2025 Corporate Pension Funding Study

Zorast Wadia, FSA, CFA, EA, MAAA Alan H. Perry, FSA, CFA, MAAA Ryan J. Cook, FSA, EA, MAAA, CERA



The 2025 edition of the Milliman Corporate Pension Funding Study (PFS) is our 25th annual analysis of the financial disclosures of the 100 U.S. public companies sponsoring the largest defined benefit (DB) pension plans. These 100 companies are ranked highest to lowest by the value of their pension assets as of the end of fiscal year (FY) 2024. These values have been reported to the public, to shareholders, and to the U.S. federal agencies with an interest in such disclosures.

FIGURE 1: HIGHLIGHTS (IN \$ BILLIONS)

FISCAL YEAR ENDING

	2023	2024	CHANGE
Funded Percentage	98.5%	101.1%	2.6%
Market Value of Assets	\$1,316.2	\$1,256.7	(\$59.5)
Projected Benefit Obligation	\$1,336.1	\$1,242.8	(\$93.3)
Funded Status	(\$19.9)	\$13.8	\$33.7
Expected Rate of Return	6.42%	6.53%	0.11%
Actual Rate of Return	7.2%	3.6%	-3.6%
Discount Rate	5.01%	5.43%	0.42%
Net Pension Income/(Cost)	(\$1.6)	\$2.4	\$4.0
Employer Contributions	\$16.3	\$17.6	\$1.3

Key results for 2024

- The funded percentage increased from 98.5% to 101.1%.
- The funded status improved from a \$19.9 billion deficit to a \$13.8 billion surplus.
- The average return on investments was 3.6%.
- The average discount rate increased from 5.01% to 5.43%.
- The average expected return on assets assumption increased from 6.42% to 6.53%.

Who are the Milliman 100 companies?

The Milliman 100 companies are the 100 U.S. public companies with the largest DB pension plan assets for which a 2024 annual report was released by March 10, 2025.

The plans in this study represent employers across multiple business sectors, including communications, healthcare, financial services, industrials, energy, technology, utilities, and others. The total value of the pension plan assets of the Milliman 100 companies was \$1.26 trillion at the end of FY2024.

2025 Pension Funding Study APRIL 2025

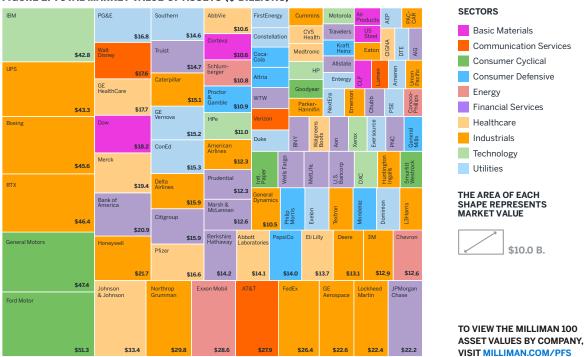
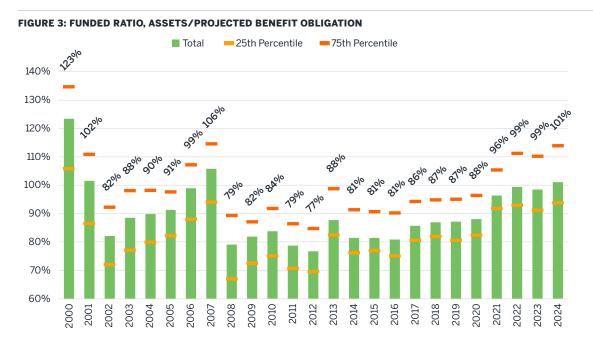


FIGURE 2: TOTAL MARKET VALUE OF ASSETS (\$ BILLIONS)

Pension funding overview

The funded ratio of the Milliman 100 pension plans increased during FY2024 to 101.1% from 98.5% at the end of FY2023. Both liabilities and assets decreased, but the liability declines fueled in part by the 42 basis point increase in the discount rate exceeded the plan asset declines based on the 3.6% annual investment return. This resulted in an improvement in funded status from a deficit position of \$19.9 billion to a surplus of \$13.8 billion.

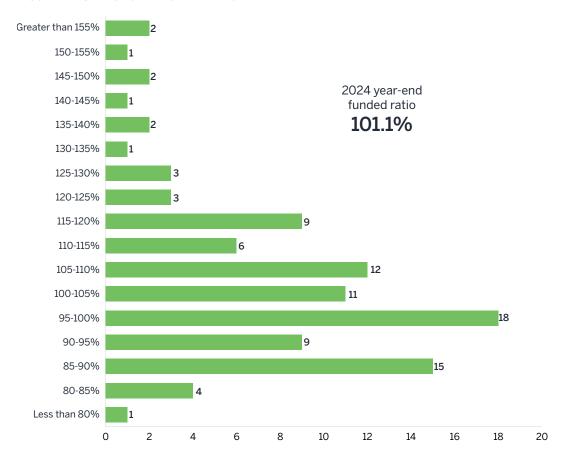




The 2.6% increase in the FY2024 funded ratio continued the trend of mostly improvements seen since 2016. Note that this is the first funding surplus at fiscal year-end since the 105.8% funded ratio in FY2007.

Figure 4 breaks down the 2024 year-end funded ratio for all the plans in the study.





The number of companies with pension surpluses continues to increase, and for employers with frozen pension plans, a surplus position represents an opportunity for significant savings. By decreasing or ceasing contributions into a 401(k) plan and instead reopening the DB pension plan for employees, a company would be able to access the surplus funding to cover its retirement benefit contributions. We estimate that about 36 of the companies in this study have frozen U.S. pension plans with excess assets. A desire to tap into the surpluses to see immediate cash savings may drive more companies to shift spending strategies from defined contribution (DC) to DB vehicles for their employer-provided retirement benefits. If all these companies made this switch, it could free up a combined \$45.0 billion in savings that could go to shareholders or other business initiatives.

