



Office of the State Actuary

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2009 OTHER POST-EMPLOYMENT BENEFITS ACTUARIAL VALUATION REPORT

January 2011



Office of the State Actuary

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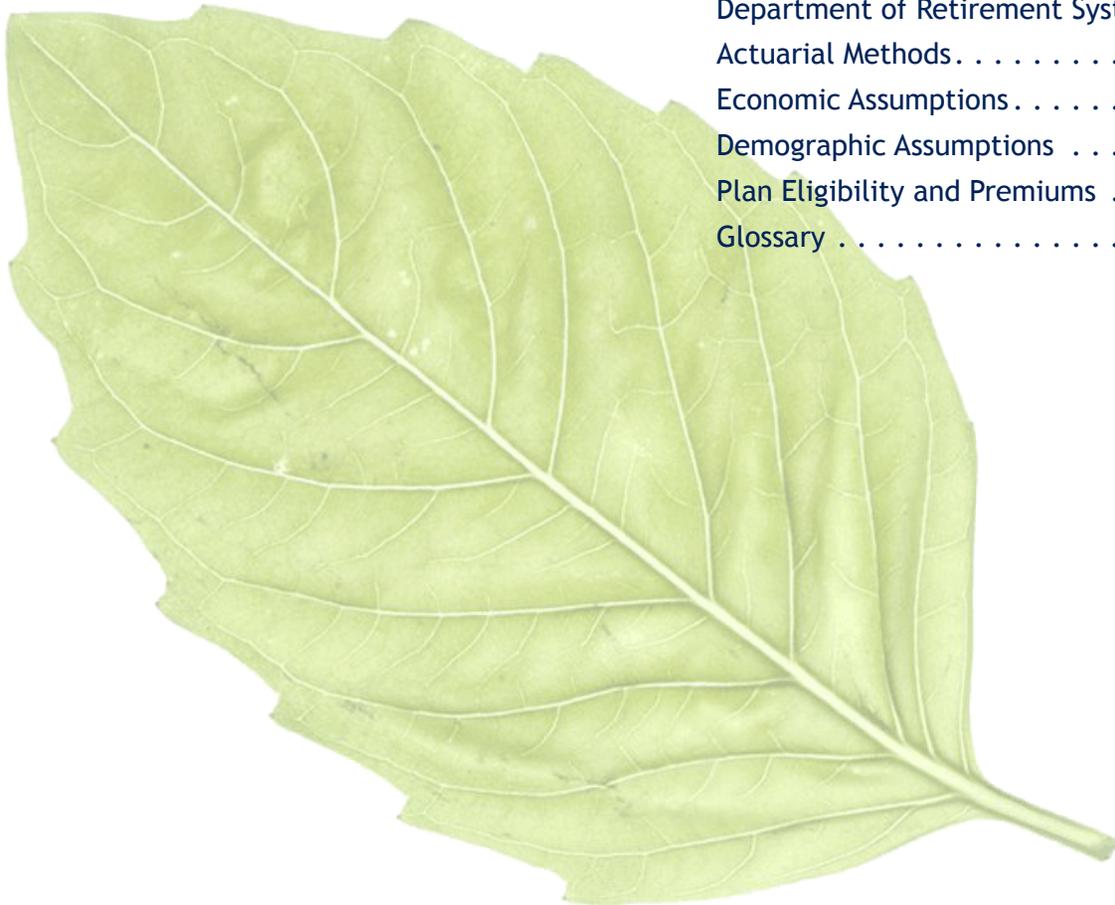
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Letter of Introduction Other Post-Employment Benefits Actuarial Valuation Report January 2011

In accordance with the reporting requirements of Statement No. 45 of the Governmental Accounting Standards Board (GASB), this report documents the results of an actuarial valuation of the employer-provided subsidies associated with post-employment medical and life insurance benefits provided through the Public Employee Benefits Board (PEBB). The PEBB was created within the Washington State Health Care Authority (HCA) to administer medical, dental, and life insurance plans for public employees and retirees.

The primary purpose of this valuation is to determine the PEBB plan liability as of January 1, 2009. This liability belongs to the participating employers of the plan, which include the state, K-12 school districts, and political subdivisions of the state. The valuation determines the total liability for the retiree medical and life insurance benefits and the Annual Required Contribution (ARC) needed to pre-fund them (although this funding policy is not required).

The report is organized into the following sections:

- ◆ Background.
- ◆ Actuarial Exhibits.
- ◆ Sensitivity Analysis.
- ◆ Participant Data.
- ◆ Appendices.

The Background section discusses the nature of the Other Post-Employment Benefits (OPEB) liabilities, who is affected by the GASB requirements, and how the liabilities are calculated. The Actuarial Exhibits section provides the results of this valuation and the necessary exhibits to satisfy the requirements of GASB Statement No. 45. The Sensitivity Analysis section provides further information about the impact of the methods and assumptions used in our calculations. The Participant Data section provides detailed information about the retired members who receive the subsidies and the active members who are potentially eligible for the subsidies. The Appendices provide a summary of the principal actuarial assumptions and methods, a summary of plan provisions, and a glossary of actuarial terms used throughout this report.



We encourage you to submit any questions you might have concerning this report to our regular e-mail address: actuary.state@leg.wa.gov. We invite you to visit our web site (osa.leg.wa.gov) for more information regarding the actuarial funding of the Washington State retirement systems.

Matthew M. Smith, FCA, EA, MAAA
State Actuary

Christi Steele
Senior Actuarial Analyst

This section documents the key GASB Statement No. 45 (GASB 45) valuation and accounting results related to the Public Employee Benefits Board (PEBB) employer-provided subsidies in Washington State. GASB 45 requires the disclosure of the following key measurements:

- ◆ **Actuarial Accrued Liability (AAL)** - The amount of subsidies expected to be paid to current retirees and current active members (future retirees) that have already been earned, measured in today's dollars. Also referred to as the GASB 45 liability.
- ◆ **Annual Required Contribution (ARC)** - The annual amount required under the actuarial cost method to fully fund

the liability. It is made up of the normal cost (the amount earned in the next year) plus the amortization of the unfunded AAL (unfunded past liability).

- ◆ **Annual OPEB Cost** - The ARC plus the amortization of the Net OPEB Obligation (NOO, see next bullet point). The Annual OPEB Cost is the “expense” for financial reporting.
- ◆ **Net OPEB Obligation (NOO)** - The cumulative difference between the Annual OPEB Cost and actual employer contributions. The NOO is the “balance sheet liability” for financial reporting.

The table below shows these key measurements for the PEBB employers by major employer category. The State category contains all state agencies and higher education employers. K-12 employers (school districts) are split from the state because they are legally separate corporate entities. The Political Subdivision category includes local governments who have applied and been accepted to join PEBB. Together, these three groups comprise the PEBB employers.

Please read the rest of the report for a detailed description of what these measures represent, how they are calculated, and how they should be used. Please review the Sensitivity Analysis section for more information about how these numbers change with small changes in our assumptions.

GASB 45 Key Results				
	Political			
<i>(Dollars in thousands)</i>	State	K-12	Subdivisions	Total
Actuarial Accrued Liability (AAL)	\$3,786,869	\$3,455,791	\$375,712	\$7,618,372
Annual Required Contribution (ARC)	349,326	315,428	41,497	706,250
Annual OPEB Cost	354,420	320,383	42,171	716,974
Net OPEB Obligation (NOO) (6/30/2010)*	\$777,872	\$733,954	\$104,675	\$1,616,502

*Estimated.

Comments on 2009 Results

Short-term actuarial gains or losses occur when actual economic and demographic experience differs from what we assume in the valuation. Actuarial gains reduce the GASB 45 liability; actuarial losses increase the GASB 45 liability. Under a reasonable set of actuarial assumptions and methods, actuarial gains and losses offset over long-term experience periods.

Significant changes in plan provisions or actuarial assumptions and methods also impact the GASB 45 liability. Significant factors that impacted the results of this valuation include the following:

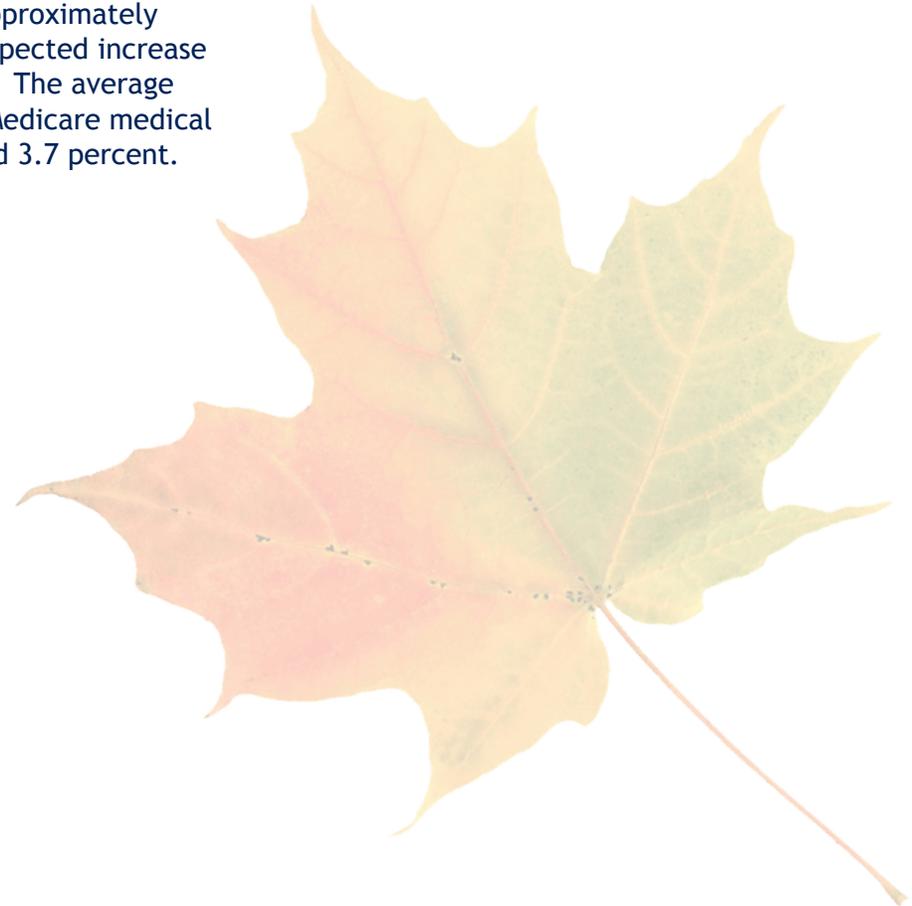
- ◆ Actual medical cost inflation was lower than the assumed rate of approximately 7.5 percent. The average

cost of medical plans providing coverage before Medicare eligibility increased by 4.9 percent; the average cost of medical plans for Medicare recipients decreased 1.4 percent.

