



Retirement Finance:

The changing landscape for finance officials

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Poll Question # 1



Poll Question:

◆ Question: What is the approximate average funded status of pension plans?

◆ 60%

◆ 70%

◆ 80%

◆ 90%



Framing the Public Policy Issue Regarding Retirement

Total FY2019 net pension liabilities of the 50 states: \$741 billion
(Standard and Poor's – August 2020)

FY2019 Total with more conservative discount rate assumptions: \$1.48 trillion
(Moody's – September 2020)

Ten thousand baby boomers will retire or reach age 65 each day until 2033
(Kiplinger)

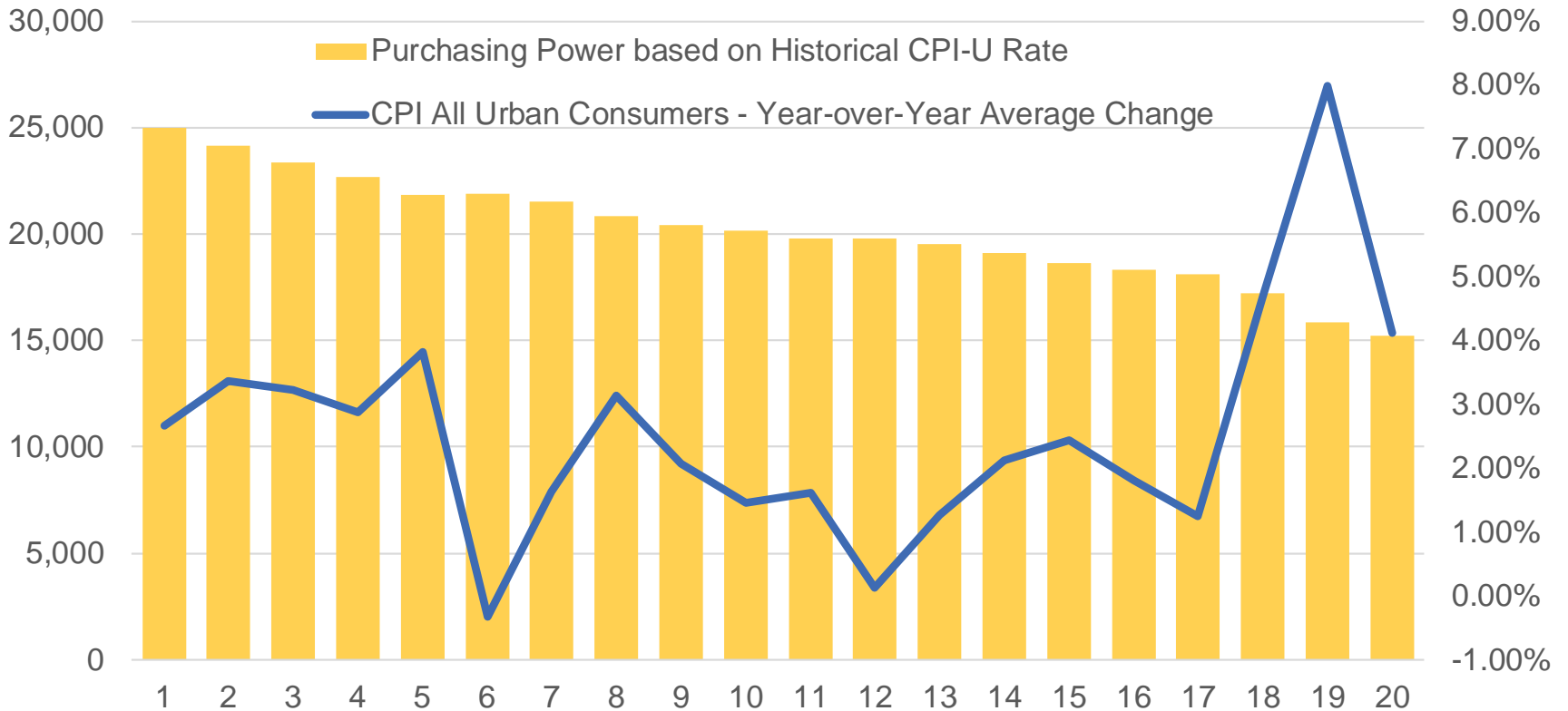
In Q2 of 2020, 28% of individuals believe they will be financially ready to retire
(Lincoln Financial Consumer Retirement Index)

According to the Public Fund Survey sponsored by NASRA, the ratio of active employees to annuitants has declined from 2.43 in 2002 to 1.26 in 2021



