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State of Delaware

Postretirement Health Plan Actuarial Valuation Report as of July 1, 2024

Produced by Cheiron

February 2025

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Letter of Transmittal

February 10, 2025

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, 2024. The following report contains our findings and additional disclosures required by the 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.

The assumptions in this report reflect the Inflation Reduction Act of 2022 (the Act) and its impact on plans for Medicare-eligible retirees, including associated regulations and market responses to date. As the regulations and market responses evolve, the impact on future costs could vary significantly from those assumed in this valuation.

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

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

Daniel J. Rhodes, 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, 2024. The primary purposes of performing this actuarial valuation are to determine the OPEB liability as of the valuation date, and to provide projections for contributions, benefits, assets, and liabilities. 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 for June 30, 2024, was provided in a separate document, based on the prior valuation. This valuation will be used at a future date to determine the Net OPEB Liability of the retiree health benefit under GASB 74 and 75 and to provide additional disclosures for financial statements as of June 30, 2025.

Funding Policy

The State of Delaware currently pays for its post-employment health benefits primarily on a pay-as-you-go (PAYGo) basis, with benefits currently provided to existing retirees from general revenues. 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. In accordance with House Bill No. 330, beginning in Fiscal Year 2026, the 0.36% of covered payroll contribution will increase to 0.50% of covered payroll and will increase by 0.25% of covered payroll in each following fiscal year. The total combined contribution will continue to increase until the amount is equal to the Annual Required Contribution.

House Bill No. 475 provides that certain escheat fund reserves can be transferred to the OPEB fund. Because the amount of these funds can be highly variable, we have not included any escheat fund transfers in our projections of OPEB fund assets in this valuation.

SECTION I – SUMMARY

Valuation Results

The table below presents the key results of the 2023 and 2024 valuations.

Table I-1
Summary of Key Valuation Results
($ In Millions)

Discount Rate	3.65%	3.94%
	July 1, 2023	**July 1, 2024**
Actuarial Liability (AL)	$ 9,565.3	$ 11,105.1
Assets	687.0	957.5
Unfunded Actuarial Liability (UAL)	$ 8,878.3	$ 10,147.6
Fiscal Year Ending	**June 30, 2024**	**June 30, 2025**
Annual Required Contribution (ARC)	$ 690.5	$ 803.6
Actual / *Expected* Contribution	522.3	*563.5*
Actual / *Expected* Net Benefit Payments	336.5	*298.5*

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

The expected increase in liability during the year was $458.2 million. The Plan experienced a decrease in liability due to population changes and updates related to the audit of $111.0 million, an increase due to updated health claims and trend assumptions of $1,701.2 million, and a decrease due to the discount rate increase from 3.65% to 3.94% of $508.6 million. The total change in the actuarial liability was approximately $1,539.8 million. More detail on the effects of these changes can be found in the valuation results section of this report.

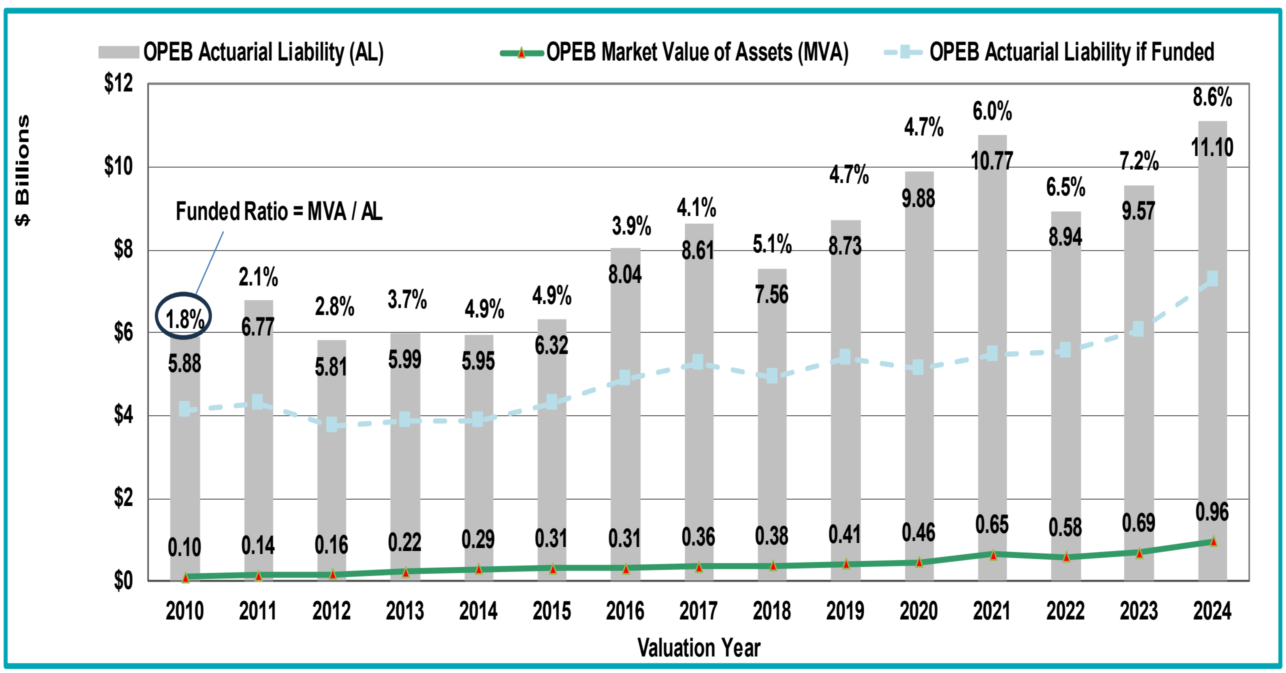
The expected contribution of $563.5 million for the period ending June 30, 2025 includes $56.0 million reflecting 1% of the prior year's annual budget payments, $199.0 million of one-time contributions from escheat funds, $10 million corresponding to 0.36% of covered payroll, and $298.5 million in expected 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 2020 was due to a reduction in discount rate from 3.50% to 2.21%. 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 increase in actuarial liability in 2024 was due to the impact of changes in the health cost assumptions. The percentages above the grey bars represent the ratio of the market value of assets over the actuarial liability (the funded ratio).

