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Subject: Looking Ahead: Washington State Public Pension Costs

As state budgets across the nation continue to be squeezed by the economic and/or political climate, it is important to analyze and prepare for potential budgetary outcomes for public higher education. To do this, the sector must be placed in the context of other state expenditures, and this brief is the first in a series to provide summary information about major categories of state spending that could impact higher education.

Issue Overview:

Ongoing **funding for both open and closed Washington State public pension plans currently consumes around 2.7 percent of the state budget.** However, this percentage may increase considerably because the current economic crisis produced a **major decline in the market value of pension assets (over 22 percent in 2009 alone)**, and fueled growing concern that taxpayers may be at risk for a costly bailout. The major fears in Washington, and across the nation, include:

- Necessity of large increases in state funding to keep ‘funded status’ (assets as a percent of obligations) healthy.
- Possibility of ‘Pay-Go’ status where obligations must be paid directly from a biennial budget as they come due.
- Possibility that current state estimates of funded status might be significantly understated due to inaccurate assumptions about investment returns and plan participation, or due to the states’ use of actuarial accounting.
- Intergenerational inequity issues where one or more generation of citizens pays the bulk of another generation’s previously underfunded pension costs, while themselves facing a far less generous retirement package.

Washington State Pension Plans

The Washington State Investment Board (WSIB) manages the assets for six major pension plans¹ (and various smaller plans), which cover over 300,000 active participants and over 129,000 retirees. Currently, **Washington’s pension plans have a combined funded status of 99 percent**, one of the highest in the nation. However, two legacy plans, Public Employees’ Retirement System (PERS) 1 and Teachers’ Retirement System (TRS) 1², **have a lower-funded status: 70% and 75% respectively.** Due to the ongoing realization of recent investment losses in the coming years, the overall funded status is expected to decline for years before rebounding in the future.

Note that the state **assumes a long-term annual rate of return equal to 8 percent.** The plan funds have averaged 8.23 percent over the last 20 years, and Office of the State Actuary (OSA) assumes that, over time, this rate of return will continue to hold. OSA recommends that in order to minimize risk to taxpayers, the state will have to:

- Make higher than normal state general fund contributions in coming biennia (doubling from 09-11 to 11-13)³.

2009-11	2011-13	2013-15	2015-17	2017-19
\$770m	\$1.48b	\$1.97b	\$2.46b	\$2.92b

¹ See Office of the State Actuary [Pension FAQ](#) for more detail about the plans.

² Major pension reform in 1977 closed the two primary plans (PERS 1 and TRS 1) to new participants, and new programs with trimmed benefits were opened at that time.

³ Note that this would at least double the percent of State General Funds dedicated to pensions for 11-13, however, given state budget constraints, it remains to be seen whether the state will contribute the full Actuarially Required Contribution (ARC).

- Limit or prohibit benefit improvements that increase plan costs/liabilities.
- Use risk modeling to make more informed decisions and track and prepare for a variety of potential scenarios.

Without taking these actions, OSA modeling shows the following probabilities:

- **41 percent chance that PERS 1 and TRS 1 enter Pay-Go status by 2030**, likely requiring over \$1 billion of cash flow to meet retiree obligations in a given budget year.
- **18 percent chance that pension costs will eventually consume 8 percent of General Fund-State (GFS).**
- **5 percent chance that pensions will eventually consume more than 9.9 percent of GFS.**
- **34 percent chance that total funded status for pension plans will fall below 60 percent** (80 percent is considered the minimum ‘healthy’ funded status).

These potential outcomes actually could be significantly understated because they assume an 8 percent annual return into the future, and that current projections about life expectancy, growth, and salaries hold up. Additionally, they rely on the use of actuarial accounting, a method that the private sector and the federal government do not use and that many critics consider highly flawed. See below for details about such concerns, as well as a look at national trends.

The Threat of Persistent Underfunding of Ongoing Costs

The Office of the State Actuary analyzed the last 20 years of Washington pension history in their [2010 Risk Assessment](#) report. It found that while the state made 100 percent of required pension payments in the first decade, the plans have been consistently underfunded in the second decade, in good revenue years and bad. On average, **the State only contributed 80 percent of the required contributions over the 20 year period.** This chronic underfunding has increased the need for more costly investments now and into the future. **Making 100 percent of actuarially required costs (ARC) in the future will reduce the chance that PERS 1 and TRS 1 enter Pay-Go status by 12 percent.**

Average % of Required Contributions Made by Fiscal Year:

1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
100%	100%	97%	100%	100%	100%	100%	100%	100%	100%	87%	48%	27%	53%	53%	54%	54%	73%	73%	62%

The Threat of Pay-Go Status: PERS 1 and TRS 1

Unfunded legacy costs associated with PERS 1 and TRS 1 are currently at \$7 billion and increasing. Because the costs of these plans cannot be passed onto current workers to preserve intergenerational equity, the state must not only continue to invest in the ongoing costs of open plans, but also cover the legacy costs of these closed plans. If current practice of underfunding and increasing benefits is continued, the Office of the State Actuary has determined that PERS 1 and TRS 1 have a 41 percent chance of entering Pay-Go status by the year 2030, potentially costing the state over a billion dollars per year in addition to the ongoing biennial costs of open plans.

