



**Municipal Pensions  
Oversight Board**

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

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

**Bolton**

Submitted by:

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December 7, 2023

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

Lieutenant Garrett Kiser  
Pension Board Secretary  
City of Nitro  
Firemen's Pension and Relief Fund

Re: City of Nitro Firemen'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 Firemen'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 a blended discount rate of 4.12%. The plan's expected gross rate of investment return of 4.25% 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.

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 Firemen'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	\$ 13,342,218
Plan fiduciary net position	(2,817,900)
Employer's net pension liability	<u>\$ 10,524,318</u>
Plan fiduciary net position as a percentage of the total pension liability	21.12%

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)	4.03%
Single discount rate (EOY)	4.12%
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)	3.69%
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	2064
Year assets are expected to be depleted for a closed plan	2044

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 3.12%	Current Discount Rate 4.12%	1% Increase 5.12%
Employer's net pension liability	\$ 13,006,027	\$ 10,524,318	\$ 8,584,382

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

	Total Pension Liability (a)	Increase (Decrease) Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
<b>Balances at 6/30/22</b>	\$ 13,492,860	\$ 2,626,265	\$ 10,866,595
<b>Changes for the year:</b>			
Service cost	534,535		534,535
Interest	535,524		535,524
Changes of benefit terms	-		-
Differences between expected and actual experience	(613,182)		(613,182)
Changes of assumptions	(198,689)		(198,689)
Contributions - employer (including Premium Tax Allocation)		363,719	(363,719)
Contributions - member		81,578	(81,578)
Net investment income		155,168	(155,168)
Benefit payments, including refunds of member contributions	(408,830)	(408,830)	-
Administrative expense		-	-
Other		-	-
<b>Net Changes</b>	<u>(150,642)</u>	<u>191,635</u>	<u>(342,277)</u>
<b>Balances at 6/30/23</b>	<u>\$ 13,342,218</u>	<u>\$ 2,817,900</u>	<u>\$ 10,524,318</u>
Return on Investments		5.9%	

City of Nitro, West Virginia Firemen's Pension and Relief Fund  
 Actuarial Information to Include in the Financial Statements  
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Components of Employer's Pension Expense for the Fiscal Year Ended June 30, 2023

Note	Description	Amount
A	Service cost	\$ 534,535
B	Interest on the total pension liability	535,524
A	Changes of benefit terms	-
C	Differences between expected and actual experience	163,093
C	Changes of assumptions	(337,606)
A	Employee contributions	(81,578)
D	Projected earnings on pension plan investments	(112,391)
C	Differences between expected and actual earnings on plan investments	34,897
A	Pension plan administrative expense	-
A	Other changes in fiduciary net position	-
<b>Total Pension Expense</b>		<b>\$ 736,474</b>

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	\$ 13,492,860	100%	4.03%	\$ 543,762
Service cost (End of Year)	534,535	0%	4.03%	-
Benefit payments, including refunds of employee contributions	(408,830)	50%	4.03%	(8,238)
<b>Total interest on the total pension liability</b>				<b>\$ 535,524</b>

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	\$ 2,626,265	100%	4.25%	\$ 111,616
Employer contributions	363,719	50%	4.25%	7,729
Employee contributions	81,578	50%	4.25%	1,734
Benefit payments, including refunds of employee contributions	(408,830)	50%	4.25%	(8,688)
Administrative expense and other	-	50%	4.25%	-
<b>Total Projected Earnings</b>				<b>\$ 112,391</b>

City of Nitro, West Virginia Firemen'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	\$ 860,758	\$ 541,512
Changes of assumptions	272,774	1,716,131
Net difference between projected and actual earnings on pension plan investments	110,759	-
<b>Total</b>	<b>\$ 1,244,291</b>	<b>\$ 2,257,643</b>

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

<b>Year ended June 30:</b>	
2024	\$ (75,124)
2025	(162,083)
2026	(106,359)
2027	(262,714)
2028	(291,087)
Thereafter	(115,985)



