Research Summary

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How Is the State Dealing With the Shortfall in Pension Systems?

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> *State pension contributions represent the single largest cost driver in the state's operating budget.*
> **Sean Parnell, Alaska governor, 2013**

In early 2003, financial analysts gave Alaska state officials some very bad news: the two largest pension systems for public employees wouldn't have the money to cover all the expected future costs of pensions and health-care benefits for state and local employees when they retired. This shortfall—called the unfunded liability—had been caused by, among other things, several years of poor returns on fund investments and soaring health-care costs.

Public pensions are protected in Alaska's constitution, and the state has already contributed nearly $7 billion to reduce the shortfall. How much more it will need to pay is uncertain, since it depends on many things that are hard to predict. But most analysts believe it will be billions more. That poses a major challenge for the state—which has been dealing with big budget deficits—and for local governments, which need to help pay the unfunded liability but have far smaller financial reserves than the state.

The next few pages summarize a more detailed paper by the same author, describing what the state has done so far, and options it might consider as time goes on. (See box on page 5.)

It's worth saying, before we go on, that a dozen other states also have shortfalls in their pension systems—it's a problem in the news around the country.

What are the Retirement Systems?

Most Alaska state and local government workers are in the Public Employees' Retirement System (PERS) or the Teachers' Retirement System (TRS).[1] But there is a big difference for those hired before and after July 2006.[2]

Until mid-2006, the retirement systems offered new employees defined benefits: guaranteed pensions and other specific benefits. But after that, to save money by transferring investment risks from the state to employees, the state changed to defined contribution-plans. Retirees and existing workers would keep the benefits they had, but new employees would have individual retirement accounts instead, funded with a share of their wages and an employer contribution (see box, page 2).

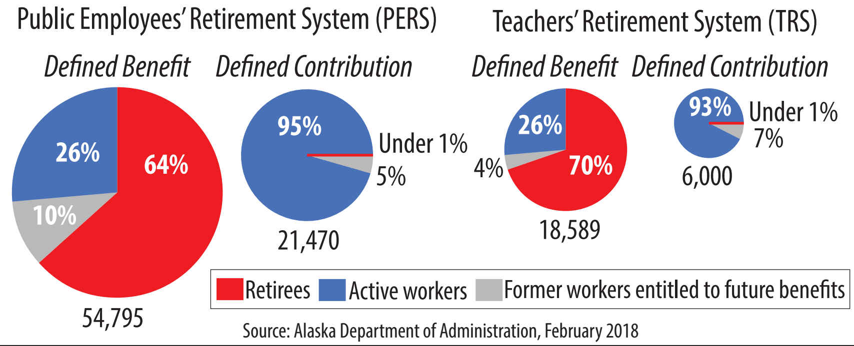
Where is the Shortfall?

The unfunded liability in PERS and TRS is in pension obligations for people hired before mid-2006—about 55,000 people in PERS and 18,600 in TRS (Figure 1). Most of those are retired—64% in PERS and 70% in TRS. The rest are either still working, or worked long enough to qualify for future benefits. About 21,500 of those in PERS and 6,000 in TRS have defined-contribution plans.[3]

What Has the State Contributed So Far?

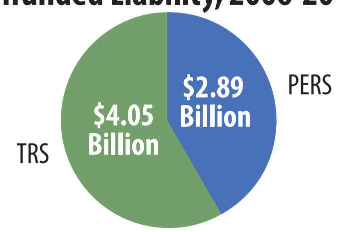
From fiscal year 2006 through 2018 (the current year), the state has contributed $6.9 billion for unfunded liability—about $4 billion to TRS and $2.9 billion to PERS (Figure 2). These special payments—called state assistance or additional state contributions—are on top of the regular employer contributions the state makes to pension systems. They cover part of the unfunded liability attributed to the state, as well as part of the liability attributed to local governments—which the state agreed to do, in 2008 (see Timeline, pages 3 and 4).

