

INDUSTRY RESEARCH

2023 Report on City and County Retirement Systems: Funding Levels and Asset Allocations

This is Wilshire's 2023 Report on City and County Retirement Systems: Funding Levels and Asset Allocation, which reports the aggregate funded status and asset allocation of over 100 U.S. city and county-sponsored defined benefit retirement systems. Wilshire has been compiling these statistics since 1990.

The Data

Financial data on public retirement systems historically lacks the timeliness and uniform disclosure governing pension plans sponsored by publicly traded companies, making it difficult to conduct a study with data that are both current and consistent across systems. For this reason, our study methodology involves collecting data during the second quarter of each calendar year with the objective of acquiring as many reports as possible with a June 30 valuation date from the previous year. Even for systems with the desire to report in a timely manner, it often takes six months to a year before actuarial results are published. Of the 107 systems, 92 surveyed reported actuarial values on or after June 30, 2022.

This study reports the aggregate Total Pension Liability (TPL) values used for financial reporting under the accounting and financial reporting standards for state and local governments: Governmental Accounting Standards Board Statements No. 67 and 68 (GASB 67/68). Through these statements, GASB and the financial industry have taken major steps to increase transparency and comparability of pension plan accounting. GASB's Statement 67, "Financial Reporting for Pension Plans," impacts annual pension reporting for plans; Statement 68, "Accounting and Financial Reporting for Pensions," impacts annual pension reporting for the employers contributing into government agency-sponsored pensions and has applied to employers' financial reporting starting in June 2015.

Funded Ratio

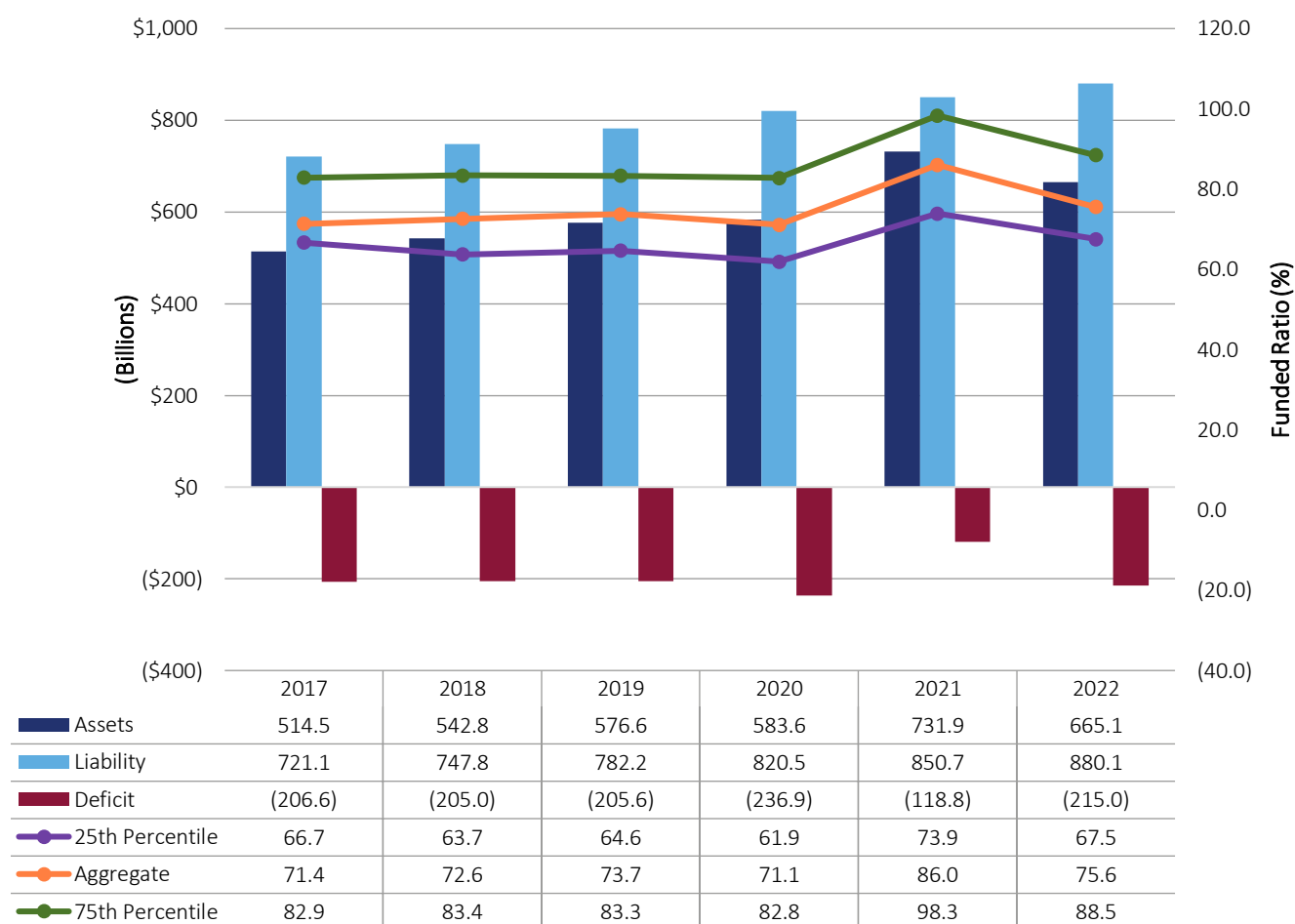
This year's report is based on the financial statements reported by these city and county plan sponsors as of their last fiscal year end (FYE) measurement date – June 30, 2022, the most frequent measurement date for plans in this year's report.

