



Municipal Pensions Oversight Board

City of Morgantown West Virginia Firemen's Pension and Relief Fund

GASB 67 Actuarial Information for the
Fiscal Year Ending June 30, 2024

GASB 68 Actuarial Information for the
Fiscal Year Ending June 30, 2024
(Measurement Period Ending June 30, 2024)

Bolton

Submitted by:

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December 6, 2024

Mr. Jonathan Furgison
Finance Director
City of Morgantown
389 Spruce Street
Morgantown, WV 26505

Firefighter Tanner Dalton
Pension Board Secretary
City of Morgantown
Firemen's Pension and Relief Fund

Re: City of Morgantown Firemen's Pension and Relief Fund
GASB 67 and GASB 68 Actuarial Information for the Measurement Period Ending June 30, 2024

Dear Jonathan,

The following report contains the GASB 67 actuarial information to be included with the plan's financial statements for the plan year ending June 30, 2024 and the GASB 68 actuarial information to be included with the City's financial statements for the fiscal year ending June 30, 2024. The GASB 68 information has been provided as of the June 30, 2024 measurement date for FY 2024.

Methodology, Reliance and Certification

This report was prepared for the internal use of the City and its auditors in connection with our actuarial valuations of the pension plan as required by GASB 68. The purpose of this report is to provide the GASB 67 actuarial information for use in the plan's financial statements for the plan year ending June 30, 2024 and the GASB 68 information for use in the City's financial statements for the fiscal year ending June 30, 2024. It is neither intended nor necessarily suitable for other purposes. Bolton is not responsible for the consequences of any other use or the reliance upon this report by any other party.

These calculations are applicable for the valuation date only. This valuation does not provide any guarantee that the plan will be able to provide the promised benefits in the future.

The total pension liability is based on the July 1, 2023 actuarial valuation rolled forward to June 30, 2024. Our understanding is that there have been no substantial changes affecting the liabilities of the plan since July 1, 2023 that would cause our estimates of the June 30, 2024 liabilities to not reasonably reflect the condition of the plan. The methods, assumptions, and participant data used are detailed in the July 1, 2023 actuarial valuation report. These calculations are based on the Entry Age Normal cost method as required by GASB 67. The calculation of the actuarially determined contribution for the fiscal year ended June 30, 2024 is contained in the July 1, 2022 actuarial valuation report. The discount rate assumption may be different if a blended rate was used for GASB purposes.

The included calculations are based on a blended discount rate of 4.18%. The plan's expected gross rate of investment return of 4.25% has been blended with the 3.97% 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, 2024. The development of the blended discount rate is included within this report.

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.

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. We have not audited the census data provided; however, based on our review, the data appears to be reasonable and consistent with previously provided information. Unless otherwise noted in our report, we believe the information provided is sufficiently complete and reliable for purposes of the results presented in this report. The accuracy of the results presented in this report is dependent upon the accuracy and completeness of the underlying information. The City is solely responsible for the validity and completeness of this information.

The City is responsible for selecting the plan's funding policy based on five 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.

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. 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.

Different assumptions or scenarios within the range of possibilities may also be reasonable and results based on those assumptions would be different. As a result of the uncertainty inherent in a forward-looking projection over a very long period of time, no one projection is uniquely "correct" and many alternative projections of the future could also be regarded as reasonable. Two different actuaries could, quite reasonably, arrive at different results based on the same data and different views of the future.

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.

In addition, decisions regarding benefit improvements, benefit changes, the trust's investment policy, and similar issues should not be based on this valuation. These issues are complex and other factors should be considered when making such decisions. Other factors might include the anticipated vitality of the local economy and future growth expectations, as well as other economic and financial factors.



Methodology, Reliance and Certification (cont.)

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.

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

The calculations in this report 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.

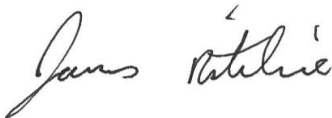
We make every effort to ensure that our calculations are accurately performed. We reserve the right to correct any potential errors by amending the results of this report or by including the corrections in a future valuation report.

Bolton does not practice law and, therefore, cannot and does not provide legal advice. Any statutory interpretation on which this report is based reflects Bolton's understanding as an actuarial firm. Bolton recommends that recipients of this report consult with legal counsel when making any decisions regarding compliance with ERISA, the Internal Revenue Code, or any other statute or regulation.

The City should notify Bolton promptly after receipt of this report if the City disagrees with anything contained in the report or is aware of any information that would affect the results of the report that has not been communicated to Bolton or incorporated herein. The report will be deemed final and acceptable to the City unless the City promptly provides such notice to Bolton.

The undersigned enrolled actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The July 1, 2023 actuarial valuation report contains information that is integral to the results contained herein and a copy may be provided upon request.

Sincerely,



James Ritchie, ASA, EA, FCA, MAAA



Jordan McClane, FSA, EA, FCA, MAAA



City of Morgantown, West Virginia Firemen’s Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2024 Measurement Date



Net Pension Liability of the Employer

The components of the net pension liability of the Employer at June 30, 2024, were as follows:

Total pension liability	\$ 66,242,946
Plan fiduciary net position	(15,480,810)
Employer's net pension liability	<u>\$ 50,762,136</u>
Plan fiduciary net position as a percentage of the total pension liability	23.37%

Actuarial assumptions. The total pension liability was determined by an actuarial valuation as of July 1, 2023 rolled forward to June 30, 2024 using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.50%
Salary increases	Rates vary by years of service
Single discount rate (BOY)	4.11%
Single discount rate (EOY)	4.18%
Investment rate of return (BOY)	4.25%, net of pension plan investment expense, including inflation
Investment rate of return (EOY)	4.25%, net of pension plan investment expense, including inflation
Long-term municipal bond rate (BOY)	3.86%
Long-term municipal bond rate (EOY)	3.97%
Mortality	SOA PubS-2010(B) with generational projection using Scale MP-2021
Year Fund is projected to be fully funded	2061
Year assets are expected to be depleted for a closed plan	2046

The above is a summary of key actuarial assumptions. Full descriptions of the actuarial assumptions are available in the July 1, 2023 actuarial valuation report.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

	1% Decrease 3.18%	Current Discount Rate 4.18%	1% Increase 5.18%
Employer's net pension liability	\$ 61,456,987	\$ 50,762,136	\$ 42,223,462

City of Morgantown, West Virginia Firemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2024 Measurement Date



