

## **State of Delaware**

### **Postretirement Health Plan Actuarial Valuation Report as of July 1, 2016**

**Produced by Cheiron  
January 2017**

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*Letter of Transmittal*

January 25, 2017

Mr. David Craik  
Pension Administrator  
Delaware Public Employees Retirement System  
860 Silver Lake Boulevard, Suite 1  
Dover, Delaware 19904

Dear Dave:

As requested, we have performed an analysis of the Postretirement Health Plan provided by the State of Delaware as of July 1, 2016. The following report contains our findings and disclosures required by The Governmental Accounting Standards Board (GASB) standard.

The purpose of this report is to present the annual 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 #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 43 and 45 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.

This report does not reflect future changes in benefits, penalties or taxes, or administrative costs that may be required as a result of the Patient Protection and Affordable Care Act of 2010, related legislation, or regulations. The report reflects an estimated cost for the temporary Transitional Reinsurance contribution.

To the best of our knowledge, this report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion

David Craik  
January 25, 2017  
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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 any other user.

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

Sincerely,  
Cheiron



Margaret A. Tempkin, FSA, MAAA  
Principal Consulting Actuary



Michael W. Schionning, FSA, MAAA  
Principal Consulting Actuary

cc: Stephanie Scola  
Kris Knight  
Dawn Haw-Young

**STATE OF DELAWARE  
POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2016**

**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, 2016. The primary purposes of performing this actuarial valuation are to:

- Determine the annual required contribution (ARC) and the net other postemployment benefit (OPEB) obligation (NOO) of the retiree health benefit under GASB Statements 43 and 45 and the current funding strategy;
- Provide disclosures for financial statements; and
- Provide projections for the ARC, NOO and actuarial 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***

The Governmental Accounting Standards Board (GASB) has released Statement 43 regarding financial reporting for post-employment benefit plans other than pension plans and a companion Statement (number 45) regarding the employer accounting for these plans. Statement 43 is generally applicable where an entity has a separate trust or fund for OPEB benefits. We understand the System received approval that the trust used to fund future OPEB costs does qualify as a separate trust for GASB purposes. Statement 45, which was adopted in the fiscal year ending June 30, 2008, requires the plan sponsor to book the actuarial cost (net of employee and retiree contributions) of the plan as an expense on its financial statements and then accrue a liability to the extent actual contributions were less than this expense. Additional disclosures include a description of the plan, summary of significant accounting policies, contributions, and a statement of funding progress, along with the methods and assumptions used for those disclosures.

This report does not reflect any changes in postemployment benefit accounting requirements from GASB No. 74 and 75 Statements for OPEB plans. The new statements would be effective for the plan year ending June 30, 2017. All references and calculations with respect to GASB reflect current Statements No. 43 and 45.

***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.

STATE OF DELAWARE  
POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2016

SECTION I – SUMMARY

*Valuation Results*

The table below presents the key results of the 2015 and 2016 valuations.

<b>Table I-1</b>		
<b>Summary of Key Valuation Results</b>		
<b>(\$ In Millions)</b>		
	<b>July 1, 2015</b>	<b>July 1, 2016</b>
Actuarial Liability (AL)	\$ 6,321.2	\$ 8,039.1
Assets	<u>312.4</u>	<u>310.0</u>
Unfunded Actuarial Liability (UAL)	\$ 6,008.8	\$ 7,729.2
	<b>June 30, 2016</b>	<b>June 30, 2017</b>
Fiscal Year Ending		
Annual Required Contribution	\$ 425.6	\$ 542.5
Actual / <i>Expected</i> Contribution	217.8	207.4
Actual / <i>Expected</i> Net Benefit Payments	234.3	207.4
Actual / <i>Expected</i> Net OPEB Obligation	2,390.8	2,729.7

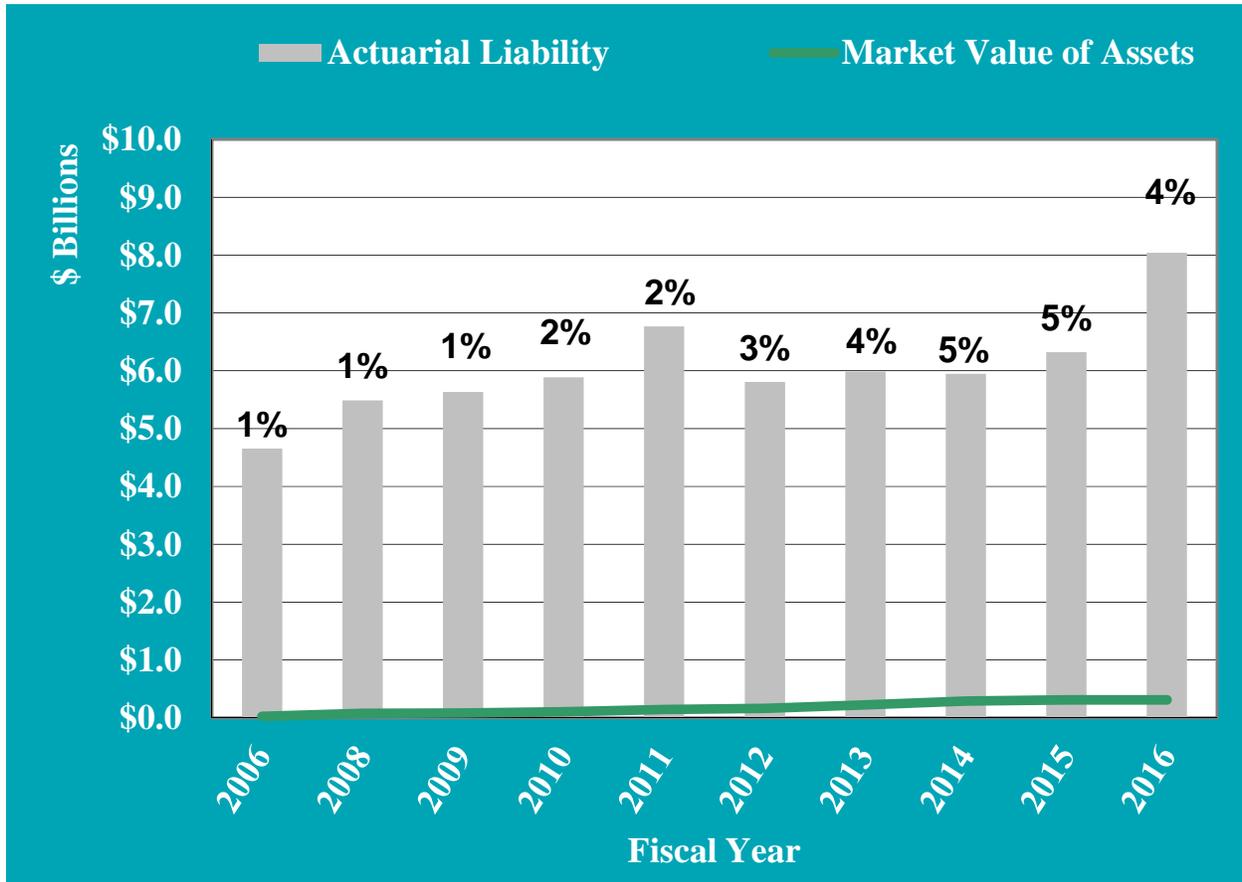
The figures provided in this report are highly sensitive to the assumptions used.

The change in experience during the year resulted in an increase in the AL of approximately \$1,729 million. More detail on the effects of these changes can be found in the valuation results section of this report.