COMPARISON TO THE MILLIMAN 100 PENSION FUNDING INDEX

Our PFS FY2024 funded ratio of 101.1% was lower than what we projected in the January 2025 edition of the Milliman 100 Pension Funding Index (PFI). There are differences in methodology between the results reported in our annual study versus our projected monthly index; therefore, a match is not expected. The annual PFS funded ratio is aggregating plans with different fiscal year ending dates and different discount rates, whereas the monthly PFI makes normalizing adjustments to approximate the values of all 100 companies as of the same measurement date using the same average discount rate.

RETURN AND LIABILITY EXPECTATIONS

Most pension funds in 2024 had investment returns below their assumed long-term expected returns. As a percentage of the market value of assets, we estimate the Milliman 100 companies' plans returned 3.6% on average, which was lower than the average long-term assumed rate of return of 6.5%, resulting in a net \$44.8 billion investment loss for FY2024.

Liabilities also came out lower than expected due, in part, to an increase in discount rates in FY2024, with the average discount rate for plans in the study increasing by 42 basis points from 5.01% to 5.43%. This caused a decrease in the projected benefit obligations (PBOs) of the plans and, after accounting for the other typical liability changes (interest cost, service cost, benefit payments, settlements, etc.), the total FY2024 PBO of \$1.24 trillion is lower than the \$1.34 trillion at FY2023.

CONTRIBUTIONS, PENSION EXPENSE, AND PRT PROGRAMS

During FY2024, pension settlements or pension risk transfer (PRT) programs continued to be used as financial cost management tools by plan sponsors. The primary types of PRT used were annuity purchases and lump-sum windows, but these figures may also include other settlements, such as ongoing lump-sum payments from plans. Among the Milliman 100 pension plans, settlement payouts totaled an estimated \$23.4 billion in FY2024, up from \$19.8 billion in FY2023.

Total plan sponsor contributions of \$17.6 billion in 2024 were higher than the 2023 contributions of \$16.3 billion. These numbers pale in comparison to 2017 and 2018, when plan sponsor contributions hit record highs of \$60.7 billion and \$57.5 billion, respectively.

Pension expense (the charge to the income statement under Accounting Standards Codification Subtopic 715) reverted in 2024 back to an income statement credit (increase to company earnings), with a pension income of \$2.4 billion in FY2024, compared to the pension expense of \$1.6 billion in FY2023. This means FY2024 joins FY2022 and FY2021 as the only years with pension income since FY2003.

The average expected investment return assumption increased slightly for FY2024 to 6.5% from 6.4% in FY2023. Last year was the first time we'd seen this assumption increase in this study, and it appears that trend continued in FY2024. Prior to 2023, there had been a decades-long trend of steady decreases in expected returns as interest rates declined and plans shifted their allocations more heavily to fixed income investments. After the large investment losses in 2022, however, higher yields on investments allowed most plan sponsors to adjust upward their expected investment return assumption.

OTHER POSTEMPLOYMENT BENEFITS

In addition to DB pension plans, the PFS tracks the actuarial obligations of postretirement healthcare benefits. Accumulated postretirement benefit obligations (APBOs) have been trending downward for the past couple of decades. In FY2024, this trend continued as APBOs decreased to \$104.2 billion from their FY2023 level of \$110.4 billion.

Detailed comments and illustrations follow in the remainder of the 2025 PFS. Various tables with historical values can be found in the Appendix.

Equities outperformed fixed income investments and pension liabilities for the sixth year in a row

The weighted average investment return on pension assets for the 2024 fiscal year of the Milliman 100 companies was 3.6%, which was below their average expected rate of return of 6.5%. Only 19 of the Milliman 100 companies exceeded their expected returns in 2024.

At the end of FY2024, total asset levels were \$1.257 trillion. This is \$33 billion above the value of \$1.224 trillion at the end of FY2007, prior to the collapse of the global financial markets.

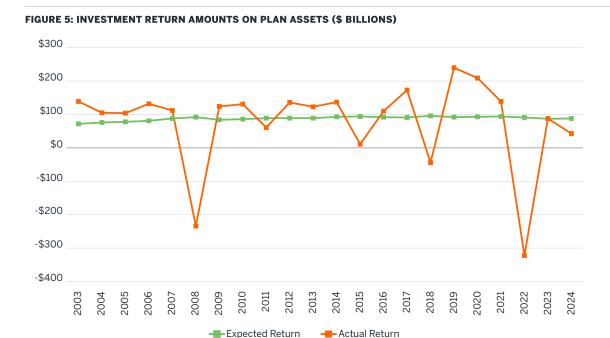


Figure 5 shows the investment return on plan assets for the Milliman 100 plans since 2003.

During FY2024, annuity purchases, lump-sum settlements, and regular benefit payments were greater than investment returns, contributions, and other adjustments, decreasing the market value of assets by \$59.5 billion.

The Milliman 100 companies' estimated investment earnings for FY2024 were \$42.8 billion, which, in aggregate, was below the expected earnings of \$87.6 billion. For the five-year period ending in 2024, investment performance has averaged 2.0% compounded annually (only considering plans with calendar-year fiscal years). There have only been three years of negative investment returns over the past 20 years (2008, 2018, and 2022), contributing to an annualized investment return of 6.0% over that period (again, only considering plans with calendar-year fiscal years).