Changes in the Net Pension Liability

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances at 6/30/23	\$ 59,468,268	\$ 14,284,625	\$ 45,183,643
Changes for the year:			
Service cost	2,572,276		2,572,276
Interest	2,394,679		2,394,679
Changes of benefit terms	-		-
Differences between expected and actual experience	5,358,552		5,358,552
Changes of assumptions	(1,143,683)		(1,143,683)
Contributions - employer (including Premium Tax Allocation)		1,957,747	(1,957,747)
Contributions - member		393,437	(393,437)
Net investment income		1,255,130	(1,255,130)
Benefit payments, including refunds of member contributions	(2,407,146)	(2,407,146)	-
Administrative expense		(2,983)	2,983
Other		-	-
Net Changes	<u>6,774,678</u>	<u>1,196,185</u>	<u>5,578,493</u>
Balances at 6/30/24	<u>\$ 66,242,946</u>	<u>\$ 15,480,810</u>	<u>\$ 50,762,136</u>
Return on Investments		8.8%	

City of Morgantown, West Virginia Firemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2024 Measurement Date



Components of Employer's Pension Expense for the Fiscal Year Ended June 30, 2024

Note	Description	Amount
A	Service cost	\$ 2,572,276
B	Interest on the total pension liability	2,394,679
A	Changes of benefit terms	-
C	Differences between expected and actual experience	939,905
C	Changes of assumptions	(1,387,279)
A	Employee contributions	(393,437)
D	Projected earnings on pension plan investments	(605,845)
C	Differences between expected and actual earnings on plan investments	73,558
A	Pension plan administrative expense	2,983
A	Other changes in fiduciary net position	-
Total Pension Expense		\$ 3,596,840

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	\$ 59,468,268	100%	4.11%	\$ 2,444,146
Service cost (end of year)	2,572,276	0%	4.11%	-
Benefit payments, including refunds of employee contributions	(2,407,146)	50%	4.11%	(49,467)
Total interest on the total pension liability				\$ 2,394,679

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	\$ 14,284,625	100%	4.25%	\$ 607,097
Employer contributions	1,957,747	50%	4.25%	41,602
Employee contributions	393,437	50%	4.25%	8,361
Benefit payments, including refunds of employee contributions	(2,407,146)	50%	4.25%	(51,152)
Administrative expense and other	(2,983)	50%	4.25%	(63)
Total Projected Earnings				\$ 605,845

City of Morgantown, West Virginia Firemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2024 Measurement Date



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

At June 30, 2024, 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	\$ 4,830,164	\$ 1,161,768
Changes of assumptions	-	6,064,619
Net difference between projected and actual earnings on pension plan investments	54,263	-
Total	\$ 4,884,427	\$ 7,226,387

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:	
2025	\$ (1,370,173)
2026	(524,054)
2027	(1,160,853)
2028	713,120
2029	-
Thereafter	-

City of Morgantown, West Virginia Firemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2024 Measurement Date



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

Total pension liability	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Service cost	\$ 2,572,276	\$ 2,146,413	\$ 2,713,424	\$ 2,535,031	\$ 2,373,186	\$ 2,311,877	\$ 1,731,483	\$ 1,925,405	\$ 1,160,928	\$ 1,084,316
Interest	2,394,679	2,257,224	2,010,784	2,147,157	2,140,131	2,002,131	1,938,342	1,749,559	1,817,826	1,775,489
Changes of benefit terms	-	-	-	-	-	-	-	-	-	-
Differences between expected and actual experience	5,358,552	878,490	(2,323,539)	81,136	317,635	1,815,332	(218,647)	(454,836)	(113,977)	(1,590,303)
Changes of assumptions	(1,143,683)	(788,241)	(8,596,267)	(1,892,974)	4,052,068	1,363,844	(660,808)	(4,690,165)	11,346,226	662,125
Benefit payments, including refunds of member contributions	(2,407,146)	(2,350,946)	(2,269,005)	(1,967,798)	(1,828,040)	(1,656,429)	(1,617,352)	(1,533,401)	(1,509,425)	(1,496,332)
Net change in total pension liability	6,774,678	2,142,940	(8,464,603)	902,552	7,054,980	5,836,755	1,173,018	(3,003,438)	12,701,578	435,295
Total pension liability - beginning	59,468,268	57,325,328	65,789,931	64,887,379	57,832,399	51,995,644	50,822,626	53,826,064	41,124,486	40,689,191
Total pension liability - ending (a)	\$ 66,242,946	\$ 59,468,268	\$ 57,325,328	\$ 65,789,931	\$ 64,887,379	\$ 57,832,399	\$ 51,995,644	\$ 50,822,626	\$ 53,826,064	\$ 41,124,486
Plan fiduciary net position	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Contributions - employer (including Premium Tax Allocation)	\$ 1,957,747	\$ 1,634,521	\$ 1,610,847	\$ 1,559,202	\$ 1,564,867	\$ 1,457,107	\$ 1,494,676	\$ 1,356,285	\$ 1,188,366	\$ 1,070,305
Contributions - member	393,437	359,469	329,817	321,450	318,125	307,067	258,246	218,900	202,830	191,330
Net investment income	1,255,130	935,250	(2,488,555)	3,028,300	(1,618)	716,195	351,940	1,054,659	(250,341)	300,409
Benefit payments, including refunds of member contributions	(2,407,146)	(2,350,946)	(2,269,005)	(1,967,798)	(1,828,040)	(1,656,429)	(1,617,352)	(1,533,401)	(1,509,425)	(1,496,332)
Administrative expense	(2,983)	(2,818)	(2,851)	(2,410)	(3,138)	-	(2,469)	(2,158)	(3,042)	(1,943)
Other	-	-	-	-	-	(2,132)	-	170	-	-
Net change in plan fiduciary net position	\$ 1,196,185	\$ 575,476	\$ (2,819,747)	\$ 2,938,744	\$ 50,196	\$ 821,808	\$ 485,041	\$ 1,094,455	\$ (371,612)	\$ 63,769
Plan fiduciary net position - beginning	14,284,625	13,709,149	16,528,896	13,590,152	13,539,956	12,718,148	12,233,107	11,138,652	11,510,264	11,482,554
Plan fiduciary net position - ending (b)	\$ 15,480,810	\$ 14,284,625	\$ 13,709,149	\$ 16,528,896	\$ 13,590,152	\$ 13,539,956	\$ 12,718,148	\$ 12,233,107	\$ 11,138,652	\$ 11,546,323
Employer's net pension liability - ending (a)-(b)	\$ 50,762,136	\$ 45,183,643	\$ 43,616,179	\$ 49,261,035	\$ 51,297,227	\$ 44,292,443	\$ 39,277,496	\$ 38,589,519	\$ 42,687,412	\$ 29,578,163
Plan fiduciary net position as a percentage of the total pension liability	23.37%	24.02%	23.91%	25.12%	20.94%	23.41%	24.46%	24.07%	20.69%	28.08%
Covered payroll	\$ 4,626,324	\$ 3,733,339	\$ 3,724,403	\$ 3,580,333	\$ 3,736,884	\$ 3,636,132	\$ 2,716,646	\$ 2,590,922	\$ 2,534,252	\$ 2,441,567
Employer's net pension liability as a percentage of covered payroll	1097.25%	1210.27%	1171.09%	1375.88%	1372.73%	1218.12%	1445.81%	1489.41%	1684.42%	1211.44%
Expected average remaining service years of all participants	5.00	5.00	6.00	5.00	5.00	5.00	4.31	4.32	4.71	4.42

