STATE OF HAWAII

POSTEMPLOYMENT BENEFITS OTHER THAN PENSIONS

Actuarial Valuation Study

Valuation Date: July 1, 2007

Date of Report: August 29, 2008

AON CONSULTING

August 29, 2008

Mr. Russ K. Saito
State Comptroller
State of Hawaii
1151 Punchbowl Street
Honolulu, Hawaii 96813

Re: GASB 43 / 45 Actuarial Valuation Report

This report contains the results of the July 1, 2007 actuarial valuation for the State of Hawaii's (State) Other Postemployment Benefits (OPEB) provided through the Hawaii Employee-Union Trust Fund's (EUTF).

The results are prepared in accordance with GASB 43 and 45, which address accounting and financial reporting requirements for OPEB plans and employers. The purpose of the report is to:

- Determine the actuarial obligations for EUTF benefits under GASB 43.
- Develop the Annual Required Contribution (ARC) and Annual OPEB Cost (AOC) for employers under GASB 45.
- Provide information needed by auditors for financial statement entries and footnote disclosures in conformity with the disclosure requirements under GASB Statements No. 43 and 45.
- Present the financial condition of the plan as measured for accounting purposes.

This report is prepared for the sole use of the State of Hawaii and supplies information consistent with the stated purposes of the report. It may not be appropriate to use this report for other business applications. Accordingly, additional discussion may be helpful in understanding the assumptions, methodologies, and limitations applied in the report.

Aon Consulting is pleased to present this report and we look forward to discussing it with you.

Respectfully submitted,

Bradley J. Au

Bradley J. Au, MAAA
Senior Vice President

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Exhibits **Page**

1. Executive Summary

For reference, a glossary of terms is provided in Exhibit 11.

Background

The State of Hawaii and its subdivisions (i.e., counties) provide healthcare benefits to public employees, retirees, and their dependents through the Hawaii Employer-Union Health Benefits Trust Fund (EUTF). As an agency of the State, the EUTF contracts with providers of medical, dental, vision, and life insurance plans.

The provisions for coverage and eligibility of benefits are set forth in Hawaii Revised Statutes (HRS) Chapter 87A. Generally, retirees and their dependents may receive health care coverage if they are eligible for their employer's public pension system. Employers make contributions to EUTF based on an employee's hire date and years of service. Retirees pay the portion of the premium not paid by the employer. These retiree healthcare benefits constitute the other postemployment benefits (OPEB) discussed in this report.

GASB 43 and 45

In 2004, the Governmental Accounting Standards Board (GASB) issued Statements 43 and 45, which address accounting and financial reporting for Postemployment Benefits Other Than Pensions. These statements replace and significantly modify prior guidance. GASB 43 addresses financial reporting for OPEB plans and is initially effective for EUTF for the 2006-2007 fiscal year, assuming the OPEB plan is administered as a qualifying trust. GASB 45 addresses financial reporting for employers of OPEB plans and is initially effective for the State of Hawaii for the 2007-2008 fiscal year.

The plan's liabilities and employer costs for the retiree benefits are calculated in this actuarial valuation in accordance with GASB 43 and 45. Similar to most government entities, the State of Hawaii does not currently prefund or recognize OPEB liability as benefits are accrued. As this report shows, any required accrual determined on a GASB basis will be considerably higher than the amount on a pay-as-you-go basis.

It is important to note that only current active, deferred inactive and retired participants are valued in this actuarial study. To better understand GASB 45's long term effect, the State of Hawaii may want to further study the impact of future new entrants or any projected growth in the State's employee population.

1. Executive Summary (cont.)

ARC Development

GASB requires the development of an Annual Required Contribution (ARC) each year based on a plan's assets and liabilities. The ARC is the basis for determining the Annual OPEB Cost (AOC), which is the amount employers recognize as annual expense.

Although GASB does not actually require pre-funding, the portion of the ARC that is not funded each year accumulates as a liability on an employer's financial statements.

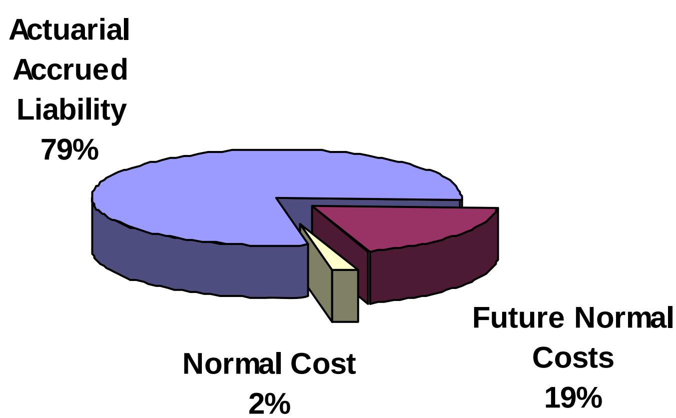
The ARC can be developed under a variety of actuarial cost methods. This report shows details under the Entry Age Normal method and also compares principal results to those under the Projected Unit Credit and Aggregate methods in Appendix A. We also show the ARC calculated using different amortization periods and spread as a level percent of payroll.

Summary of Results

Liabilities

There are a few terms to understand related to the Plan's liabilities. The Present Value of Benefits (PVB) represents the actuarial present value of all future benefits expected to be paid to current active, deferred inactive and retired employees. The Actuarial Accrued Liability (AAL) is the portion of the PVB attributable to past service. The Normal Cost is the portion of the PVB that is allocated to the current fiscal year for active employees. The chart below shows the relative allocation of these items for this plan.

Present Value of Benefits



1. Executive Summary (cont.)

Each liability is a present value calculated by using a selected discount rate. As requested by the State of Hawaii, results in this report are developed assuming obligations are not fully prefunded. Accordingly, the table below summarizes the liability results based on a 5.0% discount rate as of July 1, 2007:

	No Prefunding (5.0%)
Present Value of Benefits (PVB)	$9,150,488,000
Actuarial Accrued Liability (AAL)	$7,192,331,000
Normal Cost	$200,012,000

Note: The AAL and normal cost shown above were calculated under the Entry Age Normal cost method by spreading costs as a level percentage of pay.

Discount Rate Selection

The discount rate can have a considerable impact on the magnitude of the liabilities, with lower discount rates resulting in higher liabilities. As guidance in selecting an appropriate discount rate, GASB states that the discount rate should be based on the long-term yield of investments used to finance the benefits. The valuation uses a base assumption of 5.0% and 8.0% for the no prefunding and full prefunding scenarios, respectively.

Considering the State of Hawaii's intentions, the results in this report are based on a 5.0% discount rate.

Annual Required Contributions (ARC)

The following table shows the ARC for the fiscal year ending June 30, 2008 under the scenario where obligations are not fully prefunded (5.0%):

	No Prefunding (5.0%)
Entry Age Normal Method	
30 year amortization	$517,755,000

The ARC can be compared to the estimated pay-as-you-go funding amount of $200,052,000.

As discussed above, the ARC can be developed using various methodologies and amortization periods. Appendix A provides a summary analysis of ARC results under the various options.

