

GASB 68 Actuarial Information for the Measurement Period Ending June 30, 2022

Bolton

Submitted by:

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November 28, 2022

Mr. Billie Trump City Treasurer, Recorder City of Beckley P.O. Box 2514 Beckley, WV 25801 Captain Ernest Parsons, Jr. Pension Board Secretary City of Beckley Firemen's Pension and Relief Fund

Re: City of Beckley Firemen's Pension and Relief Fund GASB 68 Actuarial Information for the Measurement Period Ending June 30, 2022

Dear Billie,

The following report contains the GASB 67 and GASB 68 actuarial information for the City of Beckley Firemen's Pension and Relief Fund to be included in the City's financial statements for FY 2022. The GASB 67 information has been provided as of June 30, 2022 (the GASB 68 measurement date for FY 2022).

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, 2022 (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, 2021 actuarial valuation rolled forward to June 30, 2022. The methods, assumptions, and participant data used are detailed in the July 1, 2021 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, 2022 is contained in the July 1, 2020 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 3.69% 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, 2022. 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, 2022 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 funded status (current and projected), equity exposure, and funding policy.

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.

Mr. Billie Trump November 28, 2022 Page 2

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. 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.



Mr. Billie Trump November 28, 2022 Page 3

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, 2021 actuarial valuation report contains information that is integral to the results contained herein and a copy may be provided upon request.

Sincerely,

Jams Ratelie

James Ritchie, ASA, EA, FCA, MAAA

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Jordan McClane, FSA, EA, FCA, MAAA



Actuarial Information to Include in the Financial Statements for the June 30, 2022 Measurement Date



Net Pension Liability of the Employer

The components of the net pension liability of the Employer at June 30, 2022, were as follows:

Total pension liability	\$ 42,365,886
Plan fiduciary net position	(21,630,738)
Employer's net pension liability	\$ 20,735,148
Plan fiduciary net position as a percentage of the total pension liability	51.06%

Actuarial assumptions. The total pension liability was determined by an actuarial valuation as of July 1, 2021 rolled forward to June 30, 2022 using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.50 percent
Salary increases	Rates vary by years of service
Single discount rate (BOY)	4.75%
Single discount rate (EOY)	5.50%
Investment rate of return (BOY)	4.75%, 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 municpal bond rate (BOY)	1.92%
Long-term municpal bond rate (EOY)	3.69%
Mortality	SOA PubS-2010(B) with generational projection using Scale MP-2019
Year Fund is projected to be fully funded	2043
Year assets are expected to be depleted	N/A
for a closed plan	

The above is a summary of key actuarial assumptions. Full descriptions of the actuarial assumptions are available in the July 1, 2021 actuarial valuation report.

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

	Current				
	1% Decrease 4.50%	Discount Rate 5.50%	1% Increase 6.50%		
Employer's net pension liability	\$ 26,263,897	\$ 20,735,148	\$ 16,220,709		

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Changes in the Net Pension Liability

	Increase (Decrease)			
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)	
Balances at 6/30/21	\$ 46,788,053	\$ 23,696,091	\$ 23,091,962	
Changes for the year:				
Service cost	1,102,273	3	1,102,273	
Interest	2,178,166	5	2,178,166	
Changes of benefit terms	-		-	
Differences between expected and actual experience	(1,802,965	5)	(1,802,965)	
Changes of assumptions	(4,035,786	5)	(4,035,786)	
Contributions - employer (including Premium Tax Allocation)		1,403,746	(1,403,746)	
Contributions - member		285,190	(285,190)	
Net investment income		(1,890,420)	1,890,420	
Benefit payments, including refunds of member contributions	(1,863,855	5) (1,863,855)	-	
Administrative expense		(14)	14	
Other		-	-	
Net Changes	(4,422,167	(2,065,353)	(2,356,814)	
Balances at 6/30/22	\$ 42,365,886	\$ 21,630,738	\$ 20,735,148	

Return on Investments

(8.0%)



Components of Employer's Pension Expense for the Fiscal Year Ended June 30, 2022

Note	Description	Amount
А	Service cost	\$ 1,102,273
В	Interest on the total pension liability	2,178,166
А	Changes of benefit terms	-
С	Differences between expected and actual experience	(398,962)
С	Changes of assumptions	(3,023,312)
А	Employee contributions	(285,190)
D	Projected earnings on pension plan investments	(1,121,409)
С	Differences between expected and actual earnings on	(311,892)
	plan investments	
А	Pension plan administrative expense	14
А	Other changes in fiduciary net position	-
	Total Pension Expense	\$ (1,860,312)

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	\$ 46,788,053	100%	4.75%	\$ 2,222,433
Service cost (End of Year)	1,102,273	0%	4.75%	-
Benefit payments, including refunds of employee contributions	(1,863,855)	50%	4.75%	(44,267)
Total interest on the total pension liability				\$ 2,178,166

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	\$ 23,696,091	100%	4.75%	\$ 1,125,564
Employer contributions	1,403,746	50%	4.75%	33,339
Employee contributions	285,190	50%	4.75%	6,773
Benefit payments, including refunds of employee contributions	(1,863,855)	50%	4.75%	(44,267)
Administrative expense and other	(14)	50%	4.75%	-
Total Projected Earnings				\$ 1,121,409



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

At June 30, 2022, the Employer reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	 ed Outflows Resources	Deferred Inflows of Resources		
Differences between expected and actual experience	\$ 243,291	\$	1,851,557	
Changes of assumptions	-		5,771,619	
Net difference between projected and actual earnings	185,530			
on pension plan investments			-	
Total	\$ 428,821	\$	7,623,176	

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:	
2023	\$ (4,289,284)
2024	(1,922,969)
2025	(1,584,467)
2026	602,365
2027	-
Thereafter	-

Actuarial Information to Include in the Financial Statements for the June 30, 2022 Measurement Date

