

State of Delaware

Postretirement Health Plan Actuarial Valuation Report as of July 1, 2023

Produced by Cheiron December 2023

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Letter of Transmittal

December 1, 2023

Ms. Joanna Adams Pension Administrator Delaware Public Employees Retirement System 860 Silver Lake Boulevard, Suite 1 Dover, Delaware 19904

Dear Joanna:

As requested, we have performed an analysis of the Postretirement Health Plan provided by the State of Delaware as of July 1, 2023. The following report contains our findings and additional disclosures required by Government Finance Officers Association (GFOA) for excellence in financial reporting.

The purpose of this report is to present the annual Other Post-Employment Benefits (OPEB) actuarial valuation of the State of Delaware. This report is for the use of the State of Delaware and its auditors in preparing financial reports in accordance with applicable law and accounting requirements.

In preparing our report, we relied on information (some oral and some written) supplied by the State of Delaware. This information includes, but is not limited to, the Plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

Appendix A describes the participant data, assumptions, and methods used in calculating the figures throughout the report. Appendix B contains a summary of the substantive plan provisions based on documentation provided by and discussions with your office.

The results of this report are based on future experience conforming to the actuarial assumptions used. The results will change to the extent that future experience differs from the assumptions. Actuarial computations are calculated based on our understanding of GASB 74 and 75 and are for purposes of fulfilling employer financial accounting requirements. Determinations for purposes other than meeting employer financial accounting requirements may be significantly different from the results in this report.

The Inflation Reduction Act of 2022 (the Act) contains provisions that may impact the cost of benefits provided to Medicare Eligible retirees. The Act provides for changes that could reduce costs and changes that could increase costs. Implementing the regulations and market responses are likely to have a net impact. Based on information currently available, we do not expect the Act to have a material impact on costs. This report does not contain any adjustments for the potential long-term impact of COVID-19.

Ms. Joanna Adams December 1, 2023 Page ii

This report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

This actuarial report was prepared for the State of Delaware for the purposes described herein and for the use by the Plan auditor in completing an audit related to the matters herein. Other users of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users.

Please do not hesitate to call should you have any questions.

Sincerely, Cheiron

Margaret A. Tempkin, FSA, EA, MAAA Principal Consulting Actuary

Elimitate, Murcin.

Elisabeth Mercer, FSA, EA, MAAA, FCA Consulting Actuary

cc: Jane Cole Lisa Elder Khairat Makanjuola

Michael W. Schionning, FSA, MAAA Principal Consulting Actuary



SECTION I – SUMMARY

The State of Delaware has engaged Cheiron to provide an analysis of the Postretirement Health Benefit Plan's liabilities as of July 1, 2023. The primary purposes of performing this actuarial valuation are to:

- Determine the net other postemployment benefit (OPEB) liability of the retiree health benefit under GASB Statements 74 and 75 and the current funding strategy,
- Provide additional disclosures for financial statements, and
- Provide projections for contributions, benefits, assets, and Net OPEB Liability (NOL).

We have determined costs, liabilities, and trends for the substantive plan using actuarial assumptions and methods that we consider reasonable.

GASB's OPEB Requirements

GASB's Statement 74 refers to the financial reporting for postemployment benefit plans other than pension plans, and Statement 75 refers to the employer accounting for these plans. Statement 74 is generally applicable where an entity has a separate trust or fund for OPEB benefits. The GASB No. 74 and 75 Statements were effective for the plan year ending June 30, 2017 and June 30, 2018, respectively. The GASB 74 and 75 valuation report was provided in a separate document.

Funding Policy

The State of Delaware currently pays for its post-employment health benefits on a pay-as-you-go (PAYGo) basis. We further understand that there are some assets set aside in a dedicated Trust to cover this liability. We have also assumed that the State will continue to make the appropriations of 0.36% of covered payroll funding contributions and 1% of the prior year's general fund budget in addition to the PAYGo costs.



SECTION I – SUMMARY

Valuation Results

The table below presents the key results of the 2022 and 2023 valuations.

| Table I-1 Summary of Key Valuation Results (\$ In Millions) | | | | | | | | | | |
|---|-----|------------|-----|------------|--|--|--|--|--|--|
| Discount Rate | | 3.54% | | 3.65% | | | | | | |
| | Ju | ly 1, 2022 | Jul | y 1, 2023 | | | | | | |
| Actuarial Liability (AL) | \$ | 8,938.0 | \$ | 9,565.3 | | | | | | |
| Assets | | 582.7 | | 687.0 | | | | | | |
| Unfunded Actuarial Liability (UAL) | \$ | 8,355.3 | \$ | 8,878.3 | | | | | | |
| Fiscal Year Ending | Jun | e 30, 2023 | Jun | e 30, 2024 | | | | | | |
| Annual Required Contribution (ARC) | \$ | 646.3 | \$ | 690.5 | | | | | | |
| Actual / Expected Contribution | | 374.5 | | 437.5 | | | | | | |
| Actual / Expected Net Benefit Payments | | 300.8 | | 276.1 | | | | | | |

The figures provided in this report are highly sensitive to the assumptions used.

The expected increase in liability during the year was \$424.9 million. The Plan experienced an additional increase in liability due to population changes of \$61.3 million as well as due to updated health claims and trend assumptions of \$306.1 million and a decrease due to the discount rate increase from 3.54% to 3.65% of \$164.9 million. The total change in the actuarial liability was approximately \$627.3 million. More detail on the effects of these changes can be found in the valuation results section of this report.

The expected contribution of \$437.5 million for the period ending June 30, 2024 includes \$50.9 million reflecting 1% of the prior year's annual budget payments, \$100.9 million of one-time contributions, \$9.6 million corresponding to 0.36% of covered payroll, and \$276.1 million in net benefit payments.

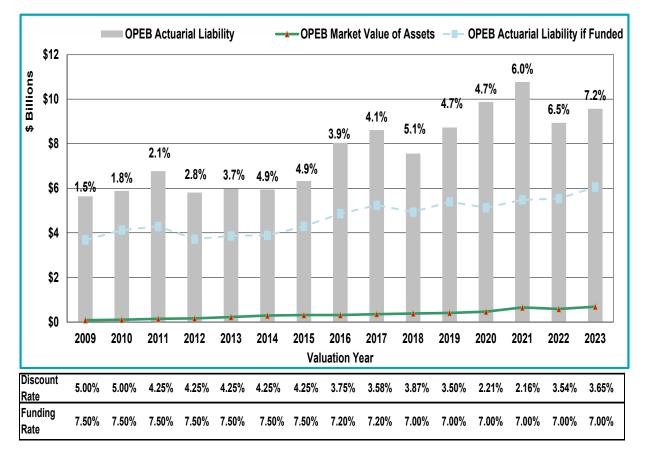


SECTION I – SUMMARY

Historical Trends

The chart below shows the historical trend of assets and the actuarial liability for the State of Delaware's Postretirement Health Plan. The first valuation complying with GASB 43 and 45 was performed in 2006. The reduction in actuarial liability in 2012 was primarily due to Plan changes. The increase in actuarial liability in 2016 was due to the demographic decrement changes from the 2015 experience study adopted in 2016 as well as the change in the discount rate from 4.25% to 3.75%. Starting in 2017, the discount rate follows the 20-year bond buyer rate. The increase in actuarial liability in 2021 was due to the demographic decrement changes from the 2021 experience study as well as reduction in discount rate from 2.21% to 2.16%. The decrease in actuarial liability in 2022 was due to the increase in the discount rate from 2.16% to 3.54%. The increase in actuarial liability in 2023 was due to an increase in the health cost assumption and the population changes. The percentages above the grey bars represent the ratio of the market value of assets over the actuarial liability.

The light blue dotted line represents the OPEB liability if the Plan's discount rate was based on the full funding rate.

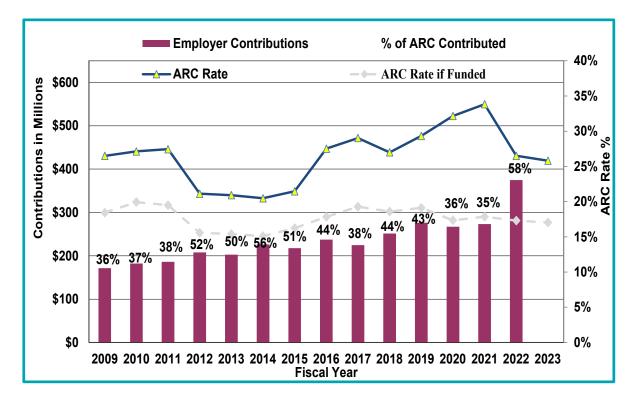




SECTION I – SUMMARY

This chart shows the historical trend of employer contributions and the annual required contribution (ARC) for the State of Delaware's Postretirement Health Plan. The ARC represents the normal cost plus a 30-year level percentage of pay amortization of the unfunded liability. The burgundy bars represent the employer contributions made during the year. The blue line with yellow triangles represents the ARC as a percentage of pay. The percentages above the burgundy bars represent the ratio of the actual contributions to the annual required contribution.

The light grey dotted line represents the ARC as a percentage of pay if the Plan's discount rate was based on the full funding rate.

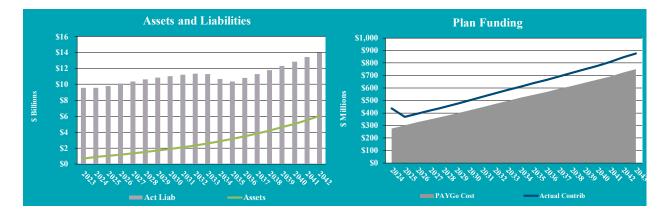




SECTION I – SUMMARY

Projected Trends

Looking beyond 2023, the expense and liability on the financial statements increase under the PAYGo funding method because the Plan is not funded. The charts below project the assets and liabilities and the funding costs for the next 20 years.



As the above chart on the left shows, the actuarial liability increases from \$9.6 billion to \$14.0 billion during the next 20 years. The green line shows the assets increasing from \$687 million to \$6.0 billion assuming a 7.0% return on assets. As the Plan becomes more funded, the discount rate increases to the full funding rate of 7%, thus reducing the expected liability in the future. The additional 1% of the prior year's annual budget contribution and the 0.36% of covered payroll appropriations are assumed to continue throughout the period, as seen by the blue line in the right-hand chart.

The chart on the right shows the projected annual costs. Benefit payments, net of retiree contributions, are shown by the grey area and increase from \$276 million to \$751 million. The blue line represents the State's assumed contributions. In late 2023, the State contributed an extra \$100.9 million to the Trust in addition to the \$50.9 million per SB 175, which codified the additional OPEB contribution of 1% of the prior year's general fund budget. We have assumed the State will continue to make the appropriations of 0.36% of covered payroll funding contributions and 1% of the prior year's general fund budget, as seen by the blue line, which is slightly higher than the PAYGo area. The State's contribution increases from \$437.5 million to \$874.8 million.



