

# U.S. State Pension And OPEBs: Funding Progress Is Likely To Pick Up In 2023 After Slipping In 2022

September 7, 2023

## Key Takeaways

- Weak investment performance dropped U.S. state pension funded ratios to 73.6% from 81.2% in fiscal 2022, although we expect marginal improvement for fiscal 2023 will blunt potential near-term pressures to states' debt and liability profiles.
- Absent plan modifications, contribution rates could inch up further to address pension funding shortfalls, leading to longer-term budget pressure for some states.
- The potential for further monetary policy tightening and slower economic growth, or equity market uncertainty could require states to exercise heightened pension funding discipline to meet assumed investment return targets.
- Retiree medical or OPEB plans remain substantially underfunded and are not likely to change without significant plan reforms or increased contributions.

Although S&P Global Ratings' annual survey shows state pension funded ratios slipped in 2022, improving asset performance for the fiscal year ended June 30, 2023, and a continuing focus on funding discipline will likely support near-term positive funding progress. Still, absent prudent risk management over time, a confluence of factors, structural demographic shifts including an aging population, and medical cost growth, could add budgetary pressure tied to pension and other postemployment benefit (OPEB) funding longer term.

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By The Numbers

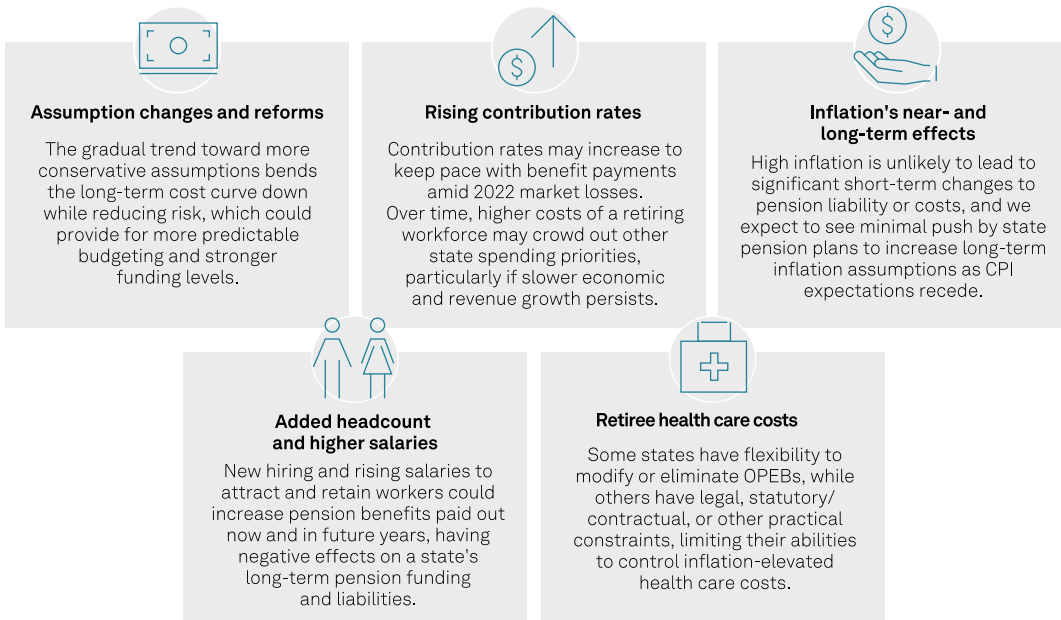
U.S. states' pensions and OPEBs, fiscal 2022

				Median net liability as	
				% of GSP (%)	% of personal income (%)
Pension medians					
	2022:	73.6 ▼	3.7 ▲	1.9	2.4
	2021:	81.2	2.7		
OPEB medians					
	2022:	9.7 ▲	1.5 ▼	0.5	0.6
	2021:	6.1	2.1		

OPEB--Other postemployment benefits. GSP--Gross state product. Source: S&P Global Ratings. Copyright © 2023 by Standard & Poor's Financial Services LLC. All rights reserved.

What We're Watching

Mixed signals ahead for pensions and OPEBs



OPEB--Other postemployment benefits. CPI—Consumer Price Index. Source: S&P Global Ratings. Copyright © 2023 by Standard & Poor's Financial Services LLC. All rights reserved.

