085,632	\$ -	\$ 635,911	\$ -	\$ 635,911	
2050	\$ 3,103,868	\$ -	\$ 606,322	\$ -	\$ 606,322	
2051	\$ 3,103,223	\$ -	\$ 574,593	\$ -	\$ 574,593	
2052	\$ 3,090,006	\$ -	\$ 542,318	\$ -	\$ 542,318	
2053	\$ 3,067,605	\$ -	\$ 510,319	\$ -	\$ 510,319	
2054	\$ 3,040,063	\$ -	\$ 479,372	\$ -	\$ 479,372	
2055	\$ 3,006,691	\$ -	\$ 449,393	\$ -	\$ 449,393	
2056	\$ 2,967,297	\$ -	\$ 420,384	\$ -	\$ 420,384	
2057	\$ 2,924,431	\$ -	\$ 392,712	\$ -	\$ 392,712	
2058	\$ 2,878,957	\$ -	\$ 366,451	\$ -	\$ 366,451	
2059	\$ 2,829,546	\$ -	\$ 341,385	\$ -	\$ 341,385	
2060	\$ 2,776,982	\$ -	\$ 317,577	\$ -	\$ 317,577	