



**Municipal Pensions
Oversight Board**

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

GASB68 Actuarial Information for the
Measurement Period Ending
06/30/2019

Bolton

Submitted by:

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October 28, 2019

Mr. Billie Trump
City Treasurer, Recorder
City of Beckley
340 Prince Street
Beckley, WV 25801

Deputy Chief Jamel Corey
Pension Board Secretary
City of Beckley, West Virginia
Policemen's Pension and Relief Fund

Re: City of Beckley, West Virginia Policemen's Pension and Relief Fund - GASB68 Actuarial Information for the Measurement Period Ending June 30, 2019

Dear Billie,

The following report contains the GASB 67 and GASB 68 actuarial information for the City of Beckley Policemen's Pension and Relief Fund to be included in the City's financial statements for FY2019. The GASB67 information has been provided as of the June 30, 2019 (the GASB 68 measurement date for FY2019).

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, 2019 (the City's fiscal year end date) as required by GASB68. 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, 2018 actuarial valuation rolled forward to June 30, 2019. The methods, assumptions, and participant data used are detailed in the July 1, 2018 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 GASB67. The calculation of the Actuarially Determined Contribution for the fiscal year ended June 30, 2019 is contained in the July 1, 2018 actuarial valuation report.

The included calculations are based on a blended discount rate of 5.50%. The plan's expected gross rate of investment return of 5.5% has been blended with the 3.13% 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, 2019. The development of the blended discount rate is included within this report.

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.

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.) The long-term nominal expected rate of return is based on the fund's current funding ratio, liquidity ratio, equity exposure and expected funded status in 15 years.

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 those assumptions; these differences may be significant or material because these 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 oversight 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. This 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.



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 GASB68. 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.

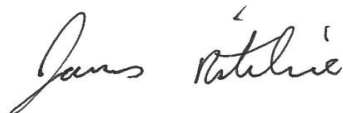
The calculation of actuarial liabilities for valuation purposes is based on a current estimate of future benefit payments. The calculation includes a computation of the "present value" of those estimated future benefit payments using an assumed discount rate; the higher the discount rate assumption, 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, 2018 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, MAAA



City of Beckley, West Virginia Policemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2019 Measurement Date



Net Pension Liability of the Employer

The components of the net pension liability of the Employer at June 30, 2019, were as follows:

Total pension liability	\$ 39,946,884
Plan fiduciary net position	(23,656,733)
Employer's net pension liability	<u>\$ 16,290,151</u>
Plan fiduciary net position as a percentage of the total pension liability	59.22%

Actuarial assumptions. The total pension liability was determined by an actuarial valuation as of July 1, 2018 rolled forward to June 30, 2019 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)	6.0000%
Single discount rate (EOY)	5.5000%
Investment rate of return	5.50 percent, net of pension plan investment expense, including inflation
Long-term municipal bond rate (BOY)	3.62%
Long-term municipal bond rate (EOY)	3.13%
Mortality	RP-2014 Blue Collar Mortality Table with generational projection using Scale MP-2014
Year Fund is projected to be fully funded	2057
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, 2018 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	\$ 22,553,628	\$ 16,290,151	\$ 11,281,727

City of Beckley, West Virginia Policemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2019 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 6/30/18	\$ 34,872,905	\$ 22,217,795	\$ 12,655,110
Changes for the year:			
Service cost	1,090,463		1,090,463
Interest	2,043,224		2,043,224
Changes of benefit terms	-		-
Differences between expected and actual experience	886,248		886,248
Changes of assumptions	2,692,393		2,692,393
Contributions - employer (including Premium Tax Allocation)		1,178,526	(1,178,526)
Contributions - member		228,413	(228,413)
Net investment income		1,670,372	(1,670,372)
Benefit payments, including refunds of member contributions	(1,638,349)	(1,638,349)	-
Administrative expense		(24)	24
Other		-	-
Net Changes	<u>5,073,979</u>	<u>1,438,938</u>	<u>3,635,041</u>
Balances at 6/30/19	<u>\$ 39,946,884</u>	<u>\$ 23,656,733</u>	<u>\$ 16,290,151</u>
Return on Investments		7.6%	

City of Beckley, West Virginia Policemen's Pension and Relief Fund
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Components of Employer's Pension Expense for the Fiscal Year Ended June 30, 2019

Note	Description	Amount
A	Service Cost	\$ 1,090,463
B	Interest on the total pension liability	2,043,224
A	Changes of benefit terms	-
C	Differences between expected and actual experience	(163,941)
C	Changes of assumptions	1,103,325
A	Employee contributions	(228,413)
D	Projected earnings on pension plan investments	(1,215,613)
C	Differences between expected and actual earnings on plan investments	132
A	Pension plan administrative expense	24
A	Other changes in fiduciary net position	-
Total Pension Expense		\$ 2,629,201

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)	Projected Rate of Return (c)	Projected Earnings (a) x (b) x (c)
Beginning total pension liability	\$ 34,872,905	100%	6.00%	\$ 2,092,374
Service Cost (End of Year)	1,090,463	0%	6.00%	-
Benefit payments, including refunds of employee contributions	(1,638,349)	50%	6.00%	(49,150)
Total interest on the total pension liability				\$ 2,043,224

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	\$ 22,217,795	100%	5.50%	\$ 1,221,979
Employer contributions	1,178,526	50%	5.50%	32,409
Employee contributions	228,413	50%	5.50%	6,281
Benefit payments, including refunds of employee contributions	(1,638,349)	50%	5.50%	(45,055)
Administrative expense and other	(24)	50%	5.50%	(1)
Total Projected Earnings				\$ 1,215,613

City of Beckley, West Virginia Policemen’s Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2019 Measurement Date