City of Nitro, West Virginia Firemen's Pension and Relief Fund  
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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	\$ 534,535	\$ 679,913	\$ 529,645	\$ 505,577	\$ 479,667	\$ 422,494	\$ 466,302	\$ 298,577	\$ 274,332	\$ 261,666
Interest	535,524	435,940	468,088	451,985	432,697	420,584	347,047	361,264	369,617	364,726
Changes of benefit terms	-	-	-	-	-	-	-	-	-	-
Differences between expected and actual experience	(613,182)	932,996	149,610	70,425	(55,742)	838,380	(486,502)	(425,741)	29,557	-
Changes of assumptions	(198,689)	(2,158,762)	108,934	486,090	7,705	(41,108)	(1,201,576)	2,468,097	331,542	345,132
Benefit payments, including refunds of member contributions	(408,830)	(385,568)	(397,043)	(372,281)	(327,394)	(346,417)	(306,296)	(277,009)	(294,327)	(268,023)
Net change in total pension liability	(150,642)	(495,481)	859,234	1,141,796	536,933	1,293,933	(1,181,025)	2,425,188	710,721	703,501
Total pension liability - beginning	13,492,860	13,988,341	13,129,107	11,987,311	11,450,378	10,156,445	11,337,470	8,912,282	8,201,561	7,498,060
<b>Total pension liability - ending (a)</b>	<b>\$ 13,342,218</b>	<b>\$ 13,492,860</b>	<b>\$ 13,988,341</b>	<b>\$ 13,129,107</b>	<b>\$ 11,987,311</b>	<b>\$ 11,450,378</b>	<b>\$ 10,156,445</b>	<b>\$ 11,337,470</b>	<b>\$ 8,912,282</b>	<b>\$ 8,201,561</b>
<b>Plan fiduciary net position</b>	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>
Contributions - employer (including Premium Tax Allocation)	\$ 363,719	\$ 370,177	\$ 598,540	\$ 371,369	\$ 586,709	\$ 615,091	\$ 612,325	\$ 288,034	\$ 231,025	\$ 189,307
Contributions - member	81,578	79,663	74,063	69,926	67,886	63,299	60,503	55,075	53,084	51,577
Net investment income	155,168	(262,832)	349,482	35,110	67,362	68,316	71,616	19,186	31,201	76,549
Benefit payments, including refunds of member contributions	(408,830)	(385,568)	(397,043)	(372,281)	(327,394)	(346,417)	(306,296)	(277,009)	(294,327)	(268,023)
Administrative expense	-	-	-	-	-	(90)	(90)	(98)	-	(675)
Other	-	-	-	-	-	-	-	-	-	-
Net change in plan fiduciary net position	\$ 191,635	\$ (198,560)	\$ 625,042	\$ 104,124	\$ 394,563	\$ 400,199	\$ 438,058	\$ 85,188	\$ 20,983	\$ 48,645
Plan fiduciary net position - beginning	2,626,265	2,824,825	2,199,783	2,095,659	1,701,096	1,300,897	862,839	777,651	756,668	708,023
<b>Plan fiduciary net position - ending (b)</b>	<b>\$ 2,817,900</b>	<b>\$ 2,626,265</b>	<b>\$ 2,824,825</b>	<b>\$ 2,199,783</b>	<b>\$ 2,095,659</b>	<b>\$ 1,701,096</b>	<b>\$ 1,300,897</b>	<b>\$ 862,839</b>	<b>\$ 777,651</b>	<b>\$ 756,668</b>
Employer's net pension liability - ending (a)-(b)	\$ 10,524,318	\$ 10,866,595	\$ 11,163,516	\$ 10,929,324	\$ 9,891,652	\$ 9,749,282	\$ 8,855,548	\$ 10,474,631	\$ 8,134,631	\$ 7,444,893
Plan fiduciary net position as a percentage of the total pension liability	21.12%	19.46%	20.19%	16.76%	17.48%	14.86%	12.81%	7.61%	8.73%	9.23%
Covered payroll	\$ 1,004,088	\$ 1,001,915	\$ 842,641	\$ 848,537	\$ 803,028	\$ 719,541	\$ 638,967	\$ 670,368	\$ 666,552	\$ 693,435
Employer's net pension liability as a percentage of covered payroll	1048.15%	1084.58%	1324.82%	1288.02%	1231.79%	1354.93%	1385.92%	1562.52%	1220.40%	1073.63%
Expected average remaining service years of all participants	7.00	7.00	7.00	7.00	7.00	6.62	6.43	6.58	6.12	N/A

**Notes to Schedule:**

Benefit changes: There were no changes for FY2023.

Changes of assumptions: The discount rate changed from 4.03% to 4.12%.

City of Nitro, West Virginia Firemen'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	\$ 1,055,289	\$ 936,385	\$ 859,243	\$ 824,018	\$ 782,859	\$ 690,694	\$ 624,038	\$ 616,637	\$ 486,921	\$ 469,302
Contributions in relation to the actuarially determined contribution										
Employer provided	232,385	227,054	450,000	225,000	450,000	486,000	485,000	144,719	127,574	77,008
State provided	131,334	143,123	148,540	146,369	136,709	129,091	127,325	143,315	103,451	112,299
Contribution deficiency (excess)	<u>\$ 691,570</u>	<u>\$ 566,208</u>	<u>\$ 260,703</u>	<u>\$ 452,649</u>	<u>\$ 196,150</u>	<u>\$ 75,603</u>	<u>\$ 11,713</u>	<u>\$ 328,603</u>	<u>\$ 255,896</u>	<u>\$ 279,995</u>
Covered payroll	\$ 1,004,088	\$ 1,001,915	\$ 842,641	\$ 848,537	\$ 803,028	\$ 719,541	\$ 638,967	\$ 670,368	\$ 666,552	\$ 693,435
Contributions as a percentage of covered employee payroll	36.22%	36.95%	71.03%	43.77%	73.06%	85.48%	95.83%	42.97%	34.66%	27.30%

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	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 Nitro, West Virginia Firemen's Pension and Relief Fund  
 Actuarial Information to Include in the Financial Statements  
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Schedule of Differences between Projected and Actual Earnings on Pension Plan Investments

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

Increase (Decrease) in Pension Expense Arising from the Recognition of Differences between Projected and Actual Earnings on Plan Investments											
Year	Differences between Projected and Actual Earnings on Pension Plan Investments	Recognition Period (Years)	2019	2020	2021	2022	2023	2024	2025	2026	2027
2019	\$ 16,549	5	\$ 3,310	3,310	3,310	3,310	3,309				
2020	60,748	5		\$ 12,150	12,150	12,150	12,150	12,148			
2021	(244,292)	5			\$ (48,858)	(48,858)	(48,858)	(48,858)	(48,860)		
2022	384,253	5				\$ 76,851	76,851	76,851	76,851	76,849	
2023	(42,777)	5					\$ (8,555)	(8,555)	(8,555)	(8,555)	(8,557)
Net increase (decrease) in pension expense							\$ 34,897	\$ 31,586	\$ 19,436	\$ 68,294	\$ (8,557)

