



**STATE OF HAWAII
EMPLOYER-UNION TRUST FUND**

**POSTEMPLOYMENT BENEFITS
OTHER THAN PENSIONS**

Actuarial Valuation Study

Valuation Date: July 1, 2011

Date of Report: June 30, 2012



June 30, 2012

Ms. Barbara Coriell
EUTF Administrator
P.O. Box 2121
Honolulu, Hawaii 96805-2121

Re: GASB 43 / 45 Actuarial Valuation Report

This report contains the results of the July 1, 2011 actuarial valuation of the Hawaii Employee-Union Trust Fund's (EUTF) Other Postemployment Benefits (OPEB).

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 for the fiscal year ending June 30, 2013. (Other circumstances may result in the use of this valuation to also determine the ARC for the fiscal year ending June 30, 2012.)
- 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 EUTF and the participating employers 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 Hewitt is pleased to present this report and we look forward to discussing it with you.

Respectfully submitted,

A handwritten signature in black ink that reads "Bradley Au".

Bradley J. Au, MAAA
Senior Vice President

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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.

The EUTF provides coverage for all public employees in the State, including Hawaii State Teachers Association (HSTA) members. Prior to 2011, HSTA member benefits were provided through a separate VEBA trust, and a separate actuarial valuation was performed for those benefits.

GASB 43 and 45

Governmental Accounting Standards Board (GASB) Statements 43 and 45 address accounting and financial reporting for Postemployment Benefits Other Than Pensions. GASB 43 addresses financial reporting for OPEB plans and was initially effective for EUTF for the 2006-2007 fiscal year. GASB 45 addresses financial reporting for employers of OPEB plans and was initially effective for the State and other employers 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.

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 and other employers may want to further study the impact of future new entrants or any projected growth in employee population.

Health Care Reform

The liabilities and costs presented in this report consider the long term impact of the Patient Protection and Affordable Care Act (PPACA), also known as Health Care Reform (HCR). Although there is continued uncertainty on specifics and the long term application of HCR, the accounting rules require a best estimate of the impact on the valuation.

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 in this report is developed under the Entry Age Normal method.

Future GASB Developments

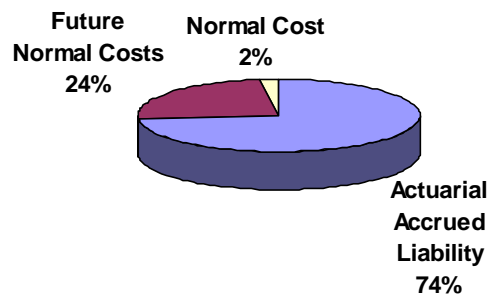
GASB is in the process of modifying employer accounting and financial reporting for pension plans. While the changes initially don't affect OPEB plans, it is anticipated that OPEB plans will soon be similarly impacted. The anticipated changes include moving unfunded liabilities from footnotes to the balance sheet, more volatile periodic expense, and a change in the discount rate basis. In order to be prepared and effectively manage plans, it is important for agencies to consider and understand the ramifications of any potential changes.

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 plan's approximate allocation of these items, which varies based on assumptions.

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 EUTF and the State, results in this report are developed based on both a 4.0% and 7.0% discount rate to show costs assuming the scenarios where obligations are not prefunded or fully prefunded, respectively. The table below summarizes the liability results based on these two discount rates as of July 1, 2011:

<i>(\$ Millions)</i>	No Prefunding (4.0%)	Prefunding (7.0%)
Present Value of Benefits (PVB)	\$25,464.7	\$13,563.7
Actuarial Accrued Liability (AAL)	\$18,232.8	\$11,362.5
Normal Cost	\$603.5	\$236.7

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

As illustrated above, 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 no prefunding results assume employer long term general asset returns of 4%. The prefunding results are based on a 7% return, which is the EUTF's targeted return on plan investments.

If the employers want to better understand the long term advantages and disadvantages to prefunding in a trust, a study which projects cash flow, accrual amounts, and balance sheet obligations based on current and future participants should be performed.

Annual Required Contributions (ARC)

The ARC equals the normal cost plus amortization of the unfunded AAL over 30 years. The following table shows the ARC for the fiscal year ending June 30, 2013 under the scenarios where obligations are not prefunded (4.0%) and fully prefunded (7.0%):

<i>(\$ Millions)</i>	No Prefunding (4.0%)	Prefunding (7.0%)
ARC for FYE June 30, 2013	\$1,323.7	\$894.5

The ARC can be compared to the estimated pay-as-you-go funding amount of \$381.4 million.

1. Executive Summary (cont.)

Comparison to Prior Valuation Results

EUTF is considered an agent multiple employer plan under GASB rules and each employer's AOC and ARC are dependent on the respective employer's anticipated funding level.

The following tables compare total plan results to the prior valuation results:

Assuming No Prefunding of Obligations

<i>(\$ Millions)</i>	July 1, 2011 (4%)	July 1, 2011 (5%)	July 1, 2009 (5%)
Liabilities			
Present Value of Benefits (PVB)	\$25,464.7	\$20,214.6	\$21,017.4
Actuarial Accrued Liability (AAL)	\$18,232.8	\$15,420.7	\$16,153.7
Normal Cost	\$603.5	\$437.9	\$484.5
ARC	\$1,323.7	\$1,128.8	\$1,300.5
Fiscal Year Ending	June 30, 2013	June 30, 2013	June 30, 2011

Assuming Prefunding of Obligations

<i>(\$ Millions)</i>	July 1, 2011 (7%)	July 1, 2009 (7%)
Liabilities		
Present Value of Benefits (PVB)	\$13,563.7	\$14,121.2
Actuarial Accrued Liability (AAL)	\$11,362.5	\$11,864.0
Normal Cost	\$236.7	\$263.2
ARC	\$894.5	\$1,013.0
Fiscal Year Ending	June 30, 2013	June 30, 2011

1. Executive Summary (cont.)

After adjusting for the discount rate (no-pre-funding scenarios only), plan liabilities are lower than expected considering the prior valuation results. The primary factors impacting results include:

- Recognition of changes in the prescription drug plan, including carrier rebates, had a positive impact and decreased plan costs.
- Overall healthcare costs experience was favorable compared to assumed trend, resulting in liability gains.
- Future healthcare trend was revised for updated expectations, resulting in slight liability increases.
- Employer caps are anticipated to have a greater impact as the Medicare B premium index used to adjust these levels decreased from 2011 to 2012.
- Updated demographic assumptions caused a slight decrease in liabilities. The primary drivers of the differences were lower retirement rates, which were partially offset by lower mortality rates.
- The AAL grows 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.

* * *

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

Appendix A, Section III shows the final results based on each employer's specific discount rate, which is determined based on the employer's funding intentions.

2. Actuarial Valuation Certificate

This report presents the results of the actuarial valuation, as of July 1, 2011, for the State of Hawaii Employer-Union Trust Fund (EUTF) under 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.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following:

- Plan experience differing from that anticipated by the economic or demographic assumptions
- Changes in economic or demographic assumptions
- Increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status)
- Changes in plan provisions or applicable law

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

Aon Hewitt 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 EUTF or the Employers to continue the plan.