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

At June 30, 2019, 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	\$ 738,540	\$ 727,874
Changes of assumptions	4,242,407	1,736,422
Net difference between projected and actual earnings on pension plan investments	-	557,359
Total	\$ 4,980,947	\$ 3,021,655

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:	
2020	\$ 1,019,301
2021	357,936
2022	(93,754)
2023	79,368
2024	596,441
Thereafter	-

City of Beckley, West Virginia Policemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2019 Measurement Date



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

Total pension liability	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Service cost	\$ 1,090,463	\$ 1,083,032	\$ 932,441	\$ 527,526	\$ 605,759	\$ 566,516	\$ -	\$ -	\$ -	\$ -
Interest	2,043,224	1,958,079	1,913,373	1,873,424	1,822,041	1,800,224	-	-	-	-
Changes of benefit terms	-	-	-	-	-	-	-	-	-	-
Differences between expected and actual experience	886,248	(539,579)	(579,180)	(367,023)	(240,296)	-	-	-	-	-
Changes of assumptions	2,692,393	(2,425,222)	-	7,544,910	(1,724,947)	-	-	-	-	-
Benefit payments, including refunds of member contributions	(1,638,349)	(1,605,801)	(1,531,586)	(1,555,886)	(1,573,944)	(1,480,387)	-	-	-	-
Net change in total pension liability	5,073,979	(1,529,491)	735,048	8,022,951	(1,111,387)	886,353	-	-	-	-
Total pension liability - beginning	34,872,905	36,402,396	35,667,348	27,644,397	28,755,784	27,869,431	-	-	-	-
Total pension liability - ending (a)	\$ 39,946,884	\$ 34,872,905	\$ 36,402,396	\$ 35,667,348	\$ 27,644,397	\$ 28,755,784	\$ -	\$ -	\$ -	\$ -
Plan fiduciary net position	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Contributions - employer (including Premium Tax Allocation)	\$ 1,178,526	\$ 1,129,068	\$ 967,969	\$ 892,200	\$ 870,447	\$ 834,851	\$ -	\$ -	\$ -	\$ -
Contributions - member	228,413	207,438	204,974	183,202	163,569	167,926	-	-	-	-
Net investment income	1,670,372	1,404,579	1,409,529	917,047	650,402	2,169,818	-	-	-	-
Benefit payments, including refunds of member contributions	(1,638,349)	(1,605,801)	(1,531,586)	(1,555,886)	(1,573,944)	(1,480,387)	-	-	-	-
Administrative expense	(24)	(24)	(24)	-	(68,325)	(63,349)	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Net change in plan fiduciary net position	\$ 1,438,938	\$ 1,135,260	\$ 1,050,862	\$ 436,563	\$ 42,149	\$ 1,628,859	\$ -	\$ -	\$ -	\$ -
Plan fiduciary net position - beginning	22,217,795	21,082,534	20,031,672	19,506,341	19,553,486	17,924,627	-	-	-	-
Plan fiduciary net position - ending (b)	\$ 23,656,733	\$ 22,217,794	\$ 21,082,534	\$ 19,942,904	\$ 19,595,635	\$ 19,553,486	\$ -	\$ -	\$ -	\$ -
Employer's net pension liability - ending (a)-(b)	\$ 16,290,151	\$ 12,655,111	\$ 15,319,862	\$ 15,724,444	\$ 8,048,762	\$ 9,202,298	\$ -	\$ -	\$ -	\$ -
Plan fiduciary net position as a percentage of the total pension liability	59.22%	63.71%	57.92%	55.91%	70.88%	68.00%	0.00%	0.00%	0.00%	0.00%
Covered payroll	\$ 2,671,312	\$ 2,580,777	\$ 2,217,255	\$ 2,100,749	\$ 2,202,152	\$ 2,076,451	\$ -	\$ -	\$ -	\$ -
Employer's net pension liability as a percentage of covered payroll	609.82%	490.36%	690.94%	748.52%	365.50%	443.17%	0.00%	0.00%	0.00%	0.00%
Expected average remaining service years of all participants	6.00	5.84	5.38	5.44	5.45	-	-	-	-	-

Notes to Schedule:

Benefit changes: There were no changes for FY2019.

Changes of assumptions: The discount rate changed from 6.0000% to 5.5000%.

City of Beckley, West Virginia Policemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2019 Measurement Date



Schedule of Employer Contributions
 Last 10 Fiscal Years

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Actuarially determined contribution	\$ 1,618,552	\$ 1,443,038	\$ 1,526,595	\$ 1,424,813	\$ 769,449	\$ 908,970	\$ 856,764	\$ -	\$ -	\$ -
Contributions in relation to the actuarially determined contribution										
Employer provided	650,018	614,036	480,407	448,978	419,606	392,155	366,500	-	-	-
State provided	528,508	515,032	487,562	443,222	450,841	405,775	702,751	-	-	-
Contribution deficiency (excess)	<u>\$ 440,026</u>	<u>\$ 313,970</u>	<u>\$ 558,626</u>	<u>\$ 532,613</u>	<u>\$ (100,998)</u>	<u>\$ 111,040</u>	<u>\$ (212,487)</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered payroll	\$ 2,671,312	\$ 2,580,777	\$ 2,217,255	\$ 2,100,749	\$ 2,202,152	\$ 2,076,451	\$ 1,865,580	\$ -	\$ -	\$ -
Contributions as a percentage of covered employee payroll	44.12%	44.00%	44.00%	42.00%	40.00%	38.00%	57.00%	0.00%	0.00%	0.00%