- ◆ Actual medical premium inflation showed mixed results. The average pre-Medicare plan premiums increased by 7.6 percent, approximately equal to the expected increase of 7.5 percent. The average premiums for Medicare medical plans decreased 3.7 percent.

- ◆ While medical premium inflation for pre-Medicaid plans matched expectations, the state experienced a cost-sharing decrease of 2.6 percent. The state's cost share for Medicare medical plans increased by 2.3 percent.

A more detailed analysis of the gain/loss can be found in the Actuarial Exhibits section.



Section One - Background



OPEB

Other post-employment benefits (OPEB) are benefits provided to retired employees beyond those provided by their pension plans. Such benefits include medical, prescription drug, life, dental, vision, disability, and long-term care insurance. PEBB offers retirees access to all of these benefits. However, PEBB employers provide monetary assistance, or subsidies, only for medical, prescription drug, life, and vision insurance.

The OPEB relationship between PEBB employers and their employees and retirees is not formalized in a contract or plan document. Rather, the benefits are provided in accordance with a substantive plan. A substantive plan is one in which the plan terms are understood by the employers and plan members. This understanding is based on communications between the employers and plan members and the historical pattern of practice with regard to the sharing of benefit costs.

Subsidies

The Washington State Health Care Authority (HCA) administers PEBB plan benefits. For medical insurance coverage, the HCA has two claims pools: one covering employees and non-Medicare eligible retirees, and the other covering retirees enrolled in Medicare Parts A and B. Each participating employer pays a portion of the premiums for active employees. For retirees, participating employers provide two different subsidies: an

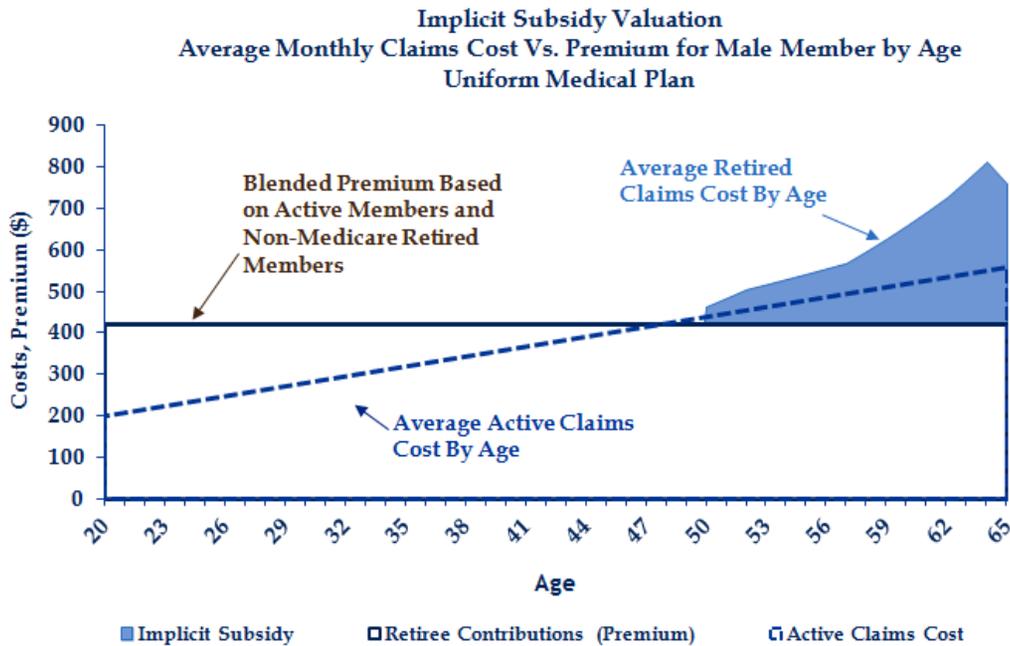
explicit subsidy and an implicit subsidy.

The explicit subsidy, permitted under RCW 41.05.085, is a straightforward, set dollar amount for a specific group of people. The explicit subsidy lowers the monthly premium paid by retired members enrolled in Medicare Parts A and B. PEBB determines the amount of the explicit subsidy annually, the table below shows the amount of the monthly explicit subsidy in recent years. The explicit subsidy is the lesser of 50 percent of the monthly premium and the amount below.

Year	Percent	
	Explicit	
	Subsidy	Increase Over
Per Month	Prior Year	
2009	\$182.89	11.46%
2008	164.08	9.63%
2007	149.67	13.50%
2006	131.87	13.50%
2005	116.19	13.52%
2004	102.35	10.36%
2003	92.74	8.04%
2002	85.84	22.66%
2001	69.98	12.00%
2000	\$62.48	N/A

The implicit subsidy, set up under RCW 41.05.022, is more complex because it is not a direct payment from the employer on behalf of the member. Since claims experience for employees and non-Medicare eligible retirees are pooled when determining premiums, these retired members pay a premium based on a pool of members that, on average, are younger and healthier. There is an implicit subsidy from the employee group since the premiums paid by the retirees are lower than they would have been if the retirees were insured separately. The subsidies are valued using the difference between the age-based claims costs and the premium paid by the retirees. The following graph shows an example of the average monthly claims costs and the blended premium for the Uniform Medical Plan (UMP).

GASB Statements No. 43 and 45



The horizontal line shows the constant premium for all members participating in the employee and non-Medicare eligible retiree pool. The upward sloping lines show the average monthly claims cost for each age. When the retirees' upward sloping line is above the horizontal line there is an implicit subsidy (the shaded area in the graph). The value of the implicit subsidy is the difference between the higher sloped line and the horizontal line. For example, in the UMP, the average monthly claims cost for 60-year-old retirees is \$659, whereas the average monthly premium for 60-year-old retirees is \$421. There is an average implicit subsidy of \$238 per month for each 60-year-old PEBB retiree enrolled in UMP.

PEBB also provides subsidized basic life insurance (Plan A) coverage to retirees. This is an explicit life insurance subsidy and is set

up by the PEBB Board and approved as part of the budget process. The table below shows a history of this subsidy.

Explicit Subsidy	
Year	Per Month
2009	\$4.84
2008	4.77
2007	4.81
2006	4.48
2005	4.14
2004	3.93

Before 2007 these subsidies were not projected and accounted for under an accrual basis. Accrual accounting is meant to match the timing between when something occurs and when it is accounted for. In this case, it is meant to match the expense to the year in which the benefits are earned by the member.

Pay-as-you-go funding occurs when an employer chooses to contribute (pay) for benefits only when they occur or become due (after retirement). Before 2007 this cost was expensed as PEBB plan employers paid the current year's subsidies. However, the unfunded liability, the difference between what members accrue (assuming on-going future payments) and what the PEBB plan employers currently pay, was growing and was not accounted for under the pay-as-you-go method.

According to GASB, Statements No. 43 and 45 were created in an attempt to:

- ◆ Create financial transparency.
- ◆ Create better alignment between public and private sector accounting.
- ◆ Provide clarity among bargaining groups to show the true cost of benefits over time.
- ◆ Provide employers knowledge of the true cost of benefits over time.
- ◆ Provide investors knowledge of the true long-term liabilities.

- ◆ Show the decision-makers a cost that they need to recognize.

GASB Statement No. 43 requires disclosure of information related to the entire plan. In the case of the PEBB plan, an agent multiple-employer plan, GASB does not require a calculation of liability at the plan level.

GASB Statement No. 45 requires each employer to calculate their OPEB liability. In addition to the overall liability, GASB requires a calculation of the ARC. The ARC is the annual amount required under the actuarial cost method and funding policy for amortizing the unfunded actuarial accrued liability. GASB does not require that PEBB plan employers actually contribute the ARC each year, just that they recognize it so that all stakeholders can see the difference in the current and long-term expected cost of benefits.

In addition, the state discloses GASB Statements No. 43 and 45 information in the Treasury Bond Prospectus. Rating agencies, such as Moody's, Fitch, and Standard & Poors, analyze OPEB liabilities. Bond ratings, and the related cost of capital, may be impacted by a government's unfunded OPEB liabilities. However, the resulting analyses will not necessarily have a negative impact on ratings. These agencies will consider whether a plan is in place to manage these liabilities, look at the entity's ability to meet their budget, and analyze the size of the unfunded actuarial accrued liability compared to payroll, budget, and tax base when making their determinations.

Actuarial Valuation

We perform an actuarial valuation to determine the GASB 45 liabilities. An actuary performs an actuarial valuation to determine benefits expected to be paid throughout the future lifetimes of current members and discounts those payments back to the present. The result is the present value of future benefits. For example, if you had a dollar amount today, which equaled the present value of future benefits, you could invest that amount, accrue earnings during the current plan members' lifetimes, and use the original investment plus earnings to pay all future benefits when the members are eligible. The total amount remaining when there are no more benefits being paid would be zero. In this case, the benefits payments are the subsidies provided to PEBB retirees.

Under an actuarial valuation, an actuary needs inputs such as participant data (who is receiving the benefits), benefit provisions (what are the benefits), and assumptions (how do we expect the members and the economy to behave). Participant data includes the members' ages, membership service, plan selection, etc. Benefit provisions include the structure of the benefits that the members receive – in this case, the subsidies supporting retiree medical benefits. Assumptions include the interest rate (investment return), health care inflation rates, general inflation rates, decrement rates, participation rates, Medicare coverage, etc.

An actuary values these inputs using an actuarial cost method. The cost method chosen allocates costs between past and

future plan membership service. Distinct actuarial cost methods produce somewhat different allocations since each method allocates cost differently. An actuary uses this information in valuation software to determine the liability and ARC. Essentially, the valuation software uses the inputs to estimate when a benefit will be paid, how much the benefit will be, and how long it will be paid to each member.

Funding Policy

In Washington State, the implicit and explicit subsidies have been funded on a pay-as-you-go basis, meaning that PEBB employers have paid these costs as they occurred. This generally means today's taxpayers are paying for benefits that were earned in the past. This funding policy is in conflict with the principle of intergenerational equity, which requires that a member's benefits be funded over the member's working lifetime. Intergenerational equity occurs when the member's benefits are paid by the taxpayers who benefit from that member's service, as opposed to future taxpayers, who do not benefit from that member's service, paying for the member's benefits.

