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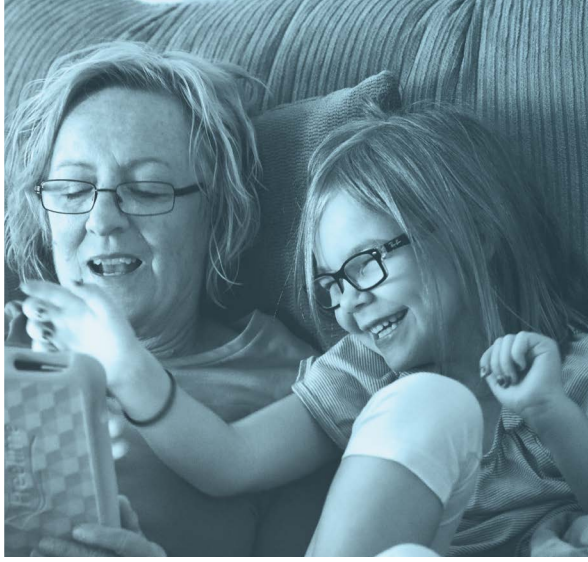

A PUBLIC INVESTMENT

Recommendations on handling Hawai'i's public worker retirement commitments as the Baby Boomer generation prepares to enter retirement.

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EXECUTIVE SUMMARY

Public Pensions And Other Post-Employment Benefits In Hawai'i Are Taking Up An Ever-Increasing Portion Of The State Budget.

PUBLIC WORKERS AND RETIREES make up 11 percent of the adult population of Hawai'i. Nearly one out of every five adults aged 65 and older is a public worker retiree. Hawai'i's state and county governments employ more than 66,000 people who, if they meet eligibility requirements, will eventually receive pension and "other post-employment benefits" (OPEB) such as health insurance coverage in retirement. Over the years, Hawai'i's public retirement liabilities have grown as current and promised benefits have outpaced contributions and asset growth to cover them. These retirement costs are sometimes referred to as "unfunded liabilities," which means that our obligations exceed the funds currently available to pay them.

In July 2018, the Hawai'i Budget & Policy Center released its "Hawai'i Budget Primer," which pointed out that obligated, or "fixed," costs are consuming an ever greater portion of the state general fund. These costs are made up of pension and other post-employment benefits, debt service, the state's share of Medicaid costs, and active employee benefits. In Fiscal Year (FY) 2019, about half of all general funds were budgeted for these obligated costs, and retiree benefits will make up 40 percent of them.

In this report, we examine the public retirement benefits as a budgetary issue of interest to all Hawai'i residents, and one that is crucial for policymakers to understand and address effectively. We also identify strategies available to meet public obligations responsibly and equitably.

PAYING PUBLIC RETIREMENT COSTS

The number of public retirees that the State of Hawai'i is responsible for is increasing, while the number of active employees contributing to the retirement fund has plateaued. Hawai'i, like many other states, did not completely prefund retirement costs as it hired workers, and did not ensure that funds and earned income were left in place to accrue and offset future costs. Hawai'i also did not adjust contributions soon enough to account for increased longevity (that is, costs to cover retirees who are living and consuming benefits longer), or for the escalation in health benefit premium costs.

To address mounting retirement obligations, Hawai'i's public employers have agreed to make actuarially determined payments over 30 years to pay down unfunded liabilities and grow the pension and health fund trusts that help fund future public contributions. These payments, which are largely supported by state and county taxes and fees, will be a sizeable burden in a small state like Hawai'i. See **Table 1**, page 8, for details on annual required contributions for all employers. The amount of money needed for retiree costs for FY2019 is $2.1 billion and is forecasted to reach about $4.5 billion in 2042 before easing back down to $1.5 billion in FY2045.[1]

Paying off accumulated benefit obligations reduces public spending in the long-run, since contributions increase assets that earn income to offset rising costs. They also reduce public spending by improving state and county financial ratings and borrowing rates.

ANOTHER POINT OF VIEW

Accounting standards for pensions and other post-employment benefits increase uniformity and transparency for a significant public budgetary responsibility. However, the practices have been applied as if governments might be liquidated (like a private business) and charged with responsibility for paying off pensions for a defined set of workers currently on the books. However, unlike private businesses states and counties are established to operate indefinitely, with continuous pension contributions coming from workers and ongoing collection of revenues from taxes and fees.[2]

Governments can make good on pension and OPEB obligations indefinitely if annual contributions to the fund meet or exceed annual distribution (i.e. pension payments and retiree premiums). Contributions come from government employers, active employees and net investment income.[3] The U.S. Government Accountability Office (GAO) reported that many pension experts identified a funded ratio of

"NEARLY ONE OUT OF EVERY FIVE ADULTS AGED 65 AND OLDER IS A PUBLIC WORKER RETIREE."

KEY NUMBERS

66,000	Current Active Employees
47,000	Current Retirees
9,200	Deferred Inactive Retirees
$25 billion	Combined Unfunded Liabilities, as of July 1, 2017
$12.9 billion	Unfunded Pension Liability
$12.1 billion	Unfunded OPEB Liability
$1.9 billion	Annual Pension and OPEB Contribution Made in 2018
$3.3 billion	Projected Average Annual Required Contribution for Pension and OPEB, from 2020–46

80 percent as sufficient for public plans since public employers are not in danger of defaulting on pension obligations through bankruptcy.[4]

This point of view does not endorse abandoning the discipline of building retirement fund assets. We should continue to make payments that go beyond meeting annual distributions as much as possible because those assets are designed to lighten public contributions in the future. However, it is important to take an approach that balances sustainable retirement benefits with other crucial investments in the wellbeing of Hawai'i residents.

HONORING OBLIGATIONS

We must never lose sight of the importance of covering pension and OPEB costs for the individuals involved, for the benefits to the state's economy and for the sake of fairness. These are obligations we have made that add to a secure retirement for people who worked for us in the public sector.

Nearly all compensation benefits, whether salary rates, salary increases or fringe benefits, were established by agreement of the public worker unions, government employers, and the legislative branches of the public employer (that is, the state legislature and county councils). All of the benefits are obligations, historically promised. Moreover, since the money provided is most likely to be spent for short-term needs like rent, food, health care, and other consumable goods and services, it circulates through the economy and supports many other jobs. A recent study shows that 2014 Hawai'i expenditures stemming from state pensions supported 9,000 jobs that paid $432.7 million in wages, $1.4 billion in total economic output, and $327.3 million in tax revenue.[5]

OVER-INVESTING IN RETIREMENT COSTS

Placing such a heavy and increasing burden on public funds is concerning for several reasons: Retiree costs are not the only important consideration for government budgets. Spending such a large portion of state and county funds on retiree costs makes it challenging to invest in other public needs such as affordable housing, education, infrastructure like roads and sewers and the environment. These latter investments help Hawai'i's economy and people thrive, so ensuring adequate contributions to them may yield a greater return than reducing unfunded liabilities.

Our currently healthy economy will slow down again someday and, when it does, tax revenues will be affected. Income tax collections will suffer if joblessness increases or wages stagnate. A recession will certainly affect tourism which generates an estimated 20–38 percent[6] of general excise tax (GET) revenue and nearly all of the transient accommodation tax (TAT) revenue. In addition, during a recession, more state residents will need the support of public benefits, putting further pressure on reduced revenues.

Even without considering a recession, the projected annual increase in total personal income between 2015 and 2045 is expected to be between 1.8 percent and 2.1 percent.[7] This will put a damper on tax revenue needed to support the annual required contributions (ARC) for retirement costs. Starting in 2020, these ARC payments are scheduled to increase by an average of 3.3 percent every year until 2043, when the liability will be largely amortized—that is, paid off—and rates will start to drop. At the high point of 2037, the contribution for both pension and health costs will equal 51 percent of payroll. However, by 2043 pension as a percentage of payroll will decrease to less than 5 percent and, by 2045, health care costs will decrease to less than 10 percent.[8]

It's not just the longevity of retirees to consider. In addition, the proportional growth of Hawai'i's retirement-age population will outpace the increase of those of working-age. Between 2015 and 2045, the state population is projected to increase by 18 percent. However, the working-age group between the ages of 18 and 65 is set to increase by only five 5 percent, while the over-65 population will expand by 61

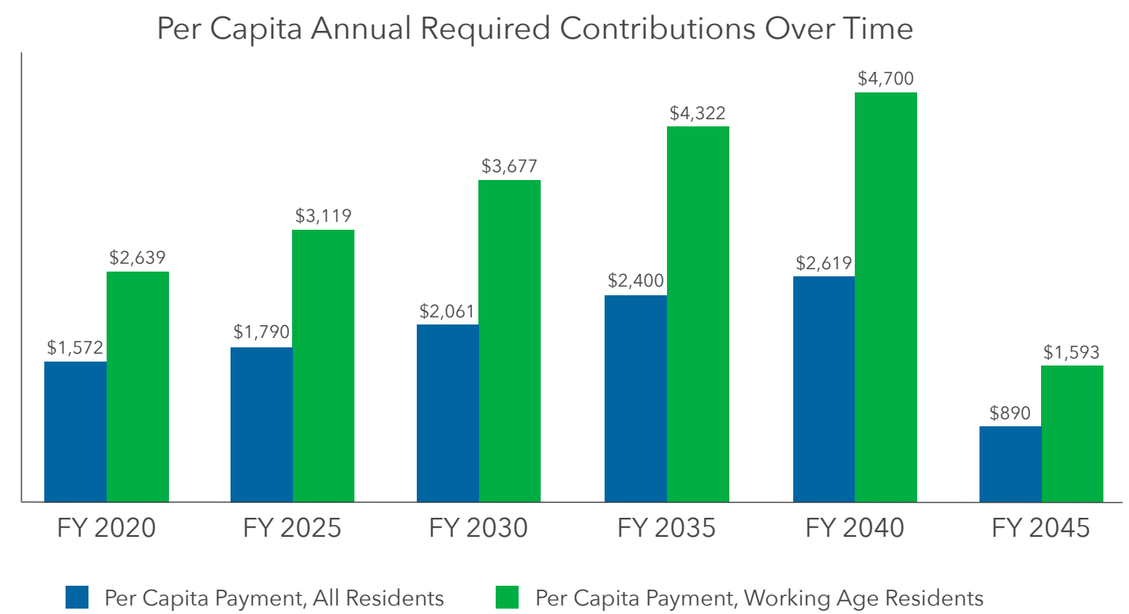


Figure 1. Making the annual required public retiree contributions on a per capita basis for all residents and for working-age residents. Source: HBPC analysis of Department of Business, Economic Development and Tourism (DBEDT) population forecasts and the pensions and OPEB contribution schedules.

percent.[9] As the ARC grows and the proportion of working-age residents shrinks, the burden of paying taxes and fees to support the ARC may exceed capacity. In combination with Hawai'i's continuing high cost of living, this could lead to further out-migration for well-qualified workers and limit economic growth. **Figure 1** shows the projected annual per capita contributions required to meet actuarially determined payments over the 30-year span.