1. Executive Summary (cont.)

Comparison to Prior Valuation Results

A fundamental difference from the prior valuation is the type of plan treatment considered under GASB guidance. The 2006 valuation assumed EUTF satisfied GASB's requirements of a cost sharing multiple employer plan and that each employer's AOC should be determined by the Contractually Required Contribution (CRC) assessed by the EUTF to the employers. Subsequent to the 2006 valuation, the EUTF and the State determined the plan should be considered an agent multiple employer plan under GASB rules and each employer's AOC and ARC would be dependent on the respective employer's anticipated funding level.

The following table compares total plan results to the prior valuation results based on a 5.0% discount rate:

	July 1, 2007	July 1, 2006
Liabilities		
Present Value of Benefits (PVB)	$9,150,488,000	$8,652,845,000
Actuarial Accrued Liability (AAL)	$7,192,331,000	$6,791,063,000
Normal Cost	$200,012,000	$188,228,000
ARC		
Entry Age Normal Method		
30 year amortization	$517,755,000	$488,211,000

The plan liabilities increased from the prior year. The factors impacting results include:

- The AAL grows each year as active participants earn additional benefits under the plan each year. Also, liabilities increase due to a decrease in the discount period for benefit payments as participants become closer to receiving benefits.
- Overall healthcare costs increased less than assumed, resulting in liability gains. This includes the change to a self-funded structure in certain plans.
- The plan changed from a two-tier to three-tier rate structure. The assumptions for plan elections was adjusted accordingly.
- Census data was updated and additional actual data used where available.

The ARC increased due to the growing liabilities and the additional year with no prefunding of annual costs.

* * *

The remainder of the report shows greater details of the above results.

2. Actuarial Valuation Certificate

This report presents the results of the actuarial valuation, as of July 1, 2007, for the State of Hawaii's Other Postemployment Benefits (OPEB) provided through the State of Hawaii Employer-Union Trust Fund (EUTF), in accordance with Governmental Accounting Standards Board (GASB) Statements 43 and for Employers under GASB 45.

This report was prepared using generally accepted actuarial practices and methods. The actuarial assumptions used in the calculations are individually reasonable and reasonable in aggregate.

Aon Consulting did not audit the employee data and financial information used in this valuation. On the basis of our review of this data, we believe that the information is sufficiently complete and reliable, and that it is appropriate for the purposes intended.

Actuarial computations under GASB 43 and 45 are for purposes of fulfilling EUTF and Employer accounting requirements, respectively. The calculations reported herein have been made on a basis consistent with our understanding of these accounting standards. Determinations for purposes other than meeting EUTF and Employer financial accounting requirements may be different from these results. As required by GASB 43 and 45, this valuation assumes this will be an ongoing plan. However, this assumption does not imply any obligation by the State of Hawaii to continue the plan.

This report is intended for the sole use of the State of Hawaii. It is intended only to supply information to comply with the stated purpose of the report and may not be appropriate for other business purposes. Reliance on information contained in this report by anyone for other than the intended purposes, puts the relying entity at risk of being misled because of confusion or failure to understand applicable assumptions, methodologies, or limitations of the report's conclusions. Accordingly, no person or entity, including the State of Hawaii, should base any representations or warranties in any business agreement on any statements or conclusions contained in this report without the written consent of Aon Consulting.

The actuaries whose signatures appear below are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The actuaries are available to answer any questions with regard to the matters enumerated in this report.

2. Actuarial Valuation Certificate (cont.)

Aon's relationship with the Plan and the Plan Sponsor is strictly professional. There are no aspects of the relationship that may impair or appear to impair the objectivity of our work.

Respectfully submitted,

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August 29, 2008

3. Plan Liabilities

The liabilities shown in this exhibit were calculated as of the July 1, 2007 valuation date. These liabilities are utilized in the development of the Annual Required Contribution (ARC) under various alternatives shown in this report.

While GASB allows the development of the ARC under various funding cost methods, this report shows the ARC under the Entry Age Normal cost method, which is based on the Actuarial Accrued Liability shown below. Other cost methods are summarized in the appendix.

The **Present Value of Benefits (PVB)** represents the actuarial present value of all benefits ever to be paid to current employees and retirees.

The **Actuarial Accrued Liability (AAL)** is a portion of the PVB attributable to past service. For retirees and fully eligible active employees, the AAL is equal to the PVB. For other active employees, the AAL is the portion of the PVB deemed to be accrued to date. The **Normal Cost** is the portion of the PVB that is allocated to the current plan year for active employees.

The AAL in this report is based on the Entry Age Normal cost method and has been developed by spreading costs as a level percentage of payroll. Spreading costs as a level percent of payroll results in lower AAL (i.e. past service liability) than if costs are spread as a level amount.

The following tables show results by retired, deferred vested, and active employee groups:

	Medical / Dental / Vision / Life	Medicare Part B	Total
Present Value of Benefits (PVB)			
Retirees	$2,927,340,000	$661,629,000	$3,588,969,000
Deferred Inactives	$336,784,000	$84,647,000	$421,431,000
Actives	$4,029,161,000	$1,110,927,000	$5,140,088,000
Total PVB	$7,293,285,000	$1,857,203,000	$9,150,488,000
Actuarial Accrued Liability (AAL)			
Retirees	$2,927,340,000	$661,629,000	$3,588,969,000
Deferred Inactives	$336,784,000	$84,647,000	$421,431,000
Actives	$2,548,217,000	$633,714,000	$3,181,931,000
Total AAL	$5,812,341,000	$1,379,990,000	$7,192,331,000
Normal Cost	$150,267,000	$49,745,000	$200,012,000

4. Accounting Information

The initial effective period for employer accounting under GASB 45 is the fiscal year ending June 30, 2008. This section shows the Annual Required Contribution (ARC), Annual OPEB Cost (AOC), and projected June 30, 2008 Net OPEB Obligation (NOO) amounts based on adoption of GASB 45 for the fiscal year ending June 30, 2008.

Annual Required Contribution (ARC)

The method for determining the ARC includes addition of the Normal Cost plus the amortization of the Unfunded AAL over the selected period. The following table shows the development of the ARC using a 30 year amortization of the Unfunded AAL as a level percent of payroll (increasing 3.5% annually).

	Totals
Actuarial Accrued Liability (AAL)	$7,192,331,000
Assets	$0
Unfunded AAL	$7,192,331,000
Normal Cost plus interest	$210,015,000
Amortization of Unfunded AAL	$307,740,000
Total ARC	$517,755,000
% of Payroll	29.1%

Please note that the normal cost is an actuarial liability and *not* the same as the pay-as-you-go cost. The ARC can be compared to the estimated pay-as-you-go funding amount of $200,052,000.

4. Accounting Information (cont.)

Annual OPEB Cost (AOC)

If there is no Net OPEB obligation on an employer's financial statements at transition, then the AOC is equal to the ARC for the initial year of adoption. However, if there is an initial obligation at transition, the AOC should reflect an adjustment for the transition obligation. Note that, generally, GASB directs plan sponsors to set their Initial Net OPEB Obligation to zero at transition. However, this may result in inconsistent accounting results. We recommend employers discuss this issue with their auditors if an obligation is currently recorded on its financial statements. Note that in the first year of implementation of GASB 45, there is no adjustment to the ARC in determining the AOC. Thereafter, any cumulative unpaid ARC will result in an adjustment to determine the AOC.