This report is intended for the sole use of the EUTF, the State of Hawaii, and the Employers. 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 EUTF, the State of Hawaii, or the Employers 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 Hewitt.

2. Actuarial Valuation Certificate (cont.)

The actuaries whose signatures appear below are Members of either the Society of Actuaries or the American Academy of Actuaries 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.

Aon Hewitt'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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June 30, 2012

3. Plan Liabilities

The liabilities shown in this exhibit were calculated as of the July 1, 2011 valuation date.

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. It is utilized in the development of the Annual Required Contribution (ARC).

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

I. Assuming No Prefunding of Obligations

<i>(\$ Millions)</i>	Medical / Dental / Vision / Life	Medicare Part B	Total
Present Value of Benefits (PVB)			
Retirees	\$6,970.7	\$1,327.2	\$8,298.0
Deferred Inactives	\$1,274.9	\$181.4	\$1,456.2
Actives	\$12,578.7	\$3,131.7	\$15,710.4
Total PVB	\$20,824.3	\$4,640.3	\$25,464.7
Actuarial Accrued Liability (AAL)			
Retirees	\$6,970.7	\$1,327.2	\$8,298.0
Deferred Inactives	\$1,274.9	\$181.4	\$1,456.2
Actives	\$6,980.4	\$1,498.2	\$8,478.6
Total AAL	\$15,226.0	\$3,006.8	\$18,232.8
Normal Cost	\$467.3	\$136.3	\$603.5

3. Plan Liabilities (cont.)

II. Assuming Prefunding of Obligations

<i>(\$ Millions)</i>	Medical / Dental / Vision / Life	Medicare Part B	Total
Present Value of Benefits (PVB)			
Retirees	\$4,880.7	\$927.8	\$5,808.5
Deferred Inactives	\$664.7	\$88.8	\$753.6
Actives	\$5,683.8	\$1,317.9	\$7,001.6
Total PVB	\$11,229.2	\$2,334.5	\$13,563.7
Actuarial Accrued Liability (AAL)			
Retirees	\$4,880.7	\$927.8	\$5,808.5
Deferred Inactives	\$664.7	\$88.8	\$753.6
Actives	\$3,975.2	\$825.2	\$4,800.4
Total AAL	\$9,520.6	\$1,841.9	\$11,362.5
Normal Cost	\$182.6	\$54.0	\$236.7

4. Plan Assets

For purposes of determining the ARC, Plan assets are based on pre-funding contributions in the Hawaii EUTF account, if any, and are equal to the market value of assets, including accrued contributions, at the valuation date. The following table shows the reconciliation of Plan assets used in ARC determination.

<i>(\$ Millions)</i>	FYE 6/30/2011	FYE 6/30/2010
Plan assets, beginning of year	\$141.4	\$115.5
Employer contributions during fiscal year		
Pay-as-you-go	\$368.9	\$332.9
Pre-funding	\$25.9	\$19.5
Total employer contributions	<u>\$394.8</u>	<u>\$352.4</u>
Benefit payments (pay-as-you-go)	(\$368.9)	(\$332.9)
Investment return	<u>\$0.1</u>	<u>\$0.1</u>
Market assets, end of year	\$167.4	\$135.2
Accrued employer contributions	<u>\$10.8</u>	<u>\$6.2</u>
Plan assets, end of year	\$178.2	\$141.4

The following table summarizes the employer contributions attributable to each fiscal year:

<i>(\$ Millions)</i>	FYE 6/30/2011	FYE 6/30/2010
Pay-as-you-go	\$368.9	\$332.9
Pre-funding (during fiscal year)	\$25.9	\$19.5
Pre-funding (accrued)	<u>\$10.8</u>	<u>\$6.2</u>
Total employer contributions	\$405.6	\$358.6

The following table compares the employer contributions with the ARC:

<i>(\$ Millions)</i>	FYE 6/30/2011	FYE 6/30/2010
ARC	\$1,301.8	\$1,190.2
Employer Contributions	<u>\$405.6</u>	<u>\$358.6</u>
(Over)/Under Payment of ARC	\$896.2	\$831.6

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 similar to funding the liabilities on a pay-as-you-go basis.

Year Ending June 30	Projected Payments (\$ Millions)		
	Medical / Dental / Vision / Life	Medicare Part B	Total
2012	\$326.0	\$55.4	\$381.4
2013	\$357.4	\$61.1	\$418.5
2014	\$392.5	\$67.2	\$459.7
2015	\$429.8	\$73.8	\$503.6
2016	\$472.3	\$80.5	\$552.8
2017	\$511.3	\$87.9	\$599.2
2018	\$548.7	\$95.6	\$644.3
2019	\$585.1	\$103.9	\$689.0
2020	\$621.2	\$112.3	\$733.5
2021	\$658.3	\$121.0	\$779.3
2022	\$695.8	\$130.0	\$825.8
2023	\$735.5	\$139.2	\$874.7
2024	\$776.3	\$148.7	\$925.0
2025	\$819.2	\$158.2	\$977.4
2026	\$862.1	\$168.2	\$1,030.3

6. Sensitivity Analysis

Impact of 1% Change to Healthcare Trend Rates

This report shows the sensitivity to discount rates by comparing results assuming no prefunding (4.0% discount rate) to results assuming prefunding (7.0% discount rate). Results are also 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, shown for both a 4.0% and 7.0% discount rate.

I. Assuming No Prefunding of Obligations

<i>(\$ Millions)</i>	4.0% 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	\$25,464.7	\$32,361.4	\$20,373.7
Funded Status			
Actuarial Accrued Liability	\$18,232.8	\$22,259.2	\$15,133.9
Assets	\$178.2	\$178.2	\$178.2
Unfunded AAL	\$18,054.6	\$22,081.0	\$14,955.8
Annual Required Contribution (ARC) for FYE 6/30/2013			
Normal Cost plus interest	\$637.0	\$856.2	\$480.6
Amortization of Unfunded AAL	\$686.7	\$847.1	\$563.7
Total ARC	\$1,323.7	\$1,703.3	\$1,044.3

II. Assuming Prefunding of Obligations

<i>(\$ Millions)</i>	7.0% 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	\$13,563.7	\$16,263.6	\$11,460.1
Funded Status			
Actuarial Accrued Liability	\$11,362.5	\$13,321.6	\$9,793.5
Assets	\$178.2	\$178.2	\$178.2
Unfunded AAL	\$11,184.3	\$13,143.4	\$9,615.3
Annual Required Contribution (ARC) for FYE 6/30/2013			
Normal Cost plus interest	\$253.3	\$328.1	\$198.3
Amortization of Unfunded AAL	\$641.2	\$757.5	\$548.2
Total ARC	\$894.5	\$1,085.6	\$746.5

7. Participant Information

These exhibit summaries contain participant demographic information.

