Municipal Pensions Oversight Board

City of Bluefield
West Virginia
Policemen's Pension Plan

Actuarial Valuation as of July 1, 2022
to Determine the City's Contribution for
the Fiscal Year Ending June 30, 2024

Bolton

Submitted by:

James E. Ritchie, ASA, EA, FCA, MAAA
President Bolton Retirement
443.573.3924
jritchie@boltonusa.com

Jordan McClane, FSA, EA, FCA, MAAA
Consulting Actuary
667.218.6935
jmcclane@boltonusa.com

Bolton
Employee Benefits, Actuarial & Investment Consulting

September 29, 2023

Mr. Danny Dillow
City Treasurer
200 Rogers Street
Bluefield, WV 24701

Chief Dennis Dillow, Jr.
Pension Board Secretary
City of Bluefield
Policemen's Pension and Relief Fund

Re: City of Bluefield Policemen's Pension and Relief Fund
Actuarial Valuation Report for the Year Beginning July 1, 2022

Dear Mr. Dillow and Chief Dillow, Jr.:

The following sets forth the actuarial valuation of the City of Bluefield Policemen's Pension and Relief Fund as of July 1, 2022. Sections I and II of the report provide a summary of results and the actuarial certification, respectively. Sections III and IV contain the development of the City's contribution for the 2024 fiscal year. Section V contains asset information. Sections VI and VII provide experience gain/loss and risk measure information, respectively. Sections VIII and IX provide projections and an analysis of changing funding policies. Sections X through XII provide a summary of the census data, plan provisions, assumptions and actuarial methods. Section XIII provides a glossary of many of the terms used in this report.

The purpose of this report is to provide information on:

- The sponsor's funding requirements for the fiscal year ending June 30, 2024, based on the selected funding policy, i.e., the **Alternative** funding policy as defined in West Virginia Code §8-22-20(c)(1)
- The Fund's eligibility to receive an allocation of the premium tax for the fiscal year ending June 30, 2024
- The Fund's requirement to provide supplemental benefits for the plan year beginning July 1, 2024

<u>If the City is considering the issuance of pension obligation bonds, the City must contact Bolton and the Municipal Pensions Oversight Board for the determination of the adjustments to information in the valuation report required under WV Code</u>.

This report may not be used for any other purpose; Bolton is not responsible for the consequences of any unauthorized use. We are available to answer any questions on the material in this report or to provide explanations or further details as appropriate.

Respectfully submitted,

James E. Ritchie, ASA, EA, FCA, MAAA

Jordan McClane, FSA, EA, FCA, MAAA

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Section I. Executive Summary

Background

Bolton has prepared the following report that sets forth the actuarial valuation of the City of Bluefield Policemen's Pension and Relief Fund (the Plan) as of July 1, 2022. Please note that some columns and rows in the tables on the following pages may not add due to rounding.

Funding Policy

The Plan is valued using the Alternative funding policy as described in WV Code §8-22-20. The City of Bluefield (the City) switched from the Standard funding policy to the Alternative funding policy effective July 1, 1991.

Summary of Results

The following table presents a two-year summary of the Plan's estimated pension contributions.

Estimated Employer Contribution Requirements		FYE 2023		FYE 2024
1. Prior Year Alternative Contribution	$	442,464	$	473,436
2. 7% Increase in Alternative Contribution	$	30,972	$	33,141
3. Current Year Preliminary Alternative Contribution	$	473,436	$	506,577
4. Additional Contribution to Satisfy 15-Year Solvency Test on an Open Group Basis	$	0	$	0
5. Employer Contribution Requirement to Receive 100% of Premium Tax (3. + 4.)	$	473,436	$	506,577
6. Additional Contribution to Satisfy 15-Year Solvency Test on a Closed Group Basis	$	0	$	0
7. Employer Contribution Requirement to Receive 100% Premium Tax and Grant Supplemental Benefits (COLA) (5. + 6.)	$	473,436	$	506,577

Amortization Period to Eliminate Unfunded Liability		FYE 2023		FYE 2024
1. Net City Contribution	$	473,436	$	506,577
2. Estimated Premium Tax Allocation	$	269,170	$	327,272
3. Total City Contribution Plus Premium Tax (1. + 2.)	$	742,606	$	833,849
4. Net Employer Normal Cost with Interest	$	251,231	$	256,397
5. Payment Towards Unfunded Liability (3. – 4.)	$	491,375	$	577,452
6. Estimated Number of Years this 'Payment Towards Unfunded Liability' Would Take to Eliminate the Unfunded Liability		**17**		**13**

The following table presents a three-year historical summary of Plan assets and liabilities.

	July 1, 2020	July 1, 2021	July 1, 2022
Actuarial Accrued Liability (AAL)	$ 13,076,075	$ 13,266,378	$ 13,750,076
Actuarial Value of Assets (AVA)	$ 7,123,576	$ 7,895,045	$ 8,503,671
Unfunded Actuarial Accrued Liability	$ 5,952,499	$ 5,371,333	$ 5,246,405
Funding Percentage	54.5%	59.5%	61.8%

The contributions shown above are assumed to be paid in equal monthly installments throughout the fiscal year. Details of the determination of the City's contribution for FYE 2024 are shown in Section IV of this report.

Please note, the Alternative and Conservation policies do not meet the requirements for a reasonable funding method under standard actuarial principles. **Current contributions developed under the Alternative and Conservation funding policies may be significantly smaller than contributions developed under a generally accepted actuarial funding policy and plans using either of these two funding policies may experience significant increases in the required contribution over time. We recommend that municipalities using the Alternative policy consider switching to a policy that is more in line with standard actuarial principles for funding. In order to understand the ineffectiveness of these funding policies, we have shown the number of years it would take to completely payoff the unfunded liability assuming the amount shown for the plan year is paid for all future years until the unfunded is eliminated.**[1] **If "Never" is shown, the year's payment toward the unfunded liability does not cover the interest on the unfunded liability and the unfunded liability will be expected to increase in future years.**

Risk Measures

Generally, the primary risk that a plan sponsor incurs from a defined benefit plan is the risk of substantial increases in annual contributions. For plans that develop contributions using a generally accepted actuarial funding policy, these increases occur most frequently due to variation in the investment returns. The following table shows four commonly used measures of the relative riskiness of a pension plan, relative to the plan sponsor and the employee groups covered by the plan. More detail is provided later in this report.

Risk Measure	July 1, 2020	July 1, 2021	July 1, 2022
Inactive AAL Percent of Total AAL	82.2%	77.6%	75.4%
Assets (MVA) to Payroll	6.2	7.6	6.7
Liabilities to Payroll	11.4	11.4	11.4
Benefit Payments to Contributions	0.9	1.0	0.9

[1] This does not factor in any future increases in the contributions since scheduled increases might require a growing burden to the City.

Experience Analysis

The following factors affected the City's funded status:

- The Plan uses the Alternative funding policy. City contributions between FY 2023 and FY 2024 are expected to increase by 7.0% from $473,436 to $506,577.
- No additional contributions are required to stay "solvent" for the next 15 years. Making the $506,577 contribution will require the plan to pay COLAs and receive premium tax payments.
- This valuation uses the same 6.25% discount rate as the prior valuation.
- Contributions under this policy are not based on actuarial liabilities and plan assets. However, liabilities increased by 3.6% and assets increased by 7.7%.
- The Plan's funded ratio increased from 59.5% to 61.8% and the Plan is expected to be 100% funded in 2034.
- The return on the market value of assets for FY 2022 was (8.4%), while the return on the actuarial value of assets for FY 2022 was 6.7%.

Changes in Methods, Assumptions, and Plan Amendments

There were no changes in methods or assumptions reflected in this valuation.

There were no changes to the Plan provisions reflected in this valuation.

Sources of Information

The July 1, 2022 participant data and market value of assets were provided by or at the direction of the City of Bluefield. While we have reviewed this data for consistency and completeness, we have not audited this data.

Supplemental Benefit Eligibility

West Virginia Code §8-22-26a requires that all retirees, surviving beneficiaries, disability pensioners or future retirees receive a Supplemental Pension Benefit (i.e. cost-of-living adjustments, or COLAs) payable on the first day of July, based on a percentage increase equal to any increase in the consumer price index as calculated by the United States Department of Labor, Bureau of Statistics for the preceding year. The COLA shall not exceed 4% per year and is not payable to a retiree until the first day of July after the second anniversary of the retiree's date of retirement. Additionally, the COLA shall be calculated on only the first $15,000 of the annual benefit paid and on the COLAs that have been accumulated by the retiree since benefit commencement. If, at any time after the COLA becomes applicable, the total accumulated percentage increase in benefit on the allowable amount becomes less than 75% of the total accumulated percentage increase in the consumer price index over that same period of time, the 4% limitation shall be inapplicable until such time as the accumulated COLAs equal 75% of the accumulated increase in the consumer price index. The consumer price index used to determine the COLA is the CPI-U US City Average all items with a base of 1982-1984 equal to 100. The increase is measured as the increase in the annual average from the second prior calendar year to the annual average from the prior calendar year.

The COLA is only payable to the extent that the actuary certifies to the Board of Trustees of the fund the amount of increase in the COLA, if any, which may be paid, and which will preserve the minimum standards for actuarial soundness of the fund as set forth in West Virginia Code §8-22-20. The related solvency test is discussed below.

Premium Tax

West Virginia Code §33-3-14d established a 1% tax on premiums for fire insurance and casualty insurance policies. The proceeds from this tax are used to fund the West Virginia Teachers Retirement System, the Fire Protection Fund for volunteer and part-volunteer fire companies and the Municipal Pensions Security Fund, which is managed by the Municipal Pensions Oversight Board (MPOB). The MPOB allocates funds from the Municipal Pensions Security Fund to each eligible municipality's police and fire fund[2] that is less than 100% funded on an actuarial basis. The funds from the Base Allocation are allocated proportionately to each fire and police fund based on the average monthly number of police officers and firefighters who worked at least 100 hours per month (regardless of whether the police and fire employees participate in the municipality's pension plan or the West Virginia state Municipal Police and Firefighters Retirement System (MPFRS)). The funds from the Excess Allocation are allocated proportionately to each fire and police fund based on the average monthly number of police officers and firefighters who worked at least 100 hours per month and the average monthly number of retired police officers and firefighters (regardless of whether the police and fire employees and retirees participate in the municipality's pension plan or the West Virginia MPFRS).

West Virginia Code §8-22-19 requires a plan sponsor to deposit into the pension fund the required contributions in accordance with Code §8-22-20 at least on a monthly basis at a rate of one-twelfth of the annual requirement in order to receive the premium tax allocation described above. A municipality may pre-pay this contribution. If the allocable portion of the Municipal Pensions Security Fund is not paid to the pension and relief fund within eighteen months, the portion is forfeited by the pension and relief fund and is allocable to other eligible municipal policemen's and firemen's pension and relief funds in accordance with West Virginia Code §33-3-14d.

Solvency Tests

There are two solvency tests. The first solvency test is used to determine whether the State premium tax may be allocated to the pension plan for the fiscal year. West Virginia Code §8-22-20 has been historically interpreted to require plans that use the **Alternative** funding policy to be projected to be solvent in the next 15 years in order to receive the State premium tax allocation. Plans that use the Standard, Optional, Optional II, or Conservation policy are projected to be solvent in future years. If a plan is not projected to be solvent in the next 15 years, the municipality or employees must make additional contributions in the current fiscal year in order to receive the State premium tax allocation.

The second test is used to determine whether the COLA is payable under West Virginia Code §8-22-26a, which requires the actuary to certify that the minimum funding for actuarial soundness will be preserved after the COLA is granted for the year. The test used to determine if the minimum funding for actuarial soundness will be preserved is a 15-year projection on a closed group basis. For the July 1, 2022 valuation, the 15-year period would end on June 30, 2037. If the assets are greater than $1 for the first 15 years of the projection, the COLA must be granted. **Please note that the Alternative policy is not consistent with generally accepted actuarial principles for funding and continued use of this policy may reduce future solvency levels, even if the current projections do not forecast insolvency.**

[2] If pension obligation bonds have been issued to fund a plan, the premium tax dollars are annually allocated to the bond trustee once the plan sponsor deposits into the pension fund the annual required contributions in accordance with Code §8-22-20. The premium tax allocation to the bond trustee ceases once the bonds have been paid in full.

Actuarial Projections

Section VIII of this report provides long-range projections of assets, liabilities, funded status, and contributions for the pension fund assuming the plan continues to use the **Alternative** funding policy. Additionally, Section IX provides projections that are based on the municipality switching to the Optional funding policy or Optional II funding policy in the current fiscal year or in the year that the Optional funding policy or Optional II funding policy contributions are projected to be less than the contribution under the Alternative policy. The projections are shown to help the municipality make decisions regarding the election of future funding policies and to understand the future funded status and future contribution requirements based on an expected set of assumptions.

Plans that use the Alternative funding policy may switch to either the Optional or Optional II funding policy. For these plans, we show projections for the following scenarios:

- Plan continues to be funded under the Alternative policy on an open group basis (these projections are also used to determine if the plan is eligible for the premium tax allocation)
- Plan continues to be funded under the Alternative policy on a closed group basis (these projections are used to determine if the COLA is payable)
- Plan switches to the Optional funding policy in the current contribution year
- Plan switches to the Optional II funding policy in the current contribution year
- Plan switches to the Optional funding policy in the year that the Optional funding policy contribution is projected to be less than the Alternative funding policy contribution
- Plan switches to the Optional II funding policy in the year that the Optional II funding policy contribution is projected to be less than the Alternative funding policy contribution

Impact of COVID-19

Because the long-term net impact of COVID-19 on mortality, salary increases, and changes in turnover and retirement behavior is difficult to estimate at this time, we have not made any adjustments to the assumptions for the potential impact of the COVID-19 pandemic.

Section II. Actuarial Certification

This actuarial valuation sets forth our calculation of an estimate of the liabilities of the City of Bluefield Policemen's Pension and Relief Fund, together with a comparison of these liabilities with the value of the Plan assets, as submitted by the City of Bluefield (the City). This liability calculation and comparison with assets is 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.

The information in this report was prepared for the internal use of the MPOB, the West Virginia Legislature's Joint Committee on Pensions and Retirement, the City and their auditors in connection with their review of the City's financial statements and our actuarial valuation of the Plan. The purpose of this report is to provide information on the following:

- The sponsor's funding requirements for the fiscal year ending June 30, 2024, based on the selected funding policy, i.e., the **Alternative** funding policy as defined in West Virginia Code §8-22-20(c)(1)
- The Fund's eligibility to receive an allocation of the premium tax for the fiscal year ending June 30, 2024
- The Fund's requirement to provide supplemental benefits for the plan year beginning July 1, 2024

This report is neither intended nor necessarily suitable for other purposes, including any analysis surrounding the consideration of pension obligation bonds (POBs). WV Code §8-33-4a(d) requires the POB analysis to be based on the most recent actuarial valuation report with appropriate adjustments for timing, experience and other factors. Cities considering the issuance of POBs must contact Bolton and the MPOB to determine the appropriate adjustments that must be made for purposes of meeting the requirement of the Code. Bolton is not responsible for the consequences of any other use or the reliance upon this report by any other party.

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 or asset data provided; however, based on our review, the data appears to be reasonable and consistent with previously provided information and appropriate for the purpose of producing this report. 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. The MPOB selects the actuarial valuation methods, asset valuation methods, and assumptions based on the advice of the Plan's actuary. The policies, methods and assumptions used in this valuation are those that have been so prescribed by the MPOB, in consultation with Bolton, and are described in this report. The MPOB is solely responsible for communicating to Bolton any changes required thereto.

The City of Bluefield Policemen's Pension Fund Board of Trustees is solely responsible for selecting the Plan's investment manager and assisting the investment manager in the selection of the Plan's investment policies, asset allocations and individual investments. Bolton's actuaries have not provided any investment advice to the City.

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. The Plan may have used other assumptions in the past. We will likely consider changes in assumptions at a future date in conjunction with the MPOB.

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 Plan's investment policy, pension obligation bonds, 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.

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. It does not affect the cost of the Plan. Different funding policies and methods provide for different timing of contributions to the Plan. As the experience of the Plan evolves, it is normal for the level of contributions to the Plan to change. If a contribution is not made for a particular year, either by deliberate choice or because of an error in a calculation, that contribution can be made in later years. We are not responsible for the consequences of any decision by the City to make contributions at a future time rather than an earlier time. The City is responsible for funding the cost of the Plan.

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 WV Code, ERISA, the Internal Revenue Code, or any other statute or regulation.

The MPOB, Pension Board, or 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 credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. We are not aware of any direct or material indirect financial interest or relationship, including investments or other services, which could create a conflict of interest that would impair the objectivity of our work.

We are available to answer any questions on the material in this report to provide explanations or further details as appropriate.

Jim Ritchie, ASA, EA, FCA, MAAA

Jordan McClane, FSA, EA, FCA, MAAA

Section III. Normal Cost and Liabilities

Net Employer Normal Cost

The breakdown of the Net Employer Normal Cost is illustrated below.

Net Employer Normal Cost (BOY)		7/1/2021		7/1/2022
1. Normal Cost	$	338,336	$	337,729
2.a. Administrative Expenses FYE (MOY)	$	308	$	308
2.b. Administrative Expenses (BOY)	$	299	$	299
3. Gross Normal Cost (1. + 2.b.)	$	338,635	$	338,028
4. Expected Employee Contributions (BOY)	$	101,787	$	105,989
5. Net Employer Normal Cost (3. – 4.)	$	236,848	$	232,039
(% of Compensation)		20.95%		19.80%

Projected Net Employer Normal Cost

The breakdown of the Projected Net Employer Normal Cost as of the first anniversary of the valuation date (i.e. the first day of the contribution year) is illustrated below.

Projected Net Employer Normal Cost (BOY)				
Valuation Date		**7/1/2021**		**7/1/2022**
Projection Date		**7/1/2022**		**7/1/2023**
1. Projected Normal Cost	$	349,355	$	363,929
2.a. Projected Administrative Expenses (MOY)	$	316	$	316
2.b. Projected Administrative Expenses (BOY)	$	307	$	307
3. Projected Gross Normal Cost (1. + 2.b.)	$	349,662	$	364,236
4. Projected Employee Contributions (BOY)	$	105,932	$	115,494
5. Projected Net Employer Normal Cost (3. – 4.)	$	243,730	$	248,742
(% of Compensation)		20.89%		19.71%

Unfunded Actuarial Accrued Liability

Below is a summary of the key valuation results.

	Count		7/1/2021	Count		7/1/2022
1. Actuarial Accrued Liability	Count			Count		
a. Active	27	$	2,966,490	26	$	3,386,587
b. Retirees	17		7,980,201	17		8,017,323
c. Survivors	11		1,529,523	11		1,546,910
d. Disableds	3		786,657	3		795,749
e. Deferred Vesteds	0		0	0		0
f. Former Members Due Refunds	1		3,507	1		3,507
g. Total	**59**	**$**	**13,266,378**	**58**	**$**	**13,750,076**
2. Present Value of Future Normal Costs		$	3,448,292		$	3,390,820
3. Present Value of Benefits (1.g. + 2.)		$	16,714,670		$	17,140,896
4. Actuarial Value of Assets		$	7,895,045		$	8,503,671
5. Unfunded Actuarial Accrued Liability (1.g. – 4.)		$	5,371,333		$	5,246,405
6. Funded Ratio (4. / 1.g.)			59.51%			61.84%

Projected Unfunded Actuarial Accrued Liability

The development of the Projected Unfunded Actuarial Accrued Liability as of the first anniversary of the valuation date (i.e. the first day of the contribution year) is illustrated below.