For calendar-year fiscal year plans, the average U.S. discount rate increased by 49 basis points during 2024. We estimate that their pension liabilities decreased about 1% on an economic basis (due to the passage of time and changes to discount rates, ignoring benefit payments and accruals). Plans with significant allocations to fixed income as part of a liability-driven investment (LDI) strategy typically have allocations to long-duration high-quality bonds. During 2024 these bonds saw asset returns of about -2%, closely tracking the decrease in pension liabilities.

For the 87 companies sponsoring pension plans with calendar-year fiscal years, rates of return in 2024 ranged from -3.9% to 14.9%, with an average of 2.9%. Generally, plans with greater allocations to equities had higher investment returns in 2024. The 11 plans with equity allocations of at least 50% earned an average return of 8.3%, while the 22 plans with equity allocations below 15% earned an average return of 1.5%. Berkshire Hathaway, with a 66% allocation to equities, had the highest investment return of any of the calendar-year fiscal year companies in the study at 14.9%.

In prior years, investment allocations made by plan sponsors showed a trend toward implementing LDI strategies. Generally, this involves shifting more assets into fixed income securities. This trend appears to have reversed slightly in 2024. The fixed income allocations in the pension portfolios decreased slightly to an average of 52.4% at the end of FY2024, down from 53.8% at the end of FY2023. This is the first decrease in fixed income allocations we've seen in the study since 2013. However, this could simply be allocation drift due to the significant underperformance of fixed income relative to equities in 2024. The percentage of pension fund assets allocated to equities, fixed income, and other investments was 24.6%, 52.4%, and 23.0%, respectively, at the end of FY2024, compared with 23.7%, 53.8%, and 22.6%, respectively, at the end of FY2023.

Plans with higher allocations to fixed income generally underperformed the other plans in FY2024 (for the 87 calendar-year plans, those with at least 50% allocated to fixed income earned an average return of 1.9% compared with 2.9% overall).

Over the last five years, the plans with consistently high allocations to fixed income have underperformed the other plans but experienced lower funded ratio volatility. Among the 87 companies in the Milliman PFS with calendar-year fiscal years, 39 pension plans had fixed income allocations greater than 40.0% at the end of FY2019 and maintained an allocation above 40.0% through FY2024. Over this five-year period, these 39 plans experienced lower funded ratio volatility than the other 48 plans (an average funded ratio volatility of 5.0% versus 8.3% for the other 48 plans) but earned a lower five-year annualized rate of return (an average of 1.1% versus 3.2%). Plans with at least 50% allocation to fixed income have underperformed other plans in each of the last five years.

FIGURE 6: FIXED-INCOME ALLOCATION 50% OR HIGHER (CALENDAR-YEAR FISCAL YEARS ONLY)

FIXED INCOME ALLOCATION 50% OR HIGHER

Λ.	 \sim	١Т	ш	DС

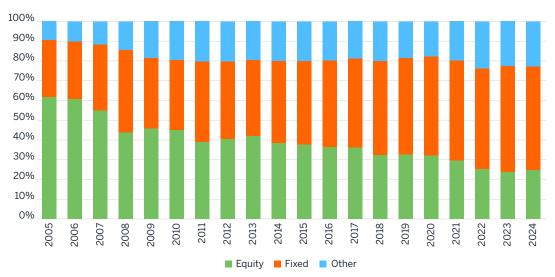
FISCAL YEAR	NUMBER OF COMPANIES	AVERAGE INVESTMENT RETURN	NUMBER OF COMPANIES	AVERAGE INVESTMENT RETURN
2024	49	1.9%	38	4.3%
2023	44	7.6%	43	9.1%
2022	38	-20.2%	49	-18.2%
2021	34	4.8%	53	10.5%
2020	30	12.5%	57	14.6%

Since 2005, pension plan asset allocations to equities have decreased to about 24.6% from about 61.7%, while fixed income allocations have increased to about 52.4% from about 28.7%.

Overall, allocations to equities increased during FY2024, resulting in an average allocation of 24.6%. None of the Milliman 100 companies had increases to equity allocations of more than 10.0% in FY2024, while two companies decreased their equity allocations by more than 10.0% in FY2024.

Overall allocations to fixed income decreased slightly in FY2024, resulting in an average allocation of 52.4%. Two companies had decreases of more than 10.0% to their fixed income allocations, while four companies increased their fixed income allocations by more than 10.0% in FY2024.





Other asset classes include real estate, private equity and debt, hedge funds, commodities, and cash equivalents. Specific details on how investments are allocated to the other categories are generally not available in the U.S. Securities and Exchange Commission (SEC) filings of the companies. Overall, allocations to other asset classes increased in FY2024, resulting in an average allocation of 23.0%. A total of eight companies increased their allocations by 5.0% or more to other asset classes during FY2024, while five companies decreased their allocations by 5.0% or more.

Increasing discount rates caused an improvement in the funded status

Discount rates used to measure plan liabilities (specifically the PBO), determined by reference to high-quality corporate bonds, increased during 2024, thereby decreasing liabilities. The average discount rate increased to 5.43% at the end of FY2024 from 5.01% at the end of FY2023.