In the future, employers can continue to fund these liabilities on a pay-as-you-go basis, or they can be pre-funded. If employers continue pay-as-you-go funding, then a NOO (Net OPEB Obligation) accrues as the annual contributions fall short of the ARC. The results are lower current contributions in the short-run, a growing liability, and continued conflict with the principle of intergenerational equity. In addition, under

pay-as-you-go funding policy, there are no assets to invest; therefore, the interest discount rate must be lower, in the range of 4 to 5 percent. A lower interest discount rate will mean a larger reported overall liability.

If, instead, employers fully pre-fund these liabilities, then annual contributions equal to the ARC are made and placed in an irrevocable trust. If the employers choose to fully pre-fund benefits, then a NOO will not accrue. The results are larger current contributions in the short-run, a lower unfunded liability, and adherence to the principle of intergenerational equity. In addition, under pre-funding there will be assets to invest; the investment return applied to the liabilities will reflect the expected long-term yield of the assets used to finance the payment of the benefits. If these assets are invested similarly to those in a typical retirement plan, an interest discount rate in the range of 7 to 8 percent can be used. A higher interest discount rate will mean a smaller reported overall liability.

An employer must consider many complicated issues when creating a trust fund under pre-funding policy. Such considerations include:

- ◆ Determining the level of pre-funding.
- ◆ Contractualizing retiree health subsidies (pro or con).
- ◆ Making it difficult for school districts and political subdivisions to join or leave PEBB.
- ◆ Making larger contributions today (lower contributions later).

Employers could also choose a combination of the two funding policies. Partially pre-funding the liabilities will allow for an interest discount rate of 5 to 7 percent. A NOO accrues, but not as fast as under a pay-as-you-go funding method. Choosing this combination of funding methods allows for decision makers to keep current contributions manageable, while still pre-funding part of the liability and being able to earn some investment returns from the assets.

Lastly, partial or full pre-funding could occur under a non-dedicated fund. Under this approach, future benefit payments are partially offset by anticipated investment earnings. A NOO would still accrue, however, since GASB requires funding under an irrevocable and dedicated trust. This approach would not contractualize retiree health subsidies.

Cost-Sharing Policy

Cost-sharing policy determines the amount that the employee pays versus the employer. It is measured in terms of the percentage of the total amount that each pays. GASB requires that the cost-sharing policy be determined from the substantive plan; the substantive plan reveals the plan terms as understood by the employer(s) and the plan members. However, a comprehensive plan document does not always exist. In this case, GASB requires that the cost-sharing policy be determined from what is communicated between the employer and employees and the historical pattern of practice with regard to the sharing of benefit costs between the employer and plan members. We must

assume continuation of the current cost-sharing policy, since that is the best estimate of what policy will be in place in the future.

In the actuarial valuation, this cost-sharing policy is used to project the retiree contributions and average retiree claims costs into the future using the same medical inflation trend rate for each. By using the same medical inflation trend rate for future contributions and claims costs, the percentage of the total cost that the employer pays will remain constant throughout the lives of the current active and inactive members. *Projections could be run to show policy decision makers what changing the cost-sharing policy will do to the liability. As a frame of reference, cutting the cost-sharing policy in half will cut the liability in half since the subsidies would all be half of their current amount.*

Section Two - Actuarial Exhibits





Office of the State Actuary

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Actuarial Certification Letter Other Post-Employment Benefits Actuarial Valuation Report

January 2011

This report documents the results of an actuarial valuation of the post-retirement medical and life insurance subsidies offered by the employers participating in the Public Employee Benefits Board’s (PEBB) plan to their employees. The primary purpose of this valuation is to determine the liability, as of January 1, 2009, for the subsidies associated with retiree medical benefits provided by PEBB plan employers to satisfy accounting requirements issued by GASB. This valuation should not be used for other purposes.

The valuation results summarized in this report involve calculations that require assumptions about future economic and demographic events. I believe that the assumptions and methods used in the underlying valuation are reasonable and appropriate for the primary purposes stated above. The use of another set of assumptions and methods, however, could also be reasonable and could result in materially different results.

The assumption used in the valuation for investment return is based on the current funding policy. The expected long-term yield on the assets used to finance the payment of benefits determines the investment return. General inflation is the same as that used in the June 30, 2008, Actuarial Valuation Report (AVR), which was prescribed by the Legislature in 2001. We use a general salary inflation assumption of 4.50 percent. Medical trend, life trend, claims costs, and aging factors were determined by health care actuaries at Milliman, Incorporated. Participation percentage, percentage of spouses covered, and Medicare coverage were determined by the Office of the State Actuary. Demographic assumptions are the same as those used in the June 30, 2008, AVR, which were developed from the 2001-2006 Experience Study performed by the Office of the State Actuary. The Office of Financial Management is responsible for the selection of the actuarial cost method, asset valuation method, and funding policy for amortizing the UAAL.

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

The Health Care Authority (HCA) and the Department of Retirement Systems (DRS) provided the member data used in this report. The census data is reported as of June 30, 2008, and was projected forward to match the open enrollment medical plan choices as of January 1, 2009. We have checked the data for reasonableness as appropriate based on the

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purpose of the valuation. There are currently no assets as the liability has not been pre-funded. An audit of the participant data was not performed. We have relied on all the information provided as complete and accurate. In my opinion, these data are adequate and complete for the purposes of this valuation.

The undersigned, with actuarial credentials, meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Matthew M. Smith, FCA, EA, MAAA
State Actuary

Present Value of Future Benefits

The PVFB is the present value of future medical and life insurance subsidies paid on behalf of the current employees (actives/future retirees) and current retirees of the employers participating in the PEBB plan. The PVFB is based on all service currently earned and all service projected to be earned in the future. In other words, this is the present value of all subsidies expected to be paid out, whereas the GASB Statement No. 45 (GASB 45) liability is the present value of all subsidies expected to be paid out that have already been earned.

The next table shows the PVFB as of January 1, 2009, split among PEBB plan employers by major category, grouped by current active and inactive members, and shows what portions are attributable to the explicit subsidy and implicit subsidy for medical insurance, and the life insurance subsidy; the table is broken into gross costs (total cost), cost sharing (member contributions), and net subsidy (cost minus member contributions).

Present Value of Future Benefits (PVFB)				
(Dollars in thousands)	State	K-12	Political Subdivisions	Total
Gross Costs				
Active Members				
Explicit Medical Subsidy	\$8,343,721	\$7,326,199	\$1,006,101	\$16,676,021
Implicit Medical Subsidy	2,622,425	2,221,161	302,373	5,145,959
Life Insurance Subsidy	18,791	328	855	19,974
Total Active	10,984,938	9,547,688	1,309,329	21,841,954
Inactive Members				
Explicit Medical Subsidy	2,254,978	2,370,768	88,924	4,714,669
Implicit Medical Subsidy	325,617	302,480	19,764	647,861
Life Insurance Subsidy	9,926	653	137	10,716
Total Inactive	2,590,521	2,673,900	108,825	5,373,245
Gross Costs Total	13,575,458	12,221,588	1,418,154	27,215,199
Cost Sharing (Retiree Contributions)				
Active Members				
Explicit Medical Subsidy	4,074,798	3,582,784	459,555	8,117,136
Implicit Medical Subsidy	1,580,067	1,326,652	169,158	3,075,877
Life Insurance Subsidy	8,681	161	395	9,238
Total Active	5,663,546	4,909,597	629,108	11,202,251
Inactive Members				
Explicit Medical Subsidy	1,109,647	1,167,604	43,461	2,320,711
Implicit Medical Subsidy	204,366	184,418	12,607	401,390
Life Insurance Subsidy	2,587	164	44	2,795
Total Inactive	1,316,599	1,352,185	56,112	2,724,896
Cost Sharing Total	6,980,145	6,261,783	685,220	13,927,147
Net Subsidy (Gross Costs - Cost-Sharing)				
Active Members				
Explicit Medical Subsidy	4,268,923	3,743,415	546,547	8,558,885
Implicit Medical Subsidy	1,042,359	894,509	133,214	2,070,082
Life Insurance Subsidy	10,110	167	460	10,736
Total Active	5,321,392	4,638,090	680,221	10,639,703
Inactive Members				
Explicit Medical Subsidy	1,145,331	1,203,164	45,463	2,393,958
Implicit Medical Subsidy	121,251	118,062	7,157	246,470
Life Insurance Subsidy	7,339	489	93	7,921
Total Inactive	1,273,921	1,321,714	52,713	2,648,349
Net PVFB (1/1/2009)	\$6,595,313	\$5,959,805	\$732,934	\$13,288,052

*GASB Statement No. 45
Liability (AAL)*

The GASB Statement No. 45 (GASB 45) liabilities are employers' total accrued liabilities from the medical and life insurance subsidies offered through the PEBB plan. It is the present value of future subsidies paid on behalf of current employees (actives/future retirees) and current retirees. The GASB 45 liabilities are based on all service currently earned. The GASB 45 liability is also referred to as the actuarial accrued liability or the projected unit credit liability.

The next table shows the GASB 45 liabilities as of January 1, 2009, split among the PEBB plan employees by major category by current active and inactive members and shows what portions are attributable to the explicit subsidy and implicit subsidy for medical insurance, and the life insurance subsidy; the table is broken into gross costs (total cost), cost sharing (member contributions), and net subsidy (cost minus member contributions).