Notes to Schedule:

Benefit changes: There were no changes for FY2024.

Changes of assumptions: Pursuant to the 2023 Experience Study Report, changes were made to cost-of-living increases, mortality improvement rates, retirement rates, termination rates, and disability rates. Additionally, the discount rate changed from 4.11% to 4.18%.

*Market value of assets as of July 1, 2015, excludes \$36,059 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.

City of Morgantown, West Virginia Firemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2024 Measurement Date



Schedule of Employer Contributions
 Last 10 Fiscal Years

	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Actuarially determined contribution	\$ 4,409,931	\$ 4,175,598	\$ 4,073,755	\$ 3,897,505	\$ 3,716,017	\$ 3,177,129	\$ 2,813,357	\$ 2,670,559	\$ 2,514,255	\$ 1,890,064
Contributions in relation to the actuarially determined contribution										
Employer provided	1,267,217	1,046,841	981,069	920,455	933,095	909,000	986,830	870,926	728,343	618,813
State provided	690,530	587,680	629,778	638,747	631,772	548,107	507,846	485,359	460,023	451,492
Contribution deficiency (excess)	<u>\$ 2,452,184</u>	<u>\$ 2,541,077</u>	<u>\$ 2,462,908</u>	<u>\$ 2,338,303</u>	<u>\$ 2,151,150</u>	<u>\$ 1,720,022</u>	<u>\$ 1,318,681</u>	<u>\$ 1,314,274</u>	<u>\$ 1,325,889</u>	<u>\$ 819,759</u>
Covered payroll	\$ 4,626,324	\$ 3,733,339	\$ 3,724,403	\$ 3,580,333	\$ 3,736,884	\$ 3,636,132	\$ 2,716,646	\$ 2,590,922	\$ 2,534,252	\$ 2,441,567
Contributions as a percentage of covered employee payroll	42.32%	43.78%	43.25%	43.55%	41.88%	40.07%	55.02%	52.35%	46.89%	43.84%

Notes to Schedule

Valuation date:

Actuarially determined contribution (ADC) amounts are calculated as of the beginning of the fiscal year (July 1) for the year immediately following the fiscal year. The assumptions shown below are those used in the 7/1/2022 actuarial valuation to calculate the FY2024 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 26.5 years
Asset valuation method	4-year smoothed market
Inflation	2.50%
Salary increases	Rates vary by years of service
Investment rate of return	4.25%, 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

City of Morgantown, West Virginia Firemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2024 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	Differences between Projected and Actual Earnings on Pension Plan Investments	Recognition Period (Years)	Increase (Decrease) in Pension Expense Arising from the Recognition of Differences between Projected and Actual Earnings on Plan Investments				
			2024	2025	2026	2027	2028
2020	\$ 612,082	5	122,418				
2021	(2,418,757)	5	(483,751)	(483,753)			
2022	3,183,995	5	636,799	636,799	636,799		
2023	(360,256)	5	(72,051)	(72,051)	(72,051)	(72,052)	
2024	(649,285)	5	\$ (129,857)	(129,857)	(129,857)	(129,857)	(129,857)
Net increase (decrease) in pension expense			\$ 73,558	\$ (48,862)	\$ 434,891	\$ (201,909)	\$ (129,857)

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, 2024 (c)	Balances at June 30, 2024	
				Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
2020	\$ 612,082	\$ -	\$ 612,082	\$ -	\$ -
2021	-	2,418,757	1,935,004	-	483,753
2022	3,183,995	-	1,910,397	1,273,598	-
2023	-	360,256	144,102	-	216,154
2024	-	649,285	129,857	-	519,428
				\$ 1,273,598	\$ 1,219,335

City of Morgantown, West Virginia Firemen'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.

Year	Differences between Expected and Actual Experience	Recognition Period (Years)	Increase (Decrease) in Pension Expense Arising from the Recognition of Differences between Projected and Actual Experience						
			2024	2025	2026	2027	2028	2029	Thereafter
2016	(113,977)	4.713961							
2017	(454,836)	4.318426							
2018	(218,647)	4.308268							
2019	1,815,332	5.000000							
2020	317,635	5.000000	63,527						
2021	81,136	5.000000	16,227	16,228					
2022	(2,323,539)	6.000000	(387,257)	(387,257)	(387,257)	(387,254)			
2023	878,490	5.000000	175,698	175,698	175,698	175,698			
2024	5,358,552	5.000000	\$ 1,071,710	1,071,710	1,071,710	1,071,710	1,071,712		
Net increase (decrease) in pension expense			\$ 939,905	\$ 876,379	\$ 860,151	\$ 860,154	\$ 1,071,712	\$ -	\$ -

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

Year	Experience Losses (a)	Experience Gains (b)	Amounts Recognized in Pension Expense Through June 30, 2024 (c)	Balances at June 30, 2024	
				Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
2016	-	113,977	113,977	-	-
2017	-	454,836	454,836	-	-
2018	-	218,647	218,647	-	-
2019	1,815,332	-	1,815,332	-	-
2020	317,635	-	317,635	-	-
2021	81,136	-	64,908	16,228	-
2022	-	2,323,539	1,161,771	-	1,161,768
2023	878,490	-	351,396	527,094	-
2024	5,358,552	-	1,071,710	4,286,842	-
				\$ 4,830,164	\$ 1,161,768

City of Morgantown, West Virginia Firemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2024 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.