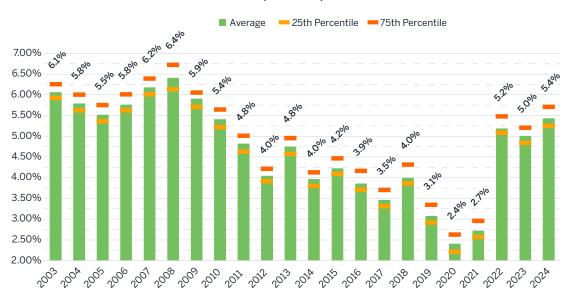


FIGURE 8: SPONSOR-REPORTED DISCOUNT RATES (2003-2024)

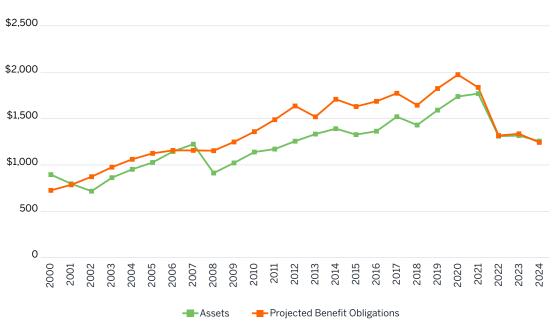
This rise in discount rates, along with settlements and benefit payments, was enough to offset the service cost and interest cost to result in the PBO decreasing from \$1.336 trillion at the end of FY2023 to \$1.243 trillion at the end of FY2024. This decrease in the PBO was sufficient to offset the decrease in assets, so the funded ratio increased from 98.5% to 101.1% in FY2024. Likewise, the funded status improved in FY2024 from a \$19.9 billion deficit to a \$13.8 billion surplus. The combined effects of changes in assets and liabilities on the funded status are shown in Figure 9.





^{*} Other changes include changes in exchange rates used to convert the assets of non-U.S. plans from the local currency into U.S. dollars, as well as any other changes in assets or liabilities not captured in the other categories in this figure.

FIGURE 10: PENSION SURPLUS/(DEFICIT): ASSETS AND PBO (\$ BILLIONS)



PRT activities continue

Plan sponsors continued to execute PRT activities in FY2024 as a way of divesting pension obligations from their DB plans and corporate balance sheets. Large-scale pension buyout programs or lump-sum windows (with at least \$1 billion in settled assets) were transacted for four of the Milliman 100 companies as pension assets and liabilities were either transferred to insurance companies or paid out to participants. In addition, some companies that were in the Milliman 100 in prior years have fallen out of the top 100 due to settlement activity and thus are not included in the statistics reported in our study.

PRT market transactions increased in 2024 compared with 2023 for the Milliman 100 companies. For the 2024 PFS, we estimate the dollar volume of PRT activities based on Form 10-K disclosures for the 2024 fiscal year to be \$23.4 billion, which primarily consisted of annuity purchases and lump-sum windows. The estimated FY2024 dollar amount represents an increase of \$3.6 billion compared to the FY2023 reported dollar volume of \$19.8 billion.

Contribution income remains low

The aggregate FY2024 cash contributions by plan sponsors of the Milliman 100 companies were \$17.6 billion, a slight increase of \$1.3 billion from the \$16.3 billion contributed in FY2023; however, this is still lower than any other year since 2001.

FIGURE 11: EMPLOYER CONTRIBUTIONS BY YEAR (\$ BILLIONS)

FY2024 Net Periodic Pension Cost

The FY2024 Net Periodic Pension Cost (aka pension expense) switched back from expense to an income, with total pension income of \$2.4 billion for FY2024 compared to the \$1.6 billion pension expense for FY2023. This is well below the \$54.2 billion expense peak level in FY2012. Fifty-two companies recorded FY2024 pension income (i.e., a credit to earnings).

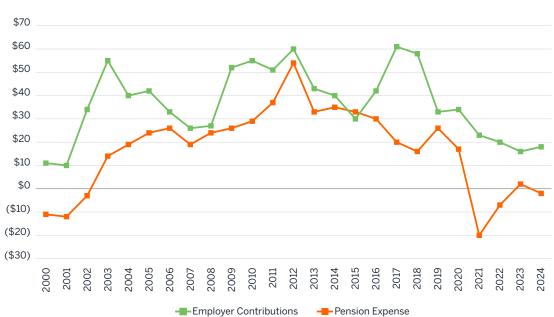


FIGURE 12: PENSION EXPENSE/(INCOME) AND CONTRIBUTIONS (\$ BILLIONS)

Expected rates of return

Companies continued last year's reversal of a decades-long trend and again raised their expected rates of return assumptions on plan assets to an average of 6.53% for FY2024, as compared with 6.42% for FY2023. This is still well below the average expected rate of return assumption of 9.36% back in FY2000.

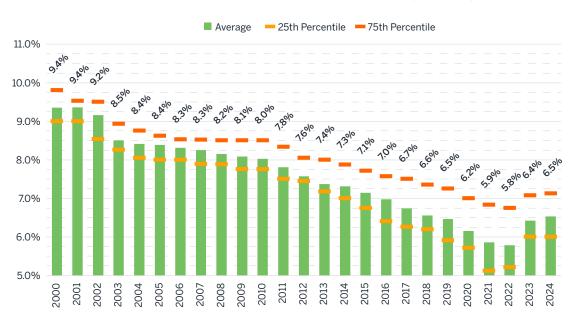


FIGURE 13: SPONSOR-REPORTED ASSUMED RATE OF RETURN ON INVESTMENTS (2000-2024)

Eight of the Milliman 100 companies utilized an expected rate of return for FY2024 of at least 8.0%. This differs drastically from FY2000, in which all but two companies were above 8.0% (the highest was 10.90%).