Wilshire estimates that the aggregate funded ratio was 75.6% at FYE 2022, which represents a 10.4 percentage point decrease from FYE 2021 and reverses last year's gains.

Wilshire's estimate of the aggregate funded ratio as of September 30, 2023 (i.e., the most recent quarter-end as of this publication) is 72.9%. The 2.7 percentage-point decrease from our FYE 2022 measurement is due to a third quarter decline of 3.3% as represented by the FT Wilshire 5000 Index due to interest rate hikes instituted by the Fed to fight inflation.

Exhibit 1 shows the aggregate reported funded status, asset, liability, and surplus/deficit values over the past six fiscal years.

Exhibit 1: Funded Ratio History



For illustrative purposes only.

Wilshire estimates that the aggregate Total Pension Liability (TPL) increased to \$880.1 billion as of FYE 2022, up 3.5%, or \$29.4 billion, from \$850.7 billion as of FYE 2021. Aggregate assets decreased to \$665.1 billion as of FYE 2022, down 9.1% (\$66.8 billion) from \$731.9 billion as of FYE 2021. Due to the decrease in aggregate assets, the aggregate shortfall is estimated to have increased by \$96.2 billion to \$215.0 billion from \$118.8 billion. This year's funded status decline is the second largest since FYE 2009 during the Great Financial Crisis.

Attribution of Changes in Funding

Exhibit 2 shows the components of aggregate annual change in TPL and Plan Fiduciary Net Position.

Exhibit 2: Changes in Asset and Liability Values

	(\$, Billions)	% of BoY
Total Pension Liability, BoY	\$850.7	
Service Cost	16.6	1.95%
Interest Cost	56.3	6.62%
Benefit Payments	-48.0	-5.64%
Actuarial (Gains)/Losses	2.6	0.31%
Other	1.9	0.22%
Total Pension Liability, EoY	\$880.1	3.46%
Plan Fiduciary Liability, BoY	\$731.9	
Total Contributions	36.0	4.92%
Actual Return on Assets	-51.0	-6.97%
Benefit Payments	-48.0	-6.56%
Other	-3.8	-0.52%
Plan Fiduciary Net Position, EoY	\$665.1	-9.13%

For illustrative purposes only.

Liabilities

Wilshire estimates that the aggregate Total Pension Liability (TPL) increased to \$880.1 billion as of FYE 2022, up more than 3% from \$850.7 billion as of FYE 2021. The two largest components of the annual increase in aggregate TPL were continued annual benefit accruals, i.e., service cost, and interest cost.

