



State of Nevada

Postretirement Health and Life Insurance Plan

For the Fiscal Year Ending June 30, 2018

Measurement Date July 1, 2017

GASB 75 Accounting Results

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Executive Summary

Executive Summary

The Program offers health, prescription drug, dental, and life insurance coverage to retirees and their covered dependents. PEBP provides these benefits to participating retirees, spouses, and survivors. In addition, participants on long-term disability and their spouses can qualify for retiree health insurance benefits. All active employees who retire from the State of Nevada (the "State") and meet the eligibility criteria to participate in the Program will receive these benefits.

The following table summarizes key valuation results:

Liability Summary	June 30, 2017	June 30, 2018
Total OPEB Liability (Ending)	\$ 1,344,455,000	\$ 1,302,864,500
Plan Fiduciary Net Position (Ending)¹	\$ 1,331,900	\$ 1,476,200
Net OPEB Liability (Ending)	\$ 1,343,123,100	\$ 1,301,388,400
Net Position as a Percentage of OPEB Liability	0%	0%
OPEB Expense²	\$ 120,889,000	\$ 77,313,600

¹Data for Fiscal Year Ending June 30, 2017 and June 30, 2018 is based on the Fiscal Year Ending June 30, 2017 Financial Statements provided by the State on October 23, 2017.

² Fiscal Year Ending June 30, 2017 OPEB expense is shown for illustrative purposes. Amortizations calculated for Fiscal Year 2017 are not assumed to be recognized in Fiscal Year 2018 expense.

	June 30, 2018
Present Value of Benefits	
Active	\$ 1,212,267,700
Inactive	744,952,000
Total	\$ 1,957,219,700
Total OPEB Liability	
Active	\$ 557,912,500
Inactive	744,952,000
Total	\$ 1,302,864,500

The results displayed above were calculated based upon plan provisions and census data provided by the State, along with certain demographic and other actuarial assumptions as recommended by Aon, in conjunction with the State and guidance from the GASB statement. The Fiscal Year Ending June 30, 2017 GASB 75 results have been shown for comparison purposes.

The GASB 75 valuation results were determined using the Entry Age Normal (Level Percentage of Payroll) actuarial costing method. Previously under GASB 45, the valuation results were determined using the Projected Unit Credit actuarial costing method. The discount rate has also been updated to 3.58% for the GASB 75 valuation results, as compared to 4.00% in the Fiscal Year Ending June 30, 2017 GASB 45 valuations.

The balance of this report provides greater detail regarding the above results.

Executive Summary

Gain-Loss Summary

	<u>Liability</u>
GASB 45 Actuarial Accrued Liability for the Fiscal Year Ending June 30, 2017	\$ 1,499,224,000
Expected Actuarial Accrued Liability for the Fiscal Year Ending June 30, 2018	\$ 1,602,304,700
<u>Implementation of GASB 75</u>	
Update Discount Rate from 4.00% to 3.58%	\$ 1,669,751,400
Updated Actuarial Cost Method	\$ 1,510,781,400
Subtotal: Change due to GASB 75 Implementation	(6%)
<u>Change due to...</u>	
Updated Experience ¹	\$ 1,310,727,000
Updated Assumptions ²	\$ 1,302,864,500
Subtotal: Change due to Experience and Assumptions	(14%)
Total Change	(19%)

¹ Reflects updated census data as of January 1, 2018, updated claims experience and retiree premiums, and updated subsidy amounts.

² Reflects updated trend and excise tax assumptions.

The actuarial (gain) / loss is a measure of the difference between the actual experience and the expected experience based on the set of actuarial assumptions. The (gains) / losses occur during the period between two actuarial valuation dates and are determined in accordance with the Actuarial Cost Method.

In general, the Total OPEB Liability will increase annually with interest and the Service Cost (portion of the Present Value of Benefits that is allocated to the valuation year by the Actuarial Cost Method) and will reduce by the actual benefit payments.

The discount rate basis under GASB 75 is required to be consistent with a 20-Year Municipal Bond Index. The Bond Buyer General Obligation 20-Bond Municipal Bond Index is used for the determination of the discount rate. The discount rate used to determine the fiscal year ending June 30, 2018 Total OPEB Liability is 3.58%, a decrease from the discount rate of 4.00% used under GASB 45 as of July 1, 2016. This decrease in the discount rate resulted in an increase in the Total OPEB Liability under GASB 75.

The Government Accounting Standards Board Statement 75 (GASB 75) became effective for the fiscal year ending June 30, 2017, replacing the GASB 45 accounting standard. With the implementation of GASB 75, the Total OPEB Liability (referred to as the Actuarial Accrued Liability under GASB 45) must be determined using the Entry Age Normal actuarial cost method as opposed to the Projected Unit Credit actuarial cost method used under GASB 45. This change in actuarial cost method resulted in a decrease in the Total OPEB Liability.

Actuarial Certification

This report documents the results of the actuarial valuation for the fiscal year ending June 30, 2018 of the Retiree Benefits Program for the State of Nevada. These results are based on a Measurement Date of July 1, 2017. The information provided in this report is intended strictly for documenting information relating to the State and plan disclosure and reporting requirements.

Determinations for purposes other than the financial accounting requirements may be significantly different from the results in this report. Thus, the use of this report for purposes other than those expressed here may not be appropriate.

This valuation has been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board. In addition, the valuation results are based on our understanding of the financial accounting and reporting requirements under U.S. Generally Accepted Accounting Principles as set forth in Government Accounting Standards Board Statement 75 (GASB 75) including any guidance or interpretations provided by the State and/or its audit partners prior to the issuance of this report. The information in this report is not intended to supersede or supplant the advice and interpretations of the Plan Sponsor's auditors.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to (but not limited to) such factors as the following:

- Plan experience differing from that anticipated by the economic or demographic assumptions;
- Changes in actuarial methods or in economic or demographic assumptions;
- Increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and
- Changes in plan provisions or applicable law.

Due to the limited scope of our assignment, we did not perform an analysis of the potential range of such future measurements.

Funded status measurements shown in this report are determined based on various measures of plan assets and liabilities. For entity and plan disclosure and reporting purposes, funded status is determined using plan assets measured at market value. Plan liabilities are measured based on the interest rates and other assumptions summarized in the Actuarial Assumptions and Methods section of this report.

These funded status measurements may not be appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations, and the funded status measurements for the plan sponsor and plan disclosure and reporting purposes may not be appropriate for assessing the need for or the amount of future contributions. In conducting the valuation, we have relied on personnel, plan design, health care claim cost, and asset information supplied by the Plan Sponsor as of the valuation date. While we cannot verify the accuracy of all the information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy or completeness of the information and believe that it has produced appropriate results.

Actuarial Certification (continued)

The actuarial assumptions and methods used in this valuation are described in the Actuarial Assumptions and Methods section of this report. The Plan Sponsor selected the economic and demographic assumptions and prescribed them for use for purposes of compliance with GASB 75. Aon provided guidance with respect to these assumptions, and it is our belief that the assumptions represent reasonable expectations of anticipated plan experience.

The undersigned are familiar with the near-term and long-term aspects of OPEB valuations and collectively meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. The information provided in this report is dependent upon various factors as documented throughout this report, which may be subject to change. Each section of this report is considered to be an integral part of the actuarial opinions.

To our knowledge, no colleague of Aon providing services to the Plan Sponsor has any material direct or indirect financial interest in the Plan Sponsor. Thus, we believe there is no relationship existing that might affect our capacity to prepare and certify this actuarial report for the Plan Sponsor.



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June 4, 2018

Accounting Requirements

Accounting Requirements (continued)

Development of GASB 75 Net OPEB Expense

Calculation Details

The following table illustrates the Net OPEB Liability under GASB 75.

	Fiscal Year Ending	
	June 30, 2017	June 30, 2018
(1) OPEB Liability		
(a) Retired Participants and Beneficiaries		
Receiving Payment	\$ 816,057,700	\$ 744,952,000
(b) Active Participants	528,397,300	557,912,500
(c) Total	\$ 1,344,455,000	\$ 1,302,864,500
(2) Plan Fiduciary Net Position ¹	\$ 1,331,900	\$ 1,476,200
(3) Net OPEB Liability	\$ 1,343,123,100	\$ 1,301,388,300
(4) Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	0%	0%
(5) Deferred Outflow of Resources for Contributions Made After Measurement Date ²	\$ 38,048,600	TBD

¹Data for Fiscal Year Ending June 30, 2017 and June 30, 2018 is based on the Fiscal Year Ending June 30, 2017 Financial Statements provided by the State on October 23, 2017.

²Employer contributions made after June 30, 2017 are reported as a deferred outflow of resources but are not amortized in expense.

Expense

The following table illustrates the OPEB expense under GASB 75.

	Fiscal Year Ending	
	June 30, 2017 ²	June 30, 2018
(1) Service Cost	\$ 49,794,200	\$ 59,309,600
(2) Interest Cost	45,360,900	39,468,600
(3) Expected Investment Return	(119,900)	(37,700)
(4) Contributions from Non-Employer Contributing Entities ¹	-	-
(5) Administrative Expense	-	-
(6) Plan Changes	-	-
(7) Amortization of Unrecognized		
(a) Liability (Gain) / Loss	-	-
(b) Asset (Gain) / Loss	13,000	(25,400)
(c) Assumption Change (Gain) / Loss	25,840,800	(21,401,600)
(8) Total Expense	\$ 120,889,000	\$ 77,313,500

¹It is assumed that the State receives no contributions from non-employer contributing entities.

