



# **Hawaii Employer-Union Health Benefits Trust Fund State of Hawaii**

Schedule of Changes in Fiduciary Net Position by Employer  
(With Independent Auditors' Report Thereon)

June 30, 2019 and 2018

Submitted by  
**THE AUDITOR  
STATE OF HAWAII**

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

Schedule of Changes in Fiduciary Net Position by Employer

June 30, 2019 and 2018

**Table of Contents**

	<b>Page</b>
Independent Auditors' Report	1
Schedule of Changes in Fiduciary Net Position by Employer	3
Notes to Schedule of Changes in Fiduciary Net Position by Employer	4
Table 1 – Summary of Net OPEB Liability by Employer	12
Table 2 – Summary of Changes in Total OPEB Liability by Employer	13
Table 3 – Sensitivity of Net OPEB Liability to Changes in Discount Rate and Healthcare Cost Trend Rates by Employer	14
Table 4 – Summary of OPEB Expense by Employer	15
Table 5 – Summary of Deferred Outflows and Inflows Related to OPEB by Employer	16
Table 6 – Deferred Inflows (Outflows) to be Recognized in Future OPEB Expense by Employer	17
Table 7 – Summary of Actuarially Determined and Actual Contributions by Employer	18

## Independent Auditors' Report

The Auditor  
State of Hawaii:

Board of Trustees  
Hawaii Employer-Union Health Benefits Trust Fund  
State of Hawaii:

We have audited the fiduciary net position as of June 30, 2019 and 2018, and the changes in fiduciary net position for the year ended June 30, 2019, included in the accompanying schedule of changes in fiduciary net position by employer (the Schedule) of the Hawaii Employer-Union Health Benefits Trust Fund of the State of Hawaii (the EUTF), and the related notes. We have also audited the fiduciary net position of each individual employer as of June 30, 2019 and 2018, and the changes in fiduciary net position of each individual employer for the year ended June 30, 2019, included in the accompanying Schedule.

### *Management's Responsibility for the Schedule*

Management is responsible for the preparation and fair presentation of the Schedule in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the Schedule that is free from material misstatement, whether due to fraud or error.

### *Auditors' Responsibility*

Our responsibility is to express an opinion on the fiduciary net position and the changes in fiduciary net position included in the Schedule based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the fiduciary net position and the changes in fiduciary net position included in the Schedule are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the Schedule. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the fiduciary net position and the changes in fiduciary net position included in the Schedule, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the fiduciary net position and the changes in fiduciary net position included in the Schedule in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the fiduciary net position and the changes in fiduciary net position included in the Schedule.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

***Opinion***

In our opinion, the Schedule referred to above presents fairly, in all material respects, the fiduciary net position of the EUTF as of June 30, 2019 and 2018, and the changes in fiduciary net position for the year ended June 30, 2019, in accordance with accounting principles generally accepted in the United States of America. Also, in our opinion, the Schedule referred to above presents fairly, in all material respects, the fiduciary net position of each individual employer as of June 30, 2019 and 2018, and the changes in fiduciary net position of each individual employer for the year ended June 30, 2019, in accordance with accounting principles generally accepted in the United States of America.

***Other Matter***

We have audited, in accordance with auditing standards generally accepted in the United States of America, the financial statements of the EUTF as of and for the years ended June 30, 2018 and 2017, and our report thereon, dated December 4, 2018, expressed unmodified opinions on those financial statements.

***Restriction on Use***

This report is intended solely for the information and use of the Auditor, State of Hawaii, the Board of Trustees and the management of the EUTF, and participating employers and their auditors, and is not intended to be and should not be used by anyone other than these specified parties.