STATE OF DELAWARE  
POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2016

SECTION I – SUMMARY

*Historical Trends*



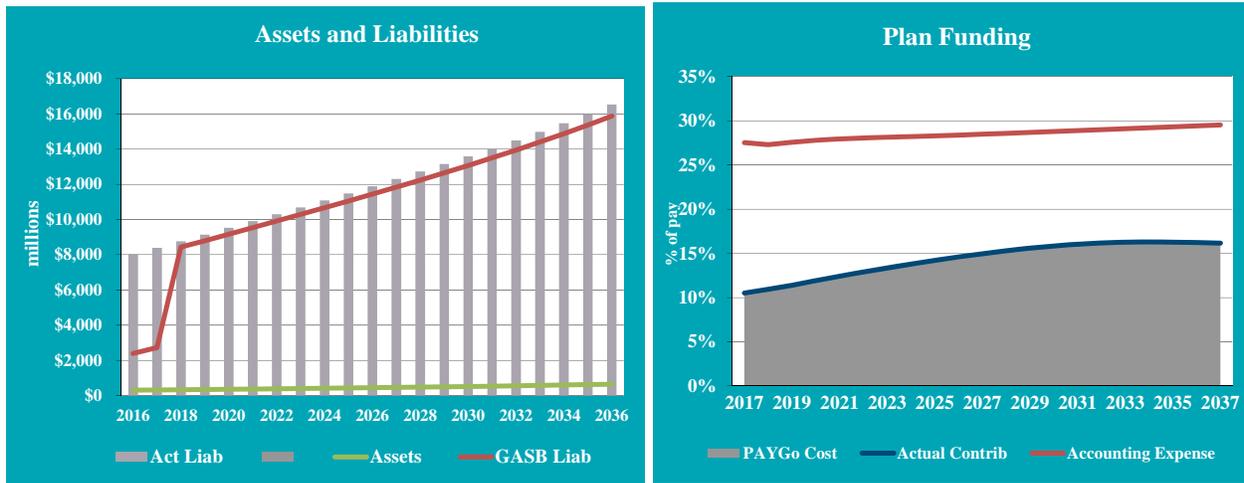
This chart shows the historical trend of assets and the actuarial liability for the State of Delaware's Postretirement Health Plan. The first valuation complying with GASB 43 and 45 was performed in 2006. The reduction in actuarial liability in 2012 was primarily due to the Plan changes. The increase in actuarial liability in 2016 was due to the demographic decrement changes from the 2015 experience study adopted in 2016. The percentages above the grey bars represent the ratio of the market value of assets over the actuarial liability.

**STATE OF DELAWARE  
POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2016**

**SECTION I – SUMMARY**

***Projected Trends***

Looking beyond 2016, 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 \$8.0 billion to \$16.5 billion during the next 20 years. The red line on the same chart shows the liability appearing on the State’s financial statements, which is projected to increase from \$2.39 billion to \$2.73 billion at July 1, 2017. In July 1, 2018 and later the liability appearing on the State’s financial statements changes, per GASB No. 74 and No. 75, to the unfunded liability, which increases to \$8.43 billion in 2018 to over \$15.88 billion by the end of the 20-year period. The green line shows the assets increasing from \$310 million to \$648 million.

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 10.5% of pay or \$207 million to 16.2% of pay or \$604 million. The blue line represents the State’s assumed contributions. Under PAYGo funding they match the net benefit payments; the accounting expense, shown by the red line, increases from 27.5% of pay or \$542.5 million in FY 2017 to 29.5% of pay or \$1.12 billion in FYE 2037.

***Please note that GASB No. 74 and 75 statements would materially alter the disclosures for fiscal years beginning after 2017.*** The changes from the GASB No. 74 and 75 statements are not reflected in the report.

**STATE OF DELAWARE  
POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2016**

**SECTION II – ASSETS**

The Plan's last valuation of liabilities was performed as of July 1, 2015. Table II-1 below shows the reconciliation of assets for the fiscal year. This section reconciles to the assets of July 1, 2016 that were used to develop the FYE 2017 ARC.

<b>Table II-1 Reconciliation of Assets (\$ in millions)</b>	
<b>Valuation Assets as of July 1, 2015</b>	<b>\$ 312.4</b>
Contributions for Fiscal Year *	
State Contributions	\$ 217.7
Transfer from outside the system	0.2
Retiree Contributions	<u>9.6</u>
Total Contributions	\$ 227.4
Benefit Payments *	234.3
Expenses	
Investment Earnings	4.4
<b>Valuation Assets as of July 1, 2016</b>	<b>\$ 310.0</b>

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

**STATE OF DELAWARE  
POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2016**

**SECTION III – VALUATION RESULTS**

This section of the report calculates the current and expected future contribution requirements under the City’s funding policy. This valuation calculates contributions for FYE 2017. Information about the actuarial liabilities of the Plan as of July 1, 2016 is shown in Table III-1 below.

<b>Table III-1 Actuarial Liability Pay-As-You-Go Funding (3.75% assumed discount) (\$ in millions)</b>					
	<b>State Employees</b>	<b>Judges</b>	<b>Closed State Police</b>	<b>Open State Police</b>	<b>Total</b>
Actives	\$ 4,033.2	\$ 4.3	\$ -	\$ 157.4	\$ 4,194.9
Retirees	<u>3,686.7</u>	<u>5.2</u>	<u>77.6</u>	<u>74.8</u>	<u>3,844.3</u>
<b>Total</b>	<b>\$ 7,719.9</b>	<b>\$ 9.5</b>	<b>\$ 77.6</b>	<b>\$ 232.2</b>	<b>\$ 8,039.2</b>
Assets*	298.0	-	3.0	9.0	310.0
<b>UAL</b>	<b>\$ 7,421.9</b>	<b>\$ 9.5</b>	<b>\$ 74.6</b>	<b>\$ 223.2</b>	<b>\$ 7,729.2</b>

\*Assets allocated in proportion to liabilities

Please note, however, that GASB only requires disclosure of the above actuarial liability in the notes to financial statements and does not require immediate recognition of the entire liability on the balance sheet. GASB’s requirement is to book the annual OPEB expense (the ARC adjusted for the difference between the amortization of the NOO and interest on the NOO), and the cumulative difference between the annual OPEB expense and actual contributions, beginning in the FYE June 30, 2008, as the NOO on the balance sheet.

The ARC 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 amortization of the unfunded actuarial liability (UAL). The UAL under pay-as-you-go (PAYGo) funding will be larger than under actuarial funding. The entire ARC is not a new expense. Under the current funding method of PAYGo, the State pays for the benefits currently provided to existing retirees. The difference between the actual contributions made (benefits provided) and the annual required contributions is the increase in expense on the financial statements of the State.

In Table III-2 below, we show the computed FY 2016-17 annual required contribution (ARC) under the State’s funding policy and a 3.75% assumed discount rate.

<b>Table III-2 GASB ARC – FY2017 Pay-As-You-Go Funding (3.75% assumed discount) (\$ in millions)</b>					
	<b>State Employees</b>	<b>Judges</b>	<b>Closed State Police</b>	<b>Open State Police</b>	<b>Total</b>
Normal Cost	\$ 255.1	\$ 0.3	\$ -	\$ 9.6	\$ 265.0
UAL Amortization	<u>266.4</u>	<u>0.3</u>	<u>2.7</u>	<u>8.0</u>	<u>277.4</u>
<b>Total</b>	<b>\$ 521.5</b>	<b>\$ 0.6</b>	<b>\$ 2.7</b>	<b>\$ 17.6</b>	<b>\$ 542.4</b>

**STATE OF DELAWARE  
POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2016**

**SECTION III – VALUATION RESULTS**

Table III-3 shows the employer contributions, benefit payments, assets and NOO/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. Note that the large increase in the NOO/NOL is due to the changes required by GASB No.74 and No. 75 to show the entire unfunded actuarial liability on the balance sheet rather than the accumulated NOO.