Active Employee Age/Service Distribution

Age	Years of Service								Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35+	
<25	802	6	0	0	0	0	0	0	808
25-29	3,313	722	4	0	0	0	0	0	4,039
30-34	2,873	2,716	520	3	0	0	0	0	6,112
35-39	2,094	2,423	2,178	467	13	0	0	0	7,175
40-44	1,817	2,022	1,933	2,182	754	7	0	0	8,715
45-49	1,728	1,734	1,439	1,737	2,511	469	15	0	9,633
50-54	1,435	1,516	1,345	1,504	2,124	1,630	471	17	10,042
55-59	1,200	1,395	1,246	1,381	1,785	1,355	1,075	338	9,775
60-64	693	890	791	869	1,063	596	435	678	6,015
65-69	181	335	294	224	278	174	106	283	1,875
70-74	34	76	71	68	47	32	28	101	457
75-79	6	22	22	21	29	13	5	26	144
80+	3	6	2	2	2	0	3	6	24
Total	16,179	13,863	9,845	8,458	8,606	4,276	2,138	1,449	64,814

Inactive Age Distribution

Age	Deferred Inactives	Retirees	Total
< 35	150	36	186
35-39	315	11	326
40-44	742	37	779
45-49	1,082	166	1,248
50-54	1,275	528	1,803
55-59	1,295	2,458	3,753
60-64	886	6,523	7,409
65-69	188	8,580	8,768
70-74	59	6,691	6,750
75-79	21	5,990	6,011
80-84	4	5,266	5,270
85-89	4	3,507	3,511
90-94	0	1,533	1,533
95+	0	428	428
Total	6,021	41,754	47,775

7. Participant Information (cont.)

Participant Statistics

Retirees

Number of retirees (including surviving spouses) valued 41,754

Average age of retirees 72.8

Deferred Vested

Number of deferred vested valued 6,021

Average age of deferred vested 52.4

Actives

Number of actives valued 64,814

Average age of actives 47.3

Average past service 13.2

Participant Distribution Among Health Plans

Retirees

	Single	Two-Party	Family	Total
HMSA	18,023	11,641	1,436	31,100
HMSA (HSTA VB)	1,011	1,107	120	2,238
Kaiser	4,184	2,366	302	6,852
Kaiser (HSTA VB)	131	101	18	250
HMA	58	54	15	127
Other	87	58	0	145
Total Medical				40,712
Dental	23,468	15,094	1,766	40,328
Vision	23,411	15,449	1,899	40,759
Life				36,784

Actives

	Single	Two-Party	Family	Waived	Total
HMSA	14,957	5,126	8,253	n/a	28,336
HMSA (HSTA VB)	3,889	1,035	2,923	n/a	7,847
Kaiser	5,001	1,698	2,424	n/a	9,123
Kaiser (HSTA VB)	1,117	255	607	n/a	1,979
HMA	1,591	496	769	n/a	2,856
Other	75	85	210	n/a	370
Waived	n/a	n/a	n/a	14,303	14,303
Total Medical					64,814
Dental	25,313	11,417	17,911	10,173	64,814
Vision	25,371	10,116	16,163	13,164	64,814

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 (effective January 1, 2012)

Medical – PPO through HMSA, or HMO through Kaiser
Prescription Drug – PPO through informedRx or HMSA (HSTA VB only); HMO through Kaiser
Dental – Hawaii Dental Service
Vision – Vision Services Plan
Life Insurance – Royal State National
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 (excluding Medicare Part B premium reimbursement). 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	50%
	≥ 10	100%
Post-7/1/96 (Post-7/1/01 applied to self premium only)	< 10	0%
	10-14	50%
	15-24	75%
	≥ 25	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 portion of the premium rate not paid by the employer.

8. Summary of Principal Plan Provisions (cont.)

7. Benefit Plan Design (Effective January 1, 2012)

EUTF

Plan Provisions	HMSA PPO		Kaiser	
	Participating	Non Participating	Non-Medicare Early Retirees	Medicare Retirees ¹
Deductible Single	\$100	\$100	None	None
Deductible Family	\$300	\$300		
Office visit copay/coinsurance	10% of eligible	30% of eligible	\$15	\$15
Routine physical exams	Not Covered	Not Covered	\$15	\$15
Inpatient admission copay/coinsurance	10% of eligible	30% of eligible	No Charge	No Charge
Emergency room copay/coinsurance	10% of eligible	10% of eligible	\$50 + other applicable plan charges	\$50 + other applicable plan charges
Ambulance copay/coinsurance	20% of eligible	30% of eligible	20% of applicable charges	20% of applicable charges
Outpatient surgery copay/coinsurance	10% of eligible	30% of eligible	\$15	\$15
Out-of-pocket limit Single/Family	\$2,500/\$7,500	\$2,500/\$7,500	\$2,000/\$6,000	\$2,000
Prescriptions (30-day supply) non-mail order	informedRx		Kaiser	
Generic	\$5	\$5 + 20% of eligible charges	\$15	\$15
Preferred brand	\$15	\$15 + 20% of eligible charges	\$15	\$15
Other Brand Name	\$30	\$30 + 20% of eligible charges	\$15	\$15
Injectables and Specialty Drug	Medicare Retirees: 20%	Medicare Retirees: Co-Pay + penalty charge	\$15	\$15
	Non-Medicare Retirees: 20% Up to \$250 copay maximum, \$2,000 out-of-pocket maximum per plan year	Non-Medicare Retirees: Not a benefit	\$15	\$15
Prescriptions (90-day supply) mail order				
Generic	\$10	No benefit	\$30	\$30
Preferred brand	\$35	No benefit	\$30	\$30
Non-preferred brand	\$60	No benefit	\$30	\$30

¹ Kaiser Medicare Retirees must enroll in Kaiser's Senior Advantage plan.

8. Summary of Principal Plan Provisions (cont.)

HSTA VB

Plan Provisions	HMSA PPO		Kaiser	
	Participating	Non Participating	Non-Medicare Early Retirees	Medicare Retirees ²
Deductible Single	\$100	\$100	None	None
Family	\$300	\$300		
Office visit copay/coinsurance	10% of eligible	30% of eligible	\$15	\$15
Routine physical exams	No Charge	No Charge	No Charge	No Charge
Inpatient admission copay/coinsurance	10% of eligible	30% of eligible	No Charge	No Charge
Emergency room copay/coinsurance	10% of eligible	10% of eligible	\$50 + other applicable plan charges	\$50 + other applicable plan charges
Ambulance copay/coinsurance	10% of eligible	30% of eligible	20% of applicable charges	20% of applicable charges
Outpatient surgery copay/coinsurance	10% of eligible	30% of eligible	\$15	\$15
Out-of-pocket limit Single/Family	\$2,000/\$6,000	\$2,000/\$6,000	\$2,000/\$6,000	\$2,000
Prescriptions (30-day supply) non-mail order	HMSA		Kaiser	
Generic	\$5	\$5 + 30% of eligible charges	\$10	\$10
Preferred brand	\$15	\$15 + 30% of eligible charges	\$10	\$10
Prescriptions (90-day supply) mail order				
Generic	\$9	No benefit	\$20	\$20
Preferred brand	\$27	No benefit	\$20	\$20

² Kaiser Medicare Retirees must enroll in Kaiser's Senior Advantage plan.

9. Actuarial Methods and Assumptions

Where applicable, the Hawaii Employee Retirement System (ERS) July 1, 2011 actuarial valuation assumptions were used.

1. Actuarial Valuation Date

July 1, 2011

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 and deferred inactive participants, 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 (both determined at the middle of year), based on the following:

For State of Hawaii:

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

For other employers:

- Initial unfunded AAL amortized over 30-year period ending June 30, 2037,
- New unfunded AAL in each subsequent valuation amortized over 30-year period beginning one year after base establishment,
- 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. Asset Method

Fair value of assets, plus accrued contributions.