SECTION II – ASSETS

The Plan's last valuation of liabilities was performed as of July 1, 2022. Table II-1 below shows the reconciliation of assets for the fiscal year. This section reconciles to the assets as of July 1, 2023 that were used to develop the FYE 2024 ARC.

| Table II-1Reconciliation of Assets(\$ in millions) | |
|--|-------------|
| Valuation Assets as of July 1, 2022 | \$ 582.7 |
| Contributions for Fiscal Year * | |
| State Contributions | \$ 374.5 |
| Transfer from outside the system | 0.2 |
| Other Contributions | - |
| Total Contributions | \$ 374.7 |
| Benefit Payments * | 300.8 |
| Expenses | 0.2 |
| Investment Earnings | 30.6 |
| Valuation Assets as of July 1, 2023 | \$ 687.0 |

* Contributions for benefits and expenses were routed through the Trust.



SECTION III – VALUATION RESULTS

This section of the report calculates the current and expected future contribution requirements under the State's funding policy of pay as you go. Even though GASB 45 has been replaced by GASB 75, we will continue to calculate an ARC using the rules previously in effect with GASB 45 as the State has not adopted a formal funding policy. This valuation calculates the annual required contribution (ARC) for FYE 2023. Information about the actuarial liabilities of the Plan as of July 1, 2023 is shown in Table III-1 below.

| Table III-1Actuarial LiabilityPay-As-You-Go Funding(3.65% assumed discount)(\$ in millions) | | | | | | | | | | |
|---|----|-------------------|----|-------|----|-------------------|----|-------------------|----|---------|
| | Er | State nployees | Ju | Idges | | losed e Police | | Open te Police | | Total |
| Actives | \$ | 4,782.2 | \$ | 3.2 | \$ | - | \$ | 155.9 | \$ | 4,941.3 |
| <u>Retirees</u> | | 4,420.2 | | 5.2 | | 56.6 | | 142.0 | | 4,624.0 |
| Total | \$ | 9,202.4 | \$ | 8.4 | \$ | 56.6 | \$ | 297.9 | \$ | 9,565.3 |
| Assets* | | 661.0 | | 1.0 | | 4.0 | | 21.0 | | 687.0 |
| UAL | \$ | 8,541.4 | \$ | 7.4 | \$ | 52.6 | \$ | 276.9 | \$ | 8,878.3 |

* Assets allocated in proportion to liabilities

The Annual Required Contribution (ARC), under GASB 45, consists of two parts: (1) the *normal cost*, which represents the annual cost attributable to service earned in a given year, and (2) the 30-year open amortization of the unfunded actuarial liability (UAL). The rolling amortization method will never pay off the unfunded liability. For that reason, we do not believe that the ARC, as defined in GASB Statement No. 45, would constitute an actuarially sound funding policy and would not satisfy the Actuarially Determined Contribution (ADC) definition under GASB 75. This report shows both the ARC and projections of the State's actual contributions using the State's funding policy of 1% of the prior year's general fund budget, plus appropriations of 0.36% of covered payroll, plus expected net benefit payment. Under the current funding method of PAYGo, the State pays for the benefits currently provided to existing retirees from general revenues.

In Table III-2 below, we show the computed FY 2023-24 annual required contribution (ARC) under the State's funding policy and a 3.65% assumed discount rate.

| Table III-2 Annual Required Contributions – FY2024 Pay-As-You-Go Funding (3.65% assumed discount) (\$ in millions) | | | | | | | | | | | |
|--|---------------------------|-------|-------|-----|-------------------|----------------------|----|------|-------|-------|--|
| | State Employees Judges | | Idges | | losed e Police | Open State Police | | | Fotal | | |
| Normal Cost | \$ | 362.7 | \$ | 0.3 | \$ | - | \$ | 13.4 | \$ | 376.4 | |
| UAL Amortization | | 302.1 | | 0.3 | | 1.9 | | 9.8 | | 314.1 | |
| Total | \$ | 664.8 | \$ | 0.6 | \$ | 1.9 | \$ | 23.2 | \$ | 690.5 | |



SECTION III – VALUATION RESULTS

Table III-3 shows the employer contributions, benefit payments, assets, and NOL that we anticipate for the next 15 years under PAYGo Funding. In calculating the liabilities, we project these figures for the life of each existing participant. Expected contributions include 1% of the prior year's general fund budget, plus appropriations of 0.36% of covered payroll, plus expected net benefit payments. Expected contributions for the fiscal year ending June 30, 2024 include an extra \$100.9 million that the State contributed to the Trust in addition to the \$50.9 million per SB 175, which codified the additional OPEB contribution of 1% of the prior year's general fund budget is assumed to increase 3.6% per year.

| Table III-3 Expected Contributions, Expected Net Benefit Payments, Assets and NOL under PAYGo Funding (\$ in millions) | | | | | | | | | | | | |
|---|---------------|----------|----------|--------------|--|--|--|--|--|--|--|--|
| Fiscal Year Expected Net | | | | | | | | | | | | |
| Ending | Expected | Benefit | Expected | | | | | | | | | |
| June 30, | Contributions | Payments | Assets | Expected NOL | | | | | | | | |
| 2024 | \$ 437.5 | \$ 276.1 | \$ 902.0 | \$ 8,639.2 | | | | | | | | |
| 2025 | 367.7 | 301.8 | 1,033.5 | 8,765.0 | | | | | | | | |
| 2026 | 394.4 | 326.1 | 1,176.5 | 8,900.3 | | | | | | | | |
| 2027 | 419.8 | 349.0 | 1,332.1 | 9,011.5 | | | | | | | | |
| 2028 | 445.4 | 372.1 | 1,501.1 | 9,105.9 | | | | | | | | |
| 2029 | 471.4 | 395.5 | 1,684.7 | 9,165.9 | | | | | | | | |
| 2030 | 499.0 | 420.5 | 1,883.9 | 9,144.8 | | | | | | | | |
| 2031 | 527.2 | 445.9 | 2,099.9 | 9,117.2 | | | | | | | | |
| 2032 | 555.3 | 471.0 | 2,334.1 | 9,008.8 | | | | | | | | |
| 2033 | 584.8 | 497.6 | 2,587.7 | 8,680.5 | | | | | | | | |
| 2034 | 610.9 | 520.6 | 2,862.3 | 7,819.4 | | | | | | | | |
| 2035 | 637.7 | 544.2 | 3,159.4 | 7,195.7 | | | | | | | | |
| 2036 | 664.3 | 567.4 | 3,480.7 | 7,327.3 | | | | | | | | |
| 2037 | 691.8 | 591.4 | 3,828.1 | 7,453.3 | | | | | | | | |
| 2038 | 719.1 | 615.2 | 4,203.5 | 7,573.8 | | | | | | | | |
| 2039 | 748.2 | 640.6 | 4,609.0 | 7,687.5 | | | | | | | | |
| 2040 | 777.7 | 666.4 | 5,046.8 | 7,794.2 | | | | | | | | |
| 2041 | 808.4 | 693.1 | 5,519.4 | 7,893.3 | | | | | | | | |
| 2042 | 843.4 | 724.0 | 6,029.3 | 7,980.5 | | | | | | | | |
| 2043 | 874.8 | 751.1 | 6,579.2 | 8,060.1 | | | | | | | | |



SECTION III – VALUATION RESULTS

Reconciliation

Table III-4 provides an estimate of the major factors contributing to the change in liability since the last actuarial valuation report (AVR).

| | ion of . (\$ in n A A L | e III-4 Actuarial Li nillions) ctuarial Accrued Jability ly 1, 2023 | Nor | mal Cost 2 30, 2024 | Re Con | nnual equired tribution e 30, 2024 |
|---|-------------------------------------|---|-----|------------------------|-----------|---|
| Expected Values for July 1, 2023 based on the 7/1/2022 AVR | \$ | 9,362.9 | \$ | 369.4 | \$ | 671.6 |
| Changes due to: | | | | | | |
| Asset (Gain) / Loss | | N/A | | N/A | | (5.0) |
| Demographic (Gain) / Loss | | 61.3 | | 5.7 | | 12.8 |
| Discount Rate (Gain) / Loss | | (164.9) | | (11.6) | | (7.4) |
| Health Cost Assumptions (Gain) / Loss | | 306.1 | | 12.9 | | 18.6 |
| Total Changes | \$ | 202.4 | \$ | 7.0 | \$ | 18.9 |
| July 1, 2023 valuation results based on the 7/1/2023 AVR | \$ | 9,565.3 | \$ | 376.4 | \$ | 690.5 |

Below is a brief description of each of the above components:

- *Expected Values* refer to the change that would have occurred had experience matched all the assumptions between July 1, 2022 and July 1, 2023.
- *Asset* changes refer to the change in the expected market value compared to actual market value.
- *Demographic* changes refer to the change in actual current and potential future beneficiary data and elections from July 1, 2022 to July 1, 2023. The active and inactive populations both increased since the prior valuation.
- *Health Cost Assumptions* refers to the change in actual claim curves compared to the expected claims based on the prior year's claims. The claim curves and healthcare trends were updated based on the healthcare actuary's projections. Expected claims are anticipated to be higher than our prior assumptions.
- *Discount Rate* refers to the decrease in the liability due to the increase in the discount rate from 3.54% to 3.65%.



SECTION IV – SENSITIVITY

The liabilities and ARC produced in this report are sensitive to the assumptions used. The tables below show the impact of a 1% increase or decrease in the healthcare trend rates on the actuarial liability, the ARC, and the net expected benefit payments, using the 3.65% discount rate, to provide some measure of sensitivity.

| Table IV-1Actuarial LiabilityAs of July 1, 2023Pay-As-You-Go Funding(3.65% assumed discount)(\$ in millions) | | | | | | | | | | | |
|--|---|---------|----|---------|----|----------|--|--|--|--|--|
| Health Care Trend Rate | | -1% | | Base | | +1% | | | | | |
| Actuarial Liability | | | | | | | | | | | |
| Actives | \$ | 4,300.1 | \$ | 4,941.3 | \$ | 5,763.1 | | | | | |
| Retirees | | 4,165.5 | | 4,624.0 | | 5,192.9 | | | | | |
| Total | Fotal \$ 8,465.6 \$ 9,565.3 \$ 10,956.0 | | | | | | | | | | |
| Assets | | | | | | | | | | | |
| UAL | \$ | 7,778.6 | \$ | 8,878.3 | \$ | 10,269.0 | | | | | |

| Table IV-2Annual Required Contributions – FY2024Pay-As-You-Go Funding(3.65% assumed discount)(\$ in millions) | | | | | | | | | | | |
|---|----|-------|----|-------|----|-------|--|--|--|--|--|
| Health Care Trend Rate | | -1% | | Base | | +1% | | | | | |
| Normal Cost | \$ | 293.0 | \$ | 376.4 | \$ | 500.3 | | | | | |
| UAL Amortization 275.1 314.1 363.3 | | | | | | | | | | | |
| Total | \$ | 568.1 | \$ | 690.5 | \$ | 863.6 | | | | | |



SECTION IV – SENSITIVITY

The liabilities and ARC produced in this report are sensitive to the assumptions used. The tables below show the impact of a 1% increase or decrease in the discount rate on the actuarial liability, the ARC, and the net expected benefit payments, using the base case healthcare trends, to provide some measure of sensitivity.

