



**Municipal Pensions
Oversight Board**

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

GASB 68 Actuarial Information for the
Measurement Period Ending
June 30, 2023

Bolton

Submitted by:

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November 30, 2023

Mr. Michael Griffith
City Treasurer
City of Nitro
2009 20th Street
Nitro, WV 25143

Lieutenant Christopher Hastings
Pension Board Secretary
City of Nitro
Policemen's Pension and Relief Fund

Re: City of Nitro Policemen's Pension and Relief Fund
GASB 68 Actuarial Information for the Measurement Period Ending June 30, 2023

Dear Michael,

The following report contains the GASB 67 and GASB 68 actuarial information for the City of Nitro Policemen's Pension and Relief Fund to be included in the City's financial statements for FY 2023. The GASB 67 information has been provided as of June 30, 2023 (the GASB 68 measurement date for FY 2023).

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, 2023 (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, 2022 actuarial valuation rolled forward to June 30, 2023. The methods, assumptions, and participant data used are detailed in the July 1, 2022 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, 2023 is contained in the July 1, 2021 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 4.75%. The plan's expected gross rate of investment return of 4.75% has been blended with the 3.86% 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, 2023. 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, 2023 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.

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 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.

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.



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, 2022 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 Nitro, West Virginia Policemen’s Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2023 Measurement Date



Net Pension Liability of the Employer

The components of the net pension liability of the Employer at June 30, 2023, were as follows:

Total pension liability	\$ 14,928,271
Plan fiduciary net position	(5,677,444)
Employer’s net pension liability	<u>\$ 9,250,827</u>
Plan fiduciary net position as a percentage of the total pension liability	38.03%

Actuarial assumptions. The total pension liability was determined by an actuarial valuation as of July 1, 2022 rolled forward to June 30, 2023 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)	5.00%
Single discount rate (EOY)	4.75%
Investment rate of return (BOY)	5.00%, net of pension plan investment expense, including inflation
Investment rate of return (EOY)	4.75%, net of pension plan investment expense, including inflation
Long-term municipal bond rate (BOY)	3.69%
Long-term municipal bond rate (EOY)	3.86%
Mortality	SOA PubS-2010(B) with generational projection using Scale MP-2019
Year Fund is projected to be fully funded	2058
Year assets are expected to be depleted for a closed plan	N/A

The above is a summary of key actuarial assumptions. Full descriptions of the actuarial assumptions are available in the July 1, 2022 actuarial valuation report.

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

	1% Decrease 3.75%	Current Discount Rate 4.75%	1% Increase 5.75%
Employer’s net pension liability	\$ 11,967,536	\$ 9,250,827	\$ 7,129,284

City of Nitro, West Virginia Policemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2023 Measurement Date



Changes in the Net Pension Liability

	Total Pension Liability (a)	Increase (Decrease) Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances at 6/30/22	\$ 12,856,196	\$ 5,235,052	\$ 7,621,144
Changes for the year:			
Service cost	453,973		453,973
Interest	630,393		630,393
Changes of benefit terms	-		-
Differences between expected and actual experience	905,240		905,240
Changes of assumptions	579,163		579,163
Contributions - employer (including Premium Tax Allocation)		424,337	(424,337)
Contributions - member		103,371	(103,371)
Net investment income		413,954	(413,954)
Benefit payments, including refunds of member contributions	(496,694)	(496,694)	-
Administrative expense		(2,576)	2,576
Other		-	-
Net Changes	<u>2,072,075</u>	<u>442,392</u>	<u>1,629,683</u>
Balances at 6/30/23	<u>\$ 14,928,271</u>	<u>\$ 5,677,444</u>	<u>\$ 9,250,827</u>
Return on Investments		7.9%	

City of Nitro, West Virginia Policemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2023 Measurement Date



Components of Employer's Pension Expense for the Fiscal Year Ended June 30, 2023

Note	Description	Amount
A	Service cost	\$ 453,973
B	Interest on the total pension liability	630,393
A	Changes of benefit terms	-
C	Differences between expected and actual experience	(779)
C	Changes of assumptions	(669,476)
A	Employee contributions	(103,371)
D	Projected earnings on pension plan investments	(262,464)
C	Differences between expected and actual earnings on plan investments	29,399
A	Pension plan administrative expense	2,576
A	Other changes in fiduciary net position	-
Total Pension Expense		\$ 80,251

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	\$ 12,856,196	100%	5.00%	\$ 642,810
Service cost (End of Year)	453,973	0%	5.00%	-
Benefit payments, including refunds of employee contributions	(496,694)	50%	5.00%	(12,417)
Total interest on the total pension liability				\$ 630,393

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	\$ 5,235,052	100%	5.00%	\$ 261,753
Employer contributions	424,337	50%	5.00%	10,608
Employee contributions	103,371	50%	5.00%	2,584
Benefit payments, including refunds of employee contributions	(496,694)	50%	5.00%	(12,417)
Administrative expense and other	(2,576)	50%	5.00%	(64)
Total Projected Earnings				\$ 262,464

City of Nitro, West Virginia Policemen’s Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2023 Measurement Date



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

At June 30, 2023, 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	\$ 994,675	\$ 968,673
Changes of assumptions	463,330	1,239,862
Net difference between projected and actual earnings on pension plan investments	162,991	-
Total	\$ 1,620,996	\$ 2,208,535

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:	
2024	\$ (467,837)
2025	(512,819)
2026	126,536
2027	266,581
2028	-
Thereafter	-

City of Nitro, West Virginia Policemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2023 Measurement Date