4. Discount Rate

4.0% - No Prefunding - This rate is based on the assumption that benefits will be paid from general employer assets.

7.0% - Prefunding - This rate is based on the assumption that employers pre-fund contributions.

9. Actuarial Methods and Assumptions (cont.)

5. Payroll Increases

3.5% - This is the annual rate at which total payroll is expected to increase and is used to amortize unfunded liabilities as a level percent of payroll.

6. Salary Increases

Used to determine AAL as a level percentage of payroll.

<u>Years of Service</u>	<u>General Employees</u>	<u>Teachers</u>	<u>Police & Fire</u>
1	8.00%	8.50%	19.00%
2	7.00%	7.75%	17.00%
3	6.00%	7.00%	5.00%
4	5.25%	6.50%	5.00%
5	5.00%	6.00%	5.00%
6	4.75%	5.50%	5.00%
7	4.50%	5.50%	5.00%
8	4.50%	5.25%	5.00%
9	4.50%	5.25%	5.00%
10	4.25%	5.25%	5.00%
11	4.25%	5.00%	5.00%
12	4.25%	5.00%	5.00%
13	4.25%	5.00%	5.00%
14	4.25%	5.00%	5.00%
15+	4.00%	4.50%	5.00%

7. Mortality

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

<u>Age</u>	<u>General Employees</u>		<u>Teachers</u>		<u>Police & Fire</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
25	0.02%	0.01%	0.02%	0.01%	0.01%	0.00%
30	0.03%	0.01%	0.02%	0.01%	0.01%	0.00%
35	0.05%	0.02%	0.04%	0.02%	0.01%	0.01%
40	0.07%	0.03%	0.05%	0.03%	0.02%	0.01%
45	0.10%	0.05%	0.08%	0.05%	0.02%	0.02%
50	0.14%	0.08%	0.11%	0.07%	0.03%	0.03%
55	0.19%	0.12%	0.15%	0.10%	0.05%	0.04%
60	0.31%	0.19%	0.24%	0.16%	0.07%	0.06%
65	0.48%	0.28%	0.38%	0.23%	0.11%	0.09%

9. Actuarial Methods and Assumptions (cont.)

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

Age	General Employees		Teachers		Police & Fire	
	Male	Female	Male	Female	Male	Female
25	0.01%	0.00%	0.00%	0.00%	0.01%	0.01%
30	0.01%	0.00%	0.00%	0.00%	0.02%	0.01%
35	0.01%	0.01%	0.01%	0.00%	0.03%	0.02%
40	0.02%	0.01%	0.01%	0.00%	0.04%	0.02%
45	0.02%	0.01%	0.02%	0.01%	0.05%	0.04%
50	0.03%	0.02%	0.02%	0.01%	0.07%	0.06%
55	0.05%	0.03%	0.03%	0.01%	0.11%	0.09%
60	0.08%	0.05%	0.05%	0.02%	0.17%	0.14%
65	0.12%	0.07%	0.08%	0.03%	0.27%	0.20%

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

Age	General Employees		Teachers		Police & Fire	
	Male	Female	Male	Female	Male	Female
50	0.33%	0.17%	0.18%	0.10%	0.22%	0.12%
55	1.02%	0.47%	0.31%	0.25%	0.38%	0.20%
60	1.30%	0.82%	0.29%	0.32%	0.68%	0.38%
65	1.49%	0.83%	0.37%	0.29%	1.24%	0.73%
70	1.91%	0.85%	0.97%	0.60%	2.02%	1.17%
75	2.92%	1.38%	1.62%	0.95%	3.16%	1.93%
80	4.38%	2.38%	3.21%	2.13%	5.27%	3.35%
85	7.49%	4.53%	6.36%	4.96%	8.27%	5.76%
90	12.54%	10.14%	11.13%	9.29%	13.00%	9.88%

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

Age	General Employees		Teachers		Police & Fire	
	Male	Female	Male	Female	Male	Female
50	0.71%	0.39%	0.44%	0.26%	0.36%	0.19%
55	1.29%	0.76%	0.80%	0.51%	0.63%	0.34%
60	2.17%	1.27%	1.45%	0.97%	1.15%	0.67%
65	3.41%	2.04%	2.37%	1.50%	1.99%	1.18%
70	5.59%	3.54%	3.72%	2.53%	3.12%	1.83%
75	8.96%	6.10%	6.20%	4.40%	5.02%	3.17%
80	13.95%	10.46%	9.72%	7.53%	8.25%	5.49%
85	21.57%	17.07%	15.29%	12.88%	12.70%	9.38%
90	30.13%	25.67%	23.36%	20.25%	19.84%	15.59%

9. Actuarial Methods and Assumptions (cont.)

8. 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:

Years	General Employees		Teachers		Police & Fire	
	Male	Female	Male	Female	Male	Female
0	15.50%	18.50%	33.00%	28.00%	12.00%	12.00%
1	12.50%	16.50%	23.00%	23.00%	9.00%	9.00%
2	10.50%	12.50%	15.00%	16.00%	4.00%	4.00%
3	9.00%	10.00%	13.00%	14.00%	4.00%	4.00%
4	7.00%	8.00%	11.00%	12.00%	4.00%	4.00%
5	6.00%	7.00%	9.00%	8.00%	4.00%	4.00%

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

Age	General Employees		Teachers		Police & Fire	
	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%	2.41%	2.34%	2.36%	0.79%	0.79%
55	2.52%	2.41%	2.34%	2.36%	0.24%	0.24%
60	2.52%	2.41%	2.34%	2.36%	0.00%	0.00%
65	2.52%	2.41%	2.34%	2.36%	0.00%	0.00%

9. Actuarial Methods and Assumptions (cont.)

9. Disability

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

Age	General Employees		Teachers		Police & Fire	
	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	0.03%	0.02%	0.01%	0.01%	0.02%	0.02%
45	0.09%	0.05%	0.03%	0.03%	0.04%	0.04%
50	0.20%	0.12%	0.07%	0.06%	0.10%	0.10%
55	0.27%	0.17%	0.10%	0.08%	0.14%	0.14%
60	0.29%	0.18%	0.11%	0.08%	0.15%	0.15%
65	0.52%	0.32%	0.19%	0.15%	0.27%	0.27%

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

Age	General Employees		Teachers		Police & Fire	
	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	0.02%	0.00%	0.00%	0.00%	0.02%	0.02%
50	0.04%	0.01%	0.01%	0.01%	0.05%	0.05%
55	0.06%	0.01%	0.01%	0.01%	0.07%	0.07%
60	0.06%	0.01%	0.01%	0.01%	0.07%	0.07%
65	0.11%	0.03%	0.02%	0.02%	0.13%	0.13%