## **Why this matters**

In our view, pension and OPEB plans that continue to prioritize long-term savings and risk management over short-term budgetary relief could yield an improving trajectory of pension and OPEB costs. At the same time, focused funding discipline should help many U.S. states manage through long-term challenges--including the ongoing bulge in baby-boomer retirements of state workforces over the next five to 10 years--and, more important, limit budgetary pressure as states ensure stability of payments to beneficiaries.

## **What we think and why**

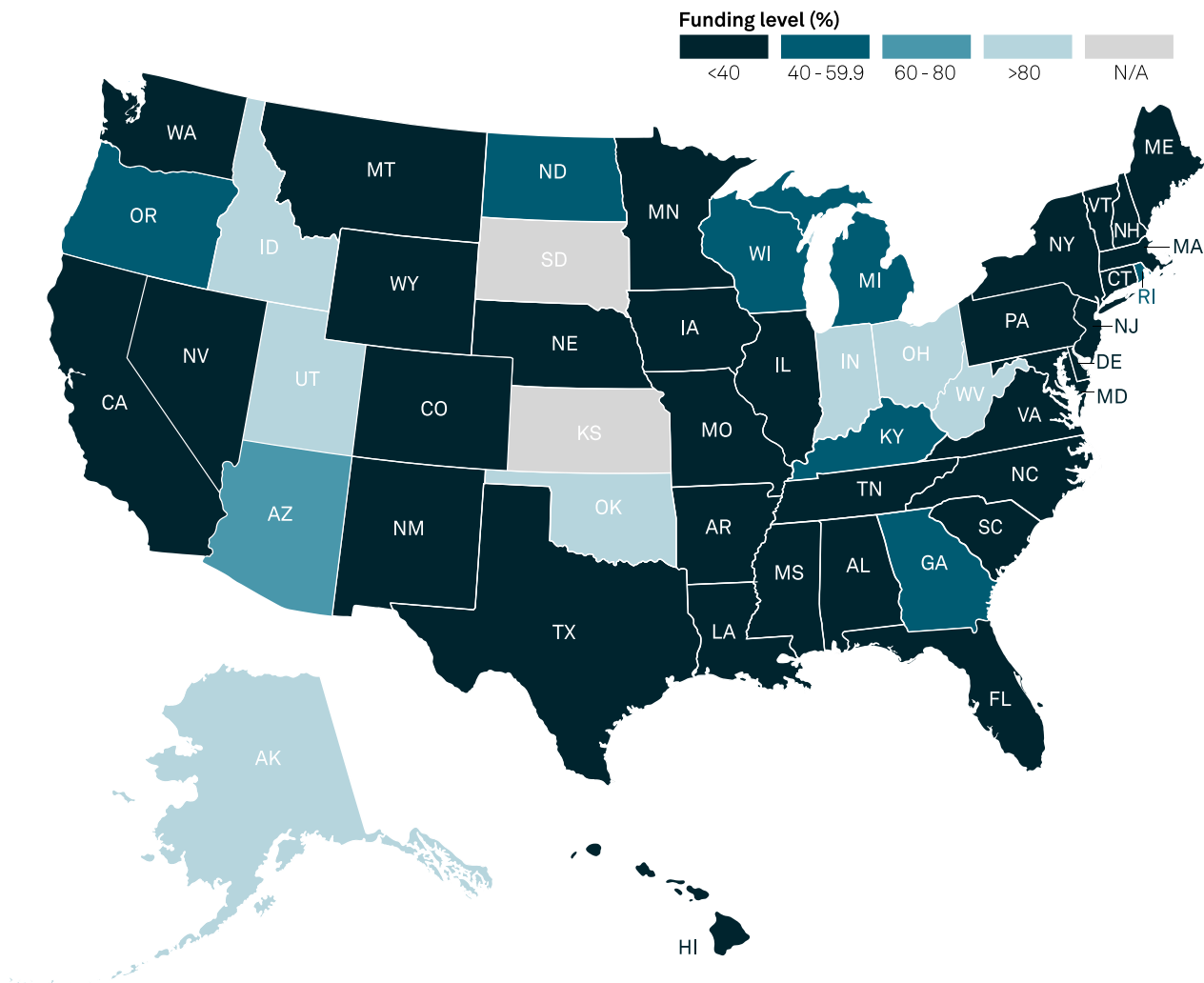
Following recent swings in pension performance, early reporting of state plan investment returns for 2023 could be reminiscent of median returns achieved over the past decade, and near or above an average pension plan's 7% long-term assumed annual asset return. However, against an uncertain economic backdrop for 2024, the outlook for pension and OPEB funding for states could be affected by higher-for-longer benchmark federal funds rates that could slow economic growth and also boost pensionable salaries and cost-of-living adjustments (COLAs) for pensioners, and a continuing wave of the public workforce at or approaching retirement age in the coming years. As state-level pension and retiree health care plans work to adapt to these shifting economic and demographic paradigms, strong oversight and management will be key to stabilizing or reducing growth in these liabilities.