| Table IV-3 Actuarial Liability As of July 1, 2023 Pay-As-You-Go Funding (\$ in millions) | | | | | | | | | | |
|--|-------------------|------------|------------|--|--|--|--|--|--|--|
| Discount Rate | 2.65% 3.65% 4.65% | | | | | | | | | |
| Actuarial Liability | | | | | | | | | | |
| Actives | \$ 5,962.3 | \$ 4,941.3 | \$ 4,139.7 | | | | | | | |
| Retirees | 5,266.0 | 4,624.0 | 4,105.2 | | | | | | | |
| Total | | | | | | | | | | |
| Assets | 687.0 | 687.0 | 687.0 | | | | | | | |
| UAL | \$ 10,541.3 | \$ 8,878.3 | \$ 7,557.9 | | | | | | | |

| Table IV-4 Annual Required Contributions – FY2024 Pay-As-You-Go Funding (\$ in millions) | | | | | | | | | | | |
|---|------------------------------------|-------|----|-------|----|-------|--|--|--|--|--|
| Discount Rate | 2 | 2.65% | 3 | .65% | 4 | .65% | | | | | |
| Normal Cost | \$ | 498.8 | \$ | 376.4 | \$ | 287.4 | | | | | |
| UAL Amortization | UAL Amortization 320.7 314.1 308.3 | | | | | | | | | | |
| Total | \$ | 819.5 | \$ | 690.5 | \$ | 595.7 | | | | | |



SECTION V – ACTUARIAL FUNDING

To have a system where the assets will eventually accumulate to the actuarial liability, meaning that the entire liability is funded, the State of Delaware may wish to begin funding this program on an actuarial basis by contributing the actuarially determined contribution (ADC). For illustration purposes, the amortization period selected to pay off the unfunded liability was set to a 30-year closed amortization. If the State were to establish a funding policy of contributing the ADC, the discount rate could be increased. Using a discount rate of 7.0% (matching the pension assumption) produces an unfunded liability of \$5.4 billion rather than \$8.9 billion.

In addition to the change in overall liability, the ADC will also decrease. Thus, in order to fund on an actuarial basis, the State needs to contribute \$455.7 million, or \$244.8 million below the ARC under the State's current PAYGo and additional contribution funding policy. The \$455.7 million is \$179.6 million higher than the expected PAYGo cost of \$276.1 million for FYE 2024 and only \$18.2 million higher than the total expected contributions under the PAYGo and additional contributions under the PAYGo and

If the State increases its contribution, but it is still less than the actuarially funded scenario, the discount rate will increase above the 3.65% discount rate, and the resulting liabilities and ADC payments will likely fall between the two discount rate scenarios presented in this report.

| | | | A | Table Actuarial Actuarial % assume (\$ in mi | Liabilit Fundin ed disco | ıg | | |
|----------------------------|----|-------------------------|----|--|--------------------------------|-------------------|----------------------------|-------------------------------|
| | Er | State nployees | Ju | dges | | losed e Police | Open te Police | Total |
| Actives <u>Retirees</u> | \$ | 2,737.9 3,077.1 | \$ | 2.0 3.8 | \$ | 42.3 | \$ 90.6 95.5 | \$ 2,830.5 3,218.7 |
| Total Assets* | \$ | 5,815.0 660.0 | \$ | 5.8 1.0 | \$ | 42.3 5.0 | \$ 186.1 21.0 | \$ 6,049.2 687.0 |
| UAL | \$ | 5,155.0 | \$ | 4.8 | \$ | 37.3 | \$ 165.1 | \$ 5,362.2 |

* Assets allocated in proportion to liabilities

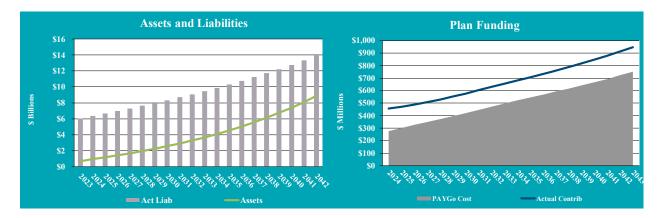
| Table V-2 Actuarially Determined Contributions – FY2024 Actuarial Funding (7.0% assumed discount) (\$ in millions) | | | | | | | | | |
|--|----|------------------|----|-------|----|-------------------|----|------------------|-------------|
| | | State ployees | Ju | ıdges | | losed e Police | | Dpen e Police | Fotal |
| Normal Cost | \$ | 153.2 | \$ | 0.2 | \$ | - | \$ | 5.9 | \$ 159.3 |
| UAL Amortization | | 284.9 | | 0.3 | | 2.1 | | 9.1 | 296.4 |
| Total | \$ | 438.1 | \$ | 0.5 | \$ | 2.1 | \$ | 15.0 | \$ 455.7 |



SECTION V – ACTUARIAL FUNDING

Actuarial Funding

Looking beyond 2023, the charts below project the assets and liabilities and the funding costs for the next 20 years assuming the State amortizes the liability over a closed 30-year period.



As the above chart on the left shows, the actuarial liability increases from \$6.0 billion to \$13.9 billion during the next 20 years. The green line shows the assets increasing from \$687 million to about \$9.7 billion.

The chart on the right shows the annual costs. Benefit payments, net of retiree contributions, are shown by the grey area and increase from \$276 million to \$751 million, the same as in the current scenario. The blue line represents the State's contribution, based on ADC. The State's contribution increases from \$455.7 million to \$947.6 million.



SECTION V – ACTUARIAL FUNDING

Below are the employer contributions, benefit payments, assets, and NOL that we anticipate for the next 15 years under Actuarial Funding.

| Table V-3 Expected Contributions, Expected Net Benefit Payments, Assets and NOL under Actuarial Funding (\$ in millions) | | | | | | | |
|--|---------------------------|-------------------------------------|---------------------|----------------------------|--|--|--|
| Fiscal Year | Expected Contributions | Expected Net | Expected Assets | Evenented NOI | | | |
| Ending June 30, 2024 | \$ 455.7 | Benefit Payments \$ 276.1 | \$ 920.7 | Expected NOL \$ 5.436.7 | | | |
| 2024 2025 | \$ 433.7 471.8 | \$ 270.1 301.8 | \$ 920.7 1,161.0 | \$ 5,436.7 5,506.3 | | | |
| 2023 | 471.8 | 326.1 | 1,101.0 | 5,570.4 | | | |
| 2020 | 488.5 507.1 | 349.0 | 1,410.3 | 5,628.3 | | | |
| 2027 | 528.5 | 372.1 | 1,951.5 | 5,679.3 | | | |
| 2028 | 552.1 | 395.5 | 2,250.1 | 5,722.6 | | | |
| 2027 | 577.1 | 420.5 | 2,569.6 | 5,757.3 | | | |
| 2030 | 602.7 | 445.9 | 2,907.0 | 5,782.6 | | | |
| 2031 | 628.4 | 471.0 | 3,278.3 | 5,797.4 | | | |
| 2032 | 654.2 | 497.6 | 3,669.8 | 5,800.4 | | | |
| 2033 | 680.0 | 520.6 | 4,091.5 | 5,790.5 | | | |
| 2035 | 706.0 | 544.2 | 4,545.3 | 5,766.3 | | | |
| 2036 | 732.5 | 567.4 | 5,034.3 | 5,726.2 | | | |
| 2030 | 759.7 | 591.4 | 5,560.8 | 5,668.7 | | | |
| 2038 | 787.9 | 615.2 | 6,128.6 | 5,592.0 | | | |
| 2039 | 817.1 | 640.6 | 6,740.1 | 5,494.6 | | | |
| 2040 | 847.5 | 666.4 | 7,399.2 | 5,374.5 | | | |
| 2041 | 879.3 | 693.1 | 8,109.7 | 5,229.7 | | | |
| 2042 | 912.6 | 724.0 | 8,872.5 | 5,057.6 | | | |
| 2043 | 947.6 | 751.1 | 9,696.7 | 4,856.0 | | | |



SECTION VI – ACCOUNTING DISCLOSURES

Government Finance Officers Association (GFOA) certificate of achievement for excellence in financial reporting establishes standards for disclosure of other postemployment benefit information by governmental employers and plans in notes to financial statements and supplementary information.

In accordance with those statements, we have prepared the following disclosures.

Schedule of Funding Progress

The schedule of funding progress, Table VI-1, compares the assets used for funding purposes to the comparable liabilities to determine how well the Plan is funded and how this status has changed over the past several years. The actuarial liability is compared to the actuarial value of assets to determine the funding ratio. The Actuarial Accrued Liability under GASB is determined assuming that the Plan is ongoing, and participants continue to terminate employment, retire, etc., in accordance with the actuarial assumptions.

| | | Sch | Table VI- edule of Fundin (\$ millions) | g Progress | | |
|------------------------|---------------------------------|-------------------------------------|---|-----------------|--------------------|--|
| Actuarial Valuation | Actuarial Value of Assets | Actuarial Accrued Liabilities | Unfunded Actuarial Accrued Liabilities (UAAL) | Funded Ratio | Covered Payroll | UAAL as a Percentage of Covered Payroll |
| Date | (a) | (b) | (b-a) | (a/b) | (c) | [(b-a)/c] |
| 7/1/2023 | \$ 687 | \$ 9,565 | \$ 8,878 | 7.18% | \$ 2,674 | 332% |
| 7/1/2022 | 583 | 8,938 | 8,355 | 6.52% | 2,517 | 332% |
| 7/1/2021 | 650 | 10,773 | 10,123 | 6.04% | 2,393 | 423% |
| 7/1/2020 | 464 | 9,877 | 9,413 | 4.70% | 2,358 | 399% |
| 7/1/2019 | 410 | 8,730 | 8,320 | 4.70% | 2,282 | 365% |
| 7/1/2018 | 382 | 7,558 | 7,176 | 5.05% | 2,162 | 332% |
| 7/1/2017 | 355 | 8,611 | 8,256 | 4.13% | 2,119 | 390% |
| 7/1/2016 | 310 | 8,039 | 7,729 | 3.86% | 2,035 | 380% |
| 7/1/2015 | 312 | 6,321 | 6,009 | 4.94% | 2,048 | 293% |
| 7/1/2014 | 290 | 5,946 | 5,656 | 4.90% | 2,038 | 277% |
| 7/1/2013 | 222 | 5,988 | 5,766 | 3.72% | 1,944 | 297% |



SECTION VI – ACCOUNTING DISCLOSURES

Schedule of Employer Contributions

The schedule of employer contributions, Table VI-2, shows whether the employer has made contributions that are consistent with an actuarially sound method of funding the benefits to be provided. The ARC is shown below instead of the Annually Determined Contribution (ADC) because the funding policy uses a 30-year rolling amortization for the unfunded liability. This funding method is not in conformity with the Actuarial Standards of Practice.

| Sch | Table VI-2 edule of Employer Contrib (\$ in millions) | utions |
|------------------------------|---|----------------------------------|
| Fiscal Year Ended June 30 | Annual Required Contribution (ARC) | Percentage of ARC Contributed |
| 2024 | \$ 690.5 | To be determined |
| 2023 | 646.3 | 58% |
| 2022 | 784.3 | 35% |
| 2021 | 734.8 | 36% |
| 2020 | 648.6 | 43% |
| 2019 | 565.1 | 45% |
| 2018 | 595.6 | 38% |
| 2017 | 542.4 | 44% |
| 2016 | 425.6 | 51% |
| 2015 | 404.4 | 56% |
| 2014 | 406.7 | 50% |