Inflation and Pension Benefit Purchasing Power

Purchasing Power of \$25,000 over 20 years

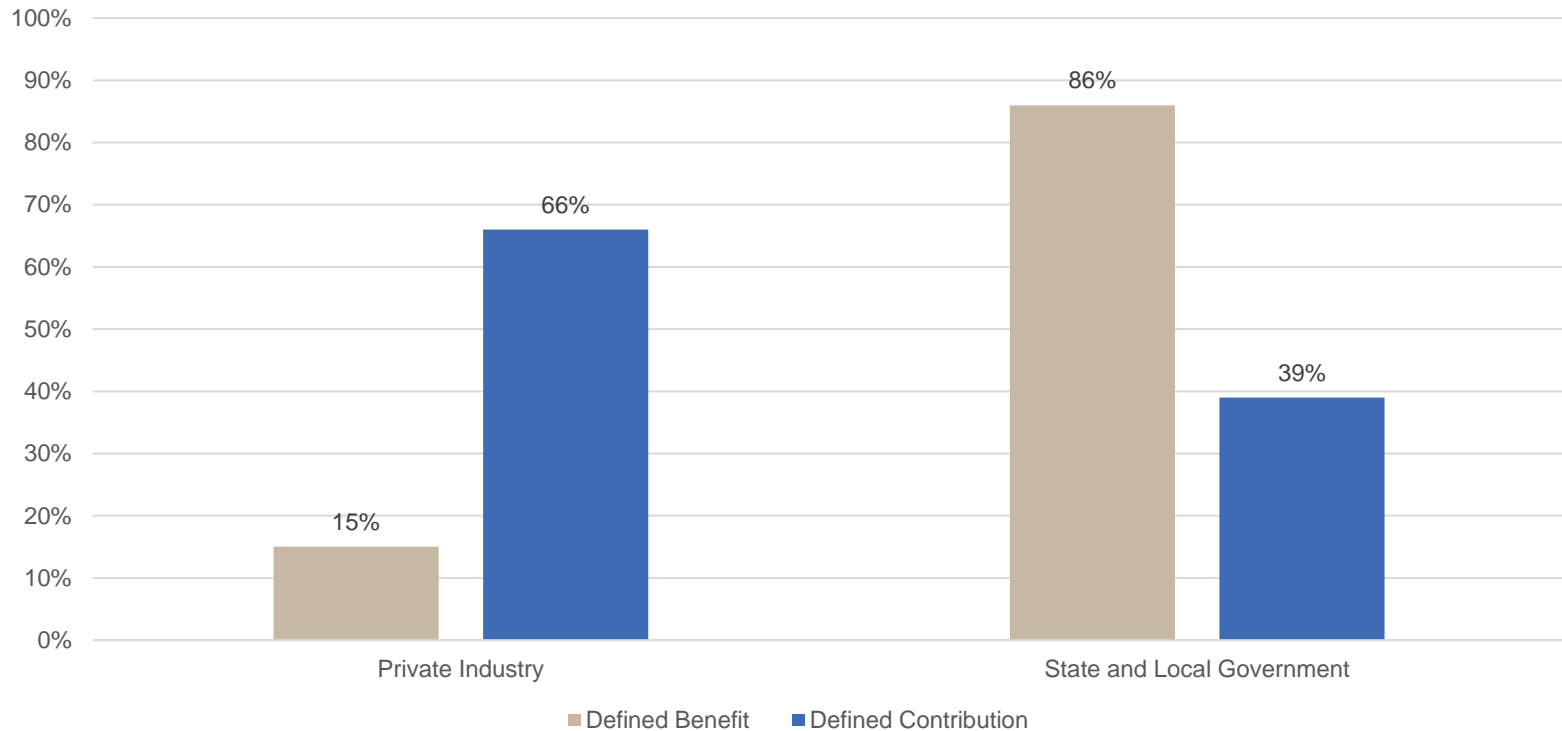


Source: Federal Reserve Bank of St. Louis, FRED



Pensions by Sector: Divergence

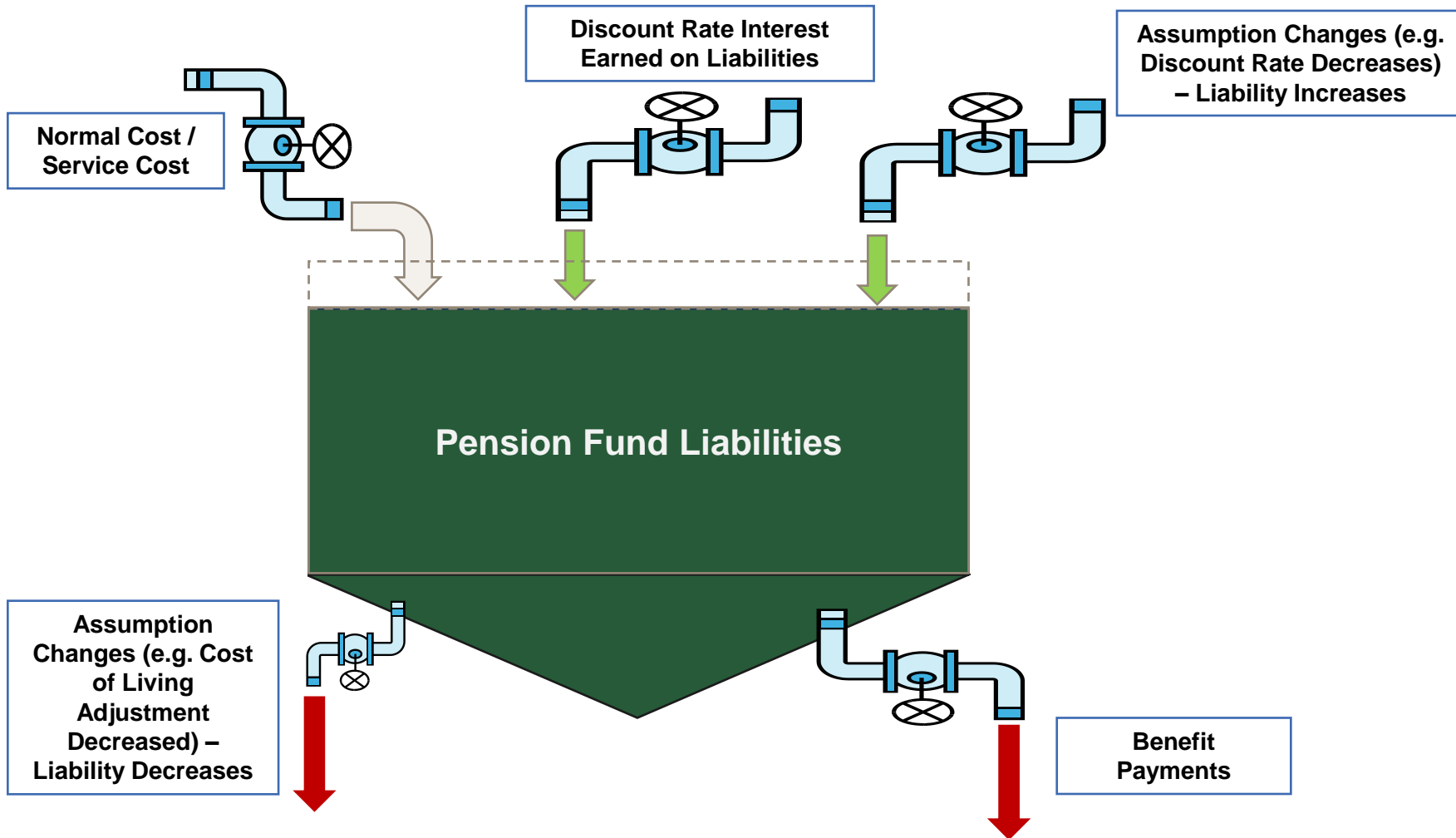
Access to Retiree Benefits
Private Industry vs. State and Local Government