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	32.5 years
Asset valuation method	Market Value
Inflation	2.75 percent
Salary increases	Rates vary by years of service
Investment rate of return	5.50 percent, 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 Beckley, West Virginia Policemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
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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)	2015	2016	2017	2018	2019	2020	2021	2022	2023
2015	\$ 596,572	5	\$ 119,314	119,314	119,314	119,314	119,316				
2016	431,580	5		\$ 86,316	86,316	86,316	86,316	86,316			
2017	(318,881)	5			\$ (63,776)	(63,776)	(63,776)	(63,776)	(63,777)		
2018	(253,859)	5				\$ (50,772)	(50,772)	(50,772)	(50,772)	(50,771)	
2019	(454,759)	5					\$ (90,952)	(90,952)	(90,952)	(90,952)	(90,951)
Net increase (decrease) in pension expense							\$ 132	\$ (119,184)	\$ (205,501)	\$ (141,723)	\$ (90,951)

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, 2019 (c)	Balances at June 30, 2019	
				Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
2015	\$ 596,572	\$ -	\$ 596,572	\$ -	\$ -
2016	431,580	-	345,264	86,316	-
2017	-	318,881	191,328	-	127,553
2018	-	253,859	101,544	-	152,315
2019	-	454,759	90,952	-	363,807
				\$ 86,316	\$ 643,675

City of Beckley, West Virginia Policemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
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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	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Thereafter	
Prior	\$ -		\$ -													
2015	(240,296)	5.448048			\$ (44,107)	(44,107)	(44,107)	(44,107)	(44,107)	(19,761)						
2016	(367,023)	5.441533				\$ (67,448)	(67,448)	(67,448)	(67,448)	(67,448)	(29,783)					
2017	(579,180)	5.378254					\$ (107,689)	(107,689)	(107,689)	(107,689)	(107,689)	(40,735)				
2018	(539,579)	5.839255						\$ (92,405)	(92,405)	(92,405)	(92,405)	(92,405)	(77,554)			
2019	886,248	6							\$ 147,708	147,708	147,708	147,708	147,708	\$ 147,708	-	
Net increase (decrease) in pension expense									\$ (163,941)	\$ (139,595)	\$ (82,169)	\$ 14,568	\$ 70,154	\$ 147,708	\$ -	

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

Year	Experience Losses (a)	Experience Gains (b)	Balances at June 30, 2019	
			Amounts Recognized in Pension Expense Through June 30, 2019 (c)	Deferred Outflows of Resources (a) - (c) / Deferred Inflows of Resources (b) - (c)
Prior	\$ -	\$ -	\$ -	\$ -
2015	-	240,296	220,535	19,761
2016	-	367,023	269,792	97,231
2017	-	579,180	323,067	256,113
2018	-	539,579	184,810	354,769
2019	886,248	-	147,708	738,540
			\$ 738,540	\$ 727,874

City of Beckley, West Virginia Policemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2019 Measurement Date



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	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Thereafter
Prior	\$ -		\$ -	-	-	-	-	-	-	-	-	-	-	-	-
2015	(1,724,947)	5.448048			\$ (316,617)	(316,617)	(316,617)	(316,617)	(316,617)	(141,862)					
2016	7,544,910	5.441533				\$ 1,386,541	1,386,541	1,386,541	1,386,541	1,386,541	612,205				
2017	-	5.378254					\$ -	-	-	-	-	-	-	-	-
2018	(2,425,222)	5.839255						\$ (415,331)	(415,331)	(415,331)	(415,331)	(415,331)	(348,567)		
2019	2,692,393	6							\$ 448,732	448,732	448,732	448,732	448,732	\$ 448,733	-
Net increase (decrease) in pension expense									\$ 1,103,325	\$ 1,278,080	\$ 645,606	\$ 33,401	\$ 100,165	\$ 448,733	\$ -

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, 2019 (c)	Balances at June 30, 2019	
				Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
Prior	\$ -	\$ -	\$ -	\$ -	\$ -
2015	-	1,724,947	1,583,085	-	141,862
2016	7,544,910	-	5,546,164	1,998,746	-
2017	-	-	-	-	-
2018	-	2,425,222	830,662	-	1,594,560
2019	2,692,393	-	448,732	2,243,661	-
				\$ 4,242,407	\$ 1,736,422

City of Beckley, West Virginia Policemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2019 Measurement Date



Projection of Pension Plan's Fiduciary Net Position (Dollar amounts in thousands)