GASB 45 Actuarial Accrued Liability				
<i>(Dollars in thousands)</i>	State	K-12	Political Subdivisions	Total
Gross Costs				
Active Members				
Explicit Medical Subsidy	\$3,970,114	\$3,390,316	\$481,396	\$7,841,826
Implicit Medical Subsidy	1,215,450	996,540	142,981	2,354,972
Life Insurance Subsidy	11,926	211	506	12,644
Total Active	5,197,491	4,387,067	624,884	10,209,442
Inactive Members				
Explicit Medical Subsidy	2,254,978	2,370,768	88,924	4,714,669
Implicit Medical Subsidy	325,617	302,480	19,764	647,861
Life Insurance Subsidy	9,926	653	137	10,716
Total Inactive	2,590,521	2,673,900	108,825	5,373,245
Gross Costs Total	7,788,011	7,060,967	733,708	15,582,687
Cost Sharing (Retiree Contributions)				
Active Members				
Explicit Medical Subsidy	1,943,138	1,657,581	221,154	3,821,873
Implicit Medical Subsidy	735,869	595,306	80,496	1,411,670
Life Insurance Subsidy	5,536	104	235	5,875
Total Active	2,684,543	2,252,991	301,885	5,239,418
Inactive Members				
Explicit Medical Subsidy	1,109,647	1,167,604	43,461	2,320,711
Implicit Medical Subsidy	204,366	184,418	12,607	401,390
Life Insurance Subsidy	2,587	164	44	2,795
Total Inactive	1,316,599	1,352,185	56,112	2,724,896
Cost Sharing Total	4,001,142	3,605,176	357,996	7,964,314
Net Subsidy (Gross Costs - Cost-Sharing)				
Active Members				
Explicit Medical Subsidy	2,026,976	1,732,735	260,243	4,019,954
Implicit Medical Subsidy	479,581	401,234	62,485	943,301
Life Insurance Subsidy	6,391	107	271	6,769
Total Active	2,512,948	2,134,077	322,999	4,970,023
Inactive Members				
Explicit Medical Subsidy	1,145,331	1,203,164	45,463	2,393,958
Implicit Medical Subsidy	121,251	118,062	7,157	246,470
Life Insurance Subsidy	7,339	489	93	7,921
Total Inactive	1,273,921	1,321,714	52,713	2,648,349
GASB 45 Liability (AAL) (1/1/2009)	\$3,786,869	\$3,455,791	\$375,712	\$7,618,372

ARC, Annual OPEB Cost, and NOO

The Annual Required Contribution (ARC) is the annual amount that would need to be contributed to fully fund the GASB 45 liability under acceptable actuarial methods. The ARC is made up of the normal cost plus the thirty-year amortization as a level percentage of payroll of the actuarial accrued liability that has not been funded. In other words, it is the amount of liability that will be earned in the next year, plus a portion of the unpaid liability that has already been earned. The following table shows the ARC and its components as of January 1, 2009. The components are split among the largest employers and broken down by active and inactive members. The table also shows what portions are attributable to the explicit subsidy, the implicit subsidy, and the life subsidy.

Annual Required Contribution (ARC)				
(Dollars in thousands)	State	K-12	Political Subdivisions	Total
Normal Cost				
Active Members				
Explicit Subsidy	\$171,291	\$154,450	\$22,682	\$348,423
Implicit Subsidy	38,810	34,613	5,141	78,564
Life Subsidy	444	7	22	473
Total Normal Cost	210,545	189,070	27,844	427,460
Amortization of UAAL				
Inactive Members				
Explicit Subsidy	112,907	103,220	11,121	227,248
Implicit Subsidy	25,582	23,132	2,521	51,235
Life Subsidy	293	5	11	308
Total Amortization*	138,781	126,357	13,652	278,790
ARC	\$349,326	\$315,428	\$41,497	\$706,250

*Amortization schedule shown beginning on page 20.

The annual OPEB cost is made up of the ARC, the interest on the Net OPEB Obligation (NOO), and the amortization of the NOO. The NOO is the ongoing balance sheet item that shows the difference between the annual OPEB cost and what the employers have actually contributed. In other words, it is the

liability for “deficient” contributions that has accrued since the ARC was first calculated including interest at the assumed discount rate. The tables below show the estimated annual OPEB cost and NOO for the PEBB plan employers by major category as of January 1, 2009.

Annual OPEB Cost				
(Dollars in thousands)	State	K-12	Political	Total
			Subdivisions	
ARC	\$349,326	\$315,428	\$41,497	\$706,250
Interest on NOO	22,210	21,552	2,935	46,697
Amortization of NOO*	(17,116)	(16,597)	(2,261)	(35,974)
Annual OPEB Cost	\$354,420	\$320,383	\$42,171	\$716,974

*Amortization schedule shown on page 21.

Net OPEB Obligation				
(Dollars in thousands)	State	K-12	Political	Total
			Subdivisions	
NOO (7/1/2009)	\$493,551	\$478,942	\$65,227	\$1,037,721
Annual OPEB Cost	354,420	320,383	42,171	716,974
(7/1/2009 - 6/30/2010) Contributions*	(70,099)	(65,370)	(2,724)	(138,193)
NOO (6/30/2010)*	\$777,872	\$733,954	\$104,675	\$1,616,502

*Estimated.

Amortization Schedule

The UAAL and NOO are amortized as a percentage of payroll over a closed thirty-year period. The tables below show what

makes up this year's amortization of the UAAL and NOO separately for the State, K-12, and political subdivisions.

(Dollars in thousands)	State Amortization of UAAL					
	Beginning	Previous	Accrued	Current	Years	Amortization
	UAAL	Amortization	Interest	UAAL	Remaining	
(a)	(b)	(c)	(d) (a - b + c)	(e)	(d / e)	
2007	\$3,799,530	\$264,765	\$423,978	\$3,958,744	28	\$141,384
2008*	90,703	3,023	3,946	91,625	29	3,159
2009	(263,500)	0	0	(263,500)	30	(8,783)
Total						135,760
Interest on Contributions						\$3,021
Total UAAL Amortization						\$138,781

*Restated.

K-12 Amortization of UAAL						
(Dollars in thousands)	Beginning UAAL	Previous Amortization	Accrued Interest	Current UAAL	Years Remaining	Amortization
	(a)	(b)	(c)	(d) (a - b + c)	(e)	(d / e)
2007	\$3,355,826	\$233,846	\$374,467	\$3,496,447	28	\$124,873
2008*	76,424	2,547	3,324	77,201	29	2,662
2009	(117,857)	0	0	(117,857)	30	(3,929)
Total						123,607
Interest on Contributions						\$2,751
Total UAAL Amortization						\$126,357

*Restated.

Political Subdivision Amortization of UAAL						
(Dollars in thousands)	Beginning UAAL	Previous Amortization	Accrued Interest	Current UAAL	Years Remaining	Amortization
	(a)	(b)	(c)	(d) (a - b + c)	(e)	(d / e)
2007	\$339,972	\$23,690	\$37,936	\$354,218	28	\$12,651
2008*	(10,293)	(343)	(448)	(10,398)	29	(359)
2009	31,892	0	0	31,892	30	\$1,063
Total						13,355
Interest on Contributions						\$297
Total UAAL Amortization						\$13,652

*Restated.

State Amortization of NOO						
(Dollars in thousands)	Beginning NOO	Previous Amortization	Accrued Interest	Current NOO	Years Remaining	Amortization
	(a)	(b)	(c)	(d) (a - b + c)	(e)	(d / e)
2007	\$0	\$0	\$0	\$0		\$0
2008	245,855	8,378	16,404	253,881	29	8,755
2009	239,670	0	0	239,670	30	\$7,989
Total						16,744
Interest on Contributions						\$373
Total NOO Amortization						\$17,116

K-12 Amortization of NOO						
(Dollars in thousands)	Beginning NOO	Previous Amortization	Accrued Interest	Current NOO	Years Remaining	Amortization
	(a)	(b)	(c)	(d) (a - b + c)	(e)	(d / e)
2007	\$0	\$0	\$0	\$0		\$0
2008	228,570	7,789	15,250	236,032	29	8,139
2009	242,910	0	0	242,910	30	\$8,097
Total						16,236
Interest on Contributions						\$361
Total NOO Amortization						\$16,597

Political Subdivision Amortization of NOO						
(Dollars in thousands)	Beginning NOO	Previous Amortization	Accrued Interest	Current NOO	Years Remaining	Amortization
	(a)	(b)	(c)	(d) (a - b + c)	(e)	(d / e)
2007	\$0	\$0	\$0	\$0		\$0
2008	31,258	1,065	2,086	32,278	29	1,113
2009	32,949	0	0	32,949	30	\$1,098
Total						2,211
Interest on Contributions						\$49
Total NOO Amortization						\$2,261

Assets

Currently, Washington State does not pre-fund post-retirement medical insurance subsidies. Since the PEBB plan subsidies are paid for on a pay-as-you-go basis the plan has no assets to invest. If the decision was made to switch from a pay-as-you-go funding policy to any level of pre-funding, assets would accumulate in a fund and earn investment returns that would lower future contributions and shift part of the burden from future taxpayers to current taxpayers. This policy would be more in line with the principle of intergenerational

equity. Under GASB, the market value of assets is the total monetary value of all assets held in an irrevocable trust. The actuarial value of assets has gains and losses smoothed over time so that some of the volatility associated with investment returns can be minimized; thus minimizing the volatility of contributions required by PEBB plan employers. However, there is currently no smoothing policy since there are no assets. Under GASB, an irrevocable, dedicated, and protected trust is required in order to

accumulate assets for accounting purposes (not required for funding). The table below shows the market value of assets and the actuarial value of assets as of the date of valuation, January 1, 2009.

Assets as of January 1, 2009	
(Dollars in thousands)	
Market Value of Assets	\$0
Amortization of Gains / (Losses)	0
Actuarial Value of Assets	\$0

Funded Ratio

The funded ratio is the ratio of the present value of contributions that have been made for current members (and associated investment return, if applicable) to the present value of the liability that has already been accrued (as defined by the funding method), also known as the actuarial accrued

liability (AAL). A funded ratio of 100 percent indicates that all benefits that have been accrued have been funded as of the valuation date. A ratio of less than 100 percent indicates that all benefits that have accrued have not been funded as of the valuation date. The next table shows the funded status of PEBB plan employers' OPEB liabilities.

Funded Status as of January 1, 2009					
(Dollars in thousands)	State	K-12	Political Subdivisions	Total	
Actuarial Accrued Liability	\$3,786,869	\$3,455,791	\$375,712	\$7,618,372	
Assets	0	0	0	0	
Unfunded Liability (1/1/2009)	\$3,786,869	\$3,455,791	\$375,712	\$7,618,372	
Funded Ratio					
	1/1/2009	0.00%	0.00%	0.00%	0.00%
	1/1/2008	0.00%	0.00%	0.00%	0.00%
	1/1/2007	0.00%	0.00%	0.00%	0.00%

Covered Payroll

The covered payroll is the total payroll of all current members that are eligible to receive subsidies from PEBB plan employers. Contributions made by the employers are considered on a percentage of payroll basis, similar to the pension systems. The ARC is calculated as a percent of the covered payroll. The estimated current covered

payroll can be seen in the table below, and is assumed to grow at 4.5 percent per year.

Note that the state's current ARC is \$349,326,000. This represents 6.15 percent of the state's current annual payroll for all eligible members.