Pension funding in 2025 and beyond

While the first quarter of 2025 was marked by market volatility, pension plans still maintained surplus funding. But with continued uncertainty about tariffs and the Federal Reserve's next steps on interest rates, there is interest among plan sponsors to protect funded status gains. Our expectations for pension funding for the Milliman 100 companies in the coming year include:

- Plan sponsor contribution levels may exceed 2024 levels given the lackluster plan asset performance in 2024 and 2025 year-to-date.
- Pension income (credit to plan sponsor income statements) is expected to continue in FY2025, given the overall improvement in funded status during 2024.
- The possibility of interest rates declining in the second half of the year could have an impact on funded status and balance sheets by year-end. However, as the Federal Reserve contemplates interest rate cuts, it is important not to forget about inflation and possible recessionary impacts.
- Plan sponsor expected return on assets assumptions for purposes of U.S. GAAP pension expense calculations
 are likely to remain stable given the modest returns during 2024 coupled with the slightly higher yields on fixed
 income at the end of 2024 compared to 2023.
- We are likely to see plan sponsors continue with their investment glide path strategies as they further implement de-risking in 2025. This is especially true if we factor in the possibility of interest rate cuts in the second half of 2025. Interest rates cuts would raise pension liabilities but would also boost bond portfolio valuations, thereby stabilizing funded status for plan sponsors implementing asset-liability matching strategies.
- As the number of plans with surplus funding continues to grow, we could see further interest among plan sponsors in reopening their frozen DB plans for future benefit accruals. About 36 of the Milliman 100 companies have surplus funding of their frozen U.S. pension plans this year for a total surplus of \$45 billion. These companies may stand to achieve balance sheet and cash savings by amending their retirement spending strategies from DC vehicles to those of DB pensions.
- PRT activities in 2025 are expected to be at similar levels to 2024. There could be continued interest from plan sponsors to exit the DB space while interest rates are still relatively high and as funded status has improved. Lump-sum windows, in particular, may be especially impactful for plan sponsors' balance sheets and cash funding sources should interest rates come down later in the year from their present levels. However, recent lawsuits around annuity purchases could slow PRT activity.

Appendix

HISTORICAL VALUES (All dollar amounts in millions. Numbers may not add up correctly due to rounding.)

FIGURE 14: FUNDED STATUS

FISCAL YEAR	MARKET VALUE OF PLAN ASSETS	CHANGE FROM PRIOR YEAR	PROJECTED BENEFIT OBLIGATION	CHANGE FROM PRIOR YEAR	FUNDED RATIO	CHANGE FROM PRIOR YEAR	FUNDED STATUS	CHANGE FROM PRIOR YEAR
2024	\$1,256,659	(\$59,537)	\$1,242,821	(\$93,269)	101.1%	2.6%	\$13,838	\$33,732
2023	\$1,316,196	\$6,473	\$1,336,090	\$19,042	98.5%	-0.9%	(\$19,894)	(\$12,568)
2022	\$1,309,722	(\$459,557)	\$1,317,048	(\$518,501)	99.4%	3.0%	(\$7,326)	\$58,944
2021	\$1,769,279	\$31,560	\$1,835,549	(\$137,391)	96.4%	8.3%	(\$66,270)	\$168,951
2020	\$1,737,720	\$146,842	\$1,972,940	\$148,575	88.1%	0.9%	(\$235,221)	(\$1,733)
2019	\$1,590,877	\$160,908	\$1,824,365	\$180,365	87.2%	0.2%	(\$233,487)	(\$19,457)
2018	\$1,429,969	(\$90,426)	\$1,644,000	(\$128,628)	87.0%	1.2%	(\$214,030)	\$38,202
2017	\$1,520,395	\$156,577	\$1,772,628	\$86,965	85.8%	4.9%	(\$252,232)	\$69,613
2016	\$1,363,818	\$36,820	\$1,685,663	\$55,569	80.9%	-0.5%	(\$321,845)	(\$18,749)
2015	\$1,326,997	(\$64,250)	\$1,630,093	(\$78,163)	81.4%	0.0%	(\$303,096)	\$13,914
2014	\$1,391,247	\$58,391	\$1,708,257	\$188,949	81.4%	-6.3%	(\$317,010)	(\$130,558)
2013	\$1,332,856	\$76,699	\$1,519,308	(\$116,637)	87.7%	10.9%	(\$186,452)	\$193,337
2012	\$1,256,157	\$84,882	\$1,635,945	\$148,035	76.8%	-1.9%	(\$379,789)	(\$63,152)
2011	\$1,171,274	\$31,788	\$1,487,911	\$128,866	78.7%	-5.1%	(\$316,636)	(\$97,078)
2010	\$1,139,486	\$117,798	\$1,359,045	\$111,050	83.8%	1.9%	(\$219,558)	\$6,747
2009	\$1,021,688	\$108,682	\$1,247,994	\$93,991	81.9%	2.8%	(\$226,306)	\$14,690
2008	\$913,007	(\$310,801)	\$1,154,003	(\$2,638)	79.1%	-26.7%	(\$240,996)	(\$308,163)
2007	\$1,223,808	\$79,032	\$1,156,641	\$61	105.8%	6.8%	\$67,167	\$78,970
2006	\$1,144,777	\$117,466	\$1,156,580	\$31,260	99.0%	7.7%	(\$11,803)	\$86,206
2005	\$1,027,311	\$74,118	\$1,125,320	\$64,015	91.3%	1.5%	(\$98,009)	\$10,104
2004	\$953,192	\$89,715	\$1,061,305	\$85,319	89.8%	1.3%	(\$108,113)	\$4,396
2003	\$863,478	\$146,130	\$975,986	\$103,083	88.5%	6.3%	(\$112,508)	\$43,046
2002	\$717,348	(\$80,110)	\$872,903	\$87,247	82.2%	-19.3%	(\$155,555)	(\$167,357)
2001	\$797,458	(\$98,816)	\$785,655	\$59,506	101.5%	-21.9%	\$11,802	(\$158,322)
2000	\$896,274	n/a	\$726,149	n/a	123.4%	n/a	\$170,125	n/a