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

Service cost Interest \$ 1.102_272 \$ 972,28 \$ 1.443,773 \$ 1.443,703 \$ 1.443,038 \$ 716,616 \$ 743,440 \$ 619,461 \$ Interest 2,178,166 2,287,289 2,006,860 1.395,876 1,040,335 1,977,837 1,914,30 \$ 1,914,30 \$ 1,914,30 \$ 1,914,30 \$ 1,914,30 \$ 1,914,335 1,977,837 1,914,30 \$ 1,914,30 \$ 1,914,335 1,977,837 1,914,30 1,917,837 \$ 1,914,335 1,977,837 1,914,335 1,917,837 \$ 1,914,3155 (1,914,3155) (1,914,3155) (1,914,3155) 1,914,3155) 1,914,3155 1,914,314	Total pension liability	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Changes of benefit terms 240.195 1.717.861 1.717.861 1.717.861 1.818.20.90 443.682 443.682 443.692 - Differences between expected and adrual experience (1.902.965) 448.683 (1.977.322) 1.717.861 (1147.78.140) (3.398.993) 13.842.099 - <td< td=""><td>Service cost</td><td>\$ 1,102,273</td><td>\$ 979,236</td><td>\$ 1,407,737</td><td>\$ 1,433,473</td><td>\$ 1,372,807</td><td>\$ 1,483,038</td><td>\$ 716,515</td><td>\$ 743,480</td><td>\$ 691,461</td><td>\$-</td></td<>	Service cost	\$ 1,102,273	\$ 979,236	\$ 1,407,737	\$ 1,433,473	\$ 1,372,807	\$ 1,483,038	\$ 716,515	\$ 743,480	\$ 691,461	\$-
Differences between expected and atual experience (1.802.965) (486.583) (1.997.332) 1.717.861 (114.768) 380.786 (413.682) 491.509 - Changes of assumptions (1.983.786) (1.981.987) (1.983.926) (1.983.926) (1.983.926) (1.983.926) (1.983.926) (1.983.926) (1.983.926) (1.983.926) (1.771.874) (1.771.87	Interest	2,178,166	2,287,269	2,109,239	2,006,880	1,956,976	1,804,335	1,977,837	1,951,130	1,895,401	-
Changes of assumptions (4,035,786) (1,957,586) (7,063,929) 964,067 (777,140) (3,368,983) 13,842,099	Changes of benefit terms	-	240,195	-	-	-	-	-	-	-	-
Benefit payments, including refunds of member contributions (1,963,965) (1,961,930) (2,023,622) (1,963,965) (1,771,874) (1,718,97) Net change in total persion liability - beginning 46,788,053 46,788,395 54,244,510 50,145,861 49,668,955 51,242,944 38,912,015 35,497,770 \$4,629,845 Total pension liability - beginning 46,788,053 46,788,395 \$4,788,395 \$5,0145,861 \$49,668,955 \$1,242,944 \$3,912,015 \$3,5497,770 \$4,629,845 Total pension liability - ending (a) \$4,738,395 \$4,738,395 \$5,142,944 \$3,912,015 \$3,5497,770 \$4,629,845 Contributions - employer (including Premium Tax Allocation) \$1,433,806 \$1,271,676 \$1,334,750 \$1,216,720 \$1,008,827 \$1,003,861 \$9,49,863 \$887,837 \$ Senterit payments, including refunds of member contributions (1,864,450) (1,964,630) (1,961,630) (1,961,630) (1,961,830) (2,023,622) (1,893,931) 777,181 \$390,578 \$2,047,093 Benefit payments, including refunds of member contributions (1,984,830) (1,961,830) <	Differences between expected and actual experience	(1,802,965)	486,583	(1,997,332)	1,717,861	(114,768)	380,786	(413,682)	491,509	-	-
Net change in total pension liability - beginning (4,422,167) (4,628,053) (4,780,053) (1,573,898) (1,4330,929) (1,414,245) 667,925 Total pension liability - beginning (4,628,053) 46,788,053 \$4,6738,395 \$54,244,510 \$50,145,861 49,668,955 \$51,242,944 \$36,912,015 \$35,407,770 \$4,628,855 Total pension liability - ending (a) \$242,558,86 \$46,788,053 \$46,788,053 \$50,145,861 \$49,668,955 \$51,242,944 \$36,912,015 \$35,407,770 \$4,628,055 Plan fiduciary net position 2022 2021 2020 2019 2018 2017 2016 2015 2014 Contributions - employer (including Permium Tax Allocation) \$1,403,746 \$1,343,896 \$1,271,676 \$1,343,450,02 \$1,269,796 \$1,418,415 \$1,003,851 \$943,850 \$887,837 \$ Net investment income (1,890,420) 4,600,863 710,419 1,324,022 1,226,796 \$1,318,457 \$1,71,474 \$152,499 \$150,637 \$2,047,099 Benefit payments, including refunds of member contributions (1,860,830)<	•		(1,957,595)	• • • •	964,067	· · · /	(3,398,993)	13,842,099	-		-
Total pension liability - beginning 46, 788, 053 46, 788, 395 54, 244, 510 50, 145, 861 49, 688, 955 51, 242, 944 36, 912, 015 35, 497, 770 34, 629, 845 Total pension liability - ending (a) \$ 42, 365, 886 \$ 46, 788, 395 \$ 54, 244, 510 \$ 50, 145, 861 \$ 49, 668, 955 \$ 51, 242, 944 \$ 36, 912, 015 \$ 35, 497, 770 \$ 34, 629, 845 Plan fiduciary net position 2022 2021 2020 2019 2018 2017 2016 2015 21, 42, 944 \$ 36, 912, 015 \$ 3, 497, 770 \$ \$ Contributions - employer (including Ptemium Tax Allocation) \$ 1, 403, 746 \$ 1, 343, 896 \$ 1, 271, 676 \$ 1, 324, 502 \$ 1, 216, 720 \$ 1, 056, 279 \$ 1, 0058, 279 \$ 1, 0058, 278 \$ 943, 860 \$ 88, 873 \$ 50, 777 \$ 98, 993, 993 \$ 771, 981 \$ 943, 860 \$ 88, 873 \$ 50, 773 \$ 1, 216, 670 \$ 1, 216, 720 \$ 1, 0058, 279 \$ 1, 0058, 279 \$ 1, 0058, 279 \$ 1, 0058, 279 \$ 1, 0058, 279 \$ 1, 0058, 279 \$ 1, 0058, 279 \$ 1, 0058, 279 \$ 1, 0058, 279 \$ 1, 0058, 279 \$ 1, 0058, 279 \$ 1, 0058, 279 \$ 1, 0058, 279 \$ 1, 0058, 279 \$ 1, 0058, 279				(, , ,		(, , ,		(,			-
Total pension liability - ending (a) \$ 42,365,886 \$ 46,788,053 \$ 46,738,395 \$ 54,244,510 \$ 50,145,861 \$ 49,668,955 \$ 51,242,944 \$ 36,912,015 \$ 35,497,770 \$ Plan fiduciary net position 2022 2021 2020 2019 2018 2017 2016 2015 2014 Contributions - employer (including Premium Tax Allocation) \$ 14,03,746 \$ 1,334,896 \$ 1,271,676 \$ 1,334,870 \$ 1,216,720 \$ 1,068,879 \$ 1,003,851 \$ 943,850 \$ 887,837 \$ 02,652 2014 2017 2016 2015 2014 Contributions - employer (including refunds of member contributions 1,980,420 4,600,863 710,419 1,324,093 1,289,931 771,981 50,578 2,047,099 2,047,099 2,047,099 2,047,099 2,047,099 2,047,099 2,047,099 2,047,099 2,047,099 2,047,099 2,047,099 2,047,099 2,047,099 2,047,099 2,047,099 2,047,099 2,047,099 2,047,019 2,047,019 2,047,019 2,047,019 2,047,019 2,047,019 2,047,019		,	,	(, , , ,	, ,	,	(, , ,		, ,	•	-
Plan fiduciary net position 2022 2021 2020 2019 2018 2017 2016 2015 2014 Contributions - employer (including Premium Tax Allocation) \$ 1,403,746 \$ 1,343,896 \$ 1,271,676 \$ 1,334,570 \$ 1,216,720 \$ 1,003,851 \$ 943,850 \$ 887,837 \$ Contributions - member \$ 1,890,4200 4,600,863 710,419 1,324,032 1,226,726 \$ 1,987,931 771,981 \$ 943,850 \$ 887,837 \$ 2047,099 \$ 1,269,796 1,387,931 771,981 \$ 590,578 2,047,099 \$ 1,71,874,910 \$ 1,71,874,91 \$ 1,71,874,91 \$ 1,71,874,91 \$ 1,71,874,91 \$ 1,71,874,91 \$ 1,71,874,91 \$ 1,71,874,91 \$ 1,71,874,91 \$ 1,71,874,91 \$ 1,71,874,91 \$ 1,71,874,91 \$ 1,71,874,91 \$ 1,71,874,91 \$ 1,71,874,91 \$ 1,71,874,91 \$ 1,71,874,91 \$ 1,318,621 \$ 1,318,621 \$		46,788,053	46,738,395	54,244,510	50,145,861	49,668,955	51,242,944	36,912,015	35,497,770	34,629,845	-
Contributions - employer (including Premium Tax Allocation) \$ 1,403,746 \$ 1,343,896 \$ 1,271,676 \$ 1,334,570 \$ 1,216,720 \$ 1,003,851 \$ 943,850 \$ 887,837 \$ 000,853 Contributions - employer (including Premium Tax Allocation) 285,190 230,632 220,835 131,084 179,050 174,156 \$ 1,003,851 \$ 943,850 \$ 887,837 \$ 000,863 Net investment income (1,890,420) 4,600,863 710,419 1,324,032 1,269,766 1,387,931 771,981 590,576 2.047,009 Benefit payments, including refunds of member contributions (1,863,855) (1,986,030) (1,961,830) (2,023,632) (1,819,968) (1,879,931 771,981 590,576 \$ 0,072,0 (5,411) Other (1) (3,042) (7,007) (20) (81) (24) - (50,002) (55,411) Other (1) (3,042) (7,077) (20) (81) (24) - (50,002) (55,411) Other (1) (3,042) (7,077) 19,275,679 \$ 826,034 \$ 777,189 \$ 15,78,742 16,980,938 \$ 16,814,980 \$ 16,958,929	Total pension liability - ending (a)	\$ 42,365,886	\$ 46,788,053	\$ 46,738,395	\$ 54,244,510	\$ 50,145,861	\$ 49,668,955	\$ 51,242,944	\$ 36,912,015	\$ 35,497,770	\$-