SECTION VI – ACCOUNTING DISCLOSURES

We have also provided a *Note to Required Supplementary Information* for the financial statements in Table VI-3.

| Table VI-3 Note to Required Supplementary Information | | | | | | |
|---|--|--|--|--|--|--|
| The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the date indicated. Additional information as of the latest actuarial valuation follows. | | | | | | |
| Valuation Date | July 1, 2023 | | | | | |
| Actuarial Cost Method | Entry Age Normal | | | | | |
| Amortization Method | Level Percent Open | | | | | |
| Remaining Amortization Period | 30 years | | | | | |
| Asset Valuation Method | Market Value | | | | | |
| Actuarial Assumptions: Investment Rate of Return Rate of Salary Increases Ultimate Rate of Medical Inflation | 3.65% 2.50% (plus merit scale) 3.94% | | | | | |



APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS

| Census as of July 1, 2023 | | | | | |
|---|--------------------|--------|------------------------|----------------------|--------|
| | State Employees | Judges | Closed State Police | Open State Police | Total |
| Eligible Active Employees | 39,412 | 59 | 0 | 715 | 40,186 |
| Actives with coverage | 32,065 | 53 | 0 | 648 | 32,766 |
| Eligible Terminated Vesteds | 3,970 | 1 | 0 | 12 | 3,983 |
| Eligible LTDs | 502 | 0 | 0 | 0 | 502 |
| Retirees and Disableds with coverage | 21,265 | 24 | 286 | 302 | 21,877 |
| Beneficiaries with coverage | 2,307 | 15 | 109 | 9 | 2,440 |
| Total Inactives with coverage | 23,572 | 39 | 395 | 311 | 24,317 |
| Spouses with coverage | 9,143 | 15 | 200 | 218 | 9,576 |
| Total Inactives and Spouses with coverage | 32,715 | 54 | 595 | 529 | 33,893 |
| Total with coverage | 64,780 | 107 | 595 | 1,177 | 66,659 |

Participant Data as of July 1, 2023

| | Eligible Active Employees | | | | | | | |
|----------------|---------------------------|--------|------------------------|----------------------|--------|--|--|--|
| Age | State Employees | Judges | Closed State Police | Open State Police | Total | | | |
| Under 25 | 1,323 | 0 | 0 | 26 | 1,349 | | | |
| 25 to 30 | 3,240 | 0 | 0 | 84 | 3,324 | | | |
| 30 to 35 | 4,055 | 0 | 0 | 138 | 4,193 | | | |
| 35 to 40 | 4,800 | 1 | 0 | 123 | 4,924 | | | |
| 40 to 45 | 5,277 | 9 | 0 | 113 | 5,399 | | | |
| 45 to 50 | 5,174 | 4 | 0 | 114 | 5,292 | | | |
| 50 to 55 | 5,498 | 7 | 0 | 106 | 5,611 | | | |
| 55 to 60 | 4,798 | 12 | 0 | 11 | 4,821 | | | |
| 60 to 65 | 3,410 | 9 | 0 | 0 | 3,419 | | | |
| <u>Over 65</u> | 1,837 | 17 | 0 | 0 | 1,854 | | | |
| Total | 39,412 | 59 | 0 | 715 | 40,186 | | | |



APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS

| | Retirees, Disables and Beneficiaries with Coverage | | | | | | | |
|----------------|--|--------|------------------------|----------------------|--------|--|--|--|
| Age | State Employees | Judges | Closed State Police | Open State Police | Total | | | |
| Under 50 | 70 | 0 | 0 | 23 | 93 | | | |
| 50 to 55 | 351 | 1 | 0 | 31 | 383 | | | |
| 55 to 60 | 1,165 | 2 | 0 | 93 | 1,260 | | | |
| 60 to 65 | 2,585 | 0 | 2 | 98 | 2,685 | | | |
| 65 to 70 | 4,290 | 3 | 36 | 59 | 4,388 | | | |
| 70 to 75 | 4,875 | 5 | 84 | 7 | 4,971 | | | |
| 75 to 80 | 4,491 | 12 | 129 | 0 | 4,632 | | | |
| 80 to 85 | 2,968 | 7 | 85 | 0 | 3,060 | | | |
| 85 to 90 | 1,678 | 4 | 35 | 0 | 1,717 | | | |
| <u>Over 90</u> | 1,099 | 5 | 24 | 0 | 1,128 | | | |
| Total | 23,572 | 39 | 395 | 311 | 24,317 | | | |

| New Entrant Population Statistics | | | | | | | |
|-----------------------------------|--------------------|-----------|--------------|--|--|--|--|
| | State Employees | Judges | State Police | | | | |
| Average Age | 38 | 46 | 26 | | | | |
| Average Salary | \$37,541 | \$167,561 | \$53,830 | | | | |
| % Blue PPO | 12% | 0% | 10% | | | | |
| % Aetna HMO/CDH | 39% | 67% | 24% | | | | |
| % Nonelect | 49% | 33% | 66% | | | | |

Economic Assumptions

| 1. Discount Rate: | 3.65% per year based on the 20-year obligation bond as described by GASB 74/75 |
|---|--|
| 2. Salary Growth (for Normal Cost): | 3.25% per year |
| 3. Aggregate Payroll Growth for Amortization: | 3.25% per year |
| 4. Budget Growth for 1% SB 175 Contribution: | 3.60% per year |
| 5. Assumed General Fund Budget FY 2024: | \$5,607 million |



APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS

6. Per Person Cost Trends:

| Date To Year | | Annual Increase | |
|-------------------------|----------------|-----------------|----------|
| Beginning July 1 | Pre-65 Medical | Post-65 Medical | Pharmacy |
| 2023 | 7.00 | 5.25 | 7.25 |
| 2024 | 6.00 | 5.00 | 6.50 |
| 2025 | 5.00 | 5.00 | 5.75 |
| 2026 | 5.00 | 5.00 | 5.62 |
| 2027 | 4.99 | 4.99 | 5.49 |
| 2028 | 4.99 | 4.99 | 5.36 |
| 2029 | 4.98 | 4.98 | 5.23 |
| 2030 | 4.98 | 4.98 | 5.10 |
| 2031 | 4.97 | 4.97 | 4.97 |
| 2032 | 4.45 | 4.45 | 4.45 |
| 2033 | 4.28 | 4.28 | 4.28 |
| 2034 | 4.19 | 4.19 | 4.19 |
| 2035 | 4.14 | 4.14 | 4.14 |
| 2036 | 4.11 | 4.11 | 4.11 |
| 2037 | 4.08 | 4.08 | 4.08 |
| 2038 | 4.06 | 4.06 | 4.06 |
| 2039 | 4.05 | 4.05 | 4.05 |
| 2040 | 4.04 | 4.04 | 4.04 |
| 2041 | 3.94 | 3.94 | 3.94 |
| 2042 | 3.94 | 3.94 | 3.94 |

Deductibles, Co-payments, Out-of-Pocket Maximums, and Annual Maximum are assumed to increase at the above trend rates.



APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS

Demographic Assumptions

1. Rates of Retirement:

State Employees:

| Retirement Rates* | | | | | |
|--|---------|--------|---------|---------|--------|
| General Employees Correctional Officers/ | | | | | |
| (including Elected Officials) Specified Peace Office | | | ers | | |
| Service | Early** | Normal | Service | Early** | Normal |
| 5 | 0.0% | 18.0% | 5 | 0.0% | 18.0% |
| 6 | 0.0% | 12.0% | 6 | 0.0% | 12.0% |
| 7 | 0.0% | 12.0% | 7 | 0.0% | 12.0% |
| 8 | 0.0% | 16.0% | 8 | 0.0% | 16.0% |
| 9 | 0.0% | 16.0% | 9 | 0.0% | 16.0% |
| 10 | 0.0% | 22.0% | 10 | 0.0% | 22.0% |
| 11 | 0.0% | 15.0% | 11 | 0.0% | 15.0% |
| 12 | 0.0% | 15.0% | 12 | 0.0% | 15.0% |
| 13 | 0.0% | 15.0% | 13 | 0.0% | 15.0% |
| 14 | 0.0% | 15.0% | 14 | 0.0% | 15.0% |
| 15 | 7.0% | 22.0% | 15 | 8.5% | 22.0% |
| 16 | 4.0% | 18.0% | 16 | 8.3% | 19.9% |
| 17 | 4.0% | 12.5% | 17 | 7.4% | 17.8% |
| 18 | 4.0% | 12.5% | 18 | 5.9% | 12.5% |
| 19 | 4.0% | 12.5% | 19 | 8.1% | 13.2% |
| 20 | 10.0% | 31.2% | 20 | 10.1% | 31.2% |
| 21 | 10.0% | 23.8% | 21 | 8.4% | 32.5% |
| 22 | 10.0% | 21.6% | 22 | 8.4% | 35.0% |
| 23 | 7.5% | 21.2% | 23 | 15.8% | 35.0% |
| 24 | 7.5% | 18.6% | 24 | 8.9% | 35.0% |
| 25 | 10.0% | 28.4% | 25 | N/A | 35.0% |
| 26 | 7.5% | 23.2% | 26 | N/A | 23.2% |
| 27 | 5.5% | 24.1% | 27 | N/A | 24.1% |
| 28 | 10.0% | 23.5% | 28 | N/A | 23.5% |
| 29 | 14.0% | 25.1% | 29 | N/A | 25.1% |
| 30 | N/A | 25.5% | 30 | N/A | 26.7% |
| 31 | N/A | 21.7% | 31 | N/A | 26.7% |
| 32 | N/A | 22.2% | 32 | N/A | 26.7% |
| 33 | N/A | 20.2% | 33 | N/A | 26.7% |
| 34 | N/A | 20.2% | 34 | N/A | 26.7% |
| 35+ | N/A | 22.8% | 35+ | N/A | 26.7% |

* Rates only applicable if member meets eligibility.

** Early retirement is increased by 5% for Correctional Officers (HB207, SB50, HB363, HB41, HB43, HB179, and HA1 Employees) where their early retirement is unreduced.



APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS

Judges:

Normal Retirement: 25% for all years the member is retirement eligible upon attaining:

age 62 with 12 years of credited service

100% probability of retirement once reaching age 75. Rates only applicable if member meets eligibility.

Closed State Police: None

Open State Police:

| Normal Retirement | | |
|-------------------|------|--|
| Service | Rate | |
| <20 | 0% | |
| 20-25 | 5 | |
| 26 | 10 | |
| 27-29 | 15 | |
| 30 | 25 | |
| 31 | 35 | |
| 32-34 | 50 | |
| 35+ | 100 | |

Rates only applied once eligibility for retirement is reached.