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

Total pension liability	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Service cost	\$ 453,973	\$ 429,367	\$ 614,673	\$ 590,211	\$ 618,647	\$ 598,321	\$ 711,164	\$ 314,562	\$ 285,508	\$ 255,694
Interest	630,393	646,335	605,390	578,426	570,802	547,497	448,588	487,352	466,748	438,033
Changes of benefit terms	-	-	-	-	-	-	-	-	-	-
Differences between expected and actual experience	905,240	(1,108,651)	646,408	(266,968)	(750,724)	830,663	(777,301)	(37,232)	200,889	-
Changes of assumptions	579,163	(519,662)	(1,734,670)	(372,208)	(378,869)	(130,855)	(2,064,480)	5,255,570	656,653	-
Benefit payments, including refunds of member contributions	(496,694)	(396,471)	(359,687)	(406,145)	(354,754)	(285,165)	(289,927)	(289,815)	(318,959)	(287,238)
Net change in total pension liability	2,072,075	(949,082)	(227,886)	123,316	(294,898)	1,560,461	(1,971,956)	5,730,437	1,290,839	406,489
Total pension liability - beginning	12,856,196	13,805,278	14,033,164	13,909,848	14,204,746	12,644,285	14,616,241	8,885,804	7,594,965	7,188,476
Total pension liability - ending (a)	\$ 14,928,271	\$ 12,856,196	\$ 13,805,278	\$ 14,033,164	\$ 13,909,848	\$ 14,204,746	\$ 12,644,285	\$ 14,616,241	\$ 8,885,804	\$ 7,594,965
Plan fiduciary net position	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Contributions - employer (including Premium Tax Allocation)	\$ 424,337	\$ 446,176	\$ 404,311	\$ 379,443	\$ 351,077	\$ 330,950	\$ 315,828	\$ 317,221	\$ 248,577	\$ 192,256
Contributions - member	103,371	123,256	102,037	94,589	91,478	89,265	92,460	79,333	75,139	76,496
Net investment income	413,954	(652,483)	1,001,211	49,751	243,964	287,729	349,585	155,340	110,431	287,530
Benefit payments, including refunds of member contributions	(496,694)	(396,471)	(359,687)	(406,145)	(354,754)	(285,165)	(289,927)	(289,815)	(318,959)	(287,238)
Administrative expense	(2,576)	(2,400)	(2,264)	(2,577)	(11,260)	(4,203)	(2,400)	(652)	(2,400)	(2,400)
Other	-	-	-	-	-	-	-	1,992	-	-
Net change in plan fiduciary net position	\$ 442,392	\$ (481,922)	\$ 1,145,608	\$ 115,061	\$ 320,505	\$ 418,576	\$ 465,546	\$ 263,419	\$ 112,788	\$ 266,644
Plan fiduciary net position - beginning	5,235,052	5,716,974	4,571,366	4,456,305	4,135,800	3,717,223	3,251,677	2,988,258	2,875,470	2,608,826
Plan fiduciary net position - ending (b)	\$ 5,677,444	\$ 5,235,052	\$ 5,716,974	\$ 4,571,366	\$ 4,456,305	\$ 4,135,800	\$ 3,717,223	\$ 3,251,677	\$ 2,988,258	\$ 2,875,470
Employer's net pension liability - ending (a)-(b)	\$ 9,250,827	\$ 7,621,144	\$ 8,088,304	\$ 9,461,798	\$ 9,453,543	\$ 10,068,946	\$ 8,927,062	\$ 11,364,564	\$ 5,897,546	\$ 4,719,495
Plan fiduciary net position as a percentage of the total pension liability	38.03%	40.72%	41.41%	32.58%	32.04%	29.12%	29.40%	22.25%	33.63%	37.86%
Covered payroll	\$ 1,233,196	\$ 1,057,644	\$ 1,122,187	\$ 1,059,432	\$ 1,096,302	\$ 1,003,494	\$ 960,443	\$ 878,065	\$ 919,991	\$ 821,706
Employer's net pension liability as a percentage of covered payroll	750.15%	720.58%	720.76%	893.10%	862.31%	1003.39%	929.47%	1294.27%	641.04%	574.35%
Expected average remaining service years of all participants	5.00	5.00	5.00	6.00	7.00	6.09	6.63	6.02	6.64	N/A

Notes to Schedule:

Benefit changes: There were no changes for FY2023.

Changes of assumptions: The discount rate changed from 5.00% to 4.75%.

City of Nitro, West Virginia Policemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2023 Measurement Date



Schedule of Employer Contributions
 Last 10 Fiscal Years

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Actuarially determined contribution	\$ 771,935	\$ 878,527	\$ 854,425	\$ 857,475	\$ 851,980	\$ 760,991	\$ 686,729	\$ 737,278	\$ 501,944	\$ 404,846
Contributions in relation to the actuarially determined contribution										
Employer provided	249,412	254,286	217,846	203,595	190,276	177,827	166,193	155,321	138,861	60,683
State provided	174,925	191,890	186,465	175,848	160,801	153,124	149,635	161,900	109,716	131,573
Contribution deficiency (excess)	<u>\$ 347,598</u>	<u>\$ 432,351</u>	<u>\$ 450,114</u>	<u>\$ 478,032</u>	<u>\$ 500,903</u>	<u>\$ 430,040</u>	<u>\$ 370,901</u>	<u>\$ 420,057</u>	<u>\$ 253,367</u>	<u>\$ 212,590</u>
Covered payroll	\$ 1,233,196	\$ 1,057,644	\$ 1,122,187	\$ 1,059,432	\$ 1,096,302	\$ 1,003,494	\$ 960,443	\$ 878,065	\$ 919,991	\$ 821,706
Contributions as a percentage of covered employee payroll	34.41%	42.19%	36.03%	35.82%	32.02%	32.98%	32.88%	36.13%	27.02%	23.40%

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 7/1/2021 actuarial valuation to calculate the FY2023 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 27.5 years
Asset valuation method	4-year smoothed market
Inflation	2.50 percent
Salary increases	Rates vary by years of service
Investment rate of return	5.00%, net of pension plan investment expense, including inflation
Retirement age	Rates vary by age
Mortality	SOA PubS-2010(B) with generational projection using Scale MP-2019

City of Nitro, West Virginia Policemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2023 Measurement Date