Figure 1. Status of PERS/TRS Members, 2017



Source: Alaska Department of Administration, February 2018

Figure 2. State Contributions for Unfunded Liability, 2006-2018



Source: Alaska Department of Administration, February 2018

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Northrim Bank

How Much More Might the State Need to Contribute?

We don't know how much more the state might need to pay, to eliminate the unfunded liability. Estimates vary with different methods and assumptions. Figure 3 shows a sample of recent projections—from \$6.6 billion to \$34 billion. But the most relevant figure may be \$10.9 billion: the amount the state's consulting actuary projects the state will need to pay over the next 20 years, under the state's plan to pay off the liability by 2039. (The box on page 3 defines actuarial valuation, and the Timeline section describes the pay-off plan.)

Figure 3. Methods and Assumptions Have a Big Effect: Recent Projections of PERS/TRS Unfunded Liability

American Legislative Exchange Council[a]	\$33.9 billion
State's consulting actuary[b]	\$10.9 billion
Alaska Department of Administration[c]	\$6.6 billion

[a]Similar to method in note b, but assuming just a 2% annual return on investments. [b]This is the total state assistance actuaries project will be needed, from fiscal years 2019 through 2039, under a plan the state has adopted to eliminate the unfunded liability. Assumes 8% annual investment returns. [c]Amount needed to pay projected unfunded liability, if it were all paid today.

What Does Alaska's Constitution Say?

Alaska's constitution says state and local governments have a contractual obligation to honor benefits they offer people in public retirement systems. Additionally, both the state and federal constitutions say states can't pass laws that impair contractual obligations (although federal courts have allowed for some exceptions).[4]

Those provisions mean that while the state was able to change from pensions to individual retirement accounts for future employees, it could not change benefits for existing employees or retirees.

Who Are the PERS and TRS Employers?

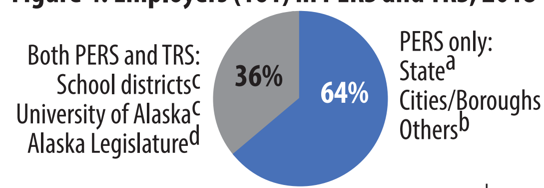
The state government manages PERS and TRS for all the participating employers. State agencies and many local governments participate in PERS, as well as a few others —regional housing authorities, for example. School districts and the University of Alaska participate in both PERS and TRS, because their employees include not only teachers but people in many other kinds of jobs (Figure 4).

What Caused the Shortfall?

In 2005, the finance committee of the state senate[5] listed things contributing to the shortfall in the public-pension funds, including:

> *Membership in employee retirement systems of the State or its political subdivisions shall constitute a contractual relationship. Accrued benefits of these systems shall not be diminished or impaired.*
> **Alaska Constitution, Article XII, Section 7**

Figure 4. Employers (161) in PERS and TRS, 2018



[a]Employees of the Alaska Department of Education who are teachers are in TRS. [b]Others include regional housing authorities and city-owned hospitals. [c]School districts and UA participate in both PERS and TRS, because their employees include teachers as well as those in other kinds of jobs. [d]Legislators who are teachers can choose to be in TRS.

Source: Alaska Division of Retirement and Benefits, *TRS and PERS Participating Employers*

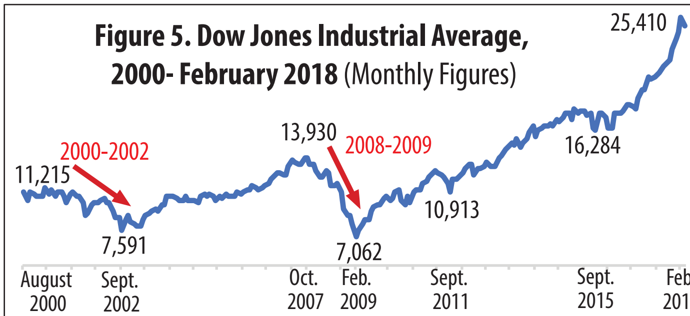
• A sharp stock market decline from 2000 through 2002 caused big investment losses. (See Figure 5.)