Contributions - member 285,190 230,632 220,835 191,084 179,050 174,158 167,664 152,499 158,033 Net investment income (1,890,420) 4,600,063 710,419 1,324,032 1,269,796 1,387,951 771,191 590,578 2,047,099 Benefit payments, including refunds of member contributions (1,863,855) (1,986,430) (2,023,632) (2,023,632) (1,959,969) (1,843,155) (1,71,184) (1,71,1874) (1,71,814) (1,71,814) (1,71,814) (1,71,814) (1,71,814) (1,81,815) (1,81,915) (1,81,915) (1,81,915) (1,81,915) (1,81,	Plan fiduciary net position	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Contributions - member 285,190 230,632 220,835 191,084 179,050 174,158 167,664 152,499 158,033 Net investment income (1,890,220) 4,600,863 710,419 1,324,032 1,269,796 1,387,931 771,981 590,578 2,047,099 Benefit parmets, including refunds of member contributions (1,863,855) (1,986,835) (1,961,830) (2,026,783) (1,91,840) (1,91,840) (1,91,840) (1,71,874) (1,71,874) (1,71,874) (1,71,874) (1,71,874) (1,71,874) (1,71,874) (1,71,874) (1,71,874) (1,71,874) (1,71,874) (1,71,874) (1,71,874) (1,71,874) (1,71,874) (1,71,874) (1,71,874) (1,71,874) (1,71,874) (1,959,929) 15,640,308 (1,959,929) 15,640,308 (1,959,929) 15,640,308 (1,959,929) 15,640,308 (1,959,929) 16,890,938 16,819,800 \$ 16,958,929 \$ 16,958,929 \$ 16,958,929 \$ 16,958,929 \$ 16,958,929 \$ 16,958,929 \$ 16,958,929 \$ 16,958,929 \$ 16,958,929 \$ 16,958,929 <td< td=""><td>Contributions - employer (including Premium Tax Allocation)</td><td>\$ 1,403,746</td><td>\$ 1,343,896</td><td>\$ 1,271,676</td><td>\$ 1,334,570</td><td>\$ 1,216,720</td><td>\$ 1,058,279</td><td>\$ 1,003,851</td><td>\$ 943,850</td><td>\$ 887,837</td><td>\$-</td></td<>	Contributions - employer (including Premium Tax Allocation)	\$ 1,403,746	\$ 1,343,896	\$ 1,271,676	\$ 1,334,570	\$ 1,216,720	\$ 1,058,279	\$ 1,003,851	\$ 943,850	\$ 887,837	\$-
Net investment income (1,890,420) 4,600,863 710,419 1,324,032 1,269,796 1,387,931 771,981 590,578 2,047,099 Benefit payments, including refunds of member contributions (1,883,855) (1,966,030) (1,961,830) (2,023,632) (1,959,969) (1,843,155) (1,771,874) (1,771,873) (1,718,937)											-
Benefit payments, including refunds of member contributions (1,863,855) (1,986,030) (1,961,830) (2,023,632) (1,959,969) (1,843,155) (1,71,840) (1,771,874) (1,718,937) Administrative expense (14) (3,042) (7,007) (20) (81) (24) - (59,002) (55,411) Other * (2,065,353) \$ 4,186,319 \$ 234,093 \$ 826,034 \$ 775,516 \$ 777,189 \$ (1,43,494) \$ 1,318,621 \$ \$ 1,318,621 \$ \$ 1,318,621 \$ \$ 1,318,621 \$ \$ 1,318,621 \$ \$ 1,318,621 \$ \$ 1,318,621 \$ \$ 1,318,621 \$ \$ 1,318,621 \$ \$ 1,318,621 \$ \$ 1,318,621 \$ \$ 1,318,621 \$ \$ 1,318,621 \$ \$ 1,318,621 \$ \$ 1,318,621 \$ \$ 1,318,621 \$ \$ 1,6,958,929 15,640,308 \$ 1,6,958,929 15,640,308 \$ 1,6,958,929			•	•	•	•	•	•	•	•	-
Other Image: Inclusion of the constraint of the constrai	Benefit payments, including refunds of member contributions	(1,863,855)	(1,986,030)	(1,961,830)	(2,023,632)	(1,959,969)	(1,843,155)	(1,791,840)	(1,771,874)	(1,718,937)	-
Other Image: Inclusion of the change in plan fiduciary net position \$ (2,065,353) \$ 4,186,319 \$ 234,093 \$ 826,034 \$ 775,516 \$ 777,189 \$ 151,656 \$ (143,949) \$ 1,318,621 \$ 1,318,	Administrative expense	(14)	(3,042)	(7,007)	(20)	(81)	(24)	-	(59,002)	(55,411)	-
Plan fiduciary net position - beginning 23,696,091 19,509,772 19,275,679 18,449,645 17,744,129 16,966,940 16,738,742 16,958,929 15,640,308 Plan fiduciary net position - ending (b) \$ 21,630,738 \$ 23,696,091 \$ 19,509,772 \$ 19,275,679 \$ 18,449,645 \$ 17,744,129 \$ 16,890,398 \$ 16,814,980 \$ 16,958,929 \$ 15,640,308 Employer's net pension liability - ending (a)-(b) \$ 20,735,148 \$ 23,091,962 \$ 27,228,623 \$ 34,968,831 \$ 31,696,216 \$ 34,352,546 \$ 20,097,035 \$ 18,538,841 \$ Plan fiduciary net position as a percentage of the total pension liability 51.06% 50.65% 41.74% 35.53% 36.79% 35.72% 32.96% 45.55% 47.77% Covered payroll \$ 2,779,350 \$ 2,640,634 \$ 2,299,930 \$ 2,289,203 \$ 2,183,999 \$ 2,080,112 \$ 2,028,434 \$ 2,075,097 \$ 1,957,139 Employer's net pension liability as a percentage of Employer's net pension liability as a percentage of \$ 2,075,097 \$ 1,957,139	•	-	-	-	-	-	-	-	-	-	-
Plan fiduciary net position - ending (b) \$ 21,630,738 \$ 23,696,091 \$ 19,509,772 \$ 19,275,679 \$ 18,449,645 \$ 17,744,129 \$ 16,890,398 \$ 16,814,980 \$ 16,958,929 \$ Employer's net pension liability - ending (a)-(b) \$ 20,735,148 \$ 23,091,962 \$ 27,228,623 \$ 31,696,216 \$ 31,924,826 \$ 34,352,546 \$ 20,097,035 \$ 18,538,841 \$ Plan fiduciary net position as a percentage of the total pension liability 51.06% 50.65% 41.74% 35.53% 36.79% 35.72% 32.96% 45.55% 47.77% Covered payroll \$ 2,779,350 \$ 2,640,634 \$ 2,299,930 \$ 2,289,203 \$ 2,183,999 \$ 2,080,112 \$ 2,028,434 \$ 2,075,097 \$ 1,957,139 Employer's net pension liability as a percentage of \$ 2,779,350 \$ 2,640,634 \$ 2,299,930 \$ 2,289,203 \$ 2,183,999 \$ 2,080,112 \$ 2,028,434 \$ 2,075,097 \$ 1,957,139 Employer's net pension liability as a percentage of \$ 2,779,350 \$ 2,640,634 \$ 2,299,930 \$ 2,289,203 \$ 2,183,999 \$ 2,080,112 \$ 2,028,434 \$ 2,075,097 \$ 1,957,139	Net change in plan fiduciary net position	\$ (2,065,353)	\$ 4,186,319	\$ 234,093	\$ 826,034	\$ 705,516	\$ 777,189	\$ 151,656	\$ (143,949)	\$ 1,318,621	\$-
Plan fiduciary net position - ending (b) \$ 21,630,738 \$ 23,696,091 \$ 19,509,772 \$ 19,275,679 \$ 18,449,645 \$ 17,744,129 \$ 16,890,398 \$ 16,814,980 \$ 16,958,929 \$ Employer's net pension liability - ending (a)-(b) \$ 20,735,148 \$ 23,091,962 \$ 27,228,623 \$ 31,696,216 \$ 31,924,826 \$ 34,352,546 \$ 20,097,035 \$ 18,538,841 \$ Plan fiduciary net position as a percentage of the total pension liability 51.06% 50.65% 41.74% 35.53% 36.79% 35.72% 32.96% 45.55% 47.77% Covered payroll \$ 2,779,350 \$ 2,640,634 \$ 2,299,930 \$ 2,289,203 \$ 2,183,999 \$ 2,080,112 \$ 2,028,434 \$ 2,075,097 \$ 1,957,139 Employer's net pension liability as a percentage of \$ 2,779,350 \$ 2,640,634 \$ 2,299,930 \$ 2,289,203 \$ 2,183,999 \$ 2,080,112 \$ 2,028,434 \$ 2,075,097 \$ 1,957,139 Employer's net pension liability as a percentage of \$ 2,779,350 \$ 2,640,634 \$ 2,299,930 \$ 2,289,203 \$ 2,183,999 \$ 2,080,112 \$ 2,028,434 \$ 2,075,097 \$ 1,957,139	Plan fiduciary net position - beginning	23,696,091	19,509,772	19,275,679	18,449,645	17,744,129	16,966,940	16,738,742	16,958,929	15,640,308	-
Plan fiduciary net position as a percentage of the total pension liability 51.06% 50.65% 41.74% 35.53% 36.79% 35.72% 32.96% 45.55% 47.77% Covered payroll \$ 2,779,350 \$ 2,640,634 \$ 2,299,930 \$ 2,289,203 \$ 2,183,999 \$ 2,080,112 \$ 2,028,434 \$ 2,075,097 \$ 1,957,139 Employer's net pension liability as a percentage of Employer		\$ 21,630,738	\$ 23,696,091	\$ 19,509,772	\$ 19,275,679	\$ 18,449,645			\$ 16,814,980		\$-
total pension liability 51.06% 50.65% 41.74% 35.53% 36.79% 35.72% 32.96% 45.55% 47.77% Covered payroll \$ 2,779,350 \$ 2,640,634 \$ 2,299,930 \$ 2,289,203 \$ 2,183,999 \$ 2,028,434 \$ 2,075,097 \$ 1,957,139 Employer's net pension liability as a percentage of	Employer's net pension liability - ending (a)-(b)	\$ 20,735,148	\$ 23,091,962	\$ 27,228,623	\$ 34,968,831	\$ 31,696,216	\$ 31,924,826	\$ 34,352,546	\$ 20,097,035	\$ 18,538,841	\$-
Covered payroll \$ 2,779,350 \$ 2,640,634 \$ 2,299,930 \$ 2,289,203 \$ 2,183,999 \$ 2,080,112 \$ 2,028,434 \$ 2,075,097 \$ 1,957,139 Employer's net pension liability as a percentage of											
Employer's net pension liability as a percentage of	total pension liability	51.06%	50.65%	41.74%	35.53%	36.79%	35.72%	32.96%	45.55%	47.77%	N/A
	Covered payroll	\$ 2,779,350	\$ 2,640,634	\$ 2,299,930	\$ 2,289,203	\$ 2,183,999	\$ 2,080,112	\$ 2,028,434	\$ 2,075,097	\$ 1,957,139	N/A
		746.04%	874.49%	1183.89%	1527.55%	1451.29%	1534.76%	1693.55%	968.49%	947.24%	N/A
Expected average remaining service years of all participants 4.00 4.00 4.00 4.00 3.87 3.52 3.64 3.66 N/A	Expected average remaining service years of all participants	4.00	4.00	4.00	4.00	3.87	3.52	3.64	3.66	N/A	N/A