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

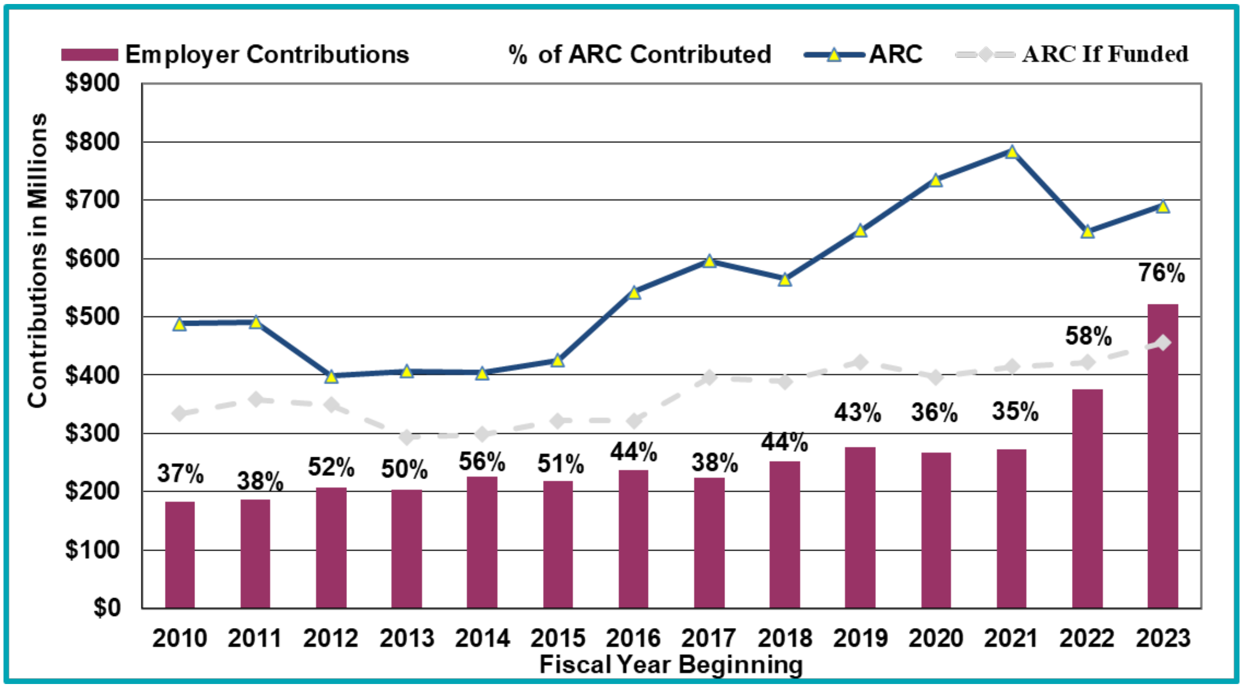


Discount Rate	5.00%	4.25%	4.25%	4.25%	4.25%	4.25%	3.75%	3.58%	3.87%	3.50%	2.21%	2.16%	3.54%	3.65%	3.94%
Funding Rate	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%	7.20%	7.20%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%

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. The percentages above the burgundy bars represent the ratio of the actual contributions to the ARC.

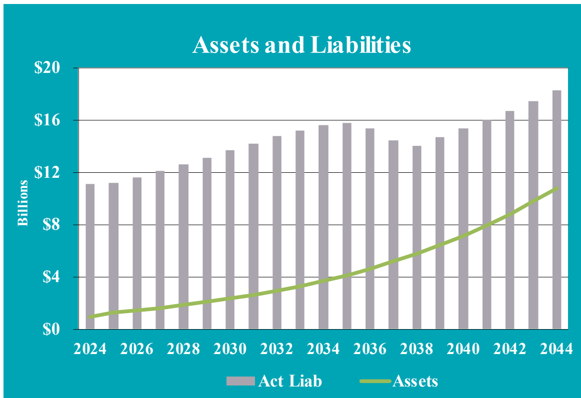
The light grey dotted line represents the ARC if the Plan's discount rate was based on the full funding rate.

