May 16, 2018

Ms. Laura Lopez
State Senior Financial Consultant
Office of Financial Management
P.O. Box 43113
Olympia, WA 98504-3113

SUBJECT: OPEB ACTUARIAL VALUATION FOR THE STATE'S JUNE 30, 2018 FISCAL YEAR-END

Dear Ms. Lopez:

This letter documents the results of an actuarial valuation of the post-retirement medical subsidies offered to retirees and their spouses by the state, as a participating employer in the Public Employee Benefits Board's (PEBB) retiree medical plans. The primary purpose of this valuation is to determine the state's Other Post-Employment Benefits (OPEB) liability under the Governmental Accounting Standards Board Statement No. 75 (GASB 75) financial reporting requirements. This valuation should not be used for other purposes.

The valuation results are attached in the GASB 75 Tables spreadsheet. The purpose of the spreadsheet is to provide the Office of Financial Management (OFM) the required information to include in their *2018 Comprehensive Annual Financial Report* (CAFR). The spreadsheet contains the following information:

- Components for the Schedule of Changes in Total OPEB Liability (TOL[1]):
  - Service Cost; Interest; Difference Between Expected and Actual Experience; Changes in Benefit Terms; Changes in Assumptions; Benefit Payments.
- OPEB Expense.
- Sensitivity of the TOL to Changes in Discount Rate and Healthcare Trend Assumptions.

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[1] *We have left the Covered Employee Payroll blank. It is our understanding this information will be populated by OFM staff.*

- Deferred Outflows and Inflows of Resources.
  - Subsequent Recognition Years.
- Summary of Plan Participants.
- Summary of Assumptions and Methodology.

The Health Care Authority (HCA) and the Department of Retirement Systems (DRS) provided the member data used in this valuation. The raw data provided by HCA reflects members enrolled in a PEBB program as of January 1, 2017, as well as active employees who were eligible to join at that date but waived coverage. The DRS census data is reported as of June 30, 2016, and supplemented the HCA data. More specifically, we relied on DRS data for retirement plan and membership service to estimate active employee eligibility for post-retirement medical benefits. The data was checked for reasonableness as appropriate based on the purpose of this valuation. An audit of the participant data was not performed. There is no established trust fund dedicated to these benefits, therefore no assests were accounted for in this valuation. We relied on all the information provided as complete and accurate. In our opinion, the data is adequate and complete for the purpose of this valuation.

We performed this valuation with a valuation date of January 1, 2017. The TOL was calculated as of the valuation date and projected to the measurement date of June 30, 2017. In order to estimate the TOL as of the beginning of the measurement period, the TOL was also projected backwards to the measurement date of June 30, 2016[2]. For both the forward and backward projection of the liability, we reflected the plan's service cost, assumed interest, and expected benefit payments.

The results attached to this letter will differ from the information our office prepared in the *2017 PEBB OPEB Report*, which were prepared to meet financial reporting requirements under GASB Statements 43 and 45. A few examples of differences include:

- For OPEB plans without a dedicated trust, GASB 75 requires the discount rate to be based on a 20-year, tax-exempt, high-quality municipal bond rate. We relied on the Bond Buyer General Obligation 20-Bond Municipal Index to determine the discount rate for each measurement date. This resulted in a 2.85 percent discount rate for our beginning TOL, measured as of June 30, 2016, and 3.58 percent for our ending TOL, measured as of June 30, 2017.
- GASB 75 requires the valuation results to be prepared using the Entry Age Normal actuarial cost method. In the *2017 PEBB OPEB Report*, we presented results using the Project Unit Credit actuarial cost method, an acceptable method under GASB 43 and 45.

[2] *As allowed under question 4.499 in the GASB Implementation Guide No. 2017-3.*

In addition to the changes required under GASB 75, we also modified our data method for this valuation. The changes arose from conversations we had with HCA and OFM staff that helped clarify (1) the employers that are considered part of the state, and (2) active employees that could be eligible for post-retirement medical benefits through a PEBB program in the future. Based on these discussions, we now include active employees who waived coverage, but could meet eligibility requirements for post-retirement medical. This increased the state's active headcount by approximately 10,000. We apply the same post-retirement participation percentage to these employees as we do to employees currently participating in a PEBB program, as not all eligible employees elect to join a PEBB program in retirement.

The valuation results summarized in the attached spreadsheet involve calculations that require assumptions about future economic and demographic events. Unless noted otherwise, all other assumptions and methods are consistent with the *2017 PEBB OPEB Report*.

HCA contracted with Milliman to prepare the healthcare assumptions for this valuation, which include healthcare trend, claims costs, and aging factors. Robert Schmidt, a healthcare actuary in Milliman's Boise, Idaho office, provided these assumptions in a letter to HCA dated April 28, 2017. Milliman provided two sets of healthcare trend rates, one with excise tax and one without excise tax. Please see the Actuarial Certification Letter from our *2017 PEBB OPEB Report* for further details. We performed our analysis using healthcare trend rates that included the excise tax rate.

