

# How to resolve Hawaii's public pension debt crisis

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## CONTENTS

I — Executive summary.....	3
II — How to resolve Hawaii’s public pension debt .....	4
A. Hawaii constitutional provisions.....	6
B. Hawaii’s current public pension plans .....	7
C. Problems in the current system .....	8
D. Pension plan options.....	9
1. Defined benefit plans .....	9
2. Defined contribution plans .....	10
3. Hybrid plans .....	11
4. Cash-balance plans .....	14
5. Choice-based plans .....	14
E. Components of alternate plan .....	15
F. Pension plans across the nation.....	16
G. Helpful guides.....	17
III — Additional reforms .....	18
IV — Conclusion .....	19
Appendix .....	20

## I — Executive summary

Hawaii's public pension system has an unfunded liability conservatively estimated at \$13.4 billion, and the crisis may get worse.

The debt represents money missing from the state Employee Retirement System (ERS), which, if not addressed now, could jeopardize future public worker retirement benefits and impose a significant burden on Hawaii taxpayers.

Other states have found themselves in similar situations, but many have been successfully reducing their unfunded pension liabilities by retooling their state retirement systems. Hawaii could do the same.

By creating a new pension plan based on best practices from other states, Hawaii's lawmakers could take a step toward helping the ERS match its promised retirement benefits with employee contributions, helping roll back the system's — and thereby the state's — unfunded public pension liabilities.

One challenge would be to enlist as many state and county workers as possible into the new plan. Future workers could be required to join the new plan, while current employees could be enticed to join by the different benefits it would offer.

Active public employees wouldn't have to worry about their benefits for hours already worked, since Hawaii's Constitution protects benefits for employee service already accrued. It does not, however, guarantee benefits for service moving forward — though perhaps that interpretation could be challenged — so making the new plan more attractive than the current plan would be key to migrating them to the new plan.

Incentives to enroll in a new plan could include lower vesting ages, increased portability and higher funding ratios. Facing a greater variety of benefits offered, current public employees would more likely volunteer to enroll in the new plan.

Ideally this would help lead to the eventual elimination of the system's debt, strengthening the promises made to Hawaii's retired public workers and providing relief to Hawaii's taxpayers — especially the younger ones, who at the moment appear to be the ones who will have to pay off most of Hawaii's unfunded liabilities in the long run.

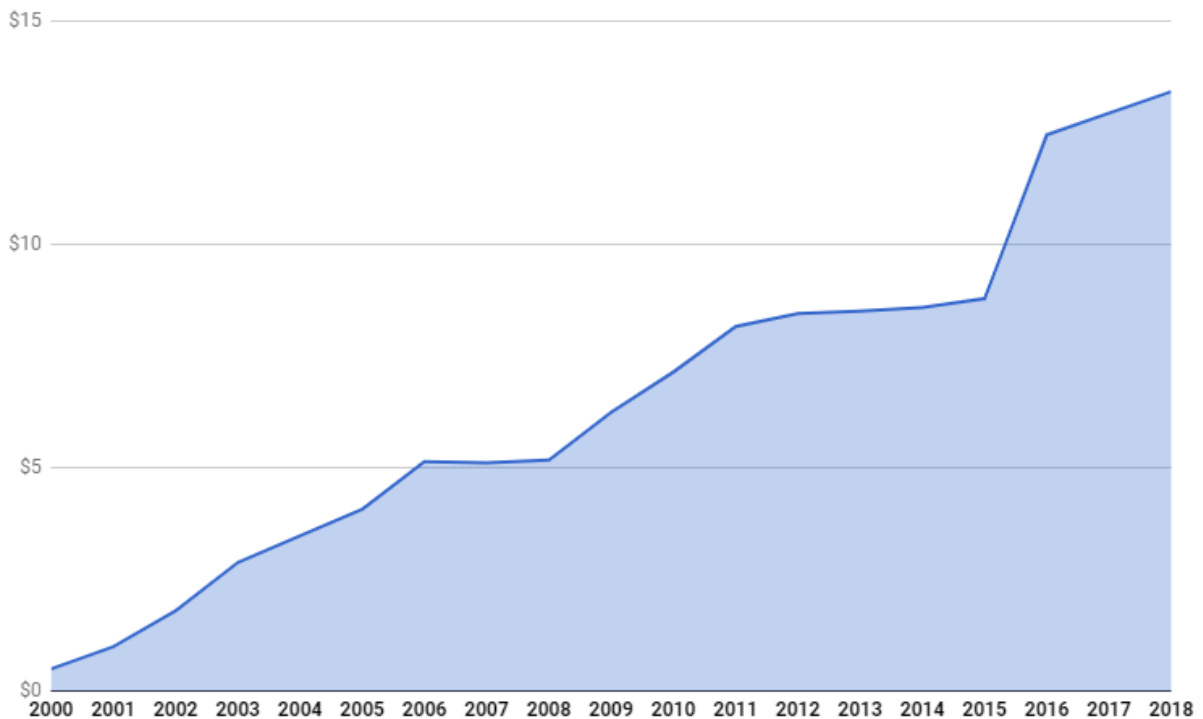
## II — How to resolve Hawaii’s public pension debt

Fundamental problems in Hawaii’s public pension system need to be fixed before the system’s unfunded liabilities become insurmountable.<sup>1</sup>

One option would be to create a new public pension plan that would reduce, and ideally eventually eliminate, the state’s public pension debt, while offering more flexibility for the government employees the system is supposed to benefit.

The state ERS is conservatively estimated to be short \$13.4 billion, leaving our state and county government retirees depending on a fund that is 46 percent empty.

Hawaii’s unfunded public pension debt (in billions)



The \$13.4 billion estimate is based on an assumed rate of investment return of 7 percent. This rate is highly sensitive, and small adjustments in the assumed rate of investment return can result in large variations in the calculated unfunded liability. For example, a 6 percent assumed rate of return would result in an unfunded liability of \$16.8 billion, while an 8 percent rate would result in a \$9.7 billion unfunded liability, according to the ERS.<sup>2</sup> If the plan assumed a “risk-free”

<sup>1</sup> The city of Detroit entered bankruptcy partially as a result of its public pension debt. In 2013, Michigan courts ruled that public pensions could be cut following the Detroit bankruptcy. This paved the way for cuts of \$1.33 billion in public benefits, including a 4.5 percent pension cut, a reduction in health insurance and a halt to cost-of-living increases.

<sup>2</sup> “Employees’ Retirement System of the State of Hawaii GASB Statement No. 67 and 68 Accounting and Financial Reporting for Pensions June 30, 2017,” Employees’ Retirement System of the State of Hawaii,

rate of investment return of 3.38 percent, the unfunded liability would increase to \$36 billion, according to the state Department of Budget and Finance.<sup>3</sup> The risk-free rate of 3.38 percent is based on a 10-year average of 30-year treasuries as recommended by a blue-ribbon panel of the Society of Actuaries.<sup>4</sup>

The ERS has averaged a 7.87 percent investment return rate since the fund was created in 1990<sup>5</sup>, but the fund would be at risk if a significant investment loss were to occur over a long period of time, such as a recession or stock market crash.

If the state were to renege on its pension promises, it wouldn't go down well with the many government employees who suddenly would have their retirement benefits eliminated or reduced. Meanwhile, the system's growing debt problem is burdening local taxpayers even now, who every year are making larger payments into the fund, to the tune of \$598 per resident as of fiscal 2019. In total, the ERS debt amounts \$9,575 for every man, woman and child in the state.