The following section shows the AOC based on the Entry Age Normal actuarial cost method and 30- year amortization of the unfunded AAL.

Annual Required Contribution (ARC)	$517,755,000
Interest on Net OPEB Obligation (NOO)	0
Adjustment to Annual Required Contribution	0
Total Annual OPEB Cost (AOC)	$517,755,000

4. Accounting Information (cont.)

Projected June 30, 2008 Net OPEB Obligation (NOO)

Based on the Annual OPEB Cost developed above, the following is the projected June 30, 2008 Net OPEB Obligation (NOO):

	Total
July 1, 2007 Net OPEB Obligation (NOO) (initial assumed)	$0
Plus: Annual OPEB Cost (AOC)	$517,755,000
Less: Employer Contributions	$200,052,000
Equals: Expected June 30, 2008 Net OPEB Obligation (NOO)	$317,703,000

OPEB Summary (After adoption, a 3-year display will be shown)

Fiscal Year Ending	Annual OPEB Cost	Percentage of Annual OPEB Cost Contributed	Net OPEB Obligation
6/30/2008	$517,755,000	38.6%	$317,703,000

Required Supplementary Information

Below is the sample of the projected schedule of funding progress, shown as of the valuation date:

Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (b)	Unfunded Actuarial Accrued Liability (b) – (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	Unfunded Actuarial Accrued Liability as a Percentage of Covered Payroll (b) – (a) / (c)
7/1/2007	$0	$7,192,331,000	$7,192,331,000	0%	$1,782,000,000	404%

5. Projected Benefit Payments

The following table shows the estimated projected net employer benefit payments based on the current plan provisions, current plan participants, and the valuation assumptions used in this report. The payments would be equivalent to funding the liabilities on a pay-as-you-go basis.

	Projected Payments		
Year Ending June 30	**Medical / Dental / Vision / Life**	**Medicare Part B**	**Total**
2008	$168,494,000	$31,558,000	$200,052,000
2009	186,779,000	34,150,000	220,929,000
2010	205,332,000	38,275,000	243,607,000
2011	223,140,000	42,504,000	265,644,000
2012	240,296,000	46,862,000	287,158,000
2013	255,718,000	51,484,000	307,202,000
2014	271,243,000	55,765,000	327,008,000
2015	285,958,000	60,191,000	346,149,000
2016	301,543,000	64,668,000	366,211,000
2017	316,949,000	69,379,000	386,328,000
2018	332,792,000	74,135,000	406,927,000
2019	348,272,000	79,008,000	427,280,000
2020	363,754,000	83,978,000	447,732,000
2021	379,536,000	88,893,000	468,429,000
2022	395,434,000	93,843,000	489,277,000

6. Sensitivity Analysis

Impact of 1% Change to Healthcare Trend Rates

Results in this report are sensitive to the healthcare trend assumptions. The following table shows the impact of a 1.0% increase or decrease in the healthcare trend rate assumption.

	5.0% Discount Rate - Baseline Results	Impact of 1.0% Increase in the Health Trend Rate	Impact of 1.0% Decrease in the Health Trend Rate
Present Value of Benefits	$9,150,488,000	$11,234,873,000	$7,576,276,000
Funded Status:			
Actuarial Accrued Liability	$7,192,331,000	$8,570,714,000	$6,115,665,000
Assets	$0	$0	$0
Unfunded AAL	$7,192,331,000	$8,570,714,000	$6,115,665,000
Annual Required Contribution (ARC):			
Normal Cost plus interest	$210,015,000	$276,018,000	$162,397,000
Amortization of Unfunded AAL	$307,740,000	$366,718,000	$261,673,000
Total ARC	$517,755,000	$642,736,000	$424,070,000

7. Participant Information

These exhibit summaries contain participant demographic information.

Active Employee Age/Service Distribution

	Years of Service								
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35+**	**Total**
<25	475	11							486
25-29	1,593	245	0						1,838
30-34	1,688	1,040	132	6					2,866
35-39	1,610	1,299	762	324	6				4,001
40-44	1,440	1,244	862	1,176	231	2		1	4,956
45-49	1,280	1,243	861	1,289	860	282	7		5,822
50-54	1,123	1,076	865	1,323	945	918	405	11	6,666
55-59	859	865	689	1,114	727	655	612	329	5,850
60-64	450	512	390	605	418	286	298	400	3,359
65-69	112	162	125	142	84	78	81	149	933
70-74	29	45	34	67	32	14	13	46	280
75-79	9	8	8	15	6	7	5	23	81
80+	1	4	2	4	3		0	7	21
Total	10,669	7,754	4,730	6,065	3,312	2,242	1,421	966	37,159

Inactive Age Distribution

Age	Deferred Inactives	Retirees	Total
< 35	32	16	48
35-39	137	10	147
40-44	291	29	320
45-49	394	93	487
50-54	586	245	831
55-59	484	1,554	2,038
60-64	331	4,090	4,421
65-69	28	5,065	5,093
70-74	9	4,862	4,871
75-79	4	4,668	4,672
80-84		3,487	3,487
85-89		2,074	2,074
90-94		826	826
95+		260	260
Total	2,296	27,279	29,575

7. Participant Information (cont.)

Participant Statistics

Retirees

Number of retirees (including surviving spouses) valued	27,279
Average age of retirees	73.0

Deferred Vested

Number of deferred vested valued	2,296
Average age of deferred vested	52.0

Actives

Number of actives valued	37,159
Average age of actives	47.9
Average past service	12.4

Participant Distribution Among Health Plans

Retirees

	Single	Two-Party	Family	Total
HMSA	12,664	8,015	755	21,434
Kaiser	3,025	1,452	152	4,629
HMA	6	7	0	13
Total Medical				26,076
Dental	15,617	9,407	865	25,889
Vision	15,579	9,522	915	26,016
Life				26,159

Actives

	Single	Two-Party	Family	Waived	Total
HMSA	12,567	3,853	6,687	n/a	23,107
Kaiser	3,348	1,067	1,642	n/a	6,057
HMA	99	56	68	n/a	223
Other	93	103	185	n/a	381
Waived	n/a	n/a	n/a	7,391	7,391
Total					37,159
Dental	14,874	6,335	10,255	5,695	37,159
Vision	14,987	5,681	9,368	7,123	37,159

8. Summary of Principal Plan Provisions

The following plan provisions are the basis for the calculations in this actuarial valuation.

1. Benefit Eligibility

The following are eligible to enroll as EUTF retirees: a) a retired member of the employees' retirement system, a county pension system, or a police, firefighters, and bandsmen pension system of the State or a county; b) the surviving spouse of a retired or deceased member; and c) the surviving child of such a retired member if the child is unmarried and under age nineteen.