²Fiscal Year Ending June 30, 2017 expense is shown for illustrative purposes only. Amortizations calculated for Fiscal Year 2017 are not assumed to be recognized in expense for the Fiscal Year 2018 and beyond.

Accounting Requirements (continued)

Shown below are details regarding the calculation of Service, Interest Cost and Expected Investment Return components of the Expense.

		Fiscal Year Ending	
		June 30, 2017	June 30, 2018
(1)	Development of Service Cost:		
	(a) Normal Cost at Beginning of Measurement Period	\$ 49,794,200	\$ 59,309,600
(2)	Development of Interest Cost:		
	(a) Total OPEB Liability at Beginning of Measurement Period	\$ 1,161,713,000	\$ 1,344,455,000
	(b) Normal Cost at Beginning of Measurement Period	49,794,200	59,309,600
	(c) Actual Gross Benefit Payments ¹	(35,932,000)	(38,069,200)
	(d) Discount Rate	3.80%	2.85%
	(e) Interest Cost	\$ 45,360,900	\$ 39,468,600
(3)	Development of Expected Investment Return		
	(a) Plan Fiduciary Net Position at Beginning of Measurement Period ¹	\$ 4,996,200	\$ 1,331,900
	(b) Actual Contributions - Employer ¹	32,213,100	38,048,600
	(c) Actual Contributions - Member ¹	-	-
	(d) Actual Gross Benefit Payments ¹	(35,932,000)	(38,069,200)
	(e) Administrative Expenses	-	-
	(f) Other	-	-
	(g) Expected Return on Assets	3.80%	2.85%
	(h) Expected Return	\$ 119,900	\$ 37,700

¹Data for Fiscal Year Ending June 30, 2017 and June 30, 2018 is based on the Fiscal Year Ending June 30, 2017 Financial Statements provided by the State on October 23, 2017.

Accounting Requirements (continued)

Reconciliation of Net OPEB Liability

Shown below are details regarding the Total OPEB Liability, Plan Fiduciary Net Position, and Net OPEB Liability for the Measurement Period from June 30, 2017 to June 30, 2018 and from June 30, 2016 to June 30, 2017:

	Increase / (Decrease)		
	Total OPEB Liability (a)	Plan Fiduciary Net Position ¹ (b)	Net OPEB Liability (c) = (a) - (b)
Balance Recognized at June 30, 2017 (Based on July 1, 2016 Measurement Date)	\$ 1,344,455,000	\$ 1,331,900	\$ 1,343,123,100
Changes Recognized for the Fiscal Year			
Service Cost	\$ 59,309,600	N/A	\$ 59,309,600
Interest on the Total OPEB Liability	39,468,600	N/A	39,468,600
Changes of Benefit Terms	-	N/A	-
Differences Between Expected and Actual Experience	-	N/A	-
Changes of Assumptions	(102,299,500)	N/A	(102,299,500)
Gross Benefit Payments ¹	(38,069,200)	(38,069,200)	-
Contributions From the Employer ¹	N/A	38,048,600	(38,048,600)
Contributions From the Member ¹	N/A	-	-
Net Investment Income ¹	N/A	164,800	(164,800)
Administrative Expense	N/A	-	-
Net Changes	\$ (41,590,500)	\$ 144,300	\$ (41,734,700)
Balance Recognized at June 30, 2018 (Based on July 1, 2017 Measurement Date)	\$ 1,302,864,500	\$ 1,476,200	\$ 1,301,388,400

	Increase / (Decrease)		
	Total OPEB Liability (a)	Plan Fiduciary Net Position ¹ (b)	Net OPEB Liability (c) = (a) - (b)
Balance Recognized at June 30, 2016 (Based on July 1, 2015 Measurement Date)	\$ 1,161,713,000	\$ 4,996,200	\$ 1,156,716,800
Changes Recognized for the Fiscal Year			
Service Cost	\$ 49,794,200	N/A	\$ 49,794,200
Interest on the Total OPEB Liability	45,360,900	N/A	45,360,900
Changes of Benefit Terms	-	N/A	-
Differences Between Expected and Actual Experience	-	N/A	-
Changes of Assumptions	123,518,900	N/A	123,518,900
Gross Benefit Payments ¹	(35,932,000)	(35,932,000)	-
Contributions From the Employer ¹	N/A	32,213,100	(32,213,100)
Contributions From the Member ¹	N/A	-	-
Net Investment Income ¹	N/A	54,600	(54,600)
Administrative Expense	N/A	-	-
Net Changes	\$ 182,742,000	\$ (3,664,300)	\$ 186,406,300
Balance Recognized at June 30, 2017 (Based on July 1, 2016 Measurement Date)	\$ 1,344,455,000	\$ 1,331,900	\$ 1,343,123,100

¹ Data for Fiscal Year Ending June 30, 2017 and June 30, 2018 is based on the Fiscal Year Ending June 30, 2017 Financial Statements provided by the State on October 23, 2017.
Numbers may not add due to rounding. .

Accounting Requirements (continued)

Liability (Gain) / Loss

The following table illustrates the liability gain / loss under GASB 75.

	Fiscal Year Ending	
	June 30, 2017 ³	June 30, 2018
(1) OPEB Liability at Beginning of Measurement Period	\$ 1,161,713,000	\$ 1,344,455,000
(2) Service Cost	49,794,200	59,309,600
(3) Interest on the Total OPEB Liability	45,360,900	39,468,600
(4) Changes of Benefit Terms	-	-
(5) Changes of Assumptions	123,518,900	(102,299,500)
(6) Gross Benefit Payments ¹	(35,932,000)	(38,069,200)
(7) Expected OPEB Liability at End of Measurement Period	1,344,455,000	1,302,864,500
(8) Actual OPEB Liability at End of Measurement Period	1,344,455,000	1,302,864,500
(9) OPEB Liability (Gain) / Loss	\$ -	\$ -
(10) Average Future Working Life Expectancy ²	4.78	4.78
(11) OPEB Liability (Gain) / Loss Amortization	\$ -	\$ -
(12) Assumption Change (Gain) / Loss ⁵	123,518,900	(102,299,500)
(13) Average Future Working Life Expectancy ²	4.78	4.78
(14) Assumption Change (Gain) / Loss Amortization ⁴	\$ 25,840,800	\$ (21,401,600)

¹ Employer benefit payments were provided by the State.

² Based on the average of the expected remaining service lives of all active and inactive employees that are provided with benefits through the OPEB plan.

³ Fiscal Year Ending June 30, 2017 expense is shown for only illustrative purposes. Amortizations calculated for Fiscal Year 2017 are not assumed to be recognized in expense for the Fiscal Year 2018 and beyond.

⁴ Fiscal Year Ending June 30, 2017 amortizations are shown for only illustrative purposes. These amortizations are not assumed to be recognized for Fiscal Year Ending June 30, 2018 expense.

⁵ The \$123,518,900 increase in the liability from June 30, 2016 to June 30, 2017 is due to the decrease in the assumed discount rate from 3.80% as of June 30, 2016 to 2.85% as of June 30, 2017. The \$102,299,500 decrease in the liability from June 30, 2017 to June 30, 2018 is due to the increase in the assumed discount rate from 2.85% as of June 30, 2017 to 3.58% as of June 30, 2018.

Asset (Gain) / Loss

The following table illustrates the asset gain / loss under GASB 75.

	Fiscal Year Ending	
	June 30, 2017 ²	June 30, 2018
(1) OPEB Asset at Beginning of Measurement Period ¹	\$ 4,996,200	\$ 1,331,900
(2) Contributions - Employer ¹	32,213,100	38,048,600
(3) Contributions - Member ¹	-	-
(4) Expected Investment Income	119,900	37,700
(5) Gross Benefit Payments	(35,932,000)	(38,069,200)
(6) Administrative Expense	-	-
(7) Other	-	-
(8) Expected OPEB Asset at End of Measurement Period	1,397,200	1,349,000
(9) Actual OPEB Asset at End of Measurement Period ¹	1,331,900	1,476,200
(10) OPEB Asset (Gain) / Loss	\$ 65,300	\$ (127,200)
(11) Amortization Factor	5.00	5.00
(12) OPEB Asset (Gain) / Loss Amortization ³	\$ 13,000	\$ (25,400)

¹ Data for Fiscal Year Ending June 30, 2017 and June 30, 2018 is based on the Fiscal Year Ending June 30, 2017 Financial Statements provided by the State on October 23, 2017.

² Fiscal Year Ending June 30, 2017 expense is shown for only illustrative purposes. Amortizations calculated for Fiscal Year 2017 are not assumed to be recognized in expense for the Fiscal Year 2018 and beyond.

³ Fiscal Year Ending June 30, 2017 amortizations are shown for only illustrative purposes. These amortizations are not assumed to be recognized for Fiscal Year Ending June 30, 2018 expense.