Source: Bureau of Labor Statistics Employee Benefits Survey, March 2023

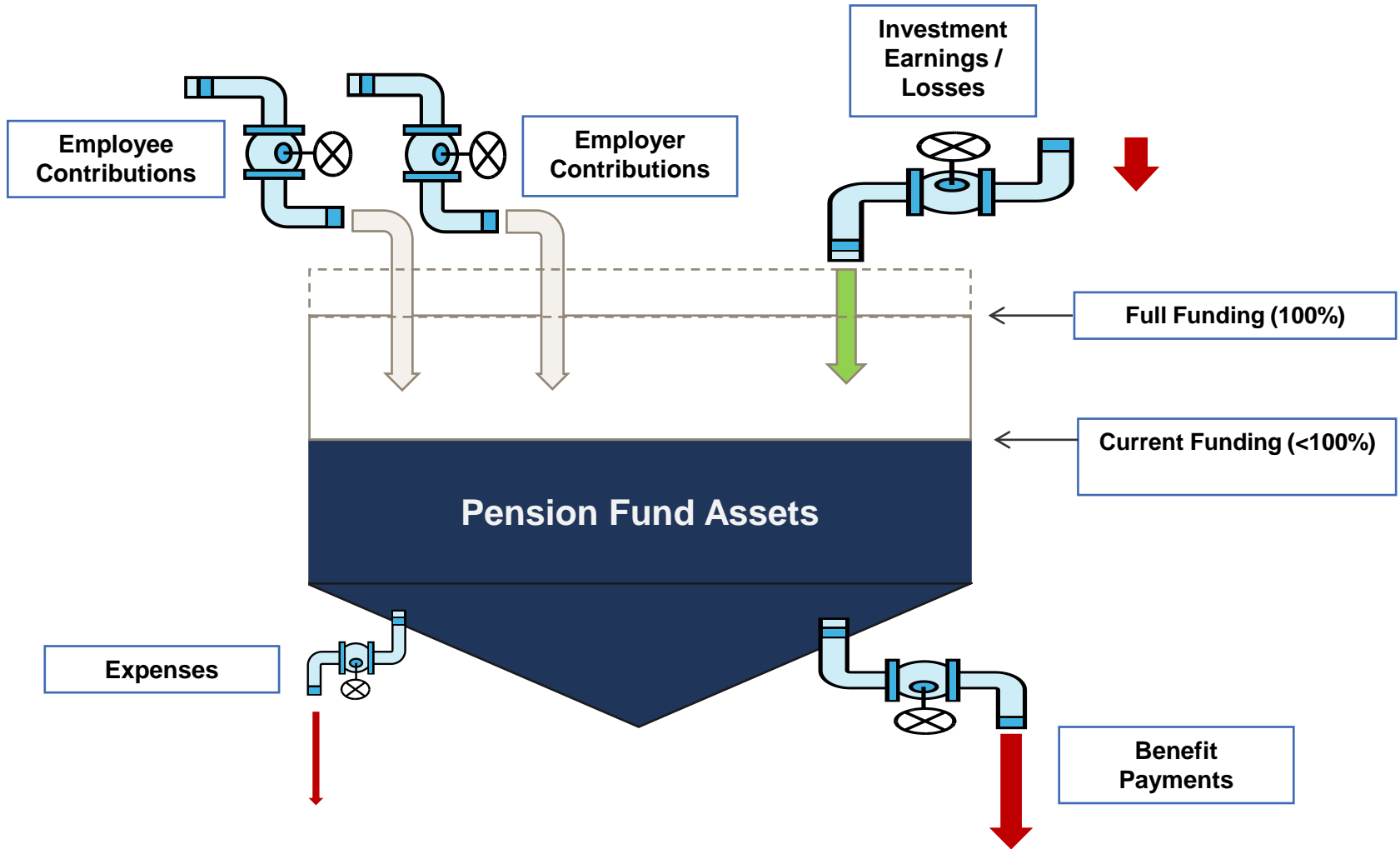


Pension Fund Liabilities – Inflows and Outflows





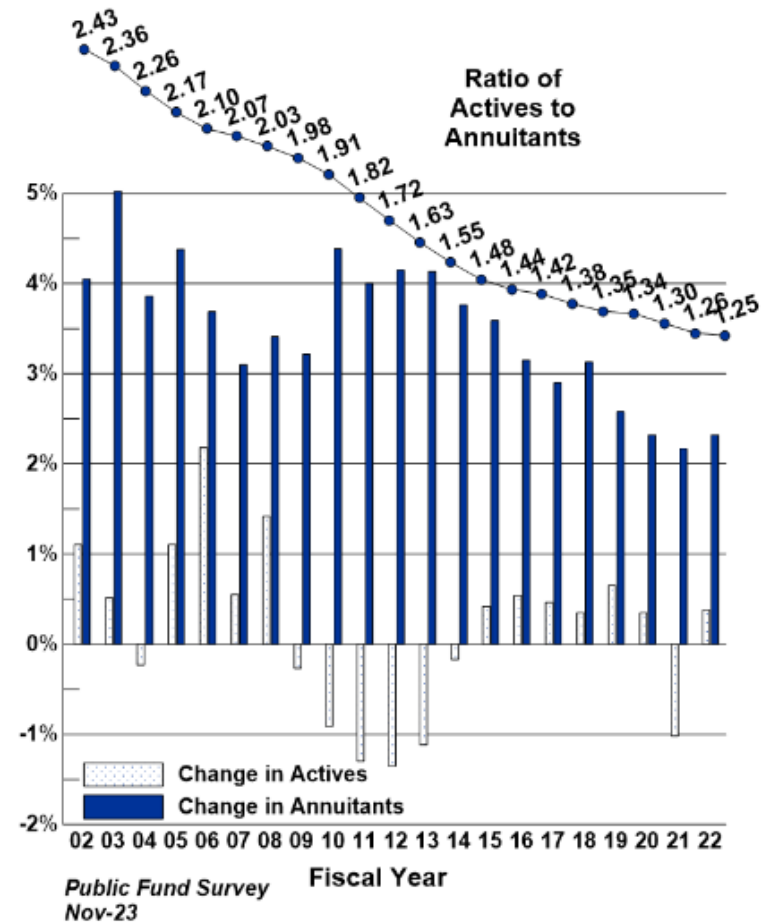
Pension Fund Assets – Inflows and Outflows





The Ratio of Actives to Annuitants Continues to Decline

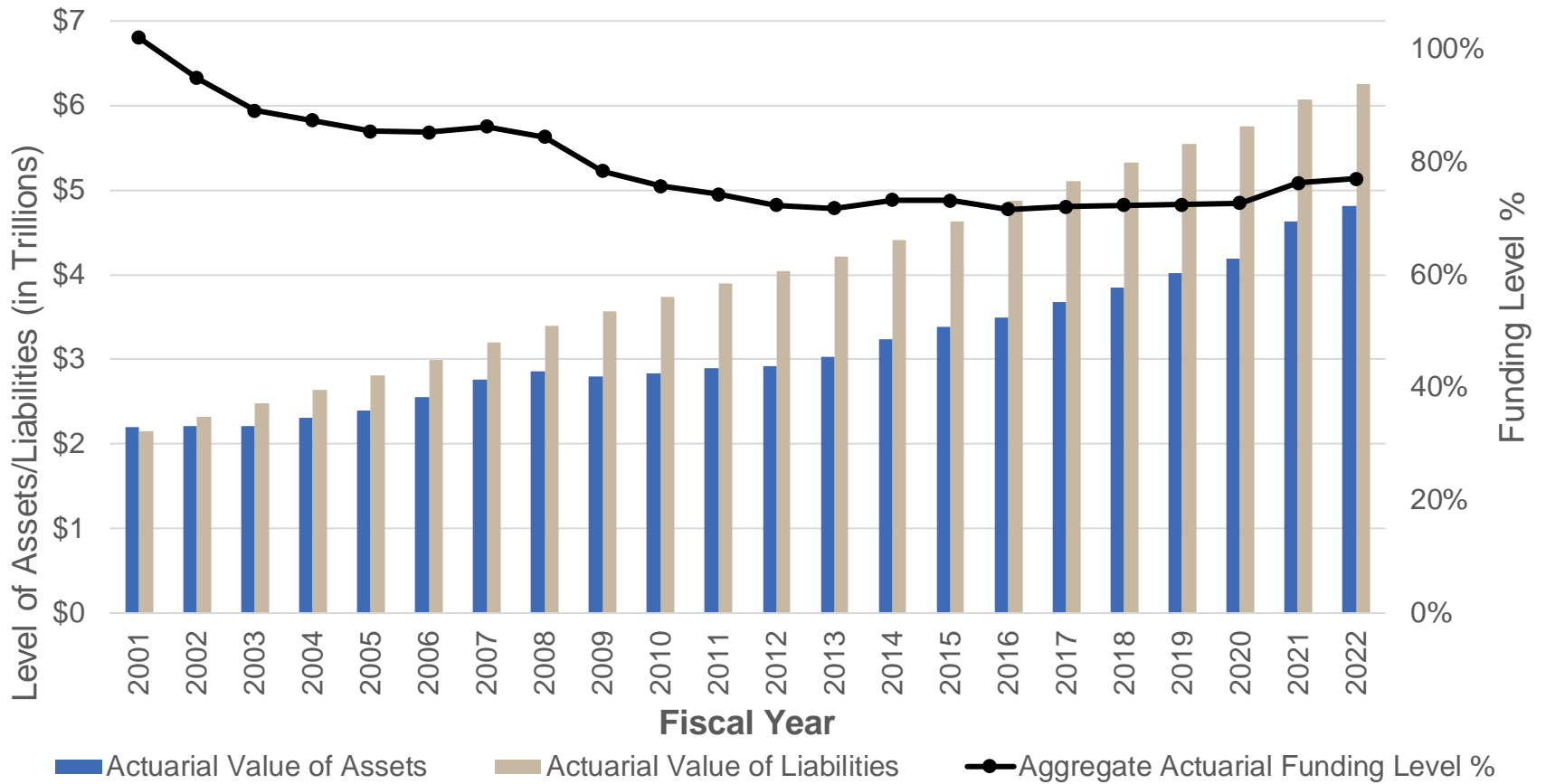
- As the amount of public retirees increase relative to active workers, the burden of retirement funding, and catching up for under-funded plans becomes steeper and more costly.
- This dynamic can and does have a direct impact on budgets and prioritization of other initiatives.



Source: *Public Fund Survey*, National Association of State Retirement Administrators, October 2022; *Public Plans Database*