- Service cost, or continued annual benefit accruals, is estimated to have increased the TPL by 1.95%.
- Interest cost is similar to changes in the time value of money and is approximately equal to the discount rate as a percentage of the beginning of year TPL. The increase due to interest cost is estimated to be 6.62% for FYE 2022.
- Benefit payments are estimated to have decreased the TPL by 5.64%.
- Actuarial losses and "Other" in aggregate increased the TPL by 0.53%.

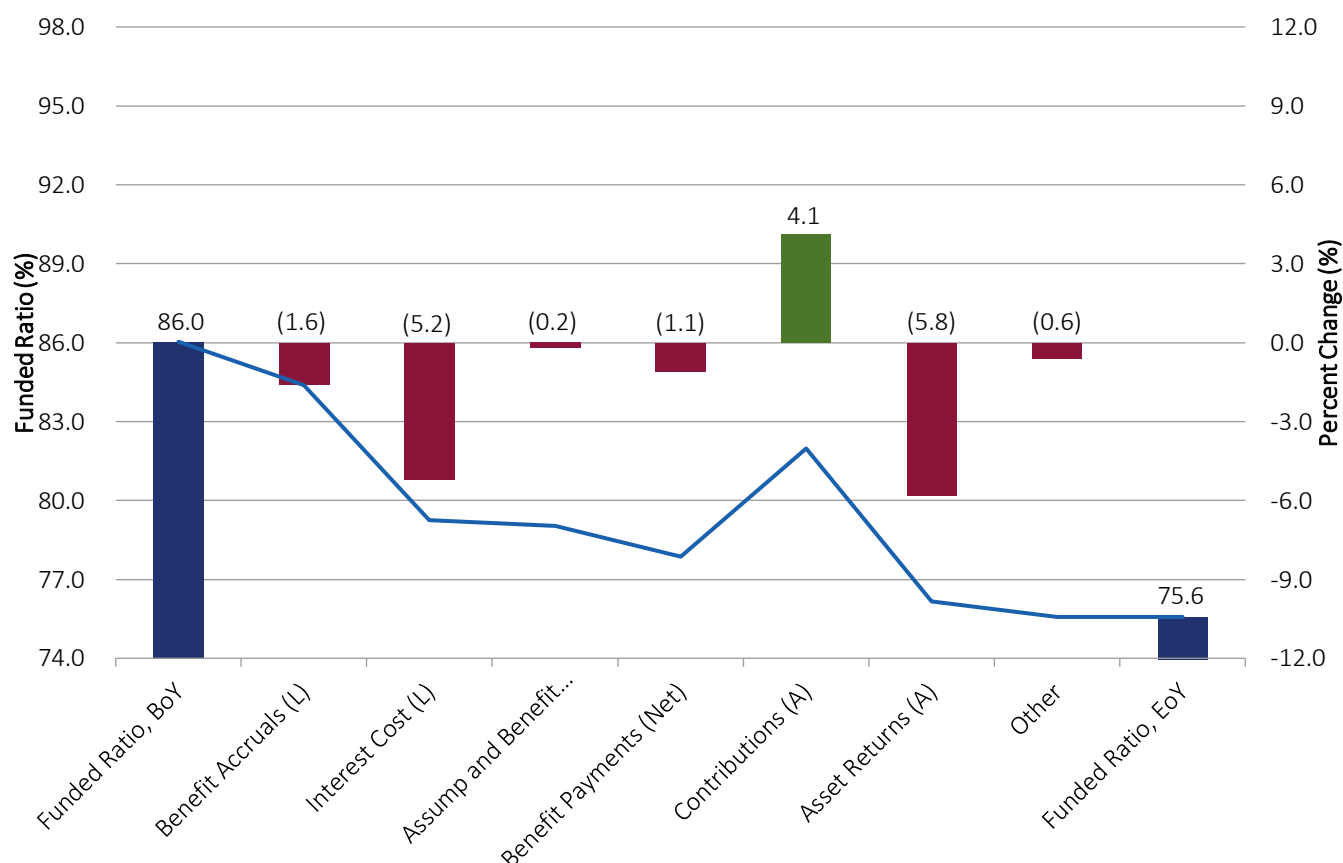
Assets

Wilshire estimates that aggregate assets decreased to \$665.1 billion as of FYE 2022, down more than 9% from \$731.9 billion as of FYE 2021. Contributions were more than offset by negative investment returns and benefit payments.