OPEB funded levels experienced a bump in 2022, thanks in part to an increase in the bond market rates, thereby increasing discount rates and reducing the liability. Although most states currently lack concrete plans to address their OPEB liabilities, we believe many will eventually attempt to address them through a combination of benefit modifications and pre-funding. However, this could prove difficult for some states with constitutional, statutory, or contractual limitations on reducing benefits. Ultimately, our OPEB risk assessment focuses on a state's relative level of the liability compared with that of other states, the legal and practical flexibility that a state possesses to adjust these liabilities, and the overall strategy to manage the cost of these benefits, which will affect future contribution rates and budgetary requirements.



Chart 2

## Aggregate U.S. state OPEB funded ratios 2022



For most plans, data aligns with the state's 2022 fiscal year. For some plans, data aligns with the state's 2021 or 2023 fiscal years depending on data availability. We exclude some OPEB plans that do not offer medical benefits and we exclude Kansas and South Dakota, which do not report even an implicit subsidy for retiree health care benefits. We are calculating Nevada's aggregate OPEB funded ratio as negative because the state's plan reported gross benefit payments that exceeded contributions and income in fiscal 2022. OPEB--Other postemployment benefits.

N/A--Not applicable. Source: S&P Global Ratings.

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## Many States Still Fall Short Of Minimum Funding Progress (MFP) Despite Reforms

Despite efforts to improve funding discipline, many states are falling short of making meaningful progress on their aggregate pension and OPEB liabilities. Many are funding their retirement liabilities on an actuarial basis; however, if the underlying actuarial assumptions prove too aggressive or if contribution methods are weak, actuarially determined contributions (ADCs) could fail to make meaningful funding progress.

OPEB plan funding stands in stark contrast to funding for state pension plans. Most states continue to fund OPEB liabilities on a pay-as-you-go (paygo) basis in which annual funding is equal to the benefits distributed; assets are not set aside to accrue returns and help offset future costs.

## **Pension And OPEB Liabilities: Demographics Play An Influential Role**

We believe long-term demographic trends could play a significant role in the trajectory of state pension and OPEB liabilities. States with mature plans and elevated discount rates that still have low funded ratios might warrant additional attention to budgetary vulnerability. As the proportion of benefits accrued increases for mature plans, there is less flexibility to reduce costs; this leads to increased liquidity needs, and results in a reduced capacity to withstand market volatility. A mature plan with a high active-to-beneficiary ratio might also elect to reduce market risk by incorporating a safer target portfolio and corresponding lower assumed return, which correlates to a lower discount rate and, therefore, a lower funded ratio and higher but less volatile costs down the road.

## **States With Weak Pension Funding That Make Up Ground Still Have A Long Way To Go**

We highlight five states (Connecticut, Illinois, Kentucky, New Jersey, and Vermont) within our survey that consistently ranked among the lowest pension funded levels. Each was experiencing projected cost escalation that made it difficult for them to absorb the costs into their budgets and contributed to credit pressure. Recently, these states took actions to steer their underfunded pension systems back toward stability. These changes included increasing contribution rates, making benefit changes, directing budget surpluses to correct past contribution underfunding, and de-risking the portfolios through more conservative plan management and assumption changes. As a result, the budget burden from high pension and retiree medical costs has stabilized, and in some cases, shown some signs of abating.