Notes to Schedule:

Benefit changes:

There were no changes for FY2022.

Changes of assumptions: The discount rate changed from 4.75% to 5.50%.

*Market value of assets as of July 1, 2016, includes \$76,542, excluded from the market value of assets as of June 30, 2016, used for the actuarial valuation report for the fiscal year end June 30, 2016.

*Market value of assets as of July 1, 2015, excludes \$76,238, included in the market value of assets as of June 30, 2015, used for the actuarial valuation report for the fiscal year end June 30, 2015.



Actuarial Information to Include in the Financial Statements for the June 30, 2022 Measurement Date

Schedule of Employer Contributions Last 10 Fiscal Years

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Actuarially determined contribution	\$ 2,531,939	\$ 2,524,427	\$ 2,840,851	\$ 2,674,661	\$ 2,367,135	\$ 2,253,955	\$ 2,093,433	\$ 1,468,949	\$ 1,398,526	\$ 1,514,033
Contributions in relation to the actuarially determined contribution										
Employer provided	882,858	825,101	771,122	870,675	773,528	629,465	588,285	549,799	513,831	480,216
State provided	520,888	518,795	500,554	463,895	443,192	428,814	415,566	394,051	342,815	444,551
Contribution deficiency (excess)	\$ 1,128,193	\$ 1,180,531	\$ 1,569,175	\$ 1,340,091	\$ 1,150,415	\$ 1,195,676	\$ 1,089,582	\$ 525,099	\$ 541,880	\$ 589,266
Covered payroll	\$ 2,779,350	\$ 2,640,634	\$ 2,299,930	\$ 2,289,203	\$ 2,183,999	\$ 2,080,112	\$ 2,028,434	\$ 2,075,097	\$ 1,957,139	\$ 1,933,420
Contributions as a percentage of covered employee payroll	50.51%	50.89%	55.29%	58.30%	55.71%	50.88%	49.49%	45.48%	43.77%	47.83%

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. The assumption shown below are those used in the 7/1/2020 actuarial valuation to calculate the FY2022 ADC. Assumptions used to determine all contributions in the past would not have been the same.

Methods and assumptions used to determine contribution rates:

Actuarial cost method	Entry Age Normal
Amortization method	Level Dollar
Remaining amortization period	15 to 28.5 years
Asset valuation method	Market Value
Inflation	2.50 percent
Salary increases	Rates vary by years of service
Investment rate of return	4.75%, net of pension plan investment expense, including inflation
Retirement age	Rates vary by age
Mortality	SOA PubS-2010(B) with generational projection using Scale MP-2019



Actuarial Information to Include in the Financial Statements for the June 30, 2022 Measurement Date

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

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

Year	betw and A on I	Differences veen Projected Actual Earnings Pension Plan nvestments	Recognition Period (Years)	2018	5 (50	2019	2020	2021	giitto	n of Differenc 2022)23	2024	inigs	2025	Strien	2026
2018	\$	(576,807)	5	\$ (115,361)		(115,361)	(115,361)	(115,361)		(115,363)							
2019		(505,003)	5		\$	(101,001)	(101,001)	(101,001)		(101,001)	((100,999)					
2020		146,270	5				\$ 29,254	29,254		29,254		29,254	29,254				
2021		(3,635,738)	5					\$ (727,148)		(727,148)	((727,148)	(727,148)		(727,146)		
2022		3,011,829	5						\$	602,366	·	602,366	602,366		602,366		602,365
Net increa	se (dec	rease) in pension	expense						\$	(311,892)	\$ ((196,527)	\$ (95,528)	\$	(124,780)	\$	602,365

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

						Balan June 3		
Year	nent Earnings nan Projected (a)	Investment Earnir Greater Than Proje (b)		Amounts Recognized in Pension Expense Through June 30, 2022 (c)	O	Deferred outflows of Resources (a) - (c)	Í	Deferred nflows of tesources (b) - (c)
2018	\$ -	\$ 5	576,807	\$ 576,807	\$	-	\$	-
2019	-	Į.	505,003	404,004		-		100,999
2020	146,270		-	87,762		58,508		-
2021	-	3,6	635,738	1,454,296		-		2,181,442
2022	3,011,829		-	602,366		2,409,463		-
					\$	2,467,971	\$	2,282,441



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.