***KKDL Y LLC***

Honolulu, Hawaii  
October 4, 2019

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

Schedule of Changes in Fiduciary Net Position by Employer

As of June 30, 2019 and 2018 and for the Year Ended June 30, 2019

<u>Employer</u>	<u>Changes in Fiduciary Net Position for the Year Ended June 30, 2019</u>					<u>Net Position Restricted for OPEB</u>	
	<u>Employer Contributions</u>	<u>Net Investment Income</u>	<u>Benefits Paid</u>	<u>Administrative Expenses</u>	<u>Net Increase</u>	<u>June 30, 2018</u>	<u>June 30, 2019</u>
State of Hawaii	\$ 682,605,116	\$ 78,648,156	\$ (345,476,116)	\$ (257,869)	\$ 415,519,287	\$ 879,516,589	\$ 1,295,035,876
City and County of Honolulu	143,665,163	30,843,936	(80,555,163)	(94,884)	93,859,052	372,671,219	466,530,271
Honolulu Authority for Rapid Transportation	386,000	51,041	-	(160)	436,881	641,072	1,077,953
County of Hawaii	32,829,013	9,474,156	(17,998,013)	(29,227)	24,275,929	126,320,614	150,596,543
County of Maui	33,968,244	15,676,708	(16,968,244)	(47,981)	32,628,727	205,190,246	237,818,973
County of Kauai	15,688,031	7,579,849	(8,414,118)	(22,893)	14,830,869	98,373,208	113,204,077
Department of Water, County of Kauai	948,000	588,700	(525,000)	(1,803)	1,009,897	8,049,348	9,059,245
Board of Water Supply, City and County of Honolulu	8,855,338	5,235,037	(5,855,338)	(15,933)	8,219,104	71,667,726	79,886,830
Department of Water Supply, County of Hawaii	1,936,548	1,111,306	(1,016,548)	(3,336)	2,027,970	15,243,827	17,271,797
	<u>\$ 920,881,453</u>	<u>\$ 149,208,889</u>	<u>\$ (476,808,540)</u>	<u>\$ (474,086)</u>	<u>\$ 592,807,716</u>	<u>\$ 1,777,673,849</u>	<u>\$ 2,370,481,565</u>

See accompanying notes to schedule of changes in fiduciary net position by employer.

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

Notes to Schedule of Changes in Fiduciary Net Position by Employer

June 30, 2019 and 2018

**(1) General Information About the EUTF**

*Plan Description*

Chapter 87A of the Hawaii Revised Statutes (HRS) established the Hawaii Employer-Union Health Benefits Trust Fund (the Trust Fund). The Trust Fund was established to design, provide, and administer health and other benefit plans for the State of Hawaii (the State) and the counties of Honolulu, Hawaii, Maui, and Kauai employees, retirees and their eligible dependents beginning July 1, 2003. Chapter 87, HRS that established the Hawaii Public Employees Health Fund (the Health Fund) was repealed and the net assets of the Health Fund were transferred to the Trust Fund.

The Trust Fund is administered by a Board of Trustees (the Board) composed of ten trustees appointed by the Governor of the State. The Board is responsible for determining the nature and scope of benefit plans offered by the Trust Fund, negotiating and entering into contracts with insurance carriers, establishing eligibility and management policies for the Trust Fund, and overseeing all Trust Fund activities. The Board relies on professional services provided by a salaried Administrator, the State Department of the Attorney General, a benefits consultant, and an investment consultant.

Chapter 87A, HRS was amended on July 9, 2012 to allow the Board to establish a separate trust fund for the purpose of receiving employer contributions that will pre-fund other post-employment benefits (OPEB) for retirees and their beneficiaries. Pursuant to this amendment, the Board executed an irrevocable declaration of trust establishing the Hawaii Employer-Union Health Benefits Trust Fund for Other Post-Employment Benefits (the OPEB Trust) effective June 30, 2013. The OPEB Trust is governed by the Board of the Trust Fund. Its assets are held for the exclusive purpose of providing other post-employment benefits and are legally protected from creditors. The OPEB Trust and the Trust Fund described above are collectively referred to as the EUTF.