Dedicating a large part of state and county general funds to cover unfunded liabilities also leaves less money for active public employee salary increases and benefits. Hawai'i's state workers are paid less than their national peers: the average U.S. state worker pay is $48,436, while Hawai'i's is $37,999 after adjusting for the cost of living.[10] (Hawai'i's county workers are paid on par with the national average after adjusting for cost of living differences.)

The promise of post-employment benefits may have served as a recruitment and retention tool in the past, but in a competitive employment environment like Hawai'i's, benefits 30 years in the future may not make up for low salaries in the present. Unfortunately, paying higher salaries not only adds to current payroll costs but increases liabilities since higher wages result in larger pensions. State and county budgetary commitments to annual required contributions may make it more difficult to fill positions with qualified workers who can efficiently and effectively carry out crucial public functions.

Finally, the experience of other states shows that overfunding retirement costs can result in an enrichment of benefits that cannot be sustained over time, or a reduction in or skipping of contributions.[11]

Table 1. Hawai'i Annual Required Contributions for all Employers

Fiscal Year	Pension	OPEB	Combined
FY2018	$892,000,000	$1,036,000,000	$1,928,000,000
FY2019	$1,062,000,000	$1,068,000,000	$2,130,000,000
FY2020	$1,200,000,000	$1,106,000,000	$2,306,000,000
FY2021	$1,235,000,000	$1,149,000,000	$2,384,000,000
FY2022	$1,270,000,000	$1,191,000,000	$2,461,000,000
FY2023	$1,308,000,000	$1,233,000,000	$2,541,000,000
FY2024	$1,346,000,000	$1,278,000,000	$2,624,000,000
FY2025	$1,386,000,000	$1,325,000,000	$2,711,000,000
FY2026	$1,429,000,000	$1,374,000,000	$2,803,000,000
FY2027	$1,473,000,000	$1,425,000,000	$2,898,000,000
FY2028	$1,519,000,000	$1,478,000,000	$2,997,000,000
FY2029	$1,567,000,000	$1,533,000,000	$3,100,000,000
FY2030	$1,617,000,000	$1,591,000,000	$3,208,000,000
FY2031	$1,670,000,000	$1,651,000,000	$3,321,000,000
FY2032	$1,724,000,000	$1,714,000,000	$3,438,000,000
FY2033	$1,781,000,000	$1,780,000,000	$3,561,000,000
FY2034	$1,840,000,000	$1,849,000,000	$3,689,000,000
FY2035	$1,902,000,000	$1,920,000,000	$3,822,000,000
FY2036	$1,966,000,000	$1,995,000,000	$3,961,000,000
FY2037	$2,033,000,000	$2,073,000,000	$4,106,000,000
FY2038	$2,103,000,000	$1,847,000,000	$3,950,000,000
FY2039	$2,176,000,000	$1,920,000,000	$4,096,000,000
FY2040	$2,252,000,000	$1,997,000,000	$4,249,000,000
FY2041	$2,332,000,000	$2,031,000,000	$4,363,000,000
FY2042	$2,414,000,000	$2,112,000,000	$4,526,000,000
FY2043	$415,000,000	$2,197,000,000	$2,612,000,000
FY2044	$425,000,000	$2,285,000,000	$2,710,000,000
FY2045	$436,000,000	$1,032,000,000	$1,468,000,000
FY2046	$448,000,000	$1,080,000,000	$1,528,000,000

Source for Table 1: ERS Annual Valuation for 6/30/17, page 26, and EUTF Actuarial Valuation Report as of 7/1/2017, page 17.

MAJOR FINDINGS

1 **Public retiree unfunded obligations are significant.** Currently, these obligations amount to nearly $17,600 for every resident of Hawai'i.[12] Between 2020 and 2042, the average per person cost to amortize these liabilities could be more than $2,200 every year.[13]

2 **The projected liabilities are based on a number of actuarial assumptions.** Small variances in real experience from these assumptions could result in significant differences over years. The actuarial assumptions include the rate of return on investments that support retirement costs, the number and classification of active employees on the payroll, salary increases, health care premium growth, rate of inflation, and the life span of retirees.

3 **Legislators have agreed to amortize the unfunded liabilities over the course of 26–30 years.** The chief advantage in doing this is building up income-producing trust assets to offset future contributions to retirement costs. An additional benefit is a better credit rating for the state and counties and, most likely, more advantageous interest rates for public debt.

4 **Completely paying off retirement liabilities is not crucial for public employers.** Governments are established to function indefinitely, with employees continuously being hired and retired, and a statutory ability to raise revenues to pay obligations. Accounting standards have encouraged state and local governments to reduce unfunded liabilities to zero. However, there is good reason to consider an approach that combines disciplined retirement contributions for the future but allows for flexibility to mitigate the potentially damaging effects on the state's economy and on other budget priorities.

5 **Retirement costs are only one of a number of obligations of government.** Paying off unfunded liabilities could leave considerably less public money to invest in other programs, needs, or priorities, and leave little room for policy-makers to maneuver when inevitable economic downturns occur. Hawai'i residents pay for public worker retiree benefits through state and county taxes and fees. Amortizing unfunded liabilities would require that a greater portion of these public budgets go to annual required payments.

6 While the benefits of paying off the liabilities as planned are clear, **dedicating so much capital to this purpose could have a negative effect on Hawai'i's economy.** In 2018, retirement contributions represented approximately 2.3 percent of the state gross domestic product (GDP). At the height of contributions in 2042, the planned $4.5 billion contribution would be about 3.6 percent of the projected GDP, a 56 percent increase.[14]

7 **Our ability to recruit and retain a competent public workforce depends on offering an attractive package of pay and benefits.** Current and future public worker retirees depend on these benefits, which are largely spent locally and contribute to Hawai'i's economy.

8 **Legislators must continue to actively review and ensure a sustainable retirement system.** Lawmakers have already introduced a number of pension reforms. These include increasing the number of years to vest and raising the normal retirement age to 65, reducing benefits and annual cost of living adjustments, changing the wage basis for pensions to limit wage spiking, putting a moratorium on benefit enrichment until unfunded liabilities are fully paid, and requiring more vigorous assessment and reporting on retirement systems and assets.

9 **Any changes in retirement benefits must be made prospectively.** All current retirees, and more than 70 percent of current active employees, were hired before July 1, 2012, when pension benefits were reduced. Many were hired before OPEB benefits were reduced in 2001. Public employers will still be honoring these obligations for years to come. Therefore, cost reductions related to benefit reductions will not be realized for some time.

RECOMMENDATIONS

Public retirement costs need to be acknowledged and addressed responsibly by all government budget- and policy-makers. We recommend the following actions:

ESTABLISH A COMMISSION ON UNFUNDED LIABILITIES

The Hawai'i Tax Review Commission has made this recommendation repeatedly since 2010.[15] It is now urgent that the state create such a body, and its recommendations should be given serious consideration by the legislature. The commission could contribute objective information and technical assistance and would heighten awareness of this important public issue. Such a body should address:

- The effects of unfunded liabilities, generally, and the effects that a 30-year payment plan would have on Hawai'i's economy, taxpayers, public employees, and retirees;
- Alternative scenarios to ensure responsible retirement trust funding during periods of economic slow-down;
- The positive and negative effects of drawing out the amortization process over a period longer than 30 years, or of accepting a certain level of unfunded liabilities as part of the retirement payment strategy;
- The effects of retirement obligations on recruiting and retaining current and future public workers, including funds available for active employee compensation and benefits;
- The feasibility of raising revenues, with attention to 2017 federal tax reform, which could make an increase in state and local taxes more difficult to impose. The new federal tax law reduces federal deductions to $10,000 for all state and local taxes (SALT), including those on income, property, and sales;[16]
- What changes in retirement benefits would be legally permissible in Hawai'i to reduce the current and future levels of liabilities; and
- Whether employer contributions for OPEB should be assessed in ways other than as a fringe benefit since OPEB benefits are not payroll-based.

This commission should consult public worker unions, public employers, and experts in public employee pensions to identify any strategies to change pension structures to meet the needs of incoming (or existing) workers, balancing guarantees, risks, flexibility and portability, and costs for both employee and employer. Economic and budget experts must also weigh in on short-, mid-, and long-term effcts on Hawai'i's economy, and its government's ability to balance expenditures for the public good.

MAINTAIN DISCIPLINE IN PAYMENTS AND BENEFITS

Legislators should strictly maintain contribution schedules and enforce the moratorium on enriching benefits and raising cost-sharing caps. Public employers would also do well to continue to make pre-payments to the extent that budget surpluses allow.

MITIGATE INVESTMENT RISKS

In order to reach or exceed income goals, both the Employees' Retirement System (ERS) and the Employer-Union Health Care Trust Fund (EUTF) invest in volatile markets. While the earnings on investments are uncertain, Hawai'i's retirement benefits are defined. It is, therefore, important to ensure that resources are sufficient to support competent professional investment management. Consider the feasibility and desirability of combining ERS and EUTF investment management, to enhance expertise and avoid duplication.

CHANGE THE COMPOSITION AND VOTING STRUCTURE OF THE EUTF BOARD OF TRUSTEES

The EUTF board is made up of five representatives of public employers and five of employees, each side must have a quorum of at least three members present to convene a meeting, and each side has a single collective vote. This structure lends itself to cancelled meetings due to lack of quorum and, worse, difficulty in reaching tough decisions to balance benefits and cost containment. Consider amending the voting structure to a majority vote and create a board with an odd number of trustees, adding a minimum of one member who represents neither employer nor employee but rather citizens of the state, all of whom also have a stake in EUTF's decisions.