Projected Unfunded Actuarial Accrued Liability		7/1/2021		7/1/2022
1. Unfunded Actuarial Accrued Liability on Valuation Date	$	5,371,333	$	5,246,405
2. Net Employer Normal Cost, Excluding Expenses (BOY)	$	236,549	$	231,740
3. Expected Expenses (MOY)	$	308	$	308
4. Expected Employer Contribution Fiscal Year Beginning on the Valuation Date	$	442,464	$	473,436
5. Expected Premium Tax Allocation Fiscal Year Beginning on the Valuation Date	$	285,513	$	269,170
6. Projected Unfunded Actuarial Accrued Liability on Valuation Date + 1 Year	$	5,208,311	$	5,055,386

Section IV. Determination of City Contributions

Development of Estimated Minimum Employer Contribution for Funding Purposes

The development of the Estimated Minimum Employer Contribution for funding purposes is illustrated below.

Estimated Employer Contribution Requirements		FYE 2023		FYE 2024
1. Prior Year Alternative Contribution	$	442,464	$	473,436
2. 7% Increase in Alternative Contribution	$	30,972	$	33,141
3. Current Year Preliminary Alternative Contribution	$	473,436	$	506,577
4. Additional Contribution to Satisfy 15-Year Solvency Test on an Open Group Basis	$	0	$	0
5. Employer Contribution Requirement to Receive 100% of Premium Tax (3. + 4.)	$	473,436	$	506,577
6. Additional Contribution to Satisfy 15-Year Solvency Test on a Closed Group Basis	$	0	$	0
7. Employer Contribution Requirement to Receive 100% Premium Tax and Grant Supplemental Benefits (COLA) (5. + 6.)	$	473,436	$	506,577

Development of Actuarially Determined Contribution for GASB Purposes

The development of the Actuarially Determined Contribution for GASB purposes is illustrated below.

Actuarially Determined Contribution for GASB		FYE 2023		FYE 2024
1. Projected Gross Normal Cost, Including Administrative Expenses (BOY)	$	349,662	$	364,236
2. Projected Employee Contributions (BOY)	$	105,932	$	115,494
3. Projected Net Employer Normal Cost (BOY) (1. – 2.)	$	243,730	$	248,742
4. Interest on Normal Cost	$	7,501	$	7,655
5. Projected Total Employer Normal Cost with Interest (3. + 4.)	$	251,231	$	256,397
6. Amortization of Projected Unfunded Liability	$	377,667	$	371,988
7. Interest on Projected Unfunded Liability Payment	$	11,623	$	11,448
8. Unfunded Liability Payment with Interest (6. + 7.)	$	389,290	$	383,436
9. Estimated Premium Tax Allocation	$	269,170	$	327,272
10. Unfunded Liability Payment Net of Premium Tax Allocation (8. – 9., not less than 0)	$	120,120	$	56,164
11. Net Employer Contribution (5. + 10.)	$	371,351	$	312,561
12. Actuarially Determined Contribution for GASB Purposes (5. + 8., not less than 0)	**$**	**640,521**	**$**	**639,833**

Schedule of Amortization Bases for GASB Purposes

Below is a schedule of the amortization bases as of July 1, 2023 used to develop the Actuarially Determined Contribution for GASB purposes.

Description	Date Established	Remaining Years	Outstanding Amount	Payment / (Credit)
Initial Unfunded	7/1/2023	26.5	$ 5,055,386	$ 371,988
Total			**$ 5,055,386**	**$ 371,988**

Section V. Assets

Asset Allocation

The table below shows the amount of funds invested in each account as of June 30, 2021 and June 30, 2022.

Assets Held by Category		June 30, 2021		June 30, 2022
Cash and Deposits	$	146,768	$	172,990
Receivables				
Contributions	$	25,114	$	0
Investment Income		17,006		0
Total Receivables	**$**	**42,120**	**$**	**0**
Investment				
Government Securities	$	1,073,908	$	1,263,473
Fixed Income		1,349,097		1,182,411
Equities		6,205,509		5,528,295
Alternative Investments		0		0
Other		0		0
Total Investments	**$**	**8,628,514**	**$**	**7,974,179**
Total Assets	**$**	**8,817,402**	**$**	**8,147,169**
Payables				
Investment Expense	$	0	$	0
Benefits and Withdrawals		0		0
Administrative Expense		0		0
Total Payables	**$**	**0**	**$**	**0**
Net Position	**$**	**8,817,402**	**$**	**8,147,169**

Reconciliation of Assets

Below is a reconciliation of assets (unaudited) from July 1, 2020 through June 30, 2022.

Plan Year Ending		June 30, 2021		June 30, 2022
1. Beginning of Year Market Value of Assets	$	7,104,226	$	8,817,402
Adjustments to Market Value of Assets		0		0
Beginning of Year Market Value of Assets	**$**	**7,104,226**	**$**	**8,817,402**
2. Additions				
a. Contributions				
(i) Local Government	$	413,519	$	442,466
(ii) State Government		275,293		310,627
(iii) Employee		113,517		129,634
(iv) Total		802,329		882,727
b. Receivable Contributions				
(i) Local Government		0		0
(ii) State Government		25,114		0
(iii) Employee Contributions		0		0
(iv) Total		25,114		0
c. Earnings on Investments				
(i) Net Appreciation/(Depreciation)		1,555,595		(877,133)
(ii) Net Realized Gain (Loss) on Sale/Exchange		(22,150)		(4,175)
(iii) Interest and Dividends		148,259		144,100
(iv) Other Income		0		574
(v) Investment Expense		(7,775)		(8,062)
(vi) Receivable Investment Income		17,006		0
(vii) Payable Investment Expenses		0		0
(viii) Net Investment Income		1,690,935		(744,696)
d. Other Revenue		0		0
e. Total Additions	**$**	**2,518,378**	**$**	**138,031**
3. Disbursements				
a. Benefit Payments	$	769,052	$	753,897
b. Withdrawals		35,850		54,067
c. Administrative Expenses				
(i) Municipal Fees		0		0
(ii) Other Expenses		300		300
(iii) Total Administrative Expenses		300		300
d. Payable Benefits and Withdrawals		0		0
e. Payable Administrative Expenses		0		0
f. Total Disbursements	**$**	**805,202**	**$**	**808,264**
4. Net Increase (2.e. – 3.f.)		1,713,176		(670,233)
5. Net Assets (1. + 4.)	**$**	**8,817,402**	**$**	**8,147,169**
6. Rate of Return Net of Investment Fees (2I / [A + B – I] Method[3])		23.8%		- 8.4%

[3] A = beginning-of-year market value of assets, B = end-of-year market value of assets, I = investment return during the year

(Gain)/Loss on Market Value of Assets for Plan Year Ended June 30, 2022

MVA (Gain)/Loss for Plan Year Ended June 30, 2022			
Market Value of Assets (MVA)			
a.	MVA as of 7/1/2021	$	8,817,402
b.	Interest on a. to 6/30/2022		551,088
c.	Contributions with Interest to 6/30/2022		909,894
d.	Benefit Payments with Interest to 6/30/2022		832,830
e.	Administrative Expenses with Interest to 6/30/2022		309
f.	Expected MVA at 6/30/2022 (a. + b. + c. – d. – e.)		9,445,245
g.	Actual MVA at 6/30/2022		8,147,169
h.	MVA (Gain)/Loss (f. - g.)		1,298,076

Development of Actuarial Value of Assets

The actuarial asset value as of July 1, 2022 is determined by spreading the asset gain or loss for each year over a four-year period. The asset gain or loss is the amount by which the actual asset return differs from the expected asset return on a market-value basis.

						July 1, 2022
1.	Market Value of Assets				$	8,147,169
2.	Spreading of Investment (Gains)/Losses					
	Fiscal Year		(Gain)/Loss	% Deferred		Amount Deferred
	2022	$	1,298,076	75%	$	973,557
	2021		(1,247,009)	50%		(623,505)
	2020		25,800	25%		6,450
	a. Total Deferred					356,502
3.	Actuarial Value of Assets (1. + 2.a.)				$	8,503,671
4.	Rate of Return Net of Investment Fees (2I / [A + B – I] Method)					6.73%

Section VI. Experience (Gain)/Loss

Experience (Gain)/Loss for Plan Year Ended June 30, 2022

Experience (Gain)/Loss for Plan Year Ended June 30, 2022			
1.	Liabilities		
	a. Actuarial Accrued Liability as of 7/1/2021	$	13,266,378
	b. Normal Cost as of 7/1/2021		338,336
	c. Interest on a. and b. to 6/30/2022		850,295
	d. Benefit Payments with Interest to 6/30/2022		832,830
	e. Effect of Assumption Changes		0
	f. Expected Liability at 7/1/2022 (a. + b. + c. – d. + e.)		13,622,179
	g. Actual Liability at 7/1/2022		13,750,076
	h. Liability (Gain)/Loss (g. - f.)		127,897
2.	Actuarial Value of Assets (AVA)		
	a. AVA as of 7/1/2021	$	7,895,045
	b. Interest on a. to 6/30/2022		493,440
	c. Contributions with Interest to 6/30/2022		909,894
	d. Benefit Payments with Interest to 6/30/2022		832,830
	e. Administrative Expenses with Interest to 6/30/2022		309
	f. Expected AVA at 6/30/2022 (a. + b. + c. – d. – e.)		8,465,240
	g. Actual AVA at 6/30/2022		8,503,671
	h. AVA (Gain)/Loss (f. - g.)		(38,431)
3.	Total (Gain)/Loss (1h. + 2h.)	$	89,466

The gains and losses shown are only for liability and asset gains and losses. Any change in the Unfunded Actuarial Accrued Liability from funding more or less than needed to cover Normal Cost and interest on the Unfunded Actuarial Accrued Liability is a separate amount.

Section VII. Risk Measures

Risk Measures

Pension plans are complicated financial instruments designed to provide income security for plan participants as they move through their working lives and into retirement. As such they can be subject to many different forces that can put the plan in better or worse positions over time. The primary risk that a plan sponsor incurs from a defined benefit plan is the risk of substantial increases in annual contributions.

The “maturity” level of a plan can indicate the likely sensitivity the plan will have to different events whether positive or negative. Variations in the investment returns are a common source of these types of events or shocks. Other sources might be experience that differs from that assumed, assumption changes or plan changes.

Actuarial Standard of Practice No. 51 *Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions* requires actuaries to provide information so that users of the report can better understand the potential for future results to vary from the results presented in this report and identify risks on the plan’s future financial condition. This standard does not require the assessment to be based on numerical calculations. In some cases, a more in-depth review of plan risk is warranted.

Examples of risk common to most public plans include the following (generally listed from greatest to least risk):

- Investment risk: The potential that investment returns will be different than expected. The Trustees are well aware of this risk. This valuation reflects the smoothing of asset returns, which reduces the risk of wide year-by-year contribution changes due to investment return fluctuations but does not ultimately reduce the risk inherent in a defined benefit plan.
- Contribution risk: Most commonly this is associated with the potential that actual future contributions are not made in accordance with the plan’s actuarially based funding policy.
- Longevity and other demographic risks: The potential that mortality or other demographic experience will be different than expected.
- Asset/liability mismatch risk: The potential that changes in asset values are not matched by changes in the value of liabilities.
- Cash flow risks: The potential that contributions coming into the plan will not cover benefit payments. While common in well-funded plans, this still requires the use of interest, dividends or principal to cover benefit payments. When assets need to be sold (or more cash held) it can be an issue. Poorly funded plans with DROP lump sum payments can magnify the issue.

One item left off this list is “interest rate risk” (i.e., the potential that interest rates will be different than expected). This risk is common in corporate ERISA plans where funding is based on bond rates. Interest rates on bonds are still an important consideration when setting an expected return assumption and can change over time.

There are several plan maturity measures that can be significant to understanding the risks associated with the plan. The following table shows four commonly used measures of the relative riskiness of a pension plan, relative to the plan sponsor and the employee group covered by the plan and how they have changed over time.

Risk Measure	July 1, 2020	July 1, 2021	July 1, 2022
Inactive AAL Percent of Total AAL	82.2%	77.6%	75.4%
Assets (MVA) to Payroll	6.2	7.6	6.7
Liabilities to Payroll	11.4	11.4	11.4
Benefit Payments to Contributions	0.9	1.0	0.9

The Assets to Payroll ratio, also called the Asset Volatility Ratio (AVR), is equal to the market value of assets (MVA) divided by payroll. A higher AVR implies that the plan is exposed to greater contribution volatility. The current *Assets to Payroll* of 6.7 indicates that a 1% asset gain/loss is about 6.7% of the annual payroll.

The Liabilities to Payroll ratio, also called the Liability Volatility Ratio (LVR), is equal to the Actuarial Accrued Liability (AAL) divided by payroll. A higher LVR implies that the plan is exposed to greater contribution volatility due to changes in liability measurements. Similarly, the current *Liabilities to Payroll* of 11.4 indicates that a 1% change in liability is about 11.4% of the annual payroll.

The use of payroll in these risk measures is generally an easily available substitute for the employer's revenue and often reflects the employer's ability to afford the plan. Each of these measures are a measure of plan maturity. The common evolution of a pension plan is to become more mature over time. Mature plans present more risk to plan sponsors because changes to the liability or assets will result in large changes in the unfunded liability as compared to the overall size of the employer as measured by payroll. As a result, the change in the metrics over time can be as important as the nominal size of the metric itself.

Additional Review

In some instances, more detailed quantitative assessment of risks is warranted either by the above maturity metrics, part of a periodic self-assessment of risks, or due to changes in investment allocations and capital market assumptions. The following are examples of tests that could be performed:

- Scenario Test—A process for assessing the impact of one possible event, or several simultaneously or sequentially occurring possible events, on a plan’s financial condition. A scenario test could show, for example, the effect of a layoff or reduction in workforce, or early retirement program.

- Sensitivity Test—A process for assessing the impact of a change in an actuarial assumption on an actuarial measurement. A sensitivity analysis could demonstrate, for example, the impact of a decrease in the valuation discount rate or a change in future life expectancies.

- Stochastic Modeling—A process for generating numerous potential outcomes by allowing for random variations in one or more inputs over time for the purpose of assessing the distribution of those outcomes. This type of analysis could show, for example, a range of potential future contribution levels and the likelihood of contributions increasing to a certain level.

- Stress Test—A process for assessing the impact of adverse changes in one or relatively few factors affecting a plan’s financial condition. A stress test could show, for example, the impact of a single year or period of several years with significant investment losses.

Section VIII. Projections for Premium Tax and COLA Eligibility

Table 1 – Open Group Projection (Determines Eligibility for Premium Tax Allocation)