<b>Table III-3</b>					
<b>Expected Contributions, Expected Net Benefit Payments, Assets and NOL under PAYGo Funding</b>					
<b>(\$ in millions)</b>					
<b>Fiscal Year</b>	<b>Expected Net</b>				
<b>Ending</b>	<b>Expected</b>	<b>Benefit</b>	<b>Expected</b>	<b>Expected</b>	<b>Expected</b>
<b>June 30,</b>	<b>Contributions</b>	<b>Payments</b>	<b>Assets</b>	<b>NOO/NOL</b>	<b>NOO/NOL</b>
2017	\$ 207.4	\$ 207.4	\$ 310.0	\$ 2,729.7	
2018	222.7	222.7	321.6	8,399.4	
2019	239.3	239.3	333.7	8,768.1	
2020	258.2	258.2	346.2	9,144.4	
2021	278.5	278.5	359.2	9,525.4	
2022	297.9	297.9	372.6	9,909.5	
2023	318.7	318.7	386.6	10,297.8	
2024	340.1	340.1	401.1	10,689.4	
2025	361.5	361.5	416.1	11,084.8	
2026	383.4	383.4	431.7	11,485.1	
2027	406.0	406.0	447.9	11,890.8	
2028	428.5	428.5	464.7	12,302.6	
2029	450.3	450.3	482.2	12,721.5	
2030	473.3	473.3	500.2	13,149.5	
2031	494.9	494.9	519.0	13,586.3	

STATE OF DELAWARE  
POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2016

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).

	(\$ in millions)		
	Actuarial Accrued Liability July 1, 2016	Normal Cost June 30, 2017	Annual Required Contribution June 30, 2017
<b>Expected Values for July 1, 2016 based on the 7/1/2015 AVR</b>	<b>\$ 6,578.6</b>	<b>\$ 202.2</b>	<b>\$ 443.3</b>
<u>Changes due to:</u>			
Asset (Gain) / Loss	N/A	N/A	0.6
Demographic (Gain) / Loss	21.4	-	0.8
Health Cost Assumptions (Gain) / Loss	(98.2)	-	(3.5)
Other Assumptions (Gain) / Loss	1,537.4	62.8	101.2
<b>Total Changes</b>	<b>\$ 1,460.6</b>	<b>\$ 62.8</b>	<b>\$ 99.1</b>
<b>July 1, 2016 valuation results based on the 7/1/2016 AVR</b>	<b>\$ 8,039.2</b>	<b>\$ 265.0</b>	<b>\$ 542.4</b>

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, 2015 and July 1, 2016.
- *Asset* changes refer the change in the expected market value to actual market value.
- *Demographic* changes refer to the change in actual current and potential future beneficiary data and elections from July 1, 2015 to July 1, 2016. There were more retirees than assumed electing medical coverage. The increase in liability due to the retirees was dampened by the active liability decrease.
- *Change in Health Cost Assumptions* refers to the change in actual claim curves compared to the expected claims based on the prior year claims.
- *Other Assumptions* changes refer to the changes in demographic assumptions as well as changes in economic assumptions other than those relating to health costs. The increase in the liability is due to the demographic decrement changes from the 2015 experience study that were adopted in 2016.

STATE OF DELAWARE  
POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2016

**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 health care trend rates on the actuarial liability, the ARC, and the net expected benefit payments, using the 3.75% discount rate, to provide some measure of sensitivity.

<b>Table IV-1</b>			
<b>Actuarial Liability</b>			
<b>As of July 1, 2016</b>			
<b>Pay-As-You-Go Funding</b>			
<b>(3.75% assumed discount)</b>			
<b>(\$ in millions)</b>			
<b>Health Care Trend Rate</b>	<b>-1%</b>	<b>Base</b>	<b>1%</b>
<b>Actuarial Liability</b>			
Actives	\$ 3,527.3	\$ 4,194.9	\$ 4,997.1
Retirees	<u>3,418.2</u>	<u>3,844.3</u>	<u>4,362.1</u>
<b>Total</b>	<b>\$ 6,945.5</b>	<b>\$ 8,039.2</b>	<b>\$ 9,359.2</b>
Assets	<u>310.0</u>	<u>310.0</u>	<u>310.0</u>
<b>UAL</b>	<b>\$ 6,635.5</b>	<b>\$ 7,729.2</b>	<b>\$ 9,049.2</b>

<b>Table IV-2</b>			
<b>GASB ARC – FY2017</b>			
<b>Pay-As-You-Go Funding</b>			
<b>(3.75% assumed discount)</b>			
<b>(\$ in millions)</b>			
<b>Health Care Trend Rate</b>	<b>-1%</b>	<b>Base</b>	<b>1%</b>
Normal Cost	\$ 184.4	\$ 265.0	\$ 385.3
UAL Amortization	<u>221.1</u>	<u>277.4</u>	<u>301.7</u>
<b>Total</b>	<b>\$ 405.5</b>	<b>\$ 542.4</b>	<b>\$ 687.0</b>

STATE OF DELAWARE  
POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2016

**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.

<b>Table IV-3</b>			
<b>Actuarial Liability</b>			
<b>As of July 1, 2016</b>			
<b>Pay-As-You-Go Funding</b>			
<b>(\$ in millions)</b>			
<b>Discount Rate</b>	<b>2.75%</b>	<b>3.75%</b>	<b>4.75%</b>
<b>Actuarial Liability</b>			
Actives	\$ 5,165.5	\$ 4,194.9	\$ 3,454.0
Retirees	4,399.1	3,844.3	3,398.1
<b>Total</b>	<b>\$ 9,564.6</b>	<b>\$ 8,039.2</b>	<b>\$ 6,852.1</b>
Assets	310.0	310.0	310.0
<b>UAL</b>	<b>\$ 9,254.6</b>	<b>\$ 7,729.2</b>	<b>\$ 6,542.1</b>

<b>Table IV-4</b>			
<b>GASB ARC – FY2017</b>			
<b>Pay-As-You-Go Funding</b>			
<b>(\$ in millions)</b>			
<b>Discount Rate</b>	<b>2.75%</b>	<b>3.75%</b>	<b>4.75%</b>
Normal Cost	\$ 350.3	\$ 265.0	\$ 202.6
UAL Amortization	264.5	277.4	252.2
<b>Total</b>	<b>\$ 614.8</b>	<b>\$ 542.4</b>	<b>\$ 454.8</b>

**STATE OF DELAWARE  
POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2016**

**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 ARC. If the State were to establish a funding policy of contributing the ARC, the discount rate could be increased. Using a discount rate of 7.20% (matching the pension assumption) produces an unfunded liability of \$4.6 billion, rather than \$7.7 billion.

In addition to the change in overall liability, the ARC will also decrease. Thus, in order to fund on an actuarial basis, the State needs to contribute \$351.6 million, or \$190.8 million below the ARC under PAYGo. The \$351.6 million is \$144.2 higher than the expected PAYGo cost of \$207.4 million for FYE 2017.

If the State increases its contribution, but it is still less than the actuarially funded scenario, the discount rate will increase above the 3.75% discount rate, and the resulting liabilities and ARC payments will likely fall between the two discount rate scenarios presented in this report.