For these states that exhibit comparatively weak funding levels, an improving trend in pension funding levels, and demonstrated funding discipline, in combination with other factors we assess under our "U.S. State Ratings Methodology" criteria, have coincided with improving or stabilizing credit fundamentals over the past year. Although we view each of these state's pension burden as high and a long-term credit consideration, below we highlight recent incremental progress in each:

Chart 3

## Plan performance for states with highest proportionate state NPLs, 2019-2022

State	NPL funded levels						NPL compared to key economic metrics					
	Aggregate pension funded ratio - all plans (%)	Change from 2019	Aggregate three-year pension funded ratio - all plans (%)	Change from 2019	NPL (bil. \$)	Change from 2019	NPL to personal income (%)	Change from 2019	NPL per capita (\$)	Change from 2019	Assumed return rate (%)	Change from 2019
Connecticut	49.5	▲ 5.1	48.3	▲ 2.7	39.8	-1	12.9	-1.3	10,965	-2.6	6.9	▼ -1.1
Illinois	42.6	▲ 3.7	41.5	▲ 2.7	144.2	0	16.7	-2.6	11,465	0.7	7	■ 0.0
Kentucky	46.5	▲ 2.3	47.8	▲ 6.7	29.0	13	12.3	-0.8	6,421	11.6	7.1	▼ -0.4
New Jersey	45.0	▲ 5.3	44.5	▲ 6.5	79.7	-14	10.9	-3.8	8,610	-17.3	7	▼ -0.5
Vermont	60.2	▼ -1.2	60.7	▼ -0.9	3.0	25	7.4	0.5	4,690	22.6	7	▼ -0.5

NPL--Net pension liability. Source: S&amp;P Global Ratings.

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## Connecticut

While Connecticut's large unfunded liability remains exceedingly high and a continuing credit pressure, assumption changes to lower the assumed rate of return to 6.9%, use of a closed layered amortization method, and transition to a level-dollar funding plan could improve plan liquidity in the long term and stabilize future costs, thereby aligning more closely with our evaluation of pension risk. Following fiscal reforms in fiscal 2018, the state began transferring surpluses in excess of its budget reserve and revenue volatility caps to make additional pension contributions from fiscal years 2020-2022, for a combined total of \$5.79 billion to its two largest pension plans. At fiscal year-end 2023 (June 30), Connecticut estimates \$1.96 billion in transferred funds will be deposited to pay down pension plan liabilities, bringing expected contributions in excess of the state's ADC payments to \$7.8 billion, or more than 20% of the total unfunded liability for these systems. If the magnitude and frequency of excess pension contributions are sustained, and we believe the growth trajectory of Connecticut's long-term liabilities is meaningfully reduced, we could view these additional pension contributions as a credit strength.

## Illinois

Illinois's state pension systems have adjusted assumptions and benefits over the past few years and the weighted-average assumed return has dropped to 6.84%. The state is now fully funding the statutory pension contribution amount, and forecasts that pension contribution cost growth will be 2.5% annually in fiscal years 2023-2026, compared with 7.4% in the previous four-year period. In fiscal years 2022 and 2023, Illinois contributed to a pension stabilization fund in addition to the statutorily required amounts for the state-sponsored plans; the recently adopted 2024 budget includes another supplemental payment of \$200 million to the pension stabilization fund. With the additional payments from this fund, Illinois will have contributed an additional \$700 million to the five state-sponsored plans. The escalating contribution schedule laid out in the

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Illinois pension code, plus the supplemental contributions, has improved the ADC shortfall. With escalating schedules and supplemental payments, we believe contributions will be close to SF levels in 2023 and 2024. However, they will still remain short of actuarial recommendations. For more information, see "Pension Spotlight: Illinois," published June 26, 2023.