	Number (BOY)			Assets												
Year End June 30	Active	Non-Active	Total Payroll	MVA (BOY)	Benefit Payments	Expenses	Employer Contrib.	Employee Contrib.	Premium Tax Allocation	Investment Income	MVA (EOY)	AVA (EOY)	Actuarial Accrued Liability	Unfunded Liability	Projected Unfunded Liability	AVA Funded Ratio
2022	27	32	$1,165,303	$8,817,402	$807,964	$300	$442,466	$129,634	$310,627	(744,696)	$8,147,169	$8,503,671	$13,750,076	$5,246,405	$5,055,386	61.84%
2023	26	32	$1,208,136	$8,147,169	$829,342	$308	$473,436	$109,251	$269,170	$509,882	$8,679,258	$9,016,544	$14,113,427	$5,096,883	$4,820,214	63.89%
2024	26	32	$1,301,153	$8,679,258	$863,215	$316	$506,577	$119,048	$327,272	$545,204	$9,313,828	$9,638,347	$14,492,409	$4,854,062	$4,537,960	66.51%
2025	26	32	$1,378,971	$9,313,828	$889,266	$324	$542,037	$126,984	$329,794	$585,476	$10,008,529	$10,008,529	$14,891,291	$4,882,762	$4,529,343	67.21%
2026	26	33	$1,468,482	$10,008,529	$907,380	$338	$579,980	$136,046	$346,075	$630,284	$10,793,196	$10,793,196	$15,322,539	$4,529,343	$4,120,659	70.44%
2027	26	31	$1,557,028	$10,793,196	$922,418	$335	$620,579	$144,831	$354,475	$680,642	$11,670,970	$11,670,970	$15,791,629	$4,120,659	$3,651,167	73.91%
2028	26	30	$1,648,201	$11,670,970	$935,745	$337	$664,020	$153,735	$363,086	$736,968	$12,652,697	$12,652,697	$16,303,864	$3,651,167	$3,114,587	77.61%
2029	26	30	$1,740,942	$12,652,697	$948,680	$345	$710,501	$162,658	$371,911	$799,905	$13,748,647	$13,748,647	$16,863,234	$3,114,587	$2,500,672	81.53%
2030	26	30	$1,833,899	$13,748,647	$957,982	$354	$760,236	$171,519	$383,811	$870,285	$14,976,162	$14,976,162	$17,476,834	$2,500,672	$1,803,096	85.69%
2031	26	30	$1,927,857	$14,976,162	$967,887	$363	$813,453	$180,452	$394,088	$948,928	$16,344,833	$16,344,833	$18,147,929	$1,803,096	$1,010,979	90.06%
2032	26	30	$2,023,245	$16,344,833	$971,436	$372	$870,395	$189,531	$406,408	$1,036,772	$17,876,131	$17,876,131	$18,887,110	$1,010,979	$115,198	94.65%
2033	26	28	$2,104,492	$17,876,131	$991,341	$368	$931,323	$197,734	$416,292	$1,134,297	$19,564,068	$19,564,068	$19,679,266	$115,198	-	99.41%
2034	26	27	$2,195,594	$19,564,068	$1,022,784	$370	$555,920	$206,994	-	$1,214,745	$20,518,573	$20,518,573	$20,518,573	-	-	100.00%
2035	26	26	$2,300,644	$20,518,573	$1,037,890	$372	$458,708	$217,153	-	$1,271,257	$21,427,429	$21,427,429	$21,427,429	-	-	100.00%
2036	26	26	$2,312,988	$21,427,429	$1,108,897	$381	$453,106	$218,429	-	$1,325,742	$22,315,428	$22,315,428	$22,315,428	-	-	100.00%
2037	26	27	$2,473,949	$22,315,428	$1,125,112	$398	$484,535	$233,802	-	$1,382,183	$23,290,438	$23,290,438	$23,290,438	-	-	100.00%
2038	26	27	$2,574,139	$23,290,438	$1,160,241	$408	$502,319	$243,381	-	$1,442,882	$24,318,371	$24,318,371	$24,318,371	-	-	100.00%
2039	26	27	$2,579,427	$24,318,371	$1,276,009	$418	$492,091	$244,314	-	$1,503,278	$25,281,627	$25,281,627	$25,281,627	-	-	100.00%
2040	26	29	$2,725,241	$25,281,627	$1,369,128	$445	$511,604	$258,637	-	$1,561,656	$26,243,951	$26,243,951	$26,243,951	-	-	100.00%
2041	26	29	$2,875,530	$26,243,951	$1,430,282	$456	$538,055	$273,090	-	$1,621,178	$27,245,536	$27,245,536	$27,245,536	-	-	100.00%
2042	26	29	$3,022,077	$27,245,536	$1,471,146	$467	$566,409	$287,116	-	$1,683,823	$28,311,271	$28,311,271	$28,311,271	-	-	100.00%
2043	26	29	$3,158,717	$28,311,271	$1,509,722	$479	$592,658	$300,164	-	$1,750,454	$29,444,346	$29,444,346	$29,444,346	-	-	100.00%
2044	26	29	$3,278,857	$29,444,346	$1,559,252	$491	$615,377	$311,652	-	$1,820,799	$30,632,431	$30,632,431	$30,632,431	-	-	100.00%
2045	26	29	$3,380,756	$30,632,431	$1,648,142	$503	$635,042	$321,393	-	$1,893,223	$31,833,444	$31,833,444	$31,833,444	-	-	100.00%
2046	26	30	$3,523,040	$31,833,444	$1,722,433	$525	$662,359	$334,897	-	$1,967,256	$33,074,998	$33,074,998	$33,074,998	-	-	100.00%
2047	26	30	$3,649,568	$33,074,998	$1,802,358	$538	$686,711	$346,950	-	$2,043,513	$34,349,276	$34,349,276	$34,349,276	-	-	100.00%
2048	26	30	$3,784,161	$34,349,276	$1,883,894	$551	$712,310	$359,736	-	$2,121,827	$35,658,704	$35,658,704	$35,658,704	-	-	100.00%
2049	26	30	$3,933,438	$35,658,704	$1,952,461	$565	$739,769	$373,921	-	$2,202,837	$37,022,205	$37,022,205	$37,022,205	-	-	100.00%
2050	26	30	$4,079,151	$37,022,205	$2,024,733	$579	$766,766	$387,779	-	$2,287,089	$38,438,527	$38,438,527	$38,438,527	-	-	100.00%
2051	26	30	$4,232,149	$38,438,527	$2,103,330	$593	$795,931	$402,321	-	$2,374,535	$39,907,391	$39,907,391	$39,907,391	-	-	100.00%
2052	26	30	$4,388,143	$39,907,391	$2,185,347	$608	$826,282	$417,151	-	$2,465,205	$41,430,074	$41,430,074	$41,430,074	-	-	100.00%
2053	26	30	$4,546,299	$41,430,074	$2,274,319	$623	$857,785	$432,188	-	$2,559,066	$43,004,171	$43,004,171	$43,004,171	-	-	100.00%
2054	26	30	$4,712,659	$43,004,171	$2,360,430	$639	$890,822	$447,999	-	$2,656,300	$44,638,223	$44,638,223	$44,638,223	-	-	100.00%
2055	26	30	$4,885,912	$44,638,223	$2,445,974	$655	$924,501	$464,465	-	$2,757,338	$46,337,898	$46,337,898	$46,337,898	-	-	100.00%
2056	26	30	$5,068,033	$46,337,898	$2,531,494	$671	$959,792	$481,773	-	$2,862,554	$48,109,852	$48,109,852	$48,109,852	-	-	100.00%
2057	26	30	$5,248,215	$48,109,852	$2,620,982	$688	$994,264	$498,910	-	$2,972,135	$49,953,491	$49,953,491	$49,953,491	-	-	100.00%
2058	26	30	$5,437,831	$49,953,491	$2,716,050	$705	$1,029,976	$516,929	-	$3,086,089	$51,869,730	$51,869,730	$51,869,730	-	-	100.00%
2059	26	30	$5,634,277	$51,869,730	$2,811,848	$723	$1,067,029	$535,605	-	$3,204,621	$53,864,414	$53,864,414	$53,864,414	-	-	100.00%
2060	26	30	$5,822,689	$53,864,414	$2,918,301	$741	$1,101,361	$553,538	-	$3,327,620	$55,927,891	$55,927,891	$55,927,891	-	-	100.00%
2061	26	31	$6,017,762	$55,927,891	$3,041,235	$773	$1,135,804	$572,082	-	$3,454,434	$58,048,203	$58,048,203	$58,048,203	-	-	100.00%
2062	26	31	$6,229,933	$58,048,203	$3,164,195	$792	$1,174,140	$592,246	-	$3,584,969	$60,234,571	$60,234,571	$60,234,571	-	-	100.00%
2063	26	31	$6,450,789	$60,234,571	$3,287,654	$812	$1,214,599	$613,237	-	$3,719,708	$62,493,649	$62,493,649	$62,493,649	-	-	100.00%

Table 2 – Closed Group Projection (Determines Whether COLA is Granted)

	Number (BOY)			Assets												
Year End June 30	Active	Non-Active	Total Payroll	MVA (BOY)	Benefit Payments	Expenses	Employer Contrib.	Employee Contrib.	Premium Tax Allocation	Investment Income	MVA (EOY)	AVA (EOY)	Actuarial Accrued Liability	Unfunded Liability	Projected Unfunded Liability	AVA Funded Ratio
2022	27	32	$1,165,303	$8,817,402	$807,964	$300	$442,466	$129,634	$310,627	(744,696)	$8,147,169	$8,503,671	$13,750,076	$5,246,405	$5,055,386	61.84%
2023	26	32	$1,208,136	$8,147,169	$829,342	$308	$473,436	$109,251	$269,170	$509,882	$8,679,258	$9,016,544	$14,113,427	$5,096,883	$4,792,045	63.89%
2024	23	32	$1,154,661	$8,679,258	$862,538	$316	$506,577	$105,122	$327,272	$544,796	$9,300,171	$9,624,690	$14,450,582	$4,825,892	$4,457,582	66.60%
2025	21	32	$1,117,316	$9,300,171	$886,894	$312	$542,037	$102,110	$329,794	$583,930	$9,970,836	$9,970,836	$14,773,219	$4,802,383	$4,368,870	67.49%
2026	19	33	$1,079,827	$9,970,836	$902,352	$314	$579,980	$99,098	$346,075	$626,947	$10,720,270	$10,720,270	$15,089,140	$4,368,870	$3,852,342	71.05%
2027	18	31	$1,051,514	$10,720,270	$913,952	$303	$620,579	$96,774	$354,475	$674,866	$11,552,709	$11,552,709	$15,405,051	$3,852,342	$3,246,378	74.99%
2028	16	30	$1,030,890	$11,552,709	$923,402	$292	$664,020	$95,052	$363,086	$728,152	$12,479,325	$12,479,325	$15,725,703	$3,246,378	$2,544,276	79.36%
2029	15	30	$1,019,498	$12,479,325	$932,284	$293	$710,501	$94,075	$371,911	$787,464	$13,510,699	$13,510,699	$16,054,975	$2,544,276	$1,735,230	84.15%
2030	15	30	$1,015,333	$13,510,699	$936,652	$300	$760,236	$93,706	$383,811	$853,676	$14,665,176	$14,665,176	$16,400,406	$1,735,230	$811,643	89.42%
2031	14	30	$1,015,585	$14,665,176	$941,258	$301	$813,453	$93,733	$394,088	$927,644	$15,952,535	$15,952,535	$16,764,178	$811,643	-	95.16%
2032	13	29	$1,018,440	$15,952,535	$938,746	$295	$870,395	$94,016	$174,421	$1,003,182	$17,155,508	$17,155,508	$17,155,508	-	-	100.00%
2033	13	28	$1,006,647	$17,155,508	$952,905	$295	$208,365	$93,376	-	$1,052,170	$17,556,219	$17,556,219	$17,556,219	-	-	100.00%
2034	12	27	$978,860	$17,556,219	$977,992	$288	$205,298	$91,337	-	$1,076,285	$17,950,859	$17,950,859	$17,950,859	-	-	100.00%
2035	11	26	$962,155	$17,950,859	$985,816	$280	$203,230	$89,923	-	$1,100,602	$18,358,518	$18,358,518	$18,358,518	-	-	100.00%
2036	10	26	$862,076	$18,358,518	$1,048,698	$279	$175,643	$80,514	-	$1,123,007	$18,688,705	$18,688,705	$18,688,705	-	-	100.00%
2037	9	26	$850,419	$18,688,705	$1,055,988	$278	$173,908	$79,480	-	$1,143,334	$19,029,161	$19,029,161	$19,029,161	-	-	100.00%
2038	8	26	$810,363	$19,029,161	$1,082,627	$277	$164,323	$75,730	-	$1,163,383	$19,349,693	$19,349,693	$19,349,693	-	-	100.00%
2039	8	26	$654,446	$19,349,693	$1,188,791	$284	$122,701	$61,342	-	$1,178,425	$19,523,086	$19,523,086	$19,523,086	-	-	100.00%
2040	5	28	$524,309	$19,523,086	$1,270,651	$283	$89,515	$49,436	-	$1,185,355	$19,576,458	$19,576,458	$19,576,458	-	-	100.00%
2041	4	28	$448,804	$19,576,458	$1,318,776	$281	$72,198	$42,428	-	$1,186,461	$19,558,488	$19,558,488	$19,558,488	-	-	100.00%
2042	3	28	$395,316	$19,558,488	$1,346,068	$279	$61,292	$37,443	-	$1,184,008	$19,494,884	$19,494,884	$19,494,884	-	-	100.00%
2043	3	28	$347,838	$19,494,884	$1,370,225	$286	$51,014	$32,994	-	$1,178,836	$19,387,217	$19,387,217	$19,387,217	-	-	100.00%
2044	2	28	$305,174	$19,387,217	$1,394,009	$284	$42,416	$28,978	-	$1,170,987	$19,235,305	$19,235,305	$19,235,305	-	-	100.00%
2045	2	28	$241,972	$19,235,305	$1,441,158	$291	$31,856	$23,028	-	$1,159,533	$19,008,273	$19,008,273	$19,008,273	-	-	100.00%
2046	1	28	$187,121	$19,008,273	$1,468,627	$288	$23,418	$17,787	-	$1,144,077	$18,724,640	$18,724,640	$18,724,640	-	-	100.00%
2047	1	27	$146,557	$18,724,640	$1,496,193	$285	$17,882	$13,958	-	$1,125,214	$18,385,216	$18,385,216	$18,385,216	-	-	100.00%
2048	1	27	$108,309	$18,385,216	$1,510,052	$292	$13,044	$10,301	-	$1,103,311	$18,001,528	$18,001,528	$18,001,528	-	-	100.00%
2049	1	26	$92,612	$18,001,528	$1,506,234	$289	$10,948	$8,809	-	$1,079,338	$17,594,100	$17,594,100	$17,594,100	-	-	100.00%
2050	1	26	$76,696	$17,594,100	$1,503,864	$296	$8,822	$7,304	-	$1,053,835	$17,159,901	$17,159,901	$17,159,901	-	-	100.00%
2051	0	25	$54,306	$17,159,901	$1,506,490	$281	$5,998	$5,179	-	$1,026,465	$16,690,772	$16,690,772	$16,690,772	-	-	100.00%
2052	0	25	$37,506	$16,690,772	$1,499,522	$288	$4,033	$3,571	-	$997,248	$16,195,814	$16,195,814	$16,195,814	-	-	100.00%
2053	0	24	$24,444	$16,195,814	$1,493,089	$283	$2,667	$2,335	-	$966,432	$15,673,876	$15,673,876	$15,673,876	-	-	100.00%
2054	0	23	$12,657	$15,673,876	$1,480,355	$278	$1,540	$1,207	-	$934,133	$15,130,123	$15,130,123	$15,130,123	-	-	100.00%
2055	0	23	$7,343	$15,130,123	$1,461,598	$285	$1,000	$701	-	$900,694	$14,570,635	$14,570,635	$14,570,635	-	-	100.00%
2056	0	22	$4,323	$14,570,635	$1,440,001	$279	$697	$412	-	$866,372	$13,997,836	$13,997,836	$13,997,836	-	-	100.00%
2057	0	21	$2,311	$13,997,836	$1,416,491	$273	$492	$221	-	$831,284	$13,413,069	$13,413,069	$13,413,069	-	-	100.00%
2058	0	21	$1,324	$13,413,069	$1,391,053	$280	$406	$127	-	$795,513	$12,817,782	$12,817,782	$12,817,782	-	-	100.00%
2059	0	20	$735	$12,817,782	$1,364,158	$273	$344	$70	-	$759,132	$12,212,897	$12,212,897	$12,212,897	-	-	100.00%
2060	0	19	$358	$12,212,897	$1,335,982	$266	$299	$34	-	$722,191	$11,599,173	$11,599,173	$11,599,173	-	-	100.00%
2061	0	19	$144	$11,599,173	$1,306,489	$273	$286	$13	-	$684,740	$10,977,450	$10,977,450	$10,977,450	-	-	100.00%
2062	0	18	$89	$10,977,450	$1,275,842	$265	$273	$8	-	$646,825	$10,348,449	$10,348,449	$10,348,449	-	-	100.00%
2063	0	17	-	$10,348,449	$1,244,184	$257	$257	-	-	$608,487	$9,712,752	$9,712,752	$9,712,752	-	-	100.00%

Section IX. Funding Policy Change Analysis

Funding Policy Options

For plans using the Alternative funding policy, West Virginia Code §8-22-20 requires the actuarial valuation report to provide an evaluation of the plan and to assess advantages of changing to other funding policies. The other funding policies available to this plan are the Optional and Optional II funding policies. The Optional funding policy is defined in West Virginia Code §8-22-20(e)(1) and is effective for plan years beginning on or after January 1, 2010. The Optional II funding policy is defined in West Virginia Code §8-22-20(g)(2) and is effective for plan years beginning on or after July 1, 2023.

If the municipality were to choose to fund using the Optional or Optional II funding policies in lieu of the Alternative policy, then the following conditions would apply to the plan:

- The required total contribution to the plan, including the premium tax allocation and employee contributions, would equal the normal cost plus a layered, level dollar amortization of the unfunded accrued liability.
- The initial unfunded liability upon switching to the policy must be amortized over a period of no more than:
  - **Optional**: 40 years beginning January 1, 2010 (26.5 years remaining for contributions developed for the fiscal year ending June 30, 2024).
  - **Optional II**: 40 years beginning July 1, 2023 (40.0 years remaining for contributions developed for the fiscal year ending June 30, 2024)
  - For more information about these funding policies please see *West Virginia Funding Policies* within *Section XII. Actuarial Methods and Assumptions*.
- The pension and relief fund would close to newly-hired police officers or firemen after the date of the change and new hires would join the statewide plan - Municipal Police Officers and Firefighters Retirement System (MPFRS).
  - Employer contributions for MPFRS currently equal 8.5% of pay
  - Employee contributions for MPFRS currently equal 8.5% of pay
  - The West Virginia Consolidated Public Retirement Board can change the employer contribution and employee contribution rate to a percentage of pay between 8.5% and 10.5% as needed to maintain an actuarially sound pension plan.

As stated previously, the Alternative funding policy does not adhere to actuarial principles generally considered necessary for classification as a reasonable funding policy. An example of a reasonable funding method is one that develops a contribution as the sum of (1) the cost of the additional benefits earned by the employees for that year (i.e. the normal cost) and (2) a level dollar or level percentage of pay amortization of the unfunded accrued liability. Both the Optional and Optional II funding policies achieve this goal, but the Alternative funding policy does not.

To help the municipality understand the impact of switching, we calculated the projected contributions, liabilities, and assets over a 40-year period under two different scenarios. The first scenario assumes the municipality switches to either the Optional or Optional II funding policies in the next valuation year. The second scenario assumes the municipality switches to either the Optional or Optional II funding policies in the year that the contribution for that funding policy is projected to be the same or less than the contribution under the Alternative funding policy. The projections are provided on the following pages of this report.

Scenario 1 – Immediate Change

The following tables show the estimated contribution under the three funding policies in the next fiscal year and in 2063 assuming the municipality elects one of the new funding policies for the next fiscal year:

Contribution Comparison for FYE June 30, 2024							
		Local Plan		State Plan		Total	
Funding Policy	**AVA Funded Status**	**Amount**	**% of Pay**	**Amount**	**% of Pay**	**Amount**	**% of Pay**
Alternative	61.8%	$506,577	38.9%	N/A	N/A	$506,577	38.9%
Optional	61.8%	$285,233	24.7%	$12,452	8.5%	$297,685	22.9%
Optional II	61.8%	$238,079	20.6%	$12,452	8.5%	$250,531	19.3%

Contribution Comparison for FYE June 30, 2063							
		Local Plan		State Plan		Total	
Funding Policy	**100% Funded Year**	**Amount**	**% of Pay**	**Amount**	**% of Pay**	**Amount**	**% of Pay**
Alternative	2034	$1,214,599	18.8%	N/A	N/A	$1,214,599	18.8%
Optional	2046	$257	N/A	$548,317	8.5%	$548,574	8.5%
Optional II	2048	$257	N/A	$548,317	8.5%	$548,574	8.5%

The projected year-by-year contribution requirements under the Optional and Optional II policies for the current plan are detailed in the projections in Tables 3 – 6 on the following pages.

Scenario 2 – Change When Fiscally Advantageous

The following tables show estimated contributions under the Optional and Optional II funding policies if the municipality switches to these funding policies in the year that the estimated contribution is smaller than the contribution under the Alternative funding policy. The first table shows the contribution in the year of the change in funding policy, while the second table shows the contribution at the end of the projection period (FYE 2063).

Contribution Comparison for Fiscal Year of Change				
		Current Policy	New Policy	Difference
Funding Policy	**Year of Change**	**Total (Local + State) Contribution in Year of Change**	**Total (Local + State) Contribution in Year of Change**	**New Policy Contribution Minus Alternative**
Optional	2024	$506,577	$297,685	$(208,892)
Optional II	2024	$506,577	$250,531	$(256,046)

Contribution Comparison for FYE June 30, 2063				
		Current Policy	New Policy	Difference
Funding Policy	**AVA Funded Status**	**Total (Local + State) Contribution in FYE 2063**	**Total (Local + State) Contribution in FYE 2063**	**New Policy Contribution Minus Alternative**
Optional	100%	$1,214,599	$548,574	$(666,025)
Optional II	100%	$1,214,599	$548,574	$(666,025)

The projected year-by-year contribution requirements under the Optional and Optional II policies assume the municipality switches funding policies in the year that the new funding policy contribution is projected to be less than the Alternative policy contribution. If the "Year of Change" is "after 2063" then the new funding policy contribution is not projected to be less than the Alternative funding policy contribution in the 40-year projection period. In this case, the *Difference* column is the amount that the Optional or Optional II funding policy contribution exceeds the Alternative contribution in 2063.