Year	Changes of Assumptions	Recognition Period (Years)	Increase (Decrease) in Pension Expense Arising from the Effects of Changes of Assumptions						
			2024	2025	2026	2027	2028	2029	Thereafter
2016	11,346,226	4.713961							
2017	(4,690,165)	4.318426							
2018	(660,808)	4.308268							
2019	1,363,844	5.000000							
2020	4,052,068	5.000000	810,412						
2021	(1,892,974)	5.000000	(378,595)	(378,594)					
2022	(8,596,267)	6.000000	(1,432,711)	(1,432,711)	(1,432,711)	(1,432,712)			
2023	(788,241)	5.000000	(157,648)	(157,648)	(157,648)	(157,649)			
2024	(1,143,683)	5.000000	\$ (228,737)	(228,737)	(228,737)	(228,737)	(228,735)		
Net increase (decrease) in pension expense			\$ (1,387,279)	\$ (2,197,690)	\$ (1,819,096)	\$ (1,819,098)	\$ (228,735)	\$ -	\$ -

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, 2024 (c)	Balances at June 30, 2024	
				Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
2016	11,346,226	-	11,346,226	-	-
2017	-	4,690,165	4,690,165	-	-
2018	-	660,808	660,808	-	-
2019	1,363,844	-	1,363,844	-	-
2020	4,052,068	-	4,052,068	-	-
2021	-	1,892,974	1,514,380	-	378,594
2022	-	8,596,267	4,298,133	-	4,298,134
2023	-	788,241	315,296	-	472,945
2024	-	1,143,683	228,737	-	914,946
				\$ -	\$ 6,064,619

City of Morgantown, West Virginia Firemen's Pension and Relief Fund
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Projection of Pension Plan's Fiduciary Net Position