- Contributions increased asset values by 4.92% for the year with 20% coming from plan participants.
- Negative capital market returns decreased asset values by 6.97% for the year.
- Benefit payments are estimated to have decreased asset values by 6.56%.
- "Other" items are expected to have decreased asset values by 0.52%.

Exhibit 3 shows the components of change in TPL and Plan Fiduciary Net Position from Exhibit 2 and their relative impact on aggregate funded ratio change during the fiscal year.

Exhibit 3: Changes in Annual Funded Ratio



For illustrative purposes only.

Benefit accruals, interest cost, benefit payments and asset returns decreased the funded ratio by more than 13 percentage points offsetting contributions which increased funded levels by four percentage points.

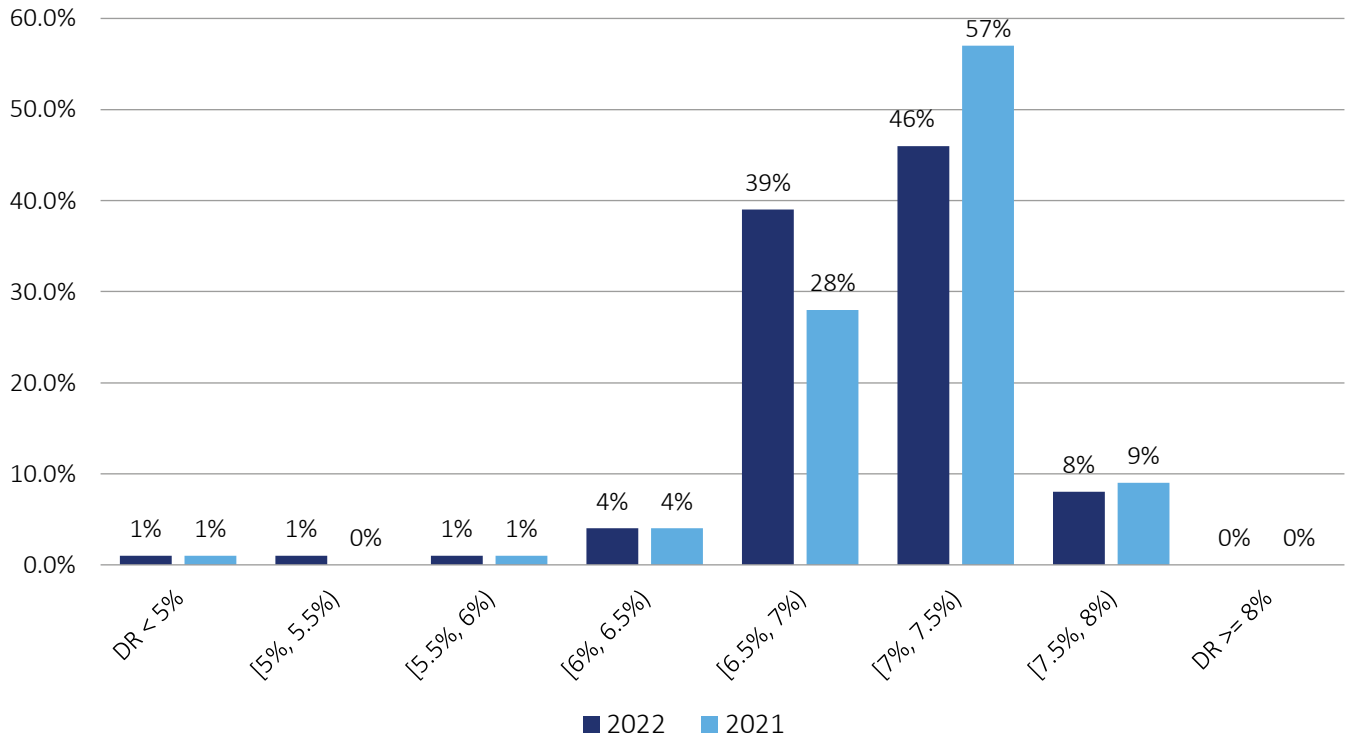
Discount Rates

The discount rate represents the expected long-term rate of return on invested plan assets used to calculate liability values (present value of a stream of projected benefit payments). Discount rates have trended lower over the past several years with nearly one quarter of this year's study plans lowering their discount rate. The range for discount rates this year is 4.48% to 7.75% with a median of 7.00%, the same as last year's median discount rate.