2. Benefits Plans Provided

Medical – PPO through HMSA or HMA, or HMO through Kaiser
Dental – Hawaii Dental Service
Vision – Vision Services Plan
Life Insurance – Standard Insurance Company
Medicare Part B premium reimbursement

3. Monthly Base Contribution (Employer Caps)

Effective July 1, 2004, a revised monthly base contribution was established to determine the amount the employers pay to the EUTF on behalf of retirees. This amount is adjusted annually by the percentage change in the Medicare Part B premium.

4. Employer Contributions

Employers pay a percentage of the monthly base contribution that depends on a participant's hire date and years of service, as shown in the following table:

Hire Date	Years of Service	% of Base Contribution
Pre-7/1/96	< 10 ≥ 10	50% 100%
Post-7/1/96 (Post-7/1/01 applied to self premium only)	< 10 10-14 15-24 ≥ 25	0% 50% 75% 100%

5. Retiree Contributions

Retirees are required to pay the portion of the premium rate not paid by the employer.

6. Dependent and Survivor Coverage

Eligible dependents and survivors may elect coverage under the plans if they pay the required employee contribution.

8. Summary of Principal Plan Provisions (cont.)

7. Benefit Plan Design

Plan Provisions	HMSA/HMA PPO Participating	HMSA/HMA PPO Non Participating	HMSA HMO	Kaiser (Comprehensive)[1] Participating	Kaiser (Comprehensive)[1] Non Participating	Kaiser (Basic)[1]	Kaiser Senior Advantage Plan Participating	Kaiser Senior Advantage Plan Non Participating
Deductible Single / Family	None	$100 / $300	None	None	No benefit	None	None	No benefit
Office visit copay/coinsurance	10% of eligible	30% of eligible	$15	$15	No benefit	$25	10% of eligible	No benefit
Routine physical exams	No Charge	No Charge	$15	$15	No benefit	$25	No Charge	No benefit
Inpatient admission copay/coinsurance	10% of eligible	30% of eligible	$15	$15	No benefit	$25	10% of eligible	No benefit
Emergency room copay/coinsurance	10% of eligible	10% of eligible	$25 (in-state $25 bluecard) 20% (worldwide)	$25 + other applicable plan charges	20% of applicable charges, plus other applicable plan charges	$50 + other applicable plan charges	$25 + other applicable plan charges	$25 + other applicable plan charges
Ambulance copay/coinsurance	10% of eligible	30% of eligible	20% of eligible	20% of applicable charges	No benefit	20% of applicable charges	20% of applicable charges for Medicare-covered ambulance service	20% of applicable charges
Outpatient surgery copay/coinsurance	10% of eligible	30% of eligible	$15	$15	No benefit	$25	10% of eligible	No benefit
Prescriptions (30-day supply) non-mail order								
Generic	$5	$5 + charges in excess of 80% of eligible charges	$5 (in network) $5 + charges in excess of 80% of eligible charges	$15	No benefit	$15	$5	No benefit
Preferred brand	$15	$15 + charges in excess of 80% of eligible charges	$15 (in network) $15 + charges in excess of 80% of eligible charges	$15	No benefit	$15	$15	No benefit
Non-preferred brand	$30	$30 + charges in excess of 80% of eligible charges	$5 (in network) $5 + charges in excess of 80% of eligible charges	$15	No benefit	$15	$30	No benefit
Prescriptions (90-day supply) mail order								
Generic	$10	No benefit	$10	$30	No benefit	$30	$10	No benefit
Preferred brand	$35	No benefit	$35	$30	No benefit	$30	$35	No benefit
Non-preferred brand	$60	No benefit	$60	$30	No benefit	$30	$60	No benefit
Out-of-pocket limit Single/Family	$2,000/ $6,000	$2,000/ $6,000	$1,500/ $4,500	$1,500/ $4,500	No limit	$1,500/ $4,500	$1,500/ $4,500	No limit

[1] *Kaiser Group Plan only available to pre Medicare members*

9. Actuarial Methods and Assumptions

Where applicable, the Hawaii Employee Retirement System (ERS) July 1, 2007 actuarial valuation assumptions were used.

1. **Actuarial Valuation Date**

   July 1, 2007

2. **Actuarial Cost Method**

   The costs shown in the report were developed using the Entry Age Normal (EAN) cost method. The EAN cost method spreads plan costs for each participant from entry date (assuming the plan existed on the employee's hire date) to the expected retirement date. Under the EAN cost method, the plan's normal cost is developed as a level percentage of payroll spread over the participants' working lifetime. The AAL is the cumulative value, on the valuation date, of prior service costs. For retirees, the AAL is the present value of all projected benefits.

   The ARC under this method equals the normal cost plus the amortization of the unfunded AAL based on the following:

   - 30-year amortization
   - Level percentage of future payroll amounts.

   The Plan costs are derived by making certain specific assumptions as to the rates of interest, mortality, turnover, and the like, which are assumed to hold for many years into the future. Actual experience may differ somewhat from the assumptions and the effect of such differences is spread over all periods. Due to these differences, the costs determined by the valuation must be regarded as estimates of the true Plan costs.

3. **Discount Rate**

   5.0% - No Prefunding - This rate is based on the assumption that benefits will be paid from general employer assets. 8.0% - Prefunding - This rate is based on the assumption that employers pre-fund contributions.

   This valuation uses a discount rate of 5.0%, which is based on the employer's anticipated funding level.

4. **Payroll Increases**

   3.5% - This is the annual rate at which total payroll is expected to increase and is used in the cost method to calculate the ARC as a level percent of payroll. For purposes of reporting current costs as a percent of pay, employer payroll is estimated at $1.782 billion for the 2007/08 fiscal year.

9. Actuarial Methods and Assumptions (cont.)

5. Mortality

Pre-retirement non-duty mortality: ERS mortality rates were used. Below are sample rates:

	General Employees		Teachers		Police & Fire	
Age	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**
25	0.02%	0.01%	0.01%	0.01%	0.01%	0.00%
30	0.02%	0.01%	0.02%	0.01%	0.01%	0.00%
35	0.03%	0.02%	0.03%	0.02%	0.01%	0.01%
40	0.04%	0.03%	0.04%	0.02%	0.02%	0.01%
45	0.06%	0.05%	0.05%	0.04%	0.02%	0.02%
50	0.09%	0.07%	0.07%	0.06%	0.03%	0.03%
55	0.12%	0.10%	0.11%	0.09%	0.05%	0.04%
60	0.20%	0.16%	0.17%	0.14%	0.07%	0.06%
65	0.30%	0.23%	0.27%	0.20%	0.11%	0.09%

Pre-retirement duty mortality: ERS mortality rates were used. Below are sample rates:

	General Employees		Teachers		Police & Fire	
Age	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**
25	0.00%	0.00%	0.00%	0.00%	0.01%	0.01%
30	0.00%	0.00%	0.00%	0.00%	0.02%	0.01%
35	0.01%	0.00%	0.00%	0.00%	0.03%	0.02%
40	0.01%	0.01%	0.01%	0.00%	0.04%	0.02%
45	0.02%	0.01%	0.01%	0.01%	0.05%	0.04%
50	0.02%	0.02%	0.01%	0.01%	0.07%	0.06%
55	0.03%	0.03%	0.02%	0.01%	0.11%	0.09%
60	0.05%	0.04%	0.02%	0.02%	0.17%	0.14%
65	0.08%	0.06%	0.04%	0.03%	0.27%	0.20%