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	\$ 16,549	\$ -	\$ 16,549	\$ -	\$ -
2020	60,748	-	48,600	12,148	-
2021	-	244,292	146,574	-	97,718
2022	384,253	-	153,702	230,551	-
2023	-	42,777	8,555	-	34,222
				\$ 242,699	\$ 131,940

City of Nitro, West Virginia Firemen's Pension and Relief Fund  
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Schedule of Differences between Expected and Actual Experience

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

Increase (Decrease) in Pension Expense Arising from the Recognition of Differences between Expected and Actual Experience																			
Year	Differences between Expected and Actual Experience	Recognition Period (Years)	Prior	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Thereafter
Prior	-	-																	
2014	-	-																	
2015	29,557	6.120708		\$ 4,829	4,829	4,829	4,829	4,829	4,829	4,829	583								
2016	(425,741)	6.579335			\$ (64,709)	(64,709)	(64,709)	(64,709)	(64,709)	(64,709)	(64,709)	(37,487)							
2017	(486,502)	6.432120				\$ (75,636)	(75,636)	(75,636)	(75,636)	(75,636)	(75,636)	(75,636)	(32,686)						
2018	838,380	6.621210					\$ 126,620	126,620	126,620	126,620	126,620	126,620	126,620	78,660					
2019	(55,742)	7.000000						\$ (7,963)	(7,963)	(7,963)	(7,963)	(7,963)	(7,963)	(7,963)	(7,964)				
2020	70,425	7.000000							\$ 10,061	10,061	10,061	10,061	10,061	10,061	10,061	10,059			
2021	149,610	7.000000								\$ 21,373	21,373	21,373	21,373	21,373	21,373	21,373	21,373	21,372	
2022	932,996	7.000000									\$ 133,285	133,285	133,285	133,285	133,285	133,285	133,285	133,285	133,286
2023	(613,182)	7.000000										\$ (87,597)	(87,597)	(87,597)	(87,597)	(87,597)	(87,597)	(87,597)	(87,600)
Net increase (decrease) in pension expense													\$ 163,093	\$ 147,819	\$ 69,158	\$ 77,120	\$ 67,060	\$ 45,689	\$ (87,600)

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	29,557	-	29,557	-	-
2016	-	425,741	425,741	-	-
2017	-	486,502	486,502	-	-
2018	838,380	-	759,720	78,660	-
2019	-	55,742	39,815	-	15,927
2020	70,425	-	40,244	30,181	-
2021	149,610	-	64,119	85,491	-
2022	932,996	-	266,570	666,426	-
2023	-	613,182	87,597	-	525,585
				\$ 860,758	\$ 541,512

City of Nitro, West Virginia Firemen's Pension and Relief Fund  
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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	331,542	6,120708			\$ 54,167	54,167	54,167	54,167	54,167	54,167	6,540								
2016	2,468,097	6,579335				\$ 375,129	375,129	375,129	375,129	375,129	375,129	217,323							
2017	(1,201,576)	6,432120					\$ (186,809)	(186,809)	(186,809)	(186,809)	(186,809)	(186,809)	(80,722)						
2018	(41,108)	6,621210						\$ (6,209)	(6,209)	(6,209)	(6,209)	(6,209)	(6,209)	(3,854)					
2019	7,705	7,000000							\$ 1,101	1,101	1,101	1,101	1,101	1,101	1,099				
2020	486,090	7,000000								\$ 69,441	69,441	69,441	69,441	69,441	69,441	69,444			
2021	108,934	7,000000									\$ 15,562	15,562	15,562	15,562	15,562	15,562	15,562		
2022	(2,158,762)	7,000000										\$ (308,395)	(308,395)	(308,395)	(308,395)	(308,395)	(308,395)	(308,395)	(308,392)
2023	(198,689)	7,000000											\$ (28,384)	(28,384)	(28,384)	(28,384)	(28,384)	(28,384)	(28,385)
Net increase (decrease) in pension expense													\$ (337,606)	\$ (254,529)	\$ (250,677)	\$ (251,773)	\$ (321,217)	\$ (336,776)	\$ (28,385)

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	331,542	-	331,542	-	-
2016	2,468,097	-	2,468,097	-	-
2017	-	1,201,576	1,201,576	-	-
2018	-	41,108	37,254	-	3,854
2019	7,705	-	5,505	2,200	-
2020	486,090	-	277,764	208,326	-
2021	108,934	-	46,686	62,248	-
2022	-	2,158,762	616,790	-	1,541,972
2023	-	198,689	28,384	-	170,305
			\$ 272,774	\$ 1,716,131	