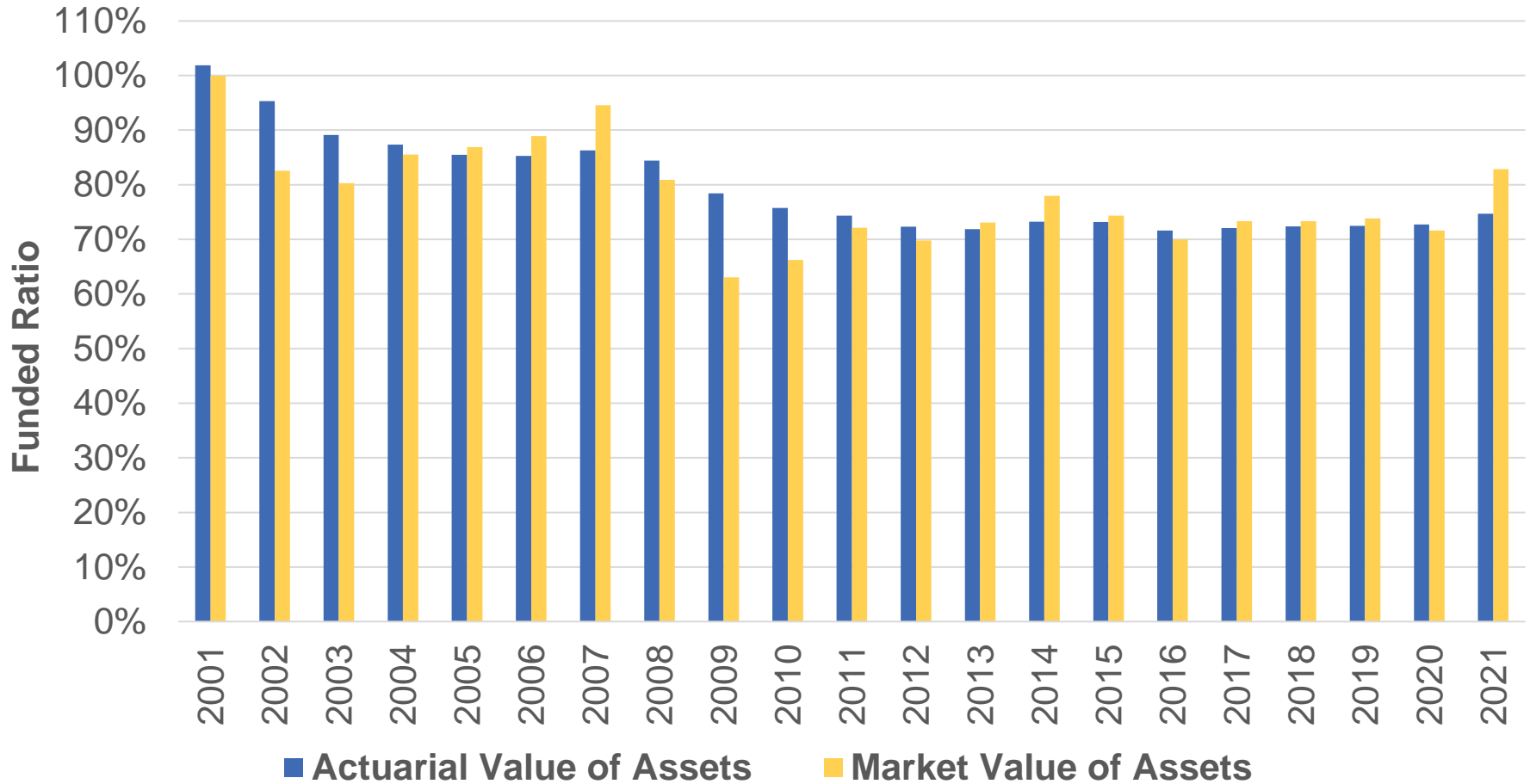
Liabilities Grow Ever Higher



Source: *Public Plans Database*



Different Funding Perspectives



Source: *Public Plans Database*



Poll Question # 2

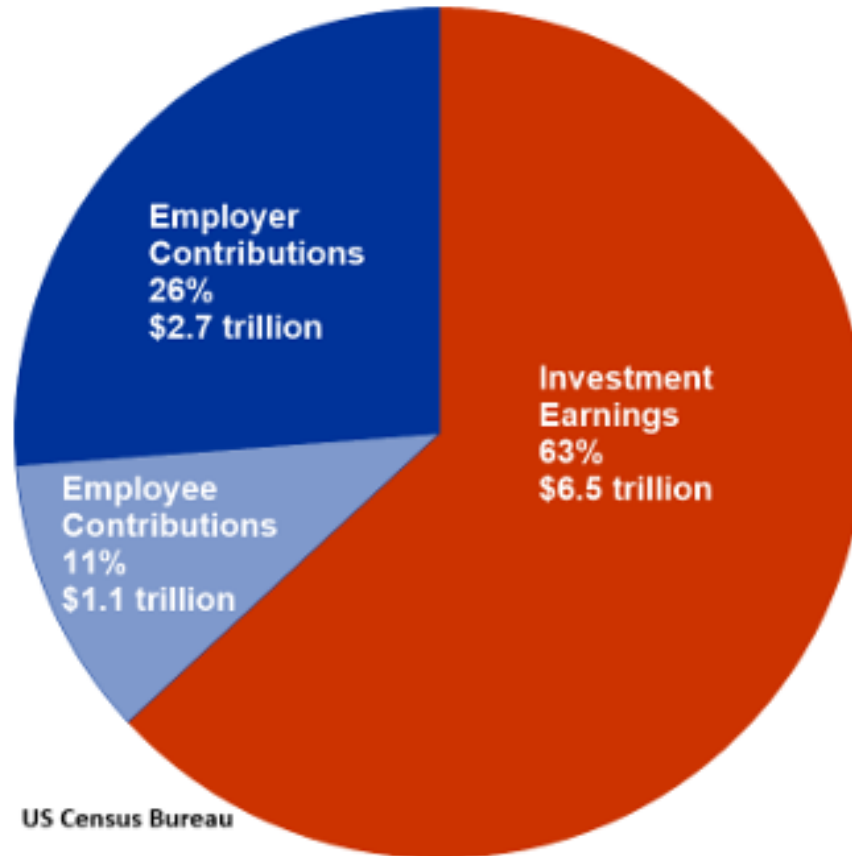


Poll Question:

- ◆ Question: The ratio of active employees to annuitants is remaining at a flat and consistent level.
- ◆ True
- ◆ False



Public Pension Sources of Revenue, 1993-2022

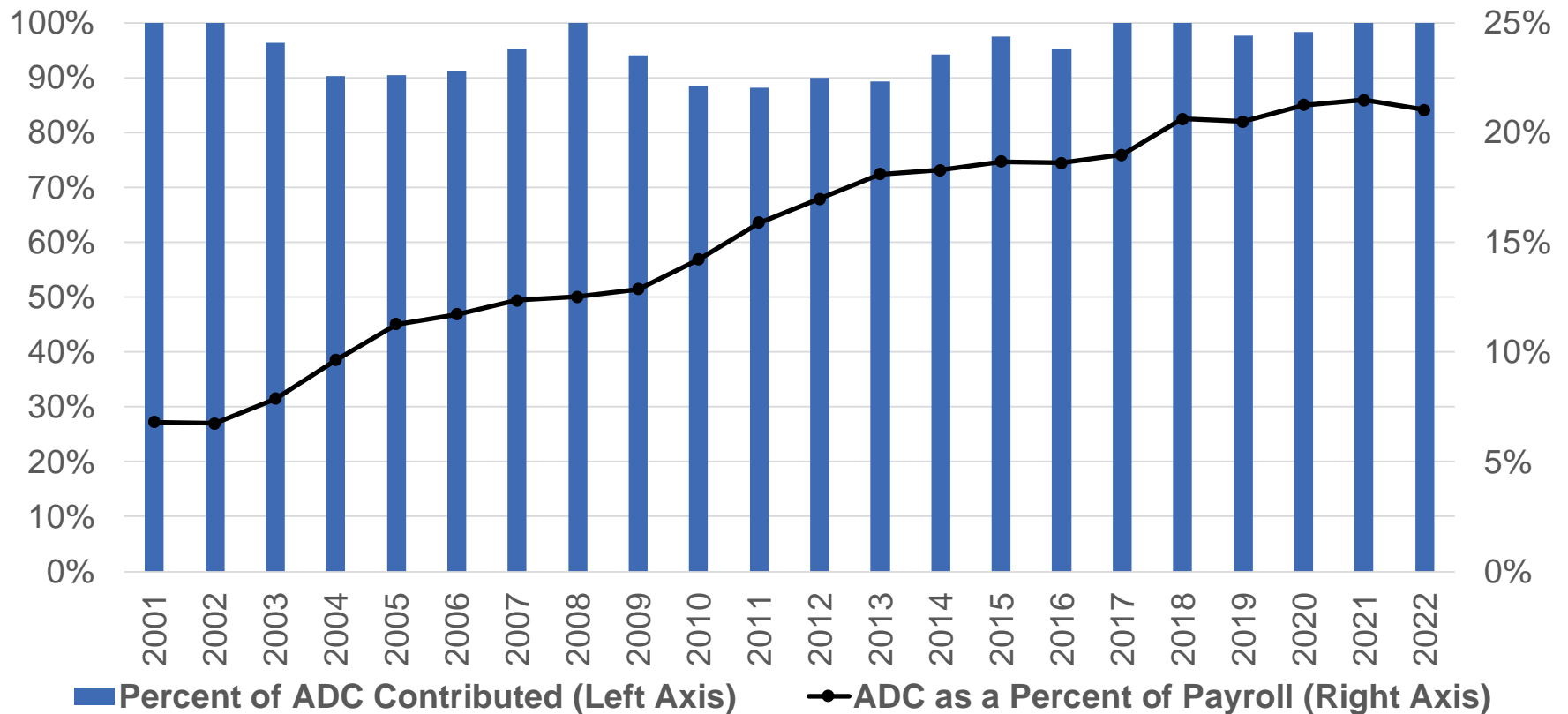


Compiled by NASRA based on U.S. Census Bureau data

Source: *NASRA Issue Brief: Public Pension Plan Investment Return Assumptions*, National Association of State Retirement Administrators, March 2024