Covered Payroll				
(Dollars in thousand:	State	K-12	Political Subdivisions	Total
Total Payroll	\$5,678,422	\$5,489,814	\$596,875	\$11,765,111

Unfunded Liability as a Percentage of Covered Payroll

We will look at the unfunded liability as a percentage of covered payroll as a measure of the relative magnitude of the unfunded liability. The table below shows the state's unfunded liability as a percentage of the state's total covered annual payroll. In other words, if this percentage payroll were contributed to fund the subsidies, all accrued subsidies would be fully funded.

Unfunded Liability as a Percentage of Covered Payroll				
<i>(Dollars in thousands)</i>	Political			Total
	State	K-12	Subdivisions	
Unfunded Liability (1/1/2009)	\$3,786,869	\$3,455,791	\$375,712	\$7,618,372
Total Payroll	\$5,678,422	\$5,489,814	\$596,875	\$11,765,111
Unfunded Liability as a % of Covered	66.69%	62.95%	62.95%	64.75%



Percentage of ARC Contributed

The following table shows the estimated percentage of the state's ARC contributed during the fiscal year ending June 30, 2010, on a pay-as-you-go basis. A percent below 100 relates to how much of the present value of the benefit being earned in the current year is being shifted to future periods.

Percentage of ARC Contributed				
<i>(Dollars in thousands)</i>	Political			Total
	State	K-12	Subdivisions	
(7/1/2009 - 6/30/2010) Contributions*	\$70,099	\$65,370	\$2,724	\$138,193
ARC	\$349,326	\$315,428	\$41,497	\$706,250
Percentage of ARC Contributed*	20.07%	20.72%	6.56%	19.57%

*Estimated.

Gain/Loss Analysis

The results of this report are based heavily on assumptions about future economic and demographic events. It is important to note over time how actual events differed from those assumptions. An event that causes the plan to cost less than was estimated is described as a gain to the plan. An event that causes the plan to cost more than was estimated is described as a loss to the plan. An analysis of the gains and losses between last year's valuation and this year's valuation shows what events are attributable to the change in expected cost of the plan.

The first table shows the difference between last year's liability and this year's liability by major source. The second table shows the difference between last year's annual cost and this year's annual cost.

2008 - 2009 Gain/Loss - Actuarial Accrued Liability (AAL)				
<i>(in thousands, 000)</i>	Political			Total
	State	K-12	Subdivisions	
Final 2008 GASB 45 Liability	\$4,014,270	\$3,541,802	\$348,538	\$7,904,611
2009 Data	(420,756)	(194,278)	(32,876)	(647,911)
2009 Plan Provisions	(130,955)	19,260	19,075	(92,620)
2009 Medical Inflation Trend	395,617	407,980	46,031	849,628
Other Changes	(71,306)	(318,974)	(5,056)	(395,336)
Final 2009 GASB 45 Liability	\$3,786,869	\$3,455,791	\$375,712	\$7,618,372

2008 - 2009 Gain/Loss - Normal Cost				
<i>(in thousands, 000)</i>	Political			Total
	State	K-12	Subdivisions	
Final 2008 Normal Cost	\$190,285	\$189,769	\$24,295	\$404,349
2009 Data	1,822	(3,092)	(1,894)	(3,165)
2009 Plan Provisions	268	13,032	2,317	15,617
2009 Medical Inflation Trend	31,610	35,396	4,054	71,060
Other Changes	(13,439)	(46,035)	(929)	(60,402)
Final 2009 Normal Cost	\$210,545	\$189,070	\$27,844	\$427,460

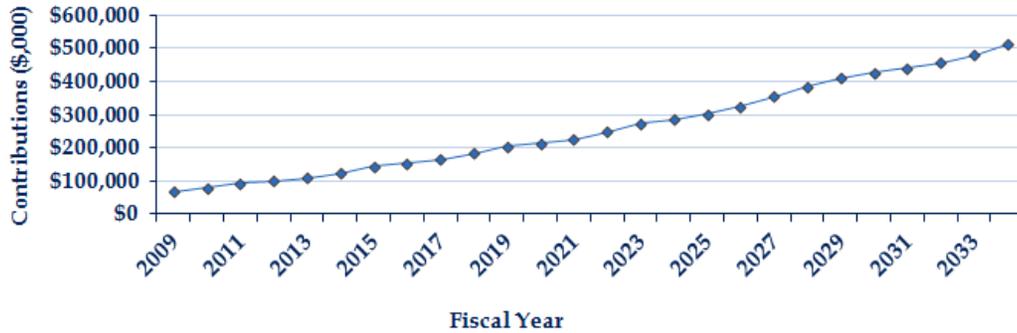
Projections

It is important to look at the projections of the contributions and the liabilities in order to determine if the contributions are manageable and whether the liabilities will be funded in a reasonable amount of time. Projections allow policy decision makers to determine the best funding policy for the State and their constituents while providing investors and stakeholders the knowledge of what lies ahead. Bond rating agencies will look at these projections to determine whether a well formulated plan is in place, or is necessary.

First, observe what the stream of payments will look like with a pay-as-you-go funding

policy for the current participants. Twenty-five years is a good time frame for projections since it is enough time to show trends in the future. As the large number of current members and high assumed medical inflation dominate the early years, the annual contributions increase. As projected medical inflation slows down and the closed current active population starts to dwindle, the annual payments reach a peak and decrease to zero in the long-run. The following graph shows what we expect the contributions to look like for the first twenty-five years under the current pay-as-you-go funding policy.

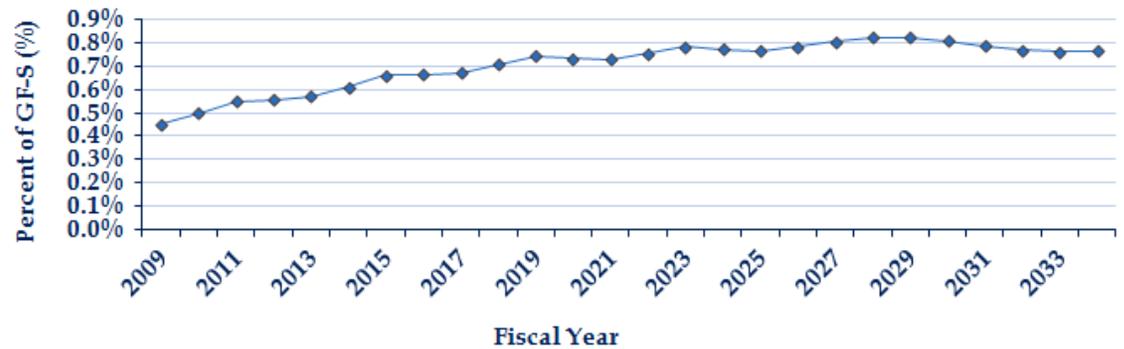
Annual State Contributions on Pay-As-You-Go Basis
(closed group basis; excludes new entrants)



While the expected stream of future contributions is informative, it is only helpful when put in perspective. A good comparison for the state's obligation is to look at the projected contributions as a percentage of the General Fund-State (GF-S) operating budget. The next graph shows the percentage of the contributions relative to

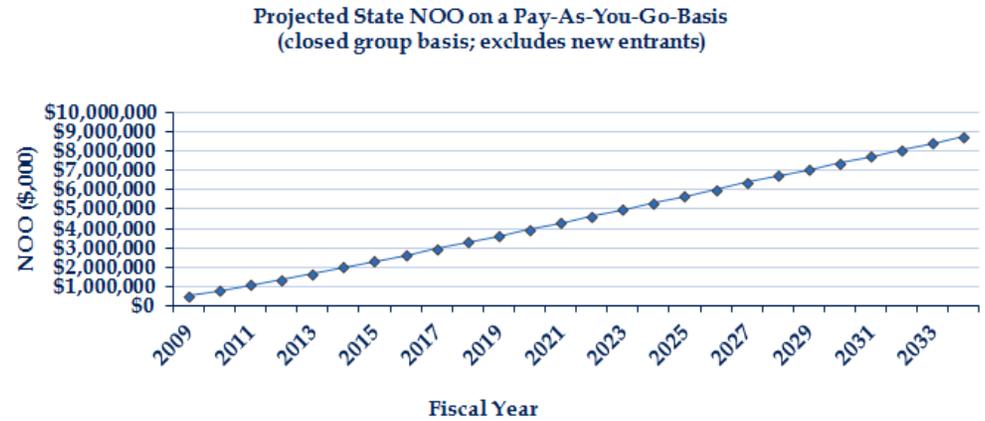
the GF-S operating budget. Note that the GF-S budget is not the sole funding source for these contributions, nor is the entire GF-S budget available to fund these contributions; this is intended to show relative magnitude. We increased the budgeted general fund expenditures for 2009 by 6.1 percent per year to estimate future general fund expenditures.

State Contributions as a Percent of GF-S Operating Budget
(closed group basis; excludes new entrants)



The last projection we considered was the NOO over the same time period. Remember, the NOO grows as long as contributions continue to be less than the Annual OPEB cost. The NOO is a balance sheet item that shows the cumulative difference between the annual OPEB cost and actual contributions made. The graph below shows the NOO;

the annual OPEB cost is larger than the contributions in the years that the NOO increases, while the annual OPEB cost is smaller than the contributions in the years that the NOO decreases. In this graph we see that the NOO increases in each year, meaning that projected contributions are less than the annual OPEB cost every year.



Section Three - Sensitivity Analysis



A single point estimate is only the start of understanding the GASB Statement No. 45 (GASB 45) liabilities. This estimate will only be realized if future economic and demographic experience matches our assumptions. It is equally important to understand what will happen if the economic and demographic experience is different than we assumed. In this section we determined how much the state's liability would change due to small changes in the medical trend assumption and the funding policy.

Medical Trend Assumption

The medical inflation trend assumption varies by medical plan and Medicare coverage, starting at approximately 7 percent in 2009 and decreasing to an ultimate rate of 5 percent in 2067. The ultimate rate means the expected rate for 2067 and beyond is 5 percent. For the detailed medical trend assumptions, refer to the Appendix. Although this is our best estimate, it is reasonable that

the medical inflation trend could be higher or lower. We looked at a medical inflation trend 1 percent higher or lower in each year to determine how sensitive the results are to medical inflation. The table below shows the results of changing the medical trend assumption by 100 basis points, or 1 percent per year for the state, as a PEBB plan employer.