**Minimum required tax contributions to the ERS by fiscal year (in thousands)<sup>6</sup>**

	State of Hawaii	City & County of Honolulu	County of Hawaii	County of Maui	County of Kauai
<b>2017</b>	\$524,862	\$125,479	\$33,818	\$30,953	\$14,955
<b>2018</b>	\$556,010	\$137,172	\$36,912	\$33,687	\$16,238
<b>2019</b>	\$587,158	\$148,865	\$40,006	\$36,421	\$17,520
<b>2020</b>	\$679,866	\$172,667	\$46,398	\$42,854	\$20,786

In 2011, Hawaii's state legislators tried to reduce the pension debt by offering reduced benefits for new hires, while at the same time, increasing employee contributions into the fund to help

Mar. 16, 2018, page 18 (accessed July 10, 2018, at [http://ers.ehawaii.gov/wp-content/uploads/2018/05/GASB6768Rpt\\_Hawaii-ERS\\_2017.pdf](http://ers.ehawaii.gov/wp-content/uploads/2018/05/GASB6768Rpt_Hawaii-ERS_2017.pdf)).

<sup>3</sup> Letter to the Hawaii Legislature from Laurel A. Johnston on Dec. 28, 2018, page 10 (accessed July 12, 2018 at <http://ers.ehawaii.gov/wp-content/uploads/2018/12/Stress-Test-2018.pdf>).

<sup>4</sup> "Report of the Blue Ribbon Panel on Public Pension Plan Funding, an Independent Panel Commissioned by the Society of Actuaries" February 2014, page 23 (accessed July 12, 2018, at <https://www.soa.org/brpreport364/>).

<sup>5</sup> "Hawaii ERS Monthly Performance Report," Employees' Retirement System of the State of Hawaii, June 30, 2018, page 1 (accessed Jan. 5, 2019 at <http://ers.ehawaii.gov/wp-content/uploads/2018/10/HIERS-Risk-Performance-Report-2Q-2018-3.pdf>).

<sup>6</sup> Grassroot Institute calculations; figures calculated by multiplying the employer-covered payroll of each county as listed in "Hawaii Employees' Retirement System of the State of Hawaii: Report to the Board of Trustees on the 91st Actuarial Valuation for the year ending June 30, 2016," by Gabriel, Roeder, Smith & Co., of Irving, Texas, page 38 (accessed June 6, 2018, at <http://ers.ehawaii.gov/wp-content/uploads/2014/01/2016-Actuarial-Valuation.pdf>), and rates in Act 17, 2017, pages 25 and 26 (accessed June 6, 2018, at [https://www.capitol.hawaii.gov/Archives/measure\\_indiv\\_Archives.aspx?billtype=SB&billnumber=936&year=2017](https://www.capitol.hawaii.gov/Archives/measure_indiv_Archives.aspx?billtype=SB&billnumber=936&year=2017)).

address the unfunded liability problem.<sup>7</sup> These measures have helped reduce the unfunded liability lower than it otherwise would be. However, other fixes may be needed in order to protect against future unfunded liabilities.

The root of the problem is the design of the public pension system itself, namely, the defined benefit (DB) plan, which promises retiree benefits based on over-generous calculations, rather than how much money is in the system. This creates a situation where more money is going out than coming in.

Hawaii can look to other states and counties to find examples of plan designs that are more sustainable. However, any change would need to comply with the state Constitution, which guarantees that benefits already accrued must be paid.

## A. Hawaii constitutional provisions

Hawaii's Constitution, Article XVI, Section 2, states:

*Membership in any employees' retirement system of the State or any political subdivision thereof shall be a contractual relationship, the accrued benefits of which shall not be diminished or impaired.*<sup>8</sup>

That wording is pretty clear, but it leaves room for updating current employee benefits moving forward.

Hawaii's Constitution protects past benefits that have been accrued, but it may not protect benefits for future services, as indicated by the debates of the 1950 Hawaii Constitutional Convention<sup>9</sup>, in which the Committee of the Whole discussed the question of a reduction of future benefits for current workers.

“Committee Proposal No. 10 contained no provision relating to an employees' retirement system. After considerable discussion your committee decided to incorporate the following section into the article on taxation and finance (its appropriate location to be decided by the Committee on Style):

“Section \_\_\_\_ . Membership in any employees retirement system of the State or any political subdivision thereof shall be a contractual relationship, the accrued benefits of which shall not be diminished or impaired.

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<sup>7</sup> Act 163, effective June 23, 2011. (Accessed July 29, 2018 at [http://www.grassrootinstitute.org/wp-content/uploads/2018/07/GM1266\\_.pdf](http://www.grassrootinstitute.org/wp-content/uploads/2018/07/GM1266_.pdf)).

<sup>8</sup> Hawaii Constitution, Article XVI, Section 2 (accessed May 31, 2018, at <http://rbhawaii.org/con/constitution/CONST%200016-0002.html>).

<sup>9</sup> “Proceedings of the Constitutional Convention of Hawaii 1950 Volume 1,” Attorney General's Office and the Public Archives, 1960, page 330 (accessed May 31, 2018, at <https://digitalcollections.hawaii.gov/docs/concon/1950/1950%20CON%20CON%20JOURNAL%20VOL.%201.pdf>).

“It should be noted that the above provision would not limit the legislature in effecting a reduction in the benefits of a retirement system providing the reduction did not apply to benefits already accrued. In other words, the legislature could reduce benefits as to (1) new entrants into a retirement system, or (2) as to persons already in the system insofar as their future services were concerned. It could not, however, reduce the benefits attributable to past services. Further, the section would not limit the legislature in making general changes [to the] system, applicable to past members, so long as the changes did not necessarily reduce the benefits attributable to past services.”

## B. Hawaii’s current public pension plans

The Hawaii Employees’ Retirement System offers six public pension plans to state and county workers, all of which are defined benefit plans, although some of the names seem to imply otherwise:

- Hybrid Plan<sup>10</sup>
- Noncontributory Plan<sup>11</sup>
- Contributory Plan for General Employees<sup>12</sup>
- Contributory Plan for Police Officers, Firefighters and Certain Public Safety Officers<sup>13</sup>
- Contributory Plan for Judges<sup>14</sup>
- Contributory Plan for Elected and Legislative Officers<sup>15</sup>

Each plan has a slightly different formula for calculating the annual pension allowance.

For example, employees enrolled in the contributory plans with 30 years of service can retire at 62 years old. If their highest five years of base pay earnings averaged \$60,000 per year, they

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<sup>10</sup> “Questions & Answers About Your Employees’ Retirement System Hybrid Plan,” Employees’ Retirement System of the State of Hawaii, May 2012 (accessed May 31, 2018, at <http://ers.ehawaii.gov/wp-content/uploads/2012/02/ContribHybrid201205.pdf>).

<sup>11</sup> “Questions & Answers About Your Employees’ Retirement System Noncontributory Plan,” Employees’ Retirement System of the State of Hawaii, Revised December 2009 (accessed June. 20, 2018, at <http://ers.ehawaii.gov/wp-content/uploads/2012/02/Noncontributory200912.pdf>).

<sup>12</sup> “Questions & Answers About Your Employees’ Retirement System Contributory Plan,” Employees’ Retirement System of the State of Hawaii, May 2012 (accessed June. 20, 2018, at <http://ers.ehawaii.gov/wp-content/uploads/2012/02/ContribGeneral201205.pdf>).

<sup>13</sup> “Questions & Answers About Your Employees’ Retirement System Contributory Plan for Police Officers, Firefighters, and certain Public Safety Officers,” Employees’ Retirement System of the State of Hawaii, May 2012 (accessed June 20, 2018, at <http://ers.ehawaii.gov/wp-content/uploads/2012/02/ContribPOFF201205.pdf>).