• Health-care costs soared in the early 2000s—and Alaska has the highest health-care costs in the country.[6] This growth hit the retirement systems hard, because they provided health-care coverage for retirees. Figure 6 shows that the average monthly cost of coverage for a PERS employee was about 15 times more in 2004 than in 1977.

• Public employees were retiring earlier and living longer than financial analysts had assumed, adding to pension-system costs.

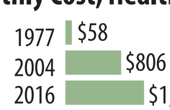
The state also said that the actuary working for the state at the time made serious errors in projecting pension and health-care liabilities.

Figure 5. Dow Jones Industrial Average, 2000- February 2018 (Monthly Figures)



Source: Yahoo Finance

Figure 6. Average Monthly Cost, Health Care for PERS Employee



Sources: *Alaska Budget Report*; Alaska Department of Administration

What are Defined-Benefit and Defined-Contribution Plans for Alaska Public Employees?

• ***Defined benefit:*** A pension of a guaranteed amount—based on how long an employee worked and pay level—and specific health-care coverage. While employees are working, both employees and employers pay a percentage of employees' pay into a pension fund. The state invests the money, with the goal of earning enough to cover future pension and health-care costs. The state carries the risk that the fund won't be big enough to cover the costs—as has happened in Alaska and other states.

• ***Defined contribution***: An individual retirement savings account. While working, employees pay a percentage of their pay into their accounts, and employers make a matching payment. Employees decide how to invest the money, under options the state offers. How much employees have when they retire varies, depending on on how much money went into the account and how much the investments earned. In this plan, the employees themselves carry the investment risks.

What is An Actuarial Valuation?

An actuarial valuation is a forecast financial analysts make of the probable future costs of pension and retirement benefits (like health-care coverage), and the contributions to pension funds needed to pay for those benefits.

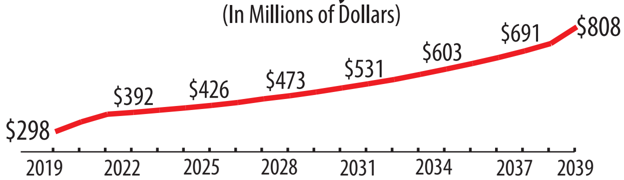
Such valuations are very hard to do, because they require making many economic and demographic assumptions, including assumptions about how much fund investments will earn, what the inflation rate will be, how much workers' pay will increase, at what age workers will retire, and how long they are likely to live. The accuracy of the valuation depends on the accuracy of these and other assumptions.[7]

What About Now?

In 2014 the state adopted a plan (see Timeline) to pay all the unfunded liability by 2039. Under the consulting actuary's current projections, the state would need to make very substantial payments every year to meet that goal—and with payments increasing over time: $298 million in 2019 but $808 million in 2039.[8] (Figure 7).

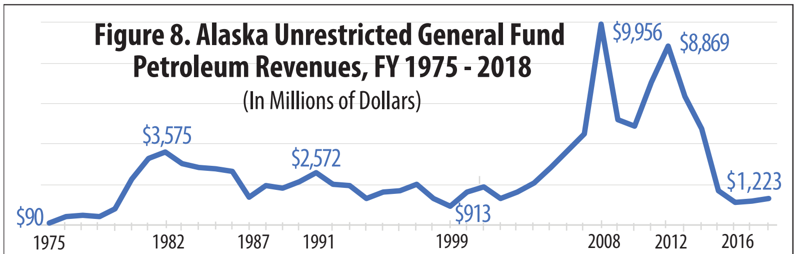
To put those numbers in context, the state's projected General Fund revenues in the near future are in the range of $2 billion a year.[9] The state has faced big budget deficits for several years, because oil revenue—its main source of general operating money—has shrunk to a small fraction of what it once was (Figure 8).