State Medical Trend Sensitivity Analysis			
<i>(Dollars in thousands)</i>	High (+ 1.0%)	Expected*	Low (-1.0%)
PVFB	\$8,491,233	\$6,595,313	\$5,210,405
GASB 45 Liability (AAL)	\$4,609,661	\$3,786,869	\$3,152,088
Normal Cost	274,054	210,545	163,967
Amortization	166,818	138,781	117,151
ARC	\$440,871	\$349,326	\$281,117
Interest on NOO	22,210	22,210	22,210
Amortization of NOO	17,116	17,116	17,116
Annual OPEB Cost	\$445,965	\$354,420	\$286,211
Beginning NOO	493,551	493,551	493,551
Contributions**	(70,099)	(70,099)	(70,099)
Ending NOO**	\$869,417	\$777,872	\$709,663

*Begins at approximately 7.0% in 2009 and decreases to an ultimate rate of 5.0% in 2067.

**Estimated.

It is important to realize that economic assumptions, such as medical inflation, can vary based on random events such as wars, medical breakthroughs, and legislation.

Knowing the variability in our best estimate is just as important as knowing the best estimate itself.

Funding Policy

The funding policy has a large impact on the results. Funding policy can range from no pre-funding (pay-as-you-go) to full pre-funding, or anything in-between. The effect on the actuarial valuation of changing funding policy is to change the assumed interest discount rate based on the level of pre-funding. The amount of the interest discount rate depends on the expected long term yield on assets used to fund the payment of benefits.

No pre-funding requires the use of the employer's short term expected return and allows an interest discount rate of 4 to 5 percent. Partial pre-funding allows an interest discount rate of 5 to 7 percent. Full pre-funding with a trust generally allows an interest discount rate of 7 to 8 percent depending on the asset allocation. The Washington State pension systems currently use an interest discount rate of 8 percent. Also, we assumed that the current level of subsidization will continue as it has in the past. In other words, our best estimate is that the percentage of the member premiums that have been subsidized in the past will be the same in the future. For more information about funding policy, please refer to the funding policy subsection in Section 1. The table below shows the impact on the state's GASB 45 results when changing the funding policy prospectively from no pre-funding to partial or full pre-funding.

State Funding Policy Sensitivity Analysis			
(Dollars in thousands)	Interest Discount Rate		
	No Pre-Funding	Partial Pre-Funding	Full Pre-Funding
	4.5%	6.0%	7.5%
PVFB	\$6,595,313	\$4,594,721	\$3,365,086
GASB 45 Liability (AAL)	\$3,786,869	\$2,855,425	\$2,233,584
Normal Cost	210,545	143,308	101,918
Amortization	138,781	130,209	123,612
ARC	\$349,326	\$273,517	\$225,530
Interest on NOO	22,210	29,613	37,016
Amortization of NOO	17,116	20,963	25,239
Annual OPEB Cost	\$354,420	\$282,167	\$237,308
Beginning NOO	493,551	493,551	493,551
Contributions*	(70,099)	(147,815)	(225,530)
Ending NOO*	\$777,872	\$627,904	\$505,329

*Estimated.

Although the reported liability is lower when the funding policy is to pre-fund, pre-funding is not easy due to the large up-front contributions that must be made. Funding policy involves a balancing act that requires sufficient pre-funding so that the liability is lowered while understanding and committing to contributions that can be realistically made. Please refer to the funding policy subsection in Section 1 for additional consideration.

What if Washington Had Pre-Funded?

On a year-to-year basis it is hard to tell the difference between a pre-funded liability and one that is funded on a pay-as-you-go basis. Since the change is cumulative a comparison over time will illustrate where the state would be if it had chosen each path from the beginning of the implementation of GASB 45.

The following table shows what the accounting results would look like in this report if each funding policy had been chosen from the beginning. It also shows how much would have been contributed over time and compares the contributions to the hypothetical assets that would be on hand. The excess assets would be from investment returns. The hypothetical investment returns are based on investment returns from the Washington State Investment Board for the pension systems, which is where the money could end up if assets were set aside. Actual returns are used through December 2009.

State Cumulative Difference Between Pay-as-you-go and Full Pre-Funding Since 1/1/2007		
	Interest Discount Rate	
	No Pre-Funding 4.5%	Full Pre-Funding 7.5%
<i>(Dollars in thousands)</i>		
PVFB	\$6,595,313	\$3,365,086
GASB 45 Liability (AAL)	3,786,869	2,233,584
Ending NOO*	777,872	-
Cumulative Contributions (a)	224,892	664,405
Cumulative Benefit Payments (b)	224,892	224,892
Cumulative Excess Contributions (c)	-	439,513
Assets (d)	-	425,402
Investment Earnings (d-c)	-	(\$14,111)

*Estimated.

Section Four - Participant Data



Overview of PEBB Membership

The HCA administers PEBB benefits for eligible active and inactive members. Below is a table that shows the active and inactive member counts by employer type. This is the current count of members enrolled in PEBB (subscribers) and current members either receiving a subsidy, or eligible to receive a subsidy in the future (eligible). Dependents are assumed to not have a subsidy and are excluded. The “% Subscribing” column shows how many members, who are eligible for post-employment subsidies, are currently enrolled in PEBB.

Membership By Employer			
Active Members	Subscribers	Eligible	% Subscribing
State	110,860	115,947	96%
K-12	2,540	118,298	2%
Political Subdivision	11,410	14,857	77%
Total Active Members	124,810	249,102	50%
Inactive Members			
State	29,826	29,826	100%
K-12	21,545	21,545	100%
Political Subdivision	1,000	1,000	100%
Total Inactive Members	52,371	52,371	100%
Total	177,181	301,473	59%



Retirees' access to PEBB depends on the retirement eligibility of their respective retirement system. PEBB members are covered in the following retirement systems: Public Employees' Retirement System (PERS), Teachers' Retirement System (TRS), School Employees' Retirement System (SERS), Public Safety Employees' Retirement Systems (PSERS), Washington State Patrol Retirement System (WSPRS), Judicial Retirement System, and Higher Education. The following table shows the active and inactive member counts by retirement system.

Eligible Membership By Retirement System						
	Active		Inactive		Total	
	Subscribers	Eligible	Subscribers	Eligible	Subscribers	Eligible
PERS						
PERS 1	6,140	6,140	20,359	20,359	26,499	26,499
PERS 2	67,792	67,792	4,551	4,551	72,343	72,343
PERS 3	16,240	16,240	238	238	16,478	16,478
Total PERS	90,172	90,172	25,148	25,148	115,320	115,320
TRS						
TRS 1	279	6,061	18,788	18,788	19,067	24,849
TRS 2	140	8,103	785	785	925	8,888
TRS 3	895	52,340	594	594	1,489	52,934
Total TRS	1,314	66,504	20,167	20,167	21,481	86,671
SERS						
SERS 2	467	17,767	837	837	1,304	18,604
SERS 3	759	33,058	541	541	1,300	33,599
Total SERS	1,226	50,825	1,378	1,378	2,604	52,203
PSERS						
PSERS	2,248	2,755	0	0	2,248	2,755
Total PSERS	2,248	2,755	0	0	2,248	2,755
WSPRS						
WSPRS 1	851	851	551	551	1,402	1,402
WSPRS 2	234	234	0	0	234	234
Total WSPRS	1,085	1,085	551	551	1,636	1,636
Judicial						
Judicial	10	10	92	92	102	102
Total Judicial	10	10	92	92	102	102
Higher Education						
Higher Education	23,734	32,730	4,156	4,156	27,890	36,886
Total Higher Education	23,734	32,730	4,156	4,156	27,890	36,886
Other						
Other	5,021	5,021	879	879	5,900	5,900
Total Other	5,021	5,021	879	879	5,900	5,900
Total Membership	124,810	249,102	52,371	52,371	177,181	301,473

Summary of PEBB Plan Participants

The following table shows summary information for the average eligible active and inactive members by major employer category.

Summary of Plan Participants				
	State	K-12	Political Subdivision	Total
Active Members				
Number	115,947	118,298	14,857	249,102
Total Salary (in thousands, 000)	\$5,678,422	\$5,489,814	\$596,875	\$11,765,111
Average Age	45.9	46.6	46.8	46.3
Average Service	11.1	11.1	11.0	11.1
Average Salary	\$48,974	\$46,407	\$40,175	\$47,230
Inactive Members				
Number	29,826	21,545	1,000	52,371
Average Age	71.6	68.8	67.0	70.3
Average Monthly Subsidy (current year)	\$196	\$253	\$227	\$220



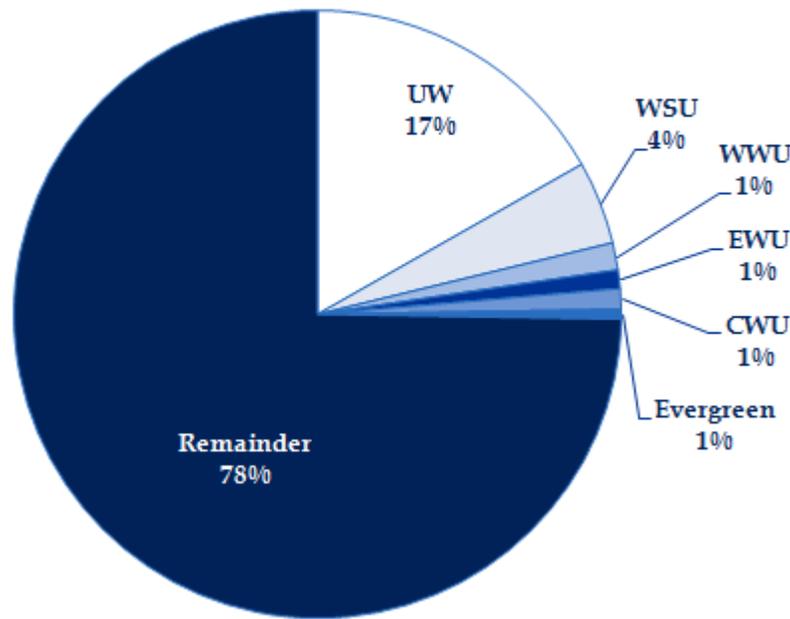
Section Five - Appendices



Higher Education

Public employers preparing financial statements in accordance with Generally Accepted Accounting Principles (GAAP) are required to comply with the reporting and disclosure requirements of GASB 45. Washington State's four-year institutions of higher education, while part of the state, issue separate financial reports. The pie chart to the right shows the portion of the state's liability attributable to the four-year institutions.