For projected depleting plans, GASB 67/68 requires the use of a blended discount rate using the plan's expected long-term rate of return on invested plan assets and the yield on a municipal bond high grade rate index. The calculation of the blended discount rate is based on a mandated projection methodology.

Exhibit 4 shows the distribution of discount rates used to calculate the TPL.

Exhibit 4: Distribution of Discount Rates

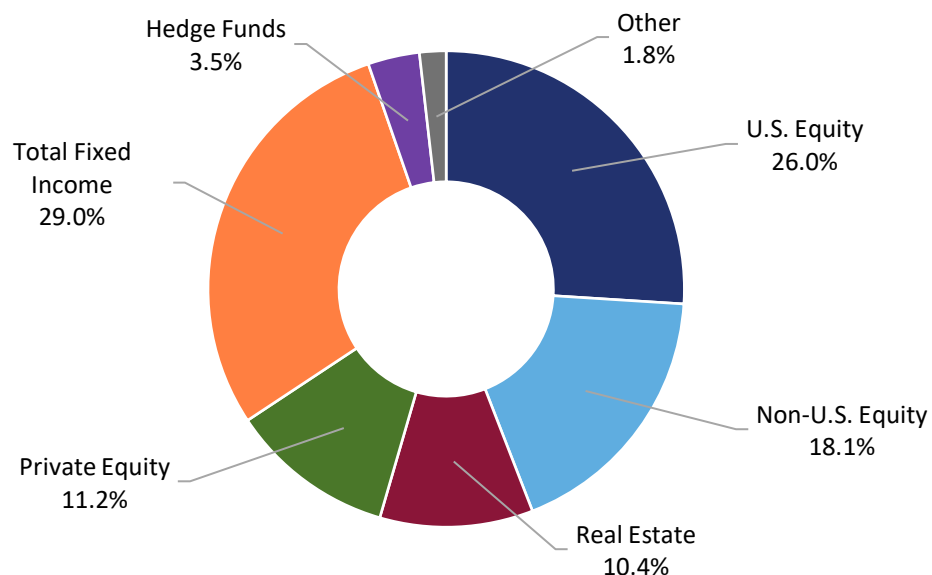


For illustrative purposes only. The total may not sum to 100% due to rounding.

Pension Plan Asset Allocation

Exhibit 5 shows the aggregate asset allocation for City and County Retirement Systems.

Exhibit 5: Aggregate Asset Allocation



For illustrative purposes only. "Other" refers to any other asset class for example Cash and Commodities.

Exhibit 6 examines the change in aggregate asset allocation over the last 10 years.

Exhibit 6: Change in Aggregate Asset Allocation for City and County Pension Plans

	2012 (%)	2017 (%)	2022 (%)	Change in Exposure		
				12-17 (%)	17-22 (%)	12-22 (%)
Equity						
U.S. Equity	32.3	30.1	26.0	-2.2	-4.1	-6.3
Non-U.S. Equity	18.0	20.6	18.1	2.6	-2.5	0.1
Real Estate	6.2	7.3	10.4	1.1	3.1	4.2
Private Equity	4.5	6.3	11.2	1.8	4.9	6.7
Return-Seeking Subtotal	61.0	64.3	65.7	3.3	1.4	4.7
Total Fixed Income	27.3	24.7	29.0	-2.6	4.3	1.7
Total Hedge Funds	3.5	2.7	3.5	-0.8	0.8	0.0
Other ¹	8.2	8.3	1.8	0.1	-6.5	-6.4
Return ²	6.1	6.3	6.6	0.2	0.3	0.5
Risk ²	10.5	11.0	11.5	0.5	0.5	1.0

For illustrative purposes only.