<b>Table V-1 Actuarial Liability Actuarial Funding (7.20% assumed discount) (\$ in millions)</b>					
	<b>State Employees</b>	<b>Judges</b>	<b>Closed State Police</b>	<b>Open State Police</b>	<b>Total</b>
Actives	\$ 2,163.3	\$ 2.8	\$ -	\$ 82.4	\$ 2,248.5
Retirees	<u>2,507.8</u>	<u>3.7</u>	<u>55.1</u>	<u>48.9</u>	<u>2,615.5</u>
<b>Total</b>	<b>\$ 4,671.1</b>	<b>\$ 6.5</b>	<b>\$ 55.1</b>	<b>\$ 131.3</b>	<b>\$ 4,864.0</b>
Assets*	298.0	-	4.0	8.0	310.0
<b>UAL</b>	<b>\$ 4,373.1</b>	<b>\$ 6.5</b>	<b>\$ 51.1</b>	<b>\$ 123.3</b>	<b>\$ 4,554.0</b>

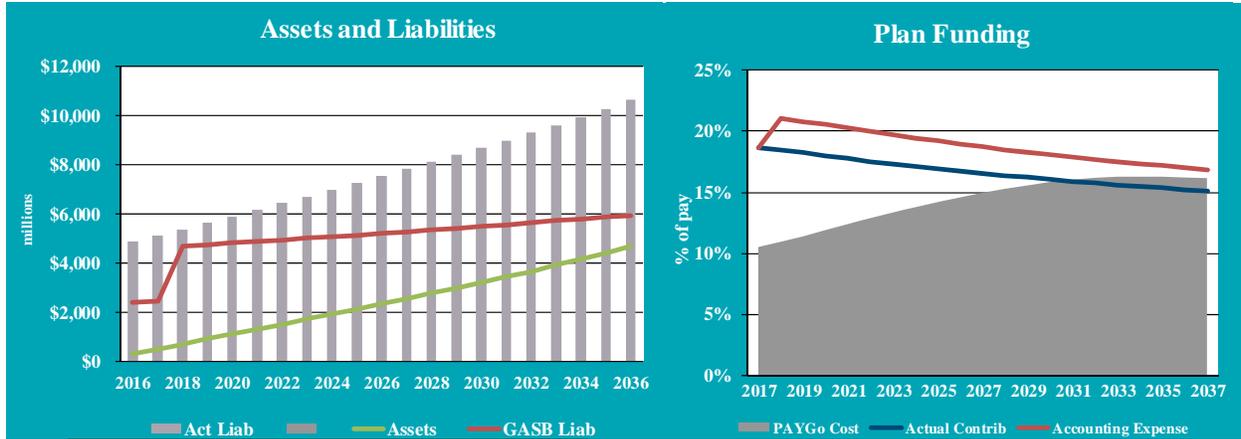
\* Assets allocated in proportion to liabilities

<b>Table V-2 GASB ARC – FY2017 Actuarial Funding (7.20% assumed discount) (\$ in millions)</b>					
	<b>State Employees</b>	<b>Judges</b>	<b>Closed State Police</b>	<b>Open State Police</b>	<b>Total</b>
Normal Cost	\$ 105.4	\$ 0.1	\$ -	\$ 4.0	\$ 109.5
UAL Amortization	<u>232.6</u>	<u>0.3</u>	<u>2.8</u>	<u>6.5</u>	<u>242.1</u>
<b>Total</b>	<b>\$ 338.0</b>	<b>\$ 0.4</b>	<b>\$ 2.8</b>	<b>\$ 10.5</b>	<b>\$ 351.6</b>

**STATE OF DELAWARE  
POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2016**

**SECTION V – ACTUARIAL FUNDING**

Looking beyond 2016, the charts below project the assets and liabilities and the funding costs for the next 20 years assuming the State amortizes the liability over an open 30-year period.



As the above chart on the left shows, the actuarial liability increases from \$4.9 billion to \$10.6 billion during the next 20 years. The red line on the same chart shows the liability appearing on the State’s financial statements, which is projected to remain fairly stable over the period. The green line shows the assets increasing from \$310 million to about \$4.7 billion. The difference between the grey bars and the green line results in the unfunded actuarial liability, which is projected to increase from \$4.6 billion today to \$5.9 billion over the 20-year period.

The chart on the right shows the annual costs. Benefit payments, net of retiree contributions, are shown by the grey area and increase from 10.5% of pay or \$207 million to 16.2% of pay or \$604 million, the same as in the pay-as-you-go scenario. The blue line represents the State’s contribution. The red line represents the expense, which is higher than the contributions because it includes the change in the unfunded liability as well as the contribution. Under actuarial funding (paying the full ARC and a 7.20% discount rate) the GASB expense on the State’s financial statements decreases as a percentage of pay.

*Please note that GASB No. 74 and 75 statements would materially alter the disclosures for fiscal years beginning after 2017. The changes from the GASB No. 74 and 75 statements are not reflected in the report.*

**STATE OF DELAWARE  
POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2016**

**SECTION V – ACTUARIAL FUNDING**

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

<b>Table V-3 Expected Contributions, Expected Net Benefit Payments, Assets and NOL under Actuarial Funding (\$ in millions)</b>				
<b>Fiscal Year Ending June 30,</b>	<b>Expected Contributions</b>	<b>Expected Net Benefit Payments</b>	<b>Expected Assets</b>	<b>Expected NOO/NOL</b>
2017	\$ 367.4	\$ 207.4	\$ 498.0	\$ 2,427.5
2018	375.3	222.7	691.9	4,676.8
2019	383.1	239.3	890.6	4,739.4
2020	390.7	258.2	1,091.8	4,802.8
2021	398.1	278.5	1,294.3	4,867.1
2022	405.6	297.9	1,499.0	4,932.2
2023	413.4	318.7	1,704.9	4,998.2
2024	421.5	340.1	1,912.0	5,065.2
2025	430.1	361.5	2,120.7	5,132.9
2026	439.2	383.4	2,331.1	5,201.7
2027	448.7	406.0	2,543.1	5,271.3
2028	458.6	428.5	2,757.4	5,341.8
2029	468.9	450.3	2,975.1	5,413.3
2030	479.5	473.3	3,195.8	5,485.8
2031	490.5	494.9	3,421.4	5,559.2

**STATE OF DELAWARE  
POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2016**

**SECTION VI – ACCOUNTING DISCLOSURES**

**Statement No. 43 and 45 of the Governmental Accounting Standards Board (GASB)** 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.

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets (a)</b>	<b>Actuarial Accrued Liabilities (b)</b>	<b>Unfunded Actuarial Accrued Liabilities (UAAL) (b-a)</b>	<b>Funded Ratio (a/b)</b>	<b>Covered Payroll (c)</b>	<b>UAAL as a Percentage of Covered Payroll [(b-a)/c]</b>
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%
7/1/2012	163	5,805	5,641	2.80%	1,885	299%
7/1/2011	144	6,769	6,625	2.10%	1,787	371%
7/1/2010	104	5,884	5,780	1.80%	1,798	321%
7/1/2009	83	5,636	5,553	1.50%	1,811	307%
7/1/2008	79	5,489	5,410	1.40%	1,770	306%
7/1/2006	25	4,656	4,631	0.50%	1,644	282%

**STATE OF DELAWARE  
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**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.