Accounting Requirements (continued)

Deferred Outflows / Inflows

The following table illustrates the Deferred Inflows and Outflows as of June 30, 2018 under GASB 75.

	Deferred Outflows	Deferred Inflows
(1) Difference Between Actual and Expected Experience	\$ -	\$ -
(2) Net Difference Between Expected and Actual Earnings on OPEB Plan Investments	-	101,800
(3) Assumption Changes	-	80,897,900
(4) Sub Total	\$ -	\$ 80,999,700
(5) Contributions Made in Fiscal Year Ending 2018 After July 1, 2017 Measurement Date ¹	TBD	N/A
(6) Total	\$ -	\$ 80,999,700

¹ Employer contributions made after June 30, 2017 are reported as a deferred outflow of resources but are not amortized in expense.

Amortization of Deferred Inflows / Outflows

The table below lists the amortizations bases included in the deferred inflows/outflows as of June 30, 2018.

Date Established	Type of Base	Period ¹		Balance		Annual Payment
		Original	Remaining	Original	Remaining	
July 1, 2017	Liability (Gain) / Loss	4.78	3.78	\$ -	\$ -	\$ -
July 1, 2017	Asset (Gain) / Loss	5.00	4.00	\$ (127,200)	\$ (101,800)	\$ (25,400)
July 1, 2017	Assumptions	4.78	3.78	\$ (102,299,500)	\$ (80,897,900)	\$ (21,401,600)
	Total Charges				\$ (80,999,700)	\$ (21,427,000)

¹ Based on the average of the expected remaining service lives of all active and inactive employees that are provided with benefits through the OPEB plan.

Amounts Recognized in the deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in the OPEB expense as follows:

Fiscal Year Ending June 30,

2019	\$ (21,427,000)
2020	\$ (21,427,000)
2021	\$ (21,427,000)
2022	\$ (16,718,700)
Total Thereafter	\$ -

Accounting Requirements (continued)

Net OPEB Liability

The components of the Net OPEB Liability as of June 30, 2017 and June 30, 2018 are as follows:

Liability Summary	June 30, 2017	June 30, 2018
Total OPEB Liability (Ending)	\$ 1,344,455,000	\$ 1,302,864,500
Plan Fiduciary Net Position (Ending)¹	\$ 1,331,900	\$ 1,476,200
Net OPEB Liability (Ending)	\$ 1,343,123,100	\$ 1,301,388,400
Net Position as a Percentage of OPEB Liability	0%	0%
OPEB Expense²	\$ 120,889,000	\$ 77,313,500

¹ Data for Fiscal Year Ending June 30, 2017 and June 30, 2018 is based on the Fiscal Year Ending June 30, 2017 Financial Statements provided by the State on October 23, 2017.

² Fiscal Year Ending June 30, 2017 OPEB expense is shown for illustrative purposes. Amortizations calculated for Fiscal Year 2017 are not assumed to be recognized in Fiscal Year 2018 expense. Numbers may not add due to rounding.

Sensitivity of Net OPEB Liability to Changes in the Discount Rate

The following table illustrates the impact of discount rate sensitivity on the Net OPEB Liability for the fiscal year ending June 30, 2018:

	1% Decrease 2.58%	Current Rate 3.58%	1% Increase 4.58%
Total OPEB Liability (Ending)	\$ 1,442,123,700	\$ 1,302,864,500	\$ 1,182,219,900
Plan Fiduciary Net Position (Ending)¹	\$ 1,476,200	\$ 1,476,200	\$ 1,476,200
Net OPEB Liability (Ending)	\$ 1,440,647,500	\$ 1,301,388,400	\$ 1,180,743,700

Sensitivity of Net OPEB Liability to Changes in the Healthcare Cost Trend Rates

The following table illustrates the impact of healthcare cost trend sensitivity on the Net OPEB Liability for the fiscal year ending June 30, 2018:

	1% Decrease	Trend Rate	1% Increase
Total OPEB Liability (Ending)	\$ 1,219,450,900	\$ 1,302,864,500	\$ 1,401,228,100
Plan Fiduciary Net Position (Ending)¹	\$ 1,476,200	\$ 1,476,200	\$ 1,476,200
Net OPEB Liability (Ending)	\$ 1,217,974,700	\$ 1,301,388,400	\$ 1,399,751,900

¹ Data for Fiscal Years Ending June 30, 2017 and June 30, 2018 is based on the Fiscal Year Ending June 30, 2017 Financial Statements provided by the State on October 23, 2017.

Numbers may not add due to rounding.

Plan Membership

At January 1, 2018, the Program membership consisted of the following:

	January 1, 2018
Active Plan Members ¹	13,190
Inactive Plan Members or Beneficiaries Currently Receiving Benefits ²	12,551
Inactive Plan Members Entitled to but Not Yet Receiving Benefit Payments ²	2,272
Total Plan Members	28,013

¹ Active counts reflect those hired prior to January 1, 2012.

² Inactive counts include terminated vested participants and reflect State retirees only.

Accounting Requirements (continued)

Disclosure—Changes in the Net OPEB Liability and Related Ratios

	Fiscal Year Ending June 30,	
	2017	2018
Total OPEB Liability		
Service Cost	\$ 49,794,200	\$ 59,309,600
Interest Cost	45,360,900	39,468,600
Changes of Benefit Terms	-	-
Differences Between Expected and Actual Experiences	-	-
Changes of Assumptions	123,518,900	(102,299,500)
Gross Benefit Payments ¹	(35,932,000)	(38,069,200)
Net Change in Total OPEB Liability	\$ 182,742,000	\$ (41,590,500)
Total OPEB Liability (Beginning)	\$ 1,161,713,000	\$ 1,344,455,000
Total OPEB Liability (Ending)	\$ 1,344,455,000	\$ 1,302,864,500
Plan Fiduciary Net Position		
Contributions: Employer ¹	\$ 32,213,100	\$ 38,048,600
Contributions: Member	-	-
Net Investment Income ¹	54,600	164,800
Gross Benefit Payments ¹	(35,932,000)	(38,069,200)
Administrative Expenses	-	-
Other	-	-
Net Change in Plan Fiduciary Net Position	\$ (3,664,300)	\$ 144,300
Plan Fiduciary Net Position (Beginning)¹	\$ 4,996,200	\$ 1,331,900
Plan Fiduciary Net Position (Ending)¹	\$ 1,331,900	\$ 1,476,200
Net OPEB Liability (Ending)	\$ 1,343,123,100	\$ 1,301,388,400
Net Position as a Percentage of OPEB Liability	0%	0%
Covered Employee Payroll¹	\$ 1,627,516,900	\$ 1,663,856,400
Net OPEB Liability as a Percentage of Payroll	83%	78%

¹ Data for Fiscal Years Ending June 30, 2017 and June 30, 2018 is provided by the State.

² Numbers may not add due to rounding.

Notes to Schedule:

Benefit Changes: None

Changes in Assumptions: The \$123,518,900 increase in the liability from June 30, 2016 to June 30, 2017 is due to the decrease in the assumed discount rate from 3.80% as of June 30, 2016 to 2.85% as of June 30, 2017. The \$102,299,500 decrease in the liability from June 30, 2017 from June 30, 2018 is due to the increase in the assumed discount rate from 2.85% as of June 30, 2017 to 3.58% as of June 30, 2018.

All Total OPEB Liability numbers reflect the plan provisions that are currently in effect as disclosed in this report. The Total OPEB Liabilities prior to June 30, 2018 are shown for illustrative purposes and differ solely due to the discount rate in effect at each date.

Accounting Requirements (continued)

Disclosure—Contribution Schedule

Contributions

	Fiscal Year Ending June 30,	
	2017	2018
Actuarially Determined Contribution	N/A	N/A
Contributions Made in Relation to the Actuarially Determined Contribution	N/A	N/A
Contribution Deficiency (Excess)	N/A	N/A
Covered Employee Payroll ¹	\$ 1,663,856,400	TBD
Contributions as a Percentage of Payroll	N/A	N/A

¹ Covered payroll for the fiscal year ending June 30, 2017 was provided by the State.

Notes to Schedule:

Valuation Date January 1, 2018

Methods and assumptions used to determine contribution rates:

Actuarial Cost Method Entry Age Normal - Level % of Salary

Asset Valuation Method Market Value of Assets

Retirement Age¹ 63

Mortality Regular: RP-2000 Combined Healthy Mortality projected to 2014 with Scale AA, set back one year for females

Police/Fire: RP-2000 Combined Healthy Mortality projected to 2014 with Scale AA, set forward one year

¹Weighted average retirement age based on January 1, 2018 census data and retirement rates provided in the "Actuarial Assumptions and Methods" section of the report.

Accounting Requirements (continued)

The results in the table in the previous page were developed based on the following:

Actuarial Valuation Date

The actuarial valuation date is the date in which the Total OPEB liability is determined. The actuarial valuation date for the GASB 75 valuation is January 1, 2018. GASB 75 Total OPEB liability results at July 1, 2016, June 30, 2017, and June 30, 2018 were all initially determined as of the actuarial valuation date and adjusted to the applicable date. The Total OPEB liability was adjusted by using roll-forward and roll-back procedures to determine the liability at the measurement date. The actuarial valuation date is required to be a date at most 30 months prior to the fiscal year ending date.