Figure 7. Current Actuarial Projections of State Assistance Needed to Fully Fund PERS and TRS*
(In Millions of Dollars)



*Author's calculations of combined state assistance needed for PERS and TRS, from Conduent *Actuarial Valuation Reports* for PERS and TRS, as of June 30, 2016 (published May 2017).

Figure 8. Alaska Unrestricted General Fund Petroleum Revenues, FY 1975 - 2018
(In Millions of Dollars)



Source: Alaska Legislative Finance, September 2017

How Large Are Pension System Assets?

So far we've talked about the shortfall in what state and local governments owe in future pension obligations. But the assets in the pension funds are nevertheless considerable—valued at nearly $25 billion by the state's actuary in 2016 (Figure 9).[10]

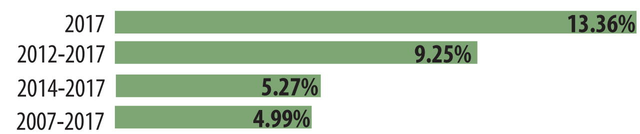
How much those pension funds earn is critical to how large the unfunded pension liability is over time. In projecting that liability, the state and its consulting actuary currently assume the funds will earn 8% a year.[11]

Figure 10 shows, for various periods in the past decade, how much the funds in fact earned. In 2017, a year of big stock market increases, the funds earned more than 13%, and for the period 2012-2017 they earned 9.25%. But over the entire decade, annualized earnings were about 5%.[12]

Figure 9. How Big are Assets of PERS and TRS Funds ?
(2016 Actuarial Valuation*)

*Conduent Human Resource Services, 2016 actuarial valuations of pension assets. Actuarial valuations smooth out year-to-year variations in the market value of the assets, to reflect their probable value based on long-term investment returns.

Figure 10. Annual Pension-Fund Investment Returns, 2007-17
(Average of PERS and TRS Returns)



Source of Data: Alaska Department of Administration, February 2018

Timeline: State Actions to Balance Pension Systems

A number of things have happened since 2003, when state officials learned about the shortfall in the pension funds. Below we summarize the major events, which are described and annotated in the detailed paper that is the basis for this summary (see page 5).

2005: The legislature changes the law, so public employees hired after June 2006 have defined-contribution retirement plans, instead of defined-benefits. (See box, page 2.) The legislature also replaces existing retirement management boards with a new board, the Alaska Retirement Management Board, to manage the pension systems. The board sets contribution rates for PERS and TRS employers and decides how to invest pension assets.

2006: The state begins making additional contributions to the pension funds, to reduce the projected shortfall in amount needed to pay future pension costs—the unfunded liability. The new PERS/TRS management board sharply increases rates local governments pay, also to reduce the unfunded liability. Local governments protest to the legislature.

2007: The management board sues the actuary working for the state when the shortfall was discovered, alleging actuarial errors and misconduct. The state had fired the actuary in 2006,[13] and the lawsuit settled in 2010, with the actuary agreeing to pay $500 million to PERS and TRS.

2008: Legislation caps local-government contributions to pay down the unfunded liability at 22% of payroll for PERS employers and 12.56% for TRS employers, and says the state will pay the difference between those contributions and the amount financial analysts project is needed.

2014: The legislature agrees to a proposal by the governor: to add $3 billion to the PERS and TRS systems—by far the largest contribution to date to pay down the unfunded liability. At the same time, the legislature adopts a plan for paying off the remaining unfunded liability: it directs the pension management board to extend the period for paying off the unfunded liability by nine years, to 2039, and to use the "level-percent of pay" method for calculating annual payments.