<b>Table VI-2</b>			
<b>Schedule of Employer Contributions</b>			
<b>(\$ in millions)</b>			
<b>Fiscal Year Ended June 30</b>	<b>Annual Required Contribution (ARC)</b>	<b>Percentage of ARC Contributed</b>	<b>Net OPEB Obligation</b>
2017	\$ 542.5	<i>To be determined</i>	<i>To be determined</i>
2016	425.6	51%	\$ 2,390.8
2015	404.4	56%	2,174.4
2014	406.7	50%	1,988.5
2013	397.8	52%	1,777.5
2012	490.5	38%	1,588.9
2011	488.1	37%	1,279.4
2010	480.0	36%	963.9
2009	516.2	31%	648.9
2008	464.6	38%	288.8

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**SECTION VI – ACCOUNTING DISCLOSURES**

Table VI-3 below shows the development of the Net OPEB Obligation.

Table VI-3 Development of Net OPEB Obligation Pay-As-You-Go Funding (\$ in millions)		
	June 30, 2016	Projected June 30, 2017
Discount Rate	4.25%	3.75%
<b>1. Net OPEB Obligation/(Asset) at beginning of fiscal year</b>	<b>\$ 2,174.4</b>	<b>\$ 2,390.8</b>
2. Annual Required Contribution for FYE	\$ 425.6	\$ 542.5
3. Interest on Net OPEB Obligation/(Asset)	92.4	89.7
4. Adjustment to Annual Required Contribution	83.9	85.8
5. Annual OPEB Cost (2.) + (3.) – (4.)	\$ 434.1	\$ 546.4
6. Employer Contributions (Actual/Estimated)	\$ (217.8)	\$ (207.4)
<b>7. Net OPEB Obligation/(Asset) at end of fiscal year (1.) + (5.) + (6.)</b>	<b>\$ 2,390.8</b>	<b>\$ 2,729.7</b>

STATE OF DELAWARE  
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**SECTION VI – ACCOUNTING DISCLOSURES**

We have also provided a *Note to Required Supplementary Information* for the financial statements in Table VI-4.

<b>Table VI-4</b>	
<b>Note to Required Supplementary Information</b>	
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, 2016
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	3.75%
Rate of Salary Increases	3.25% (plus merit scale)
Ultimate Rate of Medical Inflation	4.00%

**STATE OF DELAWARE  
POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2016**

**APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS**

**Participant Data as of July 1, 2016**

Census as of July 1, 2016					
	State Employees	Judges	Closed State Police	Open State Police	Total
Eligible Active Employees	36,189	58	0	703	36,950
<b>Actives with coverage</b>	<b>29,332</b>	<b>54</b>	<b>0</b>	<b>649</b>	<b>30,035</b>
Eligible Terminated Vesteds	3,374	1	0	9	3,384
Eligible LTDs	647	0	0	0	647
Retirees and Disableds with coverage	18,948	27	345	147	19,467
Beneficiaries with coverage	2,112	14	92	4	2,222
<b>Total Inactives with coverage</b>	<b>21,060</b>	<b>41</b>	<b>437</b>	<b>151</b>	<b>21,689</b>
Spouses with coverage	8,050	20	261	111	8,442
<b>Total Inactives and Spouses with coverage</b>	<b>29,110</b>	<b>61</b>	<b>698</b>	<b>262</b>	<b>30,131</b>
<b>Total with coverage</b>	<b>58,442</b>	<b>115</b>	<b>698</b>	<b>911</b>	<b>60,166</b>

Eligible Active Employees					
Age	State Employees	Judges	Closed State Police	Open State Police	Total
Under 25	900	0	0	26	926
25 to 30	3,235	0	0	88	3,323
30 to 35	3,839	0	0	109	3,948
35 to 40	4,194	3	0	116	4,313
40 to 45	4,412	2	0	133	4,547
45 to 50	5,266	6	0	151	5,423
50 to 55	5,301	11	0	78	5,390
55 to 60	4,755	9	0	2	4,766
60 to 65	2,937	9	0	0	2,946
Over 65	1,350	18	0	0	1,368
<b>Total</b>	<b>36,189</b>	<b>58</b>	<b>0</b>	<b>703</b>	<b>36,950</b>

Retirees, Disables and Beneficiaries with Coverage					
Age	State Employees	Judges	Closed State Police	Open State Police	Total
Under 50	135	0	0	11	146
50 to 55	389	0	0	30	419
55 to 60	1,159	0	10	83	1,252
60 to 65	2,827	0	47	26	2,900
65 to 70	4,749	7	102	1	4,859
70 to 75	4,232	8	119	0	4,359
75 to 80	2,905	9	81	0	2,995
80 to 85	2,224	9	37	0	2,270
85 to 90	1,498	4	26	0	1,528
Over 90	942	4	15	0	961
<b>Total</b>	<b>21,060</b>	<b>41</b>	<b>437</b>	<b>151</b>	<b>21,689</b>

**STATE OF DELAWARE  
POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2016**

**APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS**

New Entrant Population Statistics			
	State Employees	Judges	State Police
Average Age	37	43	27
Average Salary	\$30,475	\$148,951	\$45,806
% Blue PPO	21%	33%	57%
% Blue HMO/CDH	28%	67%	14%
% Aetna HMO/CDH	7%	0%	21%
% Nonelect	44%	0%	7%

**Economic Assumptions**

1. *Discount Rate:* 3.75% per year
2. *Salary Growth (for Normal Cost):* 3.25% per year
3. *Aggregate Payroll Growth for Amortization:* 3.25% per year
4. *Per Person Cost Trends:*

Date To Year Beginning July 1	Annual Increase		
	Pre-65 Medical	Post-65 Medical	Pharmacy
2017	7.00%	4.00%	10.00%
2018	6.80	4.00	9.60
2019	6.60	4.00	9.20
2020	6.40	4.00	8.80
2021	6.20	4.00	8.40
2022	6.00	4.00	8.00
2023	5.80	4.00	7.60
2024	5.60	4.00	7.20
2025	5.40	4.00	6.80
2026	5.20	4.00	6.40
2027	5.00	4.00	6.00
2028	4.80	4.00	5.60
2029	4.60	4.00	5.20
2030	4.40	4.00	4.80
2031	4.20	4.00	4.40
2032 +	4.00	4.00	4.00

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

**STATE OF DELAWARE  
POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2016**

**APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS**

**Demographic Assumptions**

**1. Rates of Retirement:**

*State Employees:*

**Non-HB207 Employees (including General Assembly):**

Retirement Rates*		
Service	Early**	Normal
5-14	0.00%	15.00%
15	7.50%	20.00%
16	5.00%	17.50%
17	5.00%	15.00%
18	5.00%	12.50%
19	5.00%	15.00%
20	7.50%	30.00%
21	7.50%	27.50%
22-23	7.50%	20.00%
24	7.50%	17.50%
25	10.00%	27.50%
26	5.00%	20.00%
27-28	5.00%	25.00%
29	12.50%	25.00%
30	N/A	25.00%
>=31	N/A	20.00%

\* Rates only applicable if member meets eligibility.

\*\* Early retirement is increased by 5% for correctional officers classified as hazardous duty level A-1 where their early retirement is unreduced.

*Judges:*

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

- i. age 62 with 12 years of credited service
- ii. 24 years of credited service

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

*Closed State Police:*

None.

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POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2016**

**APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS**

*Open State Police:*

<b>Normal Retirement</b>	
<b>Service</b>	<b>Rate</b>
<10	0%
10-19	5
20	10
21-25	5
26-29	20
30-34	50
35+	100

Rates only applied once eligibility for retirement is reached.