Year	Differences between Expected and Actual	Recognition Period	Prior	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	and Actual Expension	2024	2025	2026	2027	The
	Experience	(Years)	FIIO	2013	2014	2015	2010	2017	2010	2019	2020	2021	2022	2023	2024				There
Prior	-	-														-	-		-
2013	-	-																	
2014	-	-				• • • • • • • • •													
2015	491,509	3.661516				\$ 134,236		134,236	88,801										
2016	(413,682)	3.643525					\$ (113,539)	(113,539)	(113,539)	(73,065)									
2017	380,786	3.518348						\$ 108,229	108,229	108,229	56,099								
2018	(114,768)	3.871779							\$ (29,642)	(29,642)	(29,642)	(25,842)							
2019	1,717,861	4.000000								\$ 429,465	429,465	429,465	429,466						
2020	(1,997,332)	4.000000								. ,	\$ (499,333)	(499,333)	(499,333)	(499,333)					
2021	486,583	4.000000									, ,	\$ 121,646	121,646	121,646	121,645				
2022	(1,802,965)	4.000000											\$ (450,741)	(450,741)	(450,741)	(450,742)			
	se (decrease) in pen												\$ (398,962)	\$ (828,428)	\$ (329,096)	· · · · · ·	\$ -	\$	- \$

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

					ices at 0, 2022
Year	Experience Losses (a)	Experience Gains (b)	Amounts Recognized in Pension Expense Through June 30, 2022 (c)	Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
Prior	\$-	\$-	\$-	\$-	\$-
2013	-	-	-	-	-
2014	-	-	-	-	-
2015	491,509	-	491,509	-	-
2016	-	413,682	413,682	-	-
2017	380,786	-	380,786	-	-
2018	-	114,768	114,768	-	-
2019	1,717,861	-	1,717,861	-	-
2020	-	1,997,332	1,497,999	-	499,333
2021	486,583	-	243,292	243,291	-
2022	-	1,802,965	450,741	-	1,352,224
				\$ 243,291	\$ 1,851,557





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 pension pension pension 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.

								Incr	rease (Decrease) i	in Pension Exp	ense Arising fro	m the Effects of	Changes of Assumpt	ions						
Year	Changes of Assumptions	Recognition Period (Years)	Prior	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	Thereafte	er
Prior	\$-	-																		-
2013	-	-																		
2014	-	-																		
2015	-	3.661516																		
2016	13,842,099	3.643525					\$ 3,799,095	3,799,095	3,799,095	2,444,814										
2017	(3,398,993)	3.518348						\$ (966,076)	(966,076)	(966,076)	(500,765)									
2018	(778,140)	3.871779							\$ (200,977)	(200,977)	(200,977)	(175,209)								
2019	964,067	4.000000								\$ 241,017	241,017	241,017	241,016							
2020	(7,063,929)	4.000000									\$ (1,765,982)	(1,765,982)	(1,765,982)	(1,765,983)						
2021	(1,957,595)	4.000000										\$ (489,399)	(489,399)	(489,399)	(489,398)					
2022	(4,035,786)	4.000000											\$ (1,008,947)	(1,008,947)	(1,008,947)	(1,008,945)				
Net increas	se (decrease) in pe	nsion expense											\$ (3,023,312) \$	(3,264,329)	\$ (1,498,345)	\$ (1,008,945)	\$-	\$ -	\$	-

9

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

					oces at 0, 2022
Year	Increases in the Total Pension Liability (a)	Decreases in the Total Pension Liability (b)	Amounts Recognized in Pension Expense Through June 30, 2022 (c)	Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
Prior	\$-	\$-	\$-	\$-	\$-
2013	-	-	-	-	-
2014	-	-	-	-	-
2015	-	-	-	-	-
2016	13,842,099	-	13,842,099	-	-
2017	-	3,398,993	3,398,993	-	-
2018	-	778,140	778,140	-	-
2019	964,067	-	964,067	-	-
2020	-	7,063,929	5,297,946	-	1,765,983
2021	-	1,957,595	978,798	-	978,797
2022	-	4,035,786	1,008,947	-	3,026,839
				\$ -	\$ 5,771,619