Measurement Date

The State has chosen the GASB 75 measurement date to be the first day of the Fiscal Year. The measurement date for the Fiscal Year Ending June 30, 2018 GASB 75 valuation is July 1, 2017.

The Total OPEB Liabilities for each fiscal year are based on valuation results as of the actuarial valuation date (January 1, 2018) and are adjusted to the measurement date using actual benefit payments (provided by the State). They reflect changes in the blended discount rate as of the end of each fiscal year.

Fiscal Year Ending June 30, 2017 GASB 75 Results

Fiscal Year Ending June 30, 2017 GASB 75 results have been calculated and shown for comparison purposes. The actuarial valuation date is January 1, 2018 and the measurement date is July 1, 2017 for the Fiscal Year Ending June 30, 2017 results. All Total OPEB Liability numbers reflect the plan provisions that are currently in effect as disclosed in this report. The Total OPEB Liabilities prior to June 30, 2018 are shown for illustrative purposes and differ solely due to the discount rates in effect at each date.

Fiscal Year Ending June 30, 2017 GASB 75 Expense

Fiscal Year Ending June 30, 2017 GASB 75 expense and gain-loss amortizations are shown for illustrative purposes only. These amortizations are not assumed to be recognized in Fiscal Year Ending June 30, 2018 expense.

Amortization of Deferred Inflows / Outflows

Differences in the Total OPEB Liability due to actual and projection experience along or due to assumptions changes are amortized over the future working lifetime of active and inactive employees. Changes in the Total OPEB Liability due to benefit changes are not amortized and recognized immediately. Differences in the actual and projected return on the assets are amortized over five years. This methodology is consistent with the GASB 75 statement.

The future working lifetime of active and inactive employees is equal to 4.78 years for Fiscal Year 2018 and it is assumed to also be 4.78 for Fiscal Year 2017 given that the Actuarial Valuation Date is the same for both Fiscal reporting years. The future working lifetime is based on all active and inactive employees that are provided benefits in the OPEB plan.

Accounting Requirements (continued)

Plan Provisions

The results provided in this report reflect the plan provisions in effect as of July 1, 2017. Active employees hired after December 31, 2011 are not eligible for a subsidy from PEBP. The Plan's active population will only decrease and represents only the active participants who were hired prior to January 1, 2012. Further detail is provided in the "Plan Provisions" section of this report.

Demographic Assumptions

Census data was provided by the State as of January 1, 2018, and salary data used for the fiscal year ending July 1, 2017 valuation was provided by the State as of July 1, 2017 and rolled-forward one year by salary scale. Further detail regarding demographic assumptions used in this valuation is provided in the "Actuarial Assumptions and Methods" section of this report.

Actuarial Assumptions

The results contained herein are consistent with the following actuarial assumptions as of July 1, 2017. Further detail is provided in the "Actuarial Assumptions and Methods" section of this report.

Economic Assumptions

Discount Rate

The discount rate basis under GASB 75 is required to be consistent with a 20-Year Municipal Bond Index. The Bond Buyer General Obligation 20-Bond Municipal Bond Index is used for the determination of the discount rate. The assets in the trust as of June 30, 2017 are less than the expected benefit payments in the first year; therefore, the crossover period is assumed to be in the first year, which provides additional support for continuing the discount rate at the 20-Year Municipal Bond Index rate.

The discount rates as of July 1, 2015, July 1, 2016, and July 1, 2017 are 3.80%, 2.85%, and 3.58% respectively. Additional detail regarding the discount rates as of June 30, 2016, June 30, 2017, and June 30, 2018 are provided in the "Actuarial Assumptions and Methods" section of this report.

Salary Scale

The salary scale assumption in the calculation of the Entry Age Normal (Level Percent of Payroll) liability and service cost results will be consistent with the salary scale assumptions provided by the State.

Accounting Requirements (continued)

Health Care Trend

The health care trend assumption is used to project the growth of the expected claims over the lifetime of the health care recipients.

The health care trend assumption was based on our internal trend guidance that was developed using national average information from a variety of sources, including S&P Healthcare Economic Index, NHCE data plan renewal data and vendor Rx report with adjustments based on the specific cost sharing provisions of the benefits offered by the State.

For medical and prescription drug benefits, this amount initially is at 7.50% and decreases to a 4.50% long-term trend rate after eight years. For dental benefits, the trend rate is 4.00%.

Funding Policy

The Plan is funded on a pay-as-you-go basis and there is no pre-funding of the Total OPEB Liability. The Plan Fiduciary Net Position represents assets associated with the HRA benefits.

Claims Cost Development

Detailed information regarding the development of the per capitas is provided in the "Health Care Claims Development" section of this report.

Health Care Reform – Excise Tax

Certain provisions of healthcare legislation that are effective in future years have the potential to impact the GASB liabilities. As a result of the Patient Protection and Affordable Care Act (PPACA), there will be a 40% excise tax on per capita medical benefit costs that exceed certain thresholds. On December 18, 2015 the President signed Consolidated Appropriations Act, 2016 into law. The new law includes provisions which impact the excise tax on high-cost group health plans introduced by the Affordable Care Act, as it will delay implementation of the excise tax for two years (i.e., from 2018 to 2020) and allow the excise tax to be deductible to the taxpayer. On January 22, 2018 Congress passed a short-term spending bill that will fund the government through February 8, 2018. This spending bill further delays the effective date of the Cadillac tax until 2022. The 2018 cost thresholds for Medicare Ineligible participants are assumed to be \$11,850 for individual and \$30,950 for family coverage and are assumed to increase at CPI+1% in 2018 and at CPI in all future years. CPI is assumed to be 2.50% in all future years. Resulting 2022 thresholds are \$13,208 for individual and \$34,496 for family coverage. For purposes of determining the impact of Excise Tax to PEBP plans, we determined separately the impact associated with the Medicare Exchange from all other plans, per the request of PEBP. The Medicare Exchange did not incur any additional Excise Tax impact. The other plans are anticipated to be impacted by Excise Tax in 2022. The excise tax is estimated to increase the Total OPEB Liability by approximately 3.8%.

Detailed information regarding excise tax is provided in the "Health Care Claims Development" section of this report.

Projection Results

Projected Cash Flows

The following table summarizes the annual expected payments for benefits provided by the Program based on assumptions and contributions described in the “Plan Provisions” and “Actuarial Assumptions and Methods” sections:

Fiscal Year Ending June 30,	Expected Medical and Life Insurance Payments
2018*	\$ 38,069,000
2019	\$ 65,363,000
2020	\$ 69,469,000
2021	\$ 73,340,000
2022	\$ 78,010,000
2023	\$ 82,290,000
2024	\$ 85,791,000
2025	\$ 89,594,000
2026	\$ 93,273,000
2027	\$ 96,591,000
2028	\$ 99,846,000
2029	\$ 103,342,000
2030	\$ 107,131,000
2031	\$ 110,665,000
2032	\$ 113,408,000
2033	\$ 115,500,000
2034	\$ 116,997,000
2035	\$ 118,479,000
2036	\$ 119,320,000
2037	\$ 118,855,000
2038	\$ 118,417,000
2039	\$ 118,176,000
2040	\$ 117,592,000
2041	\$ 116,445,000
2042	\$ 114,305,000
2043	\$ 111,095,000
2044	\$ 107,317,000
2045	\$ 102,275,000
2046	\$ 95,893,000
2047	\$ 88,788,000

*Actual benefit payments for Fiscal Year Ending June 30, 2018 were provided by the State.

Appendix

Participant Data

The actuarial valuation was based on personnel information provided by the State as of January 1, 2018. Below are some of the pertinent characteristics from the personnel data as of that date. Both age and service have been determined using years and months as of the valuation date. Salary data was provided by the State as of July 1, 2017.

January 1, 2018

Health Care Participants

Active Participants*

Number	13,190
Average Age	51.51
Average Service	14.41

Inactive Participants**

State Retirees and Surviving Spouses Under Age 65	3,355
Average Age	59.36

State Retirees and Surviving Spouses Age 65 and Older	7,129
Average Age	73.69

Terminated Vested	2,272
Average Age	53.38

State Covered Spouses	2,067
Average Age	63.57

Total Participants

Number	28,013
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Life Insurance Participants

Active Participants*

Number	13,190
Average Age	51.51
Average Service	14.41

State Inactive Participants

Number	12,375
Average Age	62.67

Non-State Inactive Participants

Number	7,354
Average Age	68.15

*Active counts reflect those hired prior to January 1, 2012.