Act 268, Session Laws of Hawaii 2013 (codified as Chapter 87A-42, HRS), further amended Chapter 87A, HRS. Effective July 1, 2018, annual employer contributions are equal to the amount of the annual required contribution as determined by an actuary and placed into the OPEB Trust. The annual required contribution is defined as the employer's required contribution that is sufficient to cover (1) the normal cost, which is the cost of other post-employment benefits attributable to the current year of service, and (2) an amortization payment, which is a catch-up payment for past service costs to fund the unfunded actuarial accrued liability over the next 30 years. Accordingly, all employer contributions for retirees are required to be placed in the OPEB Trust effective July 1, 2018.

The EUTF, an agent multiple-employer defined benefit OPEB plan, is administratively attached to the State Department of Budget and Finance.

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

Notes to Schedule of Changes in Fiduciary Net Position by Employer

June 30, 2019 and 2018

*Benefits Provided*

The EUTF currently provides medical, prescription drug, dental, vision, chiropractic, supplemental medical and prescription drug, and group life insurance benefits. The medical plans include a statewide preferred provider organization (PPO) benefit plan and a federally-qualified health maintenance organization (HMO) plan.

*Employees Covered by Benefit Terms*

At June 30, 2018, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefit payments	48,443
Inactive employees entitled to but not yet receiving benefit payments	9,191
Active employees	<u>66,020</u>
	<u><u>123,654</u></u>

*Contributions*

The employers' share of benefit plan contributions for collectively bargained employees are negotiated by the State and counties with the exclusive representative of each employee bargaining unit. Employer contributions for retirees are prescribed by Chapter 87A, HRS. Any remaining premium balance is paid by employees through payroll deductions or premium conversion plan reductions and paid by retirees directly, if applicable.

The State's and counties' contributions also include the employees' share made through payroll deductions, contributions for retired employees, and Medicare Part B reimbursements made by the Trust Fund to eligible retired employees and their spouses for Medicare Part B insurance premiums.

**(2) Summary of Significant Accounting Policies**

*Postemployment Benefits Other Than Pensions (OPEB)*

For purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the EUTF, and additions to/deductions from the EUTF's fiduciary net position have been determined on the same basis as they are reported by the EUTF. For this purpose, the EUTF recognizes benefit payments when due and payable in accordance with the benefit terms. Investments are reported at fair value.

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

Notes to Schedule of Changes in Fiduciary Net Position by Employer

June 30, 2019 and 2018

**(3) Basis of Presentation**

The accompanying schedule of changes in fiduciary net position by employer (the Schedule) presents amounts that are considered elements of the financial statements of the EUTF or its participating employers. Accordingly, they do not purport to be a complete presentation of the fiduciary net position or changes in fiduciary net position of the EUTF or its participating employers. The amounts presented in the Schedule were prepared in accordance with accounting principles generally accepted in the United States of America. Such preparation requires management of the EUTF to make a number of estimates and assumptions relating to the reported amounts. Due to the inherent nature of these estimates, actual results could differ from those estimates.

**(4) Net OPEB Liability**

The net OPEB liability was measured as of July 1, 2018, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of that date.



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

Notes to Schedule of Changes in Fiduciary Net Position by Employer

June 30, 2019 and 2018

*Actuarial Methods and Assumptions*

The total OPEB liability in the actuarial valuation was determined using the following actuarial methods and assumptions, applied to all periods included in the measurement, unless otherwise specified:

Actuarial cost method	Entry age normal
Discount rate	7.00%
Inflation	2.50%
Salary increases	3.50% to 7.00%, including inflation
Investment rate of return	7.00%, net of investment expenses, including inflation
Demographic assumptions	Based on the experience study covering the five year period ended June 30, 2015, as conducted for the Employees' Retirement System of the State of Hawaii (ERS)
Mortality	System-specific mortality tables utilizing scale BB to project generational mortality improvement
Participation rates	98% healthcare participation assumption for retirees that receive 100% of the Base Monthly Contribution (BMC). Healthcare participation rates of 25%, 65%, and 90% for retirees that receive 0%, 50%, or 75% of the BMC, respectively. 100% for life insurance and 98% for Medicare Part B
Healthcare cost trend rates:	
PPO*	Initial rate of 10.00%; declining to a rate of 4.86% after 13 years
HMO*	Initial rate of 10.00%; declining to a rate of 4.86% after 13 years
Part B & BMC	Initial rates of 4.00% and 5.00%; declining to a rate of 4.70% after 12 years
Dental	Initial rate of 5.00% for first three years, followed by 4.00%
Vision	Initial rate of 0.00% for first three years, followed by 2.50%
Life insurance	0.00%