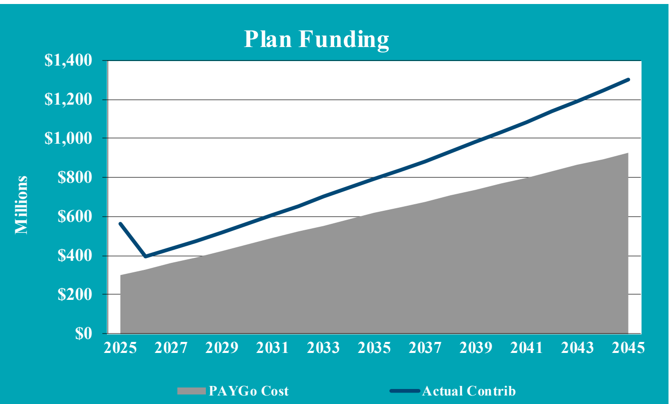


SECTION I – SUMMARY

Projected Trends

Looking beyond 2024, the expense and liability on the financial statements increase under the current funding policy because the Plan is not funded yet. 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 $957 million to $9.7 billion assuming a 7.0% return on assets. As the Plan becomes more funded, the discount rate increases to the full funding rate of 7.0%, thus reducing the expected liability in the future. Beginning in 2038 the funding level is sufficient to meet the depletion test requirements, and the discount rate changes to 7.0%. The additional 1% of the prior year's annual budget contribution and the increasing percentages of covered payroll appropriations are assumed to continue throughout the period until the total combined contributions are equal to the Annual Required Contribution, as shown 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 $298 million to $925 million. The blue line represents the State's assumed contributions. In late 2024, the State contributed an extra $199 million to the Trust from escheat funds in addition to the $56 million contribution of 1% of the prior year's general fund budget and $10 million which is 0.36% of covered payroll. We have assumed the State will continue to make the contributions according to the State's codified funding policy, as seen by the blue line, which is higher than the PAYGo area. Over the projection period, the State's contribution increases from $563.5 million to $1,126 million.

SECTION II – ASSETS

The Plan's last valuation of liabilities was performed as of July 1, 2023. Table II-1 below shows the reconciliation of assets for the fiscal year. This section reconciles the assets as of July 1, 2024 that were used to develop the FYE 2025 ARC.

Table II-1
Reconciliation of Assets
($ in millions)

Valuation Assets as of July 1, 2023	**$**	**687.0**
Contributions for Fiscal Year *		
State Contributions	$	522.1
Transfer from outside the system		0.2
Other Contributions		-
Total Contributions	$	522.3
Benefit Payments *		(336.5)
Expenses		(0.2)
Investment Earnings		84.9
Valuation Assets as of July 1, 2024	**$**	**957.5**

* 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 primarily pay as you go. Even though GASB 45 has been replaced by GASB 75, we will continue to calculate an annual required contribution (ARC) using the rules previously in effect with GASB 45 as the State's funding policy is still emerging.. This valuation calculates the ARC for FYE 2025. Information about the actuarial liabilities of the Plan as of July 1, 2024 is shown in Table III-1 below.

Table III-1
Actuarial Liability
Pay-As-You-Go Funding
(3.94% assumed discount)
($ in millions)

	State Employees	Judges	Closed State Police	Open State Police	Total
Actives	$ 5,655.5	$ 3.9	$ -	$ 179.3	$ 5,838.7
Retirees	5,051.0	6.7	60.8	147.9	5,266.4
Total	**$ 10,706.5**	**$ 10.6**	**$ 60.8**	**$ 327.2**	**$ 11,105.1**
Assets*	923.5	1.0	5.0	28.0	957.5
UAL	**$ 9,783.0**	**$ 9.6**	**$ 55.8**	**$ 299.2**	**$ 10,147.6**

* *Assets allocated in proportion to liabilities*

The 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, as described in Section I.

In Table III-2 below, we show the computed FY 2024-25 ARC under the State's funding policy and a 3.94% assumed discount rate.

Table III-2
Annual Required Contributions – FY2025
Pay-As-You-Go Funding
(3.94% assumed discount)
($ in millions)

	State Employees	Judges	Closed State Police	Open State Police	Total
Normal Cost	$ 413.9	$ 0.4	$ -	$ 14.9	$ 429.2
UAL Amortization	361.0	0.4	2.0	11.0	374.4
Total	**$ 774.9**	**$ 0.8**	**$ 2.0**	**$ 25.9**	**$ 803.6**

SECTION III – VALUATION RESULTS

Table III-3 shows the employer contributions, benefit payments, assets, and UAL that we anticipate for the next 15 years under the current funding policy. In calculating the liabilities, we project these figures for the life of each existing participant. Expected contributions follow the State's funding policy as described in section I.

Table III-3

Expected Contributions, Expected Net Benefit Payments, Assets and UAL under Current Funding Policy ($ in millions)

Fiscal Year Beginning July 1,	Expected Contributions	Expected Net Benefit Payments	Expected Assets	Expected UAL
2024	$ 563.5	$ 298.5	$ 1,298.6	$ 9,876.3
2025	396.8	328.5	1,460.2	10,154.5
2026	434.9	360.0	1,639.9	10,446.1
2027	476.1	390.9	1,842.8	10,762.5
2028	517.8	421.8	2,071.1	11,069.7
2029	562.2	454.7	2,327.3	11,365.8
2030	607.9	488.2	2,614.0	11,596.6
2031	653.7	521.3	2,934.0	11,803.5
2032	700.5	554.5	3,290.3	11,920.7
2033	746.4	586.2	3,686.4	11,928.3
2034	792.7	617.4	4,125.7	11,648.3
2035	838.3	647.2	4,612.2	10,749.1
2036	884.2	676.4	5,149.9	9,248.1
2037	931.5	706.2	5,743.5	8,286.4
2038	981.3	737.5	6,397.7	8,262.4
2039	1,031.9	768.6	7,117.9	8,200.1
2040	1,083.6	799.9	7,909.6	8,095.6
2041	1,139.4	834.2	8,779.0	7,941.4
2042	1,192.3	864.5	9,732.6	7,736.8
2043	1,245.8	894.2	10,777.6	7,477.1

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).