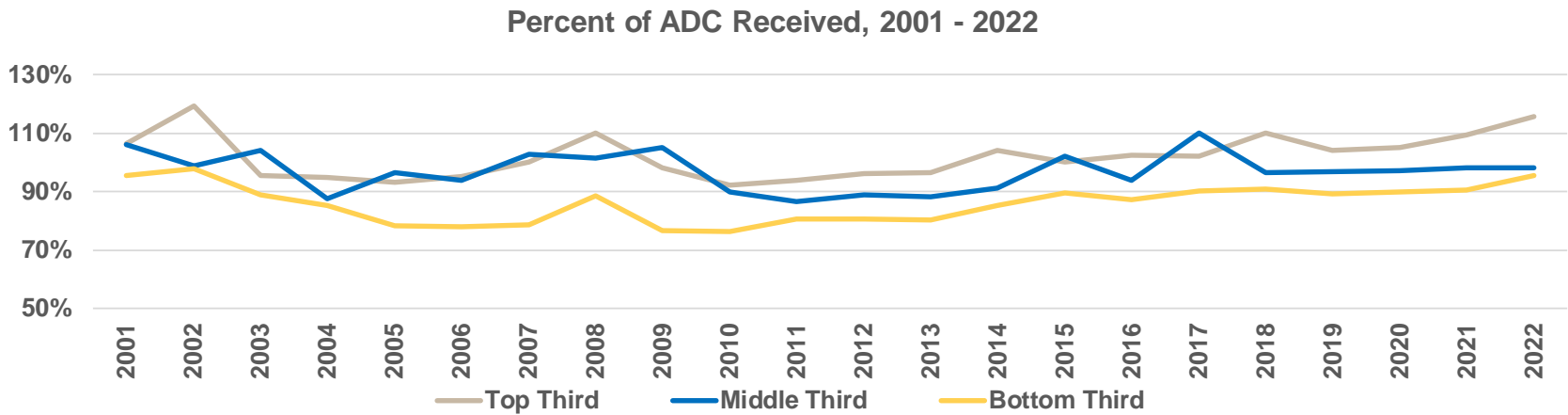
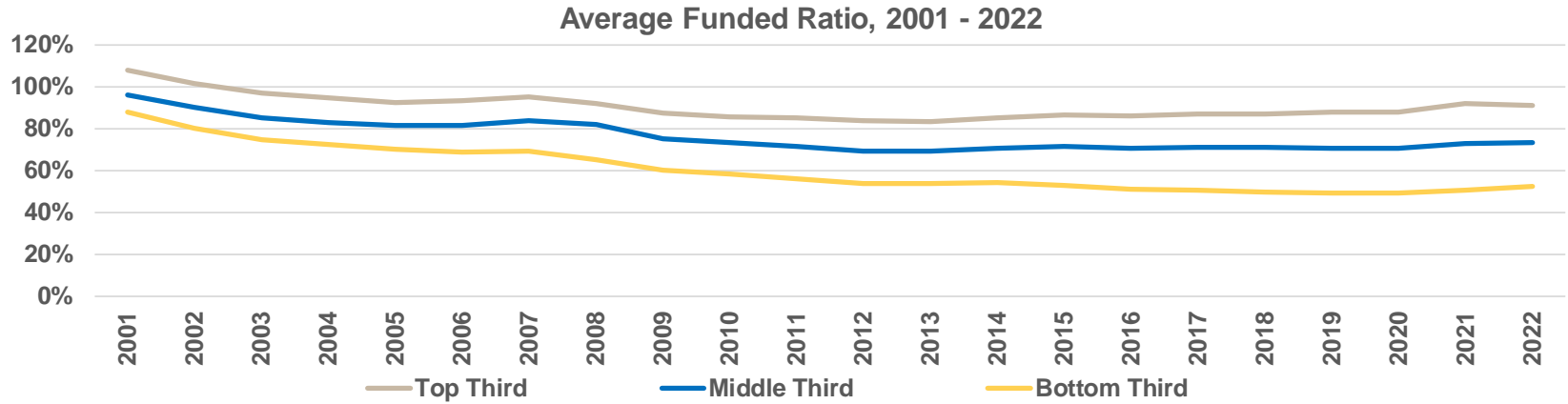
Pension Contributions Through the Years



Source: *Public Plans Database*



Average Funded Ratios and Annual Contributions Received for State and Local Governments



Source: Public Plans Database



Poll Question # 3



Poll Question:

◆ Question: Employer contributions generate the most revenue for a pension / OPEB plan.