Makeup of State's Liability



The table to the right shows each of the six four-year college's GASB 45 liability (AAL), ARC, Annual OPEB Cost, and NOO.

We estimated the liabilities for the active members covered under the higher education institutions' retirement plans (non-PERS eligible) based on the liabilities for the active members in higher education covered under PERS. This estimated liability is approximately 4.2 percent of each higher education institution's individual liability. It is approximately 1.2 percent of the state's total liability.

	Higher Education GASB 45 Measurements					
	University of Washington	Washington State University	Western Washington University	Eastern Washington University	Central Washington University	Evergreen State College
<i>(Dollars in thousands)</i>						
PVFB	\$1,320,186	\$309,569	\$95,689	\$68,454	\$70,861	\$34,810
GASB 45 Liability (AAL)	635,666	167,691	54,654	37,682	40,954	19,824
Normal Cost	46,997	10,880	3,536	2,487	2,546	1,336
Amortization	23,161	6,114	1,997	1,377	1,494	726
ARC	70,158	16,994	5,534	3,864	4,040	2,062
Interest on NOO	5,082	1,185	395	277	284	153
Amortization of NOO	(3,915)	(913)	(305)	(213)	(218)	(118)
Annual OPEB Cost	71,324	17,266	5,624	3,928	4,105	2,097
Beginning NOO	112,930	26,332	8,779	6,154	6,300	3,406
Contributions*	(6,495)	(2,327)	(791)	(509)	(604)	(252)
Ending NOO (6/30/2010)*	\$177,760	\$41,271	\$13,612	\$9,572	\$9,801	\$5,252

*Estimated.

Department of Labor and Industries

The table below shows the accounting results for the Department of Labor and Industries (L&I). L&I, while part of the state, issues separate financial statements.

L&I GASB 45 Measurements	
<i>(Dollars in thousands)</i>	
PVFB	\$164,421
GASB 45 Liability	104,110
Normal Cost	4,999
Amortization	3,548
ARC	8,546
Interest on NOO	0
Amortization of NOO	0
Annual OPEB Cost	8,546
Beginning NOO	0
Contributions*	(1,928)
Ending NOO* (6/30/10)	\$6,618
<i>*Estimated.</i>	
Other L&I Information	
Active Members	2,683
Inactive Members	670
Total Members	3,353
Average Implicit Subsidy Per Retiree (Under 65)	\$405
Average Explicit Subsidy Per Retiree (65 and Older)	\$188

Actuarial Methods

The actuarial funding method chosen will determine the allocation of costs. For example, one method may allocate all costs between now and the time a member is fully eligible to retire, whereas another method may allocate all costs between now and the time a member is expected to retire (several years after retirement eligibility). One method might allocate costs as a level dollar amount while another might allocate costs as a level percentage of payroll. Using a different method will provide slightly different results. In short, different methods will relatively frontload the costs or backload the costs.

GASB allows the selection of one of six different actuarial methods. The method selected for this report was Projected Unit Credit (PUC). PUC is known to backload the costs; however, for OPEB liabilities, which are “soft liabilities”¹ in Washington State, this is reasonable to do because it allows for the realization of the assumptions before most payments are made.

Currently, there is no asset valuation method since there are no assets invested in an irrevocable, dedicated, and protected trust.

The unfunded actuarial accrued liability is amortized over a closed thirty-year period as a level percent of payroll. GASB also allows for the selection of the amortization period (not to exceed thirty years). A longer amortization period means that the unfunded

liability is being smoothed, and funded, over a longer period of time. This can be compared to a mortgage being paid off over a longer period of time (lower payments, but more interest).

Economic Assumptions

The economic assumptions are used in the actuarial valuation to determine liabilities and contributions in the future. For presentation purposes, they are broken into non-medical and medical economic assumptions. The non-medical economic assumptions specify how we expect membership and salaries to grow, and the interest discount rate we used in order to discount future cash flows into today’s dollars. Aside from the interest discount rate and general salary increase assumptions, these are consistent with the assumptions used in the June 30, 2008, Actuarial Valuation Report (AVR).

The interest discount rate is chosen based on the expected long-term yield of assets anticipated to finance the payment of benefits. The subsidies are paid from the State’s Concentration Account. The Concentration Account is the State’s primary bank account that is invested in short term products such as repurchase agreements, FNMA instruments, and U.S. Treasury obligations. In consultation with the Office of the State Treasurer, we have determined that an expected long-term yield of 4.50 percent can be sustained.

¹ *Non-contractual liabilities with sensitive assumptions.*

Non-Medical Economic Assumptions		
	State and Political Subdivisions	K-12 ¹
Annual Growth in Membership ²	1.25%	0.90%
Return on Investment Earnings ³	4.50%	4.50%
Inflation ⁴	3.50%	3.50%
General Salary Increases (due to inflation) ⁵	4.50%	4.50%

¹ Only applies to K-12 members in TRS.

² 0.0% for GASB requirements.

³ Annual rate, compounded annually.

⁴ Based on the CPI: Urban Wage Earners & Clerical Workers, Seattle-Tacoma-Bremerton, WA - All Items.

⁵ Excludes longevity, merit, or step increases that usually apply to members in the early part of their careers.

The medical economic assumptions specify how we expect the benefits (subsidies) will behave in the future. We relied on health care actuaries at Milliman, Incorporated, contracted through the HCA, to determine the medical trend rate.



Medical Inflation Trend					
Calendar Year(s)	UMP		Insured Medical		
	Non-Medicare	Medicare	Non-Medicare	Medicare	Medicare Supplement
2009	7.0%	7.5%	8.0%	7.5%	7.5%
2010	7.0%	7.5%	8.0%	7.5%	7.5%
2011	6.3%	6.3%	6.3%	6.2%	6.2%
2012	6.3%	6.3%	6.3%	6.2%	6.2%
2013	6.3%	6.2%	6.2%	6.1%	6.1%
2014	6.3%	6.2%	6.2%	6.1%	6.1%
2015	6.2%	6.2%	6.2%	6.1%	6.1%
2016	6.2%	6.1%	6.2%	6.1%	6.1%
2017	6.2%	6.1%	6.1%	6.0%	6.0%
2018	6.2%	6.1%	6.1%	6.0%	6.0%
2019	6.1%	6.1%	6.1%	6.0%	6.0%
2020	6.1%	6.1%	6.1%	6.0%	6.0%
2021	6.1%	6.0%	6.0%	6.0%	6.0%
2022	6.1%	6.0%	6.0%	6.0%	6.0%
2023	6.0%	6.0%	6.0%	5.9%	5.9%
2024	6.0%	6.0%	6.0%	5.9%	5.9%
2025	6.0%	6.0%	6.0%	5.9%	5.9%
2026	6.0%	5.9%	5.9%	5.9%	5.9%
2027	6.0%	5.9%	5.9%	5.9%	5.9%
2028	5.9%	5.9%	5.9%	5.8%	5.8%
2029	5.9%	5.9%	5.9%	5.8%	5.8%
2030	5.9%	5.9%	5.9%	5.8%	5.8%
2031	5.9%	5.9%	5.9%	5.8%	5.8%
2032	5.9%	5.8%	5.8%	5.8%	5.8%
2033	5.9%	5.8%	5.8%	5.8%	5.8%
2034	5.7%	5.7%	5.7%	5.7%	5.7%
2035	5.7%	5.6%	5.6%	5.6%	5.6%
2036	5.6%	5.6%	5.6%	5.5%	5.5%
2037	5.6%	5.5%	5.5%	5.5%	5.5%
2038	5.5%	5.5%	5.5%	5.5%	5.5%
2039	5.5%	5.5%	5.5%	5.4%	5.4%
2040-2041	5.4%	5.4%	5.4%	5.4%	5.4%
2042	5.4%	5.4%	5.4%	5.3%	5.3%
2043	5.4%	5.3%	5.3%	5.3%	5.3%
2044-2046	5.3%	5.3%	5.3%	5.3%	5.3%
2047	5.3%	5.3%	5.3%	5.2%	5.2%
2048	5.3%	5.3%	5.3%	5.2%	5.2%
2049	5.3%	5.2%	5.2%	5.2%	5.2%
2050-2053	5.2%	5.2%	5.2%	5.2%	5.2%
2054	5.2%	5.2%	5.2%	5.1%	5.1%
2055	5.2%	5.2%	5.2%	5.1%	5.1%
2056	5.2%	5.1%	5.1%	5.1%	5.1%
2057-2062	5.1%	5.1%	5.1%	5.1%	5.1%
2063	5.1%	5.1%	5.1%	5.0%	5.0%
2064	5.1%	5.1%	5.1%	5.0%	5.0%
2065	5.1%	5.0%	5.0%	5.0%	5.0%
2066	5.1%	5.0%	5.0%	5.0%	5.0%
2067+	5.0%	5.0%	5.0%	5.0%	5.0%

Milliman provided us with the age 65 medical cost and aging factors. The age 65 medical cost is shown below. This represents the average claims cost for a 65-year-old retiree and is broken down by each plan for non-Medicare and Medicare separately. The cost is further divided by gender and split by members and their spouses. On average, younger retirees cost less and older retirees cost more, prior to any Medicare offsets.

Age 65 Annual Medical Cost								
Medical Plan	Non-Medicare				Medicare			
	Members		Spouses		Members		Spouses	
	Males	Females	Males	Females	Males	Females	Males	Females
Aetna	\$18,523	\$17,170	\$16,392	\$14,186	\$4,991	\$5,293	\$4,991	\$5,293
Group Health Classic	\$12,358	\$11,455	\$10,936	\$9,465	\$2,598	\$2,755	\$2,598	\$2,755
Group Health Value	\$11,952	\$11,079	\$10,577	\$9,154	\$2,468	\$2,618	\$2,468	\$2,618
Kaiser Permanente Classic	\$11,652	\$10,801	\$10,312	\$8,924	\$3,157	\$3,348	\$3,157	\$3,348
Kaiser Permanente Value	\$11,755	\$10,896	\$10,403	\$9,003	\$2,662	\$2,823	\$2,662	\$2,823
Secure Horizons Classic	N/A	N/A	N/A	N/A	\$3,349	\$3,552	\$3,349	\$3,552
Secure Horizons Value	N/A	N/A	N/A	N/A	\$2,643	\$2,803	\$2,643	\$2,803
UMP	\$10,332	\$9,577	\$9,143	\$7,913	\$2,954	\$3,133	\$2,954	\$3,133
Supplements	Non-Medicare				Medicare			
	Members		Spouses		Members		Spouses	
	Males	Females	Males	Females	Males	Females	Males	Females
Plan E Retired	N/A	N/A	N/A	N/A	\$1,223	\$1,297	\$1,223	\$1,297
Plan E Disabled	N/A	N/A	N/A	N/A	\$2,079	\$2,205	\$2,079	\$2,205
Plan J Retired Without Rx	N/A	N/A	N/A	N/A	\$1,778	\$1,886	\$1,778	\$1,886
Plan J Disabled Without Rx	N/A	N/A	N/A	N/A	\$3,023	\$3,206	\$3,023	\$3,206
Plan J Retired With Rx	N/A	N/A	N/A	N/A	\$2,439	\$2,587	\$2,439	\$2,587
Plan J Disabled With Rx	N/A	N/A	N/A	N/A	\$4,147	\$4,398	\$4,147	\$4,398

We use aging factors to determine the average claims cost at different ages. For example, to determine the average claims cost for a 66-year-old male member in UMP (not covered by Medicare), the aging factor of 3.4 percent would be applied to the 65-year-old male member UMP cost [$\$10,332 * (1 + .034)$]. This formula results in a 66-year-old UMP male member cost of \$10,683. The aging factors can be seen below.