Table III-4
Reconciliation of Actuarial Liability
($ in millions)

	Actuarial Liability July 1, 2024	Normal Cost June 30, 2025	Annual Required Contribution June 30, 2025
Expected Values for July 1, 2024 based on the 7/1/2023 AVR	**$ 10,023.5**	**$ 391.3**	**$ 713.9**
Changes due to:			
Asset (Gain) / Loss	N/A	N/A	(2.0)
Demographic and Audit (Gain) / Loss	(111.0)	(2.7)	(8.6)
Health Cost Assumptions (Gain) / Loss	1,701.2	75.9	138.0
Discount Rate (Gain) / Loss	(508.6)	(35.2)	(37.8)
Total Changes	**$ 1,081.7**	**$ 37.9**	**$ 89.7**
July 1, 2024 valuation results based on the 7/1/2024 AVR	**$ 11,105.1**	**$ 429.2**	**$ 803.6**

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, 2023 and July 1, 2024.
- *Asset* changes refer to the change in the expected market value compared to actual market value.
- *Demographic and audit* changes refer to the change in actual current and potential future beneficiary data and elections from July 1, 2023 to July 1, 2024. The active and inactive populations both increased since the prior valuation. This also includes the programming updates related to the actuarial audit.
- *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 and trends are anticipated to be higher than our prior assumptions and reflect the impact of GLP-1 prescription drugs and other high-cost drugs.
- *Discount Rate* refers to the decrease in the liability due to the increase in the discount rate from 3.65% to 3.94%.

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 3.94% discount rate, to provide some measure of sensitivity.

Table IV-1
Actuarial Liability
As of July 1, 2024
Pay-As-You-Go Funding
(3.94% assumed discount)
($ in millions)

Health Care Trend Rate	-1%	Base	1%
Actuarial Liability			
Actives	$ 4,572.5	$ 5,838.7	$ 7,556.5
Retirees	4,709.6	5,266.4	5,937.0
Total	**$ 9,282.1**	**$ 11,105.1**	**$ 13,493.5**
Assets	957.5	957.5	957.5
UAL	**$ 8,324.6**	**$ 10,147.6**	**$ 12,536.0**

Table IV-2
Annual Required Contributions – FY2025
Pay-As-You-Go Funding
(3.94% assumed discount)
($ in millions)

Health Care Trend Rate	-1%	Base	1%
Normal Cost	$ 333.6	$ 429.2	$ 561.3
UAL Amortization	307.1	374.4	462.5
Total	**$ 640.7**	**$ 803.6**	**$ 1,023.8**

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, 2024
Pay-As-You-Go Funding
($ in millions)

Discount Rate	2.94%	3.94%	4.94%
Actuarial Liability			
Actives	$ 7,064.0	$ 5,838.7	$ 4,882.4
Retirees	5,984.5	5,266.4	4,683.4
Total	**$ 13,048.5**	**$ 11,105.1**	**$ 9,565.8**
Assets	957.5	957.5	957.5
UAL	**$ 12,091.0**	**$ 10,147.6**	**$ 8,608.3**

Table IV-4
Annual Required Contributions – FY2025
Pay-As-You-Go Funding
($ in millions)

Discount Rate	2.94%	3.94%	4.94%
Normal Cost	$ 565.3	$ 429.2	$ 328.9
UAL Amortization	384.7	374.4	365.4
Total	**$ 950.0**	**$ 803.6**	**$ 694.3**

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 $6.3 billion rather than $10.1 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 $544.2 million, or $259.4 million below the ARC under the State's current PAYGo and additional contribution funding policy. The $544.2 million is $245.7 million higher than the expected PAYGo cost of $298.5 million for FYE 2025. This year the contribution is expected to be $563.5 million, which is $19.2 million more than the contribution on the actuarial basis due to the additional escheat funds contribution.

If the State increases its contribution, but it is still less than the actuarially funded scenario, the discount rate will increase above the 3.94% discount rate, and the resulting liabilities and ADC payments will likely fall between the two discount rate scenarios presented in this report.

Table V-1
Actuarial Liability
Actuarial Funding
(7.0% assumed discount)
($ in millions)

	State Employees	Judges	Closed State Police	Open State Police	Total
Actives	$ 3,371.6	$ 2.5	$ -	$ 109.9	$ 3,484.0
Retirees	3,627.9	5.0	47.0	102.5	3,782.4
Total	**$ 6,999.5**	**$ 7.5**	**$ 47.0**	**$ 212.4**	**$ 7,266.4**
Assets*	922.5	1.0	6.0	28.0	957.5
UAL	**$ 6,077.0**	**$ 6.5**	**$ 41.0**	**$ 184.4**	**$ 6,308.9**