◆ True

◆ False

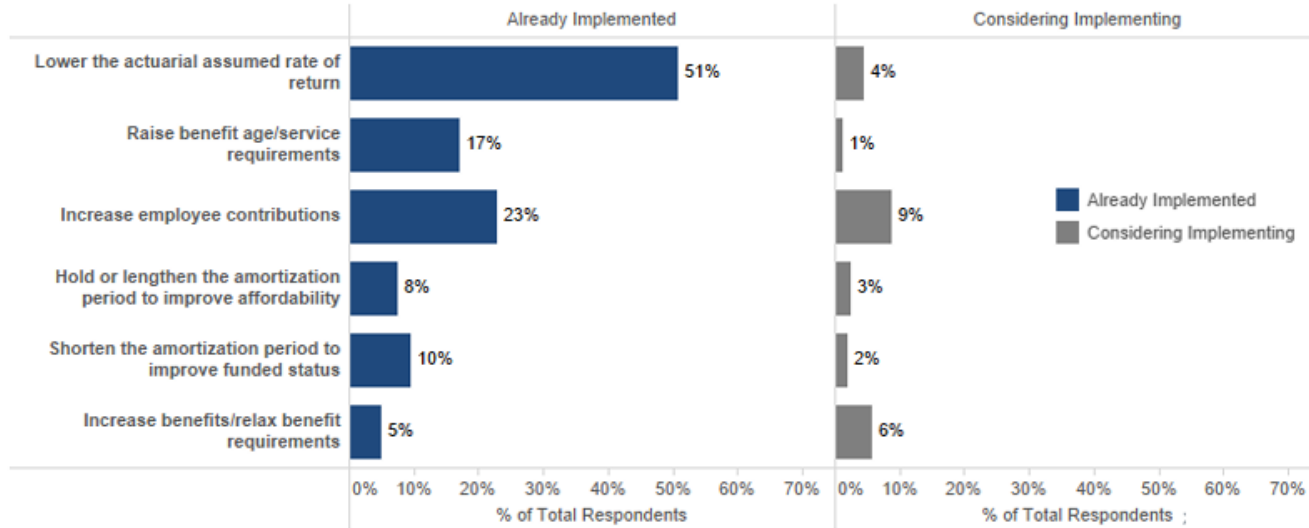


Retirement Plan Trends

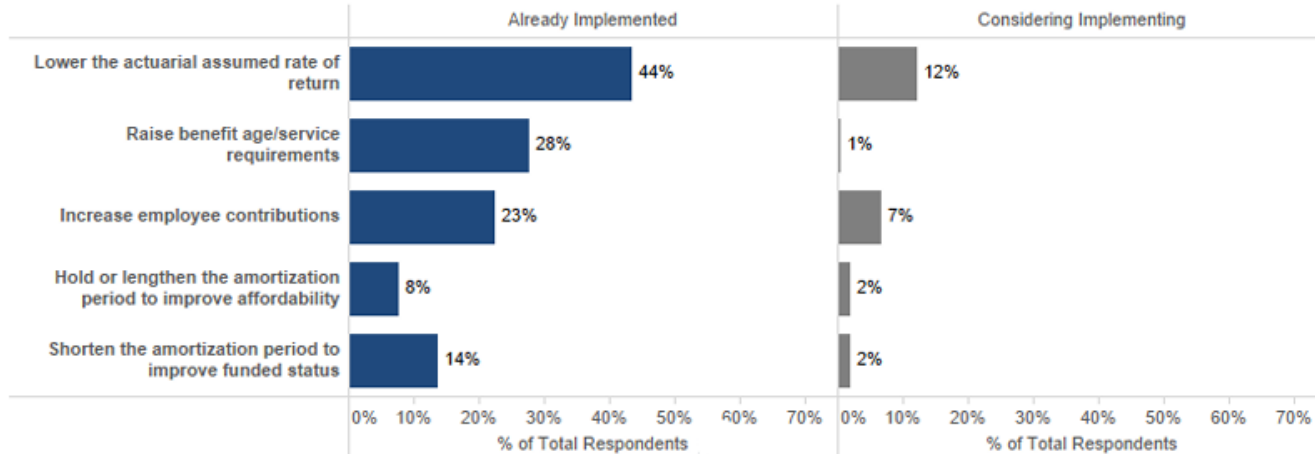


Trends in State and Local Government Retirement Plan Adjustments

2023 Retirement Plan Changes



2022 Retirement Plan Changes

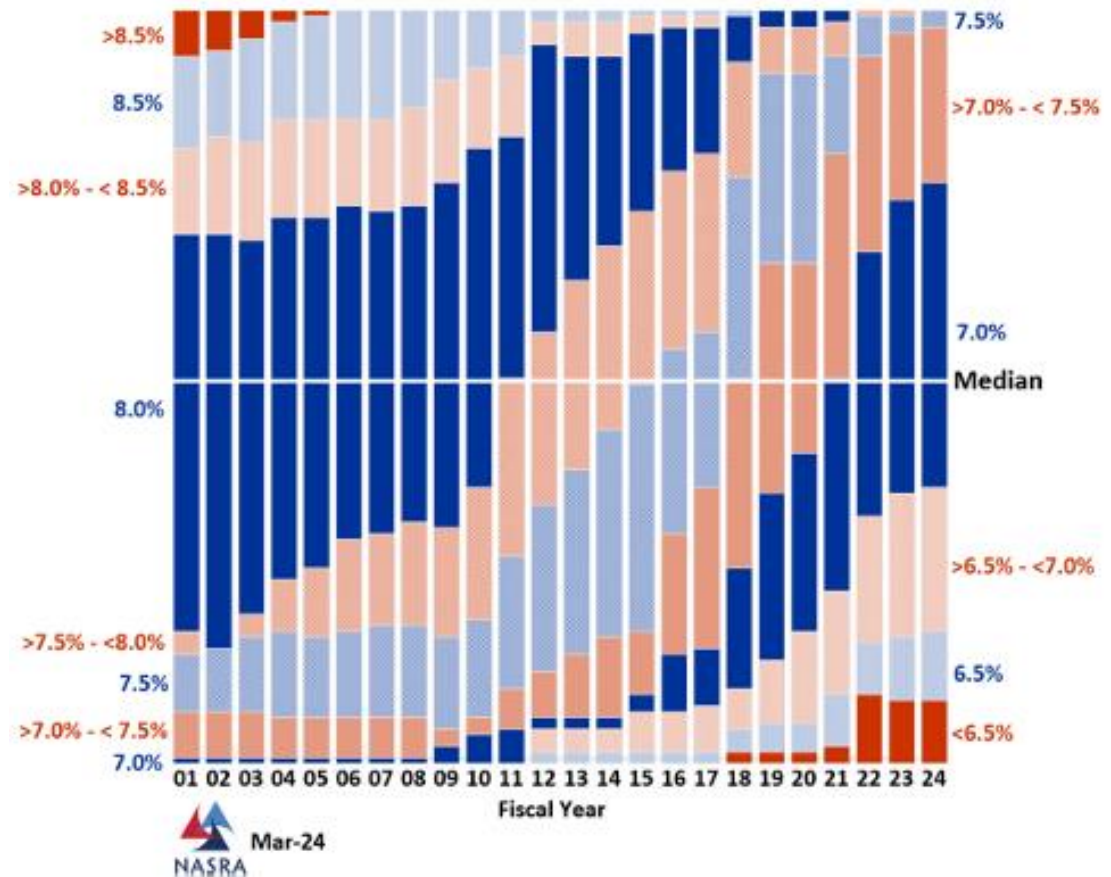




Investment Return Assumptions Used By Public Plans

- Public plans continue to de-risk their plans by reducing the investment return assumption/ discount rate
- Many plans used outstanding investment returns in 2021 to lower IRR assumptions in 2022
 - The 2024 NASRA median of 7.0% was down from 8.0% in 2010
 - The average of 6.91% in 2024 is down from 7.95% in 2007

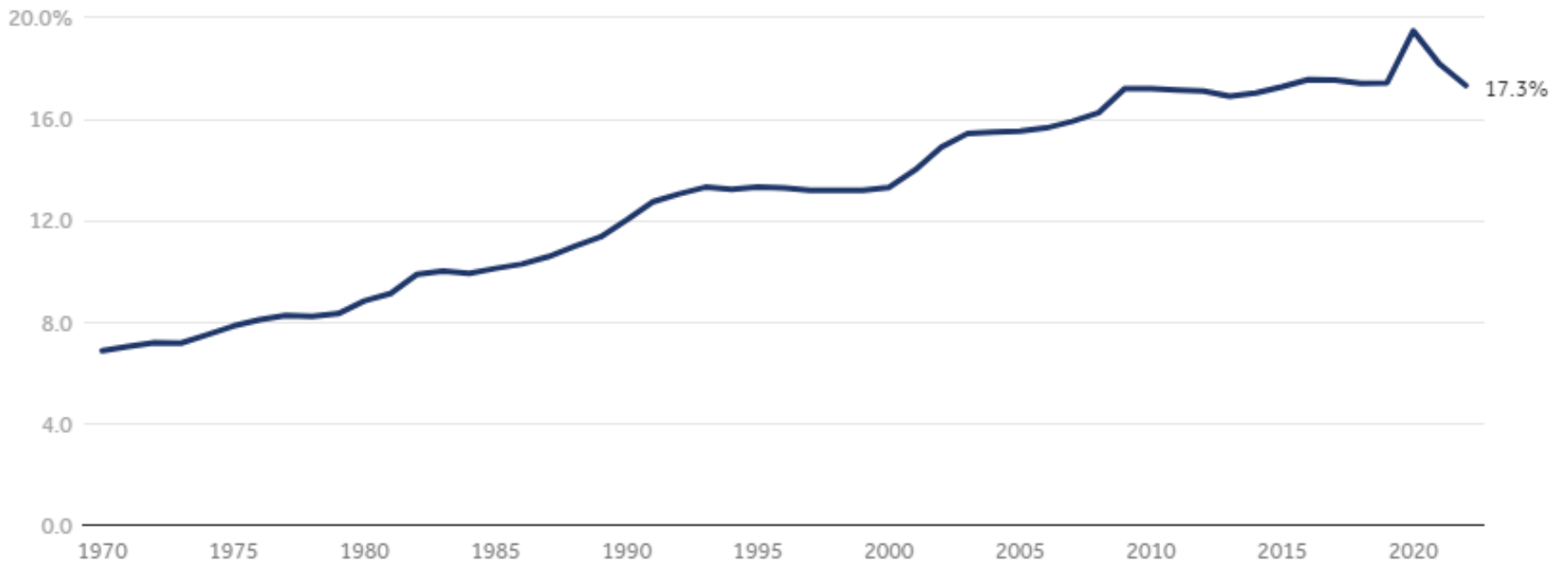
Change in Distribution of Public Pension Investment Return Assumptions, FY01 to FY24





OPEB/ Medical Cost Trends

Total national health expenditures as a percent of Gross Domestic Product, 1970-2022