City of Nitro, 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
2023	\$ 483,518	\$ -	\$ 483,518	\$ 81,578	\$ -	\$ 81,578	\$ 401,940	\$ -	\$ 401,940	\$ -	\$ -	\$ -	\$ 232,385	\$ -	\$ 232,385	\$ 131,334	\$ -	\$ 131,334
2024	\$ 487,665	\$ 21,401	\$ 509,066	\$ 84,008	\$ 3,898	\$ 87,906	\$ 403,657	\$ 17,503	\$ 421,160	\$ -	\$ -	\$ -	\$ 230,781	\$ 17,871	\$ 248,652	\$ 162,034	\$ -	\$ 162,034
2025	\$ 491,831	\$ 45,318	\$ 537,149	\$ 84,433	\$ 8,239	\$ 92,672	\$ 407,398	\$ 37,079	\$ 444,477	\$ -	\$ -	\$ -	\$ 228,199	\$ 37,859	\$ 266,058	\$ 163,194	\$ -	\$ 163,194
2026	\$ 499,059	\$ 67,252	\$ 566,311	\$ 85,452	\$ 12,210	\$ 97,662	\$ 413,607	\$ 55,042	\$ 468,649	\$ -	\$ -	\$ -	\$ 228,483	\$ 56,199	\$ 284,682	\$ 171,025	\$ -	\$ 171,025
2027	\$ 483,532	\$ 86,956	\$ 570,488	\$ 83,321	\$ 15,771	\$ 99,092	\$ 400,211	\$ 71,185	\$ 471,396	\$ -	\$ -	\$ -	\$ 231,928	\$ 72,682	\$ 304,610	\$ 174,889	\$ -	\$ 174,889
2028	\$ 450,776	\$ 134,342	\$ 585,118	\$ 78,888	\$ 24,387	\$ 103,275	\$ 371,888	\$ 109,955	\$ 481,843	\$ -	\$ -	\$ -	\$ 213,666	\$ 112,267	\$ 325,933	\$ 178,849	\$ -	\$ 178,849
2029	\$ 420,982	\$ 176,108	\$ 597,090	\$ 75,302	\$ 31,951	\$ 107,253	\$ 345,680	\$ 144,157	\$ 489,837	\$ -	\$ -	\$ -	\$ 201,560	\$ 147,188	\$ 348,748	\$ 182,908	\$ -	\$ 182,908
2030	\$ 384,730	\$ 225,004	\$ 609,734	\$ 70,634	\$ 40,813	\$ 111,447	\$ 314,096	\$ 184,191	\$ 498,287	\$ -	\$ -	\$ -	\$ 185,096	\$ 188,064	\$ 373,160	\$ 188,502	\$ -	\$ 188,502
2031	\$ 359,010	\$ 276,913	\$ 635,923	\$ 67,165	\$ 50,212	\$ 117,377	\$ 291,845	\$ 226,701	\$ 518,546	\$ -	\$ -	\$ -	\$ 167,813	\$ 231,468	\$ 399,281	\$ 193,259	\$ -	\$ 193,259
2032	\$ 347,859	\$ 318,371	\$ 666,230	\$ 65,856	\$ 57,688	\$ 123,544	\$ 282,003	\$ 260,683	\$ 542,686	\$ -	\$ -	\$ -	\$ 161,066	\$ 266,165	\$ 427,231	\$ 199,019	\$ -	\$ 199,019
2033	\$ 342,739	\$ 355,536	\$ 698,275	\$ 65,440	\$ 64,378	\$ 129,818	\$ 277,299	\$ 291,158	\$ 568,457	\$ -	\$ -	\$ -	\$ 159,856	\$ 297,281	\$ 457,137	\$ 203,565	\$ -	\$ 203,565
2034	\$ 341,075	\$ 390,028	\$ 731,103	\$ 65,545	\$ 70,577	\$ 136,122	\$ 275,530	\$ 319,451	\$ 594,981	\$ -	\$ -	\$ -	\$ 162,968	\$ 326,169	\$ 489,137	\$ 208,835	\$ -	\$ 208,835
2035	\$ 341,249	\$ 424,026	\$ 765,275	\$ 65,911	\$ 76,684	\$ 142,595	\$ 275,338	\$ 347,342	\$ 622,680	\$ -	\$ -	\$ -	\$ 168,731	\$ 354,646	\$ 523,377	\$ 214,765	\$ -	\$ 214,765
2036	\$ 338,540	\$ 457,873	\$ 796,413	\$ 66,016	\$ 82,759	\$ 148,775	\$ 272,524	\$ 375,114	\$ 647,638	\$ -	\$ -	\$ -	\$ 177,011	\$ 383,002	\$ 560,013	\$ 220,531	\$ -	\$ 220,531