9. Actuarial Methods and Assumptions (cont.)

10. Retirement Age

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

For active participants in a contributory pension plan

Age	General Employees		Teachers		Police & Fire	
	Male	Female	Male	Female	Male	Female
45	2.00%	1.00%	0.00%	0.00%	13.00%	13.00%
50	2.00%	1.00%	1.00%	0.00%	15.00%	15.00%
55	16.00%	13.00%	20.00%	18.00%	20.00%	20.00%
60	14.00%	15.00%	14.00%	18.00%	30.00%	30.00%
65	25.00%	25.00%	20.00%	25.00%	100.00%	100.00%
70	20.00%	20.00%	15.00%	20.00%	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

Age	General Employees				Teachers			
	>= 30 years of Service		< 30 years of Service		>= 30 years of Service		< 30 years of Service	
	Male	Female	Male	Female	Male	Female	Male	Female
45	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
50	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
55	13.00%	12.00%	2.00%	2.00%	10.00%	13.00%	2.00%	3.00%
60	14.00%	15.00%	4.00%	4.00%	10.00%	17.00%	5.00%	5.00%
65	25.00%	22.00%	25.00%	22.00%	20.00%	30.00%	20.00%	30.00%
70	20.00%	20.00%	20.00%	20.00%	15.00%	25.00%	15.00%	25.00%
75	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

9. Actuarial Methods and Assumptions (cont.)

11. Annual Healthcare Inflation (“Trend”)

Medical and prescription drug trends were determined initially from a combination of EUTF specific trend experience and national/regional expectations. The relative weighting of the group specific versus national average trend was based on credibility theory. Applying econometric theory, trends were graded downward over several years to an ultimate rate. This assumption methodology is in line with Actuarial Standards of Practice for retiree health valuations.

A unique claim trend was developed for the Kaiser Medicare Advantage plans incorporating national expectations for these plans. The HMSA PPO trends include the impact of maximum rate guarantees from the vendor through Plan Year 2014.

The resulting trend rates are as follows:

Year	HMSA	HMSA	HMSA	HMSA
	Pre-65	Post-65	(HSTA VB) Pre-65	(HSTA VB) Post-65
2011	8.00%	8.50%	8.50%	8.50%
2012	7.50%	8.25%	8.25%	8.25%
2013	7.50%	8.00%	8.00%	8.00%
2014	13.00%	7.75%	7.75%	7.75%
2015	7.50%	7.50%	7.50%	7.50%
2016	7.00%	7.00%	7.00%	7.00%
2017	6.50%	6.50%	6.50%	6.50%
2018	6.00%	6.00%	6.00%	6.00%
2019	5.50%	5.50%	5.50%	5.50%
2020+	5.00%	5.00%	5.00%	5.00%

Year	Kaiser	Kaiser	Dental	Vision	Medicare
	Pre-65	Post-65			Part B
2011	8.50%	15.00%	4.00%	3.00%	acutal*
2012	8.25%	13.00%	4.00%	3.00%	5.00%
2013	8.00%	12.00%	4.00%	3.00%	5.00%
2014	7.75%	10.00%	4.00%	3.00%	5.00%
2015	7.50%	8.00%	4.00%	3.00%	5.00%
2016	7.00%	7.00%	4.00%	3.00%	5.00%
2017	6.50%	6.50%	4.00%	3.00%	5.00%
2018	6.00%	6.00%	4.00%	3.00%	5.00%
2019	5.50%	5.50%	4.00%	3.00%	5.00%
2020+	5.00%	5.00%	4.00%	3.00%	5.00%

* The standard 2011 Medicare Part B premium is \$96.40 for most retirees, and \$115.40 for new retirees. For 2012, the standard Part B monthly premium is \$99.90. For the Medicare Part B reimbursement valuation, \$96.40 was used from July 2011 to December 2011, and \$99.90 was used from January 2012 to June 2012. The first year trend rate is $(\$99.6*6 + \$99.6*1.05*6) / (\$96.4 * 6 + \$99.9 * 6) - 1 = 4.33\%$.

For the purpose of determining Base Contribution (Employer Caps), the first year trend rate is (13.43%).

9. Actuarial Methods and Assumptions (cont.)

12. Healthcare Premiums

Effective January 1, 2012, the total monthly premium rates for retirees follow:

	<u>Premium</u>	<u>Administrative Fee</u>	<u>Total Payment Required</u>
HMSA Non-Medicare			
Single	\$379.24	\$2.12	\$381.36
Two-Party	738.96	4.48	743.44
Family	1,095.50	6.54	1,102.04
HMSA Medicare			
Single	175.88	2.12	178.00
Two-Party	342.76	4.48	347.24
Family	508.10	6.54	514.64
Prescription Drug Non-Medicare			
Single	109.56	0.60	110.16
Two-Party	213.36	1.28	214.64
Family	316.36	1.88	318.24
Prescription Drug Medicare			
Single	203.54	0.62	204.16
Two-Party	396.31	1.29	397.60
Family	587.58	1.86	589.44
Kaiser Non-Medicare (Including Drug)			
Single	657.04	2.76	659.80
Two-Party	1,281.20	5.76	1,286.96
Family	1,898.76	8.40	1,907.16
Kaiser Medicare (Including Drug)			
Single	362.76	2.76	365.52
Two-Party	707.32	5.76	713.08
Family	1,048.24	8.40	1,056.64

9. Actuarial Methods and Assumptions (cont.)

	<u>Premium</u>	<u>Administrative Fee</u>	<u>Total Payment Required</u>
HSTA VB HMSA Non-Medicare (Including Drug)			
Single	515.56	2.80	518.36
Two-Party	1,004.77	5.91	1,010.68
Family	1,487.07	8.61	1,495.68
HSTA VB HMSA Medicare (Including Drug)			
Single	393.78	2.82	396.60
Two-Party	767.49	5.91	773.40
Family	1,135.24	8.60	1,143.84
HSTA VB Kaiser Non-Medicare (Including Drug)			
Single	677.24	2.80	680.04
Two-Party	1,320.90	5.90	1,326.80
Family	1,955.04	8.60	1,963.64
HSTA VB Kaiser Medicare (Including Drug)			
Single	376.76	2.80	379.56
Two-Party	734.98	5.90	740.88
Family	1,086.72	8.60	1,095.32
HDS (Dental)			
Single	28.56	0.32	28.88
Two-Party	55.68	0.64	56.32
Family	68.28	0.96	69.24
VSP (Vision; included in HSTA VB Medical above)			
Single	5.06	0.06	5.12
Two-Party	10.12	0.12	10.24
Family	13.59	0.17	13.76

The standard Medicare Part B monthly premium for 2011 is \$96.40 for most retirees, and is \$110.50 or \$115.40 for certain other retirees. For 2012, the standard Part B monthly premium is \$99.90.

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

9. Actuarial Methods and Assumptions (cont.)

13. Monthly Base Contribution (Employer Caps)

The monthly base contribution for the fiscal years 2011/2012 and 2012/2013 follows:

Fiscal Year 7/1/11 – 6/30/12	Single	Two-Party	Family
Non-Medicare	\$771.50	\$1,555.06	\$2,276.02
Medicare	549.58	1,101.52	1,604.36
Fiscal Year 7/1/12 – 6/30/13	Single	Two-Party	Family
Non-Medicare	\$668.12	\$1,346.68	\$1,971.04
Medicare	475.94	953.92	1,389.36

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

14. Base Year Claims

Self Funded

The EUTF PPO prescription drug plan is self-insured. The claims development was based on 36 months of claims experience adjusted by trend and any plan design modifications. Due to data limitations, prescription drug experience was combined for both Pre-Medicare and Medicare retirees. This assumption was accounted for in our calculations.