Current Washington state pension income comprises 25 percent contributions and 75 percent investment income. Pay-Go status, wherein the state pays retiree benefits as they are due from the General Fund, not only directs resources away from other sectors, but is the most costly way to fund state retirement costs since there is no ability to leverage investment returns over a long time horizon.

The Threat of Underestimation of Funded Status due to Faulty Assumptions

The following represent the main assumptions built into all valuation and modeling calculations:

Annual Rate of Investment Return	8.0%
Inflation	3.5%
Salary Growth	4.0%
Membership Growth	1.25%

If any one of these and other assumptions prove to be significantly wrong for any extended period of time in the future, current calculation of future pension plan liabilities could be way off. For example, while the annual rate of return averaged 8.23 percent over the past 20 years, including the large declines of recent years, OSA found that returns in the second decade were much lower and much more volatile than the consistent high returns in the first decade. **Funded status is highly sensitive to changes in rate of return, especially over several years since investment returns are compounded; a return of 7 percent instead of 8 percent would reduce 2009 combined funded status from 99 percent to 87 percent⁴**, while a return of 9 percent would increase combined funded status from 99 percent to 112 percent. With only 20 years of analysis, it is clear that if the trends of the second decade (2001 to present) persist into the future, the average rate of return could easily fall below 8 percent⁵.

In addition, see the [OSA summary](#) of Senate Bill 6161 (passed into law in 2009) for other changes that have the effect of decreasing estimates of future liability, which make currently required payments lower. These changes might help the state to balance the budget now, but if the assumptions don't hold, it will cost taxpayers more in the future.

The Threat of Underestimation of Funded Status due to use of Actuarial Accounting

The method by which states calculate the funded status (and thus financial health) of their pension funds differs from methods used by the federal government and the private sector. The state uses actuarial valuation instead of market valuation⁶. This can impact the calculation of funded status in important ways:

- **Use of smoothing:** to decrease the perceived impact of annual market fluctuation, states use 'smoothing' to spread investment gains and losses over time for the purposes of assessing the funded status of pension funds. Washington uses an 8 year smoothing period (altered from 4 years in 2003), so the 2009 22 percent loss in market value will be spread over the next 8 years. This means that current plan value estimates only realize 1/8th of this historic loss, and, as a result, OSA expects funded status to go down and state required contributions to go up for at least 7 more years as the 2009 losses are realized, even if the fund returns its estimated 8 percent each year. **Due to smoothing, pension fund assets are currently likely to be overvalued at this time.**
- **Discounting by target annual rate of return:** when calculating the present value of future liabilities, states reverse compound by the full target rate of return (8 percent in Washington, and, on average, in all states). Critics claim that this does not fully capture the risk of lower returns or volatility, since any shortfall beneath the 8% target in early years will hurt future compound returns even if later years do achieve 8% growth. **Due to**

⁴ See the [2009 OSA Actuarial Valuation Report](#).

⁵ Note that the assumed average annual rate of investment return was changed from 7.5% to 8% in 2001

⁶ For further information, a recent [AEI report](#) describes the differences in these methodologies.

discounting by the target annual rate of return, pension fund liabilities are currently likely to be undervalued at this time.

Per OSA ([page 44](#)): “Private sector plans calculate their funded status based on market value measures of both assets and liabilities. We use the actuarial value with longer asset smoothing and a long-term interest rate assumption. **If we were to calculate the funded status for our public plans the same way that private plans do, our current funded status would be much lower.**”

National Concerns

National concern about the growing likelihood of a future taxpayer bailout of public pensions was heightened by a 2008 Pew Center on the States report called “[State Pensions and Retiree Health Benefits: The Trillion Dollar Gap](#)”. Pew’s estimate of a one trillion dollar state pension deficit in the US was based on state reported estimates and reflects \$452 billion in estimated unfunded pension liabilities, and \$555 billion from healthcare liabilities (a figure that is more controversial, and less subject to contractual obligation for most states). Note that Pew determined that as of 2008, **Washington State was one of only four states with an overall surplus across all pension funds** (FL, NY and WI were the other three). However, the underfunded status of PERS 1 and TRS 1 are noted as plans that pose major financial risks to the state’s taxpayers in the future.

The Pew report is generally considered to be accurate. However, there is an active public debate about the magnitude of the risk that pension liabilities may pose to states. The [Economist](#) has published several alarming pieces, even claiming that pensions might push many states into bankruptcy in the coming decades. Meanwhile, columnist Ezra Klein uses the [Washington Post](#) to cite research that downplays the risk of pensions, which only account for 3.8 percent of average state spending.

In Washington, the OSA’s new [risk assessment](#) tools represent great progress in considering and preparing for a wider range of possibilities that should help policymakers make more informed choices about pension funding and plan benefits, and reduce financial risks to the state budget and taxpayers.

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