2037	\$ 341,675	\$ 493,305	\$ 834,980	\$ 66,884	\$ 89,123	\$ 156,007	\$ 274,791	\$ 404,182	\$ 678,973	\$ -	\$ -	\$ -	\$ 186,533	\$ 412,681	\$ 599,214	\$ 226,955	\$ -	\$ 226,955
2038	\$ 349,085	\$ 527,948	\$ 877,033	\$ 68,395	\$ 95,338	\$ 163,733	\$ 280,690	\$ 432,610	\$ 713,300	\$ -	\$ -	\$ -	\$ 199,452	\$ 441,707	\$ 641,159	\$ 238,459	\$ -	\$ 238,459
2039	\$ 355,456	\$ 561,953	\$ 917,409	\$ 69,792	\$ 101,431	\$ 171,223	\$ 285,664	\$ 460,522	\$ 746,186	\$ -	\$ -	\$ -	\$ 215,834	\$ 470,206	\$ 686,040	\$ 243,956	\$ -	\$ 243,956
2040	\$ 352,015	\$ 597,718	\$ 949,733	\$ 69,079	\$ 107,842	\$ 176,921	\$ 282,936	\$ 489,876	\$ 772,812	\$ -	\$ -	\$ -	\$ 233,885	\$ 500,178	\$ 734,063	\$ 249,590	\$ -	\$ 249,590
2041	\$ 287,776	\$ 649,283	\$ 937,059	\$ 56,945	\$ 117,148	\$ 174,093	\$ 230,831	\$ 532,135	\$ 762,966	\$ -	\$ -	\$ -	\$ 242,122	\$ 543,325	\$ 785,447	\$ 255,366	\$ -	\$ 255,366
2042	\$ 210,817	\$ 765,061	\$ 975,878	\$ 42,429	\$ 138,213	\$ 180,642	\$ 168,388	\$ 626,848	\$ 795,236	\$ -	\$ -	\$ -	\$ 200,398	\$ 640,030	\$ 840,428	\$ 267,260	\$ -	\$ 267,260
2043	\$ 176,451	\$ 842,480	\$ 1,018,931	\$ 36,020	\$ 152,176	\$ 188,196	\$ 140,431	\$ 690,304	\$ 830,735	\$ -	\$ -	\$ -	\$ 194,438	\$ 704,820	\$ 899,258	\$ 274,535	\$ -	\$ 274,535
2044	\$ 151,999	\$ 919,659	\$ 1,071,658	\$ 31,471	\$ 166,159	\$ 197,630	\$ 120,528	\$ 753,500	\$ 874,028	\$ -	\$ -	\$ -	\$ 192,861	\$ 769,345	\$ 962,206	\$ 285,188	\$ -	\$ 285,188
2045	\$ 140,895	\$ 980,445	\$ 1,121,340	\$ 29,438	\$ 177,213	\$ 206,651	\$ 111,457	\$ 803,232	\$ 914,689	\$ -	\$ -	\$ -	\$ 209,437	\$ 820,123	\$ 1,029,560	\$ 291,825	\$ -	\$ 291,825
2046	\$ 133,719	\$ 1,037,720	\$ 1,171,439	\$ 28,145	\$ 187,669	\$ 215,814	\$ 105,574	\$ 850,051	\$ 955,625	\$ -	\$ -	\$ -	\$ 233,702	\$ 867,927	\$ 1,101,629	\$ 305,337	\$ -	\$ 305,337
2047	\$ 120,112	\$ 1,093,200	\$ 1,213,312	\$ 25,372	\$ 197,809	\$ 223,181	\$ 94,740	\$ 895,391	\$ 990,131	\$ -	\$ -	\$ -	\$ 264,523	\$ 914,220	\$ 1,178,743	\$ 312,480	\$ -	\$ 312,480
2048	\$ 94,896	\$ 1,149,796	\$ 1,244,692	\$ 20,142	\$ 208,331	\$ 228,473	\$ 74,754	\$ 941,465	\$ 1,016,219	\$ -	\$ -	\$ -	\$ 299,992	\$ 961,263	\$ 1,261,255	\$ 319,801	\$ -	\$ 319,801
2049	\$ 74,921	\$ 1,213,636	\$ 1,288,557	\$ 16,069	\$ 220,251	\$ 236,320	\$ 58,522	\$ 993,385	\$ 1,052,237	\$ -	\$ -	\$ -	\$ 335,268	\$ 1,014,275	\$ 1,349,543	\$ 335,091	\$ -	\$ 335,091
2050	\$ 64,495	\$ 1,270,338	\$ 1,334,833	\$ 13,966	\$ 230,881	\$ 244,847	\$ 50,529	\$ 1,039,457	\$ 1,089,986	\$ -	\$ -	\$ -	\$ 382,695	\$ 1,061,316	\$ 1,444,011	\$ 358,307	\$ -	\$ 358,307