Fiscal Year	Gross Normal Cost (BOY)			Employee Contributions (BOY)			Employer Normal Cost (BOY)			Expenses (MOY)			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
2019	\$ 1,033,614	\$ -	\$ 1,033,614	\$ 209,058	\$ -	\$ 209,058	\$ 824,556	\$ -	\$ 824,556	\$ 10,554	\$ -	\$ 10,554	\$ 550,015	\$ -	\$ 550,015	\$ 528,508	\$ -	\$ 528,508
2020	\$ 1,053,511	\$ 42,550	\$ 1,096,061	\$ 212,969	\$ 10,187	\$ 223,156	\$ 840,542	\$ 32,363	\$ 872,905	\$ 11,142	\$ -	\$ 11,142	\$ 555,275	\$ 33,241	\$ 588,516	\$ 561,153	\$ -	\$ 561,153
2021	\$ 1,061,023	\$ 86,493	\$ 1,147,516	\$ 214,544	\$ 20,718	\$ 235,262	\$ 846,479	\$ 65,775	\$ 912,254	\$ 11,224	\$ 224	\$ 11,448	\$ 561,928	\$ 67,784	\$ 629,712	\$ 574,401	\$ -	\$ 574,401
2022	\$ 1,057,166	\$ 144,649	\$ 1,201,815	\$ 214,130	\$ 34,671	\$ 248,801	\$ 843,036	\$ 109,978	\$ 953,014	\$ 11,417	\$ 458	\$ 11,875	\$ 560,372	\$ 113,420	\$ 673,792	\$ 589,182	\$ -	\$ 589,182
2023	\$ 1,053,693	\$ 203,201	\$ 1,256,894	\$ 213,856	\$ 48,733	\$ 262,589	\$ 839,837	\$ 154,468	\$ 994,305	\$ 11,375	\$ 827	\$ 12,202	\$ 561,471	\$ 159,486	\$ 720,957	\$ 604,368	\$ -	\$ 604,368
2024	\$ 1,048,801	\$ 268,123	\$ 1,316,924	\$ 213,552	\$ 64,342	\$ 277,894	\$ 835,249	\$ 203,781	\$ 1,039,030	\$ 11,688	\$ 1,086	\$ 12,774	\$ 561,028	\$ 210,396	\$ 771,424	\$ 619,973	\$ -	\$ 619,973
2025	\$ 992,146	\$ 335,626	\$ 1,327,772	\$ 203,828	\$ 80,587	\$ 284,415	\$ 788,318	\$ 255,039	\$ 1,043,357	\$ 11,884	\$ 1,363	\$ 13,247	\$ 562,102	\$ 263,322	\$ 825,424	\$ 642,753	\$ -	\$ 642,753
2026	\$ 968,875	\$ 444,840	\$ 1,413,715	\$ 199,909	\$ 106,902	\$ 306,811	\$ 768,966	\$ 337,938	\$ 1,106,904	\$ 12,082	\$ 1,904	\$ 13,986	\$ 534,193	\$ 349,011	\$ 883,204	\$ 659,382	\$ -	\$ 659,382
2027	\$ 968,641	\$ 525,331	\$ 1,493,972	\$ 200,282	\$ 126,303	\$ 326,585	\$ 768,359	\$ 399,028	\$ 1,167,387	\$ 12,282	\$ 2,217	\$ 14,499	\$ 532,957	\$ 412,071	\$ 945,028	\$ 676,469	\$ -	\$ 676,469
2028	\$ 945,676	\$ 598,430	\$ 1,544,106	\$ 196,939	\$ 143,934	\$ 340,873	\$ 748,737	\$ 454,496	\$ 1,203,233	\$ 12,348	\$ 2,682	\$ 15,030	\$ 541,671	\$ 469,509	\$ 1,011,180	\$ 694,026	\$ -	\$ 694,026
2029	\$ 906,589	\$ 704,484	\$ 1,611,073	\$ 190,792	\$ 169,540	\$ 360,332	\$ 715,797	\$ 534,944	\$ 1,250,741	\$ 12,548	\$ 3,166	\$ 15,714	\$ 529,339	\$ 552,624	\$ 1,081,963	\$ 714,614	\$ -	\$ 714,614
2030	\$ 875,713	\$ 807,460	\$ 1,683,173	\$ 186,669	\$ 194,415	\$ 381,084	\$ 689,044	\$ 613,045	\$ 1,302,089	\$ 12,893	\$ 3,392	\$ 16,285	\$ 524,630	\$ 633,070	\$ 1,157,700	\$ 733,211	\$ -	\$ 733,211
2031	\$ 835,475	\$ 913,026	\$ 1,748,501	\$ 181,121	\$ 219,930	\$ 401,051	\$ 654,354	\$ 693,096	\$ 1,347,450	\$ 13,100	\$ 3,919	\$ 17,019	\$ 522,919	\$ 715,820	\$ 1,238,739	\$ 752,320	\$ -	\$ 752,320
2032	\$ 793,151	\$ 1,034,433	\$ 1,827,584	\$ 174,794	\$ 249,293	\$ 424,087	\$ 618,357	\$ 785,140	\$ 1,403,497	\$ 13,309	\$ 4,325	\$ 17,634	\$ 514,684	\$ 810,767	\$ 1,325,451	\$ 771,954	\$ -	\$ 771,954