* Assets allocated in proportion to liabilities

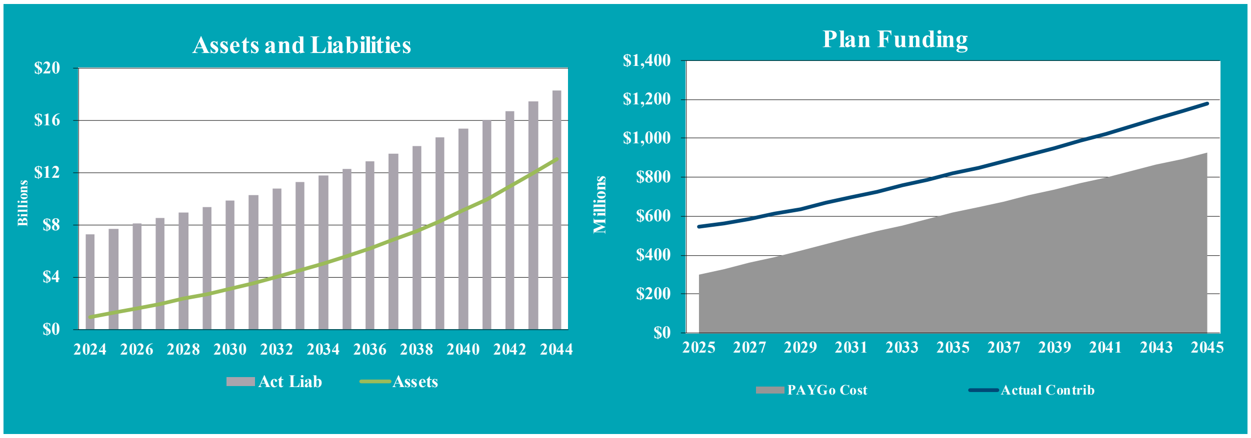
Table V-2
Actuarially Determined Contributions – FY2025
Actuarial Funding
(7.0% assumed discount)
($ in millions)

	State Employees	Judges	Closed State Police	Open State Police	Total
Normal Cost	$ 188.3	$ 0.2	$ -	$ 6.9	$ 195.4
UAL Amortization	335.9	0.4	2.3	10.2	348.8
Total	**$ 524.2**	**$ 0.6**	**$ 2.3**	**$ 17.1**	**$ 544.2**

SECTION V – ACTUARIAL FUNDING

Actuarial Funding

Looking beyond 2024, 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 $7.3 billion to $18.3 billion during the next 20 years. The green line shows the assets increasing from $957 million to about $13 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 $298 million to $925 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 $544.1 million to $1,176 million.

SECTION V – ACTUARIAL FUNDING

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

Table V-3
Expected Contributions,
Expected Net Benefit Payments,
Assets and UAL under Actuarial Funding
($ in millions)

Fiscal Year Beginning July 1,	Expected Contributions	Expected Net Benefit Payments	Expected Assets	Expected UAL
2024	$ 544.1	$ 298.5	$ 1,278.6	$ 6,389.8
2025	564.5	328.5	1,612.1	6,464.7
2026	586.6	360.0	1,959.4	6,532.8
2027	611.5	390.9	2,324.7	6,593.2
2028	638.6	421.8	2,711.8	6,644.9
2029	667.3	454.7	3,121.5	6,686.7
2030	696.8	488.2	3,555.8	6,717.4
2031	727.0	521.3	4,017.4	6,735.5
2032	757.4	554.5	4,508.5	6,739.6
2033	788.2	586.2	5,033.1	6,727.9
2034	819.5	617.4	5,594.4	6,698.7
2035	851.3	647.2	6,197.1	6,650.1
2036	883.9	676.4	6,845.6	6,580.2
2037	917.4	706.2	7,543.3	6,486.6
2038	951.9	737.5	8,293.1	6,367.0
2039	987.4	768.6	9,099.9	6,218.1
2040	1,023.9	799.9	9,968.6	6,036.6
2041	1,061.2	834.2	10,901.2	5,819.2
2042	1,099.2	864.5	11,907.0	5,562.4
2043	1,137.7	894.2	12,992.4	5,262.3

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.

Table VI-1
Schedule of Funding Progress
($ millions)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Liabilities (b)	Unfunded Actuarial Liabilities (UAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAL as a Percentage of Covered Payroll [(b-a)/c]
7/1/2024	$ 957	$ 11,105	$ 10,148	8.62%	$ 2,864	354%
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%

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.

Table VI-2
Schedule of Employer Contributions
($ in millions)

Fiscal Year Beginning July 1,	Annual Required Contribution (ARC)	Percentage of ARC Contributed
2024	$ 803.6	*To be determined*
2023	690.5	76%
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%

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, 2024
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	3.94%
Rate of Salary Increases	2.50% (plus merit scale)
Ultimate Rate of Medical Inflation	3.90%

APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS

Participant Data as of July 1, 2024

Census as of July 1, 2024	State Employees	Judges	Closed State Police	Open State Police	Total
Eligible Active Employees	40,420	60	0	717	41,197
Actives with coverage	**33,410**	**54**	**0**	**665**	**34,129**
Eligible Terminated Vesteds	4,169	3	0	15	4,187
Eligible LTDs	506	0	0	0	506
Retirees and Disableds with coverage	21,241	26	273	308	21,848
Beneficiaries with coverage	2,335	13	109	9	2,466
Total Inactives with coverage	**23,576**	**39**	**382**	**317**	**24,314**
Spouses with coverage	8,969	17	190	189	9,365
Total Inactives and Spouses with coverage	**32,545**	**56**	**572**	**506**	**33,679**
Total with coverage	**65,955**	**110**	**572**	**1,171**	**67,808**