2051	\$ 52,580	\$ 1,325,689	\$ 1,378,269	\$ 11,686	\$ 241,313	\$ 252,999	\$ 40,894	\$ 1,084,376	\$ 1,125,270	\$ -	\$ -	\$ -	\$ 437,913	\$ 1,107,179	\$ 1,545,092	\$ 366,724	\$ -	\$ 366,724
2052	\$ 39,337	\$ 1,373,138	\$ 1,412,475	\$ 8,764	\$ 250,351	\$ 259,115	\$ 30,573	\$ 1,122,787	\$ 1,153,360	\$ -	\$ -	\$ -	\$ 506,850	\$ 1,146,398	\$ 1,653,248	\$ 375,352	\$ -	\$ 375,352
2053	\$ 21,980	\$ 1,441,343	\$ 1,463,323	\$ 4,885	\$ 263,016	\$ 267,901	\$ 17,095	\$ 1,178,327	\$ 1,195,422	\$ -	\$ -	\$ -	\$ 565,869	\$ 1,203,106	\$ 1,768,975	\$ 395,354	\$ -	\$ 395,354
2054	\$ 15,301	\$ 1,500,924	\$ 1,516,225	\$ 3,392	\$ 274,047	\$ 277,439	\$ 11,909	\$ 1,226,877	\$ 1,238,786	\$ -	\$ -	\$ -	\$ 640,126	\$ 1,252,677	\$ 1,892,803	\$ 1,239,547	\$ -	\$ 1,239,547
2055	\$ 11,122	\$ 1,560,575	\$ 1,571,697	\$ 2,460	\$ 285,050	\$ 287,510	\$ 8,662	\$ 1,275,525	\$ 1,284,187	\$ -	\$ -	\$ -	\$ 722,951	\$ 1,302,348	\$ 2,025,299	\$ 1,269,695	\$ -	\$ 1,269,695
2056	\$ 8,549	\$ 1,621,852	\$ 1,630,401	\$ 1,891	\$ 296,195	\$ 298,086	\$ 6,658	\$ 1,325,657	\$ 1,332,315	\$ -	\$ -	\$ -	\$ 813,536	\$ 1,353,534	\$ 2,167,070	\$ 1,353,678	\$ -	\$ 1,353,678
2057	\$ 5,607	\$ 1,686,020	\$ 1,691,627	\$ 1,240	\$ 307,740	\$ 308,980	\$ 4,367	\$ 1,378,280	\$ 1,382,647	\$ -	\$ -	\$ -	\$ 911,501	\$ 1,407,264	\$ 2,318,765	\$ 1,729,717	\$ -	\$ 1,729,717
2058	\$ 3,278	\$ 1,752,399	\$ 1,755,677	\$ 744	\$ 319,627	\$ 320,371	\$ 2,534	\$ 1,432,772	\$ 1,435,306	\$ -	\$ -	\$ -	\$ 1,018,177	\$ 1,462,902	\$ 2,481,079	\$ 1,859,720	\$ -	\$ 1,859,720
2059	\$ 2,538	\$ 1,821,693	\$ 1,824,231	\$ 576	\$ 331,959	\$ 332,535	\$ 1,962	\$ 1,489,734	\$ 1,491,696	\$ -	\$ -	\$ -	\$ 1,133,694	\$ 1,521,061	\$ 2,654,755	\$ 1,905,267	\$ -	\$ 1,905,267
2060	\$ 1,965	\$ 1,894,356	\$ 1,896,321	\$ 446	\$ 344,875	\$ 345,321	\$ 1,519	\$ 1,549,481	\$ 1,551,000	\$ -	\$ -	\$ -	\$ 1,258,523	\$ 1,582,065	\$ 2,840,588	\$ 1,951,953	\$ -	\$ 1,951,953
2061	\$ 1,521	\$ 1,968,103	\$ 1,969,624	\$ 345	\$ 358,041	\$ 358,386	\$ 1,176	\$ 1,610,062	\$ 1,611,238	\$ -	\$ -	\$ -	\$ 1,395,509	\$ 1,643,920	\$ 3,039,429	\$ 1,999,805	\$ -	\$ 1,999,805
2062	\$ -	\$ 2,034,517	\$ 2,034,517	\$ -	\$ 370,091	\$ 370,091	\$ -	\$ 1,664,426	\$ 1,664,426	\$ -	\$ -	\$ -	\$ 1,552,762	\$ 1,699,427	\$ 3,252,189	\$ 2,492,922	\$ -	\$ 2,492,922
2063	\$ -	\$ 2,108,222	\$ 2,108,222	\$ -	\$ 383,614	\$ 383,614	\$ -	\$ 1,724,608	\$ 1,724,608	\$ -	\$ -	\$ -	\$ 1,718,967	\$ 1,760,875	\$ 3,479,842	\$ 3,888,210	\$ -	\$ 3,888,210