Table 3 – Switch to Optional Funding Policy in 2024

	Number (BOY)		Assets												
Year End June 30	Active	Non-Active	MVA (BOY)	Benefit Payments	Expenses	Employer Contrib.	Employee Contrib.	Premium Tax Allocation	Investment Income	MVA (EOY)	AVA (EOY)	Actuarial Accrued Liability	Unfunded Liability	Projected Unfunded Liability	AVA Funded Ratio
2022	27	32	$8,817,402	$807,964	$300	$442,466	$129,634	$310,627	(744,696)	$8,147,169	$8,503,671	$13,750,076	$5,246,405	$5,055,386	61.84%
2023	26	32	$8,147,169	$829,342	$308	$473,436	$109,251	$269,170	$509,882	$8,679,258	$9,016,544	$14,113,427	$5,096,883	$5,020,201	63.89%
2024	23	32	$8,679,258	$862,538	$316	$285,233	$105,122	$327,272	$537,984	$9,072,015	$9,396,534	$14,450,582	$5,054,048	$4,970,075	65.03%
2025	21	32	$9,072,015	$886,894	$312	$280,024	$102,110	$329,794	$561,607	$9,458,344	$9,458,344	$14,773,219	$5,314,875	$5,243,439	64.02%
2026	19	33	$9,458,344	$902,352	$314	$259,788	$99,098	$346,075	$585,062	$9,845,701	$9,845,701	$15,089,140	$5,243,439	$5,129,199	65.25%
2027	18	31	$9,845,701	$913,952	$303	$283,330	$96,774	$354,475	$609,827	$10,275,852	$10,275,852	$15,405,051	$5,129,199	$5,007,819	66.70%
2028	16	30	$10,275,852	$923,402	$292	$271,325	$95,052	$363,086	$636,263	$10,717,884	$10,717,884	$15,725,703	$5,007,819	$4,878,853	68.16%
2029	15	30	$10,717,884	$932,284	$293	$261,280	$94,075	$371,911	$663,549	$11,176,122	$11,176,122	$16,054,975	$4,878,853	$4,741,827	69.61%
2030	15	30	$11,176,122	$936,652	$300	$249,835	$93,706	$383,811	$692,057	$11,658,579	$11,658,579	$16,400,406	$4,741,827	$4,596,237	71.09%
2031	14	30	$11,658,579	$941,258	$301	$240,987	$93,733	$394,088	$722,113	$12,167,941	$12,167,941	$16,764,178	$4,596,237	$4,441,547	72.58%
2032	13	29	$12,167,941	$938,746	$295	$230,544	$94,016	$406,408	$754,093	$12,713,961	$12,713,961	$17,155,508	$4,441,547	$4,277,189	74.11%
2033	13	28	$12,713,961	$952,905	$295	$220,832	$93,376	$416,292	$787,769	$13,279,030	$13,279,030	$17,556,219	$4,277,189	$4,102,559	75.64%
2034	12	27	$13,279,030	$977,992	$288	$206,387	$91,337	$427,670	$822,156	$13,848,300	$13,848,300	$17,950,859	$4,102,559	$3,904,990	77.15%
2035	11	26	$13,848,300	$985,816	$280	$203,230	$89,923	$440,424	$857,747	$14,453,528	$14,453,528	$18,358,518	$3,904,990	$3,682,283	78.73%
2036	10	26	$14,453,528	$1,048,698	$279	$175,643	$80,514	$452,832	$892,882	$15,006,422	$15,006,422	$18,688,705	$3,682,283	$3,431,478	80.30%
2037	9	26	$15,006,422	$1,055,988	$278	$173,907	$79,480	$466,588	$927,552	$15,597,683	$15,597,683	$19,029,161	$3,431,478	$3,152,974	81.97%
2038	8	26	$15,597,683	$1,082,627	$277	$164,323	$75,730	$478,253	$963,634	$16,196,719	$16,196,719	$19,349,693	$3,152,974	$2,844,738	83.71%
2039	8	26	$16,196,719	$1,188,791	$284	$122,702	$61,342	$490,209	$996,451	$16,678,348	$16,678,348	$19,523,086	$2,844,738	$2,504,607	85.43%
2040	5	28	$16,678,348	$1,270,651	$283	$89,515	$49,436	$502,464	$1,023,022	$17,071,851	$17,071,851	$19,576,458	$2,504,607	$2,130,269	87.21%
2041	4	28	$17,071,851	$1,318,776	$281	$72,198	$42,428	$515,026	$1,045,773	$17,428,219	$17,428,219	$19,558,488	$2,130,269	$1,719,261	89.11%
2042	3	28	$17,428,219	$1,346,068	$279	$61,292	$37,443	$527,902	$1,067,114	$17,775,623	$17,775,623	$19,494,884	$1,719,261	$1,268,961	91.18%
2043	3	28	$17,775,623	$1,370,225	$286	$51,014	$32,994	$541,100	$1,088,036	$18,118,256	$18,118,256	$19,387,217	$1,268,961	$776,574	93.45%
2044	2	28	$18,118,256	$1,394,009	$284	$42,416	$28,978	$554,628	$1,108,746	$18,458,731	$18,458,731	$19,235,305	$776,574	$239,120	95.96%
2045	2	28	$18,458,731	$1,441,158	$291	$31,856	$23,028	$568,494	$1,128,493	$18,769,153	$18,769,153	$19,008,273	$239,120	-	98.74%
2046	1	28	$18,769,153	$1,468,627	$288	$23,418	$17,787	$246,479	$1,136,718	$18,724,640	$18,724,640	$18,724,640	-	-	100.00%
2047	1	27	$18,724,640	$1,496,193	$285	$17,882	$13,958	-	$1,125,214	$18,385,216	$18,385,216	$18,385,216	-	-	100.00%
2048	1	27	$18,385,216	$1,510,052	$292	$13,044	$10,301	-	$1,103,311	$18,001,528	$18,001,528	$18,001,528	-	-	100.00%
2049	1	26	$18,001,528	$1,506,234	$289	$10,948	$8,809	-	$1,079,338	$17,594,100	$17,594,100	$17,594,100	-	-	100.00%
2050	1	26	$17,594,100	$1,503,864	$296	$8,822	$7,304	-	$1,053,835	$17,159,901	$17,159,901	$17,159,901	-	-	100.00%
2051	0	25	$17,159,901	$1,506,490	$281	$5,998	$5,179	-	$1,026,465	$16,690,772	$16,690,772	$16,690,772	-	-	100.00%
2052	0	25	$16,690,772	$1,499,522	$288	$4,033	$3,571	-	$997,248	$16,195,814	$16,195,814	$16,195,814	-	-	100.00%
2053	0	24	$16,195,814	$1,493,089	$283	$2,667	$2,335	-	$966,432	$15,673,876	$15,673,876	$15,673,876	-	-	100.00%
2054	0	23	$15,673,876	$1,480,355	$278	$1,540	$1,207	-	$934,133	$15,130,123	$15,130,123	$15,130,123	-	-	100.00%
2055	0	23	$15,130,123	$1,461,598	$285	$1,000	$701	-	$900,694	$14,570,635	$14,570,635	$14,570,635	-	-	100.00%
2056	0	22	$14,570,635	$1,440,001	$279	$696	$412	-	$866,373	$13,997,836	$13,997,836	$13,997,836	-	-	100.00%
2057	0	21	$13,997,836	$1,416,491	$273	$492	$221	-	$831,284	$13,413,069	$13,413,069	$13,413,069	-	-	100.00%
2058	0	21	$13,413,069	$1,391,053	$280	$406	$127	-	$795,513	$12,817,782	$12,817,782	$12,817,782	-	-	100.00%
2059	0	20	$12,817,782	$1,364,158	$273	$344	$70	-	$759,132	$12,212,897	$12,212,897	$12,212,897	-	-	100.00%
2060	0	19	$12,212,897	$1,335,982	$266	$299	$34	-	$722,191	$11,599,173	$11,599,173	$11,599,173	-	-	100.00%
2061	0	19	$11,599,173	$1,306,489	$273	$285	$13	-	$684,741	$10,977,450	$10,977,450	$10,977,450	-	-	100.00%
2062	0	18	$10,977,450	$1,275,842	$265	$272	$8	-	$646,826	$10,348,449	$10,348,449	$10,348,449	-	-	100.00%
2063	0	17	$10,348,449	$1,244,184	$257	$257	-	-	$608,487	$9,712,752	$9,712,752	$9,712,752	-	-	100.00%

Table 3 – Switch to Optional Funding Policy in 2024 (Cont.)

				Employer Contributions											
Year End June 30	Closed Group Payroll	New Entrant Payroll	Total Payroll	Employee Contrib.	Gross Normal Cost	Interest on Net Normal Cost	Net Employer Normal Cost	Amortization of UAAL	Mid-Year Interest on Amortization	Premium Tax Allocation	Net Employer Amortization	Expenses	Optional Employer Contrib.	Statewide Employer Contrib.	Total Employer Contrib.
2024	$1,154,661	$146,492	$1,301,153	$101,983	$323,906	$6,830	$228,753	$371,988	$11,448	$327,272	$56,164	$316	$285,233	$12,452	$297,685
2025	$1,117,316	$261,655	$1,378,971	$99,061	$314,038	$6,616	$221,593	$376,331	$11,582	$329,794	$58,119	$312	$280,024	$22,241	$302,265
2026	$1,079,827	$388,655	$1,468,482	$96,139	$303,735	$6,389	$213,985	$379,873	$11,691	$346,075	$45,489	$314	$259,788	$33,036	$292,824
2027	$1,051,514	$505,514	$1,557,028	$93,885	$296,395	$6,233	$208,743	$415,957	$12,802	$354,475	$74,284	$303	$283,330	$42,969	$326,299
2028	$1,030,890	$617,311	$1,648,201	$92,214	$291,442	$6,132	$205,360	$415,957	$12,802	$363,086	$65,673	$292	$271,325	$52,471	$323,796
2029	$1,019,498	$721,444	$1,740,942	$91,266	$289,310	$6,095	$204,139	$415,957	$12,802	$371,911	$56,848	$293	$261,280	$61,323	$322,603
2030	$1,015,333	$818,566	$1,833,899	$90,908	$289,387	$6,108	$204,587	$415,957	$12,802	$383,811	$44,948	$300	$249,835	$69,578	$319,413
2031	$1,015,585	$912,272	$1,927,857	$90,934	$290,798	$6,151	$206,015	$415,957	$12,802	$394,088	$34,671	$301	$240,987	$77,543	$318,530
2032	$1,018,440	$1,004,805	$2,023,245	$91,209	$292,900	$6,207	$207,898	$415,957	$12,802	$406,408	$22,351	$295	$230,544	$85,408	$315,952
2033	$1,006,647	$1,097,845	$2,104,492	$90,588	$292,446	$6,212	$208,070	$415,957	$12,802	$416,292	$12,467	$295	$220,832	$93,317	$314,149
2034	$978,860	$1,216,734	$2,195,594	$88,610	$287,499	$6,121	$205,010	$415,957	$12,802	$427,670	$1,089	$288	$206,387	$103,422	$309,809
2035	$962,155	$1,338,489	$2,300,644	$87,238	$284,128	$6,060	$202,950	$415,957	$12,802	$440,424	-	$280	$203,230	$113,772	$317,002
2036	$862,076	$1,450,912	$2,312,988	$78,110	$248,238	$5,236	$175,364	$415,957	$12,802	$452,832	-	$279	$175,643	$123,328	$298,971
2037	$850,419	$1,623,530	$2,473,949	$77,107	$245,552	$5,184	$173,629	$415,957	$12,802	$466,588	-	$278	$173,907	$138,000	$311,907
2038	$810,363	$1,763,776	$2,574,139	$73,469	$232,617	$4,898	$164,046	$415,957	$12,802	$478,253	-	$277	$164,323	$149,921	$314,244
2039	$654,446	$1,924,981	$2,579,427	$59,510	$178,273	$3,655	$122,418	$415,957	$12,802	$490,209	-	$284	$122,702	$163,623	$286,325
2040	$524,309	$2,200,932	$2,725,241	$47,960	$134,528	$2,664	$89,232	$411,614	$12,668	$502,464	-	$283	$89,515	$187,079	$276,594
2041	$448,804	$2,426,726	$2,875,530	$41,161	$110,931	$2,147	$71,917	$408,072	$12,559	$515,026	-	$281	$72,198	$206,272	$278,470
2042	$395,316	$2,626,761	$3,022,077	$36,325	$95,516	$1,822	$61,013	$371,988	$11,448	$527,902	-	$279	$61,292	$223,275	$284,567
2043	$347,838	$2,810,879	$3,158,717	$32,009	$81,222	$1,515	$50,728	$371,988	$11,448	$541,100	-	$286	$51,014	$238,925	$289,939
2044	$305,174	$2,973,683	$3,278,857	$28,113	$68,987	$1,258	$42,132	$371,988	$11,448	$554,628	-	$284	$42,416	$252,763	$295,179
2045	$241,972	$3,138,784	$3,380,756	$22,340	$52,963	$942	$31,565	$371,988	$11,448	$568,494	-	$291	$31,856	$266,797	$298,653
2046	$187,121	$3,335,919	$3,523,040	$17,256	$39,695	$691	$23,130	$371,988	$11,448	$246,479	$136,957	$288	$23,418	$283,553	$306,971
2047	$146,557	$3,503,011	$3,649,568	$13,541	$30,613	$525	$17,597	-	-	-	-	$285	$17,882	$297,756	$315,638
2048	$108,309	$3,675,852	$3,784,161	$9,993	$22,364	$381	$12,752	-	-	-	-	$292	$13,044	$312,447	$325,491
2049	$92,612	$3,840,826	$3,933,438	$8,546	$18,887	$318	$10,659	-	-	-	-	$289	$10,948	$326,470	$337,418
2050	$76,696	$4,002,455	$4,079,151	$7,086	$15,357	$255	$8,526	-	-	-	-	$296	$8,822	$340,209	$349,031
2051	$54,306	$4,177,843	$4,232,149	$5,024	$10,571	$171	$5,718	-	-	-	-	$281	$5,998	$355,117	$361,115
2052	$37,506	$4,350,637	$4,388,143	$3,464	$7,097	$112	$3,745	-	-	-	-	$288	$4,033	$369,804	$373,837
2053	$24,444	$4,521,855	$4,546,299	$2,265	$4,578	$71	$2,384	-	-	-	-	$283	$2,667	$384,358	$387,025
2054	$12,657	$4,700,002	$4,712,659	$1,171	$2,395	$38	$1,262	-	-	-	-	$278	$1,540	$399,500	$401,040
2055	$7,343	$4,878,569	$4,885,912	$680	$1,374	$21	$715	-	-	-	-	$285	$1,000	$414,678	$415,678
2056	$4,323	$5,063,710	$5,068,033	$400	$805	$12	$417	-	-	-	-	$279	$696	$430,415	$431,111
2057	$2,311	$5,245,904	$5,248,215	$214	$427	$7	$220	-	-	-	-	$273	$492	$445,902	$446,394
2058	$1,324	$5,436,507	$5,437,831	$123	$245	$4	$126	-	-	-	-	$280	$406	$462,103	$462,509
2059	$735	$5,633,542	$5,634,277	$68	$137	$2	$71	-	-	-	-	$273	$344	$478,851	$479,195
2060	$358	$5,822,331	$5,822,689	$33	$65	$1	$33	-	-	-	-	$266	$299	$494,898	$495,197
2061	$144	$6,017,618	$6,017,762	$13	$25	-	$12	-	-	-	-	$273	$285	$511,498	$511,783
2062	$89	$6,229,844	$6,229,933	$8	$15	-	$7	-	-	-	-	$265	$272	$529,537	$529,809
2063	-	$6,450,789	$6,450,789	-	-	-	-	-	-	-	-	$257	$257	$548,317	$548,574