\* Blended rates for medical and prescription drug.

Assumption changes during the current measurement period include updating the healthcare cost trend rates assumption to better anticipate short-term premium experience. The changes in assumptions had the effect of increasing the total OPEB liability at June 30, 2019 by \$178,680,011.

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

Notes to Schedule of Changes in Fiduciary Net Position by Employer

June 30, 2019 and 2018

*Long-Term Expected Rate of Return*

The long-term expected rate of return on the EUTF's investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of the EUTF's investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long-Term Expected Real Rate of Return</u>
Non-U.S. equity	17.00%	6.50%
U.S. equity	15.00%	5.05%
Private equity	10.00%	8.65%
Core real estate	10.00%	4.10%
Trend following	9.00%	3.00%
U.S. microcap	7.00%	7.00%
Global options	7.00%	4.50%
Private credit	6.00%	5.25%
Long treasuries	6.00%	1.90%
Alternative risk premia	5.00%	2.45%
TIPS	5.00%	0.75%
Core bonds	3.00%	1.30%
	<u>100.00%</u>	

*Discount Rate*

Projected benefit payments are required to be discounted to their actuarial present values using a single discount rate that reflects (1) a long-term expected rate of return on the EUTF's investments (to the extent that the plan's fiduciary net position is projected to be sufficient to pay benefits), and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

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

Notes to Schedule of Changes in Fiduciary Net Position by Employer

June 30, 2019 and 2018

A single discount rate of 7.00% was used to measure the total OPEB liability. This discount rate was based on the expected rate of return on the EUTF's investments of 7.00%. Beginning with the fiscal year 2019 contribution, the funding policy of the State of Hawaii is to pay the recommended actuarially determined contribution, which is based on layered, closed amortization periods. As a result, the EUTF's fiduciary net position is expected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on the EUTF's investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

**(5) Changes in the Net OPEB Liability**

The components of the net OPEB liability (total OPEB liability less plan fiduciary net position) as of June 30, 2019 and 2018 for each participating employer are presented in Table 1, *Summary of Net OPEB Liability by Employer*.

The total OPEB liability as of June 30, 2019 and 2018, and the changes in total OPEB liability for the year ended June 30, 2019 for each participating employer are presented in Table 2, *Summary of Changes in Total OPEB Liability by Employer*.

The total fiduciary net position as of June 30, 2019 and 2018, and the changes in fiduciary net position for the year ended June 30, 2019 for each participating employer are presented in the accompanying Schedule.

The net OPEB liability was measured as of July 1, 2018 and 2017. Accordingly, participating employers will report their respective plan fiduciary net position as of June 30, 2019 and 2018 (as presented in Table 1), and their respective changes in fiduciary net position for the year ended June 30, 2019 (as presented in the Schedule), based upon information contained in the EUTF's audited financial statements as of June 30, 2018 and 2017, and for the year ended June 30, 2018, respectively.

**(6) Sensitivity of Net OPEB Liability to Changes in Discount Rate and Healthcare Cost Trend Rates**

Table 3, *Sensitivity of Net OPEB Liability to Changes in Discount Rate and Healthcare Cost Trend Rates by Employer*, presents the net OPEB liability as of June 30, 2019 for each participating employer, as well as what the net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.00%) or 1-percentage-point higher (8.00%) than the current discount rate.