** Inactive counts include terminated vested participants.

Age / Service Scatter

The following table summarizes the distribution of the future retiree population by age and service as of January 1, 2018:

HTH ACTIVES (AS OF JANUARY 1, 2018)											
Age	COMPLETED YEARS OF SERVICE										Total
	Under 1	1 to 4	5-10	10-14	15-19	20-24	25-29	30-34	35-39	40+	
Under 25	0	0	0	0	0	0	0	0	0	0	0
25-29	0	0	8	2	0	0	0	0	0	0	10
30-34	0	0	53	27	2	0	0	0	0	0	82
35-39	0	0	63	80	14	2	0	0	0	0	159
40-44	0	0	68	88	64	12	0	0	0	0	232
45-49	0	0	74	140	93	58	14	0	0	0	379
50-54	0	0	111	107	82	72	22	5	0	0	399
55-59	0	0	82	137	91	59	32	0	1	0	402
60-64	0	0	72	103	65	34	15	6	2	0	297
65-69	0	0	27	28	20	14	12	2	1	0	104
70+	0	0	3	12	12	5	4	1	0	0	37
Total	0	0	561	724	443	256	99	14	4	0	2,101

HPN ACTIVES (AS OF JANUARY 1, 2018)											
Age	COMPLETED YEARS OF SERVICE										Total
	Under 1	1 to 4	5-10	10-14	15-19	20-24	25-29	30-34	35-39	40+	
Under 25	0	0	0	0	0	0	0	0	0	0	0
25-29	0	0	12	1	0	0	0	0	0	0	13
30-34	0	0	56	28	1	0	0	0	0	0	85
35-39	0	0	63	75	15	0	0	0	0	0	153
40-44	0	0	67	108	43	18	1	0	0	0	237
45-49	0	0	86	118	80	39	6	0	0	0	329
50-54	0	0	64	120	78	42	25	1	0	0	330
55-59	0	0	52	100	70	47	22	3	0	0	294
60-64	0	0	45	83	59	36	19	1	0	0	243
65-69	0	0	21	32	26	7	12	2	2	0	102
70+	0	0	7	9	9	10	6	2	2	1	46
Total	0	0	473	674	381	199	91	9	4	1	1,832

CDHP ACTIVES (AS OF JANUARY 1, 2018)											
Age	COMPLETED YEARS OF SERVICE										Total
	Under 1	1 to 4	5-10	10-14	15-19	20-24	25-29	30-34	35-39	40+	
Under 25	0	0	0	0	0	0	0	0	0	0	0
25-29	0	0	83	4	0	0	0	0	0	0	87
30-34	0	0	299	161	4	0	0	0	0	0	464
35-39	0	0	375	437	65	2	0	0	0	0	879
40-44	0	0	371	510	257	57	2	0	0	0	1,197
45-49	0	0	368	512	371	198	35	3	0	0	1,487
50-54	0	0	382	522	374	209	98	19	0	0	1,604
55-59	0	0	309	498	314	227	109	41	3	0	1,501
60-64	0	0	200	365	266	165	98	49	6	1	1,150
65-69	0	0	110	176	106	82	76	38	18	6	612
70+	0	0	26	68	58	37	29	23	16	19	276
Total	0	0	2,523	3,253	1,815	977	447	173	43	26	9,257

Note: Active Counts reflect those hired prior to January 1, 2012.

Health Care Claims Development

Applicability of Health Care Reforms to Valuation

Background

On March 23, 2010, the “Patient Protection and Affordable Care Act” was signed into law, followed by the passage of the “Health Care and Education Affordability Reconciliation Act of 2010” on March 30, 2010 (“Acts”). The health care reforms contained in these Acts have wide-spread impact on corporate health care programs, including those covering retirees. This valuation reflects Aon’s interpretation of the Acts based on information currently available. Future regulations on each aspect of the Acts may be different than Aon’s initial interpretations.

Key issues in Health Care Reform that have an effect on the Plan Sponsor valuation include:

- Excise tax on high-cost health plans
- Group market reforms
- Early Retiree Reimbursement Program
- Taxation of Retiree Drug Subsidy for Post-65 Coverage

The valuation issues related to each of these topics are discussed below.

Excise Tax on High-Cost Health Plans

The excise tax on high cost plans becomes effective in 2022. However, the expected additional cost needs to be reflected in OPEB valuations and disclosures. Key features of the law include:

- Imposes a non-deductible excise tax of 40% on plans with an aggregate value of health insurance coverage exceeding specified dollar thresholds beginning in 2022
 - Aggregate value includes medical, pharmacy, and employer HSA/HRA contributions (excludes standalone dental and vision plans)
- 2018 thresholds for high-risk professions are:
 - \$11,850 for single coverage and \$30,950 for family coverage for age 55 to 64 retirees
 - \$10,200 for single coverage and \$27,500 for family coverage for Medicare retirees.
- Thresholds will be increased if the increase in the cost of the Federal Employees Health Benefit Plan (FEHBP) increases by more than 55% from 2010 to 2018
 - Thresholds indexed at general inflation (CPI-U) plus 1 % from 2018 to 2019, and to CPI-U only thereafter
- Excise tax applies only to portion of cost that exceeds threshold amount
- The law provides for blending of pre-65 and post-65 retirees.

The pre-65 and the post-65 retirees were blended together to determine the overall value of the benefit relative to the excise tax threshold. The values of the benefits were assumed to increase with the valuation trend and the excise tax thresholds were assumed to increase by 2.5% per year.

Health Care Claims Development (continued)

Group Market Reforms

- **Requirement to Cover Children to Age 26**—The Acts requires that a group health plan that provides dependent coverage of children shall continue to make such coverage available for an adult child until the child turns 26 years of age. Current and future dependent children are valued implicitly in the valuation. Per capita claims costs were developed using claims information for all covered lives and adult headcounts. As such, the impact of child coverage is built into the per capita claims for retirees and spouses.
- **Elimination of Benefit Limitations**—The Acts include a number of other provisions that may increase the cost of retiree health care including the elimination of lifetime maximum benefits and “restrictive” annual benefit limitations. We have made no adjustment for these additional benefits because there are no material limits in the plans.

Medicare Part D reimbursements and the Early Retiree Reinsurance program do not fall under GASB 75.

Claims Cost Development

The preliminary per capita costs were developed as follows:

- for the CDHP plan the per capita costs were based on the claims and enrollment for the time period January 1, 2015 – December 31, 2017, separately for state versus non-state. The experience was adjusted for demographics, historical plan design changes, rebates, and trended to the valuation period.
- the per capita HMO rates were based on the 07/2017-06/2018 retiree premium rates provided for state versus non-state, and adjusted for trend and demographics.
- the per capita costs for the dental plan were based on the claims and enrollment for the time period January 1, 2015 – December 31, 2017. The experience was trended to the valuation period. No aging was assumed.

The final per capita costs for all the plans were based on a blend of the preliminary claim costs and the prior valuation’s claim costs trended forward to the valuation period.

A sample of the resulting age related annual claims rates, including administrative expenses are shown below:

Dental Claims Costs		<u>Claim Costs</u>
As of January 1, 2018	Pre-65	\$533
	Post-65	\$533

The claims table above was projected to each future year using the health care cost trend rates described below:

Health Care Claims Development (continued)

Health Care Cost Trend Rates

Medical, Prescription Drug, & Admin

Year	Medical/Rx/ PEBP Subsidy
2017	6.50%
2018	7.50%
2019	7.00%
2020	6.50%
2021	6.00%
2022	5.50%
2023	5.25%
2024	5.00%
2025	4.75%
2026	4.50%

HRA Accounts Trend: 0.00%

Dental Plan Trend: 4.00%

Trend on Part B Premiums: 4.50%

Aging Factors

Age	Medical	Rx
Less than 44	3.0%	4.8%
45 - 49	3.7%	4.7%
50 - 54	4.2%	4.7%
55 - 59	4.4%	4.6%
60 - 64	3.7%	4.6%
64 - 69	2.7%	3.8%
70 - 74	1.8%	2.5%
75 - 79	2.2%	0.8%
80 - 84	2.8%	0.2%
86 - 90	1.4%	0.1%
90 and over	0.0%	0.0%

Health Care Claims Development (continued)