FIGURE 15: RETURN ON ASSETS

	EXPECTED RATE	ACTUAL RATE	OF RETURN (ESTIMATED)	EXPECTED RETURN	ACTUAL RETURN	
FISCAL YEAR	CAL YEAR OF RETURN		ALL PLANS CALENDAR FISCAL YEARS		(ALL PLANS)	DIFFERENCE
2024	6.5%	3.6%	2.9%	\$87,567	\$42,765	\$44,802
2023	6.4%	7.2%	8.2%	\$87,243	\$88,220	(\$978)
2022	5.8%	-18.7%	-19.2%	\$91,376	(\$322,064)	\$413,440
2021	5.9%	8.4%	7.9%	\$94,302	\$139,049	(\$44,747)
2020	6.2%	13.4%	13.8%	\$93,288	\$208,977	(\$115,689)
2019	6.5%	17.3%	17.9%	\$92,169	\$239,845	(\$147,676)
2018	6.6%	-2.9%	-3.5%	\$95,558	(\$44,439)	\$139,997
2017	6.7%	12.8%	13.0%	\$90,632	\$172,806	(\$82,174)
2016	7.0%	8.4%	8.6%	\$92,138	\$110,018	(\$17,880)
2015	7.1%	0.8%	0.3%	\$93,919	\$10,576	\$83,343
2014	7.3%	10.7%	10.5%	\$93,045	\$137,130	(\$44,084)
2013	7.4%	10.2%	10.1%	\$88,609	\$123,122	(\$34,513)
2012	7.6%	11.8%	12.0%	\$88,789	\$136,025	(\$47,237)
2011	7.8%	5.6%	5.3%	\$88,976	\$61,019	\$27,956

HISTORICAL VALUES (All dollar amounts in millions. Numbers may not add up correctly due to rounding.)

FIGURE 15: RETURN ON ASSETS (CONTINUED)

	EXPECTED RATE	ACTUAL RATE	OF RETURN (ESTIMATED)	EXPECTED RETURN	ACTUAL RETURN	
FISCAL YEAR	OF RETURN	ALL PLANS	CALENDAR FISCAL YEARS	(ALL PLANS)	(ALL PLANS)	DIFFERENCE
2010	8.0%	12.9%	12.7%	\$86,431	\$130,656	(\$44,226)
2009	8.1%	14.3%	15.3%	\$84,232	\$124,497	(\$40,266)
2008	8.2%	-19.0%	-19.9%	\$91,501	(\$233,638)	\$325,140
2007	8.3%	9.9%	9.7%	\$88,327	\$111,564	(\$23,237)
2006	8.3%	12.9%	12.9%	\$81,321	\$131,528	(\$50,208)
2005	8.4%	11.2%	11.1%	\$77,572	\$104,409	(\$26,838)
2004	8.4%	12.3%	12.2%	\$76,493	\$105,311	(\$28,818)
2003	8.5%	19.4%	20.0%	\$71,866	\$138,593	(\$66,728)
2002	9.2%	-8.6%	-8.6%	n/a	n/a	n/a
2001	9.4%	-6.1%	-6.2%	n/a	n/a	n/a
2000	9.4%	3.9%	3.3%	n/a	n/a	n/a

FIGURE 16: PENSION COST

FISCAL YEAR	PENSION INCOME/(EXPENSE)	CHANGE FROM PRIOR YEAR	EMPLOYER CONTRIBUTION	CHANGE FROM PRIOR YEAR	DISCOUNT RATE
2024	\$2,392	\$3,995	\$17,573	\$1,253	5.43%
2023	(\$1,603)	(\$9,036)	\$16,320	(\$3,453)	5.01%
2022	\$7,433	(\$12,942)	\$19,773	(\$3,256)	5.18%
2021	\$20,375	\$37,570	\$23,029	(\$11,008)	2.72%
2020	(\$17,194)	\$8,508	\$34,038	\$589	2.41%
2019	(\$25,703)	(\$9,982)	\$33,449	(\$24,086)	3.08%
2018	(\$15,721)	\$4,572	\$57,534	(\$3,190)	3.99%
2017	(\$20,293)	\$9,881	\$60,725	\$18,973	3.46%
2016	(\$30,173)	\$2,731	\$41,752	\$11,502	3.86%
2015	(\$32,904)	\$2,534	\$30,250	(\$9,687)	4.23%
2014	(\$35,438)	(\$2,340)	\$39,937	(\$3,069)	3.96%
2013	(\$33,098)	\$21,073	\$43,007	(\$16,741)	4.75%
2012	(\$54,172)	(\$17,064)	\$59,747	\$8,784	4.05%
2011	(\$37,108)	(\$7,816)	\$50,964	(\$3,753)	4.82%
2010	(\$29,292)	(\$3,218)	\$54,716	\$3,216	5.41%
2009	(\$26,073)	(\$2,190)	\$51,500	\$24,385	5.91%
2008	(\$23,883)	(\$4,573)	\$27,116	\$1,615	6.41%
2007	(\$19,311)	\$6,580	\$25,501	(\$7,857)	6.18%
2006	(\$25,891)	(\$1,815)	\$33,358	(\$8,508)	5.76%
2005	(\$24,076)	(\$4,868)	\$41,866	\$1,900	5.52%
2004	(\$19,209)	(\$4,822)	\$39,966	(\$14,767)	5.79%
2003	(\$14,387)	(\$17,563)	\$54,733	\$21,187	6.07%
2002	\$3,177	(\$9,026)	\$33,546	\$23,989	n/a
2001	\$12,203	\$1,347	\$9,557	(\$1,839)	n/a
2000	\$10,856	n/a	\$11,396	n/a	n/a