Table 3 also presents the net OPEB liability as of June 30, 2019 for each participating employer, as well as what the net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower or 1-percentage-point higher than the current healthcare cost trend rates.

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

Notes to Schedule of Changes in Fiduciary Net Position by Employer

June 30, 2019 and 2018

**(7) EUTF's Fiduciary Net Position**

Detailed information about the EUTF's fiduciary net position is available in the separately issued EUTF financial statements.

**(8) OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB**

The OPEB expense to be recognized by each participating employer for the year ended June 30, 2019 is presented in Table 4, *Summary of OPEB Expense by Employer*.

Deferred outflows of resources and deferred inflows of resources by source at June 30, 2019 for each participating employer are presented in Table 5, *Summary of Deferred Outflows and Inflows Related to OPEB by Employer*.

Deferred outflows of resources related to OPEB at June 30, 2019, resulting from employer contributions subsequent to the measurement date (refer to Table 5), will be recognized by each participating employer as a reduction of the OPEB liability in the year ending June 30, 2020.

The net OPEB liability was measured as of July 1, 2018. Accordingly, participating employers will report their respective deferred outflows of resources as of June 30, 2019 (as presented in Table 5) based upon employer contributions made by each participating employer during the year ended June 30, 2019.

The amounts reported as deferred outflows of resources related to OPEB at June 30, 2019, resulting from the net difference between projected and actual earnings on investments, the difference between expected and actual experience, and the changes in assumptions and the amounts reported as deferred inflows of resources related to OPEB at June 30, 2019, resulting from the net difference between projected and actual earnings on investments and the difference between expected and actual experience (refer to Table 5), will be recognized in OPEB expense by each participating employer as presented in Table 6, *Deferred Inflows (Outflows) to be Recognized in Future OPEB Expense by Employer*.

**(9) Employer Contributions**

Table 7, *Summary of Actuarially Determined and Actual Contributions by Employer*, presents the actuarially determined contributions for the years ended June 30, 2019 and 2018, based upon an actuarial valuation as of July 1, 2017 and July 1, 2015, respectively, as well as the actual contributions made during the years ended June 30, 2019 and 2018, and the contribution deficiency (excess), which is the difference between the actuarially determined contributions and the actual contributions made.

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

Notes to Schedule of Changes in Fiduciary Net Position by Employer

June 30, 2019 and 2018

The actuarially determined contributions for the year ended June 30, 2019 was determined using the following actuarial methods and assumptions:

*Actuarial Methods and Assumptions*

Actuarial cost method	Entry age normal
Discount rate	7.00%
Inflation	2.50%
Amortization method	Level percent. Closed bases are established at each valuation for new unfunded liabilities.
Equivalent single amortization period (A)	18.9 to 26.0 as of June 30, 2019
Payroll growth	3.50%
Salary increases	3.50% to 7.00%; including inflation
Demographic assumptions	Based on the experience study covering the five year period ended June 30, 2015 as conducted for the ERS
Mortality	System-specific mortality tables utilizing scale BB to project generational mortality improvement
Participation rates	98% healthcare participation assumption for retirees that receive 100% of the Base Monthly Contribution (BMC). Healthcare participation rates of 25%, 65%, and 90% for retirees that receive 0%, 50%, or 75% of the BMC, respectively. 100% for life insurance and 98% for Medicare Part B
Healthcare cost trend rates:	
PPO (B)	Initial rates of 6.60%, 6.60%, and 9.00%; declining to a rate of 4.86% after 14 years
HMO (B)	Initial rate of 9.00%; declining to a rate of 4.86% after 14 years
Part B	Initial rates of 2.00% and 5.00%; declining to a rate of 4.70% after 14 years
Dental	3.50%
Vision	2.50%
Life insurance	0.00%

(A) Department of Water, County of Kauai, Board of Water Supply, City and County of Honolulu, and Department of Water Supply, County of Hawaii (18.9); County of Kauai (19.1); City and County of Honolulu (20.1); County of Maui and County of Hawaii (20.2); Honolulu Authority for Rapid Transportation (25.9); and State of Hawaii (26.0)