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

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

Increase (Decrease) in Pension Expense Arising from the Recognition of Differences between Projected and Actual Earnings on Plan Investments											
Year	Differences between Projected and Actual Earnings on Pension Plan Investments	Recognition Period (Years)	2019	2020	2021	2022	2023	2024	2025	2026	2027
2019	\$ (35,261)	5	\$ (7,052)	(7,052)	(7,052)	(7,052)	(7,052)				
2020	174,697	5		\$ 34,939	34,939	34,939	34,939	34,941			
2021	(769,033)	5			\$ (153,807)	(153,807)	(153,807)	(153,807)	(153,805)		
2022	928,090	5				\$ 185,618	185,618	185,618	185,618	185,618	185,618
2023	(151,490)	5					\$ (30,298)	(30,298)	(30,298)	(30,298)	(30,298)
Net increase (decrease) in pension expense							\$ 29,399	\$ 36,454	\$ 1,515	\$ 155,320	\$ (30,298)

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, 2023 (c)	Balances at June 30, 2023	
				Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
2019	\$ -	\$ 35,261	\$ 35,261	\$ -	\$ -
2020	174,697	-	139,756	34,941	-
2021	-	769,033	461,421	-	307,612
2022	928,090	-	371,236	556,854	-
2023	-	151,490	30,298	-	121,192
				\$ 591,795	\$ 428,804

Schedule of Differences between Expected and Actual Experience

In conformity with paragraph 33a of Statement 68, the effects of differences between expected and actual experience are recognized in pension expense, beginning in the current reporting period, using a systematic and rational method over a closed period equal to the average of the remaining service lives of all employees that are provided with pensions through the pension plan (active and inactive employees), determined as of the beginning of the measurement period. The following table illustrates the application of this requirement.

Increase (Decrease) in Pension Expense Arising from the Recognition of Differences between Expected and Actual Experience																			
Year	Differences between Expected and Actual Experience	Recognition Period (Years)	Prior	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Thereafter
Prior	-	-																	
2014	-	-																	
2015	200,889	6.638436			\$ 30,261	30,261	30,261	30,261	30,261	30,261	19,323								
2016	(37,232)	6.024461				\$ (6,180)	(6,180)	(6,180)	(6,180)	(6,180)	(6,180)	(152)							
2017	(777,301)	6.632187					\$ (117,201)	(117,201)	(117,201)	(117,201)	(117,201)	(117,201)	(74,095)						
2018	830,663	6.087379						\$ 136,457	136,457	136,457	136,457	136,457	136,457	11,921					
2019	(750,724)	7.000000							\$ (107,246)	(107,246)	(107,246)	(107,246)	(107,246)	(107,246)	(107,246)	(107,248)			
2020	(266,968)	6.000000								\$ (44,495)	(44,495)	(44,495)	(44,495)	(44,495)	(44,493)				
2021	646,408	5.000000									\$ 129,282	129,282	129,282	129,282	129,280				
2022	(1,108,651)	5.000000										\$ (221,730)	(221,730)	(221,730)	(221,730)	(221,730)	(221,731)		
2023	905,240	5.000000											\$ 181,048	181,048	181,048	181,048	181,048	181,048	
Net increase (decrease) in pension expense													\$ (779)	\$ (51,220)	\$ (63,143)	\$ (40,683)	\$ 181,048	\$ -	\$ -

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, 2023 (c)	Balances at June 30, 2023	
				Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
Prior	\$ -	\$ -	\$ -	\$ -	\$ -
2014	-	-	-	-	-
2015	200,889	-	200,889	-	-
2016	-	37,232	37,232	-	-
2017	-	777,301	777,301	-	-
2018	830,663	-	818,742	11,921	-
2019	-	750,724	536,230	-	214,494
2020	-	266,968	177,980	-	88,988
2021	646,408	-	387,846	258,562	-
2022	-	1,108,651	443,460	-	665,191
2023	905,240	-	181,048	724,192	-
				\$ 994,675	\$ 968,673



Schedule of Changes of Assumptions

In conformity with paragraph 33a of Statement 68, the effects of changes of assumptions should be recognized in pension expense, beginning in the current reporting period, using a systematic and rational method over a closed period equal to the average of the remaining service lives of all employees that are provided with pensions through the pension plan (active and inactive employees), determined as of the beginning of the measurement period. The following table illustrates the application of this requirement.

Increase (Decrease) in Pension Expense Arising from the Effects of Changes of Assumptions																			
Year	Changes of Assumptions	Recognition Period (Years)	Prior	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Thereafter
Prior	\$ -	-																	-
2014	-	-																	
2015	656,653	6.638436			\$ 98,917	98,917	98,917	98,917	98,917	98,917	63,151								
2016	5,255,570	6.024461				\$ 872,372	872,372	872,372	872,372	872,372	872,372	21,338							
2017	(2,064,480)	6.632187					\$ (311,282)	(311,282)	(311,282)	(311,282)	(311,282)	(311,282)	(196,788)						
2018	(130,855)	6.087379						\$ (21,496)	(21,496)	(21,496)	(21,496)	(21,496)	(21,496)	(1,879)					
2019	(378,869)	7.000000							\$ (54,124)	(54,124)	(54,124)	(54,124)	(54,124)	(54,124)	(54,125)				
2020	(372,208)	6.000000								\$ (62,035)	(62,035)	(62,035)	(62,035)	(62,035)	(62,033)				
2021	(1,734,670)	5.000000									\$ (346,934)	(346,934)	(346,934)	(346,934)	(346,934)				
2022	(519,662)	5.000000										\$ (103,932)	(103,932)	(103,932)	(103,932)	(103,934)			
2023	579,163	5.000000											\$ 115,833	115,833	115,833	115,833	115,831		
Net increase (decrease) in pension expense													\$ (669,476)	\$ (453,071)	\$ (451,191)	\$ 11,899	\$ 115,831	\$ -	\$ -