<sup>14</sup> “Questions & Answers About Your Employees’ Retirement System Contributory Plan for Judges,” Employees’ Retirement System of the State of Hawaii, May 2012 (accessed June 20, 2018, at <http://ers.ehawaii.gov/wp-content/uploads/2012/02/ContribJudges201205.pdf>).

<sup>15</sup> “Questions & Answers About Your Employees’ Retirement System Contributory Plan for Elected & Legislative Officers,” Employees’ Retirement System of the State of Hawaii, May 2012 (accessed June 20, 2018, at <http://ers.ehawaii.gov/wp-content/uploads/2012/02/ContribElected201205.pdf>).



can receive an annual pension of \$36,000. This is according to the contributory formula whereby 30 years x 2 percent multiplier = 60 percent x \$60,000 = \$36,000 annual pension.<sup>16</sup>

Most (68.6 percent)<sup>17</sup> of the members of the ERS are in the so-called hybrid plan, from which the average annual pension is \$26,136.<sup>18</sup> The average annual pension among all ERS plans is \$27,816.<sup>19</sup> However, because overtime and vacation pay are allowed as part of the calculation of final average earnings for employees hired before 2012, this can result in higher than average annual pensions for certain employees.

For example, in 2017, a Maui County police officer made a base salary of \$68,879, with \$52,713 in overtime pay and \$11,490 in other pay, for a total of \$133,083 that year. If this officer was hired before July 1, 2012, and retired with three years of similar pay, the pension formula would resemble the following: 30 years x 2.5 percent multiplier = 75 percent x \$133,083 = \$99,812 annual pension.<sup>20</sup>

This type of “pension spiking” resulted in \$20.5 million of extra pension costs for fiscal year 2017, according to the ERS.<sup>21</sup>

Pension spiking calculations are still allowed for members hired before July 1, 2012. Members hired after that date are no longer able to include overtime or vacation pay in their pension calculation, due to the passage in 2012 of Act 153.<sup>22</sup>

### C. Problems in the current system

Some might question why any current employee would want to opt out of the current system, but there are plenty of reasons to do so.

First, the current state pension plans make flashy promises but the unfunded liability means there is no guarantee that retirees will be able to cash out in the future, especially if the system goes bust.<sup>23</sup>

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<sup>16</sup> “Questions & Answers About Your Employees’ Retirement System Contributory Plan,” page 3.

<sup>17</sup> “Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2016” Employees’ Retirement System of the State of Hawaii, Jan. 2018, page 11 (accessed July 18, 2018, at <http://ers.ehawaii.gov/wp-content/uploads/2018/01/CAFR-2016.pdf>).

<sup>18</sup> Thomas Williams, “Navigating Risk at Hawaii’s Pension System: Presentation for the Grassroot Institute (of Hawaii), May 21, 2018, page 15 (accessed July 18, 2018, at [http://www.grassrootinstitute.org/wp-content/uploads/2018/07/Grassroot-Institute\\_Risk\\_Hnl\\_05-21-2018-1.pdf](http://www.grassrootinstitute.org/wp-content/uploads/2018/07/Grassroot-Institute_Risk_Hnl_05-21-2018-1.pdf)).

<sup>19</sup> Ibid.

<sup>20</sup> “Questions & Answers About Your Employees’ Retirement System Contributory Plan for Police Officers, Firefighters, and certain Public Safety Officers,” page 3.

<sup>21</sup> Data obtained from Employees’ Retirement System of the State of Hawaii via open records request submitted by the Grassroot Institute of Hawaii (accessed July 29, 2018 at [http://www.grassrootinstitute.org/wp-content/uploads/2018/07/Act-253\\_2012-Excess-Pension-Costs-2013-2017\\_Grassroot-HI-04-24-2018.pdf](http://www.grassrootinstitute.org/wp-content/uploads/2018/07/Act-253_2012-Excess-Pension-Costs-2013-2017_Grassroot-HI-04-24-2018.pdf)).

<sup>22</sup> Act 153, effective June 26, 2012. (accessed July 12, 2018, at [https://www.capitol.hawaii.gov/session2012/bills/GM1256\\_PDF](https://www.capitol.hawaii.gov/session2012/bills/GM1256_PDF)).

<sup>23</sup> Kent, “State pension woes,” Dec. 20, 2017.



Second, Hawaii's public retirement plans lack portability. Employees wishing to leave their jobs are unable to take their entire pensions with them. They can take the money they contributed to the fund, but they are unable to take the amounts their employer contributed on their behalf.

Third, new employees must work for the state for at least 10 years before they are vested in the plan. If they leave before being vested, they do not get the money that was allocated to them.

For example, an employee working three years for the state would have contributed \$10,000 into the fund, with the state contributing \$13,000 on his or her behalf. If the employee quit at three years, that employee would be eligible to keep the \$10,000 but would have to forfeit all of the \$13,000 contributed by the state, as well as any investment earnings on the total amount.

In addition, any money given back to the employee — in this example, the \$10,000 — would be subject to a 10 percent tax, unless the employee were to roll the money into another retirement account, such as an IRA.

If a new pension plan were offered, more portability for employees could be offered.

Hypothetically, a new plan could offer employees the ability to withdraw the total amount of their funds, if desired, including contributions made by the employer. The funds generally would be subject to taxation, though there are exceptions. For example, private 401(k) plans allow early withdrawal tax-free up to \$10,000 for first-time home buyers.

## D. Pension plan options

Offering new public pension plan options would be an ideal way to reduce the state's unfunded pension liabilities in the long run, especially since it wouldn't involve increasing taxes. There are many different types of plans that the state could create.

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### 1. Defined benefit plans

Defined benefit plans provide benefits based on a formula consisting of an employee's age, years of service, salary and a benefit multiplier, as discussed previously.

All of Hawaii's current plans are DB plans, but Hawaii policymakers could create a new DB plan formula with better risk-management provisions. Such a risk-managed DB plan could be built from the very beginning with a mechanism to prevent underfunding from spiraling out of control.

Wisconsin, for example, has a defined benefit plan that is funded at 99 percent, making it the most well funded public pension plan in the nation, according to the Pew Charitable Trusts.<sup>24</sup> The plan is unique in that it promises employees a minimum of pension benefits that can

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<sup>24</sup> "The State Pension Funding Gap: 2016," Pew Charitable Trusts, April 2018, page 17 (accessed July 13, 2018, at [http://www.pewtrusts.org/-/media/assets/2018/04/state\\_pensions\\_funding\\_gap\\_2016\\_final.pdf](http://www.pewtrusts.org/-/media/assets/2018/04/state_pensions_funding_gap_2016_final.pdf)).

increase if the plan's investments are strong, or fall back down to the minimum level if investments underperform. It does this by supplementing the plan with a post-retirement annuity adjustment, which provides extra monies when investment returns are higher than expected.<sup>25,26</sup> This feature of the Wisconsin plan is used instead of an annual cost-of-living adjustment.<sup>27</sup>

Another way the Wisconsin plan protects against debt is that it allows contribution rates for each employee and employer to be changed from year to year, based on the recommendation of the consulting actuary of the pension plan.<sup>28</sup>

Additionally, the defined benefit formula for Wisconsin employees can be changed for current members, but only for future service<sup>29</sup> — as seems to be allowed by Hawaii's Constitution, as discussed previously.