2. Rate of Withdrawal:

State Employees:

| Rates of T | ermination* |
|--------------------------------------|--------------------------|
| Service | Rates |
| 0 | 17.2% |
| 1 | 15.2 |
| 2 | 11.4 |
| 3 | 9.9 |
| 4 | 7.7 |
| 5 | 6.5 |
| 2 3 4 5 6 7 8 9 | 5.9 |
| 7 | 5.0 |
| 8 | 4.7 |
| 9 | 4.0 |
| 10 | 3.4 |
| 11 | 3.1 |
| 12 | 2.6 |
| 13 | 2.6 2.3 2.1 1.8 |
| 14 | 2.1 |
| 15-16 | 1.8 |
| 17 | 1.3 |
| 18-19 | 1.2 |
| 20-21 | 1.1 |
| 22 | 0.9 |
| 20-21 22 23 24 | 0.6 |
| 24 | 0.3 |
| >25 | 0.0 |

* Termination rates zero once member has reached early or normal retirement eligibility regardless of service.



APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS

Judges:

None

Closed State Police: None

Open State Police:

Service-based table applies until eligibility for retirement is reached.

| Termination | | | |
|-------------|-------|--|--|
| Service | Rate | | |
| 0 | 5.00% | | |
| 1 | 4.00 | | |
| 2-9 | 1.50 | | |
| Ultimate | 0.50 | | |

3. Rate of Disability:

| State Employees: | |
|------------------|--|
| | |

| Rates of Active Disability | | |
|----------------------------|--------|--|
| Age | Rates | |
| 20 | 0.030% | |
| 25 | 0.030 | |
| 30 | 0.150 | |
| 35 | 0.230 | |
| 40 | 0.320 | |
| 45 | 0.410 | |
| 50 | 0.500 | |
| 55 | 0.800 | |
| 60 | 0.960 | |

| Rates of Active Disability for those who opted into the Disability Insurance Program* | | |
|--|--------|--|
| Age | Rates | |
| 65 | 1.000% | |
| 70 | 1.500 | |
| 75 | 1.500 | |
| 80 | 1.500 | |

* For those who remained in the Pension Plan for disability purposes, the assumption stops at age 64.



APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS

Judges:

None

Closed State Police: None

Open State Police:

| Rates of Active Disability | | | |
|----------------------------|---------|--|--|
| Age | Current | | |
| 20 | 0.030% | | |
| 25 | 0.030 | | |
| 30 | 0.150 | | |
| 35 | 0.230 | | |
| 40 | 0.320 | | |
| 45 | 0.410 | | |
| 50 | 0.500 | | |
| 55 | 0.800 | | |
| 60 | 0.960 | | |

No disabilities are assumed with 20 or more years of service.

1/3 of disabilities are assumed partial disability and 2/3s are assumed total disability.1/3 of disabilities are assumed duty-related and 2/3s are assumed non-duty related.



APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS

4. Rate of Mortality:

State Employees:

a. Rates of Mortality

Mortality rates are based on the sex-distinct employee, healthy annuitant, and disabled annuitant mortality tables described below, including adjustment factors, applied to the published tables for each group. Future mortality improvements are reflected by applying a custom projection scale on a generational basis to adjusted base tables from the base year shown below.

i. Sample Rates of Mortality for Active Healthy Lives at Selected Ages (number of deaths per 10,000 members):

| (2023 Values Shown) | | | |
|---------------------|------|--------|--|
| Age | Male | Female | |
| 25 | 3 | 1 | |
| 30 | 5 | 2 | |
| 35 | 6 | 3 | |
| 40 | 8 | 4 | |
| 45 | 9 | 5 | |
| 50 | 12 | 7 | |
| 55 | 19 | 11 | |
| 60 | 30 | 17 | |
| 65 | 42 | 25 | |
| 70 | 58 | 38 | |
| 75 | 88 | 64 | |
| 80 | 140 | 109 | |

Rates are based on 90% and 89%, respectively, of the Pub-2010 General Employee Mortality Table, for males and females, using the Pub-2010 General Benefits Weighted Annuitant Mortality Table rates after the end of the Employee Mortality Table, both projected from the 2010 base rates using the RPEC-2020 model, with an ultimate rate of 1.0% for ages 20-80, grading down to an ultimate rate of 0% for ages 114-120, and convergence to the ultimate rate in the year 2027. The valuation uses fully generational projection of mortality improvements. Sample rates shown are those projected through the valuation date.



APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS

| (2023 Values Shown) | | | |
|---------------------|-------|--------|--|
| Age | Male | Female | |
| 50 | 30 | 21 | |
| 55 | 45 | 29 | |
| 60 | 68 | 40 | |
| 65 | 98 | 58 | |
| 70 | 151 | 94 | |
| 75 | 255 | 167 | |
| 80 | 460 | 310 | |
| 85 | 849 | 590 | |
| 90 | 1,481 | 1,106 | |
| 95 | 2,314 | 1,808 | |
| 100 | 3,331 | 2,724 | |

ii. Sample Rates of Mortality for Healthy Annuitant Lives at Selected Ages (number of deaths per 10,000 members):

Rates are based on 107% and 100% of the Pub-2010 General Benefits Weighted Healthy Annuitant Mortality Table, respectively, for males and females, using the Pub-2010 General Employee Mortality Table for ages prior to start of the Healthy Annuitant Mortality Table, both projected from the 2010 base rates using the RPEC-2020 model, with an ultimate rate of 1.0% for ages 20-80, grading down to an ultimate rate of 0% for ages 114-120, and convergence to the ultimate rate in the year 2027. The valuation uses fully generational projection of mortality improvements. Sample rates shown are those projected through the valuation date.



APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS

| (2023 Values Shown) | | | |
|---------------------|-------|--------|--|
| Age | Male | Female | |
| 25 | 36 | 22 | |
| 30 | 54 | 38 | |
| 35 | 73 | 59 | |
| 40 | 90 | 78 | |
| 45 | 113 | 101 | |
| 50 | 160 | 146 | |
| 55 | 217 | 188 | |
| 60 | 276 | 217 | |
| 65 | 327 | 227 | |
| 70 | 385 | 267 | |
| 75 | 495 | 376 | |
| 80 | 708 | 587 | |
| 85 | 1,069 | 940 | |
| 90 | 1,641 | 1,395 | |
| 95 | 2,387 | 1,965 | |
| 100 | 3,331 | 2,887 | |

iii. Sample Rates of Mortality for Disabled Annuitant Lives at Selected Ages (number of deaths per 10,000 members):

Rates are based on 107% and 106% of the Pub-2010 General Benefits Weighted Disabled Annuitant Mortality Table, respectively, for males and females, projected from the 2010 base rates using the RPEC-2020 model, with an ultimate rate of 1.0% for ages 20-80, grading down to an ultimate rate of 0% for ages 114-120, and convergence to the ultimate rate in the year 2027. The valuation uses fully generational projection of mortality improvements. Sample rates shown are those projected through the valuation date.



APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS

Judges:

b. Rates of Mortality

Mortality rates are based on the sex-distinct employee, healthy annuitant, and disabled annuitant mortality tables described below, including adjustment factors, applied to the published tables for each group. Future mortality improvements are reflected by applying a custom projection scale on a generational basis to adjusted base tables from the base year shown below.

i. Sample Rates of Mortality for Active Healthy Lives at Selected Ages (number of deaths per 10,000 members):

| (2023 Values Shown) | | |
|---------------------|------|--------|
| Age | Male | Female |
| 25 | 3 | 1 |
| 30 | 5 | 2 |
| 35 | 6 | 3 |
| 40 | 8 | 4 |
| 45 | 9 | 5 |
| 50 | 12 | 7 |
| 55 | 19 | 11 |
| 60 | 30 | 17 |
| 65 | 42 | 25 |
| 70 | 58 | 38 |
| 75 | 88 | 64 |
| 80 | 140 | 109 |

Rates are based on 90% and 89%, respectively, of the Pub-2010 General Employee Mortality Table, for males and females, using the Pub-2010 General Benefits Weighted Annuitant Mortality Table rates after the end of the Employee Mortality Table, both projected from the 2010 base rates using the RPEC-2020 model, with an ultimate rate of 1.0% for ages 20-80, grading down to an ultimate rate of 0% for ages 114-120, and convergence to the ultimate rate in the year 2027. The valuation uses fully generational projection of mortality improvements. Sample rates shown are those projected through the valuation date.



APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS

| (2023 Values Shown) | | | |
|---------------------|-------|--------|--|
| Age | Male | Female | |
| 50 | 30 | 21 | |
| 55 | 45 | 29 | |
| 60 | 68 | 40 | |
| 65 | 98 | 58 | |
| 70 | 151 | 94 | |
| 75 | 255 | 167 | |
| 80 | 460 | 310 | |
| 85 | 849 | 590 | |
| 90 | 1,481 | 1,106 | |
| 95 | 2,314 | 1,808 | |
| 100 | 3,331 | 2,724 | |

ii. Sample Rates of Mortality for Healthy Annuitant Lives at Selected Ages (number of deaths per 10,000 members):

Rates are based on 107% and 100% of the Pub-2010 General Benefits Weighted Healthy Annuitant Mortality Table, respectively, for males and females, using the Pub-2010 General Employee Mortality Table for ages prior to start of the Healthy Annuitant Mortality Table, both projected from the 2010 base rates using the RPEC-2020 model, with an ultimate rate of 1.0% for ages 20-80, grading down to an ultimate rate of 0% for ages 114-120, and convergence to the ultimate rate in the year 2027. The valuation uses fully generational projection of mortality improvements. Sample rates shown are those projected through the valuation date.



APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS

| (2023 Values Shown) | | | |
|---------------------|-------|--------|--|
| Age | Male | Female | |
| 25 | 36 | 22 | |
| 30 | 54 | 38 | |
| 35 | 73 | 59 | |
| 40 | 90 | 78 | |
| 45 | 113 | 101 | |
| 50 | 160 | 146 | |
| 55 | 217 | 188 | |
| 60 | 276 | 217 | |
| 65 | 327 | 227 | |
| 70 | 385 | 267 | |
| 75 | 495 | 376 | |
| 80 | 708 | 587 | |
| 85 | 1,069 | 940 | |
| 90 | 1,641 | 1,395 | |
| 95 | 2,387 | 1,965 | |
| 100 | 3,331 | 2,887 | |

iii. Sample Rates of Mortality for Disabled Annuitant Lives at Selected Ages (number of deaths per 10,000 members):

Rates are based on 107% and 106% of the Pub-2010 General Benefits Weighted Disabled Annuitant Mortality Table, respectively, for males and females, projected from the 2010 base rates using the RPEC-2020 model, with an ultimate rate of 1.0% for ages 20-80, grading down to an ultimate rate of 0% for ages 114-120, and convergence to the ultimate rate in the year 2027. The valuation uses fully generational projection of mortality improvements. Sample rates shown are those projected through the valuation date.



APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS

Closed State Police and Open State Police:

c. Rates of Mortality

Mortality rates are based on the sex-distinct employee, healthy annuitant, and disabled annuitant mortality tables described below, including adjustment factors, applied to the published tables for each group. Future mortality improvements are reflected by applying a custom projection scale on a generational basis to adjusted base tables from the base year shown below.

i. Sample Rates of Mortality for Active Healthy Lives at Selected Ages (number of deaths per 10,000 members):

| (2023 Values Shown) | | | |
|---------------------|------|--------|--|
| Age | Male | Female | |
| 25 | 3 | 1 | |
| 30 | 5 | 2 | |
| 35 | 6 | 3 | |
| 40 | 8 | 4 | |
| 45 | 9 | 5 | |
| 50 | 12 | 7 | |
| 55 | 19 | 11 | |
| 60 | 30 | 17 | |
| 65 | 42 | 25 | |
| 70 | 58 | 38 | |
| 75 | 88 | 64 | |
| 80 | 140 | 109 | |

Rates are based on 100% of the Pub-2010 General Employee Mortality Table, for males and females, using the Pub-2010 General Benefits Weighted Annuitant Mortality Table rates after the end of the Employee Mortality Table, both projected from the 2010 base rates using the RPEC-2020 model, with an ultimate rate of 1.0% for ages 20-80, grading down to an ultimate rate of 0% for ages 114-120, and convergence to the ultimate rate in the year 2027. The valuation uses fully generational projection of mortality improvements. Sample rates shown are those projected through the valuation date.



APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS

| (2022 Values Shown) | | | |
|---------------------|-------|--------|--|
| Age | Male | Female | |
| 50 | 30 | 21 | |
| 55 | 45 | 29 | |
| 60 | 68 | 40 | |
| 65 | 98 | 58 | |
| 70 | 151 | 94 | |
| 75 | 255 | 167 | |
| 80 | 460 | 310 | |
| 85 | 849 | 590 | |
| 90 | 1,481 | 1,106 | |
| 95 | 2,314 | 1,808 | |
| 100 | 3,331 | 2,724 | |

ii. Sample Rates of Mortality for Healthy Annuitant Lives at Selected Ages (number of deaths per 10,000 members):

Rates are based on 107% and 100% of the Pub-2010 General Benefits Weighted Healthy Annuitant Mortality Table, respectively, for males and females, using the Pub-2010 General Employee Mortality Table for ages prior to start of the Healthy Annuitant Mortality Table, both projected from the 2010 base rates using the RPEC-2020 model, with an ultimate rate of 1.0% for ages 20-80, grading down to an ultimate rate of 0% for ages 114-120, and convergence to the ultimate rate in the year 2027. The valuation uses fully generational projection of mortality improvements. Sample rates shown are those projected through the valuation date.



APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS

| (2023 Values Shown) | | | | | |
|---------------------|-------|--------|--|--|--|
| Age | Male | Female | | | |
| 25 | 36 | 22 | | | |
| 30 | 54 | 38 | | | |
| 35 | 73 | 59 | | | |
| 40 | 90 | 78 | | | |
| 45 | 113 | 101 | | | |
| 50 | 160 | 146 | | | |
| 55 | 217 | 188 | | | |
| 60 | 276 | 217 | | | |
| 65 | 327 | 227 | | | |
| 70 | 385 | 267 | | | |
| 75 | 495 | 376 | | | |
| 80 | 708 | 587 | | | |
| 85 | 1,069 | 940 | | | |
| 90 | 1,641 | 1,395 | | | |
| 95 | 2,387 | 1,965 | | | |
| 100 | 3,331 | 2,887 | | | |

iii. Sample Rates of Mortality for Disabled Annuitant Lives at Selected Ages (number of deaths per 10,000 members):

Rates are based on 107% and 106% of the Pub-2010 General Benefits Weighted Disabled Annuitant Mortality Table, respectively, for males and females, projected from the 2010 base rates using the RPEC-2020 model, with an ultimate rate of 1.0% for ages 20-80, grading down to an ultimate rate of 0% for ages 114-120, and convergence to the ultimate rate in the year 2027. The valuation uses fully generational projection of mortality improvements. Sample rates shown are those projected through the valuation date.

5. *Percent of Retirees Electing Coverage:* For employees who currently have medical coverage, 95% of employees are assumed to elect coverage at retirement if they have 20 or more years of service and 80% if they have less than 20 years of service. These employees are assumed to remain in their current plan.

For employees who do not currently have medical coverage, 50% of employees are assumed to elect medical coverage in the comprehensive plan prior to retirement and then will follow the election percentages above.

40% of current and future terminated vested employees are assumed to elect coverage.

100% of LTD participants are assumed to elect coverage.



APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS

- 6. *Family Composition:* 50% of employees will elect spousal coverage at retirement.
- 7. *Dependent Age:* For current active employees, males are assumed to be three years older than female spouses. For current retirees, the actual spouse date of birth was used.
- 8. *Rationale for Assumptions:* The demographic assumptions were adopted by the Board of Trustees upon the recommendations of the actuary, based on an experience study performed in 2021 and covering the period July 1, 2015 through June 30, 2020. Assumptions directly related to health care elections, spousal coverage, and health care trends are reviewed annually. Based on the assumptions of a pay-as-you-go plan, the discount rate was selected based on the 20-year obligation bond as described by GASB.

Claim and Expense Assumptions

1. Average Monthly Claims and Expense Assumptions: The following claim and expense assumptions are applicable to the 12-month period beginning July 1, 2023. Subsequent years' costs are based on the trended first-year cost adjusted with trends listed above.

Due to the small enrollment on the Aetna CDH Gold Plan, claims experience was blended with the Aetna HMO, and the combined claims curve was used for both plans. The claim curves for this valuation, July 1, 2023 – June 30, 2024 are below.

| cunny | | Blue PPO Ae | | | Aetna H | tna HMO/CDH | | | Pharmacy | | | | |
|-------|----|-------------|-------|----|---------|-------------|-------|----|----------|----|------|----|-------|
| A | ge | | Male | F | emale | | Male | F | emale | | Male | F | emale |
| 4 | 0 | \$ | 430 | \$ | 780 | \$ | 435 | \$ | 789 | \$ | 106 | \$ | 131 |
| 4 | 5 | | 568 | | 808 | | 574 | | 817 | | 138 | | 157 |
| 5 | 0 | | 744 | | 930 | | 752 | | 940 | | 175 | | 186 |
| 5 | 5 | | 959 | | 1,138 | | 969 | | 1,150 | | 218 | | 217 |
| 6 | 0 | | 1,212 | | 1,340 | | 1,225 | | 1,355 | | 266 | | 252 |
| 6 | 4 | | 1,442 | | 1,361 | | 1,457 | | 1,376 | | 310 | | 282 |
| 6 | 5 | | 149 | | 137 | | 149 | | 137 | | 270 | | 264 |
| 7 | 0 | | 180 | | 155 | | 180 | | 155 | | 304 | | 276 |
| 7 | 5 | | 219 | | 185 | | 219 | | 185 | | 297 | | 271 |
| 8 | 0 | | 260 | | 217 | | 260 | | 217 | | 269 | | 256 |
| 8 | 5 | | 297 | | 246 | | 297 | | 246 | | 237 | | 236 |

Healthy Retirees & All Dependents



APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS

| Jis | abled Re | eurees | | | | | | |
|-----|----------|--------|--------|---------|--------|----------|--------|--|
| | Blue PPO | | | Aetna H | MO/CDH | Pharmacy | | |
| | Age | Male | Female | Male | Female | Male | Female | |
| | 40 | \$ 386 | \$ 565 | \$ 389 | \$ 570 | \$ 302 | \$ 306 | |
| | 45 | 528 | 639 | 531 | 644 | 426 | 422 | |
| | 50 | 683 | 759 | 687 | 764 | 541 | 528 | |
| | 55 | 828 | 897 | 833 | 904 | 607 | 587 | |
| | 60 | 951 | 994 | 958 | 1,002 | 606 | 579 | |
| | 64 | 1,034 | 965 | 1,042 | 973 | 557 | 526 | |
| | 65 | 224 | 205 | 224 | 205 | 406 | 396 | |
| | 70 | 270 | 232 | 270 | 232 | 457 | 414 | |
| | 75 | 329 | 277 | 329 | 277 | 445 | 407 | |
| | 80 | 390 | 326 | 390 | 326 | 403 | 384 | |
| | 85 | 445 | 369 | 445 | 369 | 355 | 355 | |

Disabled Retirees

- 2. *Medicare Part D Subsidy*: Effective January 1, 2013, the subsidy is no longer applicable as the State is enrolled in an EGWP.
- 3. *Medicare Part B Premiums*: Assumed that Medicare-eligible retirees pay the Medicare Part B premiums.

4. Medicare Eligibility:

Future retirees: Age 65+=100.00%. Current retires: Under 65= those known to be eligible for Medicare will remain eligible, Age 65+=100.00%.

- 5. Annual Limits: Assumed to increase at the same rate as trend.
- 6. Lifetime Maximums: Are assumed to have no financial impact.
- 7. *Geography*: Implicitly assumed to remain the same as current retirees.



APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS

Methodology

The Entry Age Actuarial Cost Method was used to value the Plan's actuarial liabilities and to set the normal cost. Under this method, the normal cost rate is the percentage of pay contribution which would be sufficient to fund the Plan benefits if it were paid from each member's entry into the System until termination or retirement. A rolling 30-year amortization period was used under the pay-as-you-go funding scenario. This amortization method will never pay off the unfunded liability.

A normal cost rate is determined for a typical new entrant. This rate is determined by taking the value, as of age at entry into a plan in the Program, of the member's projected future benefits, reducing it by the value of future member contributions, and dividing it by the value, also as of the member's entry age, of the member's expected future salary.

The claims costs were developed using projected claims for FY 2020-2021 and FY 2021-2022 retiree experience paid through March 31, 2022. Claims were trended from FYE 2021 to FYE 2022 at 5.75% for non-Medicare medical, 4.0% for Medicare medical, and 9.0% for pharmacy and from FYE 2022 to FYE 2023 at 5.0%, 5.0%, and 8.0%, respectively. From this data, we developed per person per month (PPPM) costs and then adjusted those using age curves. Claims costs include a 4.5% load for expenses, based on the State health care actuary's projected expenses. These final claim curves were then further trended by 9.4% for non-Medicare medical, 8.1% for Medicare medical, 4.4% for non-Medicare pharmacy, and 14.3% for Medicare pharmacy to bring them to July 1, 2023.

Changes Since Last Valuation

The discount rate was increased from 3.54% to 3.65% based on the 20-yr GO Bond rates.

Disclosure of Models Used

<u>ProVal</u>

Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate the liabilities, normal costs, and projected benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this actuarial valuation.



APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS

Health Care Trends

Medical trends were developed using the 2022 v4 Society of Actuaries Long-Run Medical Cost Trend Model with the following parameters:

| Initial trend rate 2023: | |
|-----------------------------|-------|
| Non-Medicare Eligible: | 7.00% |
| Medicare Eligible: | 5.25% |
| Pharmacy: | 7.25% |
| Inflation: | 2.50% |
| Real GDP per Capita: | 1.40% |
| Excess Medical Cost Growth: | 1.00% |
| Expected GDP Share in 2031: | 19.0% |
| Resistance Point: | 20.0% |
| Year limited to GDP growth: | 2041 |

The SOA Long-Run Medical Cost Trend Model and its baseline projection are based on an econometric analysis of historical U.S. medical expenditures and the judgments of experts in the field. The long-run baseline projection and input variables have been developed under the guidance of the SOA Project Oversight Group.

The trends selected from 2023 to 2025 were based on recently updated general industry information and our view of the marketplace. For the remaining assumptions, we have reviewed the baseline assumptions for the model and found them to be reasonable and consistent with the other economic assumptions used in the valuation.