### **Kentucky**

The commonwealth has made notable progress with increased pension contributions, using less aggressive actuarial assumptions and methods, which has led to improved funded levels and could result in lower contribution volatility in future budgets. The proposed 2023-2024 budget fully funds actuarially determined pension contributions plus meaningful additional amounts. We also view the recent Teachers Retirement System (TRS) pension reform positively. Kentucky enacted House Bill 258 in March 2021, which created a hybrid structure for teachers hired after Jan. 1, 2022, that will provide a foundational defined-benefit plan and a supplemental defined-contribution plan. We believe this is a step in the right direction and note that TRS also lowered its assumed rate of return to 7.1% from 7.5% in the recent reform. The payroll growth assumption used in the contribution calculation of 2.75%, down from an aggressive 3.50%, will reduce deferred costs and result in increased contributions to the plan. Still, TRS and the Kentucky Employee Retirement System contributions fall short of not only our MFP, but also SF, which indicates funding deterioration last year, as contributions did not cover service and unfunded interest costs.

### **New Jersey**

Despite a 7.9% investment loss in fiscal 2022, we believe New Jersey's funded ratio will slowly improve due to the state's full actuarial pension contribution in fiscal 2022, budgeted full ADC in fiscal 2023, and full ADC in the fiscal 2024 budget. We calculate combined fiscal 2023 debt service, pension contributions, and pay-as-you-go OPEB payments of \$12.2 billion total a large 23.5% of estimated fiscal 2023 operating funds appropriations on a budgetary basis of accounting. In 2023, we removed our one-notch downward rating adjustment for low funded pension systems under our state rating criteria, based on our belief that New Jersey's combined retirement funds will show a sustained Governmental Accounting Standards Board (GASB) funded ratio above 40% for the near future. Still, this high fixed-charge carrying cost leaves the state vulnerable to financial pressures should there be a pronounced revenue downturn, such as occurred when New Jersey issued a large deficit financing bond in fiscal 2021.



## Vermont

Last year's pension reform legislation included several measures to shore up Vermont's retirement accounts and place pension and OPEB costs on a more sustainable trajectory. These measures included raising state contributions above actuarially determined levels and creating a long-term funding mechanism for higher contributions, raising employee contributions, and lowering COLAs, as well as changing employee eligibility, prefunding OPEB, and providing a one-time state contribution of \$200 million to the pension funds. With these changes, we believe Vermont's retirement liabilities are less of a source of credit pressure than they were before pension reform but are still sizable relative to those of state peers. State contributions have exceeded the ADC for the past decade and the ongoing payment of the ADC plus additional contributions pursuant to last year's reforms will result in gradual funding improvement over time. However, as noted, the plans rely on a funding structure that, while improved, still results in meaningful cost deferrals that increase outyear risk.

## Policy Decisions, Not Markets, Will Likely Make The Greatest Impact

Some states appear to have recovered a portion of their 2022 losses following expected improvement of asset performance in 2023, but we will continue to monitor if states regain an appetite to implement retirement liability reforms and flatten the trajectory of these costs over the long term.

While retirement plans experienced overall resilience during a period of market volatility, we believe states that proactively reduce unfunded pension and OPEB liabilities and adapt better funding policies are more able to meet evolving challenges. Retirement liability reforms gained traction in the economic expansion leading up to the pandemic, but states might be slow to revisit reforms and assumptions to structurally improve pension and OPEB plans in the near term, which could challenge affordability in future budgets. Deferring these policy decisions for longer could make it more difficult for these states to manage retirement liabilities and overall fixed costs (including debt and entitlements) if left unaddressed.