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
2024	\$ 2,304,239	\$ -	\$ 2,304,239	\$ 393,437	\$ -	\$ 393,437	\$ 1,910,802	\$ -	\$ 1,910,802	\$ 2,983	\$ -	\$ 2,983	\$ 1,267,217	\$ -	\$ 1,267,217	\$ 690,530	\$ -	\$ 690,530
2025	\$ 2,318,307	\$ 70,408	\$ 2,388,715	\$ 391,906	\$ 13,465	\$ 405,371	\$ 1,926,401	\$ 56,943	\$ 1,983,344	\$ 2,979	\$ -	\$ 2,979	\$ 1,134,380	\$ 58,140	\$ 1,192,520	\$ 807,974	\$ -	\$ 807,974
2026	\$ 2,294,095	\$ 141,768	\$ 2,435,863	\$ 389,131	\$ 26,988	\$ 416,119	\$ 1,904,964	\$ 114,780	\$ 2,019,744	\$ 2,949	\$ 79	\$ 3,028	\$ 1,155,821	\$ 117,273	\$ 1,273,094	\$ 813,061	\$ -	\$ 813,061
2027	\$ 2,216,689	\$ 245,158	\$ 2,461,847	\$ 379,211	\$ 46,540	\$ 425,751	\$ 1,837,478	\$ 198,618	\$ 2,036,096	\$ 2,969	\$ 161	\$ 3,130	\$ 1,156,100	\$ 202,956	\$ 1,359,056	\$ 851,548	\$ -	\$ 851,548
2028	\$ 2,079,697	\$ 371,462	\$ 2,451,159	\$ 358,709	\$ 70,359	\$ 429,068	\$ 1,720,988	\$ 301,103	\$ 2,022,091	\$ 2,961	\$ 274	\$ 3,235	\$ 1,143,264	\$ 307,709	\$ 1,450,973	\$ 973,165	\$ -	\$ 973,165
2029	\$ 1,980,321	\$ 530,893	\$ 2,511,214	\$ 345,420	\$ 100,411	\$ 445,831	\$ 1,634,901	\$ 430,482	\$ 2,065,383	\$ 2,979	\$ 419	\$ 3,398	\$ 1,109,262	\$ 439,954	\$ 1,549,216	\$ 996,354	\$ -	\$ 996,354
2030	\$ 1,935,038	\$ 657,446	\$ 2,592,484	\$ 340,237	\$ 124,005	\$ 464,242	\$ 1,594,801	\$ 533,441	\$ 2,128,242	\$ 2,996	\$ 515	\$ 3,511	\$ 1,109,113	\$ 545,174	\$ 1,654,287	\$ 1,022,783	\$ -	\$ 1,022,783
2031	\$ 1,862,401	\$ 786,968	\$ 2,649,369	\$ 330,908	\$ 148,115	\$ 479,023	\$ 1,531,493	\$ 638,853	\$ 2,170,346	\$ 2,982	\$ 617	\$ 3,599	\$ 1,113,763	\$ 652,904	\$ 1,766,667	\$ 1,047,209	\$ -	\$ 1,047,209
2032	\$ 1,798,031	\$ 925,141	\$ 2,723,172	\$ 322,206	\$ 173,854	\$ 496,060	\$ 1,475,825	\$ 751,287	\$ 2,227,112	\$ 3,026	\$ 692	\$ 3,718	\$ 1,119,012	\$ 767,778	\$ 1,886,790	\$ 1,080,077	\$ -	\$ 1,080,077
2033	\$ 1,725,345	\$ 1,064,129	\$ 2,789,474	\$ 311,662	\$ 199,707	\$ 511,369	\$ 1,413,683	\$ 864,422	\$ 2,278,105	\$ 3,040	\$ 801	\$ 3,841	\$ 1,131,893	\$ 883,401	\$ 2,015,294	\$ 1,109,500	\$ -	\$ 1,109,500
2034	\$ 1,682,384	\$ 1,210,949	\$ 2,893,333	\$ 305,343	\$ 227,017	\$ 532,360	\$ 1,377,041	\$ 983,932	\$ 2,360,973	\$ 3,052	\$ 916	\$ 3,968	\$ 1,147,190	\$ 1,005,539	\$ 2,152,729	\$ 1,142,092	\$ -	\$ 1,142,092
2035	\$ 1,670,243	\$ 1,336,345	\$ 3,006,588	\$ 304,497	\$ 250,154	\$ 554,651	\$ 1,365,746	\$ 1,086,191	\$ 2,451,937	\$ 3,063	\$ 972	\$ 4,035	\$ 1,189,725	\$ 1,110,004	\$ 2,299,729	\$ 1,169,458	\$ -	\$ 1,169,458
2036	\$ 1,615,329	\$ 1,456,928	\$ 3,072,257	\$ 295,629	\$ 272,364	\$ 567,993	\$ 1,319,700	\$ 1,184,564	\$ 2,504,264	\$ 3,073	\$ 1,063	\$ 4,136	\$ 1,246,435	\$ 1,210,537	\$ 2,456,972	\$ 1,223,698	\$ -	\$ 1,223,698
2037	\$ 1,578,635	\$ 1,608,719	\$ 3,187,354	\$ 289,477	\$ 300,585	\$ 590,062	\$ 1,289,158	\$ 1,308,134	\$ 2,597,292	\$ 3,081	\$ 1,158	\$ 4,239	\$ 1,288,384	\$ 1,336,801	\$ 2,625,185	\$ 1,272,772	\$ -	\$ 1,272,772
2038	\$ 1,556,347	\$ 1,745,399	\$ 3,301,746	\$ 286,473	\$ 325,844	\$ 612,317	\$ 1,269,874	\$ 1,419,555	\$ 2,689,429	\$ 3,123	\$ 1,222	\$ 4,345	\$ 1,354,556	\$ 1,450,629	\$ 2,805,185	\$ 1,341,216	\$ -	\$ 1,341,216
2039	\$ 1,500,913	\$ 1,885,873	\$ 3,386,786	\$ 277,299	\$ 351,804	\$ 629,103	\$ 1,223,614	\$ 1,534,069	\$ 2,757,683	\$ 3,129	\$ 1,290	\$ 4,419	\$ 1,430,186	\$ 1,567,619	\$ 2,997,805	\$ 1,428,604	\$ -	\$ 1,428,604
2040	\$ 1,380,553	\$ 2,063,668	\$ 3,444,221	\$ 256,591	\$ 384,923	\$ 641,514	\$ 1,123,962	\$ 1,678,745	\$ 2,802,707	\$ 3,133	\$ 1,432	\$ 4,565	\$ 1,488,412	\$ 1,715,479	\$ 3,203,891	\$ 1,462,800	\$ -	\$ 1,462,800
2041	\$ 1,260,285	\$ 2,273,210	\$ 3,533,495	\$ 235,448	\$ 424,068	\$ 659,516	\$ 1,024,837	\$ 1,849,142	\$ 2,873,979	\$ 3,136	\$ 1,543	\$ 4,679	\$ 1,534,908	\$ 1,889,570	\$ 3,424,478	\$ 1,497,852	\$ -	\$ 1,497,852
2042	\$ 1,090,497	\$ 2,478,194	\$ 3,568,691	\$ 204,211	\$ 462,194	\$ 666,405	\$ 886,286	\$ 2,016,000	\$ 2,902,286	\$ 3,137	\$ 1,697	\$ 4,834	\$ 1,600,494	\$ 2,060,091	\$ 3,660,585	\$ 1,573,075	\$ -	\$ 1,573,075
2043	\$ 898,490	\$ 2,749,425	\$ 3,647,915	\$ 168,053	\$ 512,972	\$ 681,025	\$ 730,437	\$ 2,236,453	\$ 2,966,890	\$ 3,176	\$ 1,856	\$ 5,032	\$ 1,627,962	\$ 2,285,339	\$ 3,913,301	\$ 1,627,384	\$ -	\$ 1,627,384