Post-retirement healthy mortality: ERS mortality rates were used. Below are sample rates:

	General Employees		Teachers		Police & Fire	
Age	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**
50	0.33%	0.18%	0.21%	0.10%	0.22%	0.12%
55	1.03%	0.47%	0.36%	0.24%	0.38%	0.20%
60	1.32%	0.83%	0.34%	0.31%	0.68%	0.38%
65	1.51%	0.84%	0.43%	0.28%	1.24%	0.73%
70	1.93%	0.86%	1.12%	0.58%	2.02%	1.17%
75	2.96%	1.39%	1.87%	0.92%	3.16%	1.93%
80	4.43%	2.40%	3.70%	2.06%	5.27%	3.35%
85	7.58%	4.58%	7.34%	4.81%	8.27%	5.76%
90	12.68%	10.26%	12.85%	9.01%	13.00%	9.88%

Post-retirement disabled mortality: ERS mortality rates were used. Below are sample rates:

	General Employees		Teachers		Police & Fire	
Age	Male	Female	Male	Female	Male	Female
50	0.80%	0.51%	0.40%	0.26%	0.44%	0.23%
55	1.45%	0.97%	0.71%	0.51%	0.80%	0.44%
60	2.37%	1.50%	1.29%	0.97%	1.45%	0.86%
65	3.72%	2.53%	2.17%	1.50%	2.37%	1.37%
70	6.20%	4.40%	3.41%	2.53%	3.72%	2.27%
75	9.72%	7.53%	5.59%	4.40%	6.20%	3.94%
80	15.29%	12.88%	8.96%	7.53%	9.72%	6.77%
85	23.36%	20.25%	13.95%	12.88%	15.29%	11.63%
90	31.72%	29.66%	21.57%	20.25%	23.36%	18.62%

6. **Termination**

ERS termination rates were used in the valuation.

The following rates apply for employees with less than 6 years of service, regardless of age:

	General Employees		Teachers		Police & Fire	
Years	Male	Female	Male	Female	Male	Female
0	15.50%	18.50%	32.00%	28.00%	11.00%	11.00%
1	12.50%	16.50%	22.00%	22.00%	7.50%	7.50%
2	10.50%	12.50%	14.00%	15.00%	4.00%	4.00%
3	9.00%	10.00%	12.00%	14.00%	4.00%	4.00%
4	7.00%	8.00%	10.00%	11.00%	4.00%	4.00%
5	6.50%	7.00%	9.00%	8.00%	4.00%	4.00%

The following rates apply for employees with 6 or more years of service:

	General Employees		Teachers		Police & Fire	
Age	Male	Female	Male	Female	Male	Female
25	6.50%	7.83%	4.98%	6.72%	1.91%	1.91%
30	5.46%	5.84%	4.12%	6.15%	2.53%	2.53%
35	4.40%	4.04%	3.95%	4.99%	2.75%	2.75%
40	3.60%	3.30%	3.60%	3.70%	2.01%	2.01%
45	3.02%	2.65%	2.88%	2.88%	1.18%	1.18%
50	2.54%	2.42%	2.34%	2.36%	0.79%	0.79%
55	3.16%	3.36%	3.62%	4.04%	0.24%	0.24%
60	4.33%	4.61%	5.86%	5.38%	0.00%	0.00%
65	1.53%	1.62%	2.18%	1.73%	0.00%	0.00%

9. Actuarial Methods and Assumptions (cont.)

7. Disability

Non-Duty Disability: ERS disability rates were used in the valuation. Sample rates are as follows:

	General Employees		Teachers		Police & Fire	
Age	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**
25	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
30	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
35	0.01%	0.01%	0.00%	0.00%	0.01%	0.01%
40	0.04%	0.02%	0.01%	0.01%	0.02%	0.02%
45	0.10%	0.06%	0.03%	0.03%	0.04%	0.04%
50	0.22%	0.14%	0.06%	0.06%	0.10%	0.10%
55	0.30%	0.19%	0.08%	0.08%	0.14%	0.14%
60	0.32%	0.20%	0.08%	0.08%	0.15%	0.15%
65	0.57%	0.36%	0.15%	0.15%	0.27%	0.27%

Duty Disability: ERS disability rates were used in the valuation. Sample rates are as follows:

	General Employees		Teachers		Police & Fire	
Age	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**
25	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
30	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
35	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
40	0.01%	0.00%	0.00%	0.00%	0.01%	0.01%
45	0.01%	0.00%	0.00%	0.00%	0.02%	0.02%
50	0.03%	0.01%	0.01%	0.01%	0.05%	0.05%
55	0.04%	0.01%	0.01%	0.01%	0.07%	0.07%
60	0.04%	0.01%	0.01%	0.01%	0.07%	0.07%
65	0.08%	0.02%	0.02%	0.02%	0.13%	0.13%

9. Actuarial Methods and Assumptions (cont.)

8. Retirement Age

ERS retirement rates were used in the valuation. Sample rates are as follows:

For active participants in a contributory pension plan

	General Employees		Teachers		Police & Fire	
Age	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**
45	1.00%	0.00%	0.00%	0.00%	18.00%	18.00%
50	2.00%	1.00%	1.00%	0.00%	18.00%	18.00%
55	20.00%	20.00%	20.00%	22.00%	25.00%	25.00%
60	15.00%	12.00%	14.00%	18.00%	30.00%	30.00%
65	35.00%	45.00%	25.00%	25.00%	100.00%	100.00%
70	25.00%	25.00%	25.00%	25.00%	100.00%	100.00%
75	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

For active participants in a non-contributory pension plan

	General Employees		Teachers	
Age	**Male**	**Female**	**Male**	**Female**
45	0.00%	0.00%	0.00%	0.00%
50	0.00%	0.00%	0.00%	0.00%
55	10.00%	10.00%	10.00%	13.00%
60	10.00%	15.00%	10.00%	18.00%
65	40.00%	30.00%	24.00%	30.00%
70	20.00%	25.00%	15.00%	25.00%
75	100.00%	100.00%	100.00%	100.00%

9. Annual Healthcare Inflation ("Trend")

Annual healthcare costs were assumed to increase as follows:

Year	Medical & Rx Pre-65	Medical & Rx Post-65	Dental	Vision	Medicare Part B
2007	9.5%	10.0%	7.0%	5.0%	3.1%
2008	8.5	9.0	6.5	4.5	7.0
2009	7.5	8.0	6.0	4.0	6.5
2010	6.5	7.0	5.5	3.5	6.0
2011	6.0	6.0	5.0	3.0	5.5
2012	5.5	5.5	4.5	3.0	5.0
2013+	5.0	5.0	4.0	3.0	5.0

10. Healthcare Premiums

Effective July 1, 2007, the total monthly premium rates for retirees are shown in the table below:

	Premium	Administrative Fee	Total Payment Required
HMSA Non-Medicare			
Single	$396.62	$2.72	$399.34
Two-Party	793.24	5.42	798.66
Family	1,189.86	8.14	1,198.00
HMSA Medicare			
Single	286.37	2.71	289.08
Two-Party	572.74	5.42	578.16
Family	859.11	8.15	867.26
Kaiser Non-Medicare			
Single	458.08	2.72	460.80
Two-Party	916.88	5.42	922.30
Family	1,374.28	8.14	1,382.42
Kaiser Medicare			
Single	213.04	2.72	215.76
Two-Party	426.40	5.42	431.82
Family	639.16	8.14	647.30
HDS			
Single	27.90	0.28	28.18
Two-Party	54.40	0.56	54.96
Family	66.62	0.84	67.46
VSP			
Single	4.36	0.06	4.42
Two-Party	8.72	0.10	8.82
Family	11.70	0.14	11.84

The Medicare Part B monthly premium for 2007 is $93.50.