Table 4 – Switch to Optional II Funding Policy in 2024

	Number (BOY)		Assets												
Year End June 30	Active	Non-Active	MVA (BOY)	Benefit Payments	Expenses	Employer Contrib.	Employee Contrib.	Premium Tax Allocation	Investment Income	MVA (EOY)	AVA (EOY)	Actuarial Accrued Liability	Unfunded Liability	Projected Unfunded Liability	AVA Funded Ratio
2022	27	32	$8,817,402	$807,964	$300	$442,466	$129,634	$310,627	(744,696)	$8,147,169	$8,503,671	$13,750,076	$5,246,405	$5,055,386	61.84%
2023	26	32	$8,147,169	$829,342	$308	$473,436	$109,251	$269,170	$509,882	$8,679,258	$9,016,544	$14,113,427	$5,096,883	$5,068,807	63.89%
2024	23	32	$8,679,258	$862,538	$316	$238,079	$105,122	$327,272	$536,533	$9,023,410	$9,347,929	$14,450,582	$5,102,653	$5,070,324	64.69%
2025	21	32	$9,023,410	$886,894	$312	$232,869	$102,110	$329,794	$557,117	$9,358,094	$9,358,094	$14,773,219	$5,415,125	$5,396,844	63.34%
2026	19	33	$9,358,094	$902,352	$314	$214,299	$99,098	$346,075	$577,396	$9,692,296	$9,692,296	$15,089,140	$5,396,844	$5,340,799	64.23%
2027	18	31	$9,692,296	$913,952	$303	$236,175	$96,774	$354,475	$598,787	$10,064,252	$10,064,252	$15,405,051	$5,340,799	$5,281,250	65.33%
2028	16	30	$10,064,252	$923,402	$292	$224,170	$95,052	$363,086	$621,587	$10,444,453	$10,444,453	$15,725,703	$5,281,250	$5,217,980	66.42%
2029	15	30	$10,444,453	$932,284	$293	$214,125	$94,075	$371,911	$645,008	$10,836,995	$10,836,995	$16,054,975	$5,217,980	$5,148,481	67.50%
2030	15	30	$10,836,995	$936,652	$300	$204,887	$93,706	$383,811	$669,478	$11,251,925	$11,251,925	$16,400,406	$5,148,481	$5,064,044	68.61%
2031	14	30	$11,251,925	$941,258	$301	$206,316	$93,733	$394,088	$695,631	$11,700,134	$11,700,134	$16,764,178	$5,064,044	$4,961,631	69.79%
2032	13	29	$11,700,134	$938,746	$295	$208,193	$94,016	$406,408	$724,167	$12,193,877	$12,193,877	$17,155,508	$4,961,631	$4,842,629	71.08%
2033	13	28	$12,193,877	$952,905	$295	$208,365	$93,376	$416,292	$754,880	$12,713,590	$12,713,590	$17,556,219	$4,842,629	$4,704,461	72.42%
2034	12	27	$12,713,590	$977,992	$288	$205,298	$91,337	$427,670	$786,783	$13,246,398	$13,246,398	$17,950,859	$4,704,461	$4,544,511	73.79%
2035	11	26	$13,246,398	$985,816	$280	$203,230	$89,923	$440,424	$820,128	$13,814,007	$13,814,007	$18,358,518	$4,544,511	$4,361,774	75.25%
2036	10	26	$13,814,007	$1,048,698	$279	$175,643	$80,514	$452,832	$852,912	$14,326,931	$14,326,931	$18,688,705	$4,361,774	$4,153,438	76.66%
2037	9	26	$14,326,931	$1,055,988	$278	$173,907	$79,480	$466,588	$885,083	$14,875,723	$14,875,723	$19,029,161	$4,153,438	$3,920,056	78.17%
2038	8	26	$14,875,723	$1,082,627	$277	$164,323	$75,730	$478,253	$918,512	$15,429,637	$15,429,637	$19,349,693	$3,920,056	$3,659,763	79.74%
2039	8	26	$15,429,637	$1,188,791	$284	$122,702	$61,342	$490,209	$948,508	$15,863,323	$15,863,323	$19,523,086	$3,659,763	$3,370,571	81.25%
2040	5	28	$15,863,323	$1,270,651	$283	$89,515	$49,436	$502,464	$972,083	$16,205,887	$16,205,887	$19,576,458	$3,370,571	$3,050,355	82.78%
2041	4	28	$16,205,887	$1,318,776	$281	$72,198	$42,428	$515,026	$991,651	$16,508,133	$16,508,133	$19,558,488	$3,050,355	$2,696,853	84.40%
2042	3	28	$16,508,133	$1,346,068	$279	$61,292	$37,443	$527,902	$1,009,608	$16,798,031	$16,798,031	$19,494,884	$2,696,853	$2,307,653	86.17%
2043	3	28	$16,798,031	$1,370,225	$286	$51,014	$32,994	$541,100	$1,026,936	$17,079,564	$17,079,564	$19,387,217	$2,307,653	$1,880,184	88.10%
2044	2	28	$17,079,564	$1,394,009	$284	$42,416	$28,978	$554,628	$1,043,828	$17,355,121	$17,355,121	$19,235,305	$1,880,184	$1,411,705	90.23%
2045	2	28	$17,355,121	$1,441,158	$291	$31,856	$23,028	$568,494	$1,059,518	$17,596,568	$17,596,568	$19,008,273	$1,411,705	$899,297	92.57%
2046	1	28	$17,596,568	$1,468,627	$288	$23,418	$17,787	$582,706	$1,073,779	$17,825,343	$17,825,343	$18,724,640	$899,297	$339,847	95.20%
2047	1	27	$17,825,343	$1,496,193	$285	$17,882	$13,958	$597,274	$1,087,390	$18,045,369	$18,045,369	$18,385,216	$339,847	-	98.15%
2048	1	27	$18,045,369	$1,510,052	$292	$13,044	$10,301	$350,306	$1,092,852	$18,001,528	$18,001,528	$18,001,528	-	-	100.00%
2049	1	26	$18,001,528	$1,506,234	$289	$10,948	$8,809	-	$1,079,338	$17,594,100	$17,594,100	$17,594,100	-	-	100.00%
2050	1	26	$17,594,100	$1,503,864	$296	$8,822	$7,304	-	$1,053,835	$17,159,901	$17,159,901	$17,159,901	-	-	100.00%
2051	0	25	$17,159,901	$1,506,490	$281	$5,998	$5,179	-	$1,026,465	$16,690,772	$16,690,772	$16,690,772	-	-	100.00%
2052	0	25	$16,690,772	$1,499,522	$288	$4,033	$3,571	-	$997,248	$16,195,814	$16,195,814	$16,195,814	-	-	100.00%
2053	0	24	$16,195,814	$1,493,089	$283	$2,667	$2,335	-	$966,432	$15,673,876	$15,673,876	$15,673,876	-	-	100.00%
2054	0	23	$15,673,876	$1,480,355	$278	$1,540	$1,207	-	$934,133	$15,130,123	$15,130,123	$15,130,123	-	-	100.00%
2055	0	23	$15,130,123	$1,461,598	$285	$1,000	$701	-	$900,694	$14,570,635	$14,570,635	$14,570,635	-	-	100.00%
2056	0	22	$14,570,635	$1,440,001	$279	$697	$412	-	$866,372	$13,997,836	$13,997,836	$13,997,836	-	-	100.00%
2057	0	21	$13,997,836	$1,416,491	$273	$492	$221	-	$831,284	$13,413,069	$13,413,069	$13,413,069	-	-	100.00%
2058	0	21	$13,413,069	$1,391,053	$280	$406	$127	-	$795,513	$12,817,782	$12,817,782	$12,817,782	-	-	100.00%
2059	0	20	$12,817,782	$1,364,158	$273	$344	$70	-	$759,132	$12,212,897	$12,212,897	$12,212,897	-	-	100.00%
2060	0	19	$12,212,897	$1,335,982	$266	$299	$34	-	$722,191	$11,599,173	$11,599,173	$11,599,173	-	-	100.00%
2061	0	19	$11,599,173	$1,306,489	$273	$286	$13	-	$684,740	$10,977,450	$10,977,450	$10,977,450	-	-	100.00%
2062	0	18	$10,977,450	$1,275,842	$265	$273	$8	-	$646,825	$10,348,449	$10,348,449	$10,348,449	-	-	100.00%
2063	0	17	$10,348,449	$1,244,184	$257	$257	-	-	$608,487	$9,712,752	$9,712,752	$9,712,752	-	-	100.00%

Table 4 – Switch to Optional II Funding Policy in 2024 (Cont.)

				Employer Contributions											
Year End June 30	Closed Group Payroll	New Entrant Payroll	Total Payroll	Employee Contrib.	Gross Normal Cost	Interest on Net Normal Cost	Net Employer Normal Cost	Amortization of UAAL	Mid-Year Interest on Amortization	Premium Tax Allocation	Net Employer Amortization	Expenses	Optional Employer Contrib.	Statewide Employer Contrib.	Total Employer Contrib.
2024	$1,154,661	$146,492	$1,301,153	$101,983	$323,906	$6,830	$228,753	$326,241	$10,041	$327,272	$9,010	$316	$238,079	$12,452	$250,531
2025	$1,117,316	$261,655	$1,378,971	$99,061	$314,038	$6,616	$221,593	$330,584	$10,174	$329,794	$10,964	$312	$232,869	$22,241	$255,110
2026	$1,079,827	$388,655	$1,468,482	$96,139	$303,735	$6,389	$213,985	$334,126	$10,283	$346,075	-	$314	$214,299	$33,036	$247,335
2027	$1,051,514	$505,514	$1,557,028	$93,885	$296,395	$6,233	$208,743	$370,210	$11,394	$354,475	$27,129	$303	$236,175	$42,969	$279,144
2028	$1,030,890	$617,311	$1,648,201	$92,214	$291,442	$6,132	$205,360	$370,210	$11,394	$363,086	$18,518	$292	$224,170	$52,471	$276,641
2029	$1,019,498	$721,444	$1,740,942	$91,266	$289,310	$6,095	$204,139	$370,210	$11,394	$371,911	$9,693	$293	$214,125	$61,323	$275,448
2030	$1,015,333	$818,566	$1,833,899	$90,908	$289,387	$6,108	$204,587	$370,210	$11,394	$383,811	-	$300	$204,887	$69,578	$274,465
2031	$1,015,585	$912,272	$1,927,857	$90,934	$290,798	$6,151	$206,015	$370,210	$11,394	$394,088	-	$301	$206,316	$77,543	$283,859
2032	$1,018,440	$1,004,805	$2,023,245	$91,209	$292,900	$6,207	$207,898	$370,210	$11,394	$406,408	-	$295	$208,193	$85,408	$293,601
2033	$1,006,647	$1,097,845	$2,104,492	$90,588	$292,446	$6,212	$208,070	$370,210	$11,394	$416,292	-	$295	$208,365	$93,317	$301,682
2034	$978,860	$1,216,734	$2,195,594	$88,610	$287,499	$6,121	$205,010	$370,210	$11,394	$427,670	-	$288	$205,298	$103,422	$308,720
2035	$962,155	$1,338,489	$2,300,644	$87,238	$284,128	$6,060	$202,950	$370,210	$11,394	$440,424	-	$280	$203,230	$113,772	$317,002
2036	$862,076	$1,450,912	$2,312,988	$78,110	$248,238	$5,236	$175,364	$370,210	$11,394	$452,832	-	$279	$175,643	$123,328	$298,971
2037	$850,419	$1,623,530	$2,473,949	$77,107	$245,552	$5,184	$173,629	$370,210	$11,394	$466,588	-	$278	$173,907	$138,000	$311,907
2038	$810,363	$1,763,776	$2,574,139	$73,469	$232,617	$4,898	$164,046	$370,210	$11,394	$478,253	-	$277	$164,323	$149,921	$314,244
2039	$654,446	$1,924,981	$2,579,427	$59,510	$178,273	$3,655	$122,418	$370,210	$11,394	$490,209	-	$284	$122,702	$163,623	$286,325
2040	$524,309	$2,200,932	$2,725,241	$47,960	$134,528	$2,664	$89,232	$365,868	$11,260	$502,464	-	$283	$89,515	$187,079	$276,594
2041	$448,804	$2,426,726	$2,875,530	$41,161	$110,931	$2,147	$71,917	$362,325	$11,151	$515,026	-	$281	$72,198	$206,272	$278,470
2042	$395,316	$2,626,761	$3,022,077	$36,325	$95,516	$1,822	$61,013	$326,241	$10,041	$527,902	-	$279	$61,292	$223,275	$284,567
2043	$347,838	$2,810,879	$3,158,717	$32,009	$81,222	$1,515	$50,728	$326,241	$10,041	$541,100	-	$286	$51,014	$238,925	$289,939
2044	$305,174	$2,973,683	$3,278,857	$28,113	$68,987	$1,258	$42,132	$326,241	$10,041	$554,628	-	$284	$42,416	$252,763	$295,179
2045	$241,972	$3,138,784	$3,380,756	$22,340	$52,963	$942	$31,565	$326,241	$10,041	$568,494	-	$291	$31,856	$266,797	$298,653
2046	$187,121	$3,335,919	$3,523,040	$17,256	$39,695	$691	$23,130	$326,241	$10,041	$582,706	-	$288	$23,418	$283,553	$306,971
2047	$146,557	$3,503,011	$3,649,568	$13,541	$30,613	$525	$17,597	$326,241	$10,041	$597,274	-	$285	$17,882	$297,756	$315,638
2048	$108,309	$3,675,852	$3,784,161	$9,993	$22,364	$381	$12,752	$326,241	$10,041	$350,306	-	$292	$13,044	$312,447	$325,491
2049	$92,612	$3,840,826	$3,933,438	$8,546	$18,887	$318	$10,659	-	-	-	-	$289	$10,948	$326,470	$337,418
2050	$76,696	$4,002,455	$4,079,151	$7,086	$15,357	$255	$8,526	-	-	-	-	$296	$8,822	$340,209	$349,031
2051	$54,306	$4,177,843	$4,232,149	$5,024	$10,571	$171	$5,718	-	-	-	-	$281	$5,998	$355,117	$361,115
2052	$37,506	$4,350,637	$4,388,143	$3,464	$7,097	$112	$3,745	-	-	-	-	$288	$4,033	$369,804	$373,837
2053	$24,444	$4,521,855	$4,546,299	$2,265	$4,578	$71	$2,384	-	-	-	-	$283	$2,667	$384,358	$387,025
2054	$12,657	$4,700,002	$4,712,659	$1,171	$2,395	$38	$1,262	-	-	-	-	$278	$1,540	$399,500	$401,040
2055	$7,343	$4,878,569	$4,885,912	$680	$1,374	$21	$715	-	-	-	-	$285	$1,000	$414,678	$415,678
2056	$4,323	$5,063,710	$5,068,033	$400	$805	$12	$417	-	-	-	-	$279	$697	$430,415	$431,112
2057	$2,311	$5,245,904	$5,248,215	$214	$427	$7	$220	-	-	-	-	$273	$492	$445,902	$446,394
2058	$1,324	$5,436,507	$5,437,831	$123	$245	$4	$126	-	-	-	-	$280	$406	$462,103	$462,509
2059	$735	$5,633,542	$5,634,277	$68	$137	$2	$71	-	-	-	-	$273	$344	$478,851	$479,195
2060	$358	$5,822,331	$5,822,689	$33	$65	$1	$33	-	-	-	-	$266	$299	$494,898	$495,197
2061	$144	$6,017,618	$6,017,762	$13	$25	-	$12	-	-	-	-	$273	$286	$511,498	$511,784
2062	$89	$6,229,844	$6,229,933	$8	$15	-	$7	-	-	-	-	$265	$273	$529,537	$529,810
2063	-	$6,450,789	$6,450,789	-	-	-	-	-	-	-	-	$257	$257	$548,317	$548,574

Table 5 – Switch to Optional Funding Policy in 2024

	Number (BOY)		Assets												
Year End June 30	Active	Non-Active	MVA (BOY)	Benefit Payments	Expenses	Employer Contrib.	Employee Contrib.	Premium Tax Allocation	Investment Income	MVA (EOY)	AVA (EOY)	Actuarial Accrued Liability	Unfunded Liability	Projected Unfunded Liability	AVA Funded Ratio
2022	27	32	$8,817,402	$807,964	$300	$442,466	$129,634	$310,627	(744,696)	$8,147,169	$8,503,671	$13,750,076	$5,246,405	$5,055,386	61.84%
2023	26	32	$8,147,169	$829,342	$308	$473,436	$109,251	$269,170	$509,882	$8,679,258	$9,016,544	$14,113,427	$5,096,883	$5,020,201	63.89%
2024	23	32	$8,679,258	$862,538	$316	$285,233	$105,122	$327,272	$537,984	$9,072,015	$9,396,534	$14,450,582	$5,054,048	$4,970,075	64.69%
2025	21	32	$9,072,015	$886,894	$312	$280,024	$102,110	$329,794	$561,607	$9,458,344	$9,458,344	$14,773,219	$5,314,875	$5,243,439	63.34%
2026	19	33	$9,458,344	$902,352	$314	$259,788	$99,098	$346,075	$585,062	$9,845,701	$9,845,701	$15,089,140	$5,243,439	$5,129,199	64.23%
2027	18	31	$9,845,701	$913,952	$303	$283,330	$96,774	$354,475	$609,827	$10,275,852	$10,275,852	$15,405,051	$5,129,199	$5,007,819	65.33%
2028	16	30	$10,275,852	$923,402	$292	$271,325	$95,052	$363,086	$636,263	$10,717,884	$10,717,884	$15,725,703	$5,007,819	$4,878,853	66.42%
2029	15	30	$10,717,884	$932,284	$293	$261,280	$94,075	$371,911	$663,549	$11,176,122	$11,176,122	$16,054,975	$4,878,853	$4,741,827	67.50%
2030	15	30	$11,176,122	$936,652	$300	$249,835	$93,706	$383,811	$692,057	$11,658,579	$11,658,579	$16,400,406	$4,741,827	$4,596,237	68.61%
2031	14	30	$11,658,579	$941,258	$301	$240,987	$93,733	$394,088	$722,113	$12,167,941	$12,167,941	$16,764,178	$4,596,237	$4,441,547	69.79%
2032	13	29	$12,167,941	$938,746	$295	$230,544	$94,016	$406,408	$754,093	$12,713,961	$12,713,961	$17,155,508	$4,441,547	$4,277,189	71.08%
2033	13	28	$12,713,961	$952,905	$295	$220,832	$93,376	$416,292	$787,769	$13,279,030	$13,279,030	$17,556,219	$4,277,189	$4,102,559	72.42%
2034	12	27	$13,279,030	$977,992	$288	$206,387	$91,337	$427,670	$822,156	$13,848,300	$13,848,300	$17,950,859	$4,102,559	$3,904,990	73.79%
2035	11	26	$13,848,300	$985,816	$280	$203,230	$89,923	$440,424	$857,747	$14,453,528	$14,453,528	$18,358,518	$3,904,990	$3,682,283	75.25%
2036	10	26	$14,453,528	$1,048,698	$279	$175,643	$80,514	$452,832	$892,882	$15,006,422	$15,006,422	$18,688,705	$3,682,283	$3,431,478	76.66%
2037	9	26	$15,006,422	$1,055,988	$278	$173,907	$79,480	$466,588	$927,552	$15,597,683	$15,597,683	$19,029,161	$3,431,478	$3,152,974	78.17%
2038	8	26	$15,597,683	$1,082,627	$277	$164,323	$75,730	$478,253	$963,634	$16,196,719	$16,196,719	$19,349,693	$3,152,974	$2,844,738	79.74%
2039	8	26	$16,196,719	$1,188,791	$284	$122,702	$61,342	$490,209	$996,451	$16,678,348	$16,678,348	$19,523,086	$2,844,738	$2,504,607	81.25%
2040	5	28	$16,678,348	$1,270,651	$283	$89,515	$49,436	$502,464	$1,023,022	$17,071,851	$17,071,851	$19,576,458	$2,504,607	$2,130,269	82.78%
2041	4	28	$17,071,851	$1,318,776	$281	$72,198	$42,428	$515,026	$1,045,773	$17,428,219	$17,428,219	$19,558,488	$2,130,269	$1,719,261	84.40%
2042	3	28	$17,428,219	$1,346,068	$279	$61,292	$37,443	$527,902	$1,067,114	$17,775,623	$17,775,623	$19,494,884	$1,719,261	$1,268,961	86.17%
2043	3	28	$17,775,623	$1,370,225	$286	$51,014	$32,994	$541,100	$1,088,036	$18,118,256	$18,118,256	$19,387,217	$1,268,961	$776,574	88.10%
2044	2	28	$18,118,256	$1,394,009	$284	$42,416	$28,978	$554,628	$1,108,746	$18,458,731	$18,458,731	$19,235,305	$776,574	$239,120	90.23%
2045	2	28	$18,458,731	$1,441,158	$291	$31,856	$23,028	$568,494	$1,128,493	$18,769,153	$18,769,153	$19,008,273	$239,120	-	92.57%
2046	1	28	$18,769,153	$1,468,627	$288	$23,418	$17,787	$246,479	$1,136,718	$18,724,640	$18,724,640	$18,724,640	-	-	95.20%
2047	1	27	$18,724,640	$1,496,193	$285	$17,883	$13,958	-	$1,125,213	$18,385,216	$18,385,216	$18,385,216	-	-	98.15%
2048	1	27	$18,385,216	$1,510,052	$292	$13,044	$10,301	-	$1,103,311	$18,001,528	$18,001,528	$18,001,528	-	-	100.00%
2049	1	26	$18,001,528	$1,506,234	$289	$10,948	$8,809	-	$1,079,338	$17,594,100	$17,594,100	$17,594,100	-	-	100.00%
2050	1	26	$17,594,100	$1,503,864	$296	$8,822	$7,304	-	$1,053,835	$17,159,901	$17,159,901	$17,159,901	-	-	100.00%
2051	0	25	$17,159,901	$1,506,490	$281	$5,998	$5,179	-	$1,026,465	$16,690,772	$16,690,772	$16,690,772	-	-	100.00%
2052	0	25	$16,690,772	$1,499,522	$288	$4,033	$3,571	-	$997,248	$16,195,814	$16,195,814	$16,195,814	-	-	100.00%
2053	0	24	$16,195,814	$1,493,089	$283	$2,667	$2,335	-	$966,432	$15,673,876	$15,673,876	$15,673,876	-	-	100.00%
2054	0	23	$15,673,876	$1,480,355	$278	$1,540	$1,207	-	$934,133	$15,130,123	$15,130,123	$15,130,123	-	-	100.00%
2055	0	23	$15,130,123	$1,461,598	$285	$1,000	$701	-	$900,694	$14,570,635	$14,570,635	$14,570,635	-	-	100.00%
2056	0	22	$14,570,635	$1,440,001	$279	$697	$412	-	$866,372	$13,997,836	$13,997,836	$13,997,836	-	-	100.00%
2057	0	21	$13,997,836	$1,416,491	$273	$492	$221	-	$831,284	$13,413,069	$13,413,069	$13,413,069	-	-	100.00%
2058	0	21	$13,413,069	$1,391,053	$280	$406	$127	-	$795,513	$12,817,782	$12,817,782	$12,817,782	-	-	100.00%
2059	0	20	$12,817,782	$1,364,158	$273	$344	$70	-	$759,132	$12,212,897	$12,212,897	$12,212,897	-	-	100.00%
2060	0	19	$12,212,897	$1,335,982	$266	$299	$34	-	$722,191	$11,599,173	$11,599,173	$11,599,173	-	-	100.00%
2061	0	19	$11,599,173	$1,306,489	$273	$286	$13	-	$684,740	$10,977,450	$10,977,450	$10,977,450	-	-	100.00%
2062	0	18	$10,977,450	$1,275,842	$265	$273	$8	-	$646,825	$10,348,449	$10,348,449	$10,348,449	-	-	100.00%
2063	0	17	$10,348,449	$1,244,184	$257	$257	-	-	$608,487	$9,712,752	$9,712,752	$9,712,752	-	-	100.00%

Table 5 – Switch to Optional Funding Policy in 2024 (Cont.)