After the healthcare assumptions were prepared, the Supplemental Budget adopted during the 2018 Legislative Session increased the cap on the monthly premium reduction for Medicare (post-65) retirees and their spouses, also referred to as the explicit subsidy. In 2017 and 2018, the cap is $150 per month and the Supplemental Budget increased that amount to $168 on January 1, 2019. While our valuation assumes future increases to this cap, the increase to $168 on January 1, 2019, is larger than currently assumed. We consulted with Robert Schmidt at Milliman, and we all believe the current assumptions for projecting that cap are reasonable over the long-term and appropriate for the purpose of this valuation. For more information on the explicit subsidy, please see our *2017 PEBB OPEB Report*.

We believe that the assumptions and methods used in the valuation are reasonable and appropriate for the primary purpose stated above. The use of another set of assumptions and methods, however, could also be reasonable and could produce materially different results.

In our opinion, all methods, assumptions, and calculations are appropriate and in conformity with generally accepted actuarial principles and standards of practice as of the date of this publication.

The undersigned, with actuarial credentials, meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. While this report is intended to be complete, we are available to offer extra advice and explanations as needed.

Luke Masselink, ASA, EA, MAAA
Senior Actuary

Lisa A. Won, ASA, FCA, MAAA
Deputy State Actuary

cc: Brian Tinney, Assistant Director of Accounting
Office of Financial Management
Michael Harbour, ASA, MAAA, Senior Actuarial Analyst
Office of the State Actuary
Kyle Stineman, ASA, Senior Actuarial Analyst
Office of the State Actuary

Attachment: GASB 75 Tables.xlsx

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Attachment

Schedule of Changes in Total Other Liability and Related Ratios Post-Employment Benefits Liability Measurement Date of June 30		
(Expressed in Dollars)	**2018**	
Total OPEB Liability (TOL)		
Service Cost	$ 394,955,230	
Interest	184,999,452	
Difference Between Expected and Actual Experience*	-	
Changes in Benefit Terms	-	
Changes in Assumptions*	(902,430,584)	
Benefit Payments	(94,278,671)	
Other	-	
Net Change in Total OPEB Liability	**(416,754,573)**	
Total OPEB Liability - Beginning	**6,242,577,034**	
Total OPEB Liability - Ending	**$ 5,825,822,461**	
Covered Employee Payroll		<---OFM to populate.
TOL as a Percentage of Covered Payroll		<---OFM to populate.

**The recognition period for these changes is nine years. This is equal to the average expected remaining service lives of all active and inactive members.*

OPEB Expense for Fiscal Year Ending June 30, 2018		
OPEB Expense		
a. Service Cost	$	394,955,230
b. Interest Cost		184,999,452
c. Amortization of Differences Between Expected and Actual Experience		-
d. Amortization of Changes in Assumptions		(100,270,065)
e. Changes in Benefit Terms		-
f. Other Changes in Fiduciary Net Position		-
Total OPEB Expense	**$**	**479,684,617**

Sensitivity Analysis - Discount Rate			
(Expressed in Dollars)	**1% Decrease**	**Current Discount Rate**	**1% Increase**
Total OPEB Liability	**$7,108,222,648**	**$5,825,822,461**	**$4,833,450,574**

Sensitivity Analysis - Healthcare Trend			
(Expressed in Dollars)	**1% Decrease**	**Current Trend Rate**	**1% Increase**
Total OPEB Liability	**$4,706,462,833**	**$5,825,822,461**	**$7,328,102,974**

Expressed in Dollars	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference Between Expected and Actual Experience	$ -	$ -
Changes of Assumptions	-	802,160,519
Transactions Subsequent to the Measurement Date		
Total	**$ -**	**$ 802,160,519**

Subsequent Years	
2019	$(100,270,065)
2020	$(100,270,065)
2021	$(100,270,065)
2022	$(100,270,065)
2023	$(100,270,065)
Thereafter	$(300,810,194)

Summary of Plan Participants	
	2017
Actives Employees*	
Number	121,518
Average Age	46.1
Average Service	11.2
Retirees Receiving Benefits**	
Number	32,107
Average Age	73.8
Retirees Not Receiving Benefits***	
Number	6,000

**Reflects active employees eligible for PEBB program participation as of January 1, 2017. Of this amount, approximately 111,000 actives are participating in a PEBB program for their active healthcare benefits.*

***Per GASB 75, the headcount above includes retirees and surviving spouses. It excludes spouses of retirees that are participating in a PEBB program as a dependent. The subsidies earned by these dependents are included in the total OPEB liability. As of January 1, 2017, there were 13,034 retiree spouses listed as a dependent.*

****This is an estimate of the number of retirees that may be eligible to join a post-retirement PEBB program in the future. No benefits are owed to them unless they choose to join in the future. In order to do so, they must show proof of continuous medical coverage since their separation of employment with the State of Washington that meets the requirements set forth in Washington Administrative Code 182-12-205.*