We have relied on the Society of Actuaries as the developer of the Model. We have reviewed the Model and have a basic understanding of the Model and have used the Model in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of the Model that would affect this valuation.

Projections

This report includes projections of future contributions, assets, and funded status for the purpose of assisting the Board of Trustees with the management of the Fund. We have used Cheiron's *H-Scan* model to develop these projections. The model is also used to stress test the impact of volatile asset returns over the projection period.



APPENDIX B – SUBSTANTIVE PLAN PROVISIONS

Eligibility:

State Employees:

Normal Retirement:

Eligibility: Non-GA Pre - 2012 hires: (i) age 62 with five years of credited service, or (ii) age 60 with 15 years of credited service, or (iii) any age with 30 years of credited service.

Non-GA Post - 2011 hires: (i) age 65 with 10 years of credited service, or (ii) age 60 with 20 years of credited service, or (iii) any age with 30 years of credited service.

GA Pre - 2012 hires: (i) age 60 with five years of credited service or (ii) age 55 with 10 years of credited service.

GA Post - 2011 hires: (i) age 65 with 10 years of credited service, or (ii) age 60 with 20 years of credited service, or (iii) any age with 30 years of credited service.

Early Retirement:

Eligibility: (i) age 55 with 15 years of credited service; or (ii) any age with 25 years of credited service.

Judges:

Normal Retirement:

Judges appointed before July 1, 1980:

Eligibility: (i) age 65 with 12 years of service as a judge; or (ii) any age with 24 years of service; or (iii) involuntarily retired after 22 years of service as a judge.

Judges appointed after June 30, 1980:

Eligibility: (i) age 62 with 12 years of service as a judge; or (ii) any age with 24 years of service; or (iii) involuntarily retired after 22 years of service as a judge.

Closed State Police:

Normal Retirement:

Age 55 or 20 years of credited service.



APPENDIX B – SUBSTANTIVE PLAN PROVISIONS

Open State Police:

Normal Retirement:

Eligibility: (i) Must be employed at 55 with 10 years of credited service; or (ii) any age with 20 years of credited service; or (iii) 10 years of credited service when age plus service equals 75.

<u>All vested participants in the groups above are eligible to pick up coverage at commencement of their vested pension benefit.</u>

Spouse coverage is available under any of the Plan options with the State paying the same percentage as the retiree. Surviving spouses are eligible for coverage after the retiree's death.



APPENDIX B – SUBSTANTIVE PLAN PROVISIONS

Benefits:

| | Delaware NME Plans | | | |
|--|--|---|--|--|
| Provider Network: | First State Basic | BlueCross BlueShield PPO | | |
| In-Network (INN)Benefits | | | | |
| Copays (Do not apply to DC ¹ or OOP max) | | | | |
| Office Visit (OV)-Primary Care(PCP) | Deductible + Coinsurance | \$20 | | |
| OV - Specialist Care Provider (SCP) | Deductible + Coinsurance | \$30 | | |
| Urgent Care (UC) | \$25 | \$20 | | |
| Hospital Emergency Room (ER) | Deductible + Coinsurance | \$150 | | |
| | | \$100 / visit; | | |
| Outpatient Surgery | Deductible + Coinsurance | \$50 / visit at ambulatory surgical centers | | |
| Hospital Inpatient | Deductible + Coinsurance | \$100 per day; max \$200 per visit | | |
| Deductible (Individual / Family) | \$500 / \$1,000 | \$0 | | |
| Coinsurance | 10% | 0% | | |
| Coinsurance Limit - Excl. Deductible (Individual / Family) | \$2,000 / \$4,000 | \$4,500 / \$9,000 | | |
| Benefits Out-of-Network (OON) | | • , | | |
| Deductible (Individual / Family) | \$1,000 / \$2,000 | \$300 / \$600 | | |
| Coinsurance | 30% | 20% | | |
| Out-of-Pocket (OOP) Max (Individual / Family) | \$4,000 / \$8,000 | \$7,500 / \$15,000 | | |
| Lifetime Max (INN/OON) | None | None | | |
| Prescription Drug | | | | |
| 30 Day Supply - Tier 1/Tier II/Tier III Copay | \$8 / \$28 / \$50 | \$8 / \$28 / \$50 | | |
| 90 Day Supply - Tier 1/Tier II/Tier III Copay | \$16 / \$56 / \$100 | \$16 / \$56 / \$100 | | |
| Detail Benefits | | | | |
| Mental Health (MH) / Substance Abuse (SA): | | | | |
| -Per Visit | Deductible + Coinsurance | \$20 | | |
| -Inpatient | Deductible + Coinsurance | \$100 copay / day; max \$200 | | |
| -Per Year Outpatient \$ Maximum | None | None | | |
| -Per Lifetime Maximum | None | None | | |
| | | | | |
| Rehabilitation (i.e., speech, occup. physical): | Deductible + Coinsurance; visit limit | 15% coinsurance; visit limit determined by | | |
| | determined by medical necessity Deductible + Coinsurance: | medical necessity | | |
| Chiropractors: | 30 visit max per year | 15% coinsurance; 30 visit mac per year | | |
| | Covered at OON cost share when | Covered at OON cost share when | | |
| Transplants: | member does not use Blue Distinction | member does not use Blue Distinction | | |
| | Center | Center | | |
| Lakaratan i | | \$10 for labs; \$50 / \$75 for imaging | | |
| Laboratory: | Deductible + Coinsurance | services | | |
| Durable Medical Equipment | Deductible + Coinsurance | 0% member cost share | | |
| Preventive Care: | Covered at 100% | No Charge | | |

<u>Blue Cross Blue Shield First State Basic</u> – This plan provides the freedom of choice you experience with a Preferred Provider Organization (PPO) that allows you to receive both in- and out-of-network benefits.

In-network services are subject to plan year deductibles of \$500 per employee and \$1,000 per family. The Plan will then pay at 90% of Highmark Delaware's allowable charge. The in-network plan year total maximum out-of-pocket (TMOOP) is \$2,000 per employee and \$4,000 per family. Deductibles, coinsurance, and copays accrue toward the TMOOP. Preventive services are covered in-network at 100% of the allowable charge and are not subject to any deductibles, coinsurance, or copays.



APPENDIX B – SUBSTANTIVE PLAN PROVISIONS

Out-of-network services are subject to plan year deductibles of \$1,000 per employee and \$2,000 per family, and then the Plan will pay at 70% of the allowable charge. The out-of-network plan year total maximum out-of-pocket (TMOOP) is \$4,000 per employee and \$8,000 per family. Deductibles, coinsurance, and copays accrue toward the TMOOP.

The First State Basic PPO Plan includes coverage for services such as inpatient care, prenatal and postnatal care, emergency services, mental health, and substance abuse treatment, and many outpatient services, including, but not limited to labs, x-rays and other imaging services, vision care, chiropractic, and other therapeutic benefits.

<u>Highmark Blue Cross Blue Shield Blue Delaware</u> – Highmark Delaware's managed care IPA/HMO Plan requires each member to select a primary care physician (PCP) to coordinate his/her health care needs. Members can also seek care, and some services without a referral from a PCP, from any specialist in the Highmark Delaware Participating Provider Network.

In addition to all inpatient care, certain outpatient services require Highmark Delaware's prior authorization. A list of these services is available to all providers (primary and specialist) in the Highmark Delaware network.

The IPA/HMO Plan includes Highmark Delaware network coverage for services such as inpatient care, prenatal and postnatal care, emergency services, mental health and substance abuse treatment, and many outpatient services, including, but not limited to labs, x-rays and other imaging services, vision care, chiropractic, and other therapeutic benefits. You will also have access to the Blue Cross Blue Shield nationwide network for urgent and emergency care while away from home.

The plan year total maximum out-of-pocket (TMOOP) is \$4,500 per employee and \$9,000 per family. TMOOP includes coinsurance and copays. Once met, the Plan pays 100% of covered services for the rest of the benefit period. Preventive services are covered at 100% of the allowable charge and are not subject to copays or coinsurance.



APPENDIX B – SUBSTANTIVE PLAN PROVISIONS

| D | elaware NME Plans Cont. | |
|--|--|--|
| Provider Network: | Aetna HMO | Aetna CDH |
| In-Network (INN)Benefits | | |
| Copays (Do not apply to DC ¹ or OOP max) | | |
| Office Visit (OV)-Primary Care(PCP) | \$15 | Deductible + Coinsurance |
| OV - Specialist Care Provider (SCP) | \$25 | Deductible + Coinsurance |
| Urgent Care (UC) | \$15 | Deductible + Coinsurance |
| Hospital Emergency Room (ER) | \$200 | Deductible + Coinsurance |
| Outpatient Surgery | \$100 / visit; \$50 / visit at ambulatory surgical centers | Deductible + Coinsurance |
| Hospital Inpatient | \$100 per day; max \$200 per visit | Deductible + Coinsurance |
| Deductible (Individual / Family) | \$0 | \$1,500 / \$3,000 |
| Coinsurance | 0% | 10% |
| Coinsurance Limit - Excl. Deductible (Individual / Family) | \$4,500 / \$9,000 | \$4,500 / \$9,000 |
| Benefits Out-of-Network (OON) | | |
| Deductible (Individual / Family) | Emergency Services Only | \$1,500 / \$3,000 |
| Coinsurance | N/A | 30% |
| Out-of-Pocket (OOP) Max (Individual / Family) | N/A | \$7,500 / \$15,000 |
| Lifetime Max (INN/OON) | None | None |
| Prescription Drug | | |
| 30 Day Supply - Tier 1/Tier II/Tier III Copay | \$8 / \$28 / \$50 | \$8 / \$28 / \$50 |
| 90 Day Supply - Tier 1/Tier II/Tier III Copay | \$16 / \$56 / \$100 | \$16 / \$56 / \$100 |
| Detail Benefits | | |
| Mental Health (MH) / Substance Abuse (SA): | | |
| -Per Visit | \$25 | Deductible + Coinsurance |
| -Inpatient | \$100 copay / day; max \$200 | Deductible + Coinsurance |
| -Per Year Outpatient \$ Maximum | None | None |
| -Per Lifetime Maximum | None | None |
| Rehabilitation (i.e., speech, occup. physical): | 20% coinsurance; PT & OT limit of 45 visits per condition; ST 45 days per incidence | Deductible + Coinsurance; visit limit determined by medical necessity |
| Chiropractors: | \$15 / visit (benefit limited to 80% of allowable charge) | Deductible + Coinsurance; 30 visit max per year |
| Transplants: | Higher member cost share when member does not use Blue Distinction Center | Covered at OON cost share when member does not use Blue Distinction Center |
| Laboratory: | \$10 for labs; \$50 / \$75 for imaging services: \$50 / diagnostic services | Deductible + Coinsurance |
| Durable Medical Equipment | 20% coinsurance | Deductible + Coinsurance |
| Preventive Care: | No Charge | Covered at 100% |

<u>Aetna</u> – Access and Choice. Aetna's HMO offers all the advantages of a national health plan and local customer service. Members choose any primary care physician (PCP) from a broad network. Aetna's HMO plan offers direct access to emergency and urgent care, routine OB/GYN care, and a host of health, wellness, and educational programs. This plan covers only emergency services out-of-network.