2044	\$ 717,251	\$ 2,995,792	\$ 3,713,043	\$ 135,445	\$ 558,764	\$ 694,209	\$ 581,806	\$ 2,437,028	\$ 3,018,834	\$ 3,174	\$ 1,984	\$ 5,158	\$ 1,693,573	\$ 2,490,260	\$ 4,183,833	\$ 1,666,529	\$ -	\$ 1,666,529
2045	\$ 550,515	\$ 3,241,420	\$ 3,791,935	\$ 105,780	\$ 604,577	\$ 710,357	\$ 444,735	\$ 2,636,843	\$ 3,081,578	\$ 3,212	\$ 2,116	\$ 5,328	\$ 1,779,019	\$ 2,694,409	\$ 4,473,428	\$ 1,734,610	\$ -	\$ 1,734,610
2046	\$ 422,706	\$ 3,497,694	\$ 3,920,400	\$ 82,925	\$ 652,703	\$ 735,628	\$ 339,781	\$ 2,844,991	\$ 3,184,772	\$ 3,207	\$ 2,296	\$ 5,503	\$ 1,876,308	\$ 2,907,114	\$ 4,783,422	\$ 1,776,478	\$ -	\$ 1,776,478
2047	\$ 342,297	\$ 3,724,642	\$ 4,066,939	\$ 68,652	\$ 695,353	\$ 764,005	\$ 273,645	\$ 3,029,289	\$ 3,302,934	\$ 3,200	\$ 2,441	\$ 5,641	\$ 2,019,892	\$ 3,095,433	\$ 5,115,325	\$ 1,838,273	\$ -	\$ 1,838,273
2048	\$ 237,617	\$ 3,929,553	\$ 4,167,170	\$ 49,719	\$ 734,048	\$ 783,767	\$ 187,898	\$ 3,195,505	\$ 3,383,403	\$ 3,190	\$ 2,548	\$ 5,738	\$ 2,205,372	\$ 3,265,251	\$ 5,470,623	\$ 1,915,233	\$ -	\$ 1,915,233
2049	\$ 162,107	\$ 4,145,039	\$ 4,307,146	\$ 35,618	\$ 775,214	\$ 810,832	\$ 126,489	\$ 3,369,825	\$ 3,496,314	\$ 3,224	\$ 2,702	\$ 5,926	\$ 2,407,560	\$ 3,443,391	\$ 5,850,951	\$ 1,961,562	\$ -	\$ 1,961,562
2050	\$ 114,723	\$ 4,331,272	\$ 4,445,995	\$ 26,026	\$ 811,147	\$ 837,173	\$ 88,697	\$ 3,520,125	\$ 3,608,822	\$ 3,210	\$ 2,864	\$ 6,074	\$ 2,661,129	\$ 3,597,013	\$ 6,258,142	\$ 2,009,049	\$ -	\$ 2,009,049
2051	\$ 89,576	\$ 4,523,256	\$ 4,612,832	\$ 20,115	\$ 848,173	\$ 868,288	\$ 69,461	\$ 3,675,083	\$ 3,744,544	\$ 3,242	\$ 2,984	\$ 6,226	\$ 2,938,677	\$ 3,755,350	\$ 6,694,027	\$ 2,057,724	\$ -	\$ 2,057,724
2052	\$ 60,690	\$ 4,697,027	\$ 4,757,717	\$ 13,823	\$ 881,874	\$ 895,697	\$ 46,867	\$ 3,815,153	\$ 3,862,020	\$ 3,224	\$ 3,158	\$ 6,382	\$ 3,262,110	\$ 3,898,539	\$ 7,160,649	\$ 2,257,302	\$ -	\$ 2,257,302
2053	\$ 44,509	\$ 4,870,668	\$ 4,915,177	\$ 10,104	\$ 915,553	\$ 925,657	\$ 34,405	\$ 3,955,115	\$ 3,989,520	\$ 3,203	\$ 3,388	\$ 6,591	\$ 3,618,476	\$ 4,041,675	\$ 7,660,151	\$ 2,347,889	\$ -	\$ 2,347,889
2054	\$ 34,163	\$ 5,042,221	\$ 5,076,384	\$ 7,917	\$ 948,697	\$ 956,614	\$ 26,246	\$ 4,093,524	\$ 4,119,770	\$ 3,179	\$ 3,577	\$ 6,756	\$ 4,011,601	\$ 4,183,183	\$ 8,194,784	\$ 7,952,476	\$ -	\$ 7,952,476
2055	\$ 20,310	\$ 5,226,819	\$ 5,247,129	\$ 4,996	\$ 983,992	\$ 988,988	\$ 15,314	\$ 4,242,827	\$ 4,258,141	\$ 3,205	\$ 3,720	\$ 6,925	\$ 4,431,275	\$ 4,335,769	\$ 8,767,044	\$ 8,150,543	\$ -	\$ 8,150,543
2056	\$ 12,913	\$ 5,421,219	\$ 5,434,132	\$ 3,222	\$ 1,020,776	\$ 1,023,998	\$ 9,691	\$ 4,400,443	\$ 4,410,134	\$ 3,176	\$ 3,975	\$ 7,151	\$ 4,882,602	\$ 4,496,954	\$ 9,379,556	\$ 8,353,561	\$ -	\$ 8,353,561
2057	\$ 10,331	\$ 5,612,633	\$ 5,622,964	\$ 2,545	\$ 1,056,754	\$ 1,059,299	\$ 7,786	\$ 4,555,879	\$ 4,563,665	\$ 3,199	\$ 4,131	\$ 7,330	\$ 5,379,270	\$ 4,655,815	\$ 10,035,085	\$ 8,561,655	\$ -	\$ 8,561,655
2058	\$ 4,326	\$ 5,815,485	\$ 5,819,811	\$ 1,236	\$ 1,094,761	\$ 1,095,997	\$ 3,090	\$ 4,720,724	\$ 4,723,814	\$ 3,164	\$ 4,349	\$ 7,513	\$ 5,912,335	\$ 4,824,345	\$ 10,736,680	\$ 8,774,950	\$ -	\$ 8,774,950
2059	\$ 3,548	\$ 6,029,664	\$ 6,033,212	\$ 1,017	\$ 1,134,813	\$ 1,135,830	\$ 2,531	\$ 4,894,851	\$ 4,897,382	\$ 3,125	\$ 4,633	\$ 7,758	\$ 6,485,140	\$ 5,002,417	\$ 11,487,557	\$ 9,426,874	\$ -	\$ 9,426,874
2060	\$ 1,964	\$ 6,254,733	\$ 6,256,697	\$ 517	\$ 1,176,778	\$ 1,177,295	\$ 1,447	\$ 5,077,955	\$ 5,079,402	\$ 3,143	\$ 4,809	\$ 7,952	\$ 7,101,524	\$ 5,189,548	\$ 12,291,072	\$ 2,659,727	\$ -	\$ 2,659,727
2061	\$ 1,641	\$ 6,478,934	\$ 6,480,575	\$ 430	\$ 1,218,672	\$ 1,219,102	\$ 1,211	\$ 5,260,262	\$ 5,261,473	\$ 3,098	\$ 5,053	\$ 8,151	\$ 4,336	\$ 5,375,932	\$ 5,380,268	\$ -	\$ -	\$ -
2062	\$ 514	\$ 6,708,867	\$ 6,709,381	\$ 148	\$ 1,261,764	\$ 1,261,912	\$ 366	\$ 5,447,103	\$ 5,447,469	\$ 3,048	\$ 5,307	\$ 8,355	\$ 3,421	\$ 5,566,957	\$ 5,570,378	\$ -	\$ -	\$ -
2063	\$ 451	\$ 6,946,772	\$ 6,947,223	\$ 130	\$ 1,306,456	\$ 1,306,586	\$ 321	\$ 5,640,316	\$ 5,640,637	\$ 3,059	\$ 5,505	\$ 8,564	\$ 3,387	\$ 5,764,431	\$ 5,767,818	\$ -	\$ -	\$ -
2064	\$ 396	\$ 7,192,549	\$ 7,192,945	\$ 114	\$ 1,352,872	\$ 1,352,986	\$ 282	\$ 5,839,677	\$ 5,839,959	\$ 3,002	\$ 5,776	\$ 8,778	\$ 3,290	\$ 5,968,255	\$ 5,971,545	\$ -	\$ -	\$ -