Finally, the benefits in the Wisconsin system are capped at 65 to 85 percent of the final average annual salary, which helps protect against pension spiking.<sup>30</sup> Hawaii caps that percentage at 80 percent for public safety workers.<sup>31</sup>

South Dakota's defined benefit public pension plan is 97 percent funded, which ranks as the second-highest funding nationally.<sup>32</sup> South Dakota's plan has many of the same features as Wisconsin's plan, such as the cap on benefits, and the ability to change the defined benefit formula for current members, but only for future service years.<sup>33</sup> Unlike Wisconsin, however, South Dakota's plan does have a cost-of-living adjustment, which varies from year to year.<sup>34</sup>

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## 2. Defined contribution plans

A defined contribution (DC) plan is a retirement vehicle that provides benefits based on the amount contributed to the fund. Both the employee and employer make regular fixed contributions into the retirement account owned by the employee. There is no possibility for unfunded liabilities in a DC plan, since the employee assumes all investment risk.

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<sup>25</sup> "Frequently Asked Questions, Annual Annuity Adjustments for the Core Fund and Variable Fund"; see "How does an annuity differ from a cost-of-living adjustment (COLA)?" Wisconsin Department of Employee Trust Funds, 2018 (Accessed July 16, 2018, at [http://etf.wi.gov/faq/annuity\\_adjustments.htm](http://etf.wi.gov/faq/annuity_adjustments.htm)).

<sup>26</sup> Justin Fox, "Wisconsin's Pension System Works for Everyone," Bloomberg Opinion, May 9, 2018 (accessed July 16, 2018, at <https://www.bloomberg.com/view/articles/2018-05-09/wisconsin-s-pension-system-works-for-taxpayers-and-employees>).

<sup>27</sup> *Ibid.*

<sup>28</sup> "Your Benefit Handbook," Wisconsin Department of Employee Trust Funds, October 2013, pages 4-5 (accessed July 13, 2018, at <http://etf.wi.gov/publications/et2119.pdf>).

<sup>29</sup> *Ibid.*, page 14.

<sup>30</sup> *Ibid.*, page 14.

<sup>31</sup> "Comprehensive Annual Financial Report," Employees' Retirement System of the State of Hawaii, pages 16 and 21 (accessed July 19, 2018, at <http://ers.ehawaii.gov/wp-content/uploads/2018/01/CAFR-2016.pdf>).

<sup>32</sup> "The State Pension Funding Gap: 2016," page 17.

<sup>33</sup> "South Dakota Retirement System Class A Handbook for Foundation Members Joining SDRS prior to July 1, 2017," South Dakota Retirement System, July 1, 2017 (accessed July 13, 2018, at <http://www.sdrs.sd.gov/docs/ClassAFoundationMemberHandbook.pdf>).

<sup>34</sup> *Ibid.*, page 14.

Benefits are based on the amount of money contributed to the fund, rather than the number of years worked, thereby eliminating the unfunded liability problem associated with DB plans.

DC plans are similar to 401(k) plans, and offer similar advantages over DB plans, such as shorter vesting periods, portability and a menu of investment options.

Most DC plans offer immediate vesting, and they are also portable, and can be taken by the employees to future jobs.

DC plans can be offered as a supplement to a traditional DB plan, or as the primary retirement plan. For example, Alaska and Oklahoma mandate that new public employees enter their DC plans.<sup>35</sup>

Most states offer DC plans, although many offer the plan only to certain workers, such as university employees (see Table 3).

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### 3. Hybrid plans

Hawaii has a hybrid plan for new workers only,<sup>36</sup> but it is hybrid in name only, since it functions as a DB plan and does not incorporate DC elements.

A true hybrid plans consists of two funds: a defined benefit account and a defined contribution account, packaged together as one plan. The employee and employer typically are required to contribute different percentages of the employee's salary toward each fund, depending on the plan.

For example, in the Tennessee hybrid pension plan, every year the employee contributes 5 percent of his or her salary to the DB account and 2 percent to the DC account, while the employer contributes 4 percent to the DB account and 5 percent to the DC account.<sup>37</sup>

The employee is paid out a defined benefit based on the annual final salary, and a defined contribution based on how much money was contributed to that account.

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<sup>35</sup> "PERS/TRS Defined Contribution Retirement Plan," Alaska Department of Administration, Retirement and Benefits, 2014 (accessed July 18, 2018, at [http://doa.alaska.gov/drb/dcrp/index.html#.W0\\_ZjdVKhhE](http://doa.alaska.gov/drb/dcrp/index.html#.W0_ZjdVKhhE)) and "What Kind of Plans Do I Have? OPERS Plan Descriptions," Oklahoma Public Employees Retirement System, Apr. 27, 2016 (accessed July 18, 2018, at <http://www.opers.ok.gov/description-of-plans>).

<sup>36</sup> "Questions & Answers About Your Employees' Retirement System Hybrid Plan," May 2012.

<sup>37</sup> "NASRA Issue Brief: State Hybrid Retirement Plans," National Association of State Retirement Administrators, December 2017, page 12 (accessed June 21, 2018, at <https://www.nasra.org/files/Issue%20Briefs/NASRAHybridBrief.pdf>) and "Hybrid Public Pension Plans: A primer," The Pew Charitable Trusts, April 2015 (accessed June 21, 2018, at [http://www.pewtrusts.org/~media/assets/2015/04/hybrid-public-pension-plans\\_brief.pdf](http://www.pewtrusts.org/~media/assets/2015/04/hybrid-public-pension-plans_brief.pdf)).

Employees upon retirement draw on the savings in their accounts through a variety of payout methods, including lump-sum payments, periodic withdrawals and the purchase of annuities.

Many hybrid plans require certain employee contribution rates. These rates differ from state to state. Ohio's hybrid plan for teachers, for example, mandates that the employees contribute 12 percent<sup>38</sup> of their annual salary to the DC portion. Virginia requires only 1 percent,<sup>39</sup> though it allows employees to raise their contributions to 4 percent, if desired. However, the lower contributions in Virginia's plan presumably also translates to lower benefits.

Similarly, the employer contribution rate of hybrid plans across the nation also varies from state to state. Some require employers to contribute a default amount regardless of the employees' contribution levels, while others require employers to match the employees' contributions.

The DC portion of many hybrid plans offer the same benefits as traditional DC plans, including portability, shorter vesting periods and a menu of investment options.

According to a report by the Pew Charitable Trusts:

“Hybrid plans allow employers to improve the predictability of their costs. Moreover, there are specific cases in which a well-designed hybrid plan can be expected to provide a better benefit than a traditional pension for the large number of workers who change jobs during their working lives — while also providing career employees with substantial retirement benefits.”<sup>40</sup>

The report also says:

“Shorter vesting periods and portable benefits for employees who change jobs help workers preserve the retirement funds they have accumulated if they leave their positions.”<sup>41</sup>

Hawaii's public retirement plans set vesting after 10 years of service for new employees, which means that employees who leave their jobs earlier are unable to receive retirement benefits.

A hybrid plan offering portability and shorter vesting periods could be more attractive to some current employees.

In addition, in most states with hybrid plans the defined-contribution portions are portable, allowing employees who leave their jobs to roll all of the money in their accounts into their new employers' defined-contribution plan or into individual retirement accounts.

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<sup>38</sup> “CO Plan,” State Teachers Retirement System of Ohio, 2018 (accessed June 7, 2018, at <https://www.strsoh.org/aboutus/impact/co.html>).

<sup>39</sup> “Plan 3 Basics,” 2017.

<sup>40</sup> “Hybrid Public Pension Plans, A primer” The Pew Charitable Trusts, April 2015, page 1 (Accessed July 16, 2018, at [http://www.pewtrusts.org/-/media/assets/2015/04/hybrid-public-pension-plans\\_brief.pdf](http://www.pewtrusts.org/-/media/assets/2015/04/hybrid-public-pension-plans_brief.pdf)).

<sup>41</sup> Ibid, page 10.