2033	\$ 696,812	\$ 1,152,151	\$ 1,848,963	\$ 157,086	\$ 277,772	\$ 434,858	\$ 539,726	\$ 874,379	\$ 1,414,105	\$ 13,520	\$ 4,750	\$ 18,270	\$ 515,300	\$ 902,853	\$ 1,418,233	\$ 792,128	\$ -	\$ 792,128
2034	\$ 621,756	\$ 1,300,257	\$ 1,922,013	\$ 143,804	\$ 313,631	\$ 457,435	\$ 477,952	\$ 986,626	\$ 1,464,578	\$ 13,732	\$ 5,351	\$ 19,083	\$ 498,763	\$ 1,018,746	\$ 1,517,509	\$ 838,657	\$ -	\$ 838,657
2035	\$ 609,811	\$ 1,444,417	\$ 2,054,228	\$ 142,567	\$ 348,543	\$ 491,110	\$ 467,244	\$ 1,095,874	\$ 1,563,118	\$ 13,946	\$ 5,981	\$ 19,927	\$ 492,147	\$ 1,131,588	\$ 1,623,735	\$ 860,582	\$ -	\$ 860,582
2036	\$ 529,593	\$ 1,562,668	\$ 2,092,261	\$ 127,564	\$ 377,174	\$ 504,738	\$ 402,029	\$ 1,185,494	\$ 1,587,523	\$ 14,161	\$ 6,314	\$ 20,475	\$ 513,423	\$ 1,223,973	\$ 1,737,396	\$ 883,111	\$ -	\$ 883,111
2037	\$ 459,950	\$ 1,739,931	\$ 2,199,881	\$ 113,112	\$ 420,147	\$ 533,259	\$ 346,838	\$ 1,319,784	\$ 1,666,622	\$ 14,377	\$ 6,998	\$ 21,375	\$ 496,424	\$ 1,362,590	\$ 1,859,014	\$ 906,259	\$ -	\$ 906,259
2038	\$ 413,329	\$ 1,905,152	\$ 2,318,481	\$ 103,255	\$ 460,202	\$ 563,457	\$ 310,074	\$ 1,444,950	\$ 1,755,024	\$ 14,772	\$ 7,364	\$ 22,136	\$ 497,627	\$ 1,491,518	\$ 1,989,145	\$ 930,044	\$ -	\$ 930,044
2039	\$ 380,721	\$ 2,055,925	\$ 2,436,646	\$ 96,570	\$ 496,751	\$ 593,321	\$ 284,151	\$ 1,559,174	\$ 1,843,325	\$ 14,995	\$ 7,750	\$ 22,745	\$ 519,158	\$ 1,609,227	\$ 2,128,385	\$ 965,560	\$ -	\$ 965,560
2040	\$ 341,133	\$ 2,208,071	\$ 2,549,204	\$ 88,052	\$ 533,639	\$ 621,691	\$ 253,081	\$ 1,674,432	\$ 1,927,513	\$ 15,032	\$ 8,338	\$ 23,370	\$ 549,171	\$ 1,728,201	\$ 2,277,372	\$ 990,949	\$ -	\$ 990,949
2041	\$ 298,529	\$ 2,368,014	\$ 2,666,543	\$ 78,566	\$ 572,476	\$ 651,042	\$ 219,963	\$ 1,795,538	\$ 2,015,501	\$ 15,252	\$ 8,761	\$ 24,013	\$ 583,773	\$ 1,853,015	\$ 2,436,788	\$ 1,017,036	\$ -	\$ 1,017,036
2042	\$ 252,139	\$ 2,519,041	\$ 2,771,180	\$ 67,588	\$ 609,238	\$ 676,826	\$ 184,551	\$ 1,909,803	\$ 2,094,354	\$ 15,473	\$ 9,200	\$ 24,673	\$ 636,543	\$ 1,970,820	\$ 2,607,363	\$ 1,043,840	\$ -	\$ 1,043,840
2043	\$ 195,856	\$ 2,675,150	\$ 2,871,006	\$ 53,669	\$ 647,323	\$ 700,992	\$ 142,187	\$ 2,027,827	\$ 2,170,014	\$ 15,491	\$ 10,059	\$ 25,550	\$ 696,973	\$ 2,092,905	\$ 2,789,878	\$ 1,097,096	\$ -	\$ 1,097,096
2044	\$ 141,080	\$ 2,831,367	\$ 2,972,447	\$ 39,432	\$ 685,487	\$ 724,919	\$ 101,648	\$ 2,145,880	\$ 2,247,528	\$ 15,708	\$ 10,545	\$ 26,253	\$ 770,522	\$ 2,214,647	\$ 2,985,169	\$ 1,126,052	\$ -	\$ 1,126,052
2045	\$ 101,669	\$ 2,994,038	\$ 3,095,707	\$ 28,618	\$ 725,267	\$ 753,885	\$ 73,051	\$ 2,268,771	\$ 2,341,822	\$ 15,710	\$ 11,474	\$ 27,184	\$ 852,330	\$ 2,341,801	\$ 3,194,131	\$ 1,155,805	\$ -	\$ 1,155,805