City of Morgantown, West Virginia Firemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2024 Measurement Date



Projection of Pension Plan's Fiduciary Net Position

Fiscal Year	Actuarial Accrued Liability (BOY)			Closed Group Asset Projection						
	Current Members	Future Members	Total Members	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
2024	\$ 62,962,323	\$ -	\$ 62,962,323	\$ 14,284,625	22.69%	\$ 393,437	\$ 1,957,747	\$ 2,407,146	\$ 2,983	\$ 1,255,130
2025	\$ 65,582,625	\$ -	\$ 65,582,625	\$ 15,480,810	23.61%	\$ 400,147	\$ 1,942,354	\$ 2,471,032	\$ 2,979	\$ 655,169
2026	\$ 68,263,727	\$ 72,513	\$ 68,336,240	\$ 16,004,469	23.45%	\$ 397,314	\$ 1,968,882	\$ 2,576,028	\$ 2,949	\$ 675,715
2027	\$ 70,926,330	\$ 220,248	\$ 71,146,578	\$ 16,467,403	23.22%	\$ 387,185	\$ 2,007,648	\$ 2,748,058	\$ 2,969	\$ 692,374
2028	\$ 73,445,751	\$ 478,338	\$ 73,924,089	\$ 16,803,583	22.88%	\$ 366,252	\$ 2,116,426	\$ 2,980,922	\$ 2,961	\$ 703,613
2029	\$ 75,691,672	\$ 874,855	\$ 76,566,527	\$ 17,005,991	22.47%	\$ 352,684	\$ 2,105,616	\$ 3,186,737	\$ 2,979	\$ 707,374
2030	\$ 77,719,302	\$ 1,448,348	\$ 79,167,650	\$ 16,981,950	21.85%	\$ 347,392	\$ 2,131,896	\$ 3,318,022	\$ 2,996	\$ 704,032
2031	\$ 79,651,853	\$ 2,171,744	\$ 81,823,597	\$ 16,844,252	21.15%	\$ 337,867	\$ 2,160,972	\$ 3,475,816	\$ 2,982	\$ 695,273
2032	\$ 81,429,701	\$ 3,053,912	\$ 84,483,613	\$ 16,559,566	20.34%	\$ 328,982	\$ 2,199,089	\$ 3,613,046	\$ 3,026	\$ 680,902
2033	\$ 83,075,886	\$ 4,110,440	\$ 87,186,326	\$ 16,152,467	19.44%	\$ 318,216	\$ 2,241,393	\$ 3,746,821	\$ 3,040	\$ 661,450
2034	\$ 84,579,671	\$ 5,348,150	\$ 89,927,821	\$ 15,623,665	18.47%	\$ 311,764	\$ 2,289,282	\$ 3,842,227	\$ 3,052	\$ 637,841
2035	\$ 86,005,168	\$ 6,782,742	\$ 92,787,910	\$ 15,017,273	17.46%	\$ 310,900	\$ 2,359,183	\$ 3,894,307	\$ 3,063	\$ 612,426
2036	\$ 87,425,416	\$ 8,399,167	\$ 95,824,583	\$ 14,402,412	16.47%	\$ 301,846	\$ 2,470,133	\$ 4,012,528	\$ 3,073	\$ 585,951
2037	\$ 88,728,070	\$ 10,199,688	\$ 98,927,758	\$ 13,744,741	15.49%	\$ 295,564	\$ 2,561,156	\$ 4,092,323	\$ 3,081	\$ 558,103
2038	\$ 89,966,360	\$ 12,223,817	\$ 102,190,177	\$ 13,064,160	14.52%	\$ 292,497	\$ 2,695,772	\$ 4,143,333	\$ 3,123	\$ 530,871
2039	\$ 91,181,959	\$ 14,464,388	\$ 105,646,347	\$ 12,436,844	13.64%	\$ 283,130	\$ 2,858,790	\$ 4,233,173	\$ 3,129	\$ 505,552
2040	\$ 92,299,702	\$ 16,932,644	\$ 109,232,346	\$ 11,848,015	12.84%	\$ 281,987	\$ 2,951,212	\$ 4,397,886	\$ 3,133	\$ 478,562
2041	\$ 93,171,297	\$ 19,676,553	\$ 112,847,850	\$ 11,138,756	11.96%	\$ 240,399	\$ 3,032,760	\$ 4,560,132	\$ 3,136	\$ 446,268
2042	\$ 93,788,898	\$ 22,738,221	\$ 116,527,119	\$ 10,294,915	10.98%	\$ 208,505	\$ 3,173,569	\$ 4,806,535	\$ 3,137	\$ 407,513
2043	\$ 94,004,158	\$ 26,124,674	\$ 120,128,832	\$ 9,274,830	9.87%	\$ 171,587	\$ 3,255,346	\$ 5,057,039	\$ 3,176	\$ 359,834
2044	\$ 93,772,628	\$ 29,915,941	\$ 123,688,569	\$ 8,001,382	8.53%	\$ 138,293	\$ 3,360,102	\$ 5,266,201	\$ 3,174	\$ 302,817
2045	\$ 93,128,755	\$ 34,101,551	\$ 127,230,306	\$ 6,533,219	7.02%	\$ 108,004	\$ 3,513,629	\$ 5,453,485	\$ 3,212	\$ 239,072
2046	\$ 92,092,473	\$ 38,684,685	\$ 130,777,158	\$ 4,937,227	5.36%	\$ 84,669	\$ 3,652,786	\$ 5,581,256	\$ 3,207	\$ 170,992
2047	\$ 90,748,450	\$ 43,675,632	\$ 134,424,082	\$ 3,261,211	3.59%	\$ 70,096	\$ 3,858,165	\$ 5,641,641	\$ 3,200	\$ 102,504
2048	\$ 89,201,825	\$ 49,046,247	\$ 138,248,072	\$ 1,647,135	1.85%	\$ 50,765	\$ 4,120,605	\$ 5,739,877	\$ 3,190	\$ 36,952
2049	\$ 87,380,038	\$ 54,772,369	\$ 142,152,407	\$ 112,390	0.13%	\$ 36,367	\$ 4,369,122	\$ 5,786,688	\$ 3,224	\$ -
2050	\$ 85,354,311	\$ 60,844,729	\$ 146,199,040	\$ -	0.00%	\$ 26,573	\$ 4,670,178	\$ 5,806,104	\$ 3,210	\$ -
2051	\$ 83,173,268	\$ 67,204,215	\$ 150,377,483	\$ -	0.00%	\$ 20,538	\$ 4,996,401	\$ 5,782,628	\$ 3,242	\$ -
2052	\$ 80,897,285	\$ 73,853,487	\$ 154,750,772	\$ -	0.00%	\$ 14,114	\$ 5,519,412	\$ 5,762,057	\$ 3,224	\$ -
2053	\$ 78,515,462	\$ 80,757,601	\$ 159,273,063	\$ -	0.00%	\$ 10,316	\$ 5,966,365	\$ 5,711,413	\$ 3,203	\$ 5,511
2054	\$ 76,067,252	\$ 87,886,033	\$ 163,953,285	\$ 267,576	0.35%	\$ 8,083	\$ 11,964,077	\$ 5,644,308	\$ 3,179	\$ 144,373
2055	\$ 73,572,724	\$ 95,217,465	\$ 168,790,189	\$ 6,736,622	9.16%	\$ 5,101	\$ 12,581,818	\$ 5,581,187	\$ 3,205	\$ 433,562
2056	\$ 71,022,185	\$ 102,768,068	\$ 173,790,253	\$ 14,172,711	19.96%	\$ 3,290	\$ 13,236,163	\$ 5,501,673	\$ 3,176	\$ 764,990
2057	\$ 68,436,723	\$ 110,543,565	\$ 178,980,288	\$ 22,672,305	33.13%	\$ 2,599	\$ 13,940,925	\$ 5,409,099	\$ 3,199	\$ 1,142,975
2058	\$ 65,833,207	\$ 118,527,444	\$ 184,360,651	\$ 32,346,506	49.13%	\$ 1,262	\$ 14,687,285	\$ 5,316,990	\$ 3,164	\$ 1,571,733
2059	\$ 63,206,828	\$ 126,730,048	\$ 189,936,876	\$ 43,286,632	68.48%	\$ 1,038	\$ 15,912,014	\$ 5,211,498	\$ 3,125	\$ 2,064,658
2060	\$ 60,575,727	\$ 135,171,526	\$ 195,747,253	\$ 56,049,719	92.53%	\$ 528	\$ 9,761,251	\$ 5,103,920	\$ 3,143	\$ 2,479,997
2061	\$ 57,940,993	\$ 143,876,750	\$ 201,817,743	\$ 63,184,432	109.05%	\$ 439	\$ 4,336	\$ 4,988,472	\$ 3,098	\$ 2,580,472
2062	\$ 55,311,822	\$ 152,836,220	\$ 208,148,042	\$ 60,778,108	109.88%	\$ 151	\$ 3,421	\$ 4,870,141	\$ 3,048	\$ 2,480,667
2063	\$ 52,690,556	\$ 162,046,514	\$ 214,737,070	\$ 58,389,159	110.82%	\$ 133	\$ 3,387	\$ 4,745,354	\$ 3,059	\$ 2,381,759
2064	\$ 50,085,231	\$ 171,519,289	\$ 221,604,520	\$ 56,026,025	111.86%	\$ 116	\$ 3,290	\$ 4,616,217	\$ 3,002	\$ 2,284,041