(B) Blended rates for medical and prescription drug

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

Summary of Net OPEB Liability by Employer

June 30, 2019 and 2018

<b>Employer</b>	<b>June 30, 2019</b>			<b>June 30, 2018</b>		
	<b>Total OPEB Liability</b>	<b>Plan Fiduciary Net Position</b>	<b>Net OPEB Liability</b>	<b>Total OPEB Liability</b>	<b>Plan Fiduciary Net Position</b>	<b>Net OPEB Liability</b>
State of Hawaii	\$ 10,704,565,403	\$ 1,295,035,876	\$ 9,409,529,527	\$ 10,194,186,536	\$ 879,516,589	\$ 9,314,669,947
City and County of Honolulu	2,357,481,412	466,530,271	1,890,951,141	2,241,999,132	372,671,219	1,869,327,913
Honolulu Authority for Rapid Transportation	7,176,556	1,077,953	6,098,603	6,203,402	641,072	5,562,330
County of Hawaii	551,431,353	150,596,543	400,834,810	517,774,914	126,320,614	391,454,300
County of Maui	553,584,745	237,818,973	315,765,772	522,749,266	205,190,246	317,559,020
County of Kauai	262,446,334	113,204,077	149,242,257	245,406,850	98,373,208	147,033,642
Department of Water, County of Kauai	17,518,549	9,059,245	8,459,304	16,417,246	8,049,348	8,367,898
Board of Water Supply, City and County of Honolulu	153,014,513	79,886,830	73,127,683	146,389,649	71,667,726	74,721,923
Department of Water Supply, County of Hawaii	33,703,543	17,271,797	16,431,746	32,509,555	15,243,827	17,265,728
	<u>\$ 14,640,922,408</u>	<u>\$ 2,370,481,565</u>	<u>\$ 12,270,440,843</u>	<u>\$ 13,923,636,550</u>	<u>\$ 1,777,673,849</u>	<u>\$ 12,145,962,701</u>

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

Summary of Changes in Total OPEB Liability by Employer

As of June 30, 2019 and 2018 and for the Year Ended June 30, 2019

Employer	Year Ended June 30, 2019						Balance June 30, 2019
	Balance June 30, 2018	Service Cost	Interest on Total OPEB Liability	Difference Between Expected and Actual Experience	Changes of Assumptions	Benefits Paid	
State of Hawaii	\$ 10,194,186,536	\$ 229,156,739	\$ 709,521,879	\$ (209,802,458)	\$ 126,978,823	\$ (345,476,116)	\$ 10,704,565,403
City and County of Honolulu	2,241,999,132	44,698,036	155,684,940	(36,126,780)	31,781,247	(80,555,163)	2,357,481,412
Honolulu Authority for Rapid Transportation	6,203,402	399,066	448,205	113,658	12,225	-	7,176,556
County of Hawaii	517,774,914	12,056,311	36,036,284	(3,679,099)	7,240,956	(17,998,013)	551,431,353
County of Maui	522,749,266	12,226,377	36,426,483	(7,224,043)	6,374,906	(16,968,244)	553,584,745
County of Kauai	245,406,850	5,745,514	17,085,078	(815,794)	3,438,804	(8,414,118)	262,446,334
Department of Water, County of Kauai	16,417,246	380,070	1,144,135	(135,272)	237,370	(525,000)	17,518,549
Board of Water Supply, City and County of Honolulu	146,389,649	2,480,098	10,129,142	(2,312,485)	2,183,447	(5,855,338)	153,014,513
Department of Water Supply, County of Hawaii	32,509,555	698,126	2,264,524	(1,184,347)	432,233	(1,016,548)	33,703,543
	<u>\$ 13,923,636,550</u>	<u>\$ 307,840,337</u>	<u>\$ 968,740,670</u>	<u>\$ (261,166,620)</u>	<u>\$ 178,680,011</u>	<u>\$ (476,808,540)</u>	<u>\$ 14,640,922,408</u>