CONSIDER ADDITIONAL CHANGES AND ALTERNATIVES

Although the promises made to current retirees and workers must be kept, pension and health benefit costs for future employees could be modified to offer a different set of benefits.

- Some states have raised the full retirement age to 67 or have tied it to full retirement age for Social Security
- Pension options that combine defined benefit protections with defined contribution flexibility could be more attractive to workers and limit risks for both public employers and retirees. However, it must be noted that changing to a defined contribution pension strategy could come with higher administrative costs and make paying off current liabilities more difficult.[17]
- Hawai'i's OPEB benefits are currently the most generous in the nation, so cost-sharing and benefit design strategies that incentivize cost control without sacrificing quality should be examined. Among them could be eliminating EUTF payment for Medicare Part B income adjustments (that is, stop paying the higher Medicare fees that the federal government imposes on more affluent retirees), which results in providing a greater benefit to the most affluent retirees.

CONSIDER TAXING PENSIONS

To be equitable, state income taxes should apply to employer-sponsored pension benefits to the same extent that they apply to retirement income from 401K and 403B accounts.

GLOSSARY OF TERMS

ACTUARIAL ASSUMPTION: An estimate developed by an actuarial expert based on a set of uncertain variables.

ACTUARIAL ACCRUED LIABILITY (AAL): The amount by which future benefits and administrative costs exceed the value of current assets and their projected growth, as determined by actuarial expertise.

AMORTIZE: To reduce or pay off a cost or debt over time.

ANNUAL REQUIRED CONTRIBUTION (ARC): The yearly amount that an employer needs to contribute to pension or other post-employment benefit funds.

ASSUMED RATE OF RETURN (ARR): The amount of expected earnings on an account, in this case, the estimated annual earnings on investments accrued to pension and OPEB trusts.

BASE MONTHLY CONTRIBUTION (BMC): Amount the employer contributes toward monthly benefit costs for OPEB.

COST OF LIVING ADJUSTMENT (COLA): An annual pension increase to off-set inflation. For public employee retirement pensions in Hawai'i, the COLA for retirees who were hired before July 1, 2012, is 2.5 percent, and for those hired after June 30, 2012, it is 1.5 percent, regardless of actual increases in the cost of living.

DEFINED BENEFIT (DB): A pension arrangement that provides benefits based on a defined formula. Pensions for public workers in Hawai'i get a defined benefit based on variables that include class of employment, salary, and number of years worked.

DEFINED CONTRIBUTION (DC): A pension arrangement that provides benefits based on employer and employee contributions, plus investment earnings related to those contributions.

DISCOUNT RATE: An investment earnings rate used to determine the present value of future cash flows. For purposes of calculating pension and OPEB liabilities, the discount rate is the same as the assumed rate of return.

EMPLOYEES' RETIREMENT SYSTEM (ERS): The state agency that manages public employee pension eligibility and benefits as well as pension trust fund assets.

EMPLOYER-UNION HEALTH CARE TRUST FUND (EUTF): The state agency that manages health benefits for both active public employees and retirees as well as OPEB trust fund assets.

FISCAL YEAR (FY): The operating and accounting year, which, for the state of Hawai'i and its counties starts on July 1 and ends on June 30 of the following calendar year.

FRINGE BENEFITS: Amounts added to payroll to cover current, future or potential benefits, including costs related to pension, health insurance, Social Security, Medicare, unemployment, and temporary disability.

FUNDED RATIO: Pension or OPEB trust assets in proportion to actuarial accrued liability, i.e., the proportion of assets available to cover future benefit costs.

GROSS DOMESTIC PRODUCT: The value of all goods and services produced or provided to describe the economy of a given country or state.

MEMBER, CONTRIBUTORY: A public worker who contributes a share of salary toward future pension benefits: may be hybrid (general) or a police officer, firefighter, certain public safety officer, judge, or elected or legislative official.

MEMBER, CURRENT ACTIVE: A public worker who is currently employed by the state, a county, or other public employer.

MEMBER, CURRENT RETIREE: A former public worker, now retired, who receives monthly pension and/or other post-employment benefits.

MEMBER, DEFERRED INACTIVE: A former public worker who is eligible to receive pension and/or other post-employment benefits, but is not currently either an active public employee or retiree.

MEMBER, HYBRID: A public worker who contributes a share of salary toward future pension benefits, not otherwise part of a contributory class that includes police officers, firefighters, certain public safety officers, judges, or elected and legislative officials.

MEMBER, NONCONTRIBUTORY: A public worker who was not required to contribute a share of salary toward future pension benefits. (No current employees are hired in this class.)

MORATORIUM: A suspension or stoppage of an indefinite length.

NORMAL COST: An employer cost for retirement benefits during a specified annual period.

NORMAL RETIREMENT AGE: The age established in a plan or by statute when full retirement benefits are provided.

OTHER POST-EMPLOYMENT BENEFITS (OPEB): Retirement benefits other than pension payments, including medical, dental, vision, and life insurance coverage.

PAY-AS-YOU-GO: A method by which the employer recognizes and contributes the costs for retirement benefits as they are paid out. This is the opposite of "pre-funded contributions."

PENSION: Income paid to a retiree based on the terms of former employment.

PENSION MULTIPLIER: A statutorily-set percentage of earned wages used as a factor to determine pension amount.

PRE-FUNDED CONTRIBUTIONS: A method by which an employer pays into a fund for retirement benefits in advance. This is the opposite of "pay as you go."

PRESENT VALUE: The current worth of a fund, to be paid in the future after discounting the amount using the assumed rate of return.

PROSPECTIVE CHANGE: Changes made to OPEB or pension benefits for public workers hired on or after a specific date set in the future. Pension and OPEB changes generally cannot be applied to current active, deferred, or retired members.

PUBLIC WORKERS: Employees of the state, counties, Kaua'i Department of Water Supply, Hawai'i Department of Water Supply, Honolulu Board of Water Supply, and Honolulu Authority of Rapid Transportation (HART).

RETIREE DEPENDENTS: Pension or OPEB terms may include retirement or survivor benefits for retirees' minor children and for spouses or domestic partners.

SALT: State and Local Tax deduction allowances under the federal tax code enacted in December 2017.

UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL): The difference between the actuarial accrued liability and valuation of assets. Sometimes referred to as "unfunded liability."

UNFUNDED LIABILITIES/OBLIGATIONS: See unfunded actuarial accrued liability (UAAL).

VEST: To maintain employment for at least the period specified in statute required to earn retirement benefits.

WAGE SPIKING: Artificially increasing wages through overtime pay, bonuses, or other arrangements in order to increase the basis on which pensions are calculated.

401K: Retirement savings plan sponsored by a private sector employer.

403B: A tax-sheltered annuity retirement plan available to certain tax-exempt organizations.

THE PUBLIC PENSION SYSTEM

Hawai'i's Employees' Retirement System (ERS) was established by the legislature in 1925 and began operations in 1926. The system, which is a state agency attached to the Department of Budget and Finance, manages an integrated defined benefit pension program for the State of Hawai'i and all counties, covering all employees, including teachers, professors, police officers, firefighters, corrections officers, judges, and elected officials.[18] ERS serves 122,000 members, as follows:[19]

- 66,000 active public sector employees;
- 47,000 public sector retirees and beneficiaries; and
- 9,200 individuals who are vested in the pension system but are no longer employed in the public sector.

Besides determining pension eligibility and operating benefit programs, ERS manages pension fund investments. Its investment target, or assumed rate of return, has been set at 7 percent since 2016.[20] ERS is a cost-sharing employer program. That is, it combines all public employers' assets and liabilities in a single pool.

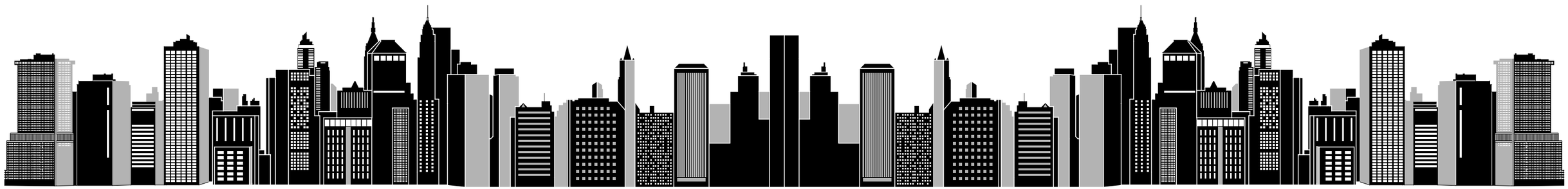
ERS is governed by an eight-member board of trustees. ERS members elect four of these trustees, which must include two general employees, a teacher and a retiree. The governor appoints three other trustees who must be non-public employee citizens of the state, one of whom is to be an officer of a Hawai'i-based bank or person of similar experience. The State Director of Finance serves as an ex-officio member.[21]

PENSION CONTRIBUTIONS AND BENEFITS

Public employee and employer contributions, eligibility, and factors that determine benefit levels are changed from time to time by statute. By law, changes in pension rules are always prospective, affecting workers hired after new rules go into effect. Workers and retirees hired before the date of any changes are entitled to the benefits in effect at the time they were hired.

The last major pension revision was effective July 1, 2012. As noted above, most current employees and retirees were hired before July 1, 2012 and they will retain the level of benefits in effect at the time of their hiring. **Table 2** details the differences before and after the 2012 amendments.[22] Those hired after June 30, 2012 are under a new set of rules, which affect:

- Employee contribution;
- The multiplier and the number of highest-paid years that are that are factors in determining pension amount;
- The normal age of retirement for full benefits;
- The length of service required to be eligible for a pension, also known as vesting; and
- The amount of the annual cost of living adjustment (COLA).



Benefits are calculated by applying a multiplier that varies by employment category to the average top years of earnings for the employee and further modifying the value according to the number of years of service. Payments are increased with an annual cost-of-living percentage adjustment. Here is an example:

Mary was hired after June 30, 2012 in a position classified as "general employee" in the hybrid pension plan. Because of her date of hire and pension plan classification, her pension will be calculated using a multiplier of 1.75 percent.