All amounts are assumed to increase at the same rate as healthcare trend.

11. Monthly Base Contribution (Employer Caps)

The monthly base contribution for the fiscal year beginning July 1, 2007 follows:

	Single	Two-Party	Family
Non-Medicare	$625.44	$1,250.88	$1,876.32
Medicare	445.54	891.06	1,336.60

This base contribution is assumed to increase at the same rate as Medicare Part B trend.

12. Base Year Claims

The following table shows expected annual per member claim costs for the fiscal year beginning July 1, 2007:

Age	HMSA Medical	Kaiser Medical
40-44	$2,888	$3,016
45-49	3,331	3,520
50-54	3,934	4,207
55-59	4,609	4,978
60-64	5,514	6,010
65-69	3,141	2,090
70-74	3,559	2,398
75-79	3,948	2,687
80-84	4,247	2,908
85-89	4,405	3,025

Dental and vision costs are not assumed to vary by age. The annual expected claims are $340 for dental and $55 for vision.

13. Life Insurance

The life insurance benefit amount effective on the valuation date is $2,372.

14. Retiree Contributions

Retirees are required to pay the portion of the premium rate not paid by their employer. Future premium rates are assumed to increase by healthcare trend.

15. Plan Participation

The rates at which future eligible retirees are assumed to elect coverage vary based on the employer contribution percentage, as follows:

Employer Contribution	Medical	Dental/Vision	Life	Medicare Part B
0%	50%	70%	100%	99%
50%	50%	70%	100%	99%
75%	75%	85%	100%	99%
100%	99%	99%	100%	99%

16. Plan Election

All active and retired participants are assumed to continue coverage in the plan in which they are currently enrolled. Current actives waiving coverage and deferred inactives are assumed to elect medical coverage at the rate of 82% HMSA / 18% Kaiser, which is approximately the same proportion as current retired participants.

17. Plan Coverage

For current retirees, actual plan coverage (e.g., single, two-party and family) is used. Future retirees are assumed to elect plan coverage in the same proportion as current retirees – currently 51% single / 44% two-party / 5% family.

All participants are assumed to be eligible for Medicare upon attainment of age 65.

18. Dependent Age

Actual spouses' dates of birth are used, if available. Otherwise, males are assumed to be 4 years older than their female spouses. Certain dependents under age 24 who are valued are assumed to be 25, 27, or 30 years younger than the retiree.

19. Participants Valued

Only current retired, deferred inactives, and active participants are valued. No future entrants are considered in this valuation.

20. Changes in Valuation Assumptions

The following assumptions were changed from the prior valuation:

Healthcare Trend

	Medical & Rx			Dental		Vision		Medicare Part B	
Year	**2007 Pre-65**	**2007 Post-65**	**2006**	**2007**	**2006**	**2007**	**2006**	**2007**	**2006**
2006			11.0%		7.0%		3.0%		5.6%
2007	9.5%	10.0%	10.0	7.0%	6.5	5.0%	3.0	3.1%	8.0
2008	8.5	9.0	9.0	6.5	6.0	4.5	3.0	7.0	7.5
2009	7.5	8.0	8.0	6.0	5.5	4.0	3.0	6.5	7.0
2010	6.5	7.0	7.0	5.5	5.0	3.5	3.0	6.0	6.5
2011	6.0	6.0	6.0	5.0	4.5	3.0	3.0	5.5	6.0
2012	5.5	5.5	5.0	4.5	4.0	3.0	3.0	5.0	5.5
2013+	5.0	5.0	5.0	4.0	4.0	3.0	3.0	5.0	5.0

Plan Coverage Assumption for Future Retirees
2007 – 51% single / 44% two-party / 5% family
2006 – 57% single / 43% family

10. GASB OPEB Summary

The Government Accounting Standards Board (GASB) has issued Statements No. 43 and 45 for the recognition and disclosure for public entities sponsoring other (than pensions) post-retirement benefit plans.

This Exhibit summarizes pertinent issues from the above statements and includes comments about GASB's OPEB standard.

Why Pay-As-You-Go Accounting Will Be Unacceptable

The GASB believes, like the FASB, that other post-retirement benefits, like pensions, are a form of deferred compensation. Accordingly, GASB is saying these benefits should be recognized (in an organization's financial statement) when earned by employees, rather than when paid out. Under SFAS 106, pay-as-you-go accounting is replaced with accrual accounting for these benefits. *This approach is similar to (although more restrictive than) GASB's approach under Statements No. 43 and 45*.

Allocating Costs (Attribution)

The FASB defines attribution as the process of assigning other post-retirement benefit cost to periods of employee service. SFAS 106 specifies how (the attribution method) and over what accounting periods (the attribution period) the postretirement benefits promise must be allocated.

The attribution (actuarial cost) method specified by SFAS 106 is the "projected unit credit actuarial cost method". This method attributes an equal amount of the total postretirement benefit to each year of service during the "attribution period".

The attribution period is the period over which the total postretirement benefit is earned. Unless the plan states that post-retirement benefits are not earned until a later date, the attribution period is from the employee's hire date until the employee is first eligible for the benefit. *The GASB Statements do not restrict entities to a single attribution method, but instead allows sponsors (and actuaries) to choose from several acceptable methods (similar to GASB 27).* GASB allows six funding methods and also allows attribution to the expected retirement age rather than the earliest eligibility age.

Defining the Plan

SFAS 106 refers to the substantive plan as the basis for accounting. The substantive plan may differ from the written plan in that it reflects the employer's cost sharing policy based on past practice or communication of intended changes, or a past practice of cost increases in monetary benefits. Under SFAS 106, the substantive plan is the basis for allowing recognition of potential future changes to the plan. *GASB follows FASB's lead on this issue, requiring entities to recognize the underlying promise, not just the written plan.*

10. GASB OPEB Summary (cont.)

One GASB requirement relates to the implied subsidy when retirees participate in the active healthcare plan, but are charged a rate based on composite active and retiree experience. Under the GASB standard, even if an organization does not otherwise subsidize the benefit, then the organization will have to recognize an OPEB obligation for the implied subsidy.