According to the Reason Foundation’s 2014 “Pension Reform Handbook,” portability is easier to design into a DC because “employer retirement contributions are paid directly into individual accounts under a DC plan,” so “it is easy for workers to take their accumulated funds with them when they change jobs”.<sup>42</sup>

The Reason Foundation report also states: “This portability is extremely appealing to employees in an age where the average worker switches jobs numerous times during his or her career.”<sup>43</sup>

**Table 2. States with hybrid public pension plans**

State	Pension Fund	Voluntary/Mandatory	Portability	Vesting
Arizona	Public safety	Voluntary	Portable	15 years
Colorado	Public safety	Voluntary	Portable	5 years
Georgia	State	Voluntary	Portable	10 years
Indiana	State	Mandatory	Portable	8 years for DB portion, immediate for DC portion
Michigan	State teachers	Mandatory DC, with voluntary hybrid	Portable	4 years for DB portion, immediate for DC portion
Ohio	State and local	Voluntary	Portable	5 years
Oregon	State and local	Mandatory	Portable	5 years for DB portion, immediate for DC portion
Pennsylvania	State and public school employees	Mandatory for new hires after 2018	Portable	3 years for both
Rhode Island	State and local	Mandatory for new hires after 2012	Portable	5 years for DB portion, immediate for DC portion
Tennessee	State and local	Mandatory for new hires after 2014, optional for local employees	Portable	5 years for DB portion, immediate for DC portion
Utah	State and local	Mandatory hybrid, with voluntary DC	Portable	4 years
Virginia	State and local	Mandatory for new hires after 2014	Portable	5 years for DB portion, immediate for DC portion
Washington	State and local	Voluntary	Portable	5 years for DB portion, immediate for DC portion

Source: “NASRA Issue Brief: State Hybrid Retirement Plans,” pages 7-12.

<sup>42</sup> Lance Christensen and Adrian Moore, “Pension Reform Handbook: A Starter Guide for Reformers,” Reason Foundation, July 2014, page 59 (accessed May 31, 2018, at [https://reason.org/wp-content/uploads/files/pension\\_reform\\_handbook.pdf](https://reason.org/wp-content/uploads/files/pension_reform_handbook.pdf)).

<sup>43</sup> Ibid, page 59.

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#### 4. Cash-balance plans

Cash-balance plans consist of DB elements with hypothetical individual employee accounts as in a DC plan. Members contribute money into a pooled fund, but their benefits are calculated based on how much money they contributed, a hypothetical guaranteed rate of interest, the number of years worked, and their age.

Cash-balance plans also typically offer to pay a lump-sum distribution to a participant upon retirement or termination of service.

For example, if a member of a cash-balance plan contributed 5 percent of his or her salary into a shared pool every year for 25 years, at a guaranteed annual interest rate of 4 percent, then retired at 60 years of age with \$200,000 in his account, the annual benefit would be \$15,935.

Some cash-balance plans, like those offered by Kansas<sup>44</sup> and Nebraska<sup>45</sup>, offer employees the choice to take an up-front lump sum at retirement. For example, an employee with \$200,000 in his or her hypothetical account could take \$60,000 as a lump sum upon retirement. However, that would leave only \$140,000 in the account from which to calculate the annual benefit, which would drop to only \$11,148.

Besides Kansas and Nebraska, other states that provide cash-balance plans are California,<sup>46</sup> Kentucky and Texas.

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#### 5. Choice-based plans

Choice-based plans are simply the above-mentioned plans, offered as a choice to employees.

For example, newly hired Michigan teachers are defaulted to the defined contribution plan, but have 75 calendar days in which to voluntarily opt-in the hybrid plan.<sup>47</sup> In Florida, new employees are auto-enrolled into a DB plan, and have an eight months to opt for the DC plan instead.<sup>48</sup>

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<sup>44</sup> "Retirement Benefits for KPERS 3 Members Hired January 2015 & After," Kansas Public Employees Retirement System, July 2016, pages 2-3 (accessed July 18, 2018 at [https://www.kpers.org/pdf/kpers3\\_retirementbenefits.pdf](https://www.kpers.org/pdf/kpers3_retirementbenefits.pdf)).

<sup>45</sup> "Defined Contribution and Cash Balance Plans," Nebraska Public Employees Retirement Systems, Presentation Aug. 5, 2015, page 7 (accessed July 18, 2018 at [http://www.ncsl.org/documents/summit/summit2015/onlineresources/Phyllis\\_Chambers\\_NPERS\\_Cash\\_Balance\\_Plan.pdf](http://www.ncsl.org/documents/summit/summit2015/onlineresources/Phyllis_Chambers_NPERS_Cash_Balance_Plan.pdf)).

<sup>46</sup> California provides cash-balance plans to only part-time educators and adjunct faculty.

<sup>47</sup> "Retirement Plan Election Guide," Michigan Public School Employees' Retirement System (accessed July 19, 2018 at <https://www.pickmiplan.org/michigan-pensionplus2/index.php>).

<sup>48</sup> "Time Lines-Choice Process" MyFRS: FAQs: Time Lines-Choice Process, 2018 (accessed July 16, 2018 at [https://www.myfrs.com/Faq\\_TimeLineChoice.htm](https://www.myfrs.com/Faq_TimeLineChoice.htm)).

The choice-based plans provide more opportunity for employees to select more sustainable retirement options.

## E. Components of alternate plan

Offering Hawaii's public employees a new defined benefit, defined contribution, hybrid, cash-balance or choice-based plan would give them more choice, portability and financial security, compared with their existing plans.

The new plans could be designed using best practices from other state plans, so as to mitigate risk as well as reduce, and perhaps eventually eliminate, the system's unfunded liability problem. Those best practices include:

- Providing more flexibility to alter the defined benefit formula for future service.
- Capping benefits at reasonable levels.
- Protecting against pension spiking.
- Eliminating overtime and vacation pay when calculating benefits for current hires for service yet to be rendered.
- Basing benefits on the amount of money contributed toward the plan, such as in a DC plan or cash-balance plan.
- Mitigating risk in hybrid plans by sharing the cost between a defined benefit and defined contribution plan.
- Offering a choice-based plan that automatically enrolled employees into the plan with the lowest risk of debt, but gives workers the choice to opt-in to a different model.
- Using "risk-free" assumptions about the rates of investment returns.

The new plan, or plans, could offer an attractive mix for current and new employees to voluntarily join — or be automatically enrolled, as many states now require. However, any previously acquired benefit for service years already worked would need to be honored.

Those benefits could include:

- Lower vesting requirements.
- More choice and control over investments.
- Portability.



- The option to take out a lump-sum at retirement.
- A boost in benefits when investments are greater than expected.
- Greater long-term financial security.

A well-designed plan that helps meet the needs of new and current workers could also help put the state on track toward greater financial sustainability, thereby keeping public pension promises in line with what taxpayers can afford.

## F. Pension plans across the nation

Table 3 is a list of public pension plans offered by all 50 states. Most states offer a mix of public pension plans for state retirees. Defined contribution plans are offered in many states; some states offer these plans to only state university employees.