Mary retires after 30 years of service. The average of her highest paid five years of work is $50,000. Her pension will be: $50,0000 x 1.75% x 30 = $26,250. Every year, her pension payment will be increased by 1.5 percent as a cost of living adjustment.[23]

Public employers contribute considerably more to pensions, as shown in **Table 3**. For police, fire and public safety workers, the rate is 31 percent of salary for fiscal year 2019, increasing to 41 percent for FY2021 and after. For all other workers, the FY2019 employers' rate is 19 percent of salary and will be 24 percent in FY2021 and beyond.[24] This rate is a result of legislation requiring amortization of unfunded liabilities over 30 years.

Table 2. Public Employee Retiree Pension Benefits

	Hybrid Plan		Contributory Plan					
	General Employee		General Employee		Judges, Elected & Legislative Officers		Police, fire, public safety	
	Employed before 7/1/2012	Employed on or after 7/1/2012	Employed before 7/1/2012	Employed on or after 7/1/2012	Employed before 7/1/2012	Employed on or after 7/1/2012	Employed before 7/1/2012	Employed on or after 7/1/2012
Employee Contribution (% of salary)	6%*	8%*	7.8%	9.8%	7.8%	9.8%	12.2%	12.2%
Multiplier (% of AFC)	2%	1.75%	2%	1.75%	3.5%	3%	2.5%	2.25%
AFC (Average Final Compensation)	Average 3 years of highest earnings	Average 5 years of highest earnings	Average 3 years of highest earnings	Average 5 years of highest earnings	Average 3 years of highest earnings	Average 5 years of highest earnings	Average 3 years of highest earnings	Average 5 years of highest earnings
Normal Retirement Age	62	65	55	60	55	60	55	60
Length of service to vest	5 years	10 years	5 years	10 years	5 years	10 years	5 years	10 years
Annual cost of living adjustment	2.5%	1.5%	2.5%	1.5%	2.5%	1.5%	2.5%	1.5%

*sewer, water safety, and EMS techs contribute 9.75% if hired pre-July 2012 and 11.75% if post-June 2012.

Table 3. Employer Pension Contributions by Employee Type

Employer Contribution (As a % of Salary)	Hybrid Plan	Contributory Plan	
	General Employee	Judges, Elected, and Legislative Officers	Police, Fire, and Public Safety
FY2018	18%	18%	28%
FY2019	19%	19%	31%
FY2020	22%	22%	36%
FY2021 and thereafter	24%	24%	41%

Source for Tables 2 and 3: ERS Member Information at ers.ehawaii.gov/online

As of June 2017, there were 65,911 active members:

- 13,743 noncontributory* (20.9% of the total);
- 46,309 hybrid members (70.3% of the total);
- 5,009 police, fire, and public safety members (7.5% of the total);
- 850 general contributory members, judges, elected officials, and legislative officers (1.3% of the total)[25]

*Note that since 2006, all newly-hired public employees must be contributory or hybrid members.

The average monthly pay-outs for all employees as of June 30, 2017 by contribution class is reported in **Table 4**. The ranges across and within employee categories vary. The average across all retirees is $28,137.

Table 4. Service-Based Pensions in 2017

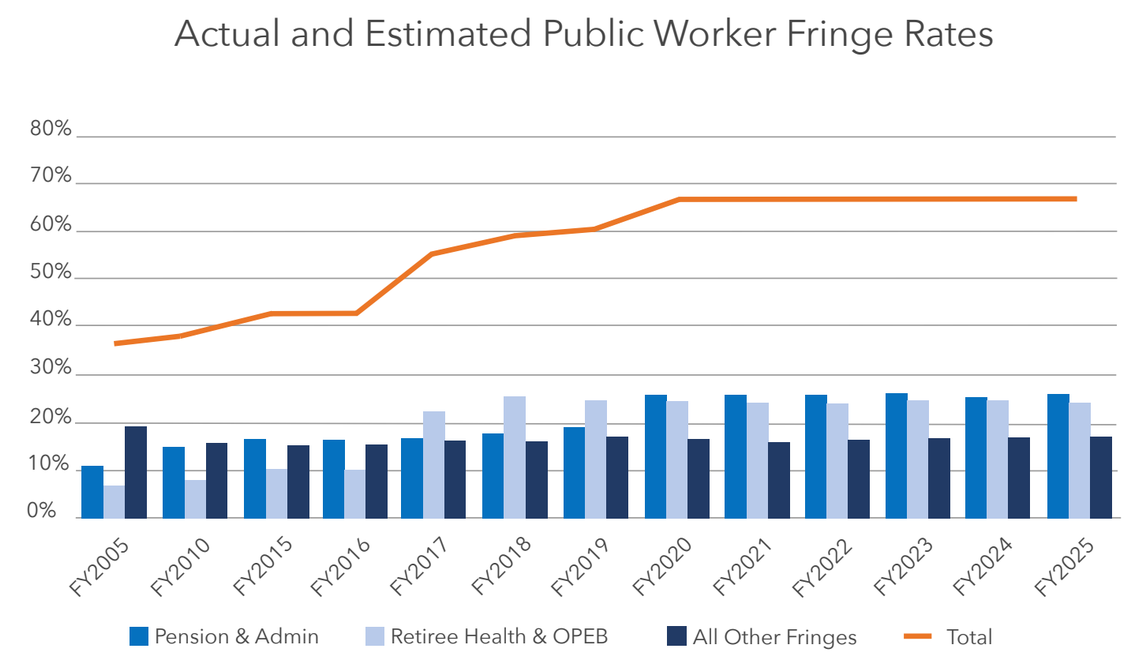
	Contributory		Noncontributory		Hybrid	
Employee Group	Number	Average Pension	Number	Average Pension	Number	Average Pension
General Employee – Male	4,021	$2,532/mo. $30,384/yr.	4,440	$1,669/mo. $20,208/yr.	2,275	$2,267/mo. $27,204/yr.
General Employee – Female	6,246	$1,858/mo. $22,296/yr	5,426	$1,295/mo. $15,540/yr.	2,275	$2,267/mo. $27,204/yr.
Teacher – Male	1,624	$3,523/mo. $42,276/yr.	1,366	$2,458/mo. $29,496/yr.	659	$2,959/mo. $35,508/yr.
Teacher – Female	4,256	$3,179/mo. $38,148/yr.	2,695	$2,260/mo. $27,120/yr.	1,530	$2,489/mo. $29,868/yr.
Police, Firefighter	3,439	$4,500/mo. $54,000/yr.	N/A	N/A	N/A	N/A
Total	19,586	$2,885/mo. $34,620/yr.	13,927	$1,715/mo. $20,580/yr.	7,735	$2,210/mo. $25,320/yr.

Source for Table 4: ERS Actuarial Valuation Report, June 30, 2017, page 78

A further benefit to public employment retirees is that they pay no state income taxes on their pensions, although their state pensions are subject to federal income tax.[26]

Since pensions are related to salary rates, the state pays the annual required contribution (ARC) as part of public worker fringe benefits. For example, the "interim" fringe rate for state employee pension contributions for FY 2019 is 19.00 percent. This is added to 6.20 percent for Social Security contributions, 25.92 percent for retiree health insurance, Medicare and other post-employment benefits, and 8.95 percent for active employee benefits (health, workers' compensation, and unemployment) for a total of 60.07 percent.[27] The rate is anticipated to go up to nearly 67 percent in FY2020. In other words, for every dollar of salary paid to every public employee, an additional amount equal to two-thirds of the salary is paid for fringe, most of which is for retirement costs. The fringe payment trend is shown in **Figure 2**, below.

Figure 2.



Source for Figure 2: Director of Finance memoranda on interim and approved fringe rates and ERS Annual Actuarial Valuation, July 1, 2017, page 17, and EUTF Annual Actuarial Valuation, June 30, 2017, page 26

ERS INVESTMENTS, RATE OF RETURN, AND LIABILITIES

ERS manages a diversified portfolio of investments in order to meet or exceed its targeted assumed rate of return. In 2010, the assumed rate of return was 8 percent. It was lowered to 7.75 percent during the period between 2011–2014, then to 7.65 percent in 2015, and finally to 7 percent in 2016.[28] The designated rate of return is significant in calculating pension debt: The projected actuarial value of assets is determined by applying and compounding the assumed rate of return over the course of 30 years.

The projected value of assets is a key factor in estimating the amount of funded versus unfunded pension liability. The higher the assumed rate of return, the more positive the projection. A study by the Grassroot Institute[29] shows how adjusting the rate changes the unfunded liability estimate as follows:

Assumed Rates of Investment Return	Unfunded Liability
8 percent	$9.7 billion
7 percent (current rate)	$12.9 billion
6 percent	$16.8 billion

In 1992, the median assumed rate of return among states was 8 percent, and pension plans could meet that goal with little risk because the interest rate on a 30-year treasury bond was 7 percent. A pension, then, had only to earn an additional 1 percent to get to 8 percent. A treasury bond now yields only 3 percent, barely more than the rate of inflation.[30]

As the return on bonds started to drop in the 1990s, states turned toward higher yield—and riskier—investments in order to meet their targets.[31] As of June 30, 2016, 60 percent of Hawai'i's ERS investments were in stocks, 7 percent in real estate and 7 percent in alternative investments,[32] which parallels other states' investment portfolios. Pension plan investments are subject to the volatility of the overall market. While this increases the potential for larger gains, the risk for losses also grows, which could put additional strain on a defined benefit plan like Hawai'i's. On average, state pension plans have failed to meet investment targets half of the time between 2008 and 2016.[33] Hawai'i's ERS has the same record, as shown in **Figure 3**.[34]

EXTENT OF UNFUNDED PENSION LIABILITY

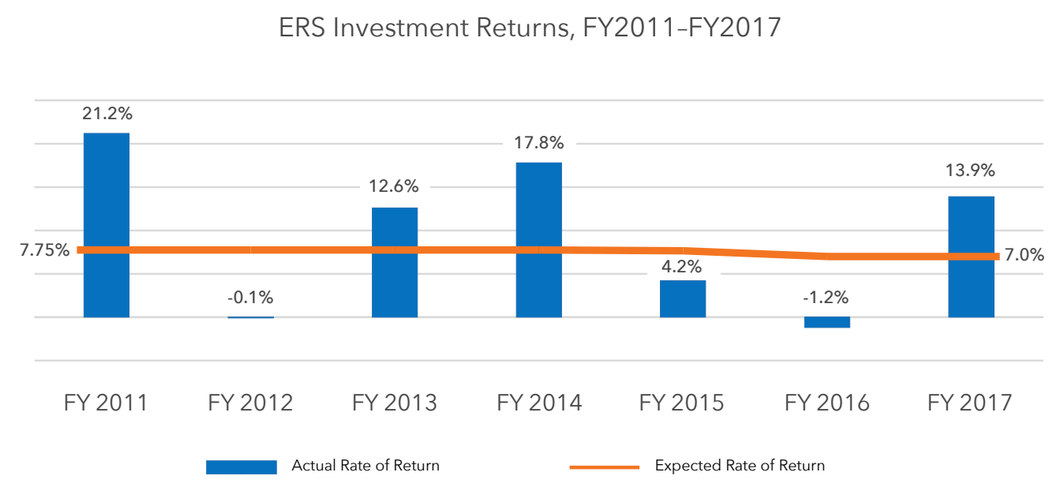
Calculations for future pension benefit costs include an annual 3.5 percent wage hike for the current workforce that will increase final average compensation and, hence, pension amounts. In addition, pension payments are increased annually at 2.5 percent for workers hired before July 1, 2012 and 1.5 percent for those hired after.