$\textbf{HISTORICAL VALUES} \ (\textbf{All dollar amounts in millions}. \ \textbf{Numbers may not add up correctly due to rounding.})$

FIGURE 17: ASSET ALLOCATIONS (BY PERCENTAGE)

FISCAL YEAR	EQUITY ALLOCATION	CHANGE FROM PRIOR YEAR	FIXED INCOME ALLOCATION	CHANGE FROM PRIOR YEAR	OTHER ALLOCATION	CHANGE FROM PRIOR YEAR
2024	24.61%	3.89%	52.40%	-2.52%	22.99%	1.93%
2023	23.69%	-5.59%	53.76%	5.15%	22.56%	-5.17%
2022	25.09%	-14.74%	51.12%	0.65%	23.79%	20.27%
2021	29.43%	-8.14%	50.79%	1.22%	19.78%	11.35%
2020	32.04%	-1.61%	50.18%	2.44%	17.76%	-3.75%
2019	32.56%	1.05%	48.98%	2.39%	18.45%	-7.43%
2018	32.22%	-10.74%	47.84%	5.97%	19.94%	6.31%
2017	36.10%	-0.56%	45.15%	3.10	18.75%	-5.80%
2016	36.31%	-3.44%	43.79%	3.58%	19.91%	-1.08%
2015	37.60%	-1.96%	42.27%	1.41%	20.13%	0.83%
2014	38.35%	-8.63%	41.69%	8.35%	19.96%	2.09%
2013	41.98%	3.99%	38.47%	-2.31%	19.55%	-3.46%
2012	40.36%	3.60%	39.38%	-2.82%	20.25%	-1.27%
2011	38.96%	-13.40%	40.53%	14.13%	20.51%	5.19%
2010	44.99%	-1.51%	35.51%	-0.78%	19.50%	5.23%
2009	45.68%	4.56%	35.79%	-14.38%	18.53%	27.71%
2008	43.69%	-20.38%	41.80%	25.75%	14.51%	22.06%
2007	54.87%	-9.40%	33.24	14.01%	11.89%	15.67%
2006	60.57%	-1.87%	29.16%	1.74%	10.28%	6.80%
2005	61.72%	n/a	28.66%	n/a	9.62%	n/a

FIGURE 18: PENSION PLAN INFORMATION BY BUSINESS SECTOR

SECTOR	COUNT	COUNT OF CALENDAR FY	MV PLAN ASSETS	РВО	FUNDED RATIO	EMPLOYER CONTRIBUTION	DISC. RATE	EXP. RoR	ACT. RoR	EQUITY ALLOC.		
Basic Materials	5	4	40,856	45,214	90%	325	5.41%	6.0%	2.32%	18%	48%	34%
Communication Services	4	3	56,479	61,717	92%	493	5.54%	7.4%	5.91%	27%	41%	32%
Consumer Cyclical	5	5	119,143	124,367	96%	2,897	5.32%	5.8%	1.07%	12%	69%	19%
Consumer Defensive	8	6	65,151	66,312	98%	723	4.86%	6.2%	4.41%	31%	56%	13%
Energy	4	4	56,532	61,044	93%	1,630	5.44%	5.9%	1.81%	25%	64%	11%
Financial Services	18	18	177,643	146,537	121%	1,838	5.62%	6.4%	4.07%	25%	59%	16%
Healthcare	11	9	145,655	137,136	106%	2,482	5.56%	7.0%	4.90%	38%	42%	21%
Industrials	23	19	389,059	396,803	98%	5,233	5.49%	6.8%	3.50%	22%	49%	28%
Technology	6	3	76,383	76,634	100%	509	4.61%	5.4%	4.38%	14%	61%	25%
Utilities	16	16	129,758	127,057	102%	1,443	5.66%	7.1%	3.17%	32%	45%	23%
Total	100	87	1,256,659	1,242,821	101%	17,573	5.43%	6.5%	3.57%	25%	52%	23%

HISTORICAL VALUES (All dollar amounts in millions. Numbers may not add up correctly due to rounding.)

FIGURE 19: OTHER POST-EMPLOYMENT BENEFITS (OPEB) FUNDED STATUS

FISCAL YEAR	OPEB MV OF ASSETS	CHANGE FROM PRIOR YEAR	OPEB APBO	CHANGE FROM PRIOR YEAR	OPEB FUNDED STATUS	CHANGE FROM PRIOR YEAR	OPEB FUNDED RATIO	CHANGE FROM PRIOR YEAR
2024	\$49,513	(\$259)	\$104,216	(\$6,160)	(\$54,703)	\$5,900	47.5%	2.4%
2023	\$49,772	\$1,160	\$110,376	(\$2,778)	(\$60,603)	\$3,938	45.1%	2.1%
2022	\$48,612	(\$14,407)	\$113,153	(\$42,123)	(\$64,541)	\$27,716	43.0%	2.4%
2021	\$63,019	\$1,585	\$155,276	(\$15,960)	(\$92,257)	\$17,544	40.6%	4.7%
2020	\$61,434	\$6,821	\$171,236	\$4,145	(\$109,802)	\$2,675	35.9%	3.2%
2019	\$54,613	\$2,728	\$167,091	\$846	(\$112,477)	\$1,882	32.7%	1.5%
2018	\$51,885	(\$6,109)	\$166,245	(\$24,307)	(\$114,359)	\$18,198	31.2%	0.8%
2017	\$57,994	\$4,668	\$190,552	(\$2,803)	(\$132,558)	\$7,471	30.4%	2.8%
2016	\$53,326	(\$616)	\$193,355	(\$8,311)	(\$140,029)	\$7,695	27.6%	0.9%
2015	\$53,942	(\$4,024)	\$201,666	(\$25,615)	(\$147,724)	\$21,591	26.7%	1.2%
2014	\$57,965	(\$1,420)	\$227,281	\$14,527	(\$169,316)	(\$15,947)	25.5%	-2.4%
2013	\$59,385	\$3,758	\$212,754	(\$40,493)	(\$153,369)	\$44,251	27.9%	5.9%
2012	\$55,627	\$4,020	\$253,247	\$12,873	(\$197,620)	(\$8,853)	22.0%	0.5%
2011	\$51,607	(\$3,607)	\$240,374	\$3,188	(\$188,767)	(\$6,795)	21.5%	-1.8%
2010	\$55,214	\$5,751	\$237,186	\$9,305	(\$181,972)	(\$3,555)	23.3%	1.6%
2009	\$49,463	(\$7,294)	\$227,881	(\$42,840)	(\$178,417)	\$35,546	21.7%	0.7%
2008	\$56,757	(\$29,391)	\$270,721	(\$41,764)	(\$213,964)	\$12,373	21.0%	-6.6%
2007	\$86,148	\$4,489	\$312,485	(\$10,219)	(\$226,337)	\$14,708	27.6%	2.3%
2006	\$81,660	\$5,792	\$322,704	(\$17,043)	(\$241,044)	\$22,834	25.3%	3.0%
2005	\$75,868	n/a	\$339,747	n/a	(\$263,879)	n/a	22.3%	n/a