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

for the June 30, 2022 Measurement Date

Projection of Pension Plan's Fiduciary Net Position

	Gr	oss Normal C (BOY)	cost	Employ	yee Contrib (BOY)	utior	าร		Emp	loyer Normal (BOY)	l Cos	t			Expension (MO)				Emplo	- T	Contribu IOY)	ition	S		Premi	um Tax / (MOY		ation
Fiscal Year	Current Members	Future Members	Total	Current Nembers	Future Members		Total		rrent nbers	Future Members		Total	Curro Memb		Futu Memb		т	Fotal	Current Members		ture nbers		Total	Cur Mem	rent Ibers	Futur Membe		Total
2022	\$ 870,253	\$-	\$ 870,253	\$ 285,190	\$-	\$	285,190	\$5	85,063	\$-	\$	585,063	\$	14	\$	- \$	\$	14	\$ 882,858	\$	-	\$	882,858	\$ 52	20,888	\$	-	\$ 520,888
2023	\$ 797,967	\$ 64,317	\$ 862,284	\$ 168,585	\$ 16,174	\$	184,759	\$6	29,382	\$ 48,143	\$	677,525	\$	14	\$5	,266 \$	\$	5,280	\$ 889,938	\$	54,715	\$	944,653	\$ 47	77,578	\$	-	\$ 477,578
2024	\$ 738,078	\$ 167,001	\$ 905,079	\$ 156,094	\$ 41,104	\$	197,198	\$5	81,984	\$ 125,897	\$	707,881	\$	14	\$ 5	,452 \$	\$	5,466	\$ 876,014	\$ 1	34,765	\$	1,010,779	\$ 48	30,945	\$	-	\$ 480,945
2025	\$ 706,053	\$ 230,091	\$ 936,144	\$ 149,281	\$ 56,662	\$	205,943	\$5	56,772	\$ 173,429	\$	730,201	\$	14	\$ 5	,589 \$	\$	5,603	\$ 897,811	\$ 1	83,723	\$	1,081,534	\$ 50	04,768	\$	-	\$ 504,768
2026	\$ 673,435	\$ 311,069	\$ 984,504	\$ 142,556	\$ 76,457	\$	219,013	\$5	30,879	\$ 234,612	2 \$	765,491	\$	14	\$ 5	,785 \$	\$	5,799	\$ 910,479	\$ 2	46,762	\$	1,157,241	\$ 51	16,789	\$	-	\$ 516,789
2027	\$ 653,089	\$ 371,995	\$ 1,025,084	\$ 137,699	\$ 91,500	\$	229,199	\$5	15,390	\$ 280,495	5\$	795,885	\$	14	\$5	,872 \$	\$	5,886	\$ 944,271	\$ 2	93,977	\$	1,238,248	\$ 53	32,748	\$	-	\$ 532,748
2028	\$ 624,263	\$ 440,639	\$ 1,064,902	\$ 131,384	\$ 108,342	\$	239,726	\$4	92,879	\$ 332,297	′\$	825,176	\$	14	\$6	,019 \$	\$	6,033	\$ 977,593	\$ 3	47,332	\$	1,324,925	\$ 55	52,670	\$	-	\$ 552,670
2029	\$ 606,581	\$ 512,985	\$ 1,119,566	\$ 126,967	\$ 126,293	\$	253,260	\$4	79,614	\$ 386,692	2 \$	866,306	\$	14	\$ 6	,230 \$	\$	6,244	\$ 1,014,256	\$ 4	03,414	\$	1,417,670	\$ 57	73,091	\$	-	\$ 573,091
2030	\$ 565,001	\$ 566,382	\$ 1,131,383	\$ 118,882	\$ 139,894	\$	258,776	\$4	46,119	\$ 426,488	\$	872,607	\$	14	\$6	,324 \$	\$	6,338	\$ 1,072,524	\$ 4	44,383	\$	1,516,907	\$ 58	36,745	\$	-	\$ 586,745
2031	\$ 497,713	\$ 664,548	\$ 1,162,261	\$ 106,752	\$ 163,979	\$	270,731	\$ 3	90,961	\$ 500,569	\$	891,530	\$	14	\$6	,610 \$	\$	6,624	\$ 1,102,330	\$5	20,760	\$	1,623,090	\$ 60	00,741	\$	-	\$ 600,741
2032	\$ 463,478	\$ 759,194	\$ 1,222,672	\$ 100,047	\$ 187,118	\$	287,165	\$3	63,431	\$ 572,076	\$	935,507	\$	14	\$ 6	,841 \$	\$	6,855	\$ 1,142,267	\$5	94,439	\$	1,736,706	\$ 61	15,086	\$	-	\$ 615,086
2033	\$ 443,393	\$ 829,356	\$ 1,272,749	\$ 95,544	\$ 204,422	\$	299,966	\$3	47,849	\$ 624,934	\$	972,783	\$	14	\$ 6	,945 \$	\$	6,959	\$ 1,209,440	\$ 6	48,835	\$	1,858,275	\$ 63	39,731	\$	-	\$ 639,731
2034	\$ 416,855	\$ 905,294	\$ 1,322,149	\$ 89,665	\$ 222,876	\$	312,541	\$3	27,190	\$ 682,418	\$ \$ 1	1,009,608	\$	14	\$ 7	,119 \$	\$	7,133	\$ 1,280,302	\$7	08,052	\$	1,988,354	\$ 67	74,731	\$	-	\$ 674,731
2035	\$ 395,641	\$ 983,382	\$ 1,379,023	\$ 84,637	\$ 241,907	\$	326,544	\$3	11,004	\$ 741,475	5 \$ 1	1,052,479	\$	14	\$ 7	,297 \$	\$	7,311	\$ 1,358,649	\$7	68,890	\$	2,127,539	\$ 69	90,860	\$	-	\$ 690,860
2036	\$ 368,904	\$ 1,058,936	\$ 1,427,840	\$ 78,580	\$ 260,296	\$	338,876	\$2	90,324	\$ 798,640) \$ 1	1,088,964	\$	14	\$ 7	,480 \$	\$	7,494	\$ 1,448,678	\$8	27,789	\$	2,276,467	\$ 74	43,180	\$	-	\$ 743,180
2037	\$ 321,975	\$ 1,140,138	\$ 1,462,113	\$ 68,765	\$ 279,698	\$	348,463	\$2	53,210	\$ 860,440) \$ 1	1,113,650	\$	14	\$ 7	,667 \$	\$	7,681	\$ 1,544,368	\$8	91,452	\$	2,435,820	\$77	73,104	\$	-	\$ 773,104
2038	\$ 279,243	\$ 1,241,785	\$ 1,521,028	\$ 59,786	\$ 303,972	\$	363,758	\$2	19,457	\$ 937,813	\$\$1	1,157,270	\$	14	\$ 7	,935 \$	\$	7,949	\$ 1,635,134	\$9	71,193	\$	2,606,327	\$ 79	91,552	\$	-	\$ 791,552
2039	\$ 238,986	\$ 1,319,859	\$ 1,558,845	\$ 51,419	\$ 322,580	\$	373,999	\$1	87,567	\$ 997,279) \$ 1	1,184,846	\$	14	\$8	,056 \$	\$	8,070	\$ 1,756,377	\$ 1,0	32,393	\$	2,788,770	\$ 83	33,878	\$	-	\$ 833,878
2040	\$ 197,834	\$ 1,426,853	\$ 1,624,687	\$ 42,960	\$ 347,868	\$	390,828	\$1	54,874	\$ 1,078,985	5 \$ 1	1,233,859	\$	14	\$8	,337 \$	\$	8,351	\$ 1,867,387	\$ 1,1	16,597	\$	2,983,984	\$ 85	53,816	\$	-	\$ 853,816
2041	\$ 160,802	\$ 1,512,089	\$ 1,672,891	\$ 35,482	\$ 368,076	\$	403,558	\$1	25,320	\$ 1,144,013	\$\$1	1,269,333	\$	14	\$8	,546 \$	\$	8,560	\$ 2,009,265	\$ 1,1	83,598	\$	3,192,863	\$87	74,252	\$	-	\$ 874,252
2042	\$ 112,032	\$ 1,611,892	\$ 1,723,924	\$ 25,275	\$ 390,490	\$	415,765	\$	86,757	\$ 1,221,402	2 \$ 1	1,308,159	\$	14	\$8	,760 \$	\$	8,774	\$ 2,153,062	\$ 1,2	63,301	\$	3,416,363	\$ 90	02,310	\$	-	\$ 902,310
2043	\$ 83,301	\$ 1,722,019	\$ 1,805,320	\$ 18,799	\$ 415,716	\$	434,515	\$	64,502	\$ 1,306,303	\$\$1	1,370,805	\$	14	\$8	,979 \$	\$	8,993	\$ 2,304,783	\$ 1,3	50,725	\$	3,655,508	\$ 92	23,969	\$	-	\$ 923,969
2044	\$ 75,670	\$ 1,791,834	\$ 1,867,504	\$ 17,052	\$ 433,571	\$	450,623	\$	58,618	\$ 1,358,263	\$\$1	1,416,881	\$	14	\$ 9	,204 \$	\$	9,218	\$ 2,507,075	\$ 1,4	04,319	\$	3,911,394	\$ 97	70,527	\$	-	\$ 970,527
2045	\$ 51,027	\$ 1,857,585	\$ 1,908,612	\$ 11,577	\$ 449,284	\$	460,861	\$	39,450	\$ 1,408,301	\$ 1	1,447,751	\$	14	\$ 9	,434 \$	\$	9,448	\$ 2,729,247	\$ 1,4	55,945	\$	4,185,192	\$ 1,02	21,476	\$	-	\$ 1,021,476
2046	\$ 26,113	\$ 1,964,768	\$ 1,990,881	\$ 6,081	\$ 474,457	\$	480,538	\$	20,032	\$ 1,490,311	\$ 1	1,510,343	\$	14	\$ 9	,670 \$	\$	9,684	\$ 1,378,731	\$ 1,5	40,416	\$	2,919,147	\$	-	\$	-	\$ -
2047	\$ 21,904		\$ 2,070,986	\$,	\$ 495,380		500,495	·		\$ 1,553,702			\$	14		,912 \$		9,926	\$		-		1,623,028	\$	-	\$	-	\$ -
2048	\$ 16,377	\$ 2,120,530	\$ 2,136,907	\$ 3,809	\$ 512,821	\$	516,630	\$	12,568	\$ 1,607,709) \$ 1	1,620,277	\$	14	\$ 10	,160 \$	\$	10,174	\$ 12,924	\$ 1,6	61,489	\$	1,674,413	\$	-	\$	-	\$ -
2049	\$ 10,760	\$ 2,208,093	\$ 2,218,853	\$ 2,505	\$ 534,217	\$	536,722	\$	8,255	\$ 1,673,876	5 \$ 1	1,682,131	\$	14	\$ 10	,414 \$	\$	10,428	\$ 8,494	\$ 1,7	29,705	\$	1,738,199	\$	-	\$	-	\$ -
2050			\$ 2,300,046	\$ 1,273	\$ 555,085	\$	556,358	\$		\$ 1,739,581			\$	14	\$ 10	,573 \$	\$	10,587	\$ 4,233	\$ 1,7	97,352	\$	1,801,585	\$	-	\$	-	\$ -
2051			\$ 2,372,560	\$ 340	\$ 573,772			\$		\$ 1,797,258			\$	14		,838 \$,	\$				1,858,095	\$	-	\$	-	\$ -
2052			\$ 2,444,352	\$ 197	\$ 591,868	\$	592,065	\$		\$ 1,851,562			\$	14	\$ 11	,216 \$	\$	11,230	\$ 759	\$ 1,9	13,014	\$	1,913,773	\$	-	\$	-	\$ -
2053	\$ 369	\$ 2,539,077	\$ 2,539,446	\$ 80	\$ 615,028	\$	615,108	\$		\$ 1,924,049			\$	14	\$ 11	,497 \$	\$	11,511	\$ 311	\$ 1,9	87,749	\$	1,988,060	\$	-	\$	-	\$ -
2054	\$ 247		\$ 2,633,873	\$ 52			638,029	\$		\$ 1,995,649		, ,	\$	14					\$					\$	-	\$	-	\$ -
2055	\$ -		\$ 2,724,829	\$ -			660,093	\$		\$ 2,064,736			\$	14		,080 \$		12,094	\$				2,132,850	\$	-	\$	-	\$ -
2056	\$-	\$ 2,822,527	\$ 2,822,527	\$ -	\$ 683,747	\$	683,747	\$	-	\$ 2,138,780) \$ 2		\$	14	\$ 12	,382 \$		12,396	\$ 15	\$ 2,2	09,191	\$	2,209,206	\$	-	\$	-	\$ -
2057	\$-		\$ 2,923,944	\$ -			708,394	\$	-	\$ 2,215,550			\$	14		,692 \$		12,706	\$				2,288,368	\$	-	\$	-	\$ -
2058	\$-		\$ 3,023,402	\$ -	\$ 733,044	\$	733,044	\$	-	\$ 2,290,358			\$	14		,134 \$		13,148	\$				2,365,648	\$	-	\$	-	\$ -
2059	\$ -		\$ 3,129,217	\$ -			758,891	\$	-	\$ 2,370,326			\$	14		,463 \$		13,477	\$				2,448,115	\$	-	\$	-	\$ -
2060	\$-		\$ 3,232,326	\$ -			783,869	\$	-	\$ 2,448,457			\$	14		,800 \$		13,814	\$				2,528,702	\$	-	\$	-	\$ -
2061	\$-		\$ 3,350,301	\$	\$ 812,704			\$	-	\$ 2,537,597			\$	14		,279 \$		14,293	\$, ,	\$	-	\$	-	\$ -
2062	\$-	\$ 3,463,262	\$ 3,463,262	\$ -	\$ 840,334	\$	840,334	\$	-	\$ 2,622,928	\$\$2	2,622,928	\$	14	\$ 14	,636 \$	\$	14,650	\$ 14	\$ 2,7	08,729	\$	2,708,743	\$	-	\$	-	\$-