When ERS calculates the pension liability, it discounts all future pension benefits to present value using a predetermined discount rate (this is the same as the assumed rate of return, which is currently 7 percent). The amount by which the present value of future pension benefits exceeds the value of pension assets is the unfunded liability.

Hawai'i's public pension economic essentials as of June 30, 2017 are as follows:[35]

1. Actuarial Accrued Pension Liability: $28.6 billion
2. Market Value of Pension Assets: $15.7 billion
3. Unfunded Liability: $12.9 billion (line 1 minus line 2)
4. Funded Ratio: 54.9 percent (line 2 divided by line 1)

Figure 3.



Although Hawai'i's funded ratio in 2017 improved from 2016, when it was 51 percent funded, pension shortfalls have continued to grow. Between 2005 and 2017, the gap between pension costs and pension contributions increased by $2.9 billion, even though employer and employee contributions increased by 93 percent (as adjusted for inflation).[36]

STATE ACTIONS

The Pew Charitable Trusts writes, "differences in state pension funding levels are driven by policy choices, with well-funded states having records of making actuarial contributions, managing risk, and avoiding unfunded benefit increases."[37] On the other hand, according to the Center on Budget and Policy Priorities, "For much of the 20th century, pension trust funds were uncommon, and pension benefits were paid directly from the operating funds instead."[38] It is unsurprising, then, that most states have unfunded pension liabilities.

Historically, Hawai'i has not contributed adequately and consistently to its pension obligations. In order to amortize pension liabilities, contributions need to be enough to offset interest on pension debt, the cost of benefits, and pension administrative costs. In 2016, 27 states fell short of the amortization benchmark, including Hawai'i.[39]

Not only has Hawai'i failed to contribute enough, some report the main reason pension funds are not more robust is that, in former decades, trust earnings that exceeded a certain threshold were routinely rerouted to purposes other than pensions. Under this policy, pension earnings did not accumulate and produce income.[40] Legislation in 2005 and a Hawai'i Supreme Court decision in 2007 put an end to pension fund diversions.[41]

Since 2004, the legislature has made efforts to increase pension contributions by employers at least five times and those by employees at least twice. (On the other hand, between 1999 and 2004, legislation enhanced benefits at least five times but decreased them only twice since 2011.) Most significantly, in 2017, Act 17 (SB936) required stepped up employer contributions to pay off the accumulated liability within 30 years, although it did not change contribution rates for employees.[42] Current employer and employee contribution rates cover both normal pension costs (i.e., the cost of the benefits earned in the current year)[43] and the amortization of the unfunded liability. Hawai'i is on-track to pay off the unfunded actuarial accrued liability (UAAL) within 26 years.[44]

INCREASING NUMBER OF RETIREES AND PENSION COSTS

Hawai'i has a mature pension system, which means that the number of employees paying into it has plateaued while the number of retirees and their beneficiaries continues to grow, as shown in **Figure 4**. The number of active public employees varies somewhat from year to year but the number of workers in 2017 is only 1 percent higher than in 2007 (65,911 and 65,251, respectively).[45] During that period the number of retirees and beneficiaries rose by 33 percent from 35,324 to 46,927.[46] The average annual pension per retiree rose from $21,161 in 2007 to $27,260 in 2016.[47] It should be noted that the difference is only slightly higher than the increase in the cost of living over that period.

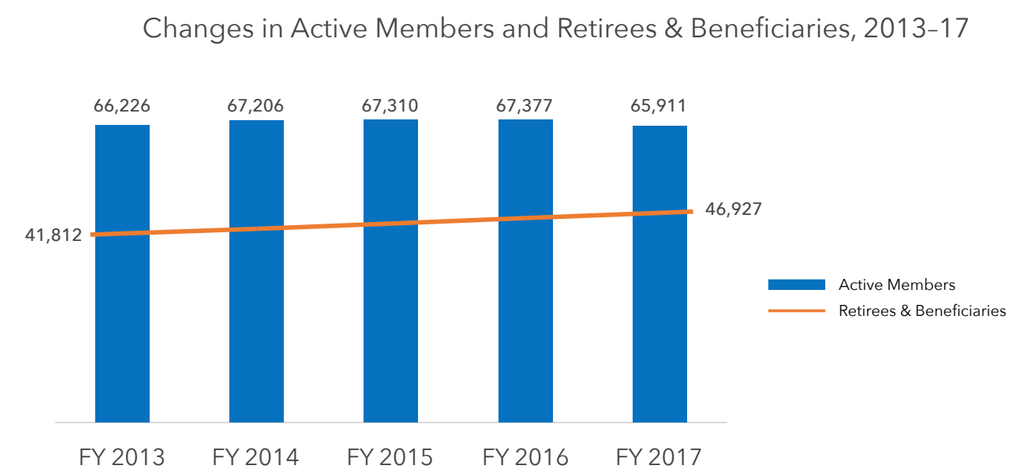
The number of retirees is expected to grow with increased longevity,[48] a trend that was not fully addressed in pension contribution assumptions when current retirees were hired. In recent valuation reports for both pension and other post-employment benefits, the new assumptions for future years of life for a 65-year-old retiree will increase from 23.2 years for males and 26.4 years for females in 2020 to 24.7 and 27.5, respectively, by 2035 (see **Table 5**, next page). As retirees live longer, more assets are needed to cover benefits paid over more years and this affects the actuarial calculation for the extent of assets needed to cover future liabilities.

THE FINANCIAL CRISIS OF 2008 AND MARKET VOLATILITY

The 2008 financial crisis contributed to current unfunded pension liabilities as both asset values fell and returns on investment declined. As the recession reduced state revenues and increased pressure to spend on safety net services, many states had to reduce pension contributions.[49]

The effects of the 2008 economic and market upheaval serve as a warning for state pension systems that now depend more than ever on volatile stock and equity investments than in previous decades. Unfortunately, few other viable investment choices are available.

Figure 4.



Source for Figure 4: Employees' Retirement System of the State of Hawai'i, Annual Actuarial Valuation Report for the Year Ending June 30, 2017, Table 15.

Table 5. Post-Retirement Life Expectancy in Years for an Age 65 Retiree

Year of Retirement				
	2020	2025	2030	2035
General Employees				
Male	23.2	23.7	24.2	24.7
Female	26.4	26.8	27.2	27.5
Teachers				
Male	24.0	24.5	25.0	25.5
Female	27.3	27.7	28.0	28.3
Police & Fire				
Male	21.8	22.3	22.8	23.3
Female	26.4	26.8	27.2	27.5

Source for Table 5: State of Hawai'i Retiree Health Care Plan, Actuarial Valuation Report as of July 1, 2017, page 51. Employees' Retirement System of the State of Hawai'i, Annual Actuarial Valuation Report for the Year Ending June 30, 2017, page 58.

OTHER FACTORS

As noted above, the level adopted for the assumed rate of return has a significant effect on estimated pension liability. Hawai'i lowered its target rate from 8 percent in 2001 to 7 percent in 2016.[50] While reducing the assumed rate of return increased the apparent pension liability, it was a prudent change. However, it may not be enough: According to the Pew Charitable Trusts, "various projections suggest that returns will be around 6.5 percent a year for the next 10 years or longer."[51]

BEST PRACTICES

Gabriel Roeder Smith & Company (GRS), which prepares the actuarial valuation reports for both ERS and EUTF, provides a checklist for pension plans.[52] The GRS Standard is five stars for each item and **Table 6** below shows Hawai'i's performance on each. In addition, GRS reported the following summary on performance to the ERS board:[53]

- While it does not show in the current Unfunded Actuarial Accrued Liability (UAAL) and funded ratio, the current actuarial assumptions and the contribution commitment produce a strong outlook for ERS;
- The scheduled employer contribution rates are expected to be adequate to satisfy state statutory requirements, even with substantial adverse experience;
- The positive outlook assumes the scheduled increases in contribution rates occur. It is imperative that the currently scheduled funding strategies are implemented and sustained.