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, 2023 (c)	Balances at June 30, 2023	
				Deferred Outflows of Resources (a) - (c)	Deferred Inflows of Resources (b) - (c)
Prior	\$ -	\$ -	\$ -	\$ -	\$ -
2014	-	-	-	-	-
2015	656,653	-	656,653	-	-
2016	5,255,570	-	5,255,570	-	-
2017	-	2,064,480	2,064,480	-	-
2018	-	130,855	128,976	-	1,879
2019	-	378,869	270,620	-	108,249
2020	-	372,208	248,140	-	124,068
2021	-	1,734,670	1,040,802	-	693,868
2022	-	519,662	207,864	-	311,798
2023	579,163	-	115,833	463,330	-
				\$ 463,330	\$ 1,239,862

City of Nitro, West Virginia Policemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2023 Measurement Date



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
2023	\$ 460,558	\$ -	\$ 460,558	\$ 103,371	\$ -	\$ 103,371	\$ 357,187	\$ -	\$ 357,187	\$ 2,576	\$ -	\$ 2,576	\$ 249,412	\$ -	\$ 249,412	\$ 174,925	\$ -	\$ 174,925
2024	\$ 456,548	\$ 23,826	\$ 480,374	\$ 107,388	\$ 5,681	\$ 113,069	\$ 349,160	\$ 18,145	\$ 367,305	\$ 2,450	\$ -	\$ 2,450	\$ 248,300	\$ 18,571	\$ 266,871	\$ 211,096	\$ -	\$ 211,096
2025	\$ 452,324	\$ 50,218	\$ 502,542	\$ 106,045	\$ 11,960	\$ 118,005	\$ 346,279	\$ 38,258	\$ 384,537	\$ 2,437	\$ 74	\$ 2,511	\$ 246,322	\$ 39,230	\$ 285,552	\$ 212,611	\$ -	\$ 212,611
2026	\$ 439,225	\$ 77,334	\$ 516,559	\$ 103,207	\$ 18,401	\$ 121,608	\$ 336,018	\$ 58,933	\$ 394,951	\$ 2,422	\$ 152	\$ 2,574	\$ 245,073	\$ 60,468	\$ 305,541	\$ 222,821	\$ -	\$ 222,821
2027	\$ 414,541	\$ 114,563	\$ 529,104	\$ 98,080	\$ 27,249	\$ 125,329	\$ 316,461	\$ 87,314	\$ 403,775	\$ 2,405	\$ 309	\$ 2,714	\$ 237,256	\$ 89,673	\$ 326,929	\$ 227,865	\$ -	\$ 227,865
2028	\$ 376,427	\$ 155,898	\$ 532,325	\$ 89,947	\$ 37,058	\$ 127,005	\$ 286,480	\$ 118,840	\$ 405,320	\$ 2,386	\$ 473	\$ 2,859	\$ 227,711	\$ 122,103	\$ 349,814	\$ 233,034	\$ -	\$ 233,034
2029	\$ 342,582	\$ 210,989	\$ 553,571	\$ 82,653	\$ 50,135	\$ 132,788	\$ 259,929	\$ 160,854	\$ 420,783	\$ 2,446	\$ 564	\$ 3,010	\$ 209,107	\$ 165,194	\$ 374,301	\$ 238,333	\$ -	\$ 238,333
2030	\$ 329,139	\$ 250,857	\$ 579,996	\$ 79,668	\$ 59,536	\$ 139,204	\$ 249,471	\$ 191,321	\$ 440,792	\$ 2,424	\$ 661	\$ 3,085	\$ 204,029	\$ 196,473	\$ 400,502	\$ 245,631	\$ -	\$ 245,631
2031	\$ 312,152	\$ 285,935	\$ 598,087	\$ 75,864	\$ 67,769	\$ 143,633	\$ 236,288	\$ 218,166	\$ 454,454	\$ 2,399	\$ 763	\$ 3,162	\$ 204,487	\$ 224,050	\$ 428,537	\$ 251,840	\$ -	\$ 251,840
2032	\$ 296,281	\$ 328,610	\$ 624,891	\$ 72,242	\$ 77,807	\$ 150,049	\$ 224,039	\$ 250,803	\$ 474,842	\$ 2,459	\$ 867	\$ 3,326	\$ 200,978	\$ 257,557	\$ 458,535	\$ 259,356	\$ -	\$ 259,356
2033	\$ 291,019	\$ 363,498	\$ 654,517	\$ 70,964	\$ 85,951	\$ 156,915	\$ 220,055	\$ 277,547	\$ 497,602	\$ 2,520	\$ 889	\$ 3,409	\$ 205,681	\$ 284,951	\$ 490,632	\$ 265,291	\$ -	\$ 265,291