Projection of Pension Plan's Fiduciary Net Position

		Actu	aria	I Accrued Liability (B	OY)						Clo	osec	Group Asset Projecti	ion
Fiscal Year	Curr	ent Members	1	Future Members		Total	Fidu	ciary Net Position (BOY)	Funded Ratio (BOY)		Projected EEC Contributions (MOY)	Pr	ojected ER Contrib + Premium Tax (MOY)	
2022	\$	41,102,256	\$	-	\$	41,102,256	\$	23,696,091	57.65%	\$	285,190	\$	1,403,746	\$
2023	\$	42,366,572	\$	-	\$	42,366,572	\$	21,630,738	51.06%	\$	173,159	\$	1,367,516	\$
2024	\$	43,431,033	\$	67,005	\$	43,498,038	\$	22,295,335	51.34%	\$	160,329	\$	1,356,959	\$
2025	\$	43,966,299	\$	243,697	\$	44,209,996	\$	22,447,906	51.06%	\$	153,331	\$	1,402,579	\$
2026	\$	43,953,910	\$	492,995	\$	44,446,905	\$	22,105,229	50.29%	\$	146,424	\$	1,427,268	\$
2027	\$	44,631,795	\$	836,373	\$	45,468,168	\$	22,487,338	50.38%	\$	141,435	\$	1,477,019	\$
2028	\$	45,110,761	\$	1,256,690	\$	46,367,451	\$	22,721,701	50.37%	\$	134,949	\$	1,530,263	\$
2029	\$	45,020,395	\$	1,760,380	\$	46,780,775	\$	22,451,717	49.87%	\$	130,412	\$		\$
2030	\$	45,493,086	\$		\$	47,856,594	\$	22,807,539	50.13%	\$	122,107			\$
2031	\$	45,678,250	\$		\$	48,706,592	\$	22,978,616	50.31%	\$	109,648			\$
2032	\$	46,004,975			\$	49,831,992	\$	23,393,660	50.85%	\$	102,761			\$
2033	\$	46,169,577		4,734,612		50,904,189	\$	23,736,239	51.41%	\$	98,136			
2034	\$	46,304,243			\$	52,045,272	\$	24,169,419	52.20%	\$	92,098			
2035	\$	46,481,167	\$		\$	53,340,964	\$	24,791,805	53.34%	\$	86,933			\$
2036	\$	46,214,171			\$	54,206,011	\$	25,108,887	54.33%	\$	80,712			\$
2037	\$	46,210,641			\$	55,517,951	\$	25,889,587	56.03%	\$	70,631		2,317,472	
2038	\$	46,259,988	\$		\$	57,035,314	\$	26,934,475	58.22%	\$	61,408			\$
2030	Ψ \$	46,179,573	↓ \$		↓ \$	58,535,382	↓ \$	28,052,142	60.75%	\$	52,814			\$
2035	Ψ \$	46,122,378	↓ \$		↓ \$	60,206,535	↓ \$	29,460,575	63.87%	\$	44,126			\$
2040	ф \$	46,018,685	Գ \$		Գ \$	61,984,270	Գ \$	31,072,111	67.52%	ֆ \$	36,445			
2041	ф \$	45,622,200	Գ \$			63,461,753	Գ \$	32,683,090	71.64%		25,961		3,055,372	
2042	ъ \$	45,822,200	э \$		\$ ¢	65,210,199	э \$	34,681,641	76.58%	\$ \$	19,309			
2043 2044		45,265,675			\$ ¢	67,243,569		37,073,223	82.36%		17,515			
	\$	45,012,187 44,564,767	\$		\$ ¢		\$			\$	11,891		3,477,602 3,750,723	
2045	\$		\$		\$ ¢	69,110,725	\$	39,699,259	89.08%	\$				\$ ¢
2046	\$	44,241,222	\$		\$	71,318,795	\$	42,918,964	97.01%	\$	6,246			
2047	\$	43,764,538	\$, ,	\$ ¢	73,341,249	\$	43,764,546	100.00%	\$	5,254		,	\$ ¢
2048	\$	43,210,107		32,039,538		75,249,645	\$	43,210,116	100.00%	\$	3,912		12,924	
2049	\$	42,922,278		34,821,397		77,743,675	\$	42,922,288	100.00%	\$	2,573		8,494	
2050	\$	42,682,464		37,639,758		80,322,222	\$	42,682,476	100.00%	\$	1,308		4,233	
2051	\$	42,193,768		40,380,366		82,574,134	\$	42,193,780	100.00%	\$	349		1,236	
2052	\$	41,988,023		43,453,339		85,441,362	\$	41,988,035	100.00%	\$	202			\$
2053	\$	41,829,660		46,535,655		88,365,315	\$	41,829,673	100.00%	\$	82		311	
2054	\$	41,673,055		49,563,573		91,236,628	\$	41,673,069	100.00%	\$	53	\$	214	
2055	\$	41,625,834		52,773,388		94,399,222	\$	41,625,848	100.00%	\$	-	\$		\$
2056	\$	41,577,822		55,982,628		97,560,450	\$	41,577,837	100.00%	\$	-	\$		\$
2057	\$	41,643,818		59,282,983		100,926,801	\$	41,643,833	100.00%	\$	-	\$		\$
2058	\$	41,776,228		62,563,950		104,340,178	\$	41,776,244	100.00%	\$	-	\$		\$
2059	\$	41,975,554	\$	66,056,162	\$	108,031,716	\$	41,975,571	100.00%	\$	-	\$	14	\$
2060	\$	42,249,015	\$	69,629,927	\$	111,878,942	\$	42,249,034	100.00%	\$	-	\$	14	\$
2061	\$	42,595,989	\$	73,161,510	\$	115,757,499	\$	42,596,009	100.00%	\$	-	\$	14	\$
2062	\$	43,023,621	\$	76,752,134	\$	119,775,755	\$	43,023,642	100.00%	\$	-	\$	14	\$