Table 6. Pension Practices Checklist and Related Performance for Hawai'i

Item	Hawai'i Performance / Stars Earned
Is there a legally required contribution amount based on accepted actuarial practice?	Yes / *****
Does the employer contribution have automatic minimum adjustments when necessary?	Yes / *****
Has the sponsor demonstrated a 10-year history of meeting the required contribution?	Yes / ***** (>100percent)
Does the contribution as a percentage of payroll or budget change each year?	No / *****
Is the funded ratio higher than it was 10 years ago?	No / *** (but the difference is heavily assumption related)
Based on current practices, is the unfunded liability expected to be lower in 10 years?	Yes / *****
What is the amortization period for the current UAAL based on the required contribution?	25 / ***
What is the amortization period for new experience losses, plan amendments, and assumption changes?	30 / *** (potentially 30, actual period floats based on funding policy)
What is the sum of the amortization period and asset smoothing period?	35 / ***
What is the amortization period for benefit enhancements?	30 / *** (should be lower, but enhanced for the moratorium)
What is the likelihood of meeting or exceeding the assumed return assumption over the next 20 years based on actuarial analysis?	50% / ***** (**** for 50% or higher, backed by multiple sources plus additional * for being below median peer)
Does the board regularly review actuarial assumptions?	3 years / ***** (every 3 years or 4 years with macroeconomic every 2)
What is the assumed rate of payroll growth for amortization purposes?	~3.20% / ***** (equal to the wage inflation assumptions with a stable active population and supported by historical 10-year average of past payroll growth, and adjustment for changes in salary definition)
What is the annual percentage change in active population last 10 years?	~0.10% / *** (>0.0 percent)
Are any of the liabilities contingent on future experience?	No / ** (only to the extent salary increases are correlated)
Are there any benefits that are likely to be paid, but not reflected in the liabilities and contributions?	No / *****
What is the current active to retiree ratio?	1.4 / ***
What is the longer term active to retiree ratio?	1.2–1.5 / ***
What is the short-intermediate term negative cash flow as a percent of assets?	~2.0% / ***** (<3.0%)
What is the longer term negative cash flow a percent of assets?	~3.0% / **** (~4.0%)

RECENT ACTIONS TO ADDRESS THE GAP

The legislature, in consultation with the ERS board, has made strides in recent years to reduce pension liabilities. As detailed below, these include increasing employer and employee contributions, imposing constraints on pension growth, and defining various monitoring and reporting requirements:

- **Act 29** (HB1035 in 2011) put a moratorium in place on benefit enhancement until such time as pension assets cover 100 percent of the actuarially accrued liability;
- **Act 163** (HB1038 in 2011) increased employee contributions, increased years of service for eligibility, decreased the pension multiplier factor, and changed the calculation for average final compensation from three years to five;
- **Act 152** (SB1269 in 2012) excluded most types of pay other than base salaries when calculating average final compensation for employees hired on or after July 1, 2012;
- **Act 153** (HB2487 in 2012) amended allowance and service requirements for water safety officers hired on or after July 1, 2012 and required employers to pay additional costs resulting from significant non-base pay increases (for example, costs attributable to over-time work);
- **Act 31** (SB2841 in 2016) allowed employers to contribute pension funds at the beginning of the fiscal year to both improve ERS cash flow and allow the funds to earn income through investment;
- **Act 17** (SB936 in 2017) increased the amount of employer contributions to fully cover pension liabilities within 30 years;
- **Act 85** (HB1182 in 2017) required an annual ERS stress test that examines current and projected assets, liabilities, debts, service costs, contributions by both employee and employer, net amortization, benefit payments, payroll and funded ratio over 30 years. It also requires analysis of different scenarios if assumed rate of return targets are met and if they are not;
- **Act 93** (SB133 in 2017) requires ERS experience studies to be conducted every three years instead of every five; and
- **Act 19** (HB2336 in 2018) allowed employers to make payments to ERS in excess of required amounts to be credited to their accounts.

OTHER POST-EMPLOYMENT BENEFITS

This report focuses on "other post-employment benefits" (OPEB) for public employment retirees and their dependents, and on The Employer-Union Health Benefits Trust Fund (EUTF) as Hawai'i's OPEB agency. The EUTF was created by legislative action (Act 88/SB1044 in 2001),[54] and started providing services for public employees in 2003. An agency attached to the state Department of Budget and Finance, EUTF provides health and life insurance to state and county active employees and retirees and their beneficiaries.[55] EUTF serves 189,000 members, as follows:[56]

- 66,000 active public sector employees
- 56,000 active employee dependents
- 47,000 public sector retirees
- 20,000 retiree dependents

EUTF oversees beneficiary enrollment and benefits as well as managing trust investments. EUTF's investment income target, or assumed rate of return, is 7 percent.[57]

Although it pools all public employers' assets for purposes of investment, EUTF maintains a separate account for each. Employers are the state, each county, the Honolulu Authority for Rapid Transportation (HART), the Kaua'i Department of Water, the Board of Water Supply of Honolulu, and the Hawai'i Department of Water Supply.

EUTF's board of trustees is composed of five representatives of public employers and five representatives of employee-beneficiaries, including one representing retirees.[58] In order to conduct business, at least six trustees must be present, three representing the public employer and three representing the beneficiaries. Moreover, employer and employee representatives, respectively, each have one collective vote. EUTF's board composition, quorum, voting requirements, and the absence of private sector members, may make tough financial and benefit decisions more difficult. This is all the more important as legislators, who periodically make statutory amendments, are also EUTF beneficiaries.

OPEB CONTRIBUTIONS AND BENEFITS

Unlike payments for future pension costs, active public employees do not contribute to other post-employment benefits during their employment. OPEB costs are borne largely by government employers, with a share of current costs being paid by retirees.

The several public employers contribute different amounts because they have varying levels of assets and unfunded liabilities, as shown in **Table 7**.[59] For each employer, the annual required contribution (ARC) is a set dollar amount determined actuarially and comprised of the "normal cost," i.e., the cost of benefits earned in the current year,[60] plus a payment to amortize the unfunded liability over a 30-year period.

Although OPEB benefits are not related to salary levels, the state has chosen to assess the ARC as a percentage of payroll included in the fringe rates for public employees. For example, the "interim" fringe rate for state employees for FY2019 includes 25.92 percent for other post-employment benefits. This is added to 19.01 percent for pension accumulation, 6.20 percent for social security contributions and 8.95 percent for active employee benefits (health, workers' compensation and unemployment) for a sizeable 60.08 percent rate.[61] The rate is anticipated to go up to nearly 67 percent in FY2020. In other words, for every dollar of salary paid to every public employee, an additional amount equal to two-thirds of the employee's salary is paid for fringe, most of which is for retirement costs. The fringe rate trend is shown in **Figure 5**.

Table 7. OPEB Assets, Liabilities and Annual Required Contributions by Public Employer

Employer	Assets	Unfunded Liability	Funded Ratio	ARC for 2019	ARC as % of Payroll
State of Hawai'i	$879,517,000	$9,314,670,000	8.6%	$787,110,000	24.1%
City & County of Honolulu	$372,671,000	$1,869,328,000	16.6%	$177,331,000	26.5%
Honolulu Authority for Rapid Transit	$641,000	$5,562,000	10.3%	$810,000,000	9.3%
Hawai'i County	$126,321,000	$391,454,000	24.4%	$39,770,000	23.3%
Maui County	$205,190,000	$317,559,000	39.3%	$34,967,000	19.5%
Kaua'i County	$98,373,000	$147,034,000	40.1%	$16,595,000	20.2%
Kaua'i Department of Water	$8,049,000	$8,368,000	49.0%	$1,011,000	17.0%
Honolulu Board of Water Supply	$71,668,000	$74,722,000	49.0%	$7,945,000	20.7%
Hawai'i Department of Water	$15,244,000	$17,266,000	46.9%	$1,990,000	19.9%
TOTAL	**$1,777,674,000**	**$12,145,963,000**	**12.8%**	**$1,067,529,000**	**24.1%**

Source for Table 7: EUTF Aggregate Actuarial Valuation Report as of July 2, 2017, page 7

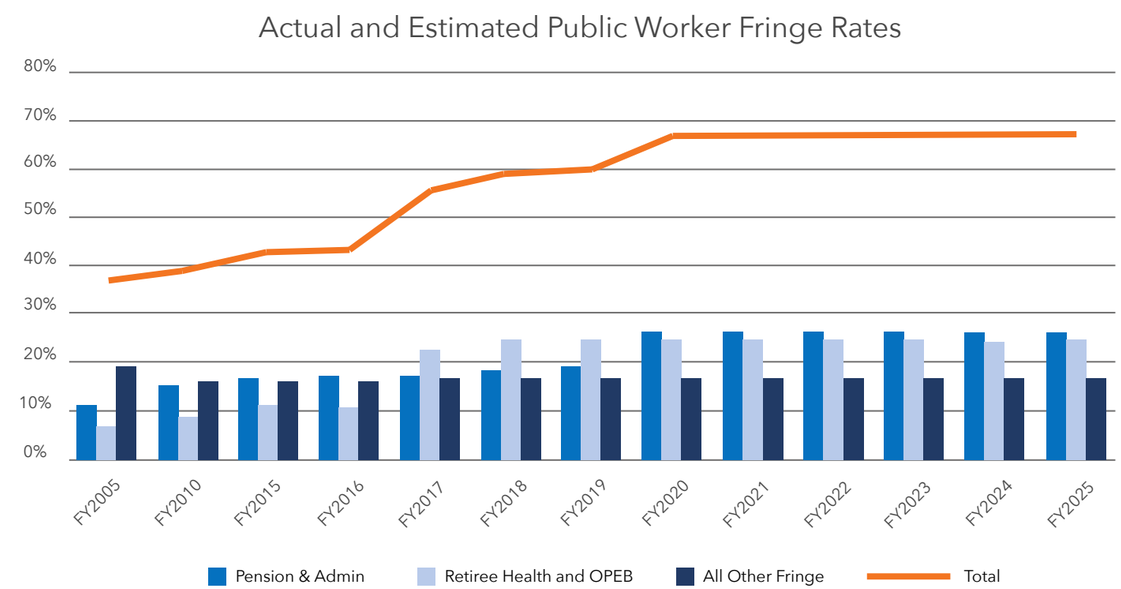
In aggregate, contributions are scheduled to increase to as much as 25.2 percent of payroll in order to pay the normal cost and amortize unfunded liabilities. When over 99 percent of these liabilities are amortized in 2045, the contribution rate will be 9.5 percent. At that time, the cost of premiums as a percentage of payroll is still expected to be 19.8 percent, but the contribution rate of 9.5 percent will suffice to cover the "normal cost," or the annual cost of providing the benefit.[62]

Employers may prefund contributions beyond the required contribution, but a failure to at least meet the required contribution mark will result in funds being taken directly from general excise tax receipts for the state or, for counties, withheld from their shares of transient accommodation tax revenues.[63]

OPEB BENEFITS AND ELIGIBILITY

Other post-employment benefits provided in Hawai'i are comprised of a life insurance policy and coverage for medical, prescription drug, dental and vision services. Retirees (and spouses or domestic partners) must enroll in Medicare Part B, when eligible, and employers pay nearly all of the Part B premium, including the federal surcharge for more affluent retirees (but excluding penalties).

Figure 5.