				Employer Contributions									Contribution Comparison				
Year End June 30	Closed Group Payroll	New Entrant Payroll	Total Payroll	Employee Contrib.	Gross Normal Cost	Interest on Net Normal Cost	Net Employer Normal Cost	Amortization of UAAL	Mid-Year Interest on Amortization	Premium Tax Allocation	Net Employer Amortization	Expenses	Opt. Employer Contrib.	Statewide Employer Contrib.	Total Contrib. if Switch	Alt. Employer Contrib.	Final Employer Contrib.[4]
2024	$1,154,661	$146,492	$1,301,153	$101,983	$323,906	$6,830	$228,753	$371,988	$11,448	$327,272	$56,164	$316	$285,233	$12,452	$297,685	$506,577	$297,685
2025	$1,117,316	$261,655	$1,378,971	$99,061	$314,038	$6,616	$221,593	$376,331	$11,582	$329,794	$58,119	$312	$280,024	$22,241	$302,265	$542,037	$302,265
2026	$1,079,827	$388,655	$1,468,482	$96,139	$303,735	$6,389	$213,985	$379,873	$11,691	$346,075	$45,489	$314	$259,788	$33,036	$292,824	$579,980	$292,824
2027	$1,051,514	$505,514	$1,557,028	$93,885	$296,395	$6,233	$208,743	$415,957	$12,802	$354,475	$74,284	$303	$283,330	$42,969	$326,299	$620,579	$326,299
2028	$1,030,890	$617,311	$1,648,201	$92,214	$291,442	$6,132	$205,360	$415,957	$12,802	$363,086	$65,673	$292	$271,325	$52,471	$323,796	$664,020	$323,796
2029	$1,019,498	$721,444	$1,740,942	$91,266	$289,310	$6,095	$204,139	$415,957	$12,802	$371,911	$56,848	$293	$261,280	$61,323	$322,603	$710,501	$322,603
2030	$1,015,333	$818,566	$1,833,899	$90,908	$289,387	$6,108	$204,587	$415,957	$12,802	$383,811	$44,948	$300	$249,835	$69,578	$319,413	$760,236	$319,413
2031	$1,015,585	$912,272	$1,927,857	$90,934	$290,798	$6,151	$206,015	$415,957	$12,802	$394,088	$34,671	$301	$240,987	$77,543	$318,530	$813,453	$318,530
2032	$1,018,440	$1,004,805	$2,023,245	$91,209	$292,900	$6,207	$207,898	$415,957	$12,802	$406,408	$22,351	$295	$230,544	$85,408	$315,952	$870,395	$315,952
2033	$1,006,647	$1,097,845	$2,104,492	$90,588	$292,446	$6,212	$208,070	$415,957	$12,802	$416,292	$12,467	$295	$220,832	$93,317	$314,149	$931,323	$314,149
2034	$978,860	$1,216,734	$2,195,594	$88,610	$287,499	$6,121	$205,010	$415,957	$12,802	$427,670	$1,089	$288	$206,387	$103,422	$309,809	$555,920	$309,809
2035	$962,155	$1,338,489	$2,300,644	$87,238	$284,128	$6,060	$202,950	$415,957	$12,802	$440,424	-	$280	$203,230	$113,772	$317,002	$458,708	$317,002
2036	$862,076	$1,450,912	$2,312,988	$78,110	$248,238	$5,236	$175,364	$415,957	$12,802	$452,832	-	$279	$175,643	$123,328	$298,971	$453,106	$298,971
2037	$850,419	$1,623,530	$2,473,949	$77,107	$245,552	$5,184	$173,629	$415,957	$12,802	$466,588	-	$278	$173,907	$138,000	$311,907	$484,535	$311,907
2038	$810,363	$1,763,776	$2,574,139	$73,469	$232,617	$4,898	$164,046	$415,957	$12,802	$478,253	-	$277	$164,323	$149,921	$314,244	$502,319	$314,244
2039	$654,446	$1,924,981	$2,579,427	$59,510	$178,273	$3,655	$122,418	$415,957	$12,802	$490,209	-	$284	$122,702	$163,623	$286,325	$492,091	$286,325
2040	$524,309	$2,200,932	$2,725,241	$47,960	$134,528	$2,664	$89,232	$411,614	$12,668	$502,464	-	$283	$89,515	$187,079	$276,594	$511,604	$276,594
2041	$448,804	$2,426,726	$2,875,530	$41,161	$110,931	$2,147	$71,917	$408,072	$12,559	$515,026	-	$281	$72,198	$206,272	$278,470	$538,055	$278,470
2042	$395,316	$2,626,761	$3,022,077	$36,325	$95,516	$1,822	$61,013	$371,988	$11,448	$527,902	-	$279	$61,292	$223,275	$284,567	$566,409	$284,567
2043	$347,838	$2,810,879	$3,158,717	$32,009	$81,222	$1,515	$50,728	$371,988	$11,448	$541,100	-	$286	$51,014	$238,925	$289,939	$592,658	$289,939
2044	$305,174	$2,973,683	$3,278,857	$28,113	$68,987	$1,258	$42,132	$371,988	$11,448	$554,628	-	$284	$42,416	$252,763	$295,179	$615,377	$295,179
2045	$241,972	$3,138,784	$3,380,756	$22,340	$52,963	$942	$31,565	$371,988	$11,448	$568,494	-	$291	$31,856	$266,797	$298,653	$635,042	$298,653
2046	$187,121	$3,335,919	$3,523,040	$17,256	$39,695	$691	$23,130	$371,988	$11,448	$582,706	-	$288	$23,418	$283,553	$306,971	$662,359	$306,971
2047	$146,557	$3,503,011	$3,649,568	$13,541	$30,613	$525	$17,597	-	-	-	-	$285	$17,883	$297,756	$315,639	$686,711	$315,639
2048	$108,309	$3,675,852	$3,784,161	$9,993	$22,364	$381	$12,752	-	-	-	-	$292	$13,044	$312,447	$325,491	$712,310	$325,491
2049	$92,612	$3,840,826	$3,933,438	$8,546	$18,887	$318	$10,659	-	-	-	-	$289	$10,948	$326,470	$337,418	$739,769	$337,418
2050	$76,696	$4,002,455	$4,079,151	$7,086	$15,357	$255	$8,526	-	-	-	-	$296	$8,822	$340,209	$349,031	$766,766	$349,031
2051	$54,306	$4,177,843	$4,232,149	$5,024	$10,571	$171	$5,718	-	-	-	-	$281	$5,998	$355,117	$361,115	$795,931	$361,115
2052	$37,506	$4,350,637	$4,388,143	$3,464	$7,097	$112	$3,745	-	-	-	-	$288	$4,033	$369,804	$373,837	$826,282	$373,837
2053	$24,444	$4,521,855	$4,546,299	$2,265	$4,578	$71	$2,384	-	-	-	-	$283	$2,667	$384,358	$387,025	$857,785	$387,025
2054	$12,657	$4,700,002	$4,712,659	$1,171	$2,395	$38	$1,262	-	-	-	-	$278	$1,540	$399,500	$401,040	$890,822	$401,040
2055	$7,343	$4,878,569	$4,885,912	$680	$1,374	$21	$715	-	-	-	-	$285	$1,000	$414,678	$415,678	$924,501	$415,678
2056	$4,323	$5,063,710	$5,068,033	$400	$805	$12	$417	-	-	-	-	$279	$697	$430,415	$431,112	$959,792	$431,112
2057	$2,311	$5,245,904	$5,248,215	$214	$427	$7	$220	-	-	-	-	$273	$492	$445,902	$446,394	$994,264	$446,394
2058	$1,324	$5,436,507	$5,437,831	$123	$245	$4	$126	-	-	-	-	$280	$406	$462,103	$462,509	$1,029,976	$462,509
2059	$735	$5,633,542	$5,634,277	$68	$137	$2	$71	-	-	-	-	$273	$344	$478,851	$479,195	$1,067,029	$479,195
2060	$358	$5,822,331	$5,822,689	$33	$65	$1	$33	-	-	-	-	$266	$299	$494,898	$495,197	$1,101,361	$495,197
2061	$144	$6,017,618	$6,017,762	$13	$25	-	$12	-	-	-	-	$273	$286	$511,498	$511,784	$1,135,804	$511,784
2062	$89	$6,229,844	$6,229,933	$8	$15	-	$7	-	-	-	-	$265	$273	$529,537	$529,810	$1,174,140	$529,810
2063	-	$6,450,789	$6,450,789	-	-	-	-	-	-	-	-	$257	$257	$548,317	$548,574	$1,214,599	$548,574

[4] After the first occurrence of the *Total Contrib. if Switch* being smaller than the *Alt. Employer Contrib.*, this column shows the *Total Contrib. if Switch* in all subsequent years.

Table 6 – Switch to Optional II Funding Policy in 2024

	Number (BOY)		Assets												
Year End June 30	Active	Non-Active	MVA (BOY)	Benefit Payments	Expenses	Employer Contrib.	Employee Contrib.	Premium Tax Allocation	Investment Income	MVA (EOY)	AVA (EOY)	Actuarial Accrued Liability	Unfunded Liability	Projected Unfunded Liability	AVA Funded Ratio
2022	27	32	$8,817,402	$807,964	$300	$442,466	$129,634	$310,627	(744,696)	$8,147,169	$8,503,671	$13,750,076	$5,246,405	$5,055,386	61.84%
2023	26	32	$8,147,169	$829,342	$308	$473,436	$109,251	$269,170	$509,882	$8,679,258	$9,016,544	$14,113,427	$5,096,883	$5,068,807	63.89%
2024	23	32	$8,679,258	$862,538	$316	$238,079	$105,122	$327,272	$536,533	$9,023,410	$9,347,929	$14,450,582	$5,102,653	$5,070,324	65.03%
2025	21	32	$9,023,410	$886,894	$312	$232,869	$102,110	$329,794	$557,117	$9,358,094	$9,358,094	$14,773,219	$5,415,125	$5,396,844	64.02%
2026	19	33	$9,358,094	$902,352	$314	$214,299	$99,098	$346,075	$577,396	$9,692,296	$9,692,296	$15,089,140	$5,396,844	$5,340,799	65.25%
2027	18	31	$9,692,296	$913,952	$303	$236,175	$96,774	$354,475	$598,787	$10,064,252	$10,064,252	$15,405,051	$5,340,799	$5,281,250	66.70%
2028	16	30	$10,064,252	$923,402	$292	$224,170	$95,052	$363,086	$621,587	$10,444,453	$10,444,453	$15,725,703	$5,281,250	$5,217,980	68.16%
2029	15	30	$10,444,453	$932,284	$293	$214,125	$94,075	$371,911	$645,008	$10,836,995	$10,836,995	$16,054,975	$5,217,980	$5,148,481	69.61%
2030	15	30	$10,836,995	$936,652	$300	$204,887	$93,706	$383,811	$669,478	$11,251,925	$11,251,925	$16,400,406	$5,148,481	$5,064,044	71.09%
2031	14	30	$11,251,925	$941,258	$301	$206,316	$93,733	$394,088	$695,631	$11,700,134	$11,700,134	$16,764,178	$5,064,044	$4,961,631	72.58%
2032	13	29	$11,700,134	$938,746	$295	$208,193	$94,016	$406,408	$724,167	$12,193,877	$12,193,877	$17,155,508	$4,961,631	$4,842,629	74.11%
2033	13	28	$12,193,877	$952,905	$295	$208,365	$93,376	$416,292	$754,880	$12,713,590	$12,713,590	$17,556,219	$4,842,629	$4,704,461	75.64%
2034	12	27	$12,713,590	$977,992	$288	$205,298	$91,337	$427,670	$786,783	$13,246,398	$13,246,398	$17,950,859	$4,704,461	$4,544,511	77.15%
2035	11	26	$13,246,398	$985,816	$280	$203,230	$89,923	$440,424	$820,128	$13,814,007	$13,814,007	$18,358,518	$4,544,511	$4,361,774	78.73%
2036	10	26	$13,814,007	$1,048,698	$279	$175,643	$80,514	$452,832	$852,912	$14,326,931	$14,326,931	$18,688,705	$4,361,774	$4,153,438	80.30%
2037	9	26	$14,326,931	$1,055,988	$278	$173,907	$79,480	$466,588	$885,083	$14,875,723	$14,875,723	$19,029,161	$4,153,438	$3,920,056	81.97%
2038	8	26	$14,875,723	$1,082,627	$277	$164,323	$75,730	$478,253	$918,512	$15,429,637	$15,429,637	$19,349,693	$3,920,056	$3,659,763	83.71%
2039	8	26	$15,429,637	$1,188,791	$284	$122,702	$61,342	$490,209	$948,508	$15,863,323	$15,863,323	$19,523,086	$3,659,763	$3,370,571	85.43%
2040	5	28	$15,863,323	$1,270,651	$283	$89,515	$49,436	$502,464	$972,083	$16,205,887	$16,205,887	$19,576,458	$3,370,571	$3,050,355	87.21%
2041	4	28	$16,205,887	$1,318,776	$281	$72,198	$42,428	$515,026	$991,651	$16,508,133	$16,508,133	$19,558,488	$3,050,355	$2,696,853	89.11%
2042	3	28	$16,508,133	$1,346,068	$279	$61,292	$37,443	$527,902	$1,009,608	$16,798,031	$16,798,031	$19,494,884	$2,696,853	$2,307,653	91.18%
2043	3	28	$16,798,031	$1,370,225	$286	$51,014	$32,994	$541,100	$1,026,936	$17,079,564	$17,079,564	$19,387,217	$2,307,653	$1,880,184	93.45%
2044	2	28	$17,079,564	$1,394,009	$284	$42,416	$28,978	$554,628	$1,043,828	$17,355,121	$17,355,121	$19,235,305	$1,880,184	$1,411,705	95.96%
2045	2	28	$17,355,121	$1,441,158	$291	$31,856	$23,028	$568,494	$1,059,518	$17,596,568	$17,596,568	$19,008,273	$1,411,705	$899,297	98.74%
2046	1	28	$17,596,568	$1,468,627	$288	$23,418	$17,787	$582,706	$1,073,779	$17,825,343	$17,825,343	$18,724,640	$899,297	$339,847	100.00%
2047	1	27	$17,825,343	$1,496,193	$285	$17,882	$13,958	$597,274	$1,087,390	$18,045,369	$18,045,369	$18,385,216	$339,847	-	100.00%
2048	1	27	$18,045,369	$1,510,052	$292	$13,044	$10,301	$350,306	$1,092,852	$18,001,528	$18,001,528	$18,001,528	-	-	100.00%
2049	1	26	$18,001,528	$1,506,234	$289	$10,948	$8,809	-	$1,079,338	$17,594,100	$17,594,100	$17,594,100	-	-	100.00%
2050	1	26	$17,594,100	$1,503,864	$296	$8,822	$7,304	-	$1,053,835	$17,159,901	$17,159,901	$17,159,901	-	-	100.00%
2051	0	25	$17,159,901	$1,506,490	$281	$5,998	$5,179	-	$1,026,465	$16,690,772	$16,690,772	$16,690,772	-	-	100.00%
2052	0	25	$16,690,772	$1,499,522	$288	$4,033	$3,571	-	$997,248	$16,195,814	$16,195,814	$16,195,814	-	-	100.00%
2053	0	24	$16,195,814	$1,493,089	$283	$2,667	$2,335	-	$966,432	$15,673,876	$15,673,876	$15,673,876	-	-	100.00%
2054	0	23	$15,673,876	$1,480,355	$278	$1,540	$1,207	-	$934,133	$15,130,123	$15,130,123	$15,130,123	-	-	100.00%
2055	0	23	$15,130,123	$1,461,598	$285	$1,000	$701	-	$900,694	$14,570,635	$14,570,635	$14,570,635	-	-	100.00%
2056	0	22	$14,570,635	$1,440,001	$279	$697	$412	-	$866,372	$13,997,836	$13,997,836	$13,997,836	-	-	100.00%
2057	0	21	$13,997,836	$1,416,491	$273	$492	$221	-	$831,284	$13,413,069	$13,413,069	$13,413,069	-	-	100.00%
2058	0	21	$13,413,069	$1,391,053	$280	$406	$127	-	$795,513	$12,817,782	$12,817,782	$12,817,782	-	-	100.00%
2059	0	20	$12,817,782	$1,364,158	$273	$344	$70	-	$759,132	$12,212,897	$12,212,897	$12,212,897	-	-	100.00%
2060	0	19	$12,212,897	$1,335,982	$266	$299	$34	-	$722,191	$11,599,173	$11,599,173	$11,599,173	-	-	100.00%
2061	0	19	$11,599,173	$1,306,489	$273	$286	$13	-	$684,740	$10,977,450	$10,977,450	$10,977,450	-	-	100.00%
2062	0	18	$10,977,450	$1,275,842	$265	$273	$8	-	$646,825	$10,348,449	$10,348,449	$10,348,449	-	-	100.00%
2063	0	17	$10,348,449	$1,244,184	$257	$257	-	-	$608,487	$9,712,752	$9,712,752	$9,712,752	-	-	100.00%

Table 6 – Switch to Optional II Funding Policy in 2024 (Cont.)