¹Other refers to any other asset class for example Cash and Commodities.

²Return and Risk are based on Wilshire's current asset class assumptions (Exhibit 7).

Over the past 10 years, the total allocation to U.S. equity has decreased by 6.3% which was offset by the increased allocation to private equity.

Exhibit 7 shows Wilshire's current long-term return and risk assumptions. The 10-year expected return for many asset classes are near-or-at their lowest point due to the historically low interest rate environment.

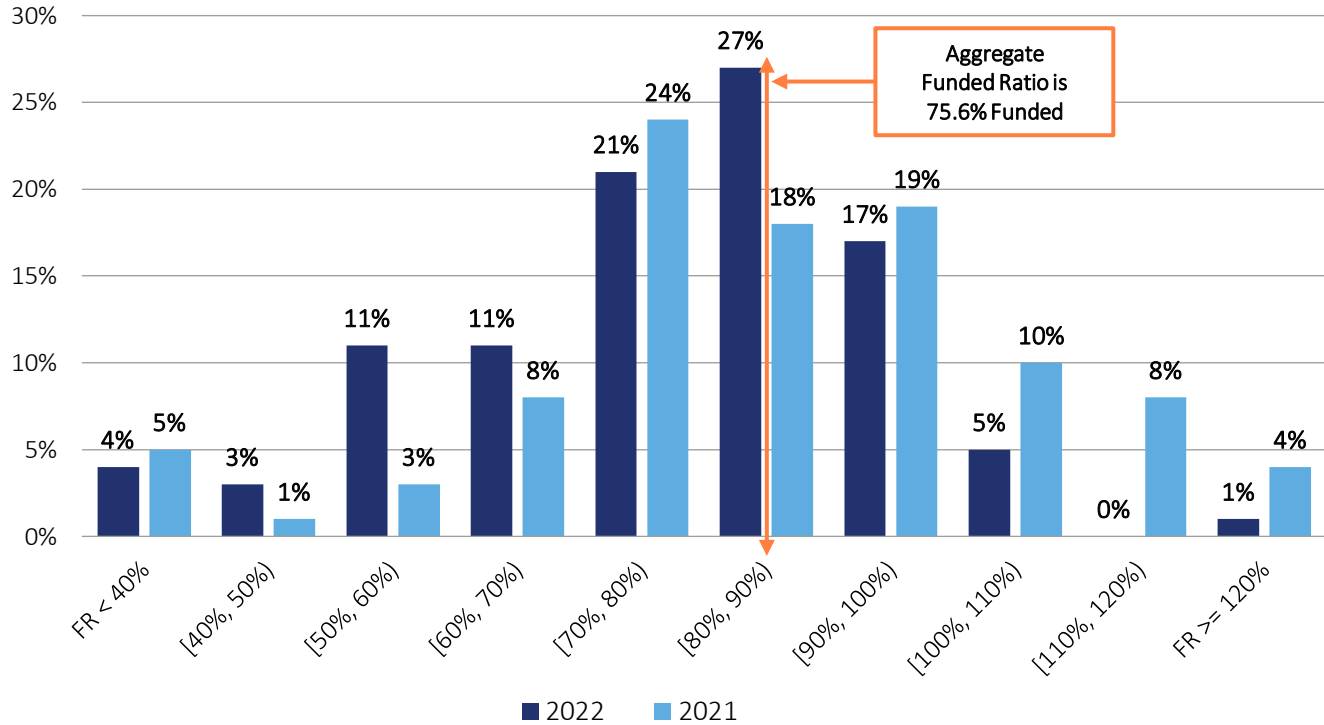
Exhibit 7: Wilshire's June 2022 Capital Market Assumptions

	Expected Return (%)		Risk (%)
	10-Year	30-Year	
U.S. Equity	6.00	6.95	17.00
Non-U.S. Equity	7.25	7.70	19.10
Real Estate	6.50	7.20	14.00
Private Equity	10.05	10.35	28.00
Fixed Income	4.05	4.45	4.25
Hedge Funds	5.45	6.75	6.60
Other	3.15	3.20	0.75

For illustrative purposes only.