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

Sensitivity of Net OPEB Liability to Changes in Discount Rate and Healthcare Cost Trend Rates by Employer

June 30, 2019

Employer	Changes in Discount Rate			Changes in Healthcare Cost Trend Rates		
	1% Decrease (6.0%)	Discount Rate (7.0%)	1% Increase (8.0%)	1% Decrease	Current Healthcare Cost Trend Rates	1% Increase
State of Hawaii	\$ 11,124,321,521	\$ 9,409,529,527	\$ 8,062,123,189	\$ 7,988,689,586	\$ 9,409,529,527	\$ 11,253,467,579
City and County of Honolulu	2,268,042,655	1,890,951,141	1,595,806,202	1,583,387,637	1,890,951,141	2,289,250,853
Honolulu Authority for Rapid Transportation	7,589,810	6,098,603	4,956,098	4,914,567	6,098,603	7,643,594
County of Hawaii	492,405,286	400,834,810	329,311,321	325,648,863	400,834,810	498,683,746
County of Maui	409,369,020	315,765,772	242,559,659	238,582,526	315,765,772	416,135,103
County of Kauai	192,647,876	149,242,257	115,316,236	113,683,376	149,242,257	195,452,975
Department of Water, County of Kauai	11,343,135	8,459,304	6,176,376	6,031,363	8,459,304	11,591,295
Board of Water Supply, City and County of Honolulu	96,267,884	73,127,683	54,940,141	54,329,692	73,127,683	97,393,040
Department of Water Supply, County of Hawaii	21,771,815	16,431,746	12,191,806	11,914,743	16,431,746	22,247,534
	<u>\$ 14,623,759,002</u>	<u>\$ 12,270,440,843</u>	<u>\$ 10,423,381,028</u>	<u>\$ 10,327,182,353</u>	<u>\$ 12,270,440,843</u>	<u>\$ 14,791,865,719</u>



Table 4

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

Summary of OPEB Expense by Employer

For the Year Ended June 30, 2019

<u>Employer</u>	
State of Hawaii	\$ 846,661,988
City and County of Honolulu	169,189,920
Honolulu Authority for Rapid Transportation	815,836
County of Hawaii	38,719,073
County of Maui	32,536,170
County of Kauai	15,572,457
Department of Water, County of Kauai	926,179
Board of Water Supply, City and County of Honolulu	7,127,521
Department of Water Supply, County of Hawaii	<u>1,691,200</u>
	<u><u>\$ 1,113,240,344</u></u>

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

Summary of Deferred Outflows and Inflows Related to OPEB by Employer

June 30, 2019

Employer	Deferred Outflows					Deferred Inflows		
	Contributions Subsequent to the Measurement Date	Net Difference Between Projected and Actual Earnings on Investments	Difference Between Expected and Actual Experience	Changes in Assumptions	Total Deferred Outflows	Net Difference Between Projected and Actual Earnings on Investments	Difference Between Expected and Actual Experience	Total Deferred Inflows
State of Hawaii	\$ 787,110,000	\$ -	\$ -	\$ 105,948,876	\$ 893,058,876	\$ 16,660,651	\$ 175,055,446	\$ 191,716,097
City and County of Honolulu	177,331,000	-	-	26,374,066	203,705,066	7,278,549	29,980,261	37,258,810
Honolulu Authority for Rapid Transportation	810,000	4,452	90,374	9,721	914,547	-	-	-
County of Hawaii	39,770,000	-	-	6,192,712	45,962,712	1,696,370	3,146,491	4,842,861
County of Maui	37,446,930	-	-	5,473,694	42,920,624	3,407,987	6,202,789	9,610,776
County of Kauai	23,927,882	-	-	2,910,074	26,837,956	1,721,237	690,362	2,411,599
Department of Water, County of Kauai	1,011,000	-	-	203,858	1,214,858	110,240	116,174	226,414
Board of Water Supply, City and County of Honolulu	7,945,000	-	-	1,773,371	9,718,371	1,079,475	1,878,175	2,957,650
Department of Water Supply, County of Hawaii	1,990,000	-	-	367,012	2,357,012	188,871	1,005,637	1,194,508
	<u>\$ 1,077,341,812</u>	<u>\$ 4,452</u>	<u>\$ 90,374</u>	<u>\$ 149,253,384</u>	<u>\$ 1,226,690,022</u>	<u>\$ 32,143,380</u>	<u>\$ 218,075,335</u>	<u>\$ 250,218,715</u>