2034	\$ 289,005	\$ 396,531	\$ 685,536	\$ 70,402	\$ 93,629	\$ 164,031	\$ 218,603	\$ 302,902	\$ 521,505	\$ 2,491	\$ 1,003	\$ 3,494	\$ 213,961	\$ 311,015	\$ 524,976	\$ 272,168	\$ -	\$ 272,168
2035	\$ 289,686	\$ 428,265	\$ 717,951	\$ 70,462	\$ 100,980	\$ 171,442	\$ 219,224	\$ 327,285	\$ 546,509	\$ 2,553	\$ 1,028	\$ 3,581	\$ 225,728	\$ 335,996	\$ 561,724	\$ 279,907	\$ -	\$ 279,907
2036	\$ 231,458	\$ 459,472	\$ 690,930	\$ 59,684	\$ 108,184	\$ 167,868	\$ 171,774	\$ 351,288	\$ 523,062	\$ 2,520	\$ 1,151	\$ 3,671	\$ 240,360	\$ 360,685	\$ 601,045	\$ 287,432	\$ -	\$ 287,432
2037	\$ 217,004	\$ 515,104	\$ 732,108	\$ 56,436	\$ 121,242	\$ 177,678	\$ 160,568	\$ 393,862	\$ 554,430	\$ 2,484	\$ 1,375	\$ 3,859	\$ 238,635	\$ 404,483	\$ 643,118	\$ 295,814	\$ -	\$ 295,814
2038	\$ 198,182	\$ 568,655	\$ 766,837	\$ 52,118	\$ 133,761	\$ 185,879	\$ 146,064	\$ 434,894	\$ 580,958	\$ 2,546	\$ 1,409	\$ 3,955	\$ 241,624	\$ 446,512	\$ 688,136	\$ 310,818	\$ -	\$ 310,818
2039	\$ 179,087	\$ 610,779	\$ 789,866	\$ 47,086	\$ 143,491	\$ 190,577	\$ 132,001	\$ 467,288	\$ 599,289	\$ 2,610	\$ 1,444	\$ 4,054	\$ 256,605	\$ 479,701	\$ 736,306	\$ 317,994	\$ -	\$ 317,994
2040	\$ 158,224	\$ 666,769	\$ 824,993	\$ 41,345	\$ 156,523	\$ 197,868	\$ 116,879	\$ 510,246	\$ 627,125	\$ 2,568	\$ 1,691	\$ 4,259	\$ 263,932	\$ 523,915	\$ 787,847	\$ 325,350	\$ -	\$ 325,350
2041	\$ 138,359	\$ 712,852	\$ 851,211	\$ 36,275	\$ 167,124	\$ 203,399	\$ 102,084	\$ 545,728	\$ 647,812	\$ 2,632	\$ 1,733	\$ 4,365	\$ 282,724	\$ 560,272	\$ 842,996	\$ 332,889	\$ -	\$ 332,889
2042	\$ 111,462	\$ 771,746	\$ 883,208	\$ 29,612	\$ 180,763	\$ 210,375	\$ 81,850	\$ 590,983	\$ 672,833	\$ 2,585	\$ 1,889	\$ 4,474	\$ 295,261	\$ 606,745	\$ 902,006	\$ 348,405	\$ -	\$ 348,405
2043	\$ 95,594	\$ 828,591	\$ 924,185	\$ 25,797	\$ 193,859	\$ 219,656	\$ 69,797	\$ 634,732	\$ 704,529	\$ 2,650	\$ 1,936	\$ 4,586	\$ 313,578	\$ 651,568	\$ 965,146	\$ 357,901	\$ -	\$ 357,901
2044	\$ 88,587	\$ 875,032	\$ 963,619	\$ 24,095	\$ 204,589	\$ 228,684	\$ 64,492	\$ 670,443	\$ 734,935	\$ 2,716	\$ 1,985	\$ 4,701	\$ 344,540	\$ 688,166	\$ 1,032,706	\$ 371,798	\$ -	\$ 371,798
2045	\$ 76,432	\$ 917,814	\$ 994,246	\$ 20,902	\$ 214,662	\$ 235,564	\$ 55,530	\$ 703,152	\$ 758,682	\$ 2,784	\$ 2,035	\$ 4,819	\$ 383,302	\$ 721,693	\$ 1,104,995	\$ 380,462	\$ -	\$ 380,462
2046	\$ 59,410	\$ 971,833	\$ 1,031,243	\$ 16,381	\$ 227,535	\$ 243,916	\$ 43,029	\$ 744,298	\$ 787,327	\$ 2,730	\$ 2,330	\$ 5,060	\$ 418,245	\$ 764,100	\$ 1,182,345	\$ 398,093	\$ -	\$ 398,093
2047	\$ 42,027	\$ 1,022,930	\$ 1,064,957	\$ 11,756	\$ 239,831	\$ 251,587	\$ 30,271	\$ 783,099	\$ 813,370	\$ 2,798	\$ 2,389	\$ 5,187	\$ 461,238	\$ 803,871	\$ 1,265,109	\$ 407,417	\$ -	\$ 407,417
2048	\$ 28,117	\$ 1,075,868	\$ 1,103,985	\$ 7,920	\$ 252,784	\$ 260,704	\$ 20,197	\$ 823,084	\$ 843,281	\$ 2,738	\$ 2,579	\$ 5,317	\$ 508,683	\$ 844,984	\$ 1,353,667	\$ 416,974	\$ -	\$ 416,974