2046	\$ 73,959	\$ 3,143,551	\$ 3,217,510	\$ 21,351	\$ 761,869	\$ 783,220	\$ 52,608	\$ 2,381,682	\$ 2,434,290	\$ 15,700	\$ 12,232	\$ 27,932	\$ 959,186	\$ 2,458,534	\$ 3,417,720	\$ 1,186,376	\$ -	\$ 1,186,376
2047	\$ 53,424	\$ 3,286,876	\$ 3,340,300	\$ 15,566	\$ 797,028	\$ 812,594	\$ 37,868	\$ 2,489,848	\$ 2,527,716	\$ 15,905	\$ 13,016	\$ 28,921	\$ 1,086,542	\$ 2,570,418	\$ 3,656,960	\$ 1,302,038	\$ -	\$ 1,302,038
2048	\$ 37,032	\$ 3,426,518	\$ 3,463,550	\$ 10,723	\$ 831,342	\$ 842,065	\$ 26,309	\$ 2,595,176	\$ 2,621,485	\$ 16,109	\$ 13,607	\$ 29,716	\$ 1,233,752	\$ 2,679,195	\$ 3,912,947	\$ 1,336,514	\$ -	\$ 1,336,514
2049	\$ 26,167	\$ 3,564,348	\$ 3,590,515	\$ 7,594	\$ 865,194	\$ 872,788	\$ 18,573	\$ 2,699,154	\$ 2,717,727	\$ 15,832	\$ 14,934	\$ 30,766	\$ 1,399,532	\$ 2,787,321	\$ 4,186,853	\$ 1,371,938	\$ -	\$ 1,371,938
2050	\$ 17,092	\$ 3,709,145	\$ 3,726,237	\$ 5,030	\$ 900,731	\$ 905,761	\$ 12,062	\$ 2,808,414	\$ 2,820,476	\$ 16,021	\$ 15,591	\$ 31,612	\$ 1,579,730	\$ 2,900,203	\$ 4,479,933	\$ 1,408,336	\$ -	\$ 1,408,336
2051	\$ 11,200	\$ 3,854,328	\$ 3,865,528	\$ 3,328	\$ 936,404	\$ 939,732	\$ 7,872	\$ 2,917,924	\$ 2,925,796	\$ 15,955	\$ 16,526	\$ 32,481	\$ 1,779,909	\$ 3,013,619	\$ 4,793,528	\$ 2,086,543	\$ -	\$ 2,086,543
2052	\$ 6,026	\$ 3,998,710	\$ 4,004,736	\$ 1,854	\$ 971,885	\$ 973,739	\$ 4,172	\$ 3,026,825	\$ 3,030,997	\$ 15,873	\$ 17,501	\$ 33,374	\$ 2,002,625	\$ 3,126,450	\$ 5,129,075	\$ 2,142,416	\$ -	\$ 2,142,416
2053	\$ 3,241	\$ 4,148,413	\$ 4,151,654	\$ 1,027	\$ 1,008,650	\$ 1,009,677	\$ 2,214	\$ 3,139,763	\$ 3,141,977	\$ 16,042	\$ 18,510	\$ 34,552	\$ 2,244,649	\$ 3,243,461	\$ 5,488,110	\$ 2,199,825	\$ -	\$ 2,199,825
2054	\$ 974	\$ 4,302,470	\$ 4,303,444	\$ 336	\$ 1,046,476	\$ 1,046,812	\$ 638	\$ 3,255,994	\$ 3,256,632	\$ 15,934	\$ 19,568	\$ 35,502	\$ 2,508,375	\$ 3,363,903	\$ 5,872,278	\$ 2,258,812	\$ -	\$ 2,258,812
2055	\$ 654	\$ 4,459,554	\$ 4,460,208	\$ 225	\$ 1,085,044	\$ 1,085,269	\$ 429	\$ 3,374,510	\$ 3,374,939	\$ 15,808	\$ 20,670	\$ 36,478	\$ 2,796,600	\$ 3,486,737	\$ 6,283,337	\$ 2,319,422	\$ -	\$ 2,319,422
2056	\$ 439	\$ 4,619,478	\$ 4,619,917	\$ 151	\$ 1,124,307	\$ 1,124,458	\$ 288	\$ 3,495,171	\$ 3,495,459	\$ 15,953	\$ 21,810	\$ 37,763	\$ 3,111,359	\$ 3,611,812	\$ 6,723,171	\$ 5,637,601	\$ -	\$ 5,637,601
2057	\$ -	\$ 4,785,740	\$ 4,785,740	\$ -	\$ 1,165,071	\$ 1,165,071	\$ -	\$ 3,620,669	\$ 3,620,669	\$ 15,796	\$ 23,005	\$ 38,801	\$ 1,377,867	\$ 3,741,910	\$ 5,119,777	\$ -	\$ -	\$ -
2058	\$ -	\$ 4,962,478	\$ 4,962,478	\$ -	\$ 1,208,360	\$ 1,208,360	\$ -	\$ 3,754,118	\$ 3,754,118	\$ 15,618	\$ 24,548	\$ 40,166	\$ 1,561,9	\$ 3,880,522	\$ 3,896,141	\$ -	\$ -	\$ -
2059	\$ -	\$ 5,143,879	\$ 5,143,879	\$ -	\$ 1,252,815	\$ 1,252,815	\$ -	\$ 3,891,064	\$ 3,891,064	\$ 15,733	\$ 25,538	\$ 41,271	\$ 15,733	\$ 4,022,174	\$ 4,037,907	\$ -	\$ -	\$ -