**Table 3. Public pension plans offered by all 50 states**

State	Hybrid plan	Cash balance plan	Defined benefit plan	Defined contribution plan	Choice-based plan
Alabama			X		
Alaska			X	X	
Arizona	X§		X	X§	X§
Arkansas			X		
California		X	X		
Colorado	X§		X	X	X
Connecticut			X	X	X
Delaware			X		
Florida			X	X	X
Georgia	X		X	X	
Hawaii			X		
Idaho			X	X	
Illinois			X	X*	
Indiana	X		X		X
Iowa			X	X*	X*
Kansas		X	X		
Kentucky		X	X		
Louisiana			X		
Maine			X	X	
Maryland			X	X*	
Massachusetts			X	X*	
Michigan	X		X	X	X
Minnesota			X		
Mississippi			X		
Missouri			X		

Montana			X	X	X
Nebraska		X	X	X	
Nevada			X	X*	
New Hampshire			X		
New Jersey			X	X	
New Mexico			X	X*	
New York			X	X*	
North Carolina	X		X	X	
North Dakota			X	X	X
Ohio	X		X	X	X
Oklahoma			X	X	
Oregon	X		X	X*	
Pennsylvania	X		X	X	X
Rhode Island	X		X		
South Carolina			X	X	X
South Dakota			X		
Tennessee	X		X	X*	
Texas		X	X	X	
Utah	X		X	X	X
Vermont			X	X†	
Virginia	X		X	X*	
Washington	X		X	X*	X
West Virginia			X	X*	
Wisconsin			X		
Wyoming			X	X*	

\* Only for professors

† Only for exempt state employees and some municipal employees

‡ Only for part-time educators and adjunct faculty

§ Only for public safety personnel

Source: State public pension plan websites and publications found in appendix.

## G. Helpful guides

Designing a new public pension plan to meet the needs of current workers, new workers and taxpayers would need to be done carefully, to ensure that one group's needs do not create a problem for other groups.

Following helpful guides crafted by experts at The Pew Charitable Trusts<sup>49</sup> and the Reason Foundation<sup>50</sup> would help in the design of such plans.

<sup>49</sup> "Hybrid Public Pension Plans: A primer," April 2015.

<sup>50</sup> Christensen and Moore, "Pension Reform Handbook," July 2014.

### III — Additional reforms

Switching to new plans could fix fundamental problems in the current system, but there are additional reforms that also could help reduce the debt. None should be seen as cures to the system. Rather, they complement the broader policy changes intended to fix the fundamental problem of mismatching promised benefits with contributions made to the system.

Many of these reforms were proposed by Thom Williams of the ERS at a Maui County Council hearing on Dec. 12, 2017.<sup>51</sup>

Among them:

- Allow Hawaii's county governments to make advance taxpayer contributions into the fund.
- Allow the ERS to keep unclaimed money temporarily, instead of being forced to give the money to the state unclaimed property fund.
- Give the ERS more control over hiring and pay of investment professionals.
- Remove overtime from public pension calculations to prevent pension spiking.
- Reforms not mentioned in Williams' presentation include:
- Freeze the 2 percent annual cost-of-living increase for public pension members.
- Raise the retirement age, since the average lifespan in Hawaii is the longest in the United States.
- Create a trigger that would initiate a cost-reduction mechanism when the unfunded liability of a plan raised to a high level.

Many of these types of reforms could help save on costs and make the system more efficient, in turn helping Hawaii taxpayers and government employees save money as well.

Coupling these smaller reforms with the creation of well-designed new plans would help pay off the unfunded liability of the state's public pension system much quicker.

It remains essential, however, to implement the fundamental fixes, such as offering well-designed new plan options, for the unfunded liability problem to be resolved.

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<sup>51</sup> Maui County Council Budget and Finance Committee meeting, Dec. 12, 2017, YouTube (accessed May 31, 2018, at <https://www.youtube.com/watch?v=xxLYn1LzqiQ&feature=youtu.be&t=36m35s>).

## IV — Conclusion

Eliminating the debt associated with Hawaii's public pension system will require a careful retooling of the state's current retirement plans, similar to how policymakers have successfully addressed the issue in other states.

Doing so could provide more value for public employees while at the same time sparing Hawaii families from state and county tax increases that otherwise will be advocated as necessary to pay down the unfunded debt.

A new, well-designed plan implementing best practices from across the nation would provide healthier retirement packages to both new and current government employees, with benefits including attractive features such as lower vesting requirements and more portability.

Additional reforms such as reducing pension spiking and allowing counties to make advance tax contributions to the pension fund would help lower the future obligations of the plan.

Tackling Hawaii's unfunded public pension debt will require courage on the part of Hawaii's policymakers, but the benefits for Hawaii's economy and residents could be enormous, since it would free up for other priorities the taxpayer dollars now being used to bail out the pension system.

Restoring financial stability to its public pension program would enable Hawaii to keep its promises to its state and county employees — and take a burden off the shoulders of every Hawaii taxpayer.

Other states have successfully implemented creative plans to save their public retirement plans. Hawaii could do so as well.

## Appendix

State public pension websites and publications.

### **Alabama**

The Retirement Systems of Alabama website, 2013 (accessed July 19, 2018, at <https://www.rsa-al.gov/>).

### **Alaska**

Alaska Department of Administration website, 2014 (accessed July 19, 2018, at <http://doa.alaska.gov/drb/retirement/index.html#.W1EAQ9VKhhF>).

### **Arizona**

Arizona State Retirement System website, 2016 (accessed July 19, 2018, <https://www.azasrs.gov/content/new-and-prospective-members>).

“Public Safety Retirement System Matrix of Plan Provisions,” Public Safety Personnel Retirement System, April 16, 2017 (accessed July 19, 2018, at [http://www.psprs.com/uploads/sites/1/PSPRS\\_Matrix\\_of\\_Plan\\_Provisions\\_2017-06-16.pdf](http://www.psprs.com/uploads/sites/1/PSPRS_Matrix_of_Plan_Provisions_2017-06-16.pdf)).

Leonard Gilroy, Pete Constant and Anthony Randazzo “Arizona Enacts Groundbreaking Public Safety Pension Reform,” Reason Foundation, Feb. 16, 2016 (accessed July 19, 2018, at <https://reason.org/commentary/az-public-safety-pension-reform/>).

### **Arkansas**

Arkansas Public Employees’ Retirement System website, 2017 (accessed July 19, 2018, at <http://www.apers.org/>).

### **California**

California Public Employees’ Retirement System website, 2018 (accessed July 19, 2018, at <https://www.calpers.ca.gov/>).

California State Teachers’ Retirement System website, 2018 (accessed July 19, 2018, at <https://www.calstrs.com/cash-balance-benefit-program>).

### **Colorado**

“Statewide Hybrid Plan,” Fire & Police Pension Association of Colorado, August 2016 (Accessed July 19, 2018, at [http://www.fppaco.org/PDF/pubs-handouts/SWHP\\_8-25-16.pdf](http://www.fppaco.org/PDF/pubs-handouts/SWHP_8-25-16.pdf)).

Colorado Public Employees’ Retirement Association website, 2018 (accessed July 19, 2018, at <https://www.copera.org/members/pera-defined-contribution-dc-plan>).

### **Connecticut**

State of Connecticut Office of the State Comptroller Retiree Resources website, 2017 (accessed July 19, 2018, at <https://www.osc.ct.gov/rbsd/stateretire.htm>).

“State of Connecticut Retirement Plan Comparison,” State of Connecticut, December 2011 (accessed July 19, 2018, at [http://www.ct.gov/dors/lib/dors/\(pdf\)/hr/newhires/retirement\\_plan\\_comparison.pdf](http://www.ct.gov/dors/lib/dors/(pdf)/hr/newhires/retirement_plan_comparison.pdf)).

“State of Connecticut Alternate Retirement Program,” State of Connecticut, Jan. 1, 2008 (accessed July 19, 2018, at <https://www.osc.ct.gov/empret/arpinfo/ARPPPlanDoc2012Amend.pdf>).

“State of Connecticut Alternative Retirement Program,” TIAA-CREF (accessed July 19, 2018, at <https://www.osc.ct.gov/empret/tiaacref/program.htm>).