City of Morgantown, West Virginia Firemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2024 Measurement Date



Projection of Pension Plan's Fiduciary Net Position

Calculation of Single Equivalent Discount Rate (DR)					
Fiscal Year	"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments	Present Value of "Funded" Portion of Benefit Payments	Present Value of "Unfunded" Portion of Benefit Payments	Present Value of Benefit Payments Using a Single DR
2024	\$ 2,407,146	\$ -	\$ 2,357,569	\$ -	\$ 2,358,363
2025	\$ 2,471,032	\$ -	\$ 2,321,476	\$ -	\$ 2,323,822
2026	\$ 2,576,028	\$ -	\$ 2,321,456	\$ -	\$ 2,325,366
2027	\$ 2,748,058	\$ -	\$ 2,375,525	\$ -	\$ 2,381,129
2028	\$ 2,980,922	\$ -	\$ 2,471,772	\$ -	\$ 2,479,271
2029	\$ 3,186,737	\$ -	\$ 2,534,708	\$ -	\$ 2,544,110
2030	\$ 3,318,022	\$ -	\$ 2,531,540	\$ -	\$ 2,542,642
2031	\$ 3,475,816	\$ -	\$ 2,543,820	\$ -	\$ 2,556,696
2032	\$ 3,613,046	\$ -	\$ 2,536,454	\$ -	\$ 2,551,010
2033	\$ 3,746,821	\$ -	\$ 2,523,134	\$ -	\$ 2,539,323
2034	\$ 3,842,227	\$ -	\$ 2,481,900	\$ -	\$ 2,499,507
2035	\$ 3,894,307	\$ -	\$ 2,412,990	\$ -	\$ 2,431,744
2036	\$ 4,012,528	\$ -	\$ 2,384,884	\$ -	\$ 2,405,038
2037	\$ 4,092,323	\$ -	\$ 2,333,152	\$ -	\$ 2,354,453
2038	\$ 4,143,333	\$ -	\$ 2,265,932	\$ -	\$ 2,288,160
2039	\$ 4,233,173	\$ -	\$ 2,220,685	\$ -	\$ 2,243,979
2040	\$ 4,397,886	\$ -	\$ 2,213,038	\$ -	\$ 2,237,758
2041	\$ 4,560,132	\$ -	\$ 2,201,133	\$ -	\$ 2,227,219
2042	\$ 4,806,535	\$ -	\$ 2,225,486	\$ -	\$ 2,253,377
2043	\$ 5,057,039	\$ -	\$ 2,246,017	\$ -	\$ 2,275,697
2044	\$ 5,266,201	\$ -	\$ 2,243,562	\$ -	\$ 2,274,740
2045	\$ 5,453,485	\$ -	\$ 2,228,634	\$ -	\$ 2,261,126
2046	\$ -	\$ 5,581,256	\$ -	\$ 2,324,347	\$ 2,221,258
2047	\$ -	\$ 5,641,641	\$ -	\$ 2,259,781	\$ 2,155,206
2048	\$ -	\$ 5,739,877	\$ -	\$ 2,211,340	\$ 2,104,758
2049	\$ -	\$ 5,786,688	\$ -	\$ 2,144,248	\$ 2,036,789
2050	\$ -	\$ 5,806,104	\$ -	\$ 2,069,291	\$ 1,961,630
2051	\$ -	\$ 5,782,628	\$ -	\$ 1,982,230	\$ 1,875,313
2052	\$ -	\$ 5,762,057	\$ -	\$ 1,899,758	\$ 1,793,670
2053	\$ -	\$ 5,711,413	\$ -	\$ 1,811,158	\$ 1,706,573
2054	\$ -	\$ 5,644,308	\$ -	\$ 1,721,533	\$ 1,618,856
2055	\$ 5,581,187	\$ -	\$ 1,504,287	\$ -	\$ 1,536,528
2056	\$ 5,501,673	\$ -	\$ 1,422,403	\$ -	\$ 1,453,868
2057	\$ 5,409,099	\$ -	\$ 1,341,457	\$ -	\$ 1,372,055
2058	\$ 5,316,990	\$ -	\$ 1,264,858	\$ -	\$ 1,294,579
2059	\$ 5,211,498	\$ -	\$ 1,189,220	\$ -	\$ 1,217,984
2060	\$ 5,103,920	\$ -	\$ 1,117,191	\$ -	\$ 1,144,984
2061	\$ 4,988,472	\$ -	\$ 1,047,406	\$ -	\$ 1,074,185
2062	\$ 4,870,141	\$ -	\$ 980,874	\$ -	\$ 1,006,629
2063	\$ 4,745,354	\$ -	\$ 916,778	\$ -	\$ 941,484
2064	\$ 4,616,217	\$ -	\$ 855,472	\$ -	\$ 879,117