City of Beckley, West Virginia Policemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2019 Measurement Date



Projection of Pension Plan's Fiduciary Net Position (Dollar amounts in thousands)

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
2019	\$ 38,426,374	\$ -	\$ 38,426,374	\$ 23,656,733	61.56%	\$ 214,730	\$ 1,078,523	\$ 1,701,564	\$ 10,554	\$ 1,289,756
2020	\$ 39,880,942	\$ -	\$ 39,880,942	\$ 24,527,624	61.50%	\$ 218,747	\$ 1,116,428	\$ 1,710,433	\$ 11,142	\$ 1,338,536
2021	\$ 41,429,008	\$ 44,593	\$ 41,473,601	\$ 25,479,760	61.50%	\$ 220,365	\$ 1,136,329	\$ 1,760,588	\$ 11,224	\$ 1,390,124
2022	\$ 43,018,627	\$ 137,222	\$ 43,155,849	\$ 26,454,766	61.50%	\$ 219,940	\$ 1,149,554	\$ 1,825,607	\$ 11,417	\$ 1,442,327
2023	\$ 44,624,822	\$ 294,971	\$ 44,919,793	\$ 27,429,563	61.47%	\$ 219,658	\$ 1,165,839	\$ 1,916,870	\$ 11,375	\$ 1,493,900
2024	\$ 46,221,955	\$ 521,180	\$ 46,743,135	\$ 28,380,715	61.40%	\$ 219,346	\$ 1,181,001	\$ 1,988,526	\$ 11,688	\$ 1,544,664
2025	\$ 47,828,169	\$ 825,558	\$ 48,653,727	\$ 29,325,512	61.31%	\$ 209,358	\$ 1,204,855	\$ 2,127,765	\$ 11,884	\$ 1,593,221
2026	\$ 49,319,937	\$ 1,214,367	\$ 50,534,304	\$ 30,193,298	61.22%	\$ 205,333	\$ 1,193,575	\$ 2,233,325	\$ 12,082	\$ 1,637,664
2027	\$ 50,760,777	\$ 1,735,173	\$ 52,495,950	\$ 30,984,463	61.04%	\$ 205,716	\$ 1,209,426	\$ 2,293,642	\$ 12,282	\$ 1,679,977
2028	\$ 52,218,663	\$ 2,364,177	\$ 54,582,840	\$ 31,773,657	60.85%	\$ 202,282	\$ 1,235,697	\$ 2,413,417	\$ 12,348	\$ 1,720,751
2029	\$ 53,609,480	\$ 3,099,267	\$ 56,708,747	\$ 32,506,622	60.64%	\$ 195,969	\$ 1,243,953	\$ 2,546,145	\$ 12,548	\$ 1,757,510
2030	\$ 54,899,226	\$ 3,980,535	\$ 58,879,761	\$ 33,145,361	60.37%	\$ 191,734	\$ 1,257,841	\$ 2,650,717	\$ 12,893	\$ 1,790,056
2031	\$ 56,119,925	\$ 5,011,982	\$ 61,131,907	\$ 33,721,382	60.09%	\$ 186,035	\$ 1,275,239	\$ 2,768,993	\$ 13,100	\$ 1,818,840
2032	\$ 57,243,826	\$ 6,203,644	\$ 63,447,470	\$ 34,219,403	59.78%	\$ 179,536	\$ 1,286,638	\$ 2,888,960	\$ 13,309	\$ 1,843,103
2033	\$ 58,261,668	\$ 7,579,745	\$ 65,841,413	\$ 34,626,411	59.43%	\$ 161,348	\$ 1,307,508	\$ 3,073,353	\$ 13,520	\$ 1,860,553
2034	\$ 59,044,457	\$ 9,145,601	\$ 68,190,058	\$ 34,868,947	59.06%	\$ 147,706	\$ 1,337,420	\$ 3,212,212	\$ 13,732	\$ 1,870,560
2035	\$ 59,648,489	\$ 10,942,486	\$ 70,590,975	\$ 34,998,689	58.67%	\$ 146,435	\$ 1,352,729	\$ 3,266,403	\$ 13,946	\$ 1,876,601
2036	\$ 60,217,480	\$ 12,977,192	\$ 73,194,672	\$ 35,094,105	58.28%	\$ 131,025	\$ 1,396,534	\$ 3,422,329	\$ 14,161	\$ 1,878,383
2037	\$ 60,572,979	\$ 15,233,742	\$ 75,806,721	\$ 35,063,557	57.89%	\$ 116,181	\$ 1,402,683	\$ 3,565,332	\$ 14,377	\$ 1,872,581
2038	\$ 60,727,674	\$ 17,784,408	\$ 78,512,082	\$ 34,875,293	57.43%	\$ 106,057	\$ 1,427,671	\$ 3,659,395	\$ 14,772	\$ 1,860,067
2039	\$ 60,745,077	\$ 20,630,767	\$ 81,375,844	\$ 34,594,920	56.95%	\$ 99,190	\$ 1,484,718	\$ 3,717,229	\$ 14,995	\$ 1,844,433
2040	\$ 60,669,632	\$ 23,772,206	\$ 84,441,838	\$ 34,291,037	56.52%	\$ 90,441	\$ 1,540,120	\$ 3,788,357	\$ 15,032	\$ 1,827,054
2041	\$ 60,475,215	\$ 27,228,898	\$ 87,704,113	\$ 33,945,263	56.13%	\$ 80,698	\$ 1,600,809	\$ 3,855,304	\$ 15,252	\$ 1,807,596
2042	\$ 60,156,394	\$ 31,016,822	\$ 91,173,216	\$ 33,563,810	55.79%	\$ 69,422	\$ 1,680,383	\$ 3,942,752	\$ 15,473	\$ 1,786,091
2043	\$ 59,681,276	\$ 35,121,214	\$ 94,802,490	\$ 33,141,481	55.53%	\$ 55,125	\$ 1,794,069	\$ 4,037,895	\$ 15,491	\$ 1,762,977
2044	\$ 59,022,923	\$ 39,527,541	\$ 98,550,464	\$ 32,700,266	55.40%	\$ 40,502	\$ 1,896,574	\$ 4,135,190	\$ 15,708	\$ 1,738,449
2045	\$ 58,170,637	\$ 44,221,149	\$ 102,391,786	\$ 32,224,894	55.40%	\$ 29,394	\$ 2,008,135	\$ 4,182,947	\$ 15,710	\$ 1,713,734
2046	\$ 57,180,844	\$ 49,198,620	\$ 106,379,464	\$ 31,777,499	55.57%	\$ 21,930	\$ 2,145,562	\$ 4,199,648	\$ 15,700	\$ 1,692,200
2047	\$ 56,090,225	\$ 54,443,968	\$ 110,534,193	\$ 31,421,844	56.02%	\$ 15,978	\$ 2,388,580	\$ 4,205,838	\$ 15,905	\$ 1,678,898
2048	\$ 54,911,599	\$ 59,935,290	\$ 114,846,889	\$ 31,283,556	56.97%	\$ 11,014	\$ 2,570,266	\$ 4,193,170	\$ 16,109	\$ 1,676,425
2049	\$ 53,663,867	\$ 65,647,860	\$ 119,311,727	\$ 31,331,982	58.39%	\$ 7,800	\$ 2,771,470	\$ 4,163,703	\$ 15,832	\$ 1,685,267
2050	\$ 52,366,314	\$ 71,570,281	\$ 123,936,595	\$ 31,616,984	60.38%	\$ 5,166	\$ 2,988,066	\$ 4,126,509	\$ 16,021	\$ 1,707,751
2051	\$ 51,026,024	\$ 77,713,097	\$ 128,739,121	\$ 32,175,437	63.06%	\$ 3,418	\$ 3,866,452	\$ 4,080,039	\$ 15,955	\$ 1,763,514
2052	\$ 49,653,533	\$ 84,075,145	\$ 133,728,678	\$ 33,712,828	67.90%	\$ 1,904	\$ 4,145,041	\$ 4,029,196	\$ 15,873	\$ 1,856,970
2053	\$ 48,252,319	\$ 90,645,562	\$ 138,897,881	\$ 35,671,674	73.93%	\$ 1,055	\$ 4,444,474	\$ 3,971,437	\$ 16,042	\$ 1,974,370
2054	\$ 46,830,426	\$ 97,423,667	\$ 144,254,093	\$ 38,104,094	81.37%	\$ 345	\$ 4,767,187	\$ 3,911,084	\$ 15,934	\$ 2,118,530
2055	\$ 45,389,928	\$ 104,414,333	\$ 149,804,261	\$ 41,063,138	90.47%	\$ 231	\$ 5,116,022	\$ 3,845,078	\$ 15,808	\$ 2,292,533
2056	\$ 43,937,662	\$ 111,612,740	\$ 155,550,402	\$ 44,611,038	101.53%	\$ 155	\$ 8,748,960	\$ 3,777,634	\$ 15,953	\$ 2,588,060
2057	\$ 42,474,568	\$ 119,008,947	\$ 161,483,515	\$ 52,154,626	122.79%	\$ -	\$ 1,377,867	\$ 3,709,766	\$ 15,796	\$ 2,804,807
2058	\$ 41,000,250	\$ 126,609,814	\$ 167,610,064	\$ 52,611,738	128.32%	\$ -	\$ 15,619	\$ 3,639,564	\$ 15,618	\$ 2,794,897
2059	\$ 39,516,951	\$ 134,428,392	\$ 173,945,343	\$ 51,767,072	131.00%	\$ -	\$ 15,733	\$ 3,568,182	\$ 15,733	\$ 2,750,377