City of Nitro, West Virginia Firemen's Pension and Relief Fund  
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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	\$ 12,447,308	\$ -	\$ 12,447,308	\$ 2,626,265	21.10%	\$ 81,578	\$ 366,798	\$ 408,830	\$ -	\$ 155,168
2024	\$ 13,062,959	\$ -	\$ 13,062,959	\$ 2,820,979	21.60%	\$ 85,775	\$ 392,815	\$ 402,503	\$ -	\$ 121,492
2025	\$ 13,715,558	\$ 22,133	\$ 13,737,691	\$ 3,018,558	22.01%	\$ 86,209	\$ 391,393	\$ 407,142	\$ -	\$ 129,770
2026	\$ 14,395,499	\$ 69,768	\$ 14,465,267	\$ 3,218,788	22.36%	\$ 87,249	\$ 399,508	\$ 407,906	\$ -	\$ 138,457
2027	\$ 15,111,093	\$ 141,705	\$ 15,252,798	\$ 3,436,096	22.74%	\$ 85,073	\$ 406,817	\$ 455,355	\$ -	\$ 146,802
2028	\$ 15,792,466	\$ 236,472	\$ 16,028,938	\$ 3,619,433	22.92%	\$ 80,547	\$ 392,515	\$ 516,191	\$ -	\$ 152,919
2029	\$ 16,406,534	\$ 383,511	\$ 16,790,045	\$ 3,729,223	22.73%	\$ 76,886	\$ 384,468	\$ 570,447	\$ -	\$ 156,198
2030	\$ 16,960,243	\$ 579,037	\$ 17,539,280	\$ 3,776,327	22.27%	\$ 72,119	\$ 373,598	\$ 640,669	\$ -	\$ 156,394
2031	\$ 17,427,993	\$ 832,015	\$ 18,260,008	\$ 3,737,769	21.45%	\$ 68,577	\$ 361,072	\$ 691,363	\$ -	\$ 153,352
2032	\$ 17,837,049	\$ 1,147,475	\$ 18,984,524	\$ 3,629,406	20.35%	\$ 67,241	\$ 360,085	\$ 716,188	\$ -	\$ 148,175
2033	\$ 18,226,518	\$ 1,516,728	\$ 19,743,246	\$ 3,488,720	19.14%	\$ 66,816	\$ 363,421	\$ 733,542	\$ -	\$ 141,892
2034	\$ 18,609,483	\$ 1,937,826	\$ 20,547,309	\$ 3,327,307	17.88%	\$ 66,923	\$ 371,803	\$ 745,069	\$ -	\$ 134,968
2035	\$ 18,995,220	\$ 2,409,659	\$ 21,404,879	\$ 3,155,932	16.61%	\$ 67,297	\$ 383,496	\$ 752,084	\$ -	\$ 127,791
2036	\$ 19,390,369	\$ 2,933,444	\$ 22,323,813	\$ 2,982,432	15.38%	\$ 67,404	\$ 397,542	\$ 765,315	\$ -	\$ 120,437
2037	\$ 19,785,979	\$ 3,510,714	\$ 23,296,693	\$ 2,802,500	14.16%	\$ 68,290	\$ 413,488	\$ 771,660	\$ -	\$ 113,010
2038	\$ 20,195,192	\$ 4,145,528	\$ 24,340,720	\$ 2,625,627	13.00%	\$ 69,833	\$ 437,911	\$ 772,936	\$ -	\$ 106,012
2039	\$ 20,628,219	\$ 4,838,999	\$ 25,467,218	\$ 2,466,447	11.96%	\$ 71,260	\$ 459,790	\$ 776,451	\$ -	\$ 99,663
2040	\$ 21,082,702	\$ 5,592,662	\$ 26,675,364	\$ 2,320,709	11.01%	\$ 70,532	\$ 483,475	\$ 802,145	\$ -	\$ 93,412
2041	\$ 21,526,679	\$ 6,410,388	\$ 27,937,067	\$ 2,165,983	10.06%	\$ 58,142	\$ 497,488	\$ 918,585	\$ -	\$ 84,422
2042	\$ 21,803,668	\$ 7,310,788	\$ 29,114,456	\$ 1,887,450	8.66%	\$ 43,321	\$ 467,658	\$ 1,030,681	\$ -	\$ 69,288
2043	\$ 21,897,746	\$ 8,363,141	\$ 30,260,887	\$ 1,437,036	6.56%	\$ 36,777	\$ 468,973	\$ 1,086,555	\$ -	\$ 48,860
2044	\$ 21,902,946	\$ 9,533,362	\$ 31,436,308	\$ 905,091	4.13%	\$ 32,133	\$ 478,049	\$ 1,125,157	\$ -	\$ 25,534
2045	\$ 21,843,462	\$ 10,822,215	\$ 32,665,677	\$ 315,649	1.45%	\$ 30,057	\$ 501,262	\$ 1,144,054	\$ -	\$ 530
2046	\$ 21,750,580	\$ 12,211,076	\$ 33,961,656	\$ -	0.00%	\$ 28,737	\$ 539,039	\$ 1,156,630	\$ -	\$ -
2047	\$ 21,633,429	\$ 13,696,780	\$ 35,330,209	\$ -	0.00%	\$ 25,906	\$ 577,003	\$ 1,186,934	\$ -	\$ -
2048	\$ 21,466,173	\$ 15,280,011	\$ 36,746,184	\$ -	0.00%	\$ 20,566	\$ 619,793	\$ 1,232,412	\$ -	\$ -
2049	\$ 21,219,086	\$ 16,950,721	\$ 38,169,807	\$ -	0.00%	\$ 16,407	\$ 670,359	\$ 1,262,133	\$ -	\$ -
2050	\$ 20,910,328	\$ 18,708,908	\$ 39,619,236	\$ -	0.00%	\$ 14,260	\$ 741,002	\$ 1,275,343	\$ -	\$ -
2051	\$ 20,564,091	\$ 20,546,799	\$ 41,110,890	\$ -	0.00%	\$ 11,932	\$ 804,637	\$ 1,288,440	\$ -	\$ -
2052	\$ 20,177,345	\$ 22,463,049	\$ 42,640,394	\$ -	0.00%	\$ 8,948	\$ 882,202	\$ 1,313,274	\$ -	\$ -
2053	\$ 19,735,000	\$ 24,432,989	\$ 44,167,989	\$ -	0.00%	\$ 4,988	\$ 961,223	\$ 1,334,527	\$ -	\$ -
2054	\$ 19,234,061	\$ 26,475,195	\$ 45,709,256	\$ -	0.00%	\$ 3,463	\$ 1,879,673	\$ 1,335,390	\$ -	\$ 11,518
2055	\$ 18,703,988	\$ 28,580,109	\$ 47,284,097	\$ 559,264	2.99%	\$ 2,512	\$ 1,992,646	\$ 1,330,160	\$ -	\$ 37,753
2056	\$ 18,152,370	\$ 30,749,668	\$ 48,902,038	\$ 1,262,015	6.95%	\$ 1,931	\$ 2,167,214	\$ 1,320,661	\$ -	\$ 71,478
2057	\$ 17,584,325	\$ 32,986,386	\$ 50,570,711	\$ 2,181,977	12.41%	\$ 1,266	\$ 2,641,218	\$ 1,310,128	\$ -	\$ 120,752
2058	\$ 16,999,826	\$ 35,294,972	\$ 52,294,798	\$ 3,635,085	21.38%	\$ 760	\$ 2,877,897	\$ 1,296,885	\$ -	\$ 187,754
2059	\$ 16,401,579	\$ 37,679,765	\$ 54,081,344	\$ 5,404,612	32.95%	\$ 588	\$ 3,038,961	\$ 1,279,511	\$ -	\$ 266,708
2060	\$ 15,794,874	\$ 40,145,355	\$ 55,940,229	\$ 7,431,357	47.05%	\$ 455	\$ 3,210,476	\$ 1,260,458	\$ -	\$ 356,849
2061	\$ 15,181,241	\$ 42,700,505	\$ 57,881,746	\$ 9,738,680	64.15%	\$ 352	\$ 3,395,314	\$ 1,239,833	\$ -	\$ 459,229
2062	\$ 14,562,124	\$ 45,351,059	\$ 59,913,183	\$ 12,353,742	84.83%	\$ -	\$ 4,045,684	\$ 1,219,898	\$ -	\$ 584,457
2063	\$ 13,935,463	\$ 48,082,312	\$ 62,017,775	\$ 15,763,985	113.12%	\$ -	\$ 5,607,177	\$ 1,195,863	\$ -	\$ 762,734