<u>Aetna</u> – Aetna's CDH Gold Plan offers many of the features of a Preferred Provider Organization (PPO) plan with the added advantage of a State-funded Health Reimbursement Account (HRA).

The Plan includes a \$1,500 deductible for employee only (Individual) coverage and \$3,000 for Family coverage. The HRA pays the first \$1,250 in deductible expenses for Individuals and \$2,500 for Families. The member is financially responsible for the remaining in-network deductible (\$250 for Individuals and \$500 for Families). When the deductible is satisfied, in-network healthcare services are paid at 90%, with an in-network coinsurance maximum of \$3,000 for Individuals and \$6,000 for Families. There is a separate out-of-network deductible of \$1,500 for Employee only (Individual) coverage and \$3,000 for Family coverage. When the



APPENDIX B – SUBSTANTIVE PLAN PROVISIONS

deductible is satisfied, out-of-network healthcare services are paid at 70%, with an out-of-network coinsurance maximum of \$6,000 for Individuals and \$12,000 for Families.

In addition, preventive care services are covered at 100% and are not subject to a deductible or coinsurance. Prescriptions are provided through the prescription benefits manager, Express Scripts, and prescription copays are not applicable to the medical deductible or out-of-pocket maximum.

<u>Special Medicfill Medicare Supplement (Administered by Blue Cross Blue Shield of Delaware)</u> – This plan supplements Medicare. Unless otherwise indicated on the Benefits Highlights pages in the Open Enrollment booklet, benefits will be paid as noted only after Medicare pays its full amount. **Note:** Delaware Law mandates that the member, spouse, and eligible dependents, elect Medicare Parts A & B when eligible.

<u>Express Scripts Prescription Coverage</u> – When you enroll in a healthcare plan you will automatically be enrolled in the prescription drug plan managed by Express Scripts. The only exception is the Special Medicfill plan without prescription coverage for those pensioners who have chosen to enroll in Medicare Part D for their prescription coverage. The Coordination of Benefits (COB) policy also applies to prescription coverage. If your spouse or dependents have other primary health coverage (pays first), the prescription coverage provided through the State's plan for the spouse or dependents will become secondary.

| 2023 Prescription Copay Rates | | | | | | |
|-------------------------------|----|---------|----|-----------|----|-------------|
| State of Delaware | | Tier 1 | | Tier 2 | | Tier 3 |
| Prescription Coverage | | Generic | P | referred* | No | n-Preferred |
| 30-DAY Supply | \$ | 8.00 | \$ | 28.00 | \$ | 50.00 |
| 90-DAY Supply | | 16.00 | | 56.00 | | 100.00 |

*****"Preferred" = Formulary

State Share of Premium:

House Bill number 81 established a fixed cost share effective July 1, 2012 for the different health insurance plans offered by the State for regular officers or employees of the State and their dependents and a fixed cost-share for pensioners and their dependents who are not eligible for federal Medicare. The State share is listed below.

| Medical Plan Type | State Share Percent of Premium Paid by State | Medical Plan Type | State Share Percent of Premium Paid by State |
|----------------------|--|----------------------|--|
| Basic | 96.00% | HMO | 93.50% |
| Consumer-Directed | 95.00% | Comprehensive PPO | 86.75% |



APPENDIX B – SUBSTANTIVE PLAN PROVISIONS

Current Retiree Contributions:

If hired prior to 07/01/1991 or are on disability retirement, no contributions are required. If hired on or after 07/01/1991 (and not retired on disability), contributions depend on years of service, as shown in the table below.

| Years of Service | Percent of State Share Paid by State |
|------------------|--------------------------------------|
| Less than 10 | 0% |
| 10-14 | 50% |
| 15-19 | 75% |
| 20 or more | 100% |

Future Retiree Contributions:

If hired prior to 07/01/1991 or are on disability retirement, no contributions are required. If hired on or after 07/01/1991 (and not retired on disability) and before January 1, 2007, contributions depend on years of service, as shown in the table below.

| Years of Service | Percent of State Share Paid by State |
|------------------|--------------------------------------|
| Less than 10 | 0% |
| 10-14 | 50% |
| 15-19 | 75% |
| 20 or more | 100% |

If hired on or after January 1, 2007 (and not retired on disability), contributions depend on years of service, as shown in the table below.

| Years of Service | Percent of State Share Paid by State |
|------------------|--------------------------------------|
| Less than 15 | 0% |
| 15-17.5 | 50% |
| 17.5-19 | 75% |
| 20 or more | 100% |

Pensioners who retire after July 1, 2012, and who become eligible for Medicare, will pay, in addition to their percentage above, an additional 5% of the Medicare supplement offered by the State.



APPENDIX B – SUBSTANTIVE PLAN PROVISIONS

State Monthly Premiums:

| State of Delaware Group Health Insurance Program Rates Effective July 1, 2023 | | | | | | | | |
|---|--------------------------|------------|----------------------------|--|--|--|--|--|
| | Total Monthly Rate | State Pays | Pensioner Contributions | | | | | |
| Highmark Delaware First State Ba | isic PPO Plan | | | | | | | |
| Employee | \$826.68 | \$793.62 | \$33.06 | | | | | |
| Employee & Spouse | \$1,710.38 | \$1,641.96 | \$68.42 | | | | | |
| Employee & Child(ren) | \$1,256.64 | \$1,206.38 | \$50.26 | | | | | |
| Family | \$2,138.06 | \$2,052.52 | \$85.54 | | | | | |
| Aetna CDH Gold Plan | | | | | | | | |
| Employee | \$855.60 | \$812.82 | \$42.78 | | | | | |
| Employee & Spouse | \$1,774.04 | \$1,685.34 | \$88.70 | | | | | |
| Employee & Child(ren) | \$1,307.22 | \$1,241.86 | \$65.36 | | | | | |
| Family | \$2,253.76 | \$2,141.08 | \$112.68 | | | | | |
| Aetna HMO Plan | | | | | | | | |
| Employee | \$863.04 | \$806.94 | \$54.18 | | | | | |
| Employee & Spouse | \$1,819.64 | \$1,701.36 | \$114.02 | | | | | |
| Employee & Child(ren) | \$1,320.24 | \$1,234.42 | \$82.87 | | | | | |
| Family | \$2,270.50 | \$2,122.92 | \$142.55 | | | | | |
| Highmark Delaware Comprehensi | ve PPO Plan | | | | | | | |
| Employee | \$943.78 | \$818.74 | \$125.04 | | | | | |
| Employee & Spouse | \$1,958.44 | \$1,698.94 | \$259.50 | | | | | |
| Employee & Child(ren) | \$1,454.52 | \$1,261.80 | \$192.72 | | | | | |
| Family | \$2,448.32 | \$2,123.92 | \$324.40 | | | | | |
| Highmark Delaware Medicare Sup | oplement | | | | | | | |
| for Pensioners Retired On or Prior | | | | | | | | |
| Special Medicfill with Prescription | \$482.34 | \$482.34 | \$0 | | | | | |
| Special Medicfill without Prescription* | \$273.46 | \$273.46 | \$0 \$0 | | | | | |
| Highmark Delaware Medicare Sur | 4 | | | | | | | |
| for Pensioners Retired After July 1 | 1 | | | | | | | |
| Special Medicfill with Prescription | \$482.34 | \$458.24 | \$24.10 | | | | | |
| Special Medicfill without Prescription* | \$273.46 | \$259.80 | \$13.66 | | | | | |



APPENDIX C – GLOSSARY OF TERMS

1. Actuarial Assumptions

Assumptions as to the occurrence of future events affecting pension costs, such as mortality, withdrawal, and retirement; changes in compensation; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the actuarial value of assets; and other relevant items.

2. Actuarial Cost Method

A procedure for determining the actuarial present value of pension plan benefits and expenses and for developing an allocation of such value to each year of service, usually in the form of a normal cost and an actuarial liability.

3. Actuarial Gain (Loss)

A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

4. Actuarial Liability

The portion of the actuarial present value of projected benefits which will not be paid by future normal costs, it represents the value of the past normal costs with interest to the valuation date.

5. Actuarial Present Value (Present Value)

The value as of a given date of a future amount or series of payments, the actuarial present value discounts the payments to the given date at the assumed investment return and includes the probability of the payment being made. As a simple example: assume you owe \$100 to a friend one year from now. Also, assume there is a 1% probability of your friend dying over the next year, in which case you will not be obligated to pay him. If the assumed investment return is 10%, the actuarial present value is:

| | | Probability | | 1/ | | Present |
|--------|---|-------------|---|-------------------|---|---------|
| Amount | | of Payment | | (1+Discount Rate) | | Value |
| \$100 | Х | (101) | х | 1/(1+.1) | = | \$90 |

6. Actuarial Valuation

The determination, as of a specified date, of the normal cost, actuarial liability, the actuarial value of assets, and related actuarial present values for a pension plan.

7. Actuarial Value of Assets

The value of cash, investments, and other property belonging to a pension plan as used by the actuary for the purpose of an actuarial valuation. The purpose of an actuarial value of assets is to smooth out fluctuations in market values. This way long-term costs are not distorted by short-term fluctuations in the market.



APPENDIX C – GLOSSARY OF TERMS

8. Amortization Payment

The portion of the pension plan contribution which is designed to pay interest and principal on the unfunded actuarial liability in order to pay for that liability in a given number of years.

9. Entry Age Normal Actuarial Cost Method

A method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages.

10. Normal Cost

That portion of the actuarial present value of pension plan benefits and expenses which is allocated to a valuation year by the actuarial cost method.

11. Unfunded Actuarial Liability

The excess of the actuarial liability over the actuarial value of assets.

12. Funded Percentage

The ratio of the actuarial value of assets to the actuarial liabilities.

13. Mortality Table

A set of percentages which estimate the probability of death at a particular point in time. Typically, the rates are annual and based on age and sex.

14. Discount Rate

The assumed interest rate used for converting projecting dollar related values to a present value as of the valuation date.

15. Medical Trend

The assumed increase in dollar related values in the future due to the increase in the cost of health care.



APPENDIX D – ABBREVIATION LIST

Actuarial Liability (AL) Actuarial Valuation Report (AVR) Annual Required Contribution (ARC) Coordination of Benefits (COB) Deductible and Coinsurance (DC) Durable Medical Equipment (DME) Employee Assistance Program (EAP) Employee Benefits Division (EBD) Fiscal Year Ending (FYE) Governmental Accounting Standards Board (GASB) Hospital Emergency Room (ER) In-Network (INN) Inpatient (IP) Medicare Eligible (ME) Net Other Postemployment Benefit (NOO) Non-Medicare Eligible (NME) Not Applicable (NA) Office Visit (OV) Other Postemployment Benefit (OPEB) Out-of-Network (OON) Out-of-Pocket (OOP) Outpatient (OP) Pay-as-you-go (PAYGo) Per Person Per Month (PPPM) Pharmacv (Rx) Preferred Provider Organization (PPO) Primary Care Physician (PCP) Specialist Care Provider (SCP) Summary Plan Description (SPD) Unfunded Actuarial Accrued Liability (UAAL) Unfunded Actuarial Liability (UAL) Urgent Care (UC)