We conclude the report with Exhibit 8, which shows the distribution of funded ratios over the past two years. Within each 10% funded ratio bucket, distribution of plans with funded ratios below 70% decreased year-over-year. This decrease was offset by the increase in the distribution of plans with funded ratios above 80%.

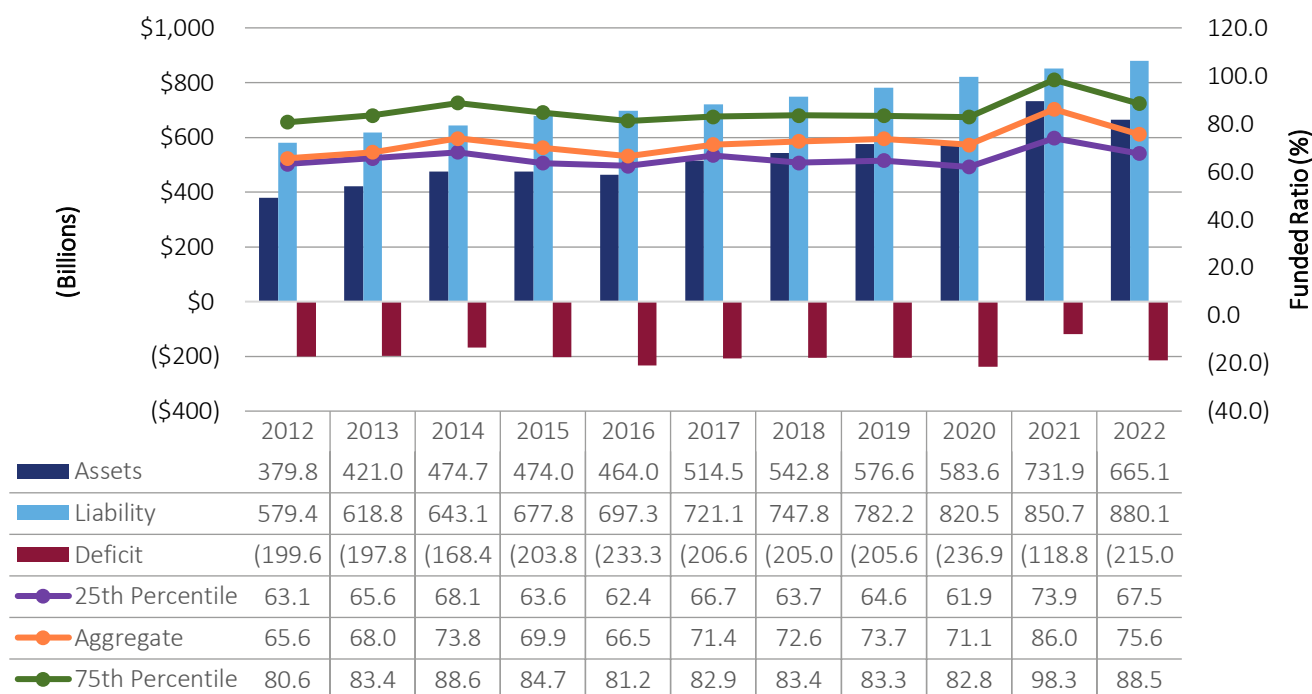
Exhibit 8: Distribution of Funded Ratios



For illustrative purposes only. The total may not sum to 100% due to rounding.

Appendix: Funded Ratio History

This appendix shows the aggregate reported funded status, asset, liability, and surplus/deficit values over the past 10 fiscal years.



For illustrative purposes only.

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