Eligible Active Employees

Age	State Employees	Judges	Closed State Police	Open State Police	Total
Under 25	1,471	0	0	34	1,505
25 to 30	3,342	0	0	94	3,436
30 to 35	4,077	0	0	132	4,209
35 to 40	4,946	0	0	129	5,075
40 to 45	5,334	7	0	107	5,448
45 to 50	5,382	5	0	105	5,492
50 to 55	5,466	10	0	109	5,585
55 to 60	4,894	14	0	7	4,915
60 to 65	3,510	10	0	0	3,520
Over 65	1,998	14	0	0	2,012
Total	**40,420**	**60**	**0**	**717**	**41,197**

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	63	0	0	21	84
50 to 55	332	1	0	25	358
55 to 60	1,145	1	0	96	1,242
60 to 65	2,475	1	3	100	2,579
65 to 70	4,153	3	22	63	4,241
70 to 75	4,811	9	92	12	4,924
75 to 80	4,635	12	118	0	4,765
80 to 85	3,095	6	78	0	3,179
85 to 90	1,726	4	46	0	1,776
Over 90	1,141	2	23	0	1,166
Total	**23,576**	**39**	**382**	**317**	**24,314**

New Entrant Population Statistics			
	State Employees	Judges	State Police
Average Age	38	55	27
Average Salary	$38,972	$172,492	$54,785
% Blue PPO	16%	50%	35%
% Aetna HMO/CDH	46%	25%	51%
% Nonelect	38%	25%	14%

Economic Assumptions

1. ***Discount Rate:*** 3.94% 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

APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS

3. *Salary Increase Rates:*

State Employees:
Service-based tables include an annual inflation rate of 2.5%

Service	Rate
0	13.26%
1	9.57
2	6.50
3	6.09
4	5.58
5	5.37
6	5.06
7	4.96
8	4.55
9	4.35
10	4.04
11	3.83
12	3.73
13	3.53
14	3.42
15	3.27
16	2.91
17	2.81
18	2.71
19	2.60
20	2.50
21+	2.29

Elected Officials are assumed to receive a flat 2.5% increase annually.

Judges: For all future years, the salary increase is assumed to equal the assumed annual inflation rate of 2.50%.

State Police:
Service-based tables include an annual inflation rate of 2.5%

Service	Rate
0	12.24%
1	9.16
2	7.62
3	6.60
4	6.09
5	5.83
6-24	5.58
25+	4.55

APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS

4. ***Aggregate Payroll Growth for Amortization:*** 3.25% per year

5. ***Budget Growth for 1% SB 175 Contribution:*** 3.60% per year

6. ***Assumed General Fund Budget FY 2025:*** $5,802 million

7. ***Per Person Cost Trends:***

Date To Year Beginning July 1	Annual Increase			
	Pre-65 Medical	Post-65 Medical	Pre-65 Pharmacy	Post-65 Pharmacy
2025	8.0%	5.0%	14.0%	10.0%
2026	8.0	5.0	11.0	10.0
2027	8.0	5.0	9.0	9.0
2028	7.5	5.0	7.5	7.0
2029	7.1	5.0	7.1	6.6
2030	6.6	5.0	6.6	6.3
2031	6.2	4.9	6.2	5.9
2032	5.7	4.9	5.7	5.6
2033	5.3	4.9	5.3	5.2
2034	4.9	4.9	4.9	4.9
2035	4.5	4.5	4.5	4.5
2036	4.3	4.3	4.3	4.3
2037	4.2	4.2	4.2	4.2
2038	4.2	4.2	4.2	4.2
2039	4.1	4.1	4.1	4.1
2040	4.1	4.1	4.1	4.1
2041	4.1	4.1	4.1	4.1
2042	4.1	4.1	4.1	4.1
2043	4.1	4.1	4.1	4.1
2044	4.0	4.0	4.0	4.0
2045	3.9	3.9	3.9	3.9

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

8. *Per Person Contribution Trends:*

Date To Year Beginning July 1	Annual Increase	
	Pre-65 Contribution	Post-65 Contribution
2025	17.9%	0.0%
2026	17.9	0.0
2027	17.9	0.0
2028	6.0	6.0
2029	5.8	5.8
2030	5.6	5.6
2031	5.4	5.4
2032	5.2	5.2
2033	5.1	5.1
2034	4.9	4.9
2035	4.5	4.5
2036	4.3	4.3
2037	4.2	4.2
2038	4.2	4.2
2039	4.1	4.1
2040	4.1	4.1
2041	4.1	4.1
2042	4.1	4.1
2043	4.1	4.1
2044	4.0	4.0
2045	3.9	3.9

Demographic Assumptions

1. *Rates of Retirement:*

State Employees:

Retirement Rates*					
General Employees (including Elected Officials)			Correctional Officers/ Specified Peace Officers		
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

100% retirement is assumed upon reaching age 80.

* 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.

APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS

2. *Rate of Withdrawal:*

State Employees:

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

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

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

APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS

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.

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 and Judges:

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):

(2024 Values Shown)		
Age	Male	Female
25	3	1
30	5	2
35	7	3
40	9	4
45	10	5
50	14	8
55	21	12
60	33	19
65	47	28
70	65	43
75	97	71
80	155	122

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 0.85% 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

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

(2024 Values Shown)		
Age	Male	Female
50	30	21
55	44	29
60	68	40
65	98	58
70	150	93
75	253	166
80	458	308
85	846	588
90	1,478	1,104
95	2,311	1,807
100	3,328	2,722

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 0.85% 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

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

(2024 Values Shown)		
Age	Male	Female
25	36	22
30	54	38
35	74	59
40	91	79
45	113	101
50	160	146
55	216	187
60	275	217
65	326	227
70	384	266
75	493	374
80	704	584
85	1,065	937
90	1,637	1,392
95	2,385	1,963
100	3,328	2,886

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 0.85% 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:

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	7	3
40	9	4
45	10	5
50	14	8
55	21	12
60	33	19
65	47	28
70	65	43
75	97	71
80	155	122

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 0.85% 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. One-third of deaths are assumed duty-related, and two-thirds are assumed non-duty related.

APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS

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

(2024 Values Shown)		
Age	Male	Female
50	30	21
55	44	29
60	68	40
65	98	58
70	150	93
75	253	166
80	458	308
85	846	588
90	1,478	1,104
95	2,311	1,807
100	3,328	2,722

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 0.85% 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

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

(2024 Values Shown)		
Age	Male	Female
25	36	22
30	54	38
35	74	59
40	91	79
45	113	101
50	160	146
55	216	187
60	275	217
65	326	227
70	384	266
75	493	374
80	704	584
85	1,065	937
90	1,637	1,392
95	2,385	1,963
100	3,328	2,886

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 0.85% 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. ***Retiree Coverage Election:*** 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. ***Terminated Vested Participant Contributions:*** Terminated vested participants are assumed to contribute 50% of the full premium.

***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, 2024. 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, 2024 – June 30, 2025 are below.

Healthy Retirees & All Dependents

	Blue PPO		Aetna HMO/CDH		Pharmacy	
Age	Male	Female	Male	Female	Male	Female
40	$ 448	$ 813	$ 443	$ 804	$ 123	$ 153
45	592	842	585	832	160	182
50	775	969	766	958	203	215
55	999	1,186	987	1,172	253	252
60	1,262	1,396	1,248	1,380	309	292
64	1,502	1,418	1,485	1,402	359	327
65	160	146	160	146	324	316
70	193	166	193	166	364	330
75	235	198	235	198	355	324
80	279	233	279	233	322	306
85	318	264	318	264	283	283

APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS

Disabled Retirees

	Blue PPO		Aetna HMO/CDH		Pharmacy	
Age	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**
40	$ 448	$ 693	$ 445	$ 687	$ 354	$ 363
45	608	766	603	759	497	497
50	789	901	782	894	631	619
55	970	1,076	962	1,066	713	690
60	1,141	1,211	1,131	1,200	722	689
64	1,271	1,191	1,259	1,179	678	637
65	240	220	240	220	485	473
70	289	249	289	249	546	496
75	352	297	352	297	533	487
80	418	349	418	349	483	459
85	478	395	478	395	425	424

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 retirees: 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*:** 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 2022-2023 and FY 2023-2024 retiree experience paid through July 30, 2024. Claims were trended from FYE 2024 to FYE 2025 at 5.0% for non-Medicare medical, 5.0% for Medicare medical, and 8.0% for pharmacy. From this data, we developed per person per month (PPPM) costs and then adjusted those using age curves. Claims costs include a 4.2% load for expenses, based on the State health care actuary's projected expenses.

Changes Since Last Valuation

The discount rate was increased from 3.65% to 3.94% based on the 20-yr GO Bond rates. The trend assumption was also updated to reflect future market expectations. The per capita healthcare costs were also updated to reflect recent and expected future experience. Lastly, the mortality assumptions were updated to align with the assumptions used in the pension valuations.

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 2024 v1b Society of Actuaries Long-Run Medical Cost Trend Model with the following parameters:

Initial trend rate 2025:	
Non-Medicare Eligible Medical:	8.0%
Medicare Medical:	5.0%
Non-Medicare Eligible Pharmacy	14.0%
Medicare Pharmacy:	10.0%
Non-Medicare Eligible Contribution	17.9%
Medicare Contribution	0.0%
Inflation:	2.50%
Real GDP per Capita:	1.40%
Excess Medical Cost Growth:	1.00%
Expected GDP Share in 2031:	19.8%
Resistance Point:	17.7%
Year limited to GDP growth:	2044

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 2026 to 2028 were based on recently updated general industry information, our view of the marketplace and the State health care actuary's projected expenses. For the remaining assumptions, we have reviewed the baseline assumptions for the model and found them to be reasonable with the exception of the expected health share of GDP in 2033 which is set to 19.8% of GDP. This assumption is consistent with the trends through 2033 and also with the 2023 Medicare Trustees report projection for 2031. The share of GDP above which cost growth is assumed to meet resistance was set to 0.177 to reflect that the share of GDP for four years pre-pandemic remained at 0.177.

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.

Disability Retirement:

Eligibility: Pre-2012 hires: 5 years of credited service and eligible disability
Post-2011 hires: 10 years of credited service and eligible disability

Judges:

Normal Retirement:

<u>Judges appointed before July 1, 1980:</u>

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.

<u>Judges appointed after June 30, 1980:</u>

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.

Disability Retirement:

Eligibility: Must have 12 years of service;

APPENDIX B – SUBSTANTIVE PLAN PROVISIONS

Closed State Police:

Normal Retirement:

Age 55 or 20 years of credited service.

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.