The projected claims costs were stratified by age according to morbidity factors recognized by the Society of Actuaries as acceptable standards of practice for retiree health valuations.

Fully Insured

The claims curves developed for fully-insured plans utilized premiums rather than claims experience. The annual premiums were stratified by age using the same morbidity factors mentioned above.

9. Actuarial Methods and Assumptions (cont.)

The following table shows sample expected monthly per member claim costs for the fiscal year beginning July 1, 2011. Please note that where applicable, claims have been adjusted for carrier rebates received.

<u>Age</u>	<u>HMSA Medical & Rx</u>	<u>HMSA (HSTA VB) Medical & Rx</u>	<u>Kaiser Medical & Rx</u>	<u>Kaiser (HSTA VB) Medical & Rx</u>
42	\$271	\$247	\$337	\$328
47	313	289	394	384
52	373	346	471	459
57	441	410	557	544
62	532	497	673	658
67	313	349	285	340
72	359	401	327	391
77	401	450	367	439
82	434	488	397	475
87	452	508	413	495

Dental and vision costs are not assumed to vary by age. The monthly expected claims are \$28 for dental and \$5 for vision.

The standard Medicare Part B reimbursement is \$96.40 per month in 2011 for most retirees and \$99.90 per month in 2012 for all retirees.

15. Life Insurance

The life insurance benefit amount effective on January 1, 2012 is \$2,034.

16. 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.

9. Actuarial Methods and Assumptions (cont.)

17. 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 & Rx	Dental/Vision	Life	Medicare Part B
0%	25%	35%	100%	99%
50%	50%	70%	100%	99%
75%	90%	85%	100%	99%
100%	99%	99%	100%	99%

An adjustment factor of 0.997 is used for EUTF HMSA and Prescription Drug participation to reflect that not all participants elect the prescription drug coverage along with HMSA.

18. 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.

19. 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 52% single / 43% two-party / 5% family.

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

20. Dependent Age

Actual spouses' dates of birth are used for current retirees, 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.

21. Participants Valued

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

9. Actuarial Methods and Assumptions (cont.)

22. Health Care Reform

The liabilities and costs presented in this report consider the long term impact of the Patient Protection and Affordable Care Act (PPACA), also known as Health Care Reform (HCR). Although there is continued uncertainty on specifics and the long term application of HCR, the accounting rules require a best estimate of the impact on the valuation.

23. Changes in Valuation Assumptions

The following assumptions were changed from the prior valuation:

1) Discount Rate – No Prefunding

2011 – 4.0%
2009 – 5.0%

This change was made based on the anticipated return on general employer assets.

2) Salary Increases

2011 – ERS July 1, 2011 assumptions
2009 – 4%

3) Demographic Assumptions (Mortality, Termination, Disability, and Retirement):

2011 – ERS July 1, 2011 assumptions
2009 – ERS July 1, 2009 assumptions

4) Healthcare Trend

Year	Medical & Rx Pre-65			Medical & Rx Post-65		
	2011 HMSA	2011 Kaiser & HMSA (HSTA VB)	2009	2011 HMSA	2011 Kaiser	2009
2009			10.50%			10.25%
2010			10.00			9.75
2011	8.00%	8.50%	9.50	8.50%	15.00%	9.25
2012	7.50	8.25	8.75	8.25	13.00	8.50
2013	7.50	8.00	8.00	8.00	12.00	7.75
2014	13.00	7.75	7.25	7.75	10.00	7.00
2015	7.50	7.50	6.50	7.50	8.00	6.25
2016	7.00	7.00	6.00	7.00	7.00	5.75
2017	6.50	6.50	5.50	6.50	6.50	5.25
2018	6.00	6.00	5.00	6.00	6.00	5.00
2019	5.50	5.50	5.00	5.50	5.50	5.00
2020+	5.00	5.00	5.00	5.00	5.00	5.00

9. Actuarial Methods and Assumptions (cont.)

Year	Dental		Vision		Medicare Part B	
	2011	2009	2011	2009	2011	2009
2009		6.00%		4.00%		actual
2010		5.50		3.50		6.00
2011	4.00%	5.00	3.00%	3.00	actual	5.50
2012	4.00	4.50	3.00	3.00	5.00	5.00
2013+	4.00	4.00	3.00	3.00	5.00	5.00

5) Plan Participation

Employer Contribution	Medical & Rx		Dental/Vision	
	2011	2009	2011	2009
0%	25%	50%	35%	70%
50%	50%	50%	70%	70%
75%	90%	75%	85%	85%
100%	99%	99%	99%	99%

6) Plan Coverage

2011 – 52% single / 43% two-party / 5% family

2009 – 51% single / 44% two-party / 5% family for EUTF

45% single / 55% family for HSTA

10. GASB OPEB Summary

The Government Accounting Standards Board (GASB) Statements No. 43 and 45 address 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 Accounting Standards Codification (ASC) 715, 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. ASC 715 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 ASC 715 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

ASC 715 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 ASC 715, 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

ASC 715 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 GASB standards have staggered effective dates, similar to GASB Statement No. 34, as follows:

	Annual Revenue	Effective for Fiscal Years Beginning After	
		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.

11. Glossary (cont.)

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).

11. Glossary (cont.)

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.

11. Glossary (cont.)

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 – Results by Employer

I. Assuming No Prefunding of Obligations (4%)

The ARC shown below is based on 30 year open period amortization of the Unfunded AAL as a level percent of payroll.