Actuarial Assumptions

SFAS 106 says actuarial assumptions should be explicit. This means each individual assumption should represent the actuary's best estimate. GASB also, generally, requires explicit assumptions.

GASB requires the discount rate be based on the source of funds used to pay the benefits. This means the underlying expected long-term rate of return on plan assets for funded plans. However, since the source of funds for unfunded plans is usually the organization's general fund, and organizations are usually restricted by State law as to what investments they can have in their general fund, unfunded plans will need to use a relatively low discount rate.

Transition Issues

Because historical annual required contribution information will rarely be available, *GASB is taking a prospective approach on transition issues.* This means there will be no requirement for any initial transition obligation.

Effective Dates

The new standards have staggered effective dates, similar to GASB Statement No. 34, as follows:

		Effective for Fiscal Years Beginning After	
	Annual Revenue	**GASB 43**	**GASB 45**
Phase I	≥ \$100 million	December 15, 2005	December 15, 2006
Phase II	≥ \$10 million, but < \$100 million	December 15, 2006	December 15, 2007
Phase III	< \$10 million	December 15, 2007	December 15, 2008

11. Glossary

Actuarial Accrued Liability (AAL)

As determined by a particular Actuarial Cost Method, the portion of the Actuarial Present Value of plan benefits and expenses which is attributable to past service, and thus not provided for by future Normal Costs.

Actuarial Assumptions

Assumptions as to the occurrence of future events affecting benefit costs, such as: mortality, withdrawal, disablement and retirement; changes in compensation and employer provided benefits; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; and other relevant items. The Actuarial Assumptions are used in connection with the Actuarial Cost Method to allocate plan costs over the working lifetime of plan participants.

Actuarial Cost Method

A procedure for determining the Actuarial Present Value of plan benefits and expenses and for developing an actuarially equivalent allocation of such value to time periods (e.g., past service, future service), usually in the form of a Normal Cost and an Actuarial Accrued Liability.

Actuarial Experience Gain or Loss

A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation Dates, as determined in accordance with a particular Actuarial Cost Method.

Actuarial Present Value

The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:

a. adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, Social Security, marital status, etc.).
b. multiplied by the probability of the occurrence of an event (such as survival, death disability, termination of employment, etc.) on which the payment is conditioned, and
c. discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Actuarial Present Value of Total Projected Benefits or Present Value of Benefits (PVB)

Total projected benefits include all benefits estimated to be payable to plan members (retirees and beneficiaries, terminated employees entitled to benefits but not yet receiving them, and current active members) as a result of their service through the valuation date and their expected future service. The actuarial present value of total projected benefits as of the valuation date is the present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment. Expressed another way, it is the amount that would have to be invested on the valuation date so that the amount invested plus investment earnings will provide sufficient assets to pay total projected benefits when due.

Actuarial Valuation

The determination, as of a Valuation Date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a benefit plan.

Actuarial Valuation Date

The date as of which an actuarial valuation is performed.

Actuarial Value of Assets

The value of cash, investments, and other property belonging to a benefit plan, as used by the actuary for the purpose of an Actuarial Valuation.

Agent Multiple-Employer Plan

An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan, based on the benefit formula selected by the employer and the individual plan's proportionate share of the pooled assets. The results of the individual valuations are aggregated at the administrative level.

Aggregate Actuarial Cost Method

A method under which the excess of the Actuarial Present Value of Projected Benefits of the group included in an Actuarial Valuation over the Actuarial Value of Assets is allocated on a level basis over the earnings or service of the group between the valuation date and assumed exit. This allocation is performed for the group as a whole, not as a sum of individual allocations. That portion of the Actuarial Present Value allocated to a valuation year is called the Normal Cost. The Actuarial Accrued Liability is equal to the Actuarial Value of Assets.

11. Glossary (cont.)

Amortization (of Unfunded Actuarial Accrued Liability)

The portion of benefit plan costs or contributions which is designed to pay off principal and interest on the Unfunded Actuarial Accrued Liability.

Annual OPEB Cost (AOC)

An accrual-basis measure of the periodic cost of an employer's participation in a defined benefit OPEB plan.

Annual Required Contributions of the Employer (ARC)

The employer's periodic required contributions to a Defined Benefit OPEB Plan, which is the basis for determining an employer's Annual OPEB Cost. For a Cost Sharing Multiple-Employer Plan, the Contractually Required Contributions should be used to determine an employer's Annual OPEB Cost.

Contractually Required Contributions (CRC)

The contributions assessed by a Cost Sharing Multiple-Employer Plan to the participating employer for a period, without regard for the method used to determine the amounts.

Cost Sharing Multiple-Employer Plan

A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to the employers. A single actuarial valuation covers all plan members, and the same contribution rate(s) applies for each employer.

Covered Group

Plan members included in an actuarial valuation.

Deferred Inactives

Former employees, not yet receiving retirement benefits, who are eligible for plan benefits in the future.

Defined Benefit OPEB Plan

An OPEB plan having terms that specify the benefits to be provided at or after separation from employment. The benefits may be specified in dollars (for example, a flat dollar payment or an amount based on one or more factors such as age, years of service, and compensation), or as a type or level of coverage (for example, prescription drugs or a percentage of healthcare insurance premiums).

Discount Rate (Investment Return Assumption)

The rate used to adjust a series of future payments to determine the present value by reflecting the time value of money.

Employer Contributions

Contributions made in relation to the annual required contributions of the employer (ARC). An employer has made a contribution in relation to the ARC if the employer has (a) made payments of benefits directly to or on behalf of a retiree or beneficiary, (b) made premium payments to an insurer, or (c) irrevocably transferred assets to a trust, or equivalent arrangement, in which plan assets are dedicated to providing benefits to retirees and their beneficiaries in accordance with the terms of the plan and are legally protected from creditors of the employer(s) of plan administrator. Employer contributions generally do not necessarily equate to benefits paid.

Entry Age Normal Actuarial Cost Method

A method under which the Actuarial Present Value of the Projected Benefits of each individual included in an Actuarial Valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age(s). The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost. The portion of this Actuarial Present Value not provided for at a valuation date by the Actuarial Present Value of future Normal Costs is called the Actuarial Accrued Liability.

Funded Ratio

The actuarial value of assets expressed as a percentage of the Actuarial Accrued Liability.

Funding Excess

The excess of the Actuarial Value of Assets over the Actuarial Accrued Liability.

Funding Policy

The program for the amounts and timing of contributions to be made by plan members, employer(s), and other contributing entities to provide the benefits specified by an OPEB plan.

Healthcare Cost Trend Rate

The rate of change in per capita health claims costs over time as a result of factors such as medical inflation, utilization of healthcare services, plan design, and technological developments.

Implicit Rate Subsidy

The differential between utilizing a blend of active and non-Medicare retiree experience for cost of benefits, and utilizing solely the expected retiree experience. Blending a lower cost active cohort with retirees results in an implicit rate subsidy for the retirees of the entire group.

11. Glossary (cont.)

Inactives

Certain former employees with a minimum amount of years of creditable service who have benefits payable from the retirement system.