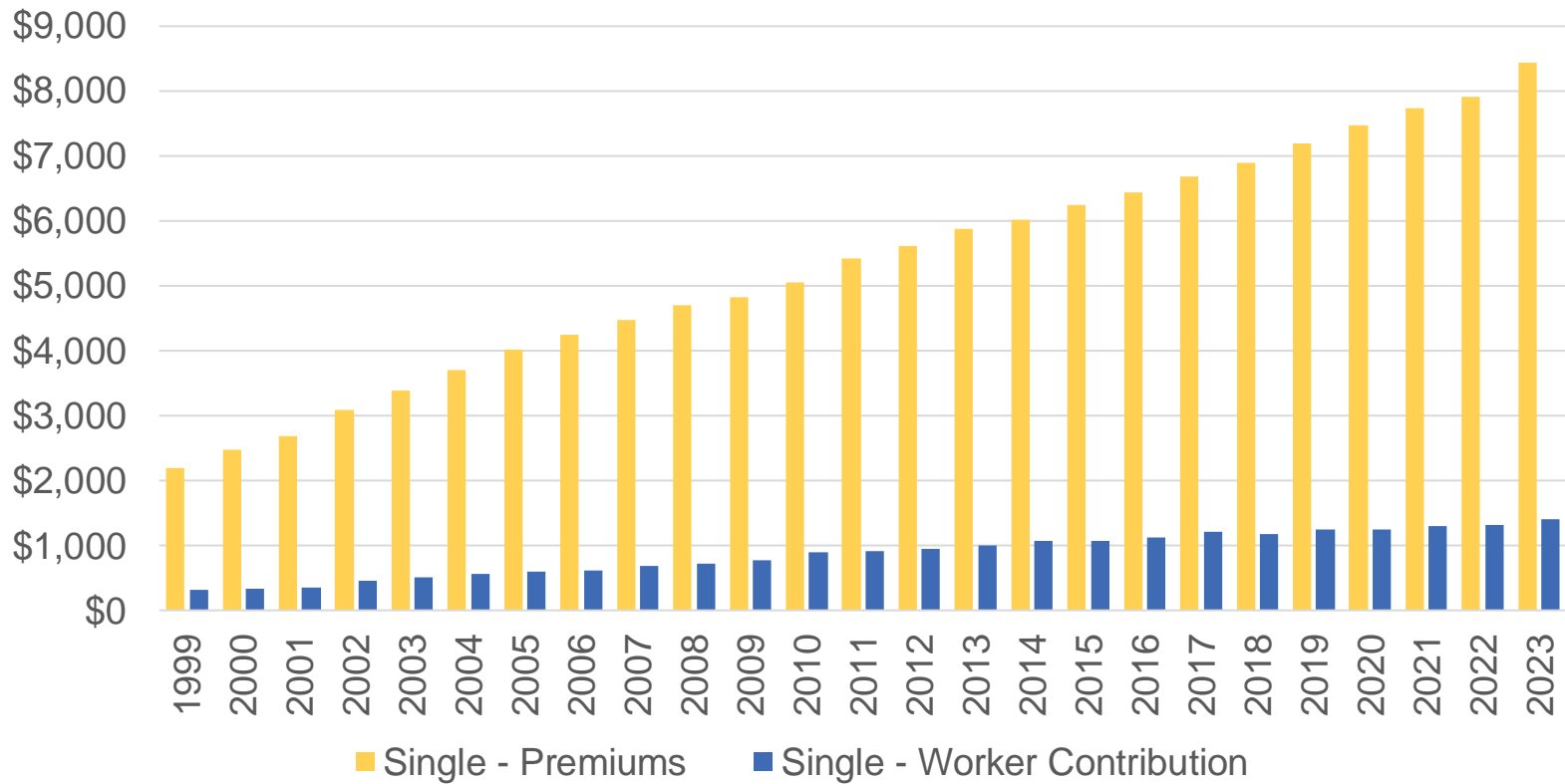


Source: Kaiser Family Foundation analysis of National Health Expenditure (NHE) data from Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group, December 2022



Premiums increasing, worker contributions remaining flat

Premiums and Worker Contributions Among Workers Covered by Employer-Sponsored Coverage, 1999-2023



Source: KFF and Kaiser/HRET Annual Surveys of Employer-Sponsored Health Benefits



Poll Question # 4



Poll Question:

◆ Question: What is the approximate median assumed rate of return for pension plans?

◆ 6.50%

◆ 6.75%

◆ 7.00%

◆ 7.25%



Tools for Addressing the Challenge



What Are the Tools?

Consistent Budgetary Funding

- Establish/Update a Funding Policy
- Fund the ADEC
- Rate Stabilization Fund

Manage Benefit Liabilities

- Plan Design Reform
- Participant and Benefit Segmentation
- Evaluate Exchanges

Risk Management

- Risk Sharing
- Risk Transfer

Build Fund Assets

- Dedicated Taxes
- Asset Monetization
- Pension Obligation/OPEB Bonds



Funding Policy

- ◆ A funding policy must be established with specific objectives.
 - ✓ Lay out a plan to fund pensions
 - ✓ Provide guidance in making annual budget decisions
 - ✓ Demonstrate affordable financial management practices to taxpayers
 - ✓ Reassure bond rating agencies
 - ✓ Assure employees how pensions will be funded
- ◆ Sustainability through policy implementation.
 - ✓ Have a pension funding policy that is based on an actuarially determined contribution
 - ✓ Build funding discipline into the policy to ensure that promised benefits can be paid
 - ✓ Maintain intergenerational equity so that the cost of employee benefits is paid by the generation of taxpayers who receive services
 - ✓ Make employer cost a consistent percentage of its current and projected payroll
 - ✓ Require clear reporting to show how and when pension plans will be fully funded



Approved: December 11, 2014
Revised: March 25, 2021

Funding Policy of the Wisconsin Retirement System

The Wisconsin Retirement System (WRS) is a public trust established under state law as a governmental tax-qualified retirement plan. The funds of the trust can only be used for pension purposes. The WRS is a defined benefit plan, created to aid public employees in protecting themselves and their beneficiaries against the financial hardships of old age, disability, death, illness, and accident. The WRS provides retirement, disability, and death benefits to employees of the State of Wisconsin and employees of local government employers who elect to participate, and Milwaukee Public School District teachers. Employees of the City of Milwaukee and Milwaukee County do not participate in the WRS.

FINANCIAL OBJECTIVE

The main financial objective of the WRS is to fully fund the long-term cost of benefits provided by statute, through disciplined and timely accumulation of sufficient assets to deliver earned benefits on a continuing basis.

FUNDING GUIDELINES

This funding policy seeks to balance three main objectives:

- **Contribution Adequacy** — Contributions and current plan assets must be sufficient to provide for all benefits expected to be paid to members and their beneficiaries when due.
- **Contribution Stability and Predictability** — Contribution volatility must be controlled to the extent reasonably possible, consistent with other policy goals.
- **Inter-Generational Equity** — Costs of benefits should be paid for by the generation that receives the benefits.

FUNDING METHODS AND PRINCIPLES

The following methods and principles, most of which are stipulated by statute, will be used to implement this policy:

- **Actuarial Cost Method** – [[Wis. Stat. § 40.05\(2\)\(b\)](#)]. Normal cost¹ for the WRS is calculated using the *frozen initial liability* method, modified to adjust the normal cost by the amortization of the Experience Amortization Reserve (EAR)².



Actuarial Assumptions*

	Annual Budget Impact (Short-Term)		Plan Funded Ratio	
	Cost ¹	Risk/Volatility ²	Short-Term Impact ³	Long-Term Impact ⁴
No actuarial or funding changes	↔	↔	↔	↑
Actuarial Assumptions (all else being equal)				
• Level Dollar Cost ⁵	↑	↓	↑	↔
• Reduce UAAL Amortization Period	↑	↓	↑	↑
• Reduce the Discount Rate	↑	↓	↓	↔
• Reduce Asset Smoothing Period	↔	↑	↔	↔
• Reduce Wage Inflation ⁶	↑	↓	↑	↑

1 – budget cost represents comprehensive governmental cost;

2 – risk/volatility represents potential annual budget variability introduced by change

3 – short-term represents likely change to pension funded status over 1 – 3 years;

4 – long-term represents likely change to pension funded status over more than 20 years

5 – assumes current cost method is level % of payroll

6 – assumes level % of payroll cost method

* For Illustrative Purposes Only - Actuarial assumption changes should be viewed within the comprehensive perspective of the plan, and reviewed based on calculations provided by your actuary.