				Employer Contributions									Contribution Comparison				
Year End June 30	Closed Group Payroll	New Entrant Payroll	Total Payroll	Employee Contrib.	Gross Normal Cost	Interest on Net Normal Cost	Net Employer Normal Cost	Amortization of UAAL	Mid-Year Interest on Amortization	Premium Tax Allocation	Net Employer Amortization	Expenses	Opt. Employer Contrib.	Statewide Employer Contrib.	Total Contrib. if Switch	Alt. Employer Contrib.	Final Employer Contrib.[5]
2024	$1,154,661	$146,492	$1,301,153	$101,983	$323,906	$6,830	$228,753	$326,241	$10,041	$327,272	$9,010	$316	$238,079	$12,452	$250,531	$506,577	$250,531
2025	$1,117,316	$261,655	$1,378,971	$99,061	$314,038	$6,616	$221,593	$330,584	$10,174	$329,794	$10,964	$312	$232,869	$22,241	$255,110	$542,037	$255,110
2026	$1,079,827	$388,655	$1,468,482	$96,139	$303,735	$6,389	$213,985	$334,126	$10,283	$346,075	-	$314	$214,299	$33,036	$247,335	$579,980	$247,335
2027	$1,051,514	$505,514	$1,557,028	$93,885	$296,395	$6,233	$208,743	$370,210	$11,394	$354,475	$27,129	$303	$236,175	$42,969	$279,144	$620,579	$279,144
2028	$1,030,890	$617,311	$1,648,201	$92,214	$291,442	$6,132	$205,360	$370,210	$11,394	$363,086	$18,518	$292	$224,170	$52,471	$276,641	$664,020	$276,641
2029	$1,019,498	$721,444	$1,740,942	$91,266	$289,310	$6,095	$204,139	$370,210	$11,394	$371,911	$9,693	$293	$214,125	$61,323	$275,448	$710,501	$275,448
2030	$1,015,333	$818,566	$1,833,899	$90,908	$289,387	$6,108	$204,587	$370,210	$11,394	$383,811	-	$300	$204,887	$69,578	$274,465	$760,236	$274,465
2031	$1,015,585	$912,272	$1,927,857	$90,934	$290,798	$6,151	$206,015	$370,210	$11,394	$394,088	-	$301	$206,316	$77,543	$283,859	$813,453	$283,859
2032	$1,018,440	$1,004,805	$2,023,245	$91,209	$292,900	$6,207	$207,898	$370,210	$11,394	$406,408	-	$295	$208,193	$85,408	$293,601	$870,395	$293,601
2033	$1,006,647	$1,097,845	$2,104,492	$90,588	$292,446	$6,212	$208,070	$370,210	$11,394	$416,292	-	$295	$208,365	$93,317	$301,682	$931,323	$301,682
2034	$978,860	$1,216,734	$2,195,594	$88,610	$287,499	$6,121	$205,010	$370,210	$11,394	$427,670	-	$288	$205,298	$103,422	$308,720	$555,920	$308,720
2035	$962,155	$1,338,489	$2,300,644	$87,238	$284,128	$6,060	$202,950	$370,210	$11,394	$440,424	-	$280	$203,230	$113,772	$317,002	$458,708	$317,002
2036	$862,076	$1,450,912	$2,312,988	$78,110	$248,238	$5,236	$175,364	$370,210	$11,394	$452,832	-	$279	$175,643	$123,328	$298,971	$453,106	$298,971
2037	$850,419	$1,623,530	$2,473,949	$77,107	$245,552	$5,184	$173,629	$370,210	$11,394	$466,588	-	$278	$173,907	$138,000	$311,907	$484,535	$311,907
2038	$810,363	$1,763,776	$2,574,139	$73,469	$232,617	$4,898	$164,046	$370,210	$11,394	$478,253	-	$277	$164,323	$149,921	$314,244	$502,319	$314,244
2039	$654,446	$1,924,981	$2,579,427	$59,510	$178,273	$3,655	$122,418	$370,210	$11,394	$490,209	-	$284	$122,702	$163,623	$286,325	$492,091	$286,325
2040	$524,309	$2,200,932	$2,725,241	$47,960	$134,528	$2,664	$89,232	$365,868	$11,260	$502,464	-	$283	$89,515	$187,079	$276,594	$511,604	$276,594
2041	$448,804	$2,426,726	$2,875,530	$41,161	$110,931	$2,147	$71,917	$362,325	$11,151	$515,026	-	$281	$72,198	$206,272	$278,470	$538,055	$278,470
2042	$395,316	$2,626,761	$3,022,077	$36,325	$95,516	$1,822	$61,013	$326,241	$10,041	$527,902	-	$279	$61,292	$223,275	$284,567	$566,409	$284,567
2043	$347,838	$2,810,879	$3,158,717	$32,009	$81,222	$1,515	$50,728	$326,241	$10,041	$541,100	-	$286	$51,014	$238,925	$289,939	$592,658	$289,939
2044	$305,174	$2,973,683	$3,278,857	$28,113	$68,987	$1,258	$42,132	$326,241	$10,041	$554,628	-	$284	$42,416	$252,763	$295,179	$615,377	$295,179
2045	$241,972	$3,138,784	$3,380,756	$22,340	$52,963	$942	$31,565	$326,241	$10,041	$568,494	-	$291	$31,856	$266,797	$298,653	$635,042	$298,653
2046	$187,121	$3,335,919	$3,523,040	$17,256	$39,695	$691	$23,130	$326,241	$10,041	$582,706	-	$288	$23,418	$283,553	$306,971	$662,359	$306,971
2047	$146,557	$3,503,011	$3,649,568	$13,541	$30,613	$525	$17,597	$326,241	$10,041	$597,274	-	$285	$17,882	$297,756	$315,638	$686,711	$315,638
2048	$108,309	$3,675,852	$3,784,161	$9,993	$22,364	$381	$12,752	$326,241	$10,041	$612,206	-	$292	$13,044	$312,447	$325,491	$712,310	$325,491
2049	$92,612	$3,840,826	$3,933,438	$8,546	$18,887	$318	$10,659	-	-	-	-	$289	$10,948	$326,470	$337,418	$739,769	$337,418
2050	$76,696	$4,002,455	$4,079,151	$7,086	$15,357	$255	$8,526	-	-	-	-	$296	$8,822	$340,209	$349,031	$766,766	$349,031
2051	$54,306	$4,177,843	$4,232,149	$5,024	$10,571	$171	$5,718	-	-	-	-	$281	$5,998	$355,117	$361,115	$795,931	$361,115
2052	$37,506	$4,350,637	$4,388,143	$3,464	$7,097	$112	$3,745	-	-	-	-	$288	$4,033	$369,804	$373,837	$826,282	$373,837
2053	$24,444	$4,521,855	$4,546,299	$2,265	$4,578	$71	$2,384	-	-	-	-	$283	$2,667	$384,358	$387,025	$857,785	$387,025
2054	$12,657	$4,700,002	$4,712,659	$1,171	$2,395	$38	$1,262	-	-	-	-	$278	$1,540	$399,500	$401,040	$890,822	$401,040
2055	$7,343	$4,878,569	$4,885,912	$680	$1,374	$21	$715	-	-	-	-	$285	$1,000	$414,678	$415,678	$924,501	$415,678
2056	$4,323	$5,063,710	$5,068,033	$400	$805	$12	$417	-	-	-	-	$279	$697	$430,415	$431,112	$959,792	$431,112
2057	$2,311	$5,245,904	$5,248,215	$214	$427	$7	$220	-	-	-	-	$273	$492	$445,902	$446,394	$994,264	$446,394
2058	$1,324	$5,436,507	$5,437,831	$123	$245	$4	$126	-	-	-	-	$280	$406	$462,103	$462,509	$1,029,976	$462,509
2059	$735	$5,633,542	$5,634,277	$68	$137	$2	$71	-	-	-	-	$273	$344	$478,851	$479,195	$1,067,029	$479,195
2060	$358	$5,822,331	$5,822,689	$33	$65	$1	$33	-	-	-	-	$266	$299	$494,898	$495,197	$1,101,361	$495,197
2061	$144	$6,017,618	$6,017,762	$13	$25	-	$12	-	-	-	-	$273	$286	$511,498	$511,784	$1,135,804	$511,784
2062	$89	$6,229,844	$6,229,933	$8	$15	-	$7	-	-	-	-	$265	$273	$529,537	$529,810	$1,174,140	$529,810
2063	-	$6,450,789	$6,450,789	-	-	-	-	-	-	-	-	$257	$257	$548,317	$548,574	$1,214,599	$548,574

[5] After the first occurrence of the *Total Contrib. if Switch* being smaller than the *Alt. Employer Contrib.*, this column shows the *Total Contrib. if Switch* in all subsequent years.

Section X. Participant Information

Participant Summary

The following table summarizes the counts, ages, and benefit information for plan participants used in the prior and current valuations.

		July 1, 2021		July 1, 2022
1. Actives				
a. Number		27		26
b. Average Age		35.3		35.0
c. Average Service		6.7		7.0
d. Average Salary	$	44,673	$	49,470
2. Retirees				
a. Number		17		17
b. Average Age		64.7		65.7
c. Total Annual Benefits	$	580,508	$	593,636
3. Survivors				
a. Number		11		11
b. Average Age		31.4		32.4
c. Total Annual Benefits	$	113,593	$	117,865
4. Disableds				
a. Number		3		3
b. Average Age		66.3		67.3
c. Total Annual Benefits	$	59,796	$	62,164
5. Deferred Vesteds				
a. Number		0		0
b. Average Age		N/A		N/A
c. Total Annual Benefits	$	N/A	$	N/A
6. Members Owed Refunds				
a. Number		1		1
b. Average Age		27.8		28.8
c. Total Refunds Owed	$	3,507	$	3,507

Active Age/Service Distribution Including Compensation

Shown below is the age and service distribution of active participants in the City of Bluefield Policemen's Pension and Relief Fund. The compensation shown is the average projected pay for the plan year beginning July 1, 2022.

Credited Service as of July 1, 2022

Participant Age	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	Total
Under 25	3	-	-	-	-	-	-	**3**
	41,752	-	-	-	-	-	-	**41,752**
25 - 29	2	4	-	-	-	-	-	**6**
	42,909	48,857	-	-	-	-	-	**46,874**
30 - 34	4	1	1	-	-	-	-	**6**
	49,388	54,937	53,548	-	-	-	-	**51,006**
35 - 39	1	1	-	-	-	-	-	**2**
	66,136	49,637	-	-	-	-	-	**57,887**
40 - 44	3	1	-	1	-	-	-	**5**
	43,901	59,324	-	59,577	-	-	-	**50,121**
45 - 49	-	1	-	-	-	1	-	**2**
	-	59,058	-	-	-	53,422	-	**56,240**
50 - 54	-	-	-	2	-	-	-	**2**
	-	-	-	47,416	-	-	-	**47,416**
55 - 59	-	-	-	-	-	-	-	**-**
	-	-	-	-	-	-	-	**-**
60 - 64	-	-	-	-	-	-	-	**-**
	-	-	-	-	-	-	-	**-**
65 & Up	-	-	-	-	-	-	-	**-**
	-	-	-	-	-	-	-	**-**
Totals	**13**	**8**	**1**	**3**	**-**	**1**	**-**	**26**
	46,651	**52,298**	**53,548**	**51,470**	**-**	**53,422**	**-**	**49,470**

Averages

Age	35.0
Service	7.0

Participant Reconciliation

Shown below is the reconciliation of participants between the prior and current valuation date.

	Actives	Retirees	Survivors	Disableds	Deferred Vesteds	Due Refund	Total
Participants as of 7/1/2021	27	17	11	3	-	1	59
New	3	-	-	-	-	-	3
Rehired	-	-	-	-	-	-	-
Terminated - Vested	-	-	-	-	-	-	-
Terminated - Nonvested	-	-	-	-	-	-	-
Disabled	-	-	-	-	-	-	-
Retired	-	-	-	-	-	-	-
Paid Refund	(4)	-	-	-	-	-	(4)
Payments Expired	-	-	-	-	-	-	-
Deceased - No Survivor	-	-	-	-	-	-	-
Deceased - With Survivor	-	-	-	-	-	-	-
New Beneficiary	-	-	-	-	-	-	-
New QDRO	-	-	-	-	-	-	-
Corrections	-	-	-	-	-	-	-
Participants as of 7/1/2022	**26**	**17**	**11**	**3**	**-**	**1**	**58**

Section XI. Summary of Plan Provisions

Plan Year

July 1 – June 30.

Eligibility to Participate

All compensated employees of the relevant Fire or Police Department are eligible to participate in the Firemen's or Policemen's Pension and Relief Fund (Plan). If the fund uses the Optional, Optional II, or Conservation funding policies, only members hired prior to the date of the change to either one of these policies are eligible to participate in the Plan.

Average Annual Compensation

The average of the three twelve-consecutive-month periods of employment in which the member received the highest salary or compensation. While the months in each twelve-month period need to be consecutive, the three "twelve-consecutive-month periods" do not need to be consecutive.

Each twelve-consecutive-month annual compensation is limited to 120% of the *Average Adjusted Salary,* which is the average of the Adjusted Salary for the two consecutive twelve-consecutive-month periods immediately preceding the twelve-consecutive-month period used in determining benefits.

The *Adjusted Salary* for any preceding year is the respective preceding year total salary multiplied by the ratio of base salary of the year used in determining benefits to the base salary from the respective preceding year. A preceding year is either the "year one" which is the second twelve consecutive month period preceding the twelve-consecutive-month period used to determine benefits or "year two" which is the twelve-consecutive-month period immediate preceding the twelve-consecutive-month period used to determine benefits.

Employee Contributions

Participating employees hired before January 1, 2010: 7.00% of compensation.
Participating employees hired on or after January 1, 2010: 9.50% of compensation.

Employer Contributions

The municipality has elected to contribute the minimum employer contribution under the Alternative funding policy.

Credited Service

The number of years that the member has contributed to the employees' retirement and benefit fund.

> Absence from service because of sickness or injury for a period of two years or less shall not be construed as time out of service.
>
> *Military Service* — Any current member who has been on qualified military service in the armed forces of the United States with an honorable discharge may, within six months from his or her date of discharge, be given credit for continuous service in the paid police or fire department.

A member may receive retirement eligibility service (i.e. eligibility towards the 20 years of service for normal retirement) for qualified military service only if the military service was prior to November 18, 2009 or the member repays, without interest, member assessments that were missed during the period of military service.

Any member who has served in active duty with the armed forces of the United States, whether prior to or subsequent to becoming a member of a paid police or fire department, shall receive an additional 1% of Average Annual Compensation for each full continuous year so served in active military duty, up to a maximum of an additional 4%.

Normal Retirement Eligibility

Members are eligible at the earlier of age 50 with 20 years of credited service or age 65.

Normal Retirement Benefit

The annual retirement benefit equals the sum of:

- 60% of average annual compensation, for service up to 20 years; not less than $6,000
- 2% for each year of service between 20 and 25 years
- 1% for each year of service between 25 and 30 years
- Employees serving in the military are eligible for an additional 1% of average annual compensation for each year of military service up to four years.

The maximum benefit is limited to 75% of average annual compensation.

Termination Benefits

Any member who terminates employment prior to retirement and has at least 20 years of credited service will be entitled to a pension benefit equal to the normal retirement benefit commencing at age 50.

Refunds: Any member who terminates from their department with fewer than 20 years of credited service and prior to age 65 shall be refunded all deductions made from his salary, without interest. Any member who receives such a refund and subsequently wishes to reenter (available only if the municipal plan is still open as of such date) the department must repay to the pension fund all sums refunded with interest at the rate of 8% per annum.

Disability Retirement Eligibility

Members are eligible after earning five years of service. There is no years of service requirement if disability is service related. Disability is defined in WV Code §8-22-23a as the inability to perform adequately the job duties required of the member, as described in the National Fire Protection Association (NFPA) Standard 1582's Chapter 9 Essential Job Tasks - Specific Evaluations of Medical Conditions in Members.

Disability Retirement Benefit

The monthly disability benefit equals the sum of:

- 60% of monthly salary at disability, but not less than $500, plus
- Employees serving in the military are eligible for an additional benefit of 1% of monthly salary at disability for each year of military service up to four years.

Disability benefits, when aggregated with monthly state workers compensation benefits, shall not exceed 100% of the member's monthly compensation at the time of disability. For permanent disabilities, the benefit is paid for life, while for temporary disabilities, the benefit is paid during the disability period not to exceed four 26-week periods.

Ordinary (non line-of-duty) disability pensions are offset by $1 per every $3 of other income. There is no offset if total other income is $18,200 (as of 2022, indexed by state minimum wage for years after 2022) or less.

Death Benefit Eligibilty

Members are eligible after earning five years of service. There is no years of service requirement if death is service related. Retirees and terminated vested participants are also eligible.

Death Benefit

For surviving spouses, this benefit is equal to 60% of the participant's benefit at the participant's date of retirement and is indexed for cost-of-living adjustments through the commencement date of this death benefit (and annually each July thereafter) using the methodology outlined in the *Supplemental Benefit (Cost of Living Adjustment – COLA)* subsection below. This benefit may not be less than $300 per month and is payable to the spouse until death or remarriage.

Other dependents (children, parents, brothers and sisters) are also eligible for death benefits. Similar to the death benefit payable to a surviving spouse, these death benefits are derived at the participant's date of retirement and indexed for COLAs. To each dependent:

- Child: 20% of the participant's benefit until the child attains age 18 or marries; for a disabled child, payments continue beyond age 18 if the child remains disabled.
- Orphaned child: 25% of the participant's benefit until the child attains age 18 or marries; for a disabled orphaned child, payments continue beyond age 18 if the child remains disabled.
- Parent: 10% of the participant's benefit for life.
- Sibling: the sum of fifty dollars per month (but a total not to exceed $100 per month) until such individual attains the age of age 18 or marries.

The total amount, derived as the participant's date of retirement, of all benefits payable to survivors cannot exceed the amount of the participant's benefit at the participant's date of retirement. Due to the COLA methodology, the sum of the benefits payable to survivors as of any time after the participant's date of retirement *may*, in some circumstances, exceed the participant's benefit amount. In no case shall the payments to the surviving spouse and children be reduced below 65 percent of the total amount paid to all dependents.

If the member is not yet in receipt of pension benefits at the date of death, then the member's benefit for purposes of deriving the death benefit to the surviving spouse and dependents is calculated using the maximum of the member's actual service at the date of death and 20 years.

Normal Form

Life annuity with a 60% spouse's survivor benefit. The benefit payable to the spouse as of the member's date of death is determined by taking 60% of the member's benefit at the member's retirement date and indexing that amount to the date of death using the COLA methodology described in the *Supplemental Benefit (Cost of Living Adjustment – COLA* section below. No other optional forms are allowed under the Plan.

Supplemental Benefit (Cost of Living Adjustment – COLA)

If a plan meets the criteria outlined in the *Supplemental Benefit Eligibility* subsection within *Section I. Executive Summary*, then all retirees, surviving beneficiaries, and disability pensioners shall be granted automatic cost-of-living benefits commencing on the first day of July following two years of retirement. The benefits equal the percentage increase in the Consumer Price Index, limited to 4% (2% for some disability retirees), multiplied by the sum of the allowable amount, which is the first $15,000 of the total annual benefits paid and the accumulated supplemental pension amounts for prior years. The consumer price index currently used to determine the supplemental benefit is the CPI-U US City Average all items with a base of 1982-1984 equal to 100. The increase is measured as the increase in the annual average from the second prior calendar year to the annual average from the prior calendar year.

Changes in Plan Provisions Since Prior Valuation

None.

Section XII. Actuarial Methods and Assumptions

Actuarial Cost Method

The actuarial valuation uses the Entry Age Normal cost method calculated on an individual basis with level percentage of pay normal cost.