Level Percentage of Projected Payroll Amortization Method

Amortization payments are calculated so that they are a constant percentage of the projected payroll of active plan members over a given number of years. The dollar amount of the payments generally will increase over time as payroll increases (e.g., due to inflation); in dollars adjusted for inflation, the payments can be expected to remain level.

Market-Related Value of Plan Assets

A term used with reference to the actuarial value of assets. A market related value may be fair value, market value (or estimated market value), or a calculated value that recognizes changes in fair or market value over a period of, for example, three to five years.

Net OPEB Obligation (NOO)

The cumulative difference since the effective date of this Statement between Annual OPEB Cost and the employer's contributions to the plan, including the OPEB liability (asset) at transition, if any, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to OPEB-related debt.

Normal Cost

The portion of the Actuarial Present Value of plan benefits and expenses that is allocated to a valuation year by the Actuarial Cost Method.

OPEB Assets

The amount recognized by an employer for contributions to an OPEB plan greater than OPEB expense.

OPEB Expenditures

The amount recognized by an employer in each accounting period for contributions to an OPEB plan on the modified accrual basis of accounting.

OPEB Expense

The amount recognized by an employer in each accounting period for contributions to an OPEB plan on the accrual basis of accounting.

11. Glossary (cont.)

OPEB Liabilities

The amount recognized by an employer for contributions to an OPEB plan less than OPEB expense/expenditures.

Other Postemployment Benefits (OPEB)

Postemployment benefits other than pension benefits. Other postemployment benefits (OPEB) include postemployment healthcare benefits, regardless of the type of plan that provides them, and all postemployment benefits provided separately from a pension plan, excluding benefits defined as termination offers and benefits.

Pay-As-You-Go

A method of financing a plan under which the contributions to the plan are generally made at about the same time and in about the same amount as benefit payments and expenses becoming due.

Plan Assets

Resources, usually in the form of stocks, bonds, and other classes of investments, that have been segregated and restricted in a trust, or equivalent arrangement, in which (a) employer contributions to the plan are irrevocable, (b) assets are dedicated to providing benefits to retirees and their beneficiaries, (c) assets are legally protected from creditors of the employers or plan administrator, for the payment of benefits in accordance with the terms of the plan.

Plan Members

The individuals covered by the terms of an OPEB plan. The plan membership generally includes employees in active service, terminated employees who have accumulated benefits but are not yet receiving them, and retired employees and beneficiaries currently receiving benefits.

Postemployment

The period between termination of employment and retirement as well as the period after retirement.

Postemployment Healthcare Benefits

Medical, dental, vision, and other health-related benefits provided to terminated or retired employees and their dependents and beneficiaries.

Postretirement Benefit Increase

An increase in the benefits of retirees or beneficiaries granted to compensate for the effects of inflation (cost-of-living adjustment) or for other reasons. Ad hoc increases may be granted periodically by a decision of the board of trustees, legislature, or other authoritative body; both the decision to grant an increase and the amount of the increase are discretionary. Automatic increases are periodic increases specified in the terms of the plan; they are nondiscretionary except to the extent that the plan terms can be changed.

Projected Benefits

Those plan benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits. That portion of an individual's Projected Benefit allocated to service to date, determined in accordance with the terms of a plan and based on future compensation as projected to retirement, is called the Credited Projected Benefit.

Projected Unit Credit Actuarial Cost Method

A method under which the benefits (projected or unprojected) of each individual included in an Actuarial Valuation are allocated by a consistent formula to valuation years. The Actuarial Present Value of benefits allocated to a valuation year is called the Normal Cost. The Actuarial Present Value of benefits allocated to all periods prior to a valuation year is called the Actuarial Accrued Liability.

Under this method, the Actuarial Gains (or Losses), as they occur, generally reduce (or increase) the Unfunded Actuarial Accrued Liability.

Under this method, benefits are projected to all future points in time under the terms of the Plan and actuarial assumptions (for example, health trends). Retirees are considered to be fully attributed in their benefits. For actives, attribution is to expected retirement age; thus, benefits at each future point in time are allocated to past service based on a proration of service-to-date over total projected service.

Required Supplementary Information (RSI)

Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Single-Employer Plan

A plan that covers the current and former employees, including beneficiaries, of only one employer.

11. Glossary (cont.)

Sponsor

The entity that established the plan. The sponsor generally is the employer or one of the employers that participate in the plan to provide benefits for their employees and employees of other employers.

Substantive Plan

The terms of an OPEB plan as understood by the employer(s) and plan members.

Transition Year

The fiscal year in which this Statement is first implemented.

Unfunded Actuarial Accrued Liability (Unfunded Actuarial Liability)

The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets.

Appendix A – Alternative Cost Methods and Alternative Discount Rate Results

GASB allows plan sponsors to use one of six actuarial cost methods. The tables below show the principle valuation results under three of the methods and based on the no prefunding (5.0%) and fully prefunding scenarios (8.0%). The other three methods produce the same results in the initial year as one of the methods shown. For all cost methods, differences lie in the manner in which liabilities are spread. It is important to note that the Hawaii ERS valuation results are based on the Entry Age Normal cost method, which is also the most common method used in the public sector. FASB rules, which are followed by non-public sector entities, require the use of the Projected Unit Credit cost method.

I. Assuming No Prefunding of Obligations (5.0%)

	Entry Age Normal	Projected Unit Credit	Aggregate
Liability - AAL / PVB	$7,192,331,000	$7,627,019,000	$9,150,488,000
Assets	$0	$0	$0
Unfunded AAL / PVB	$7,192,331,000	$7,627,019,000	$9,150,488,000
Normal Cost plus interest	$210,015,000	$190,864,000	n/a
Total ARC - 30 Year Amortization	$517,755,000	$517,203,000	n/a
Total ARC - 20 Year Amortization	$641,434,000	$648,358,000	n/a
Total ARC - 10 Year Amortization	$1,015,038,000	$1,044,540,000	n/a
Total ARC - Future Working Lifetime	n/a	n/a	$895,551,000

II. Assuming Prefunding of Obligations (8.0%)

	Entry Age Normal	Projected Unit Credit	Aggregate
Liability - AAL / PVB	$4,716,070,000	$4,748,709,000	$5,359,224,000
Assets	$0	$0	$0
Unfunded AAL / PVB	$4,716,070,000	$4,748,709,000	$5,359,224,000
Normal Cost plus interest	$89,129,000	$87,603,000	n/a
Total ARC - 30 Year Amortization	$383,447,000	$383,957,000	n/a
Total ARC - 20 Year Amortization	$459,440,000	$460,477,000	n/a
Total ARC - 10 Year Amortization	$701,393,000	$704,105,000	n/a
Total ARC - Future Working Lifetime	n/a	n/a	$620,514,000

Amortization of unfunded liabilities – The results shown are developed by amortizing unfunded liabilities as a level percent of payroll, as compared to a level dollar amount. Funding as a percent of payroll reduces current costs but increases future costs as employer payroll increases. It should also be noted that GASB allows amortization of the unfunded liabilities for up to 30 years. Further, an Open or Closed Amortization Period can be used, as described in the Glossary. Funding over a longer period reduces annual costs but extends the funding period.