City of Beckley, West Virginia Policemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2019 Measurement Date



Projection of Pension Plan's Fiduciary Net Position (Dollar amounts in thousands)

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
2019	\$ 1,701,564	\$ -	\$ 1,656,617	\$ -	\$ 1,656,617
2020	\$ 1,710,433	\$ -	\$ 1,578,437	\$ -	\$ 1,578,437
2021	\$ 1,760,588	\$ -	\$ 1,540,021	\$ -	\$ 1,540,021
2022	\$ 1,825,607	\$ -	\$ 1,513,644	\$ -	\$ 1,513,644
2023	\$ 1,916,870	\$ -	\$ 1,506,456	\$ -	\$ 1,506,456
2024	\$ 1,988,526	\$ -	\$ 1,481,299	\$ -	\$ 1,481,299
2025	\$ 2,127,765	\$ -	\$ 1,502,390	\$ -	\$ 1,502,390
2026	\$ 2,233,325	\$ -	\$ 1,494,715	\$ -	\$ 1,494,715
2027	\$ 2,293,642	\$ -	\$ 1,455,056	\$ -	\$ 1,455,056
2028	\$ 2,413,417	\$ -	\$ 1,451,222	\$ -	\$ 1,451,222
2029	\$ 2,546,145	\$ -	\$ 1,451,217	\$ -	\$ 1,451,217
2030	\$ 2,650,717	\$ -	\$ 1,432,056	\$ -	\$ 1,432,056
2031	\$ 2,768,993	\$ -	\$ 1,417,967	\$ -	\$ 1,417,967
2032	\$ 2,888,960	\$ -	\$ 1,402,275	\$ -	\$ 1,402,275
2033	\$ 3,073,353	\$ -	\$ 1,414,008	\$ -	\$ 1,414,008
2034	\$ 3,212,212	\$ -	\$ 1,400,848	\$ -	\$ 1,400,848
2035	\$ 3,266,403	\$ -	\$ 1,350,219	\$ -	\$ 1,350,219
2036	\$ 3,422,329	\$ -	\$ 1,340,923	\$ -	\$ 1,340,923
2037	\$ 3,565,332	\$ -	\$ 1,324,126	\$ -	\$ 1,324,126
2038	\$ 3,659,395	\$ -	\$ 1,288,209	\$ -	\$ 1,288,209
2039	\$ 3,717,229	\$ -	\$ 1,240,349	\$ -	\$ 1,240,349
2040	\$ 3,788,357	\$ -	\$ 1,198,183	\$ -	\$ 1,198,183
2041	\$ 3,855,304	\$ -	\$ 1,155,788	\$ -	\$ 1,155,788
2042	\$ 3,942,752	\$ -	\$ 1,120,383	\$ -	\$ 1,120,383
2043	\$ 4,037,895	\$ -	\$ 1,087,601	\$ -	\$ 1,087,601
2044	\$ 4,135,190	\$ -	\$ 1,055,742	\$ -	\$ 1,055,742
2045	\$ 4,182,947	\$ -	\$ 1,012,260	\$ -	\$ 1,012,260
2046	\$ 4,199,648	\$ -	\$ 963,319	\$ -	\$ 963,319
2047	\$ 4,205,838	\$ -	\$ 914,445	\$ -	\$ 914,445
2048	\$ 4,193,170	\$ -	\$ 864,161	\$ -	\$ 864,161
2049	\$ 4,163,703	\$ -	\$ 813,354	\$ -	\$ 813,354
2050	\$ 4,126,509	\$ -	\$ 764,065	\$ -	\$ 764,065
2051	\$ 4,080,039	\$ -	\$ 716,076	\$ -	\$ 716,076
2052	\$ 4,029,196	\$ -	\$ 670,287	\$ -	\$ 670,287
2053	\$ 3,971,437	\$ -	\$ 626,236	\$ -	\$ 626,236
2054	\$ 3,911,084	\$ -	\$ 584,568	\$ -	\$ 584,568
2055	\$ 3,845,078	\$ -	\$ 544,741	\$ -	\$ 544,741
2056	\$ 3,777,634	\$ -	\$ 507,286	\$ -	\$ 507,286
2057	\$ 3,709,766	\$ -	\$ 472,201	\$ -	\$ 472,201
2058	\$ 3,639,564	\$ -	\$ 439,114	\$ -	\$ 439,114
2059	\$ 3,568,182	\$ -	\$ 408,058	\$ -	\$ 408,058
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A	#N/A	#N/A