<i>(\$ Millions)</i>	State of Hawaii	City & County of Honolulu	County of Hawaii	County of Maui	County of Kauai	Kauai - Department of Water	Board of Water Supply - Honolulu	Hawaii Department of Water Supply	Total
Present Value of Benefits (PVB)									
Retirees	\$6,014.3	\$1,433.4	\$322.0	\$264.0	\$139.0	\$7.6	\$101.8	\$15.9	\$8,298.0
Deferred Inactives	\$1,171.1	\$174.7	\$32.9	\$43.6	\$20.9	\$0.9	\$12.2	\$0.0	\$1,456.2
Actives	\$11,711.1	\$2,345.3	\$582.9	\$604.5	\$271.8	\$18.9	\$135.6	\$40.5	\$15,710.4
Total PVB	\$18,896.5	\$3,953.3	\$937.8	\$912.1	\$431.6	\$27.4	\$249.6	\$56.3	\$25,464.7
Actuarial Accrued Liability (AAL)									
Retirees	\$6,014.3	\$1,433.4	\$322.0	\$264.0	\$139.0	\$7.6	\$101.8	\$15.9	\$8,298.0
Deferred Inactives	\$1,171.1	\$174.7	\$32.9	\$43.6	\$20.9	\$0.9	\$12.2	\$0.0	\$1,456.2
Actives	\$6,381.4	\$1,247.5	\$287.8	\$302.8	\$141.8	\$10.5	\$83.6	\$23.1	\$8,478.6
Total AAL	\$13,566.8	\$2,855.6	\$642.8	\$610.4	\$301.6	\$18.9	\$197.6	\$39.0	\$18,232.8
Normal Cost	\$449.5	\$89.2	\$22.8	\$23.9	\$10.8	\$0.7	\$5.0	\$1.5	\$603.5
Assets	\$0.0	\$40.2	\$61.9	\$25.1	\$29.7	\$2.3	\$14.6	\$4.5	\$178.2
Unfunded AAL as of 7/1/2011	\$13,566.8	\$2,815.4	\$580.9	\$585.3	\$272.0	\$16.7	\$183.1	\$34.5	\$18,054.6
Interest on Unfunded AAL	\$542.7	\$112.6	\$23.2	\$23.4	\$10.9	\$0.7	\$7.3	\$1.4	\$722.2
Normal Cost plus interest	\$467.5	\$92.7	\$23.8	\$24.9	\$11.2	\$0.7	\$5.2	\$1.6	\$627.6
Contribution with interest	\$289.0	\$159.1	\$36.9	\$33.5	\$17.4	\$1.1	\$11.0	\$2.4	\$550.4
Unfunded AAL as of 7/1/2012	\$14,288.0	\$2,861.6	\$591.0	\$600.1	\$276.7	\$17.0	\$184.6	\$35.1	\$18,854.0
Annual Required Contribution for FYE 6/30/2013									
Normal Cost plus interest	\$474.5	\$94.1	\$24.1	\$25.2	\$11.4	\$0.8	\$5.3	\$1.6	\$637.0
Amortization of Unfunded AAL	\$520.4	\$104.2	\$21.5	\$21.9	\$10.1	\$0.6	\$6.7	\$1.3	\$686.7
Total ARC	\$994.9	\$198.3	\$45.6	\$47.1	\$21.5	\$1.4	\$12.0	\$2.9	\$1,323.7
% of Pay	36.0%	34.2%	33.6%	34.2%	31.5%	25.0%	29.7%	33.0%	35.4%

Appendix A Results by Employer (cont.)

II. Assuming Prefunding of Obligations (7%)

The ARC shown below for the State of Hawaii is based on 30 year open period amortization of the Unfunded AAL. For the other employers, separate amortization of Unfunded AAL developed each year is used.

(\$ Millions)	State of Hawaii	City & County of Honolulu	County of Hawaii	County of Maui	County of Kauai	Kauai - Department of Water	Board of Water Supply - Honolulu	Hawaii Department of Water Supply	Total
Present Value of Benefits (PVB)									
Retirees	\$4,244.3	\$984.0	\$216.9	\$179.3	\$95.2	\$5.2	\$72.2	\$11.3	\$5,808.5
Deferred Inactives	\$611.7	\$86.7	\$16.8	\$21.8	\$10.4	\$0.4	\$5.8	\$0.0	\$753.6
Actives	\$5,233.5	\$1,041.7	\$252.1	\$261.4	\$121.2	\$8.5	\$64.6	\$18.7	\$7,001.6
Total PVB	\$10,089.5	\$2,112.4	\$485.8	\$462.5	\$226.8	\$14.2	\$142.6	\$30.0	\$13,563.7
Actuarial Accrued Liability (AAL)									
Retirees	\$4,244.3	\$984.0	\$216.9	\$179.3	\$95.2	\$5.2	\$72.2	\$11.3	\$5,808.5
Deferred Inactives	\$611.7	\$86.7	\$16.8	\$21.8	\$10.4	\$0.4	\$5.8	\$0.0	\$753.6
Actives	\$3,614.5	\$707.3	\$160.9	\$168.7	\$80.6	\$5.9	\$49.1	\$13.2	\$4,800.4
Total AAL	\$8,470.6	\$1,778.0	\$394.6	\$369.8	\$186.3	\$11.6	\$127.2	\$24.5	\$11,362.5
Normal Cost	\$176.5	\$34.5	\$9.1	\$9.5	\$4.3	\$0.3	\$1.8	\$0.6	\$236.7
Assets	\$0.0	\$40.2	\$61.9	\$25.1	\$29.7	\$2.3	\$14.6	\$4.5	\$178.2
Unfunded AAL as of 7/1/2011	\$8,470.6	\$1,737.8	\$332.7	\$344.6	\$156.6	\$9.3	\$112.6	\$20.0	\$11,184.3
Annual Required Contribution for FYE 6/30/2013									
Normal Cost plus interest	\$189.0	\$36.9	\$9.7	\$10.1	\$4.7	\$0.3	\$2.0	\$0.6	\$253.3
Amortization of Unfunded AAL	\$480.2	\$103.1	\$19.8	\$20.3	\$9.3	\$0.6	\$6.7	\$1.2	\$641.2
Total ARC	\$669.2	\$140.0	\$29.5	\$30.5	\$14.0	\$0.9	\$8.7	\$1.8	\$894.5
% of Pay	24.2%	24.1%	21.7%	22.1%	20.5%	15.5%	21.5%	20.8%	23.9%

Appendix A Results by Employer (cont.)

III. Actual Final Results Based on Employers' Funding Intentions

The following exhibit shows the results based on each employer's specific discount rate, which is determined based on the employer's funding intentions. This exhibit also reflects different amortization methods of the Unfunded AAL to develop the ARC. The results were provided in separate employer reports and in some cases figures are slightly different than in earlier sections of this report due to rounding. *Please note that Honolulu Authority for Rapid Transportation (HART) requested their results shown as a separate employer, as shown in this exhibit. All other exhibits include HART with City & County of Honolulu based on the breakdown provided in preliminary results.*

(\$ Millions)	State of Hawaii	City & County of Honolulu	Honolulu Authority for Rapid Transportation	County of Hawaii	County of Maui	County of Kauai	Kauai - Department of Water	Board of Water Supply - Honolulu	Hawaii Department of Water Supply	Total
<i>Employer Specific Discount Rate</i>	4%	7%	7%	7%	7%	7%	7%	7%	7%	
Present Value of Benefits (PVB)										
Retirees	\$6,014.3	\$984.0	\$0.0	\$216.9	\$179.3	\$95.2	\$5.2	\$72.2	\$11.3	\$7,578.5
Deferred Inactives	\$1,171.1	\$86.7	\$0.0	\$16.8	\$21.8	\$10.4	\$0.4	\$5.8	\$0.0	\$1,313.0
Actives	\$11,711.1	\$1,038.5	\$3.3	\$252.1	\$261.4	\$121.2	\$8.5	\$64.6	\$18.7	\$13,479.3
Total PVB	\$18,896.5	\$2,109.1	\$3.3	\$485.8	\$462.5	\$226.8	\$14.2	\$142.6	\$30.0	\$22,370.8
Actuarial Accrued Liability (AAL)										
Retirees	\$6,014.3	\$984.0	\$0.0	\$216.9	\$179.3	\$95.2	\$5.2	\$72.2	\$11.3	\$7,578.5
Deferred Inactives	\$1,171.1	\$86.7	\$0.0	\$16.8	\$21.8	\$10.4	\$0.4	\$5.8	\$0.0	\$1,313.0
Actives	\$6,381.4	\$705.4	\$2.0	\$160.9	\$168.7	\$80.6	\$5.9	\$49.1	\$13.2	\$7,567.3
Total AAL	\$13,566.8	\$1,776.1	\$2.0	\$394.6	\$369.8	\$186.3	\$11.6	\$127.2	\$24.5	\$16,458.8
Normal Cost	\$449.5	\$34.3	\$0.2	\$9.1	\$9.5	\$4.3	\$0.3	\$1.8	\$0.6	\$509.7
Assets	\$0.0	\$40.2	\$0.0	\$61.9	\$25.1	\$29.7	\$2.3	\$14.6	\$4.5	\$178.2
Unfunded AAL as of 7/1/2011	\$13,566.8	\$1,735.9	\$2.0	\$332.7	\$344.6	\$156.6	\$9.3	\$112.6	\$20.0	\$16,280.6
Annual Required Contribution for FYE 6/30/2013										
Normal Cost plus interest	\$474.5	\$36.7	\$0.2	\$9.7	\$10.1	\$4.7	\$0.3	\$2.0	\$0.6	\$538.8
Amortization of Unfunded AAL	\$520.4	\$103.0	\$0.1	\$19.8	\$20.3	\$9.3	\$0.6	\$6.7	\$1.2	\$681.4
Total ARC	\$994.9	\$139.7	\$0.3	\$29.5	\$30.5	\$14.0	\$0.9	\$8.7	\$1.8	\$1,220.3
% of Pay	36.0%	24.5%	3.0%	21.7%	22.1%	20.5%	15.5%	21.5%	20.8%	32.6%