Table 6

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

Deferred Inflows (Outflows) to be Recognized in Future OPEB Expense by Employer

June 30, 2019

Employer	Year Ending June 30:						Total
	2020	2021	2022	2023	2024	Thereafter	
State of Hawaii	\$ 18,917,848	\$ 18,917,848	\$ 18,917,849	\$ 14,775,366	\$ 13,717,065	\$ 521,245	\$ 85,767,221
City and County of Honolulu	2,995,426	2,995,426	2,995,425	1,249,624	648,843	-	10,884,744
Honolulu Authority for Rapid Transportation	(26,784)	(26,784)	(26,782)	(24,197)	-	-	(104,547)
County of Hawaii	42,244	42,244	42,243	(492,905)	(515,636)	(468,041)	(1,349,851)
County of Maui	1,208,033	1,208,033	1,208,033	264,056	120,042	128,885	4,137,082
County of Kauai	141,118	141,118	141,120	(315,311)	(403,298)	(203,222)	(498,475)
Department of Water, County of Kauai	21,633	21,633	21,632	(12,314)	(14,414)	(15,614)	22,556
Board of Water Supply, City and County of Honolulu	376,469	376,469	376,469	47,004	7,868	-	1,184,279
Department of Water Supply, County of Hawaii	175,635	175,635	175,637	115,920	113,489	71,180	827,496
	<u>\$ 23,851,622</u>	<u>\$ 23,851,622</u>	<u>\$ 23,851,626</u>	<u>\$ 15,607,243</u>	<u>\$ 13,673,959</u>	<u>\$ 34,433</u>	<u>\$ 100,870,505</u>

Table 7

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

Summary of Actuarially Determined and Actual Contributions by Employer

For the Years Ended June 30, 2019 and 2018

Employer	2019			2018		
	Actuarially Determined Contributions	Actual Contributions	Contributions Deficiency / (Excess)	Actuarially Determined Contributions	Actual Contributions	Contributions Deficiency / (Excess)
State of Hawaii	\$ 787,110,000	\$ 787,110,000	\$ -	\$ 770,297,000	\$ 682,605,116	\$ 87,691,884
City and County of Honolulu	177,331,000	177,331,000	-	166,876,000	143,665,163	23,210,837
Honolulu Authority for Rapid Transportation	810,000	810,000	-	594,000	386,000	208,000
County of Hawaii	39,770,000	39,770,000	-	37,748,000	32,829,013	4,918,987
County of Maui	34,967,000	37,446,930	(2,479,930)	32,891,000	33,968,244	(1,077,244)
County of Kauai	16,595,000	23,927,882	(7,332,882)	16,272,000	15,688,031	583,969
Department of Water, County of Kauai	1,011,000	1,011,000	-	1,002,000	948,000	54,000
Board of Water Supply, City and County of Honolulu	7,945,000	7,945,000	-	8,467,000	8,855,338	(388,338)
Department of Water Supply, County of Hawaii	1,990,000	1,990,000	-	1,933,000	1,936,548	(3,548)
	<u>\$ 1,067,529,000</u>	<u>\$ 1,077,341,812</u>	<u>\$ (9,812,812)</u>	<u>\$ 1,036,080,000</u>	<u>\$ 920,881,453</u>	<u>\$ 115,198,547</u>