## States pension and OPEB liabilities and ratios--Fiscal 2022

State	Pensions			OPEBs		
	Proportionate state NPL or NPA (mil. \$)	Aggregate pension funded ratio (%)	State NPL or NPA per capita (\$)	Proportionate state NOL or NOA (mil. \$)	Aggregate OPEB funded ratio (%)	State NOL or NOA per capita (\$)
Alabama	3,574	63.0	704	1,445	35.9	285
Alaska	4,135	71.8	5,637	(1,217)	100.0	(1,659)
Arizona	5,727	71.9	778	980	61.7	133
Arkansas	2,352	84.8	772	1,474	0.0	484
California	90,626	77.6	2,322	97,124	3.0	2,488
Colorado	12,346	61.5	2,114	262	38.6	45
Connecticut	39,763	49.5	10,965	21,154	9.8	5,834
Delaware	1,613	87.4	1,584	7,664	6.4	7,525
Florida	7,481	79.1	336	10,541	0.0	474
Georgia	12,258	72.2	1,123	5,482	45.3	502
Hawaii	7,352	62.8	5,105	7,627	34.3	5,296
Idaho	940	84.1	485	(136)	100.0	(70)
Illinois	144,247	42.6	11,465	58,657	0.1	4,662
Indiana	9,876	69.3	1,445	59	80.4	9
Iowa	539	91.8	169	268	0.0	84
Kansas	10,386	69.8	3,536	0	0.0	0
Kentucky	28,973	46.5	6,421	2,573	47.9	570
Louisiana	7,026	69.8	1,531	6,858	0.0	1,494
Maine	2,286	85.9	1,650	2,569	11.4	1,854
Maryland	19,403	75.8	3,147	13,435	2.8	2,179
Massachusetts	41,257	64.3	5,909	13,352	13.0	1,912
Michigan	20,367	62.1	2,030	4,371	55.8	436
Minnesota	3,346	78.9	585	721	0.0	126
Mississippi	3,581	60.2	1,218	110	0.2	38
Missouri	7,809	56.3	1,264	2,891	6.3	468
Montana	2,742	72.8	2,442	171	0.0	152
Nebraska	(533)	105.1	(271)	25	0.0	13
Nevada	10	75.2	3	910	-0.7	286
New Hampshire	1,091	65.2	782	2,120	0.4	1,520
New Jersey	79,743	45.0	8,610	88,854	0.1	9,594
New Mexico	5,707	69.6	2,700	592	32.3	280
New York	(3,647)	101.4	(185)	67,663	0.0	3,439
North Carolina	3,668	84.2	343	4,910	10.1	459
North Dakota	1,513	60.4	1,941	42	56.3	54

## States pension and OPEB liabilities and ratios--Fiscal 2022 (cont.)

State	Pensions			OPEBs		
	Proportionate state NPL or NPA (mil. \$)	Aggregate pension funded ratio (%)	State NPL or NPA per capita (\$)	Proportionate state NOL or NOA (mil. \$)	Aggregate OPEB funded ratio (%)	State NOL or NOA per capita (\$)
Ohio	6,588	77.4	560	504	93.8	43
Oklahoma	2,560	79.2	637	(128)	100.0	(32)
Oregon	3,704	84.6	874	(24)	57.1	(6)
Pennsylvania	45,692	61.4	3,522	18,268	3.9	1,408
Rhode Island	2,967	61.8	2,713	325	52.3	298
South Carolina	4,129	58.3	782	11,526	9.6	2,182
South Dakota	(2)	100.1	(2)	0	0.0	0
Tennessee	(489)	103.7	(69)	1,834	28.8	260
Texas	55,071	74.5	1,834	55,951	4.3	1,863
Utah	559	95.2	165	(28)	99.2	(8)
Vermont	3,035	60.2	4,690	1,515	8.7	2,341
Virginia	5,599	82.3	645	1,647	12.3	190
Washington	(3,241)	104.0	(416)	6,473	0.0	831
West Virginia	2,481	87.4	1,398	89	93.6	50
Wisconsin	(2,297)	106.0	(390)	384	59.4	65
Wyoming	512	75.6	881	200	0	344

For most plans, data aligns with a state's 2021 fiscal year. For some plans, data aligns with a state's 2021 or 2023 fiscal years depending on data availability. Plans with calendar year-end reporting periods are incorporated within a state's respective fiscal year (for example, reports ended Dec. 31, 2021, are counted within a state's 2022 fiscal year). We exclude various OPEB plans that do not offer medical benefits. The majority of these benefits resulted in relatively small liabilities but these benefits are sizable for some states. Kansas and South Dakota do not report even an implicit liability for retiree health care benefits. We are calculating Iowa's aggregate pension funded ratio as overfunded despite having a small proportionate state NPL due to how we aggregate pension data across state plans. We are calculating Nevada's aggregate OPEB funded ratio as negative because the state's plan reported gross benefit payments that exceeded contributions and income in fiscal 2021. We are calculating a NOA for Utah's OPEB plans although the state's aggregate OPEB funded ratio is below 100% due to how we aggregate OPEB data across state plans. New Mexico's pension data reflects 2021 plan annual comprehensive financial reports for the New Mexico Educational Retirement Board. Average NPL--Net pension liability. NPA--Net pension asset. NOL--Net OPEB liability. NOA--Net OPEB asset. OPEB--Other postemployment benefits. N/A--Not applicable.