**2. Rate of Withdrawal:**

*State Employees:*

<b>Rates of Termination*</b>	
<b>Service</b>	<b>Rates</b>
0	16.5%
1	15.5
2	11.0
3	9.0
4	7.5
5	6.5
6	5.0
7	4.5
8	4.0
9	3.5
10-11	3.0
12-13	2.5
14-15	2.0
16-18	1.5
19-24	1.0
>25	0.0

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

*Judges:*

None

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**APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS**

*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	0.0522%
25	0.0522
30	0.1831
35	0.2694
40	0.3821
45	0.4643
50	0.6214
55	0.8579
60	1.0699

Rates of Active Disability for those who opted into the Disability Insurance Program*	
Age	Rates
65	1.3018%
70	1.3464
75	1.7914
80	1.0234

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

**STATE OF DELAWARE  
POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2016**

**APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS**

*Judges:*

45% of 1946 Railroad Retirement Board Disability Rates

Rates of Active Disability	
Age	Current
20	0.0877%
25	0.1008
30	0.1080
35	0.1148
40	0.1323
45	0.1777
50	0.3208
55	0.6129
60	1.2420

*Closed State Police:*

None.

*Open State Police:*

Rates of Active Disability	
Age	Current
20	0.0522%
25	0.0522
30	0.1831
35	0.2694
40	0.3821
45	0.4643
50	0.6214
55	0.8579
60	1.0699

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.

**STATE OF DELAWARE  
POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2016**

**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):**

(2016 Values Shown)		
Age	Male	Female
25	5	2
30	5	2
35	5	3
40	7	4
45	10	6
50	18	11
55	30	17
60	51	25
65	90	37
70	153	64
75	261	110
80	441	190

Rates are based on 110% and 100% of the RP-2014 Total Dataset Employee Mortality Table, respectively, for males and females, using the RP-2014 Total Dataset Healthy Annuitant Mortality Table rates after the end of the Employee Mortality Table, both projected from the 2006 base rates using the RPEC-2015 model, with an ultimate rate of 0.85% for ages 20-85, grading down to an ultimate rate of 0% for ages 115-120, and convergence to the ultimate rate in the year 2020. The valuation uses fully generational projection of mortality improvements. Sample rates shown are those projected through the valuation date.

**STATE OF DELAWARE  
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**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):**

(2016 Values Shown)		
Age	Male	Female
50	44	27
55	62	36
60	84	53
65	119	81
70	185	130
75	302	213
80	508	360
85	885	638
90	1,553	1,138
95	2,447	1,868
100	3,500	2,796

Rates are based on 110% and 100% of the RP-2014 Total Dataset Healthy Annuitant Mortality Table, respectively, for males and females, using the RP-2014 Total Dataset Employee Mortality Table for ages prior to start of the Healthy Annuitant Mortality Table, both projected from the 2006 base rates using the RPEC-2015 model, with an ultimate rate of 0.85% for ages 20-85, grading down to an ultimate rate of 0% for ages 115-120, and convergence to the ultimate rate in the year 2020. The valuation uses fully generational projection of mortality improvements. Sample rates shown are those projected through the valuation date.

**STATE OF DELAWARE  
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**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):**

(2016 Values Shown)		
Age	Male	Female
25	93	28
30	89	35
35	105	49
40	126	67
45	196	105
50	240	138
55	276	174
60	313	207
65	375	252
70	486	342
75	666	502
80	949	757
85	1,411	1,145
90	2,157	1,690
95	3,019	2,453
100	3,973	3,446

Rates are based on 120% of the RP-2014 Total Dataset Disabled Annuitant Mortality Table, projected from the 2006 base rates using the RPEC-2015 model, with an ultimate rate of 0.85% for ages 20-85, grading down to an ultimate rate of 0% for ages 115-120, and convergence to the ultimate rate in the year 2020. The valuation uses fully generational projection of mortality improvements. Sample rates shown are those projected through the valuation date.

STATE OF DELAWARE  
POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2016

**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):**

(2016 Values Shown)		
Age	Male	Female
25	5	2
30	5	2
35	5	3
40	7	4
45	10	6
50	18	11
55	30	17
60	51	25
65	90	37
70	153	64
75	261	110
80	441	190

Rates are based on 110% and 100% of the RP-2014 Total Dataset Employee Mortality Table, respectively, for males and females, using the RP-2014 Total Dataset Healthy Annuitant Mortality Table rates after the end of the Employee Mortality Table, both projected from the 2006 base rates using the RPEC-2015 model, with an ultimate rate of 0.85% for ages 20-85, grading down to an ultimate rate of 0% for ages 115-120, and convergence to the ultimate rate in the year 2020. The valuation uses fully generational projection of mortality improvements. Sample rates shown are those projected through the valuation date.

STATE OF DELAWARE  
POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2016

**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):**

(2016 Values Shown)		
Age	Male	Female
50	44	27
55	62	36
60	84	53
65	119	81
70	185	130
75	302	213
80	508	360
85	885	638
90	1,553	1,138
95	2,447	1,868
100	3,500	2,796

Rates are based on 110% and 100% of the RP-2014 Total Dataset Healthy Annuitant Mortality Table, respectively, for males and females, using the RP-2014 Total Dataset Employee Mortality Table for ages prior to start of the Healthy Annuitant Mortality Table, both projected from the 2006 base rates using the RPEC-2015 model, with an ultimate rate of 0.85% for ages 20-85, grading down to an ultimate rate of 0% for ages 115-120, and convergence to the ultimate rate in the year 2020. The valuation uses fully generational projection of mortality improvements. Sample rates shown are those projected through the valuation date.

**STATE OF DELAWARE  
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**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):**

(2016 Values Shown)		
Age	Male	Female
25	93	28
30	89	35
35	105	49
40	126	67
45	196	105
50	240	138
55	276	174
60	313	207
65	375	252
70	486	342
75	666	502
80	949	757
85	1,411	1,145
90	2,157	1,690
95	3,019	2,453
100	3,973	3,446

Rates are based on 120% of the RP-2014 Total Dataset Disabled Annuitant Mortality Table, projected from the 2006 base rates using the RPEC-2015 model, with an ultimate rate of 0.85% for ages 20-85, grading down to an ultimate rate of 0% for ages 115-120, and convergence to the ultimate rate in the year 2020. The valuation uses fully generational projection of mortality improvements. Sample rates shown are those projected through the valuation date.

**STATE OF DELAWARE  
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**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):**

(2016 Values Shown)		
Age	Male	Female
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30	5	2
35	5	3
40	7	4
45	10	6
50	18	11
55	30	17
60	51	25
65	90	37
70	153	64
75	261	110
80	441	190

Rates are based on 110% and 100% of the RP-2014 Total Dataset Employee Mortality Table, respectively, for males and females, using the RP-2014 Total Dataset Healthy Annuitant Mortality Table rates after the end of the Employee Mortality Table, both projected from the 2006 base rates using the RPEC-2015 model, with an ultimate rate of 0.85% for ages 20-85, grading down to an ultimate rate of 0% for ages 115-120, and convergence to the ultimate rate in the year 2020. The valuation uses fully generational projection of mortality improvements. Sample rates shown are those projected through the valuation date.

**STATE OF DELAWARE  
POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2016**

**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):**

(2016 Values Shown)		
Age	Male	Female
50	44	27
55	62	36
60	84	53
65	119	81
70	185	130
75	302	213
80	508	360
85	885	638
90	1,553	1,138
95	2,447	1,868
100	3,500	2,796

Rates are based on 110% and 100% of the RP-2014 Total Dataset Healthy Annuitant Mortality Table, respectively, for males and females, using the RP-2014 Total Dataset Employee Mortality Table for ages prior to start of the Healthy Annuitant Mortality Table, both projected from the 2006 base rates using the RPEC-2015 model, with an ultimate rate of 0.85% for ages 20-85, grading down to an ultimate rate of 0% for ages 115-120, and convergence to the ultimate rate in the year 2020. The valuation uses fully generational projection of mortality improvements. Sample rates shown are those projected through the valuation date.