Projected BP (MOY)	Projected Admin Expenses (MOY)	 l Investment mings
1,863,855	\$ 14	\$ (1,890,420)
2,051,884	\$ 14	\$ 1,175,820
2,562,585	\$ 14	\$ 1,197,882
3,091,542	\$ 14	\$ 1,192,970
2,385,335	\$ 14	\$ 1,193,766
2,594,401	\$ 14	\$ 1,210,324
3,144,733	\$ 14	\$ 1,209,551
2,573,548	\$ 14	\$ 1,211,625
2,836,083	\$ 14	\$ 1,225,798
2,639,063	\$ 14	\$ 1,241,403
2,779,235	\$ 14	\$ 1,261,713
2,796,564	\$ 14	\$ 1,282,451
2,735,375	\$ 14	\$ 1,310,644
3,155,253	\$ 14	\$ 1,335,907
2,856,988	\$ 14	\$ 1,365,132
2,757,116	\$ 14	\$ 1,413,915
2,842,201	\$ 14	\$ 1,471,788
2,773,939	\$ 14	\$ 1,539,317
2,773,878	\$ 14	\$ 1,620,099
3,015,347	\$ 14	\$ 1,706,378
2,885,647	\$ 14	\$ 1,802,879
2,776,744	\$ 14	\$ 1,920,278
2,923,599	\$ 14	\$ 2,054,533
2,753,727	\$ 14	\$ 2,210,832
2,859,906	\$ 14	\$ 2,320,525
2,905,751	\$ 14	\$ 2,328,822
2,610,826	\$ 14	\$ 2,306,176
2,542,897	\$ 14	\$ 2,292,032
2,766,838	\$ 14	\$ 2,272,616
2,461,238	\$ 14	\$ 2,253,922
2,403,466	\$ 14	\$ 2,244,157
2,392,707	\$ 14	\$ 2,235,724
2,277,701	\$ 14	\$ 2,230,227
2,275,689	\$ 14	\$ 2,227,678
2,162,122	\$ 14	\$ 2,228,118
2,100,996	\$ 14	\$ 2,233,407
2,042,938	\$ 14	\$ 2,242,265
1,981,434	\$ 14	\$ 2,254,896
1,924,506	\$ 14	\$ 2,271,481
1,864,558	\$ 14	\$ 2,292,191
1,806,521	\$ 14	\$ 2,317,286



Projection of Pension Plan's Fiduciary Net Position

iscal Year	"Fun	ded" Portion of BP	"Unfunc	led" Portion of BP	P۱	/ of "Funded" BP	PV of	"Unfunded" BP	P۷	of BP Using a Single DR
2022	\$	1,863,855	\$	-	\$	1,814,621	\$	-	\$	1,814,62 [,]
2023	\$	2,051,884	\$	-	\$	1,893,538	\$	-	\$	1,893,538
2024	\$	2,562,585	\$	-	\$	2,241,543	\$	-	\$	2,241,543
2025	\$	3,091,542	\$	-	\$	2,563,253	\$	-	\$	2,563,253
2026	\$	2,385,335	\$	-	\$	1,874,620	\$	-	\$	1,874,620
2027	\$	2,594,401	\$	-	\$	1,932,629	\$	-	\$	1,932,62
2028	\$	3,144,733	\$	-	\$	2,220,459	\$	-	\$	2,220,45
2029	\$	2,573,548	\$	-	\$	1,722,419	\$	-	\$	1,722,41
2030	\$	2,836,083	\$	-	\$	1,799,173	\$	-	\$	1,799,173
2031	\$	2,639,063	\$	-	\$	1,586,907	\$	-	\$	1,586,90
2032	\$	2,779,235	\$	-	\$	1,584,070	\$	-	\$	1,584,07
2033	\$	2,796,564	\$	-	\$	1,510,850	\$	-	\$	1,510,85
2034	\$	2,735,375	\$	-	\$	1,400,752	\$	-	\$	1,400,75
2035	\$	3,155,253	\$	-	\$	1,531,532	\$	-	\$	1,531,53
2036	\$	2,856,988	\$	-	\$	1,314,461	\$	-	\$	1,314,46
2037	\$	2,757,116	\$	-	\$	1,202,380	\$	-	\$	1,202,38
2038	\$	2,842,201	\$	-	\$	1,174,868	\$	-	\$	1,174,86
2039	\$	2,773,939	\$	-	\$	1,086,873	\$	-	\$	1,086,87
2040	\$	2,773,878	\$	-	\$	1,030,189	\$	-	\$	1,030,18
2041	\$	3,015,347	\$	-	\$	1,061,486	\$	-	\$	1,061,48
2042	\$ \$	2,885,647	\$	-	\$	962,870	\$	-	\$	962,87
2043	\$ \$	2,776,744	\$	-	\$	878,229	\$	-	\$	878,22
2044	\$	2,923,599	\$	-	\$	876,471	\$	_	\$	876,47
2045	\$	2,753,727	\$	-	\$	782,507	\$	_	\$	782,50
2046	\$	2,859,906	\$	-	\$	770,312	\$	_	\$	770,31
2040	Ψ \$	2,905,751	Ψ \$	-	\$	741,858	Ψ \$	_	↓ \$	741,85
2048	\$	2,610,826	\$	_	\$	631,812	\$	_	\$	631,81
2040	Ψ \$	2,542,897	Ψ \$	_	Ψ \$	583,292	Ψ \$	_	\$	583,29
2049	Ψ \$	2,766,838	Ψ \$	_	Ψ \$	601,573	Ψ \$	_	\$	601,57
2050	Ψ \$	2,461,238	Ψ \$		Ψ \$	507,231	Ψ \$		\$	507,23
2051	φ \$	2,401,238	Ψ \$	_	Ψ \$	469,503	φ \$	-	\$	469,50
2052	э \$	2,403,400	Ф \$	-	ф \$	443,034	ֆ \$	-		409,50
2053 2054				-		399,753		-	\$ ¢	
	\$ ¢	2,277,701	\$ ¢	-	\$ ¢		\$ ¢	-	\$ ¢	399,75
2055	\$ ¢	2,275,689	\$	-	\$ ¢	378,578	\$ ¢	-	\$	378,57
2056	\$ ¢	2,162,122	\$ ¢	-	\$ ¢	340,934	\$ ¢	-	\$ ¢	340,93
2057	\$ ¢	2,100,996	\$ ¢	-	\$ ¢	314,024	\$ ¢	-	\$ ¢	314,02
2058	\$ ¢	2,042,938	\$	-	\$ ¢	289,428	\$ ¢	-	\$	289,42
2059	\$	1,981,434	\$	-	\$	266,080	\$	-	\$	266,08
2060	\$	1,924,506	\$	-	\$	244,962	\$	-	\$	244,96
2061	\$ \$	1,864,558 1,806,521	\$ \$	-	\$ \$	224,959	\$	-	\$	224,959 206,594