Health Care Claims Cost as of January 1, 2018

Age	CDHP Medical			
	State		Non-State	
	Non-Medicare	Medicare	Non-Medicare	Medicare
30	\$3,016	\$3,016	\$3,479	\$3,479
31	\$3,106	\$3,106	\$3,583	\$3,583
32	\$3,199	\$3,199	\$3,691	\$3,691
33	\$3,295	\$3,295	\$3,802	\$3,802
34	\$3,394	\$3,394	\$3,916	\$3,916
35	\$3,496	\$3,496	\$4,033	\$4,033
36	\$3,601	\$3,601	\$4,154	\$4,154
37	\$3,709	\$3,709	\$4,279	\$4,279
38	\$3,820	\$3,820	\$4,407	\$4,407
39	\$3,935	\$3,935	\$4,539	\$4,539
40	\$4,053	\$4,053	\$4,675	\$4,675
41	\$4,175	\$4,175	\$4,815	\$4,815
42	\$4,300	\$4,300	\$4,959	\$4,959
43	\$4,429	\$4,429	\$5,108	\$5,108
44	\$4,562	\$4,562	\$5,261	\$5,261
45	\$4,699	\$4,699	\$5,419	\$5,419
46	\$4,873	\$4,873	\$5,619	\$5,619
47	\$5,053	\$5,053	\$5,827	\$5,827
48	\$5,240	\$5,240	\$6,043	\$6,043
49	\$5,434	\$5,434	\$6,267	\$6,267
50	\$5,635	\$5,635	\$6,499	\$6,499
51	\$5,872	\$5,872	\$6,772	\$6,772
52	\$6,119	\$6,119	\$7,056	\$7,056
53	\$6,376	\$6,376	\$7,352	\$7,352
54	\$6,644	\$6,644	\$7,661	\$7,661
55	\$6,923	\$6,923	\$7,983	\$7,983
56	\$7,228	\$7,228	\$8,334	\$8,334
57	\$7,546	\$7,546	\$8,701	\$8,701
58	\$7,878	\$7,878	\$9,084	\$9,084
59	\$8,225	\$8,225	\$9,484	\$9,484
60	\$8,587	\$8,587	\$9,901	\$9,901
61	\$8,905	\$8,905	\$10,267	\$10,267
62	\$9,234	\$9,234	\$10,647	\$10,647
63	\$9,576	\$9,576	\$11,041	\$11,041
64	\$9,930	\$9,930	\$11,450	\$11,450
65	\$10,297	\$3,604	\$11,874	\$4,156
66	\$10,575	\$3,701	\$12,195	\$4,268
67	\$10,861	\$3,801	\$12,524	\$4,383
68	\$11,154	\$3,904	\$12,862	\$4,502
69	\$11,455	\$4,009	\$13,209	\$4,623
70	\$11,764	\$4,117	\$13,566	\$4,748
71	\$11,976	\$4,192	\$13,810	\$4,834
72	\$12,192	\$4,267	\$14,059	\$4,921
73	\$12,411	\$4,344	\$14,312	\$5,009
74	\$12,634	\$4,422	\$14,570	\$5,100
75	\$12,861	\$4,501	\$14,832	\$5,191

Health Care Claims Development (continued)

Health Care Claims Cost as of January 1, 2018 (continued)

Age	CDHP Rx			
	State		Non-State	
	Non-Medicare	Medicare	Non-Medicare	Medicare
30	\$652	\$652	\$599	\$599
31	\$683	\$683	\$628	\$628
32	\$716	\$716	\$658	\$658
33	\$750	\$750	\$690	\$690
34	\$786	\$786	\$723	\$723
35	\$824	\$824	\$758	\$758
36	\$864	\$864	\$794	\$794
37	\$905	\$905	\$832	\$832
38	\$948	\$948	\$872	\$872
39	\$993	\$993	\$914	\$914
40	\$1,041	\$1,041	\$958	\$958
41	\$1,091	\$1,091	\$1,004	\$1,004
42	\$1,143	\$1,143	\$1,052	\$1,052
43	\$1,198	\$1,198	\$1,103	\$1,103
44	\$1,255	\$1,255	\$1,156	\$1,156
45	\$1,315	\$1,315	\$1,211	\$1,211
46	\$1,377	\$1,377	\$1,268	\$1,268
47	\$1,442	\$1,442	\$1,328	\$1,328
48	\$1,510	\$1,510	\$1,390	\$1,390
49	\$1,581	\$1,581	\$1,455	\$1,455
50	\$1,655	\$1,655	\$1,523	\$1,523
51	\$1,733	\$1,733	\$1,595	\$1,595
52	\$1,814	\$1,814	\$1,670	\$1,670
53	\$1,899	\$1,899	\$1,748	\$1,748
54	\$1,988	\$1,988	\$1,830	\$1,830
55	\$2,081	\$2,081	\$1,916	\$1,916
56	\$2,177	\$2,177	\$2,004	\$2,004
57	\$2,277	\$2,277	\$2,096	\$2,096
58	\$2,382	\$2,382	\$2,192	\$2,192
59	\$2,492	\$2,492	\$2,293	\$2,293
60	\$2,607	\$2,607	\$2,399	\$2,399
61	\$2,727	\$2,727	\$2,509	\$2,509
62	\$2,853	\$2,853	\$2,624	\$2,624
63	\$2,984	\$2,984	\$2,745	\$2,745
64	\$3,121	\$3,121	\$2,871	\$2,871
65	\$3,265	\$3,265	\$3,003	\$3,003
66	\$3,389	\$3,389	\$3,117	\$3,117
67	\$3,518	\$3,518	\$3,235	\$3,235
68	\$3,652	\$3,652	\$3,358	\$3,358
69	\$3,791	\$3,791	\$3,486	\$3,486
70	\$3,935	\$3,935	\$3,618	\$3,618
71	\$4,033	\$4,033	\$3,708	\$3,708
72	\$4,134	\$4,134	\$3,801	\$3,801
73	\$4,237	\$4,237	\$3,896	\$3,896
74	\$4,343	\$4,343	\$3,993	\$3,993
75	\$4,452	\$4,452	\$4,093	\$4,093

Health Care Claims Development (continued)

Health Care Claims Cost as of January 1, 2018 (continued)

Age	HMO			
	State		Non-State	
	Non-Medicare	Medicare	Non-Medicare	Medicare
30	\$3,723	\$3,723	\$3,727	\$3,727
31	\$3,835	\$3,835	\$3,839	\$3,839
32	\$3,950	\$3,950	\$3,954	\$3,954
33	\$4,069	\$4,069	\$4,073	\$4,073
34	\$4,191	\$4,191	\$4,195	\$4,195
35	\$4,317	\$4,317	\$4,321	\$4,321
36	\$4,446	\$4,446	\$4,451	\$4,451
37	\$4,579	\$4,579	\$4,585	\$4,585
38	\$4,716	\$4,716	\$4,723	\$4,723
39	\$4,857	\$4,857	\$4,865	\$4,865
40	\$5,003	\$5,003	\$5,011	\$5,011
41	\$5,153	\$5,153	\$5,161	\$5,161
42	\$5,308	\$5,308	\$5,316	\$5,316
43	\$5,467	\$5,467	\$5,475	\$5,475
44	\$5,631	\$5,631	\$5,639	\$5,639
45	\$5,800	\$5,800	\$5,808	\$5,808
46	\$6,015	\$6,015	\$6,023	\$6,023
47	\$6,238	\$6,238	\$6,246	\$6,246
48	\$6,469	\$6,469	\$6,477	\$6,477
49	\$6,708	\$6,708	\$6,717	\$6,717
50	\$6,956	\$6,956	\$6,966	\$6,966
51	\$7,248	\$7,248	\$7,259	\$7,259
52	\$7,552	\$7,552	\$7,564	\$7,564
53	\$7,869	\$7,869	\$7,882	\$7,882
54	\$8,200	\$8,200	\$8,213	\$8,213
55	\$8,544	\$8,544	\$8,558	\$8,558
56	\$8,920	\$8,920	\$8,935	\$8,935
57	\$9,313	\$9,313	\$9,328	\$9,328
58	\$9,723	\$9,723	\$9,738	\$9,738
59	\$10,151	\$10,151	\$10,166	\$10,166
60	\$10,598	\$10,598	\$10,613	\$10,613
61	\$10,990	\$10,990	\$11,006	\$11,006
62	\$11,397	\$11,397	\$11,413	\$11,413
63	\$11,819	\$11,819	\$11,835	\$11,835
64	\$12,256	\$12,256	\$12,273	\$12,273
65	\$12,709	\$4,448	\$12,727	\$4,454
66	\$13,052	\$4,568	\$13,071	\$4,575
67	\$13,404	\$4,691	\$13,424	\$4,698
68	\$13,766	\$4,818	\$13,786	\$4,825
69	\$14,138	\$4,948	\$14,158	\$4,955
70	\$14,520	\$5,082	\$14,540	\$5,089
71	\$14,781	\$5,173	\$14,802	\$5,181
72	\$15,047	\$5,266	\$15,068	\$5,274
73	\$15,318	\$5,361	\$15,339	\$5,369
74	\$15,594	\$5,458	\$15,615	\$5,465
75	\$15,875	\$5,556	\$15,896	\$5,564

Actuarial Assumptions and Methods

Actuarial Method	Entry Age Normal – Level % of Salary Method
Measurement Date	First day of the fiscal year (i.e. – July 1, 2017)
Measurement Period	July 1, 2017 to June 30, 2018
Actuarial Valuation Date	January 1, 2018
Census Data	As of January 1, 2018
Service Cost	The Actuarial Present Value of benefits is allocated as a level percentage over the earnings of an individual between entry age (i.e. – age at hire) and assumed retirement age(s).
Discount Rates	For the Fiscal Year Ending June 30, 2018: 3.58% For the Fiscal Year Ending June 30, 2017: 2.85% For the Fiscal Year Ending June 30, 2016: 3.80%
Expected Rate of Return	For the Fiscal Year Ending June 30, 2018: 3.58% For the Fiscal Year Ending June 30, 2017: 2.85% For the Fiscal Year Ending June 30, 2016: 3.80%
Municipal Bond Rate Basis	Bond Buyer General Obligation 20-Bond Municipal Bond Index
CPI	2.50%
Life Insurance Administrative Load	10.0%
Salary Scale	Inflation: 2.75%

Actuarial Assumptions and Methods (continued)