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POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2016**

**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):**

(2016 Values Shown)		
Age	Male	Female
25	93	28
30	89	35
35	105	49
40	126	67
45	196	105
50	240	138
55	276	174
60	313	207
65	375	252
70	486	342
75	666	502
80	949	757
85	1,411	1,145
90	2,157	1,690
95	3,019	2,453
100	3,973	3,446

Rates are based on 120% of the RP-2014 Total Dataset Disabled Annuitant Mortality Table, projected from the 2006 base rates using the RPEC-2015 model, with an ultimate rate of 0.85% for ages 20-85, grading down to an ultimate rate of 0% for ages 115-120, and convergence to the ultimate rate in the year 2020. 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.

**6. Family Composition:** 50% of employees will elect spouse coverage at retirement.

STATE OF DELAWARE  
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**APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS**

7. **Dependent Age:** For current active employees, males are assumed to be 3-years older than female spouses. For current retirees, actual spouse date of birth was used.
8. **Rationale for Assumptions:** The assumptions were adopted by the Board of Trustees upon the recommendations of the actuary, based on an experience study performed in 2016 and covering the period July 1, 2010 through June 30, 2015.

**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, 2016. Subsequent years' costs are based on the trended first year cost adjusted with trends listed above.

Due to the small enrollment on the BCBS CDH Gold Plan, claims experience was blended with the Bluecare HMO and the combined claims curve was used for both plans. Similarly, the experience of the Aetna CDH Gold Plan was combined with the Aetna HMO, and the combined claims curve was used for both plans.

*Healthy Retirees & All Dependents*

Age	Blue PPO		Bluecare HMO/CDH		Aetna HMO/CDH		Pharmacy	
	Male	Female	Male	Female	Male	Female	Male	Female
40	\$ 329	\$ 617	\$ 349	\$ 654	\$ 313	\$ 588	\$ 84	\$ 124
45	402	628	426	665	383	598	113	152
50	524	719	555	761	499	684	157	200
55	684	832	725	881	651	792	209	258
60	893	984	946	1,043	850	938	269	314
64	1,120	1,153	1,187	1,222	1,067	1,098	313	342
65	133	141	133	141	133	141	180	192
70	163	162	163	162	163	162	206	207
75	195	182	195	182	195	182	219	217
80	217	194	217	194	217	194	224	219
85	226	196	226	196	226	196	222	213

STATE OF DELAWARE  
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**APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS**

*Disabled Retirees*

Age	Blue PPO		Bluecare HMO/CDH		Aetna HMO/CDH		Pharmacy	
	Male	Female	Male	Female	Male	Female	Male	Female
40	\$ 220	\$ 427	\$ 230	\$ 445	\$ 212	\$ 411	\$ 90	\$ 132
45	273	440	285	459	263	424	121	162
50	361	498	377	520	348	480	167	213
55	471	559	492	584	455	538	223	274
60	612	671	640	701	591	647	287	335
64	756	785	790	821	729	757	333	364
65	199	212	199	212	199	212	270	289
70	244	243	244	243	244	243	308	311
75	292	273	292	273	292	273	329	326
80	325	291	325	291	325	291	337	328
85	339	294	339	294	339	294	333	320

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:** Are assumed to have no financial impact.
7. **Geography:** Implicitly assumed to remain the same as current retirees.

## 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.

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**APPENDIX A – PARTICIPANT DATA, ASSUMPTIONS AND METHODS**

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 2014-2015 and FY 2015-2016 retiree experience paid through March 31, 2016. Claims were trended from FYE 2015 to FYE 2016 at 6.5% for non-Medicare medical, 5.5% for Medicare medical, and 6.0% for pharmacy and from FYE 2016 to FYE 2017 at 6.5%, 5.5%, and 6.0% respectively. From this data, we developed per person per month (PPPM) costs and then adjusted those using age curves. Claims costs include a 5.2% load for expenses, based on the State health care actuary's projected expenses.

### **Changes Since Last Valuation**

Claim curves were updated to reflect the most recent experience.

Decrements were updated per the 2015 experience study.

Trends were updated to reflect anticipated healthcare trends.

**STATE OF DELAWARE  
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**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.

STATE OF DELAWARE  
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**APPENDIX B – SUBSTANTIVE PLAN PROVISIONS**

***Open State Police:***

*Normal Retirement:*

Eligibility: (i) Must be employed at 55 with ten 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.

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

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

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POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2016**

**APPENDIX B – SUBSTANTIVE PLAN PROVISIONS**

**Benefits:**

Provider Network:	Delaware NME Plans		
	First State Basic	BlueCross BlueShield PPO	BlueCross BlueShield CDH
<b>In-Network (INN) Benefits</b>			
Copays (Do not apply to DC <sup>1</sup> or OOP max)			
Office Visit (OV)-Primary Care(PCP)	Deductible + Coinsurance	\$20	Deductible + Coinsurance
OV - Specialist Care Provider (SCP)	Deductible + Coinsurance	\$30	Deductible + Coinsurance
Urgent Care (UC)	\$25	\$20	Deductible + Coinsurance
Hospital Emergency Room (ER)	Deductible + Coinsurance	\$150	Deductible + Coinsurance
Outpatient Surgery	Deductible + Coinsurance	\$50 / visit at ambulatory surgical centers	Deductible + Coinsurance
Hospital Inpatient	Deductible + Coinsurance	\$100 per day; max \$200 per visit	Deductible + Coinsurance
Deductible (Individual / Family)	\$500 / \$1,000	\$0	\$1,500 / \$3,000
Coinsurance	10%	0%	10%
Coinsurance Limit - Excl. Deductible (Individual / Family)	\$1,500 / \$3,000	None	\$3,000 / \$6,000
<b>Benefits Out-of-Network (OON)</b>			
Deductible (Individual / Family)	\$1,000 / \$2,000	\$300 / \$600	\$1,500 / \$3,000
Coinsurance	30%	20%	30%
Out-of-Pocket (OOP) Max (Individual / Family)	\$3,000 / \$6,000	\$7,200 / \$14,400	\$6,000 / \$12,000
<b>Lifetime Max (INN/OON)</b>	None	None	None
<b>Prescription Drug</b>			
30 Day Supply - Tier 1/Tier II/Tier III Copay	\$8 / \$28 / \$50	\$8 / \$28 / \$50	\$8 / \$28 / \$50
90 Day Supply - Tier 1/Tier II/Tier III Copay	\$16 / \$56 / \$100	\$16 / \$56 / \$100	\$16 / \$56 / \$100
<b>Detail Benefits</b>			
Mental Health (MH) / Substance Abuse (SA):			
-Per Visit	Deductible + Coinsurance	\$20	Deductible + Coinsurance
-Inpatient	Deductible + Coinsurance	\$100 copay / day; max \$200	Deductible + Coinsurance
-Per Year Outpatient \$ Maximum	None	None	None
-Per Lifetime Maximum	None	None	None
Rehabilitation (i.e., speech, occup. physical):	Deductible + Coinsurance; visit limit determined by medical necessity	15% coinsurance; visit limit determined by medical necessity	Deductible + Coinsurance; visit limit determined by medical necessity
Chiropractors:	Deductible + Coinsurance; 30 visit max per year	15% coinsurance; 30 visit max per year	Deductible + Coinsurance; 30 visit max per year
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	Covered at OON cost share when member does not use Blue Distinction Center
Laboratory:	Deductible + Coinsurance	\$10 for labs; \$20 / \$35 for imaging services	Deductible + Coinsurance
Durable Medical Equipment	Deductible + Coinsurance	0% member cost share	Deductible + Coinsurance
Preventive Care:	Covered at 100%	No Charge	Covered at 100%

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 \$1000 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.