City of Nitro, West Virginia Firemen's Pension and Relief Fund  
 Actuarial Information to Include in the Financial Statements  
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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	\$ 408,830	\$ -	\$ 400,410	\$ -	\$ 400,662
2024	\$ 402,503	\$ -	\$ 378,142	\$ -	\$ 378,856
2025	\$ 407,142	\$ -	\$ 366,907	\$ -	\$ 368,062
2026	\$ 407,906	\$ -	\$ 352,609	\$ -	\$ 354,164
2027	\$ 455,355	\$ -	\$ 377,579	\$ -	\$ 379,721
2028	\$ 516,191	\$ -	\$ 410,575	\$ -	\$ 413,423
2029	\$ 570,447	\$ -	\$ 435,232	\$ -	\$ 438,803
2030	\$ 640,669	\$ -	\$ 468,882	\$ -	\$ 473,323
2031	\$ 691,363	\$ -	\$ 485,355	\$ -	\$ 490,568
2032	\$ 716,188	\$ -	\$ 482,286	\$ -	\$ 488,079
2033	\$ 733,542	\$ -	\$ 473,834	\$ -	\$ 480,129
2034	\$ 745,069	\$ -	\$ 461,659	\$ -	\$ 468,381
2035	\$ 752,084	\$ -	\$ 447,008	\$ -	\$ 454,087
2036	\$ 765,315	\$ -	\$ 436,328	\$ -	\$ 443,795
2037	\$ 771,660	\$ -	\$ 422,010	\$ -	\$ 429,772
2038	\$ 772,936	\$ -	\$ 405,475	\$ -	\$ 413,453
2039	\$ 776,451	\$ -	\$ 390,714	\$ -	\$ 398,902
2040	\$ 802,145	\$ -	\$ 387,188	\$ -	\$ 395,799
2041	\$ 918,585	\$ -	\$ 425,316	\$ -	\$ 435,322
2042	\$ 1,030,681	\$ -	\$ 457,763	\$ -	\$ 469,122
2043	\$ 1,086,555	\$ -	\$ 462,906	\$ -	\$ 474,988
2044	\$ -	\$ 1,125,157	\$ -	\$ 498,396	\$ 472,405
2045	\$ -	\$ 1,144,054	\$ -	\$ 487,932	\$ 461,336
2046	\$ -	\$ 1,156,630	\$ -	\$ 474,962	\$ 447,956
2047	\$ -	\$ 1,186,934	\$ -	\$ 469,292	\$ 441,507
2048	\$ -	\$ 1,232,412	\$ -	\$ 469,163	\$ 440,287
2049	\$ -	\$ 1,262,133	\$ -	\$ 462,620	\$ 433,067
2050	\$ -	\$ 1,275,343	\$ -	\$ 450,089	\$ 420,288
2051	\$ -	\$ 1,288,440	\$ -	\$ 437,811	\$ 407,806
2052	\$ -	\$ 1,313,274	\$ -	\$ 429,665	\$ 399,223
2053	\$ -	\$ 1,334,527	\$ -	\$ 420,391	\$ 389,634
2054	\$ -	\$ 1,335,390	\$ -	\$ 405,029	\$ 374,462
2055	\$ -	\$ 1,330,160	\$ -	\$ 388,449	\$ 358,239
2056	\$ -	\$ 1,320,661	\$ -	\$ 371,341	\$ 341,610
2057	\$ 1,310,128	\$ -	\$ 311,666	\$ -	\$ 325,479
2058	\$ 1,296,885	\$ -	\$ 295,938	\$ -	\$ 309,443
2059	\$ 1,279,511	\$ -	\$ 280,071	\$ -	\$ 293,219
2060	\$ 1,260,458	\$ -	\$ 264,652	\$ -	\$ 277,426
2061	\$ 1,239,833	\$ -	\$ 249,709	\$ -	\$ 262,090
2062	\$ 1,219,898	\$ -	\$ 235,678	\$ -	\$ 247,675
2063	\$ 1,195,863	\$ -	\$ 221,616	\$ -	\$ 233,190