## Survey Methodology

We derived our calculation of pension liabilities from pension and state annual comprehensive financial reports (ACFRs) reporting under GASB 67 and 68, GASB 67 consultant reports, and GASB 68 allocation reports currently available to us. We derived our calculation of OPEB liabilities from the most recent state ACFR, benefit plan ACFR, and benefit plan actuarial report currently available. In most cases, this corresponded with a state's 2022 fiscal year. For some plans, data align with a state's 2021 or 2023 fiscal years depending on data availability. Some states do not perform actuarial valuations for OPEBs as often as they do for pensions, so results could be measured as of an earlier year.

We have combined information across multiple pension plans for each state to calculate a state's aggregated plan net position to the total pension liability (pension funded ratio) and funding progress measures. The largest pension plan for a state is measured by its share of the state's aggregated net pension liability (NPL). We use cost-sharing, multiple-employer pension plan ACFRs or GASB 67 reports released within a state's fiscal year and use a state's proportionate share of plan liabilities to calculate its NPL. Given varying reporting dates between some plan ACFRs and state government ACFRs, we use plan reports measured within the respective state's fiscal 2022 information, except where noted.

We have combined multiple OPEB plans for each state into one funded figure. Our survey includes those OPEB plans that states disclose as a state obligation. We use the combined OPEB for multiple-employer plans when both state and local governments participate but we also disclose a state's combined net OPEB liability in our table, which incorporates the state's reported proportionate share of the unfunded liability. For cost-sharing, multiple-employer plans where a state's proportionate share was not publicly available, we assumed the state has sole responsibility for the liability. Some states provide a general fund contribution to local teacher OPEB plans, and for these we have also included teacher OPEB. In most cases, we have not included public university systems' OPEBs, unless a state considers these a direct state responsibility or if they are not reported separately from a state's cost-sharing, multiple-employer plan.

All states have released an ACFR using GASB 68 reporting standards, which incorporates disclosure on a state's proportionate share of cost-sharing pension plans. To estimate respective shares of the pertinent cost-sharing plans' NPL, we use the reported proportionate share disclosed in the states' most recent ACFRs or plan GASB 68 allocation reports. Although most state ACFRs report their proportionate share of respective cost-sharing plan NPLs with a one-year lag, we assume the reported percentage share is applied to fiscal 2022 plan NPLs. In deriving the estimated state portion of the liability for some cost-sharing, multiple-employer plans, we include a portion of plan liabilities in addition to those reported in a state's ACFR if we expect the state will likely continue to make pension contributions on behalf of other plan employers, even if such contributions are not legally required or do not flow directly to the plan.

Most states' single- or agent-employer plans are relatively small and updated GASB reported information is available only as of fiscal 2021 in their fiscal 2022 ACFRs. Given the relative size of these plans, if updated information is not available for fiscal 2022, we carry forward fiscal 2021 NPLs to fiscal 2022 to maintain relative comparability between years.

At the time of this report, a 2022 state ACFR was unavailable for Arizona, California, Iowa, Illinois, Nevada, and Oklahoma. For states with plan reporting periods that align with a calendar year-end, we used reports ended Dec. 31, 2021.

## **Related Research**

- Michigan: Pension Spotlight, Aug. 22, 2023
- Pension Spotlight: Minnesota, Aug. 10, 2023
- Pension Spotlight: Ohio, July 31, 2023
- U.S. Public Pension Fiscal 2023 Update: Funded Ratios Stable, Inflation Retreats, And POB Issuance Stops, July 11, 2023
- Pension Spotlight: Illinois, June 26, 2023
- Pension Spotlight: Texas, April 4, 2023
- Five U.S. Public Pension And OPEB Credit Points To Watch In 2023, Jan. 31, 2023

This report does not constitute a rating action.

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