Disability:

Eligibility: (i) Must have 5 years of service; 0 years of service for a duty related disability

<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 or an active participant's related death based on the participant's eligibility at time of 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	$200
Outpatient Surgery	Deductible + Coinsurance	$150 / visit; $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	$10 / $32 / $60	$10 / $32 / $60
90 Day Supply - Tier 1/Tier II/Tier III Copay	$20 / $64 / $120	$20 / $64 / $120
Detail Benefits		
Mental Health (MH) / Substance Abuse (SA):		
-Per Visit	Deductible + Coinsurance	No Charge
-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 determined by medical necessity	15% coinsurance; visit limit determined by medical necessity
Chiropractors:	Deductible + Coinsurance; 30 visit max per year except for treatment of back pain	15% coinsurance; 30 visit max per year except for treatment of back pain
Transplants:	Covered at OON cost share when member does not use Blue Distinction Center	Covered at OON cost share when member does not use Blue Distinction Center
Laboratory:	Deductible + Coinsurance	$10 for labs; $50 / $100 for imaging services
Durable Medical Equipment	Deductible + Coinsurance	0% member cost share
Preventive Care:	Covered at 100%	No Charge

Blue Cross Blue Shield First State Basic – 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.

Highmark Blue Cross Blue Shield Blue Delaware – 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

Delaware 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	$10 / $32 / $60	$10 / $32 / $60
90 Day Supply - Tier 1/Tier II/Tier III Copay	$20 / $64 / $120	$20 / $64 / $120
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 except for treatment of back pain
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 / $100 for imaging services: $50 / diagnostic services	Deductible + Coinsurance
Durable Medical Equipment	20% coinsurance	Deductible + Coinsurance
Preventive Care:	No Charge	Covered at 100%

Aetna – 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.

Aetna – 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 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.

APPENDIX B – SUBSTANTIVE PLAN PROVISIONS

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, CVS Caremark, and prescription copays are not applicable to the medical deductible or out-of-pocket maximum.

Special Medicfill Medicare Supplement (Administered by Blue Cross Blue Shield of Delaware) – 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.

CVS Caremark Prescription Coverage – When you enroll in a healthcare plan you will automatically be enrolled in the prescription drug plan managed by CVS Caremark. 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.

2024 Prescription Copay Rates			
State of Delaware Prescription Coverage	Tier 1 Generic	Tier 2 Preferred*	Tier 3 Non-Preferred
30-DAY Supply	$ 10.00	$ 32.00	$ 60.00
90-DAY Supply	20.00	64.00	120.00

*"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

Retiree Contributions:

If hired prior to July 1, 1991, or are on disability retirement, no contributions are required.

If hired on or after July 1, 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%

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, 2024			
	Total Monthly Rate	State Pays	Pensioner Contributions
Highmark Delaware First State Basic PPO Plan			
Employee	$1,049.58	$1,007.60	$41.98
Employee & Spouse	$2,171.54	$2,084.66	$86.88
Employee & Child(ren)	$1,595.46	$1,531.64	$63.82
Family	$2,714.52	$2,605.92	$108.60
Aetna CDH Gold Plan			
Employee	$1,086.30	$1,031.98	$54.32
Employee & Spouse	$2,252.36	$2,139.74	$112.62
Employee & Child(ren)	$1,659.68	$1,576.70	$82.98
Family	$2,861.42	$2,718.36	$143.06
Aetna HMO Plan			
Employee	$1,095.74	$1,024.50	$71.24
Employee & Spouse	$2,310.26	$2,160.08	$150.18
Employee & Child(ren)	$1,676.20	$1,567.24	$108.96
Family	$2,882.68	$2,695.30	$187.38
Highmark Delaware Comprehensive PPO Plan			
Employee	$1,198.24	$1,039.48	$158.76
Employee & Spouse	$2,486.48	$2,157.00	$329.48
Employee & Child(ren)	$1,846.70	$1,602.02	$244.68
Family	$3,108.44	$2,696.58	$411.86
Highmark Delaware Medicare Supplement for Pensioners Retired On or Prior to July 1, 2012			
Special Medicfill with Prescription	$612.40	$612.40	$0
Special Medicfill **without** Prescription*	$347.20	$347.20	$0
Highmark Delaware Medicare Supplement for Pensioners Retired After July 1, 2012			
Special Medicfill with Prescription	$612.40	$581.78	$30.62
Special Medicfill **without** Prescription*	$347.20	$329.84	$17.36

Changes Since Last Valuation

There were no substantive plan changes since the prior valuation.

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:

Amount		Probability of Payment		1/ (1+Discount Rate)		Present Value
$100	x	(1 - .01)	x	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. **Discount Rate**
   The assumed interest rate used for converting projecting dollar related values to a present value as of the valuation date.

10. **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.

11. **Funded Percentage**
    The ratio of the actuarial value of assets to the actuarial liabilities.

12. **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.

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

14. **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.

15. **Unfunded Actuarial Liability**
    The excess of the actuarial liability over the actuarial value of assets.

APPENDIX D – ABBREVIATION LIST

Actuarial Liability (AL)
Actuarial Valuation Report (AVR)
Actuarially Determined Contribution (ADC).
Annual Required Contribution (ARC)
Coordination of Benefits (COB)
Deductible and Coinsurance (DC)
Durable Medical Equipment (DME)
Employee Assistance Program (EAP)
Fiscal Year Ending (FYE)
Governmental Accounting Standards Board (GASB)
Hospital Emergency Room (ER)
In-Network (INN)
Inpatient (IP)
Medicare Eligible (ME)
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)
Pharmacy (Rx)
Preferred Provider Organization (PPO)
Primary Care Physician (PCP)
Specialist Care Provider (SCP)
Summary Plan Description (SPD)
Unfunded Actuarial Liability (UAL)
Urgent Care (UC)