2049	\$ 18,371	\$ 1,119,196	\$ 1,137,567	\$ 5,202	\$ 263,584	\$ 268,786	\$ 13,169	\$ 855,612	\$ 868,781	\$ 2,806	\$ 2,644	\$ 5,450	\$ 570,083	\$ 878,341	\$ 1,448,424	\$ 436,921	\$ -	\$ 436,921
2050	\$ 9,851	\$ 1,167,368	\$ 1,177,219	\$ 2,772	\$ 275,606	\$ 278,378	\$ 7,079	\$ 891,762	\$ 898,841	\$ 2,739	\$ 2,980	\$ 5,719	\$ 634,138	\$ 915,676	\$ 1,549,814	\$ 467,202	\$ -	\$ 467,202
2051	\$ 5,769	\$ 1,213,203	\$ 1,218,972	\$ 1,629	\$ 286,970	\$ 288,599	\$ 4,140	\$ 926,233	\$ 930,373	\$ 2,807	\$ 3,055	\$ 5,862	\$ 707,270	\$ 951,031	\$ 1,658,301	\$ 478,191	\$ -	\$ 478,191
2052	\$ 3,298	\$ 1,256,620	\$ 1,259,918	\$ 937	\$ 297,665	\$ 298,602	\$ 2,361	\$ 958,955	\$ 961,316	\$ 2,877	\$ 3,132	\$ 6,009	\$ 789,784	\$ 984,598	\$ 1,774,382	\$ 489,454	\$ -	\$ 489,454
2053	\$ 1,900	\$ 1,300,341	\$ 1,302,241	\$ 541	\$ 308,319	\$ 308,860	\$ 1,359	\$ 992,022	\$ 993,381	\$ 2,801	\$ 3,358	\$ 6,159	\$ 879,922	\$ 1,018,667	\$ 1,898,589	\$ 515,548	\$ -	\$ 515,548
2054	\$ 1,098	\$ 1,348,365	\$ 1,349,463	\$ 312	\$ 319,808	\$ 320,120	\$ 786	\$ 1,028,557	\$ 1,029,343	\$ 2,871	\$ 3,442	\$ 6,313	\$ 975,346	\$ 1,056,144	\$ 2,031,490	\$ 1,616,593	\$ -	\$ 1,616,593
2055	\$ 541	\$ 1,398,085	\$ 1,398,626	\$ 154	\$ 331,583	\$ 331,737	\$ 387	\$ 1,066,502	\$ 1,066,889	\$ 2,788	\$ 3,683	\$ 6,471	\$ 1,078,473	\$ 1,095,221	\$ 2,173,694	\$ 1,655,949	\$ -	\$ 1,655,949
2056	\$ 274	\$ 1,448,936	\$ 1,449,210	\$ 79	\$ 343,517	\$ 343,596	\$ 195	\$ 1,105,419	\$ 1,105,614	\$ 2,858	\$ 3,775	\$ 6,633	\$ 1,190,710	\$ 1,135,143	\$ 2,325,853	\$ 1,765,517	\$ -	\$ 1,765,517
2057	\$ 98	\$ 1,498,194	\$ 1,498,292	\$ 29	\$ 355,075	\$ 355,104	\$ 69	\$ 1,143,119	\$ 1,143,188	\$ 2,767	\$ 4,032	\$ 6,799	\$ 1,314,678	\$ 1,173,985	\$ 2,488,663	\$ 2,256,028	\$ -	\$ 2,256,028
2058	\$ 61	\$ 1,549,563	\$ 1,549,624	\$ 18	\$ 367,278	\$ 367,296	\$ 43	\$ 1,182,285	\$ 1,182,328	\$ 2,836	\$ 4,133	\$ 6,969	\$ 1,191,561	\$ 1,214,172	\$ 2,405,733	\$ -	\$ -	\$ -
2059	\$ -	\$ 1,605,411	\$ 1,605,411	\$ -	\$ 380,535	\$ 380,535	\$ -	\$ 1,224,876	\$ 1,224,876	\$ 2,736	\$ 4,407	\$ 7,143	\$ -	\$ 1,258,036	\$ 1,260,772	\$ -	\$ -	\$ -
2060	\$ -	\$ 1,661,336	\$ 1,661,336	\$ -	\$ 393,802	\$ 393,802	\$ -	\$ 1,267,534	\$ 1,267,534	\$ 2,804	\$ 4,518	\$ 7,322	\$ 2,804	\$ 1,301,807	\$ 1,304,611	\$ -	\$ -	\$ -
2061	\$ -	\$ 1,718,519	\$ 1,718,519	\$ -	\$ 407,411	\$ 407,411	\$ -	\$ 1,311,108	\$ 1,311,108	\$ 2,694	\$ 4,811	\$ 7,505	\$ 2,693	\$ 1,346,697	\$ 1,349,390	\$ -	\$ -	\$ -
2062	\$ -	\$ 1,777,960	\$ 1,777,960	\$ -	\$ 421,522	\$ 421,522	\$ -	\$ 1,356,438	\$ 1,356,438	\$ 2,761	\$ 4,932	\$ 7,693	\$ 2,760	\$ 1,393,212	\$ 1,395,972	\$ -	\$ -	\$ -
2063	\$ -	\$ 1,841,476	\$ 1,841,476	\$ -	\$ 436,628	\$ 436,628	\$ -	\$ 1,404,848	\$ 1,404,848	\$ 2,641	\$ 5,244	\$ 7,885	\$ 2,641	\$ 1,443,070	\$ 1,445,711	\$ -	\$ -	\$ -