Source: Director of Finance memoranda on interim and approved fringe rates and ERS Annual Actuarial Valuation, July 1, 2017, page 17, and EUTF Annual Actuarial Valuation, June 30, 2017, page 26

For employees hired on or before July 1, 2001, the employer provides benefits for both the retiree and spouse or domestic partner. For those hired after June 30, 2001, the employer contributes for the retiree only. However, if the retiree predeceases a spouse or domestic partner, the survivor receives half of the deceased retiree's benefit.[64] Otherwise, post-June 30, 2001 spouses or domestic partners may be covered by the retiree's plan but not at the employer's expense.

A Base Monthly Contribution (BMC) is paid by the employer, which pays 50 percent, 75 percent, or 100 percent of the BMC, depending on the hire date and years of service of the retiree. The BMC ceiling was raised in favor of retirees in 2014,[65] and is adjusted annually in parallel with changes in Medicare Part B premiums.[66] The BMC ceiling for the employer contribution for health care premium costs and the employer-retiree share of payments are shown in **Tables 8** and **9**. Employer contributions for two-party and family coverage apply to retirees hired before July 1, 2001 only.

Table 8. 2018 Base Monthly Contribution Caps

	Self	Two-Party	Family
Non-Medicare	$940.70	$1,896.14	$2,775.20
Medicare	$670.12	$1,343.12	$1,956.24

Source: Hawai'i Employer-Union Health Benefits Trust Fund Retiree Health Care Plan Aggregate Actuarial Valuation Report as of July 1, 2017, page 22

Table 9. Employer and Retiree Shared Payments per Base Monthly Contribution

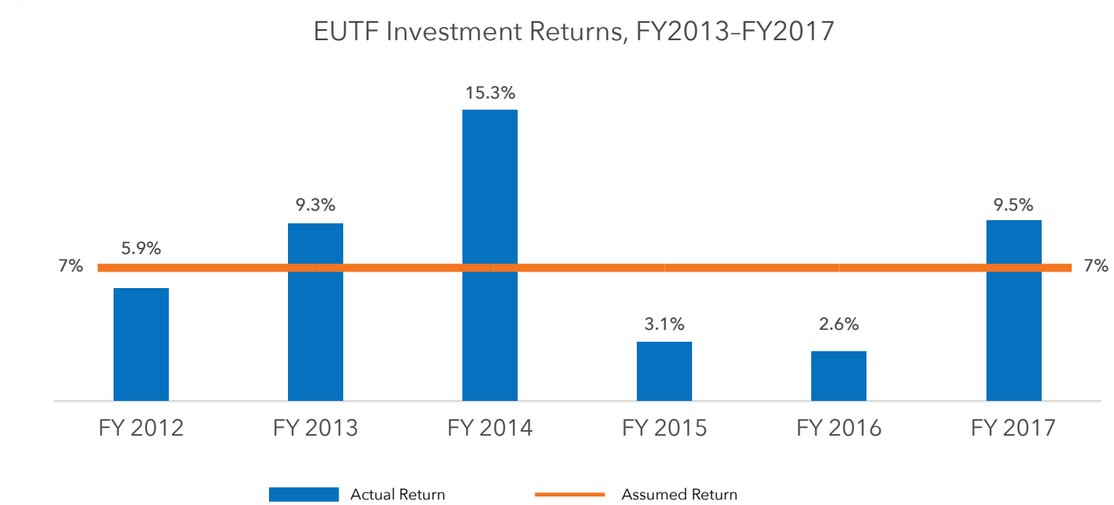
Years of Credited Service	State's BMC if hired before 7/1/1996	State's BMC if hired between 7/1/1996 and 6/30/2001	State's BMC if hired after 6/30/2001 **(retiree only)**
Less than 10 years	50%	0%	0%
At least 10 years, but less than 15	100%	50%	50%
At least 15 years, but less than 25	100%	75%	75%
25 years or more	100%	100%	100%

Source: Hawai'i Employer-Union Health Benefits Trust Fund, June 6, 2018 Presentation, page 32

OPEB INVESTMENTS, RATE OF RETURN, AND LIABILITIES

For OPEB purposes, EUTF maintains an "Agency Fund" that manages contributions and payments for post-employment benefits, and the "OPEB Trust" that accounts for and invests pre-funded contributions and assets.[67] In its short investment history—July 2011 through June 2017—the OPEB Trust has averaged a 7.5 percent return (net of fees), as shown in **Figure 6**.[68]

Figure 6.



Source: Hawai'i Employer-Union Health Benefits Trust Fund, June 6, 2018 Presentation, page 27

EXTENT OF UNFUNDED OPEB LIABILITY

For most of its history, EUTF's OPEB program was run as a pay-as-you-go system, collecting no prefunded contributions and maintaining few assets to invest.[69] This changed for the state after the passage of Act 268. As Hawai'i made the transition from pay-as-you-go to pre-funding future retirement costs, it began with a large OPEB unfunded liability.

When EUTF calculates its OPEB liability, it discounts all future OPEB benefits to present value using a predetermined discount rate (this is the same as the assumed rate of return, currently 7 percent). The amount by which the present value of future OPEB benefits exceeds the value of OPEB assets is the unfunded liability.

Hawai'i's OPEB assets, unfunded liability, and other economic essentials for all public employers as of July 1, 2017 are as follows:[70]

1. Actuarial Accrued Liability: $13.9 billion
2. Market Value of Assets: $1.8 billion
3. Unfunded Liability: $12.1 billion (line 1 minus line 2)
4. Funded Ratio: 12.8 percent (line 2 divided by line 1)

The funded ratio trend has improved yearly since prefunding began, nearly doubling since July 1, 2015, when it was 6.7 percent.[71] The unfunded liability decreased by more than $7 billion between FY2011 and FY2013, largely because the plan to prefund came with an increase in the assumed rate of return from 4 percent to 7 percent.[72] The assumed rate of return is significant in calculating OPEB debt: The projected actuarial value of assets is determined by applying and compounding the assumed rate of return over the course of 30 years. The value of assets is a key factor in estimating the amount of funded versus unfunded liability. The higher the assumed rate of return, the more positive the projection. Aside from the sudden improvement due to raising the rate of return, the unfunded liability has increased annually as health care costs have increased and retirees live longer.

As of June 30, 2017, 22 percent of EUTF's $1.8 billion in assets were invested in fixed income securities and 78 percent were in stocks, real estate, and alternative investments.[73]

STATE ACTIONS TO ADDRESS UNFUNDED OPEB COSTS

Public employers have made strides in addressing unfunded OPEB costs in a relatively short time, with the state starting to prefund expenses and move from a pay-as-you-go model in 2014. Cost containment measures, however, have been uneven. Even before EUTF was established, statutory changes reduced retirement benefits for individuals hired after June 30, 1996, and eliminated employer contributions for dependents for those hired after June 30, 2001. The cost-sharing method for health care premiums, known as the Base Monthly Contribution (BMC), is intended to moderate the growth and cap employer costs. While it has influenced more modest growth in employer contributions, the legislature raised the BMC employer spending ceiling in 2014.[74]

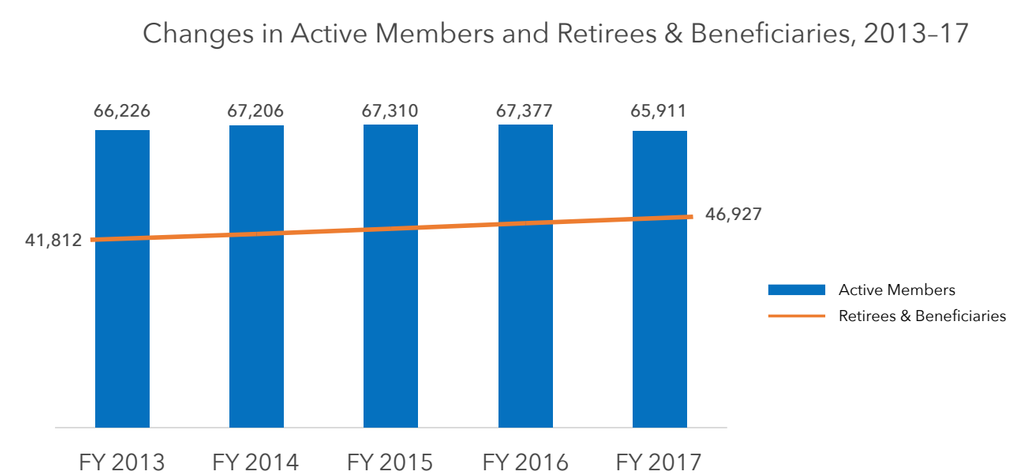
EUTF has listed a variety of strategies it uses or has proposed to manage costs.[75] These include:

- Negotiating best-price contracts from insurers;
- Conducting enrollment and claims audits; and
- Designing preventive benefit additions, such as coverage for annual physical exams and advance care planning.

INCREASING NUMBER OF RETIREES AND INCREASING BENEFIT COSTS

The number of active public employees (according to ERS figures) varies somewhat from year to year, but the number of workers in 2017 was only 1 percent higher than in 2007 (65,911 and 65,251, respectively). Meanwhile, during that period the number of OPEB retirees and beneficiaries rose by 27 percent from 37,000 to 47,000.[76] This active employee to retiree trend is shown in **Figure 7**. The FY2018 average annual OPEB benefit per retiree is estimated to be nearly $9,800, based on the estimated benefit cost of $460 million divided by an estimated 47,000 retirees in 2018.[77]

Figure 7.



Source: Employees' Retirement System of the State of Hawai'i, Annual Actuarial Valuation Report for the Year Ending June 30, 2017, Table 15.

The number of retirees is expected to grow with increased longevity.[78] In recent valuation reports for both pension and OPEB, the new assumptions for future years of life for a 65-year-old retiree will increase from 23.2 years for males and 26.4 years for females in 2020 to 24.7 and 27.5 years, respectively, by 2035. This is shown in **Table 10**.

Table 10. Life Expectancy for an Age 65 Retiree in Years (ERS and EUTF)

	Year of Retirement			
	2020	2025	2030	2035
General Employees				
Male	23.2	23.7	24.2	24.7
Female	26.4	26.8	27.2	27.5
Teachers				
Male	24.0	24.5	25.0	25.5
Female	27.3	27.7	28.0	28.3
Police & Fire				
Male	21.8	22.3	22.8	23.3
Female	26.4	26.8	27.2	27.5

Source: State of Hawai'i Retiree Health Care Plan, Actuarial Valuation Report as of July 1, 2017, page 51. Employees' Retirement System of the State of Hawai'i, Annual Actuarial Valuation Report for the Year Ending June 30, 2017, page 58.