Appendix A Results by Employer (cont.)

IV. Additional Information

The following exhibit shows the 2012 ARC. This ARC was developed based on the July 1, 2009 actuarial valuation for all employers except for the State, for which the ARC was developed based on the July 1, 2011 actuarial valuation.

(\$ Millions)	State of Hawaii	City & County of Honolulu	County of Hawaii	County of Maui	County of Kauai	Kauai - Department of Water	Board of Water Supply - Honolulu	Hawaii Department of Water Supply	Total
<i>Employer Specific Discount Rate</i>	4%	7%	7%	7%	7%	7%	7%	7%	
Normal Cost plus interest	\$458.4	\$44.0	\$11.8	\$11.6	\$5.6	\$0.4	\$2.5	\$0.9	\$535.3
Amortization of Unfunded AAL	\$494.1	\$112.0	\$24.4	\$21.2	\$11.5	\$0.7	\$8.2	\$1.5	\$673.7
Total 6/30/2012 ARC	\$952.6	\$156.0	\$36.2	\$32.9	\$17.1	\$1.1	\$10.8	\$2.4	\$1,209.0
% of Pay	36.7%	28.4%	27.8%	24.8%	25.7%	21.7%	36.0%	30.0%	34.4%

The following exhibit shows the change in the ARC from FY 2012 to FY 2013 by source.

(\$ Millions)	State of Hawaii	City & County of Honolulu	County of Hawaii	County of Maui	County of Kauai	Kauai - Department of Water	Board of Water Supply - Honolulu	Hawaii Department of Water Supply	Total
<i>Employer Specific Discount Rate</i>	4%	7%	7%	7%	7%	7%	7%	7%	
6/30/2012 ARC	\$952.6	\$156.0	\$36.2	\$32.9	\$17.1	\$1.1	\$10.8	\$2.4	\$1,209.0
Anticipated growth*	\$42.3	\$5.5	\$1.3	\$1.2	\$0.6	\$0.0	\$0.4	\$0.1	\$51.3
Contribution Shortfall / (Excess) vs. ARC	N/A	\$8.3	\$0.0	\$1.9	(\$0.0)	(\$0.0)	(\$0.1)	(\$0.0)	\$10.1
Asset (Gain) / Loss	N/A	\$0.3	\$0.3	\$0.2	\$0.1	\$0.0	\$0.1	\$0.0	\$1.0
Liability (Gain) / Loss - Amortization of AAL	N/A	(\$21.3)	(\$5.8)	(\$3.8)	(\$2.7)	(\$0.2)	(\$1.8)	(\$0.4)	(\$36.0)
Liability (Gain) / Loss - Normal Cost	N/A	(\$8.7)	(\$2.5)	(\$1.9)	(\$1.1)	(\$0.1)	(\$0.7)	(\$0.2)	(\$15.1)
6/30/2013 ARC	\$994.9	\$140.0	\$29.5	\$30.5	\$14.0	\$0.8	\$8.7	\$1.8	\$1,220.2

* The anticipated growth is 3.5% for pre-funding employers.

Appendix B – Results for the State

The following exhibit compares results for the State to the prior valuation results, both at 4.0% discount rate.

(\$ Millions)	July 1, 2011			July 1, 2009		
	Non-HSTA (EUTF)	HSTA	State of Hawaii Total	Non-HSTA (EUTF)	HSTA	State of Hawaii Total
Present Value of Benefits (PVB)						
Retirees	\$5,227.8	\$786.5	\$6,014.3	\$5,221.0	\$507.7	\$5,728.8
Deferred Inactives	\$931.6	\$239.5	\$1,171.1	\$1,019.6	\$263.5	\$1,283.1
Actives	\$8,295.6	\$3,415.6	\$11,711.1	\$9,283.4	\$2,985.2	\$12,268.5
Total PVB	\$14,455.0	\$4,441.5	\$18,896.5	\$15,524.0	\$3,756.4	\$19,280.4
Actuarial Accrued Liability (AAL)						
Retirees	\$5,227.8	\$786.5	\$6,014.3	\$5,221.0	\$507.7	\$5,728.8
Deferred Inactives	\$931.6	\$239.5	\$1,171.1	\$1,019.6	\$263.5	\$1,283.1
Actives	\$4,575.7	\$1,805.7	\$6,381.4	\$5,282.7	\$1,712.9	\$6,995.6
Total AAL	\$10,735.2	\$2,831.6	\$13,566.8	\$11,523.3	\$2,484.2	\$14,007.5
Normal Cost	\$327.0	\$122.6	\$449.5	\$379.8	\$108.5	\$488.2
Assets	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Unfunded AAL as of 7/1/2011	\$10,735.2	\$2,831.6	\$13,566.8	\$11,523.3	\$2,484.2	\$14,007.5
Annual Required Contribution	For FYE June 30, 2013			For FYE June 30, 2011		
Normal Cost plus interest	\$345.1	\$129.4	\$474.5	\$400.8	\$114.5	\$515.3
Amortization of Unfunded AAL	\$409.5	\$110.8	\$520.4	\$441.4	\$97.4	\$538.8
Total ARC	\$754.7	\$240.2	\$994.9	\$842.3	\$211.9	\$1,054.1

Appendix B – Results for the State (cont.)

HSTA liabilities are slightly lower than expected considering the prior valuation results. The primary factors impacting results include:

- Overall healthcare costs experience was less favorable compared to assumed trend, resulting in liability losses.
- Updated demographic assumptions caused a decrease in liabilities. The primary drivers of the differences were lower retirement rates, which were partially offset by lower mortality rates.
- Future healthcare trend was revised for updated expectations, resulting in slight liability increases.
- Employer caps are anticipated to have a greater impact as the Medicare B premium index used to adjust these levels decreased from 2011 to 2012.
- Some new retirees elected coverage under the EUTF medical plans, and their liabilities are not included under HSTA.
- The AAL grows 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.