West Virginia Funding Policies

Under West Virginia Code §8-22-20(c)(1), there are five funding policies available for plan sponsors. Those funding policies are summarized below:

- **Standard Funding Policy:** Employer contributions are equal to the sum of (1) the net employer normal cost and (2) an amortization of the unfunded actuarial liability, less the State premium tax allocation applicable to the plan year, not less than $0. Prior to the July 1, 2020 actuarial valuation, the unfunded actuarial accrued liability was amortized over a single, closed period of 40-years from July 1, 1991, using level dollar amortization (8.0 years remaining for contributions developed for the fiscal year ending June 30, 2024). Beginning with the July 1, 2020 valuation, the unfunded actuarial accrued liability as of July 1, 2019 continues to be amortized over that same closed, decreasing period but new bases will be amortized using a layered approach with the following initial amortization periods when each base is created:

  - Experience gains and losses: 15 years
  - Assumption changes: 15 years
  - Plan changes: 5 years

  West Virginia Code §8-22-20(c)(3) requires that plans contribute at least the normal cost until the plan is at least 125% funded. Upon reaching 125% funded, the actuary may provide an actuarial recommendation that the normal cost does not need to be paid by the employer for that fiscal year and the municipality may then elect to not make a contribution for that fiscal year. Other than this requirement, the Code does not detail any other policies or methodologies for a plan in a surplus position.

  To orderly track the surplus position, which will become particularly relevant once a plan breaches 125% funded for the first time, and to develop an actuarially determined contribution (ADC) for GASB purposes, actuarial surpluses (the amount by which assets exceed actuarial accrued liabilities) will be amortized over 30 years using a single open amortization base and all existing prior bases will be eliminated. Provided, however, for funding purposes the credit installments from the surplus base will be inapplicable at least until the plan reaches 125% funded. Finally, if an overfunded plan subsequently becomes less than 100% funded, the surplus base will be eliminated, the unfunded actuarial accrued liability will be amortized over 15 years, and any subsequent gains and losses, assumption changes, or plan changes will be amortized according to the schedule outlined above for plans with an actuarial deficiency.

  The Standard funding policy is consistent with generally accepted actuarial standards of practice.

- **Alternative Funding Policy:** Employer contributions equal 107% of the prior year's employer contribution. The state premium tax allocation is contributed in addition to the employer contributions.

  The Alternative funding policy is not consistent with generally accepted actuarial standards of practice because the policy does not reflect emerging experience gains and losses and may not produce an actuarially sound pattern of contributions or funded ratio.

- **Optional Funding Policy**: Allows plan sponsors using either the Standard funding policy or Alternative funding policy to close the current local Plan to new hires and switch to this funding policy, under which they would contribute to the Plan on an actuarially determined basis. Effective July 1, 2023, plan sponsors using the Conservation funding policy may switch to the Optional funding policy and the plan would remain closed to new hires. The actuarially determined employer contribution is equal to the net employer normal cost, plus a level dollar amortization of the unfunded actuarial liability, less the state premium tax allocation applicable to the plan year, not less than $0. The closed amortization period for contributions developed for the fiscal year ending June 30, 2024 is 8.0 years for sponsors who previously used the Standard funding policy and 26.5 years for sponsors who previously used the Alternative or Conservation funding policies. Beginning with the July 1, 2020 valuation, the unfunded actuarial accrued liability as of July 1, 2019 continues to be amortized over those same closed, decreasing periods but new bases will be amortized using a layered approach using the same amortization periods as those used in the Standard Funding Policy listed above. Similarly, surplus amortization will follow the methodology outlined in the Standard Funding Policy.

  For plans that switch from the Alternative or Conservation funding policy on or after the July 1, 2020 valuation, the initial unfunded actuarial accrued liability prior to any assumption changes or plan changes that became effective during the year ending on the valuation date will be amortized over the maximum of 15 years and the remaining period described above (26.5 years).

  Members hired after the adoption date of the Optional funding policy are covered in the statewide pension plan – The Municipal Police Officers and Firefighters Retirement System (MPFRS).

  The Optional funding policy is consistent with generally accepted actuarial standards of practice.

- **Optional II Funding Policy**: Allows plan sponsors using the Alternative funding policy or Conservation funding policy to switch to this funding policy, under which they would contribute to the Plan on an actuarially determined basis. If switching from the Alternative funding policy, the current local Plan would close to new hires. The actuarially determined employer contribution is equal to the net employer normal cost, plus a level dollar amortization of the unfunded actuarial liability, less the state premium tax allocation applicable to the plan year, not less than $0. The initial unfunded closed amortization period for contributions developed for the fiscal year ending June 30, 2024 is 40 years.

  Upon switching to the Optional II funding policy, the initial unfunded actuarial accrued liability prior to any assumption changes or plan changes that became effective during the year ending on the valuation date will be amortized over the maximum of 15 years and the remaining period described in the previous paragraph (40 years). New unfunded liability bases created after the switch will be amortized using a layered approach using the same amortization periods as those used in the Standard Funding Policy listed above. Similarly, surplus amortization will follow the methodology outlined in the Standard Funding Policy.

Members hired after the adoption date of the Optional II funding policy are covered in the statewide pension plan – MPFRS.

The Optional II funding policy is consistent with generally accepted actuarial standards of practice.

- **Conservation Funding Policy:** Formerly allowed plan sponsors using the Alternative funding policy to close the current local Plan to new hires and contribute to the plan on a pay-as-you-go basis. Effective July 1, 2023, plan sponsors are prohibited from switching to the Conservation funding policy. Sponsors using the Conservation funding policy are required to assign a portion of the state premium tax allocation and member contributions to an accumulation account that is projected to grow to 100% of the remaining actuarial liabilities at the end of a 35-year projection period.

  Members hired after the adoption date of the Conservation funding policy are covered in the statewide pension plan – MPFRS.

  This Conservation funding policy is not consistent with generally accepted actuarial principles.

This Plan is valued using the **Alternative** funding policy.

Amortization Method for GASB

Amortization Policies	
Standard, Optional, and Optional II Funding Policies	Same as for funding purposes (described above)
Alternative and Conservation Funding Policies	The methodology used for plans that switch to the Optional funding policy on or after July 1, 2020 for funding purposes (described above)

Basis for Selection of Actuarial Methods

While the funding policies and funding amortization methodology are defined in the West Virginia Code, the following actuarial methods used in the valuation were set by the MPOB on the basis of Bolton's 2020 *Actuarial Methods Recommendation Report*. These actuarial methods are, in the opinion of the signing actuaries, reasonable for the intended purposes.

Asset Method

Actuarial Value of Assets using four-year smoothing. Returns on the market value of assets above or below the assumed rate of return are gradually recognized using straight-line amortization over a four-year period.

Roll-Forward Method

For the actuarially-based funding policies (Standard, Optional, and Optional II), valuation results are rolled forward one year to align the contribution calculation with the contribution year:

- To develop the projected unfunded actuarial accrued liability (UAAL), the UAAL on the valuation date is increased by the employer normal cost (which is net of employee contributions) and expected expenses, both with interest, and decreased by the expected employer contribution, including the premium tax allocation, for the fiscal year beginning on the valuation date, with interest.
- The projected normal cost for the contribution year is derived using a valuation software projection (open-group projection for plans open to new entrants and closed-group projection for plans closed to new entrants).

Projection Methods

The projections of future assets, liabilities, funded status and contributions are based on the following assumptions:

- Compensation will increase and members will leave the active workforce according to the actuarial valuation assumptions.
- For the open group projections, each active member leaving the workforce will be replaced with a new entrant so that the total number of active members remains the same throughout the projection period. The assumption made regarding the demographic makeup of new entrants is described in the *Open Group Projection New Hire Profile* section below.
- For closed group projections, new hires that replace active members who retire, terminate, die or become disabled are not assumed to enter the Plan.
- The sponsor contributes the amount determined by the applicable funding policy each year.
- For plans that are less than 100% funded as of the valuation date, the contribution during the projection period is capped at the amount needed to achieve and maintain a funded status of 100%.
- Assets grow at the assumed rate of return (discount rate).
- Non-vested members receive a refund of their accumulated employee contribution account balance during the year in which they terminate.
- New amortization bases are not created for contribution gains that may occur during the projection period as a result of the premium tax allocation exceeding the unfunded liability amortization payment.
- For projections that illustrate a change from the Alternative funding policy to either the Optional funding policy or Optional II funding policy, new hires that replace active members who, after the change in funding policy, retire, terminate, die or become disabled are assumed to enter the statewide pension plan – The Municipal Police Officers and Firefighters Retirement System (MPFRS). For the MPFRS, employer contributions are currently equal to 8.5% of pay but can range from 8.5% - 10.5% of pay. For these projections, MPFRS employer contributions are assumed to be 8.5% of pay throughout the projection period.

Open Group Projection New Hire Profile

The active population is projected to be stable throughout the open group projections meaning that active exits are replaced by new hires. The profile for new hires contains four separate records corresponding to a different age-at-hire band (under 24, 24-27, 28-31, 32 and above). Each record contains the average (for the associated age-at-hire band) date of birth, compensation, and percentage male of all actives who have two years of service or less within the 53 plans covered by the MPOB. The four records are created using compensation for the fiscal year ending on the valuation date. The beginning salary for new entrants hired after the current plan year is equal to the new entrant profile salary increased by the general wage inflation assumption of 3.50% for each year between the new entrant's assumed date of hire and the valuation date.

Premium Tax Allocation

The premium tax allocation is projected using the following methodology:

(1) The Base Allocation is a fixed amount equal to $8,709,689 in all future years. This amount is allocated to each individual Pension and Relief Fund in proportion to the number of eligible members, which includes active members covered in either the Pension and Relief Fund or the statewide plan, Municipal Police Officers and Firefighters Retirement System (MPFRS). We assume that the percentage of eligible members of the Pension and Relief Fund and MPFRS for a single municipal plan (e.g., Bluefield Police) to the total eligible members for all municipalities remains constant throughout the projection period.

(2) The Excess Allocation is equal to the excess of the current year premium tax assigned to all Pension and Relief Funds over the total Base Allocation. This amount is allocated to each individual Pension and Relief Fund in proportion to the number of eligible active and retired members covered in either the Pension and Relief Fund or the MPFRS.

(3) We have assumed all Pension and Relief Funds will make the minimum statutory contribution requirement and will receive 100% of the total allocation assigned to the individual plan until they are 100% funded. Once a plan attains a funded ratio of at least 100%, the premium tax that would have been allocated to the plan had the funded ratio been lower than 100% is reallocated in subsequent years to all remaining plans that are less than 100% funded.

(4) The total available premium tax allocation, net of expenses, as of September 1, 2023, includes a Base Allocation of $8,709,689, an Excess Allocation of $12,751,652, and an Expired Premium Tax Allocation of $358,083.

(5) For the plan year ending June 30, 2023, all Pension and Relief Funds reported a total of 1,736.67 eligible active members and 2,247.38 eligible retired members. The City of Bluefield Policemen's Pension and Relief Fund reported 27.08 eligible active members and 31.08 eligible retired members, based on the average number of plan participants for the 12-month period ending June 30, 2023. The Fund is eligible to receive a premium tax allocation of $327,271.69 for the fiscal year ending June 30, 2024.

(6) The total premium tax allocation is assumed to increase by 2.50% in calendar years ending on and after 2024.

Basis for Selection of Actuarial Assumptions

Unless otherwise noted, the actuarial assumptions used in the valuation were set by the MPOB on the basis of Bolton's 2020 *Experience Study Report*, which covered experience during the period from period July 1, 2014 through June 30, 2017. These assumptions are, in the opinion of the actuaries signing this report, reasonable for the intended purposes.

Discount Rate

The following table outlines the factors used to determine the discount rate:

Discount Rate Matrix for Plans Not Investing with the IMB				
Funded Ratio as of Valuation Date[6]	Equity Exposure[7]	Projected Funded Ratio after 15 Years[6]	Discount Rate – Standard and Optional Policies	Discount Rate – Alternative and Conservation Policies
30% or more	60% or more	70% or more	6.50%	6.25%
30% or more	50% or more	70% or more	6.25%	6.00%
30% or more	40% or more	60% or more	6.00%	5.50%
15% or more	30% or more	50% or more	5.75%	5.00%
15% or more	20% or more	40% or more	5.50%	4.75%
Less than 15%	Less than 20%	15% or more	5.00%	4.25%
Less than 15%	Less than 20%	Less than 15%	5.00%	4.00%

Discount Rate Matrix for Plans Investing with the IMB				
Funded Ratio as of Valuation Date[6]	Equity Exposure[7]	Projected Funded Ratio after 15 Years[6]	Discount Rate – Standard and Optional Policies[8]	Discount Rate – Alternative and Conservation Policies
30% or more	N/A	70% or more	7.00%	6.50%
30% or more	N/A	70% or more	7.00%	6.00%
15% or more	N/A	50% or more	7.00%	5.50%
15% or more	N/A	40% or more	7.00%	5.25%
Less than 15%	N/A	15% or more	7.00%	4.75%
Less than 15%	N/A	Less than 15%	7.00%	4.50%

As of June 30, 2022	
Plan Investing with the IMB	No
Actuarially-Based Funding Policy	No
Actuarial Value of Assets	$8,503,671
Liabilities Using a 5.0% Discount Rate	$16,194,417
Funded Ratio	52.51%
Equity Exposure	60%
Projected Funded Ratio after 15 Years	87%
Discount Rate	**6.25%**

[6] Funded ratios based on a 6.0% investment return assumption for plans using an actuarially sound funding policy (Standard, Optional, or Optional II) and a 5.0% investment return assumption for other plans (Alternative or Conservation).
[7] Based on target allocation percentage outlined in the investment policy.
[8] Assumes the IMB maintains a current growth asset target above 70%. If this policy changes, the assumption should be reviewed.

Inflation

2.50%, compounded annually.

Cost of Living Increase in Benefits

2.50% on first $15,000 of annual benefit and on the accumulated supplemental pension amounts for prior years. Assumed to be payable to all members receiving payments.

Salary Increases

The following assumed rates are used:

Years of Service	Increase
0	20.00%
1	9.00%
2	6.50%
3	6.00%
4-28	5.00%
29-33	4.00%
34+	3.50%

Pay Spiking

A load of 6% is applied to active retirement and active termination pension benefits to account for unused accrued leave time (vacation and sick) that is included in pensionable earnings used to compute the average annual compensation.

Mortality

Pre Decrement

SOA PubS-2010(B) Employee[9] Mortality Table[10] with the 2010 base rates projected generationally from 2010 using the SOA Mortality Improvement **Scale MP-2019**.

Post Decrement

For Terminated Vested Employees, Healthy Retirees, and Beneficiaries:

SOA PubS-2010(B) Healthy Retiree Mortality Table with the 2010 base rates projected generationally from 2010 using the SOA Mortality Improvement **Scale MP-2019.**

For Disabled Retirees:

SOA PubS-2010 Disabled Retiree Mortality Table with the 2010 base rates **set forward five years** and projected generationally from 2010 using the SOA Mortality Improvement **Scale MP-2019.**

Mortality improvement projections to the valuation date represent current mortality and mortality improvement projections beyond the valuation date represent future mortality improvement.

[9] Table name abbreviations from *Society of Actuaries Pub-2010 Public Retirement Plans Mortality Tables Report* published in January 2019. For example, *PubS-2010(B) Employee* translates to the Amount-Weighted Public Safety 2010 Below Median Employee Mortality Table.
[10] *Assumes 10% of deaths are duty-related and 90% are non-duty related.*

Retirement Rates

Members need a minimum of 20 years of service in order to be eligible for normal retirement. The retirement rates below are for years of service greater than or equal to 20 years of service:

Age	Fire	Police
50	55%	60%
51-52	35%	40%
53-54	25%	40%
55-56	25%	50%
57-59	25%	40%
60	100%	100%

Terminated-vested members (members who terminate employment after attaining 20 years of service but prior to commencing pension benefits) are assumed to retire at age 50.

Termination of Employment

Sample termination rates are as follows:

Age	Fire	Police
20	15%	25%
25	7%	10%
30	5%	8%
35	2%	6%
40	2%	3.5%
45	1%	2%
50	0%	0%

Non-Vested Terminations

The employee contribution account balance is assumed to be paid on the valuation date for current non-vested terminated members and on the termination date for future non-vested terminations.

Disability Rates

Sample disability rates are as follows:

Age	Rates[11]
30	0.33%
40	0.76%
50	1.18%

[11] Assumes that 50% of disabilities are duty related and 50% are non-duty related. Also assumes that 5% of non-duty disabled members receive a 20% reduction in benefits through age 65 due to gainful employment.

Marital Status
70% assumed to be married with wives 3 years younger than husbands. Widows and widowers are not expected to re-marry in the future.

Form of Payment
Benefits are assumed to be paid as a life annuity with a 60% spousal death benefit taking into account the re-indexing of the spouse's supplemental benefit as provided in WV Code §8-22-26a.

Non-Spouse Beneficiaries
Pre-retirement death benefits are loaded by 6% and post-retirement death benefits are loaded by 1% to estimate the impact of benefits provided to non-spouse beneficiaries (children, parents, siblings).

Administrative Expenses
Total administrative expenses for the fiscal year are equal to the average of the administrative expenses for the prior two fiscal years, increased by 2.50% annually for inflation.

Future expenses are assumed to increase by the general inflation assumption and are adjusted for headcount.

Changes in Methods/Assumptions Since Prior Valuation
There were no changes in methods or assumptions reflected in this valuation.

Section XIII. Glossary

Actuarial Accrued Liability (AAL)
The difference between the Present Value of Future Benefits and the Present Value of Future Normal Costs or the portion of the present value of future benefits allocated to service before the valuation date in accordance with the actuarial cost method. Represents the present value of benefits expected to be paid from the plan in the future allocated to service prior to the date of the measurement.

Actuarial Assumptions
Estimates of future plan experience such as investment return, expected lifetimes and the likelihood of receiving a pension from the pension plan. Demographic, or “people” assumptions include rates of mortality, retirement and separation. Economic, or “money” assumptions, include expected investment return, inflation and salary increases.

Actuarial Cost Method
A procedure for allocating the Present Value of Future Benefits into the Present Value of Future Normal Costs and the Actuarial Accrued Liability. Also known as the “funding method”.

Actuarial Value of Assets (AVA)
The value of the assets as of a given date, used by the actuary for valuation purposes. The AVA may be the market or fair value of plan assets or a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the actuarially determined contribution (ADC).

Actuarially Determined Contribution (ADC)
The employer’s periodic determined contribution to a pension plan, calculated in accordance with the assumptions and methods used by the plan actuary.

Amortization Method
A procedure for payment of the Unfunded Actuarial Accrued Liability (UAAL) by means of periodic contributions of interest and principal. The components of the amortization payment for the UAAL includes the amortization period length, amortization payment increase (level dollar or level percentage of pay), and amortization type (closed or open).

Experience Gain/Loss
A measure of the difference between actuarial experience and experience anticipated by a set of actuarial assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used.

Funded Ratio
The actuarial value of assets expressed as a percentage of the plan’s actuarial accrued liability.

Market Value of Assets (MVA)
The value of the assets as of a given date held in the trust available to pay for benefits of the pension plan.

Normal Cost
That portion of the Present Value of Future Benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.

Present Value of Future Benefits (PVFB)
The present value of amounts which are expected to be paid at various future times to active members, retired members, beneficiaries receiving benefits, and inactive, non-retired members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.

Present Value of Future Normal Cost (PVFNC)
The portion of the Present Value of Future Benefits (PVFB) allocated to future service.

Unfunded Actuarial Accrued Liabilities (UAAL)
The difference between the Actuarial Accrued Liability (AAL) and the Actuarial Value of Assets (AVA).