Aging Factors				
Age	Members		Spouses	
	Males	Females	Males	Females
0-26	1.99%	4.12%	1.99%	1.68%
27-31	3.83%	1.58%	3.83%	0.29%
32-36	4.09%	0.08%	4.09%	-0.91%
37-41	4.60%	0.71%	4.60%	0.08%
42-46	5.33%	2.64%	5.33%	2.11%
47-51	4.42%	2.60%	5.90%	3.96%
52-56	2.40%	1.32%	6.05%	3.59%
57-61	5.03%	3.78%	5.40%	3.94%
62-64	5.79%	4.88%	5.79%	4.88%
65-71	3.40%	2.12%	3.40%	2.12%
72-76	2.03%	1.43%	2.03%	1.43%
77-81	0.86%	0.58%	0.86%	0.58%
82-88	-0.24%	-0.87%	-0.24%	-0.87%
89+	0.00%	0.00%	0.00%	0.00%

Milliman also provided us with the following life insurance benefit assumptions by member age. These assumptions incorporate aging factors and represent expected life insurance payouts by subscriber age.

Life Insurance Benefits	
Age	Benefit
Under 65	\$3,000
65-69	\$2,100
Over 69	\$1,800

Demographic Assumptions

Demographic assumptions include rates of decrement (reasons members would exit the plan: retirement, termination, disability, and mortality) as well as participation percentage, percentage of spouses covered, and Medicare coverage. The rates of decrement are the same as those used in the June 30, 2008, AVR; the State and Political Subdivision members use the PERS decrement rates, whereas K-12 members in TRS use the TRS decrement rates and K-12 members in SERS use the SERS decrement rates.

We looked at the valuation data to determine the other demographic assumptions including participation percentage, percentage of spouses covered, and Medicare coverage.

Participation percentage refers to how many current active members will elect to enroll in PEBB as a retiree.

Percentage of spouses covered and Medicare coverage refer to how

many current active members will cover their spouse or be Medicare eligible as a retiree. These assumptions can be seen in the following table.

Demographic Assumptions	State and Political	
	Subdivisions	K-12
Participation Percentage	65.0%	50.0%
Percentage of Spouses Covered	45.0%	45.0%
Medicare Coverage After Initial Participation	100.0%	100.0%

Plan Eligibility and Premiums

Retirees' access to PEBB depends on meeting the retirement eligibility of their respective retirement system at the time of retirement. PEBB members are covered in the following retirement systems: PERS, TRS, SERS, PSERS, WSPRS, and Higher Education. The table below shows the retirement eligibility for each system and plan. For example, PERS 2 members are eligible for retirement with five years of service at age 65, or with 20 years of service at age 55.

Retirement Eligibility By System		
System	Years of Service	Age
PERS 1	5	60
	25	55
	30	Any
PERS 2/3	5	65
PERS 2	20	55
PERS 3	10	55
TRS 1	5	60
	25	55
	30	Any
TRS 2/3	5	65
TRS 2	20	55
TRS 3	10	55
SERS 2/3	5	65
SERS 2	20	55
SERS 3	10	55
PSERS 2	5 Total	65
	10 PSERS	60
	20 Total	53
WSPRS 1	Any	55
	25	Any
WSPRS 2	Any	55
	25	Any
Judicial	15	60
Higher Education	10	55
	Any	62

HCA administers the medical plans in PEBB. The premium a retiree pays depends on:

1. The plan chosen by the retiree.
2. Whether the retiree is enrolled in Parts A and B of Medicare.

Note that a retiree's age does not affect the premium. The explicit subsidy is for all

retirees that are enrolled in Parts A and B of Medicare, while the implicit subsidy is for all retirees not enrolled in Parts A and B of Medicare. A more detailed explanation of the subsidies can be found in Section 1. The following tables show the different medical plans administered by PEBB and the monthly premium for each medical plan, broken into non-Medicare and Medicare rates. For each medical plan's complete provisions please visit HCA's website (hca.wa.gov).

2009 Non-Medicare Retiree Monthly Rates				
Medical Plans	Retiree	Retiree & Spouse or SSDP ¹	Retiree & Children	Full Family
Aetna	\$513.44	\$1,020.79	\$893.95	\$1,401.30
Group Health Classic	508.50	1,010.91	885.31	1,387.72
Group Health Value	426.16	846.23	741.21	1,161.28
Kaiser Permanente Classic	476.60	947.11	829.48	1,299.99
Kaiser Permanente Value	433.88	861.67	754.72	1,182.51
Uniform Medical Plan	\$427.25	\$848.41	\$743.12	\$1,164.28

¹ Same Sex Domestic Partner.

2009 Medicare Retiree Monthly Rates								
Medical Plans	Retiree & Spouse or SSDP ¹							
	Retiree	Retiree & Spouse or SSDP ¹		Retiree & Children		Full Family		
		Number eligible for Medicare						
		1	2	1	2	1	2	3
Aetna	\$202.08	\$709.63	\$398.47	\$582.79	\$398.47	\$1,090.14	\$778.98	\$594.66
Group Health Classic	142.31	644.72	278.53	519.12	278.53	1,021.53	655.34	414.75
Group Health Value	126.81	546.88	247.53	441.86	247.53	861.93	562.58	368.25
Kaiser Permanente Classic	171.31	641.82	336.53	524.19	336.53	994.70	689.41	501.75
Kaiser Permanente Value	139.04	566.83	271.99	459.88	271.99	887.67	592.83	404.94
Secure Horizons Classic*	186.16		366.23		366.23			546.30
Secure Horizons Value*	144.58		283.07		283.07			421.56
Uniform Medical Plan	\$170.02	\$591.18	\$333.95	\$485.89	\$333.95	\$907.05	\$649.82	\$497.88

*The retiree and his or her enrolled dependents must be enrolled in Medicare Parts A and B to enroll in Secure Horizons.

¹ Same Sex Domestic Partner.

Glossary

Actives

Members who are currently employed.

Actuarial Accrued Liability (AAL)

Computed differently under different funding methods, the actuarial accrued liability generally represents the portion of the present value of fully projected benefits attributable to service credit that has been earned (or accrued) as of the valuation date.

Actuarial Gain or Loss

Experience, from one year to the next, which differs from that assumed will result in an actuarial gain or loss. For example, an actuarial gain would occur if fewer members retired than assumed.

Actuarial Value of Assets

The value of pension plan investments and other property used by the actuary for the purpose of an actuarial valuation (sometimes referred to as valuation assets). It is common for actuaries to select an actuarial valuation method that smoothes the effects of short term volatility in the market value of assets.

ARC

Annual required contribution: refers to a GASB disclosure requirement. The ARC is the annual contribution that will fund the current active and inactive members' subsidies by the end of their working lifetimes. It can be calculated as a level dollar amount or a percent of payroll on a year to year basis.

Actuarial Valuation Report (AVR)

Created annually to monitor the financial status of the state's pension plans.

Decrement

The mode in which a member leaves employment. Examples include retirement, termination, disability, or death.

Entry Age Normal (EAN) Funding Method

The EAN funding method is a standard actuarial funding method. The annual cost of benefits under EAN is comprised of two components:

- ◆ Normal cost; plus
- ◆ Amortization of the unfunded liability

The normal cost is determined on an individual basis, from a member's age at

plan entry, and is designed to be a level percentage of pay throughout a member's career.

Funded Ratio

The ratio of a plan's assets to its liabilities. There are several acceptable methods of measuring a plan's assets and liabilities. In financial reporting, funded status is reported using consistent measures by all governmental entities. According to GASB, the funded ratio is the actuarial value of assets divided by the actuarial accrued liability calculated under PUC (see below).

Governmental Accounting Standards Board (GASB)

Refers to the private, nonpartisan, nonprofit organization that works to create and improve the rules U.S. state and local governments follow when accounting for their finances and reporting to the public.

Inactives

Retired members, beneficiaries, or terminated members entitled to a benefit.

Net OPEB Obligation (NOO)

Refers to the GASB disclosure requirement on the balance sheet. It is the cumulative difference between the annual OPEB cost and the actual contributions.

Normal Cost

Computed differently under different funding methods, the normal cost generally represents the portion of the cost of projected benefits allocated to the current plan year.

Other Post-Employment Benefits (OPEB)

Refers to benefits offered to retirees besides a pension and includes, among other benefits, medical insurance, prescription drug insurance, dental insurance, and long-term care insurance.

Present Value of Fully Projected Benefits (PVFB)

Computed by projecting the total future benefit cash flows from the plan, using actuarial assumptions (i.e., probability of death, retirement, salary increases, etc.), and discounting the cash flows to the valuation date using the assumed valuation interest rate to determine the present value (today's value).

Projected Unit Credit (PUC) Actuarial Cost Method

The PUC cost method is a standard actuarial funding method. The annual cost of benefits under PUC is comprised of two components:

- ◆ Normal cost; plus

- ◆ Amortization of the unfunded actuarial accrued liability.

The PUC normal cost is the estimated present value of projected benefits current plan members will earn in the year following the valuation date. It represents today's value of one year of earned benefits.

Unfunded Actuarial Accrued Liability (UAAL)

The excess, if any, of the actuarial accrued liability over the actuarial value of assets. In other words, the present value of benefits earned to date not covered by plan assets.



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