About the study

The results of the 2025 Milliman Pension Funding Study (PFS) are based on the pension plan accounting information disclosed in the footnotes to the companies' Form 10-K annual reports for the 2024 fiscal year and for previous fiscal years. These figures represent the GAAP accounting information that public companies are required to report under Financial Accounting Standards Board (FASB) Accounting Standards Codification Subtopics 715-20, 715-30, and 715-60. In addition to providing the financial information on the funded status of their U.S. qualified pension plans, these footnotes may also include figures for the companies' nonqualified and foreign plans, both of which are often unfunded or subject to different funding standards than those for U.S. qualified pension plans. These foreign and nonqualified plans are included in our study, so the information, data, and footnotes do not represent the funded status of only the companies' U.S. qualified pension plans under ERISA.

Thirteen of the companies in the 2025 Milliman PFS had fiscal years other than the calendar year. The companies included in the study are affected by mergers, acquisitions, and other corporate transactions during FY2024. Figures quoted from 2024 and earlier years reflect the 2025 composition of Milliman 100 companies and may not necessarily match results published in the 2024 or any prior Milliman PFS. Generally, the group of Milliman 100 companies selected remains consistent from year to year. Privately held companies, mutual insurance companies, and U.S. subsidiaries of foreign parents were excluded from the study.

The results of the 2025 study will be used to update the Milliman 100 Pension Funding Index (PFI) as of December 31, 2024, the basis of which will be used for projections in 2025 and beyond. The Milliman 100 PFI is published monthly and reflects the effect of market returns and interest rate changes on pension funded status.

About the authors

Zorast Wadia, FSA, CFA, EA, MAAA, is a principal and consulting actuary in the New York office of Milliman. He has more than 25 years of experience in advising plan sponsors on their retirement programs. Zorast has expertise in the valuation of qualified and nonqualified plans. He also has expertise in the areas of pension plan compliance, design, and risk management.

Alan H. Perry, FSA, CFA, MAAA, is a principal and consulting actuary in the Philadelphia office of Milliman. He has more than 35 years of experience in advising plan sponsors on asset allocation and financial risk management. Alan specializes in the development of investment policies by performing asset-liability studies that focus on asset mix, liability-driven investing, and risk hedging.

Ryan J. Cook, FSA, EA, MAAA, CERA, is a consulting actuary in the Boise office of Milliman. He has more than 10 years of experience in advising plan sponsors on their retirement programs. Ryan has expertise in the valuation and projection of pension and OPEB plan liabilities. He also has expertise in the areas of asset-liability modeling, plan design, and risk management.

Acknowledgments

The authors thank the following Milliman colleagues for their assistance in compiling the figures and editing the report for the 2025 Milliman Pension Funding Study: Lena Amano, Deepanshi Bhaskar, Adin Bookbinder, Francine Brazeau, Rachel Chu, Keila Cohen, Michael Cuesta, Henny Damian, Prerna Dhalla, Rebecca Driskill, Yazur Garg, Jeremy Engdahl-Johnson, Mirella Lugo, Samridhi Sachdeva, Javier Sanabría, Akshat Sukhija, Archit Taneja, Kangan Verma, and Kyle Wood.

Solutions for a world at risk[™]

Milliman leverages deep expertise, actuarial rigor, and advanced technology to develop solutions for a world at risk. We help clients in the public and private sectors navigate urgent, complex challenges—from extreme weather and market volatility to financial insecurity and rising health costs—so they can meet their business, financial, and social objectives. Our solutions encompass insurance, financial services, healthcare, life sciences, and employee benefits. Founded in 1947, Milliman is an independent firm with offices in major cities around the globe.

milliman.com

CONTACT

Zorast Wadia zorast.wadia@milliman.com Alan H. Perry alan.perry@milliman.com Ryan J. Cook ryan.cook@milliman.com



© 2025 Milliman, Inc. All Rights Reserved. The materials in this document represent the opinion of the authors and are not representative of the views of Milliman, Inc. Milliman does not certify the information, nor does it guarantee the accuracy and completeness of such information. Use of such information is voluntary and should not be relied upon unless an independent review of its accuracy and completeness has been performed. Materials may not be reproduced without the express consent of Milliman.

2025 Pension Funding Study APRIL 2025