Health Benefits Participation	90% of current eligible actives and 60% of current terminated vested employees will elect retiree plan coverage. Additionally, 60% of future retirees who have declined coverage are assumed to elect to participate in the plan upon retirement. 60% of actives decremented to withdrawal from the plan with at least five years of service will elect retiree medical and dental coverage.
Life Insurance Participation	All active employees and current retirees that elected healthcare coverage. Reinstated retirees and survivors are not eligible to receive the life insurance benefit.
Plan Election Percentage	Future retiree election percentage is based on the current retiree plan enrollment distribution.
Demographic Assumptions	Census data was provided by the State and adjustments were made for missing data, which have an insignificant effect on the liability. The census provided did not include gender for every terminated vested participant, so it was assumed that the percentage of males among the terminated vested population is consistent with the percentage of males among the retiree population. All actives are assumed to accumulate State service only. A factor has been applied to total service for State and Non-State retirees which represents the percentage of a retiree's total service that is attributable to service with the State: - State - 94% - Non-State Retiree – 13%
Spouse Age Difference & Marriage Percentage	Male participants are assumed to be four years older than spouses: female participants are assumed to be two years younger than spouses. 30% of active males and 15% of active females will elect retiree spouse coverage.
Healthy Mortality	<i>Regular:</i> RP-2000 Combined Healthy Mortality projected to 2014 with Scale AA, set back one year for females. <i>Police / Fire:</i> RP-2000 Combined Healthy Mortality projected to 2014 with Scale AA, set forward one year.
Disabled Mortality	RP-2000 Disabled Retiree Mortality projected to 2014 with Scale AA, set forward three years.

Actuarial Assumptions and Methods (continued)

Retirement Rates

Retirement rates vary by employee group and are shown below:

<u>Age</u>	Regular Years of Service (%)				
	<u>5 - 9</u>	<u>10 - 19</u>	<u>20 - 24</u>	<u>25 - 29</u>	<u>30+</u>
45 - 49	0.00	0.00	1.00	7.00	20.00
50 - 54	1.00	2.00	2.00	10.00	20.00
55 - 59	2.00	4.00	6.00	13.00	25.00
60 - 61	8.00	12.00	18.00	25.00	25.00
62 - 64	10.00	14.00	18.00	25.00	25.00
65 - 69	20.00	20.00	22.00	25.00	25.00
70 - 74	40.00	40.00	60.00	60.00	60.00
75+	100.00	100.00	100.00	100.00	100.00

<u>Age</u>	Police / Fire Years of Service (%)				
	<u>5 - 9</u>	<u>10 - 19</u>	<u>20 - 24</u>	<u>25 - 29</u>	<u>30+</u>
Under 40	0.00	0.00	0.00	0.00	0.00
40 - 44	0.00	0.75	3.00	0.00	0.00
45 - 49	0.00	1.00	5.00	15.00	15.00
50 - 54	1.50	5.00	13.00	18.00	27.00
55 - 59	3.50	11.00	20.00	25.00	35.00
60 - 64	10.00	18.00	25.00	32.00	35.00
65 - 69	60.00	60.00	65.00	70.00	70.00
70+	100.00	100.00	100.00	100.00	100.00

Withdrawal Rates

Withdrawal rates vary by employee group and are shown below:

<u>Years of Service</u>	<u>% Regular</u>	<u>% Police / Fire</u>
0 - 1	16.50	14.00
1 - 2	12.50	6.50
2 - 3	9.70	5.75
3 - 4	7.30	4.75
4 - 5	6.60	4.25
5 - 6	5.00	3.50
6 - 7	4.00	3.00
7 - 8	3.50	2.25
8 - 9	3.25	1.90
9 - 10	3.00	1.75
10 - 11	2.75	1.50
11 - 12	2.50	1.25
12 - 13	2.25	1.00
13 - 14	2.00	0.90
14 - 15	1.75	0.80
15+	1.50	0.50

Actuarial Assumptions and Methods (continued)

Disability Rates

Disability rates vary by employee group and are shown below:

<u>Age</u>	<u>% Regular</u>	<u>% Police / Fire</u>
20 - 24	0.01	0.00
25 - 29	0.02	0.06
30 - 34	0.06	0.10
35 - 39	0.09	0.18
40 - 44	0.21	0.35
45 - 49	0.35	0.56
50 - 54	0.57	0.75
55 - 59	0.75	0.50
60 - 64	0.40	0.50
65+	0.00	0.00

Plan Provisions

Eligibility

For a retiree to participate in the PEBP program, the participant must be receiving a PERS, LRS, JRS, or RPA benefit. PERS eligibility requirements vary by employee group and benefit type. Actives hired after December 31, 2011 are not eligible for any subsidy from PEBP. In addition, actives hired after December 31, 2009 and who retires with less than 15 years of continuous service (except a disability retirement) are not eligible for a subsidy from PEBP.

Normal Retirement – Regular Employees

- Minimum age of 65 with 5+ years of service;
- Minimum age of 60 with 10+ years of service; or
- Minimum 30 years of service, regardless of age.

Normal Retirement – Police & Fire

- Minimum age 65 and 5+ years of service;
- Minimum age 55 and 10+ years of service; or
- Minimum age 50 and 20+ years of service; or
- Minimum 25 years of service, regardless of age.

Disability Benefit

- Minimum 5 years of service, regardless of age.

Reduced Benefit

- Minimum 5 years of service, regardless of age.

For this valuation, Regular Employees were considered eligible for retirement at a minimum age of 50 with 5 years of service and Police & Fire Employees were considered eligible for retirement at a minimum age of 45 with 5 years of service.

Surviving spouses are not eligible to receive post-Medicare benefits.

Benefits

Medical / Prescription Drug

Pre-Medicare Retirees: For retirees with younger spouses, retirees and spouses will move to the exchange once the spouse becomes Medicare eligible (age 65). For retirees with older spouse, retirees and spouses will both move to the Exchange when the retiree becomes Medicare eligible.

Medicare Retirees: Certain retirees over age 65 are not eligible for Medicare Part A as indicated on the data. For these participants, we have assumed they will not become eligible for Medicare Part A at any time in the future. Current active employees are assumed to be eligible for Medicare Part A. Medicare eligible retirees will go to the Exchange.

Terminated Vesteds: If service is less than 10 years, Terminated Vested (TVs) participants are assumed to retire at age 65 and go directly to the Exchange. If service is ten years or more, TVs are assumed to retire at age 60 and move to the exchange in the same manner as actives outlines above.

Plan Provisions (continued)

Current Actives: Actives enrolled in the CDHP are assumed to participate in this plan upon retirement. It is assumed 5% of pre-Medicare actives enrolled in the HPN Plan will participate in the CDHP upon retirement. Likewise, it is assumed 20% of pre-Medicare actives enrolled in the HTH Plan will participate in the CDHP upon retirement. The balance of the HMO populations will remain in the HMO plan as early retirees. These assumptions were based upon actual PEBP census. For all plans, when actives retire and then reach age 65, it is assumed they become Medicare eligible. Once both the participant and spouse become Medicare eligible, it is assumed they will both participate in the exchange.

Dental

Pre-Medicare retirees will participate in PEBP's Dental Plan. Those enrolled in the EHPD plan will assume to enroll in PEBP's dental plan. For those future Exchange retirees, we assume 55% will participate in PEBP's Dental program.

State Retiree Life Insurance Plan

If you participate in a PEBP medical plan, your benefits include \$12,500 life insurance. Zero retiree contributions have been assumed for the life insurance. The life insurance retiree contribution for non-Medicare retirees is included in the medical premium. For Medicare retirees, the premium is paid by PEBP.

HRA Benefit

The following monthly amount will be credited on behalf of Medicare Eligible Retirees, effective July 1, 2016

1. For those who retired prior to January 1, 1994, the dollar amount is equal to \$180 (previously was \$165).
2. For those who retired on or after January 1, 1994, the dollar amount is equal to the base amount (\$12) multiplied by the years of service credit up to a maximum of 20 years of service. Prior to this plan year, the base amount was \$11.
3. A one-time contribution \$2 per year of service per month for PY 2016 and 2017.

More detail regarding the benefit plans offered through the Plan are provided below.