That level-percent of pay method uses actuarial calculations about the size of future payrolls, and determines annual payments based on a fixed (or level) percent of the projected payroll. The board had been using the "level-dollar" method, making equal payments every year. The level-percent of pay method reduces annual payments in the short-run, but the state's current actuary has said that changing to the level-percent of pay method and stretching the payments over an additional nine years will cost the state and other PERS/TRS employers billions of dollars more over the long run.[14]

2015: Alaska's attorney general says the state is not legally responsible for the unfunded pension liability of PERS and TRS employers other than the state—mostly local governments and school districts—despite the 2008 legislation (discussed above) and the state's historical practice.

2016: Bills are introduced in the legislature to shift more of the costs of unfunded pension liability to local governments and school districts—but the legislature doesn't adopt any changes.

What Other Options Might the State Consider?

It's likely that the serious and continuing financial squeeze on the state will over time lead policymakers to consider ways of stemming the flow of money going to unfunded pension liability. Below we briefly summarize some of the possible options, based on a review of legislative history and literature about unfunded pension liability. It's important to say we're not endorsing or opposing any of these options—just describing them.

Pension Obligation Bonds

The legislature has considered selling bonds to pay off some of the unfunded liability—the idea being that the state would take on debt at relatively low interest rates, and pay it off with money from better-paying investments. In 2008 the legislature did agree to allow the sale of pension bonds—but shelved the plan following the stock market crash later that year.[15] More recently, in 2016, the governor again considered selling such bonds, but dropped the idea when legislators said it was too risky.[16]

Bankruptcy

One time-honored way for U.S. debtors to deal with creditors is declaring bankruptcy and having the debts re-organized—and often reduced—in a court-approved plan. But federal bankruptcy law bars states from filing for bankruptcy, and some scholars argue that the U.S. Constitution does as well.[17]

Federal law does, however, give states authority to allow municipalities to declare bankruptcy. If Alaska allowed municipalities to declare bankruptcy, bankruptcy judges would decide whether, and how much, to reduce various kinds of debt—including unfunded pension liability. If courts decided to reduce pension liability, pension cuts would likely follow.[18]

Shift More Costs to Local Governments

As we discussed earlier, the legislature has considered but not yet approved shifting more of the costs of unfunded liability to local governments. Such cost-shifting will almost inevitably come up again.

Federal Bailout

More than a dozen other states have under-funded pension systems, and some commentators have raised the possibility of the federal government stepping in to help—perhaps through a federal pension reform commission that could provide bridge financing, or guarantee pension restructuring bonds. But as of now, such federal assistance appears unlikely.

Benefit Reductions Through Collective Bargaining

Public employee unions could be allowed to bargain away benefits in negotiations with the state—if they decided bargaining over reductions was better than the alternatives. This option might get more attention in future years. But it's hard to see how it would work with PERS or TRS beneficiaries—including retirees— who were not union members.

Amending Alaska's Constitution

An obvious question is whether Alaska's constitutional protections for pensions could be changed so existing pension benefits could be cut. The answer is not simple.

Alaska's Supreme Court has broadly interpreted the constitutional protections, but has also said that "reasonable modifications" to benefits are permissible, as long as changes that disadvantage employees are accompanied by "comparable new advantages."[19] Also, the court has noted its general agreement that modifications may be made to keep a pension system "flexible to permit adjustments in accord with changing conditions and at the same time maintain the integrity of the system."[20]

In practice, many questions would surround a constitutional amendment—including how it would affect benefits of those who entered the system at different times, and whether it would affect benefits only from the time it was enacted, or retroactively.

Conclusions

The large unfunded liabilities of PERS and TRS will mean continuing controversy. The precise amount of those liabilities is uncertain: depending on investment returns and other factors, they could be larger or smaller. But in any case they will be substantial, and they need to be considered in any discussion of Alaska's ongoing fiscal challenge.

How much the state should continue to pay of the unfunded liability of local governments will likewise be up for discussion. The state may also attempt to avoid or re-allocate the obligation to pay the unfunded liability. Some such efforts may be legally tricky.

The state might also borrow ideas from other states facing large shortfalls in retirement funds. Analysts have described many policy options, some of which we discussed here.