City of Nitro, West Virginia Policemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2023 Measurement Date



Projection of Pension Plan's Fiduciary Net Position

Fiscal Year	Actuarial Accrued Liability (BOY)			Closed Group Asset Projection						
	Current Members	Future Members	Total	Fiduciary Net Position (BOY)	Funded Ratio (BOY)	Projected EEC Contributions (MOY)	Projected ER Contrib + Premium Tax (MOY)	Projected BP (MOY)	Projected Admin Expenses (MOY)	Projected Investment Earnings
2023	\$ 14,276,207	\$ -	\$ 14,276,207	\$ 5,235,052	36.67%	\$ 103,371	\$ 424,337	\$ 496,694	\$ 2,576	\$ 413,954
2024	\$ 14,928,408	\$ -	\$ 14,928,408	\$ 5,677,444	38.03%	\$ 109,909	\$ 459,396	\$ 498,436	\$ 2,450	\$ 271,285
2025	\$ 15,605,605	\$ 24,668	\$ 15,630,273	\$ 6,017,148	38.56%	\$ 108,534	\$ 458,933	\$ 509,152	\$ 2,437	\$ 287,126
2026	\$ 16,299,577	\$ 77,336	\$ 16,376,913	\$ 6,360,152	39.02%	\$ 105,630	\$ 467,894	\$ 525,625	\$ 2,422	\$ 303,175
2027	\$ 16,995,931	\$ 159,540	\$ 17,155,471	\$ 6,708,804	39.47%	\$ 100,382	\$ 465,121	\$ 573,446	\$ 2,405	\$ 318,425
2028	\$ 17,650,562	\$ 282,667	\$ 17,933,229	\$ 7,016,881	39.75%	\$ 92,058	\$ 460,745	\$ 656,297	\$ 2,386	\$ 330,816
2029	\$ 18,211,568	\$ 452,361	\$ 18,663,929	\$ 7,241,817	39.76%	\$ 84,593	\$ 447,440	\$ 720,465	\$ 2,446	\$ 339,506
2030	\$ 18,698,095	\$ 684,577	\$ 19,382,672	\$ 7,390,445	39.53%	\$ 81,538	\$ 449,660	\$ 752,283	\$ 2,424	\$ 345,799
2031	\$ 19,161,085	\$ 965,478	\$ 20,126,563	\$ 7,512,735	39.21%	\$ 77,645	\$ 456,327	\$ 797,359	\$ 2,399	\$ 350,616
2032	\$ 19,582,139	\$ 1,291,877	\$ 20,874,016	\$ 7,597,565	38.80%	\$ 73,938	\$ 460,334	\$ 831,971	\$ 2,459	\$ 353,838
2033	\$ 19,971,144	\$ 1,673,374	\$ 21,644,518	\$ 7,651,244	38.31%	\$ 72,630	\$ 470,972	\$ 851,650	\$ 2,520	\$ 356,144
2034	\$ 20,352,974	\$ 2,104,272	\$ 22,457,246	\$ 7,696,820	37.82%	\$ 72,055	\$ 486,129	\$ 863,086	\$ 2,491	\$ 358,383
2035	\$ 20,739,127	\$ 2,584,691	\$ 23,323,818	\$ 7,747,810	37.36%	\$ 72,116	\$ 505,635	\$ 872,400	\$ 2,553	\$ 361,044
2036	\$ 21,134,802	\$ 3,114,899	\$ 24,249,701	\$ 7,811,652	36.96%	\$ 61,085	\$ 527,792	\$ 946,897	\$ 2,520	\$ 362,590
2037	\$ 21,412,032	\$ 3,696,430	\$ 25,108,462	\$ 7,813,701	36.49%	\$ 57,761	\$ 534,449	\$ 979,827	\$ 2,484	\$ 361,993
2038	\$ 21,653,587	\$ 4,356,727	\$ 26,010,314	\$ 7,785,594	35.96%	\$ 53,341	\$ 552,442	\$ 1,016,292	\$ 2,546	\$ 360,119
2039	\$ 21,849,579	\$ 5,097,156	\$ 26,946,735	\$ 7,732,658	35.39%	\$ 48,191	\$ 574,599	\$ 1,072,500	\$ 2,610	\$ 356,683
2040	\$ 21,977,351	\$ 5,908,730	\$ 27,886,081	\$ 7,637,020	34.75%	\$ 42,316	\$ 589,282	\$ 1,122,607	\$ 2,568	\$ 351,172
2041	\$ 22,038,055	\$ 6,808,327	\$ 28,846,382	\$ 7,494,616	34.01%	\$ 37,127	\$ 615,613	\$ 1,170,400	\$ 2,632	\$ 343,781
2042	\$ 22,031,919	\$ 7,789,447	\$ 29,821,366	\$ 7,318,105	33.22%	\$ 30,307	\$ 643,666	\$ 1,219,360	\$ 2,585	\$ 334,747
2043	\$ 21,947,208	\$ 8,869,176	\$ 30,816,384	\$ 7,104,880	32.37%	\$ 26,403	\$ 671,479	\$ 1,249,010	\$ 2,650	\$ 324,482
2044	\$ 21,811,505	\$ 10,049,421	\$ 31,860,926	\$ 6,875,584	31.52%	\$ 24,661	\$ 716,338	\$ 1,262,922	\$ 2,716	\$ 314,275
2045	\$ 21,647,778	\$ 11,318,286	\$ 32,966,064	\$ 6,665,220	30.79%	\$ 21,393	\$ 763,764	\$ 1,296,050	\$ 2,784	\$ 304,540
2046	\$ 21,429,636	\$ 12,667,585	\$ 34,097,221	\$ 6,456,083	30.13%	\$ 16,766	\$ 816,338	\$ 1,330,752	\$ 2,730	\$ 294,918
2047	\$ 21,147,785	\$ 14,108,934	\$ 35,256,719	\$ 6,250,623	29.56%	\$ 12,032	\$ 868,655	\$ 1,370,493	\$ 2,798	\$ 285,341
2048	\$ 20,793,663	\$ 15,638,476	\$ 36,432,139	\$ 6,043,360	29.06%	\$ 8,106	\$ 925,657	\$ 1,394,661	\$ 2,738	\$ 276,176
2049	\$ 20,383,415	\$ 17,249,581	\$ 37,632,996	\$ 5,855,899	28.73%	\$ 5,324	\$ 1,007,004	\$ 1,413,471	\$ 2,806	\$ 268,673
2050	\$ 19,924,219	\$ 18,925,287	\$ 38,849,506	\$ 5,720,623	28.71%	\$ 2,837	\$ 1,101,340	\$ 1,423,808	\$ 2,739	\$ 264,162
2051	\$ 19,423,707	\$ 20,668,069	\$ 40,091,776	\$ 5,662,416	29.15%	\$ 1,667	\$ 1,185,461	\$ 1,422,933	\$ 2,807	\$ 263,363
2052	\$ 18,896,041	\$ 22,477,763	\$ 41,373,804	\$ 5,687,167	30.10%	\$ 959	\$ 1,279,238	\$ 1,417,243	\$ 2,877	\$ 266,856
2053	\$ 18,346,546	\$ 24,345,697	\$ 42,692,243	\$ 5,814,100	31.69%	\$ 554	\$ 1,395,470	\$ 1,407,973	\$ 2,801	\$ 275,823
2054	\$ 17,778,973	\$ 26,264,357	\$ 44,043,330	\$ 6,075,173	34.17%	\$ 319	\$ 2,591,939	\$ 1,396,235	\$ 2,871	\$ 316,579
2055	\$ 17,195,613	\$ 28,241,296	\$ 45,436,909	\$ 7,584,904	44.11%	\$ 158	\$ 2,734,422	\$ 1,382,614	\$ 2,788	\$ 391,954
2056	\$ 16,597,901	\$ 30,280,252	\$ 46,878,153	\$ 9,326,036	56.19%	\$ 81	\$ 2,956,227	\$ 1,367,026	\$ 2,858	\$ 480,227
2057	\$ 15,987,472	\$ 32,381,072	\$ 48,368,544	\$ 11,392,687	71.26%	\$ 30	\$ 3,570,706	\$ 1,349,762	\$ 2,767	\$ 593,224
2058	\$ 15,365,533	\$ 34,536,136	\$ 49,901,669	\$ 14,204,118	92.44%	\$ 18	\$ 1,191,561	\$ 1,330,601	\$ 2,836	\$ 671,366
2059	\$ 14,733,624	\$ 36,743,404	\$ 51,477,028	\$ 14,733,626	100.00%	\$ -	\$ 2,736	\$ 1,309,833	\$ 2,736	\$ 669,100
2060	\$ 14,092,890	\$ 39,012,042	\$ 53,104,932	\$ 14,092,893	100.00%	\$ -	\$ 2,804	\$ 1,287,209	\$ 2,804	\$ 639,196
2061	\$ 13,444,877	\$ 41,343,093	\$ 54,787,970	\$ 13,444,880	100.00%	\$ -	\$ 2,693	\$ 1,262,740	\$ 2,694	\$ 608,990
2062	\$ 12,791,126	\$ 43,733,017	\$ 56,524,143	\$ 12,791,130	100.00%	\$ -	\$ 2,760	\$ 1,236,429	\$ 2,761	\$ 578,554
2063	\$ 12,133,251	\$ 46,184,694	\$ 58,317,945	\$ 12,133,254	100.00%	\$ -	\$ 2,641	\$ 1,208,200	\$ 2,641	\$ 547,968