Plan Provisions (continued)

State Retiree Medical Contributions

Rate Effective 7/1/2017 - 6/30/2018	State Non-Medicare Retirees and Survivor Rates	
Coverage	CDHP	Hometown Health Plan & Health Plan of Nevada
Retiree	\$209.08	\$397.99
Retiree + Spouse	\$477.86	\$942.40
Surviving Spouse	\$581.78	\$802.75

Rate Effective 7/1/2017 - 6/30/2018	Non-State Non-Medicare Retirees and Survivor Rates	
Coverage	CDHP	Hometown Health Plan & Health Plan of Nevada
Retiree	\$391.67	\$439.31
Retiree + Spouse	\$953.23	\$1,038.00
Surviving Spouse	\$1,100.86	\$868.57

Rate Effective 7/1/2017 - 6/30/2018	Voluntary Dental Insurance Rates for Medicare Exchange Retirees	
Coverage	State Retirees	Non-State Retirees
Retiree	\$38.89	\$38.21
Retiree + Spouse	\$77.78	\$76.42
Surviving Spouse	\$38.89	\$38.21

Plan Provisions (continued)

State and Non-State Subsidy for Retirees Enrolled in the CDHP or HMO Plans

Years of Service	7/1/2016	7/1/2017
5	\$322.72	\$333.77
6	290.45	300.39
7	258.18	267.02
8	225.91	233.64
9	193.63	200.26
10	161.36	166.89
11	129.09	133.51
12	96.82	100.13
13	64.54	66.75
14	32.27	33.38
15	0.00	0.00
16	(32.27)	(33.38)
17	(64.54)	(66.75)
18	(96.82)	(100.13)
19	(129.09)	(133.51)
20	(161.36)	(166.89)

Plan Provisions (continued)

Part B Premium	The State of Nevada pays Part B premium for eligible participants in the CDHP and HMO Plans. If not specifically indicated on the data, it is assumed any retiree over age 65 and participating in these plans will receive the Part B premium and the State pays the premium. For retirees indicated on the data file as eligible for Part B, it is assumed they will receive the Part B premium subsidy. The Part B premium subsidy in effect for 2018 calendar year is \$134 per month.
Administrative Fees (on a per employee basis)	Effective as of January 1, 2018 CDHP: \$610.92 HMOs: \$269.04
HRA Account Reversions	Pre-65 CDHP: 5.0% Medicare HRA: 0.5%

Plan Provisions (continued)

The following tables provide concise summaries of each of the benefit plan designs available to eligible retirees as of January 1, 2018:

Plan Year 2018 Health Plan Comparison

PLAN DESIGN FEATURES	CONSUMER DRIVEN HEALTH PLAN (CDHP - PPO)		STANDARD HMO PLAN (Hometown Health and Health Plan of Nevada)		ALTERNATE HMO PLAN (Hometown Health and Health Plan of Nevada)	
	IN-NETWORK	OUT-OF-NETWORK	IN-NETWORK	OUT-OF-NETWORK	IN-NETWORK	OUT-OF-NETWORK
Service Areas	Global	Global	Statewide	None	HHP: Washoe, Carson, Douglas, Storey, Lyon, Churchill, HPN: Clark, Nye, & Esmeralda Counties	None
Annual Deductible	\$1,500 Individual \$3,000 Family □ \$2,600 Individual Family Member Deductible	\$1,500 Individual \$3,000 Family □ \$2,600 Individual Family Member Deductible	N/A		N/A	
Medical Coinsurance	20% after Deductible	20% to 50% after Deductible	N/A		N/A	
Out-of-Pocket Maximum	\$3,900 Individual \$7,800 Family □ \$6,850 Individual Family Max Out of Pocket	\$10,600 Individual \$21,200 Family	\$7,150 Individual \$14,300 Family	N/A	\$7,150 Individual \$14,300 Family	N/A
Specialist Referral Required	No	No	No	N/A	Yes	N/A
Primary Care Office Visit	20% after Deductible	50% after Deductible – Subject to Usual and Customary Limits	\$25 Copay	N/A	\$5 Copay Per Visit	N/A
Specialist Care Office Visit	20% after Deductible	50% after Deductible – Subject to Usual and Customary Limits	\$45 Copay (no referral required)	N/A	\$25 Copay (referral required)	N/A
Urgent Care Visit	20% after Deductible	50% after Deductible – Subject to Usual and Customary Limits	\$50 Copay Hometown Health \$30 Copay Health Plan of Nevada	\$50 Copay Hometown Health \$30 Copay Health Plan Of Nevada	\$25 Copay Per Visit	\$25 Copay Per Visit

Plan Provisions (continued)

Plan Year 2018 Health Plan Comparison (continued)

PLAN DESIGN FEATURES	CONSUMER DRIVEN HEALTH PLAN (CDHP - PPO)		STANDARD HMO PLAN (Hometown Health and Health Plan of Nevada)		ALTERNATE HMO PLAN (Hometown Health and Health Plan of Nevada)	
	IN-NETWORK	OUT-OF-NETWORK	IN-NETWORK	OUT-OF-NETWORK	IN-NETWORK	OUT-OF-NETWORK
Emergency Room Visit	20% after Deductible	20% after Deductible – Subject to U & C Limits	\$300 Copay per visit	\$300 Copay per visit	\$1,000 Copay per visit	\$1,000 Copay per visit
In-Patient Hospital	20% after Deductible	50% after Deductible – Subject to U & C Limits	\$500 Copay per admit	N/A	\$1,000 per day not to exceed \$3,000 per admission	N/A
Outpatient Surgery	20% after Deductible Requires Pre-Authorization	50% after Deductible – Subject to U & C Limits Requires Pre-Authorization	\$350 Copay Hometown Health \$50 Copay Health Plan of Nevada	N/A	\$1,000 Copay per visit	N/A
Affordable Care Act Preventive Services	\$0 (Covered at 100%)	No Benefit	\$0 (Covered at 100%)	No Benefit	\$0 (Covered at 100%)	No Benefit
HSA/HRA Funding	\$700 Primary \$200 per Dependent (max 3) **\$200 Primary after completion of PEBP's Prevention Program	N/A	N/A	N/A	N/A	N/A
**The \$200 additional HSA/HRA contribution will be credited to the primary participants HSA/HRA when PEBP's Third Party Administrator, HealthScope Benefits, verifies through medical/dental claims that the participant has completed all of the following requirements: 1. Annual Preventive Exam 2. Annual Preventive Lab Work 3. Annual Dental Exam 4. One Dental cleaning (of the 4 available per year). Primary participants have until June 30, 2018 to complete all four requirements to receive the additional \$200 contribution from PEBP. Activities before July 1, 2017 will not count towards these requirements. All four requirements are covered at 100% under the preventive wellness benefits when using in network providers.						

Plan Provisions (continued)

Plan Year 2018 Prescription Plan Comparison

PLAN DESIGN FEATURES	CONSUMER DRIVEN HEALTH PLAN (CDHP - PPO)		STANDARD HMO PLAN Hometown Health and Health Plan of Nevada		ALTERNATE HMO PLAN Hometown Health and Health Plan Of Nevada	
	IN-NETWORK	OUT-OF-NETWORK	IN-NETWORK	OUT-OF-NETWORK	IN-NETWORK	OUT-OF-NETWORK
PRESCRIPTION DRUGS						
Preferred Generic	20% after Deductible*	N/A	\$7 Copay	N/A	\$25 Copay	N/A
Preferred Brand	20% after Deductible	N/A	\$40 Copay	N/A	\$50 Copay	N/A
Non-Formulary	20% after Deductible	N/A	\$75 Copay	N/A	\$75 Copay	N/A
Specialty	20% after Deductible	N/A	40% Coinsurance	N/A	40% Coinsurance	N/A
ACA Preventive Medications	\$0	No Benefit	\$0	N/A	\$0	N/A
CDHP Preventive Medications	20% Coinsurance Not subject to Deductible	20% Coinsurance after Deductible	N/A	N/A	N/A	N/A

Preventive Drug Benefit *NEW

The Preventive Drug Benefit provides plan participants access to certain preventive medications without having to meet a deductible, and will instead only be subject to coinsurance. Coinsurance paid under the benefit will not apply to the deductible, but will apply to the out-of-pocket maximum. The drugs covered under this benefit include categories of prescription drugs that are used for preventive purposes or conditions, such as hypertension, asthma or high cholesterol. This benefit only applies to if using an in-network provider. An example list can be located at www.pebp.state.nv.us. For more information on this, contact Express Scripts at (855) 889-7708.

Plan Provisions (continued)

Plan Year 2018 Dental Plan Comparison

Dental Plan <i>All PPO, HMO and Medicare Exchange eligible Participants</i>		
Benefit Category	In-Network	Out-of-Network
Individual Plan Year Maximum	\$1,500 per person for Basic and Major services	\$1,500 per person for Basic and Major services
Plan Year Deductible (applies to Basic and Major services only)	\$100 per person or \$300 per family (3 or more)	\$100 per person or \$300 per family (3 or more)
Preventive Services Four cleanings/plan year, exams, bitewing X-rays (2/plan year) Preventive Services are not subject to the \$1,500 Individual Plan Year Maximum	100% of allowable fee schedule, no deductible	80% of allowable fee schedule for the Las Vegas area for participants using an out-of-network provider <i>within the in-network</i> service area; or For services received out-of-network, outside of Nevada, the plan will reimburse at the U&C rates
Basic Services Periodontal, fillings, extractions, root canals, full-mouth X-rays	80% of allowable fee schedule, after deductible	50% (after deductible) of allowable fee schedule for the Las Vegas area for participants using an out-of-network provider <i>within the in-network</i> service area; or For services received out-of-network, outside of Nevada, the plan will reimburse at the U&C rates
Major Services Bridges, crowns, dentures, tooth implants	50% of allowable fee schedule, after deductible	50% (after deductible) of allowable fee schedule for the Las Vegas area for participants using an out-of-network provider <i>within the in-network</i> service area; or For services received out-of-network, outside of Nevada, the plan will reimburse at the U&C rates

Family Deductible may be met by any combination of eligible dental expenses of three or more members of the same family coverage tier. No one single family member will be required to contribute more than the equivalent of the individual deductible toward the family deductible.

Under no circumstances will the combination of PPO and Non-PPO benefit payments exceed the plan year maximum benefit of \$1,500.