Marc Fitch, "Connecticut union deal creates a new retirement plan, but is it a "hybrid" in name only?" Yankee Institute for Public Policy, July 28, 2017 (accessed July 19, 2018, at <http://www.yankeeinstitute.org/2017/07/connecticut-union-deal-creates-a-new-retirement-plan-but-is-it-a-hybrid-in-name-only/>).

#### **Delaware**

State of Delaware Office of Pensions website, 2017 (accessed July 19, 2018, at [https://open.omb.delaware.gov/pensionPlans/StateEmp/sep\\_benefits.shtml](https://open.omb.delaware.gov/pensionPlans/StateEmp/sep_benefits.shtml)).

#### **Florida**

"Plan Comparison Chart," MyFRS Florida Retirement System, July 2017 (accessed July 19, 2018, at <https://www.myfrs.com/pdf/forms/plancomparison.pdf>).

"Welcome to the Florida Retirement System" MyFRS Florida Retirement System, January 2018 (accessed July 19, 2018, at <https://www.myfrs.com/pdf/forms/BCS.pdf>).

#### **Georgia**

"GSEPS FAQs," Employees' Retirement System of Georgia, Jan. 2018 (accessed July 19, 2018, at <https://www.myfrs.com/pdf/forms/BCS.pdf>).

"Employees' Retirement System (ERS) Old Plan, New Plan, GSEPS," Employees' Retirement System of Georgia (accessed July 19, 2018, at <https://www.ers.ga.gov/employees-retirement-system>).

#### **Hawaii**

Employees' Retirement System of the State of Hawaii website, 2018 (accessed July 19, 2018, at <http://ers.ehawaii.gov/>).

#### **Idaho**

"Choice 401(k) Plan," Public Employee Retirement System of Idaho, 2018 (accessed July 19, 2018, at [https://persi.idaho.gov/Members/choice\\_401k\\_plan.cfm](https://persi.idaho.gov/Members/choice_401k_plan.cfm)).

"PERSI Members," Public Employee Retirement System of Idaho, 2018 (accessed July 19, 2018, at <https://persi.idaho.gov/Members/index.cfm>).

#### **Illinois**

State Retirement Systems of Illinois website, 2002 (accessed July 19, 2018, at <https://www.srs.illinois.gov/>).

"Self-managed plan," State Universities Retirement System, 2014 (accessed July 19, 2018, at <https://surs.org/self-managed-plan>).

Benjamin VanMetre, "State Universities Retirement System Option Provides Model for Illinois Pension Reform," Illinois Policy, June 14, 2014 (accessed July 19, 2018, at <https://www.illinoispolicy.org/state-universities-retirement-system-option-provides-model-for-illinois-pension-reform/>).

#### **Indiana**

"My Choice: Retirement Savings Plan vs. PERF Hybrid Plan FAQs," Indiana Public Retirement System, 2018 (accessed July 19, 2018, at <https://www.in.gov/inprs/2759.htm#>).

#### **Iowa**

"Publications," Iowa Public Employees' Retirement System (accessed July 19, 2018, at <https://www.ipers.org/about-us/publications>).

"University Retirement Plans," The University of Iowa (accessed July 19, 2018, at <https://hr.uiowa.edu/retirement/university-plans>).

#### **Kansas**

“Active Members,” Kansas Public Employees’ Retirement System (accessed July 19, 2018, at <https://www.kpers.org/active/index.html>).

### **Kentucky**

“Members,” Kentucky Retirement Systems, 2017 (accessed July 19, 2018, at <https://kyret.ky.gov/Members/Pages/Members.aspx>).

### **Louisiana**

“Publications,” Louisiana State Employees’ Retirement System, 2018 (accessed July 19, 2018, at <https://lasersonline.org/resources/publications>).

### **Maine**

“Welcome to Main Public Employees’ Retirement System, A Guide for New Members,” Maine Public Employees’ Retirement System, October 2017 (accessed July 19, 2018, at <http://www.maineopers.org/PDFs/handbooks/Welcome%20booklet.pdf>).

### **Maryland**

“Optional Retirement Program,” Maryland State Retirement and Pension System, 2018 (accessed July 19, 2018, at <http://www.sra.state.md.us/Agency/Investment/OptionalRetirementProgram.aspx>).

“Benefits handbook,” Maryland State Retirement and Pension System, July 2011 (accessed July 19, 2018, at <http://www.sra.state.md.us/Participants/Members/Downloads/Handbooks/BenefitHandbook-Emp-Pen.pdf>).

### **Massachusetts**

“Defined Contribution Plans,” Mass.gov, 2018 (accessed July 19, 2018, at <https://www.mass.gov/orgs/defined-contribution-plans>).

“Benefit Guide for the Massachusetts State Employees’ Retirement System,” Massachusetts State Retirement Board, Aug. 2017 (accessed July 19, 2018, at <https://www.umass.edu/humres/sites/default/files/MA%20State%20Employees%20Retirement%20System%20Guide%202016.pdf>).

### **Michigan**

“Public School Retirement Plans,” Michigan Office of Retirement Services, 2018 (accessed July 19, 2018, at <https://www.michigan.gov/ors/0,4649,7-144-6182---,00.html>).

Eric Boehm, “Michigan’s Pension Reforms Are Kind of a Big Deal,” Reason Hit & Run Blog, June 30, 2017 (accessed July 19, 2018, at <http://reason.com/blog/2017/06/30/michigans-pension-reforms-are-kind-of-a>).

### **Minnesota**

“MSRS Pension Plans,” Minnesota State Retirement System, 2017 (accessed July 19, 2018, at <https://www.msrs.state.mn.us/pension-plans>).

### **Mississippi**

“A New Member’s Guide, Welcome to PERS,” Public Employees’ Retirement System of Mississippi, July 1, 2016 (accessed July 19, 2018, at [http://www.pers.ms.gov/Content/RetirementGuides/New\\_Member\\_Guide.pdf](http://www.pers.ms.gov/Content/RetirementGuides/New_Member_Guide.pdf)).

### **Missouri**

Missouri State Employees’ Retirement System website, 2018 (accessed July 19, 2018, at <https://www.mosers.org/>).

“Publications,” Public School & Educational Employee Retirement Systems of Missouri, 2014 (accessed July 19, 2018, at <https://www.psrps-peers.org/PEERS/Resources/Publications>).

### **Montana**

“New PERS Members,” Montana Public Employee Retirement Administration (accessed July 19, 2018, at <https://mpera.mt.gov/MEMBERS/New-PERS-Members>).



"Member Handbook for the Defined Benefit Retirement Plan," Montana Public Employees' Retirement System (accessed July 19, 2018, at <https://mpera.mt.gov/Portals/175/documents/Handbooks/PERS.pdf>).

### **Nebraska**

"About," Nebraska Public Employees' Retirement Systems, 2001 (accessed July 19, 2018, at <https://npers.ne.gov/SelfService/public/aboutus/aboutus.jsp>).

### **Nevada**

Public Employees' Retirement System of Nevada, 2018 (accessed July 19, 2018, at <https://www.nvpers.org>).

"Defined Contribution Retirement Plan Alternative," Nevada System of Higher Education (accessed July 19, 2018, at <https://nshe.nevada.edu/administration/retirement-program/defined-contribution-retirement-plan-alternative-rpa>).

### **New Hampshire**

New Hampshire Retirement System website, 2018 (Accessed July 19, 2018 at <https://www.nhrs.org/>).

### **New Jersey**

"Defined Contribution Retirement Program," New Jersey Division of Pensions & Benefits, May 2018 (accessed July 19, 2018, at <https://www.state.nj.us/treasury/pensions/documents/factsheets/fact79.pdf>).