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.

**STATE OF DELAWARE  
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**APPENDIX B – SUBSTANTIVE PLAN PROVISIONS**

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 therapy benefits.

Blue Cross Blue Shield Comprehensive Preferred Provider Organization (PPO) Plan – This Plan provides the freedom of choice that you experience with a traditional comprehensive plan. When participants obtain services in-network, they pay a small copay/coinsurance with no deductible, but they may also use an out-of-network provider to obtain benefits at a reduced level.

The Plan provides an expansive national network of participating providers. The in-network plan year total maximum out-of-pocket (TMOOP) is \$4,500 per employee and \$9,000 per family. Coinsurance and copays accrue toward the TMOOP. If you use out-of-network providers, you must meet a \$300 per person/\$600 per family plan year deductible, unless otherwise noted. The out-of-network total maximum out-of-pocket (TMOOP) is \$7,500 per person/\$15,000 per family per plan year. Deductibles, coinsurance and copays accrue toward the TMOOP.

The Comprehensive 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 therapy benefits.

Blue Cross Blue Shield CDH Gold – BCBSD'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).

Highmark Blue Cross Blue Shield Delaware'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 (Employee) coverage and \$3,000 for Family coverage. The HRA Fund pays the first \$1,250 in deductible expenses for Employee-only and \$2,500 for Family coverage. The member is financially responsible for the remaining in-network deductible (\$250 for Employee only coverage and \$500 for Family coverage). When the deductible is satisfied, in-network health care services are paid at 90%, with an in-network total maximum out-of-pocket (TMOOP) of \$4,500 for Employee only coverage and \$9,000 for Family coverage. Deductibles and coinsurance accrue toward the TMOOP.

There is a separate \$1,500 out-of-network deductible for Employee-only coverage and \$3,000 for Family coverage. When the deductible is satisfied, out-of-network health care services are paid at 70 percent, with a total maximum out-of-pocket (TMOOP) of \$7,500 for Employees and \$15,000 for Families. Deductibles and coinsurance accrue toward the TMOOP.

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**APPENDIX B – SUBSTANTIVE PLAN PROVISIONS**

In addition, preventive care services are covered at 100 percent and are not subject to a deductible or coinsurance. This plan also includes coverage for services such as outpatient, inpatient, prenatal and postnatal care, emergency, mental health care, laboratory, x-ray, vision, chiropractic and many others.

Provider Network:	Delaware NME Plans Cont.		
	BlueCross BlueShield HMO	Aetna HMO	Aetna CDH
<b>In-Network (INN) Benefits</b>			
Copays (Do not apply to DC <sup>1</sup> or OOP max)			
Office Visit (OV)-Primary Care(PCP)	\$15	\$15	Deductible + Coinsurance
OV - Specialist Care Provider (SCP)	\$25	\$25	Deductible + Coinsurance
Urgent Care (UC)	\$15	\$15	Deductible + Coinsurance
Hospital Emergency Room (ER)	\$50	\$150	Deductible + Coinsurance
Outpatient Surgery	\$100 / visit; \$50 / visit at ambulatory surgical centers	\$100 / visit; \$50 / visit at ambulatory surgical centers	Deductible + Coinsurance
Hospital Inpatient	\$100 per day; max \$200 per visit	\$100 per day; max \$200 per visit	Deductible + Coinsurance
Deductible (Individual / Family)	\$0	\$0	\$1,500 / \$3,000
Coinsurance	0%	0%	10%
Coinsurance Limit - Excl. Deductible (Individual / Family)	None	None	\$3,000 / \$6,000
<b>Benefits Out-of-Network (OON)</b>			
Deductible (Individual / Family)	Emergency Services Only	Emergency Services Only	\$1,500 / \$3,000
Coinsurance	N/A	N/A	30%
Out-of-Pocket (OOP) Max (Individual / Family)	N/A	N/A	\$6,000 / \$12,000
<b>Lifetime Max (INN/OON)</b>	None	None	None
<b>Prescription Drug</b>			
30 Day Supply - Tier 1/Tier II/Tier III Copay	\$8 / \$28 / \$50	\$8 / \$28 / \$50	\$8 / \$28 / \$50
90 Day Supply - Tier 1/Tier II/Tier III Copay	\$16 / \$56 / \$100	\$16 / \$56 / \$100	\$16 / \$56 / \$100
<b>Detail Benefits</b>			
Mental Health (MH) / Substance Abuse (SA):			
-Per Visit	\$15	\$25	Deductible + Coinsurance
-Inpatient	\$100 copay / day; max \$200	\$100 copay / day; max \$200	Deductible + Coinsurance
-Per Year Outpatient \$ Maximum	None	None	None
-Per Lifetime Maximum	None	None	None
Rehabilitation (i.e., speech, occup. physical):	20% coinsurance; PT limit of 45 visits per condition; ST & OT limited to 60 days	20% coinsurance; PT & OT limit of 45 visits per condition; ST 45 days per incidence	Deductible + Coinsurance; visit limit determined by medical necessity
Chiropractors:	20% coinsurance; limited to 60 consecutive days per acute condition	\$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	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; \$20 / \$35 for imaging services	\$10 for labs; \$20 / \$35 for imaging services; \$20 / diagnostic services	Deductible + Coinsurance
Durable Medical Equipment	20% coinsurance	20% coinsurance	Deductible + Coinsurance
Preventive Care:	No Charge	No Charge	Covered at 100%

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 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 therapy benefits. You’ll also have access to the Blue Cross Blue Shield nationwide network for urgent and emergency care while away from home.



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**APPENDIX B – SUBSTANTIVE PLAN PROVISIONS**

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.

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 for 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.

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.

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.

Express Scripts Prescription Coverage – 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 health coverage that is primary (pays first), the prescription coverage provided through the State’s plan for the spouse or dependents will become secondary.

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POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2016**

**APPENDIX B – SUBSTANTIVE PLAN PROVISIONS**

2016 Prescription Copay Rates			
State of Delaware	Tier 1	Tier 2	Tier 3
Prescription Coverage	Generic	Preferred	Non-Preferred
30-DAY Supply	\$ 8.00	\$28.00	\$50.00
90-DAY Supply	\$16.00	\$56.00	\$100.00
“Preferred” = Formulary			

**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%

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%

**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%

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**APPENDIX B – SUBSTANTIVE PLAN PROVISIONS**

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:

<b>Years of Service</b>	<b>Percent of State Share Paid by State</b>
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 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 won't be obligated to pay him. If the assumed investment return is 10%, the actuarial present value is:

$$\frac{\text{Amount}}{\$100} \times \frac{\text{Probability of Payment}}{(1 - .01)} \times \frac{1/}{(1+\text{Discount Rate})} = \frac{\text{Present Value}}{\$90}$$

**6. Actuarial Valuation**

The determination, as of a specified date, of the normal cost, actuarial liability, 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.

STATE OF DELAWARE  
POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2016

**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.

**STATE OF DELAWARE  
POSTRETIREMENT HEALTH VALUATION AS OF JULY 1, 2015**

**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)  
Pharmacy (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)