OTHER COSTS TO CONSIDER

Medical cost inflation is an important consideration for ensuring the adequacy of employer contributions. EUTF's actuarial valuation report estimates that normal price inflation will rise at a rate of 2.5 percent, while the anticipated annual increase for medical and prescription drug premiums is as much as 9 percent and normalizes at 4.86 percent per year in 2033. The inflation rate for Medicare Part B, which is more pertinent to retiree calculations, does not exceed 5 percent and is assumed to be 4.7 percent per year in and after 2033.[79] Dental premiums are expected to rise 3.5 percent annually and vision coverage 2.5 percent.[80] The actual increase in health care premiums between 2013 and 2017 amounted to just under 20 percent, as shown in **Table 11**.

Table 11. Increases in OPEB Premiums, 2013–2017

Retiree Health Care Premiums (In $ Millions)	6/30/13	6/30/14	6/30/15	6/30/16	6/30/17
Medical and Drug; Dental; Vision; Life	299.4; 20.6; 3.7; 1.9	298.1; 22.1; 3.8; 1.9	290.8; 22.3; 4.0; 1.9	319.8; 24.3; 4.1; 2.0	352.9; 27.6; 4.2; 2.0
Emloyer Share	325.6	325.9	319.0	350.2	386.7
Retiree Share	2.3	2.6	2.8	3.4	3.8
Medicare Part B (all paid by Employer)	55.2	59.0	60.9	64.0	69.0
Total Costs	383.1	387.5	382.7	417.6	459.5
Increase in Medical, Drug, Dental, Vision, Life (Employer Share), FY2013–FY2017					18.8%
Increase in Retiree Share, FY2013–FY2017					65.2%
Increase in Medicare Part B, FY2013–FY2017					25.0%
Increase in Total Employer Share + Medicare Part B, FY2013–FY2017					19.7%
Total Benefit Cost Increase, FY2013–FY2017					**19.9%**

Source: Hawai'i Employer-Union Health Benefits Trust Fund, June 6, 2018 Presentation, page 14

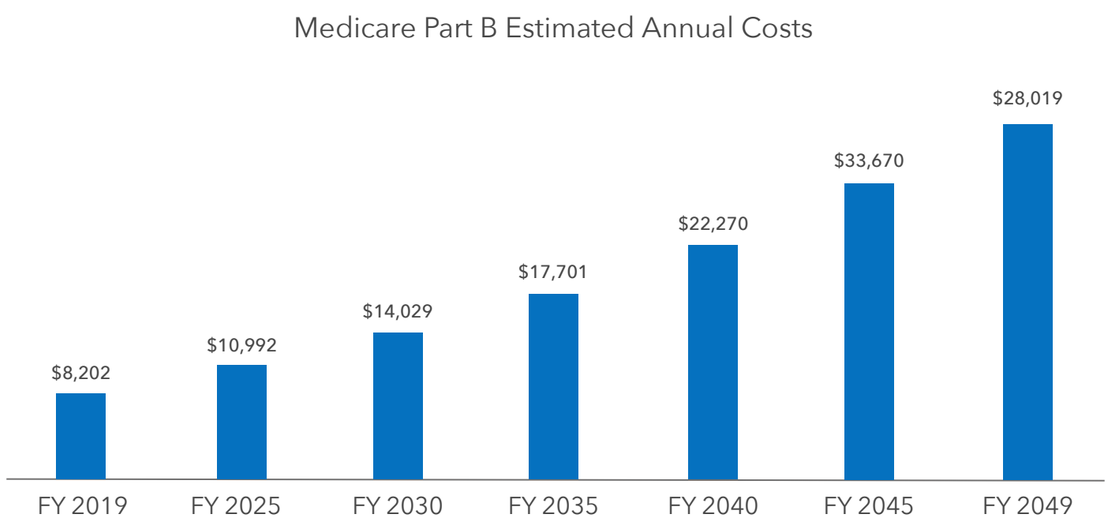
Starting with $670.12, the Base Monthly Contribution for a Medicare retiree as of January 1, 2018, the expected employer contribution per retiree would be $2,800 per month by 2049, or $33,670 per year.[81] Expected premium increases are shown in **Figure 8** (next page). Employers would pay 50 percent, 75 percent, or 100 percent of this cost, depending on the retiree's hire date and years of service.

The level of post-employment benefits varies widely across states, which greatly influences the cost of benefits and the size of liabilities. Overall differences, according to a Pew Trusts/ MacArthur Foundation report,[82] include:

Early Retirees

- 16 states do not contribute to health care premiums for early retirees.
- 9 provide a fixed dollar amount.
- 25 provide an amount tied to total premium costs.
- For those that contribute, 29 offer prorated payments that share costs between employer and retiree.
- Hawai'i provides a prorated contribution tied to the BMC.

Figure 8.



Source: EUTF Retirement Healthcare Plan, Aggregate Actuarial Valuation Report, July 1, 2017, page 43

Medicare-Eligible Retirees

- 15 states do not pay Medicare premiums.
- 10 provide a fixed dollar amount.
- 25 provide an amount tied to total premium costs.
- For those that contribute, 28 offer prorated payments that share costs between employer and retiree.
- Hawai'i provides a prorated contribution tied to the BMC.

The most common OPEB arrangements are a flat rate annual contribution or a percentage, based on years of service, applied to a capped rate. Hawai'i, too, provides a percentage of a capped rate, but that capped rate is the highest among all states. In 2014, it was $8,839 for retirees not eligible for Medicare and $6,297 for Medicare enrollees. It has been increased annually since then.

RECENT ACTIONS TO ADDRESS THE GAP

The legislature has made strides in recent years to recognize and reduce OPEB liabilities primarily related to requiring and prefunding contributions to the OPEB trust:

- **Act 304** (HB2491 in 2012) allowed EUTF to establish a trust for pre-funded OPEB contributions.
- **Act 268** (HB546 in 2013) established a task force to assess the OPEB unfunded liability and mandated that, by June 30, 2019, all public employers would begin making actuarially-determined annual required contributions. The act described the means to make up for any underpayments and put the trust's assets off limits for any purpose other than paying for retiree/beneficiary benefits.
- **Act 30** (SB2838 in 2016) conferred greater investment flexibility on EUTF in order to maximize earnings.
- **Act 93** (SB133 in 2017) requires EUTF's actuary to make an annual valuation of assets and liabilities and an update of assumptions every three years.

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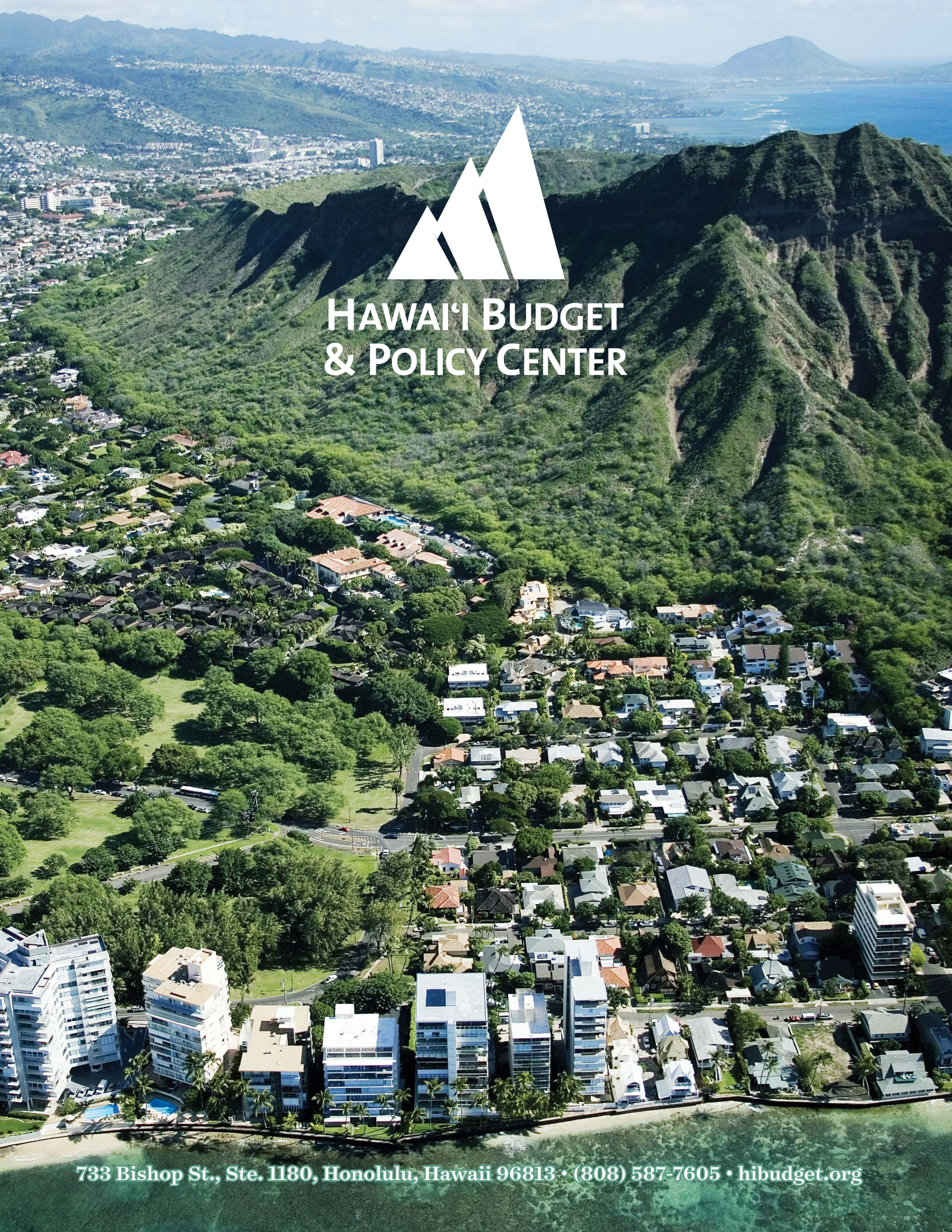

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