One thing is certain: this problem isn't going away any time soon.

About the Author

Cliff Groh is a lawyer and writer who has lived in Alaska all his life. He was an assistant district attorney for the Alaska Department of Law, and worked as in-house or outside counsel for more than a half-dozen local governments. He was special assistant to the Alaska Commissioner of Revenue, as well as a legislative staffer. He is also a Tier I PERS beneficiary who has drawn a pension since 2006.

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History and Options Regarding the Unfunded Liabilities of Alaska's Public Employees' and Teachers' Retirement Systems

This summary is based on a more detailed paper (title above) by the same author. To see the paper, go to www.iser.uaa.alaska.edu and search Publications, by author name or title of paper.

Endnotes

1. Alaska also has smaller public-pension funds: National Guard and Naval Militia Retirement System; Judicial Retirement System; and Elected Public Official Retirement System.
2. There are also differences among those hired before 2006. Pre-2006 PERS employees are divided into three tiers, depending on when they were hired. In TRS, pre-2006 employees are divided into two tiers. Those in the later tiers have more limited benefits.
3. Data from Alaska Department of Administration, PERS and TRS 2018 Update. Presented to Alaska Senate Finance Committee, February 14, 2018.
4. Alaska Constitution, Article I, Section 15. ; U.S. Constitution, Article I, Section 10, Clause 1.; United States Trust Co. *v*. New Jersey, 431 U.S. 1, 15-21 (1977).
5. Alaska State Legislature, Senate Finance Committee, "Retirement Security Act [:] SB 141," March 16, 2005, p. 13.
6. Anchorage Economic Development Corporation, 2016, Alaska Cost of Living Index.
7. For a more detailed explanation of actuarial valuations, see, for example, Investopedia, "Actuary," at http://www.investopedia.com/terms/a/actuary.asp.
8. Conduent Human Resource Services, State of Alaska PERS and TRS Actuarial Valuation Reports As of June 30, 2016, May 2017.
9. Alaska Department of Revenue, *Revenue Sources Book*, Spring, 2017, p. 10.
10. Conduent Human Resource Services, 2016 actuarial valuation, as reported By Alaska Department of Administration (see note 3).
11. Conduent, State of Alaska Public Employees' Retirement System, Actuarial Valuation Report As of June 30, 2016, May 2017, p. 39.
12. Alaska Department of Administration; see note 3.
13. *The New York Times*, Gretchen Morgenson, "Mercer's Little Alaska Problem," December 19, 2009.
14. David Slishinsky, Buck Consultants, quoted in *Alaska Dispatch News*, Pat Forgey, "Alaska's looming retirement fund problem shifts to new administration," December 10, 2014.
15. Senate Committee Substitute for Committee Substitute for House Bill 13 (Finance), enrolled as Chapter 35 of the Session Laws of Alaska 2008.
16. Alaska Public Radio Network, Andrew Kitchenman, "Walker puts the brakes on issuing bonds to pay pensions," October 25, 2016.
17. See, for example, *Capitol Ideas*, Jennifer Burnett, "3 Questions on State Bankruptcy," January/February 2015.
18. In Michigan, which has a constitutional provision similar to Alaska's, a bankruptcy judge dealing with Detroit's bankruptcy ruled, "The state constitutional provisions prohibiting the impairment of contracts and pensions impose no constraint on the bankruptcy process." (Opinion Regarding Eligibility, In re: City of Detroit, Michigan, Debtor, U.S. Bankruptcy Court, Eastern District of Michigan, Southern Division, December 5, 2013, p. 74).
19. Duncan *v.* Retired Public Employees of Alaska, Inc., 71 P.3d 882, 886 (Alaska 2003).
20. Duncan *v.* Retired Public Employees of Alaska, Inc., 71 P.3d 882, 889 n.26 (Alaska 2003), quoting Allen v. City of Long Beach, 287 P.2d 765, 767 (Cal. 1955).

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