"Funding the Pension System," New Jersey Division of Pensions & Benefits, 2018 (accessed July 19, 2018, at <https://www.state.nj.us/treasury/pensions/pension-funding.shtml>).

### **New Mexico**

Public Employees' Retirement Association of New Mexico website (accessed July 19, 2018, at <http://www.nmpera.org/>).

"Alternative Retirement Plan for University and College Faculty," New Mexico Educational Retirement Board, 2012 (accessed July 19, 2018, at [https://www.nmerb.org/alternativeretirementplan\\_hand.html](https://www.nmerb.org/alternativeretirementplan_hand.html)).

### **New York State**

"Membership in a Nutshell," Office of the New York State Comptroller, Oct. 2017 (accessed July 19, 2018, at <http://www.osc.state.ny.us/retire/publications/vo1878.php>).

"New York State Voluntary Defined Contribution Program, Summary Plan Description," TIAA-CREF, July 2015 (accessed July 19, 2018, at [https://www.tiaa.org/public/pdf/Voluntary-Defined-Contribution-Plan-SPD.pdf?\\_ga=2.106798023.555077989.1531875678-889769807.1531875678](https://www.tiaa.org/public/pdf/Voluntary-Defined-Contribution-Plan-SPD.pdf?_ga=2.106798023.555077989.1531875678-889769807.1531875678)).

### **North Carolina**

"Get the Facts," North Carolina Pension System (accessed July 19, 2018, at <https://www.nctreasurer.com/ret/Active%20Employees/PensionFactSheet.pdf>).

"The NC 401(k) Plan," Prudential Retirement, January 2018 (accessed July 19, 2018, at [http://www3.prudential.com/email/retirement/IMFPWeb/hosted\\_websites/cs/ncplans/pdfs/nc401k-plan/0215620-00009-00.pdf](http://www3.prudential.com/email/retirement/IMFPWeb/hosted_websites/cs/ncplans/pdfs/nc401k-plan/0215620-00009-00.pdf)).

### **North Dakota**

"Active Members" North Dakota Public Employees' Retirement System, 2017 (accessed July 19, 2018, at <https://ndpers.nd.gov/active-members/>).

"Defined Contribution (DC) Retirement Plan," North Dakota Public Employees' Retirement System, August 2017 (accessed July 19, 2018, at <https://ndpers.nd.gov/image/cache/dc-plan-handbook.pdf>).

### **Ohio**

"How to Select Your Plan," Ohio Public Employees' Retirement System, 2018 (accessed July 19, 2018, at <https://www.opers.org/members/plan-select/index.shtml>).

## **Oklahoma**

"Description of Plans," Oklahoma Public Employees' Retirement System, Apr. 27, 2016 (accessed July 19, 2018, at <http://www.opers.ok.gov/description-of-plans>).

## **Oregon**

"Active Members," Oregon Public Employees' Retirement System (accessed July 19, 2018, at <https://www.oregon.gov/pers/MEM/Pages/index.aspx>).

"Pension," Oregon State University, 2018 (accessed July 19, 2018, at <https://hr.oregonstate.edu/orientation/benefits-overview/unclassified-50-fte-benefits/pension>).

## **Pennsylvania**

Pennsylvania State Employees' Retirement System website (accessed July 19, 2018, at <http://sers.pa.gov/>).

Greg Mennis, "Pennsylvania's Historic Pension Reforms," The Pew Charitable Trusts, Dec. 14, 2017 (accessed July 19, 2018, at <http://www.pewtrusts.org/en/research-and-analysis/articles/2017/12/14/pennsylvanias-historic-pension-reforms>).

## **Rhode Island**

"An Employee's Guide to Understanding the Rhode Island Retirement Security Act," Employees' Retirement System of Rhode Island, January 2012 (accessed July 19, 2018, at [https://d10k7k7mywg42z.cloudfront.net/assets/4f2feb51dabe9d2cb600fa49/final\\_rirsaguide\\_january2012.pdf](https://d10k7k7mywg42z.cloudfront.net/assets/4f2feb51dabe9d2cb600fa49/final_rirsaguide_january2012.pdf)).

"Pension Reform Case Study: Rhode Island," Reason Foundation, January 2014 (accessed July 19, 2018, at [https://reason.org/wp-content/uploads/files/pension\\_reform\\_rhode\\_island.pdf](https://reason.org/wp-content/uploads/files/pension_reform_rhode_island.pdf)).

## **South Carolina**

"State Optional Retirement Program," South Carolina Public Employee Benefit Authority, 2018 (accessed July 19, 2018, at <https://www.peba.sc.gov/sorp.html>).

## **South Dakota**

South Dakota Retirement System website, 2016 (accessed July 19, 2018, at <http://sdrs.sd.gov/>).

## **Tennessee**

"Tennessee Consolidated Retirement System," Tennessee Department of Treasury, 2016 (accessed July 19, 2018, at <http://treasury.tn.gov/tcrs/>).

"Your State of Tennessee Hybrid Pension Plan," State of Tennessee (accessed July 19, 2018, at [http://www.scsk12.org/employee/files/2014/oct/Hybrid\\_Plan\\_Flier\\_v2.pdf](http://www.scsk12.org/employee/files/2014/oct/Hybrid_Plan_Flier_v2.pdf)).

"Retirement Plans," The University of Tennessee (accessed July 19, 2018, at <https://hr.tennessee.edu/benefits/retirement/plans/>).

## **Texas**

"Retirement for Active Employees," Employees' Retirement System of Texas, 2018 (accessed July 19, 2018, at <https://ers.texas.gov/Active-Employees/Retirement>).

## **Utah**

"New Members," Utah Retirement System, 2017 (accessed July 19, 2018, at <https://www.urs.org/NewMembers/index>).

## **Vermont**

"VSERS Defined Contribution Plan," State of Vermont Office of the State Treasurer, 2018 (accessed July 19, 2018, at <http://www.vermonttreasurer.gov/content/retirement/vsersp-plans/DC>).

## **Virginia**

"Publications," Virginia Retirement System, 2018 (accessed July 19, 2018, at <https://www.varetire.org/publications/index.asp>).

"Hybrid Retirement Plan Handbook for Members," Virginia Retirement System, July 2018 (accessed July 19, 2018, at <https://www.varetire.org/pdf/publications/hybrid-handbook.pdf>).

### **Washington**

"Plan Choice," Washington State Department of Retirement Systems, 2017 (accessed July 19, 2018, at <http://www.drs.wa.gov/choice/choice.htm>).

"WSU Retirement Plan," Washington State University (accessed July 19, 2018, at <https://hrs.wsu.edu/wsu-retirement-plan/>).

### **West Virginia**

"Teachers' Defined Contribution Retirement System," West Virginia Consolidated Public Retirement Board, 2018 (accessed July 19, 2018, at <https://www.wvretirement.com/TDC.html>).

### **Wisconsin**

"Wisconsin Retirement System Benefits Summary," Wisconsin Department of Employee Trust Funds (accessed July 19, 2018, at [http://etf.wi.gov/members/benefits\\_wrs.htm](http://etf.wi.gov/members/benefits_wrs.htm)).

### **Wyoming**

"Good News Ahead," Wyoming Retirement System (accessed July 19, 2018, at <http://retirement.state.wy.us/-/media/Files/Pension/WRS-Pension-Intro.ashx>).

"University of Wyoming 401(a) Defined Contribution Retirement Plan," University of Wyoming, 2018 (accessed July 19, 2018, at <https://www.tiaa.org/public/tcm/wyoming/retirement-benefits/plan1>).