City of Nitro, West Virginia Policemen's Pension and Relief Fund
 Actuarial Information to Include in the Financial Statements
 for the June 30, 2023 Measurement Date



Projection of Pension Plan's Fiduciary Net Position

Calculation of Single Equivalent Rate					
Fiscal Year	"Funded" Portion of BP	"Unfunded" Portion of BP	PV of "Funded" BP	PV of "Unfunded" BP	PV of BP Using a Single DR
2023	\$ 496,694	\$ -	\$ 485,302	\$ -	\$ 485,302
2024	\$ 498,436	\$ -	\$ 464,920	\$ -	\$ 464,920
2025	\$ 509,152	\$ -	\$ 453,380	\$ -	\$ 453,380
2026	\$ 525,625	\$ -	\$ 446,824	\$ -	\$ 446,824
2027	\$ 573,446	\$ -	\$ 465,371	\$ -	\$ 465,371
2028	\$ 656,297	\$ -	\$ 508,456	\$ -	\$ 508,456
2029	\$ 720,465	\$ -	\$ 532,858	\$ -	\$ 532,858
2030	\$ 752,283	\$ -	\$ 531,161	\$ -	\$ 531,161
2031	\$ 797,359	\$ -	\$ 537,458	\$ -	\$ 537,458
2032	\$ 831,971	\$ -	\$ 535,359	\$ -	\$ 535,359
2033	\$ 851,650	\$ -	\$ 523,171	\$ -	\$ 523,171
2034	\$ 863,086	\$ -	\$ 506,154	\$ -	\$ 506,154
2035	\$ 872,400	\$ -	\$ 488,416	\$ -	\$ 488,416
2036	\$ 946,897	\$ -	\$ 506,085	\$ -	\$ 506,085
2037	\$ 979,827	\$ -	\$ 499,938	\$ -	\$ 499,938
2038	\$ 1,016,292	\$ -	\$ 495,029	\$ -	\$ 495,029
2039	\$ 1,072,500	\$ -	\$ 498,719	\$ -	\$ 498,719
2040	\$ 1,122,607	\$ -	\$ 498,347	\$ -	\$ 498,347
2041	\$ 1,170,400	\$ -	\$ 496,003	\$ -	\$ 496,003
2042	\$ 1,219,360	\$ -	\$ 493,320	\$ -	\$ 493,320
2043	\$ 1,249,010	\$ -	\$ 482,401	\$ -	\$ 482,401
2044	\$ 1,262,922	\$ -	\$ 465,656	\$ -	\$ 465,656
2045	\$ 1,296,050	\$ -	\$ 456,201	\$ -	\$ 456,201
2046	\$ 1,330,752	\$ -	\$ 447,175	\$ -	\$ 447,175
2047	\$ 1,370,493	\$ -	\$ 439,646	\$ -	\$ 439,646
2048	\$ 1,394,661	\$ -	\$ 427,111	\$ -	\$ 427,111
2049	\$ 1,413,471	\$ -	\$ 413,243	\$ -	\$ 413,243
2050	\$ 1,423,808	\$ -	\$ 397,389	\$ -	\$ 397,389
2051	\$ 1,422,933	\$ -	\$ 379,136	\$ -	\$ 379,136
2052	\$ 1,417,243	\$ -	\$ 360,496	\$ -	\$ 360,496
2053	\$ 1,407,973	\$ -	\$ 341,898	\$ -	\$ 341,898
2054	\$ 1,396,235	\$ -	\$ 323,673	\$ -	\$ 323,673
2055	\$ 1,382,614	\$ -	\$ 305,981	\$ -	\$ 305,981
2056	\$ 1,367,026	\$ -	\$ 288,813	\$ -	\$ 288,813
2057	\$ 1,349,762	\$ -	\$ 272,234	\$ -	\$ 272,234
2058	\$ 1,330,601	\$ -	\$ 256,200	\$ -	\$ 256,200
2059	\$ 1,309,833	\$ -	\$ 240,765	\$ -	\$ 240,765
2060	\$ 1,287,209	\$ -	\$ 225,877	\$ -	\$ 225,877
2061	\$ 1,262,740	\$ -	\$ 211,536	\$ -	\$ 211,536
2062	\$ 1,236,429	\$ -	\$ 197,736	\$ -	\$ 197,736
2063	\$ 1,208,200	\$ -	\$ 184,459	\$ -	\$ 184,459