Funding and Other Changes

	Annual Budget Impact (Short-Term)		Plan Funded Ratio Impact	
	Cost ¹	Risk/Volatility ²	Short-Term ³	Long-Term ⁴
Funding Practices (all else being equal)				
• Fund ADEC (if current level of funding is less)	↑	↓	↑	↑
• Additional Funding Plan ⁵	↑	↔	↑	↑
• Pension Obligation Bond	↓	↑	↑	↔
Other Changes (all else being equal)				
• New Tiers ⁶	↔	↓	↔	↑
• Investment Risk Sharing ⁷	↔	↓	↔	↔

1 – budget cost represents comprehensive governmental cost;

2 – risk/volatility represents potential annual budget variability introduced by change

3 – short-term represents likely change to pension funded status over 1 – 3 years;

4 – long-term represents likely change to pension funded status over more than 20 years

5 – additional funding plan could be one-time or planned from cash reserves, dedicated tax or other extra-budgetary measure

6 – new tiers would represent lower benefits at a given age/service or longer benefit qualification period

7 – investment risk sharing would introduce programmatic sharing of losses and, potentially, gains amongst all stakeholders



Poll Question # 5



Poll Question:

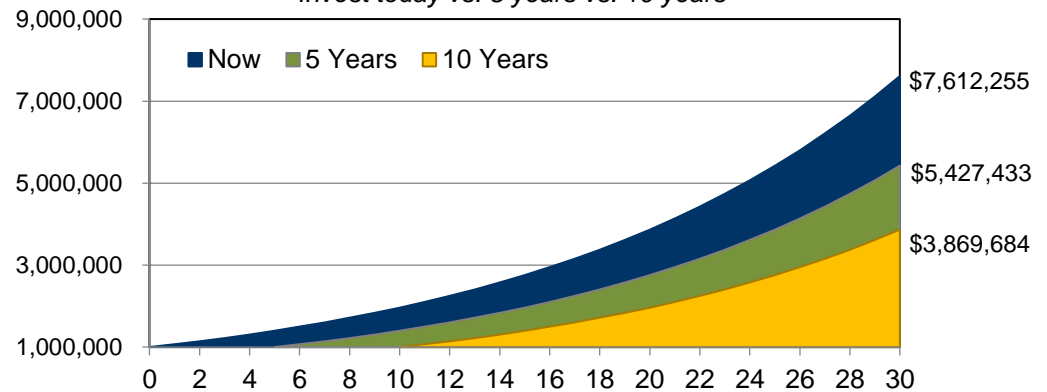
- ◆ Question: Lowering the assumed rate of return will decrease the amount an employer and/or employee needs to contribute to the fund.
- ◆ True
- ◆ False



Why Fund OPEB?

- Earn a higher rate of return than cash – more efficient use of resources
- Reduce the unfunded liability that will be reported on the balance sheet following GASB 74/75 by:
 - Dedicating assets to decrease Net OPEB Liability
 - Allowing application of the higher discount rate to some portion of the liability
- Offset the 5%+ growth in costs of the medical benefits by investing in long-term assets
- The cost of the benefit is funded when earned, instead of passed to future taxpayers/ ratepayers

Growth of Initial \$1 million Investment*
Invest today vs. 5 years vs. 10 years



*Example represents growth of original deposit at an annual earnings rate of 7%, which is an average long-term rate of return for a balanced fixed-income and equity portfolio; assumes no redemptions of funds.

Model returns may not reflect material economic or market factors.

Returns are shown before any fees.

Do not assume that the recommendations made in the future will be profitable or will equal the performance cited.



Asset Monetization as a Funding Strategy

- ◆ Many governments own significant assets that provide a stable and long-term source of cash-flows. Governments may sell or lease these assets to match long-term cash-flows with the long-term liabilities associated with retirement systems

Pittsburgh, PA rejected a bid of \$453 million for a 50-year lease on parking revenues to fund its pension deficit. Instead, it sought to accomplish the same purpose by transferring the yearly parking revenue directly to the pension system. While the economics of this were similar, no changes were made to the pension system's benefits, and the funded ratio is falling.

Allentown, PA leased its water utility for 50 years to a public authority in return for \$211.3 million, of which \$160 million was used to reduce the unfunded pension liability. Future rate increases were limited and there was no initial cost to taxpayers. As a result, Standard & Poor's revised Allentown's ratings outlook from stable to positive.

Scranton, PA sold its wastewater system to Pennsylvania American Water for \$195 million. The net proceeds of the transaction were utilized to pay off debt and a deposit to the pension system, which was roughly 25% funded in aggregate at 12/31/14. The City's Recovery Coordinator has recommended an exit within the next three years from the state's fiscally distressed status, which has been in place since 1992.

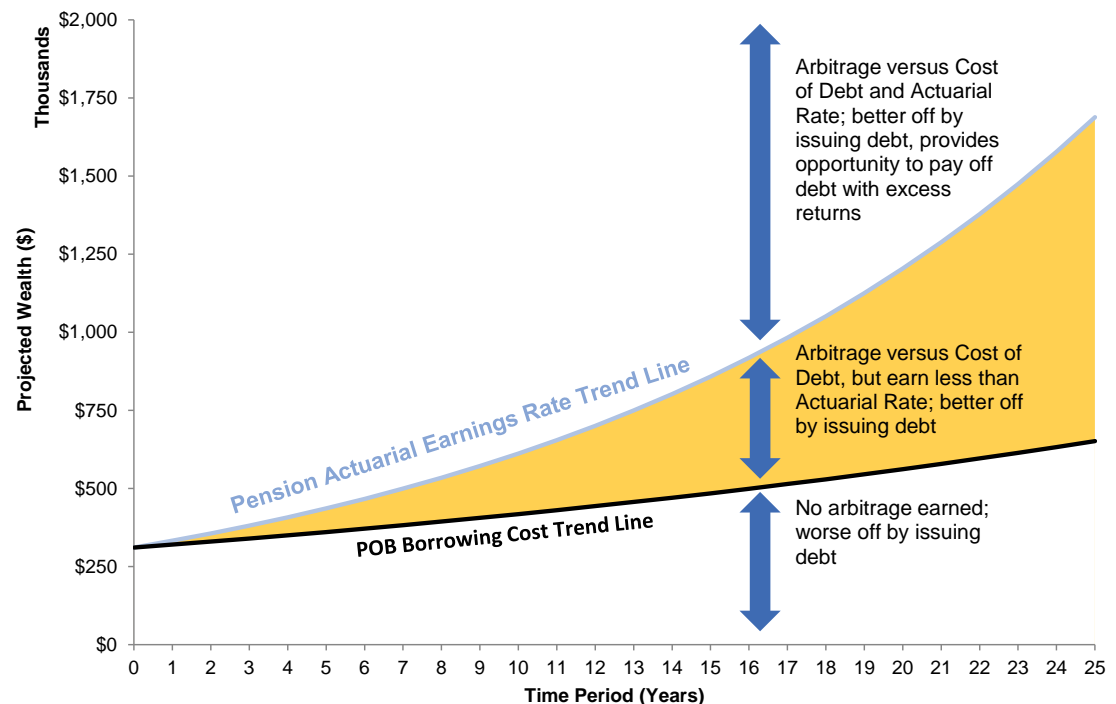




What is a Pension Obligation Bond?

- ◆ Issuers of Pension Obligation Bonds (“POBs”) issue debt in the taxable fixed rate markets and deposit the proceeds into their pension system
- ◆ POBs are a risk-bearing arbitrage strategy between the cost of financing and the long-term return on investment
 - Investment rates that are greater than borrowing costs will achieve net savings to the pension obligation
 - Where net pension savings are achieved, there can be budgetary relief and funding improvements
 - POB proceeds should be invested in asset classes that can generate an arbitrage balanced against the risk/return trade-off
- ◆ POBs replace a ‘soft liability’ with a ‘hard liability’

Illustrative Arbitrage Example

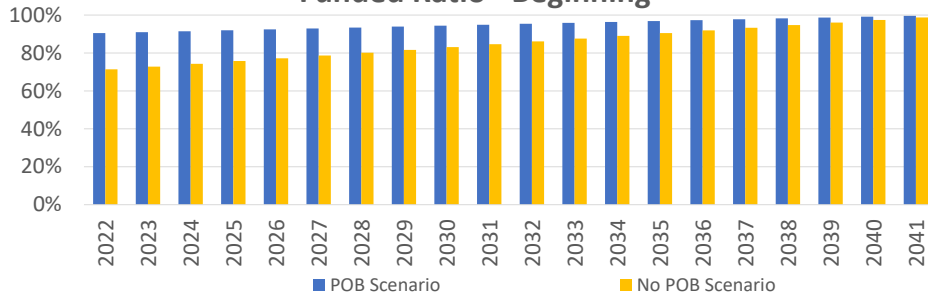




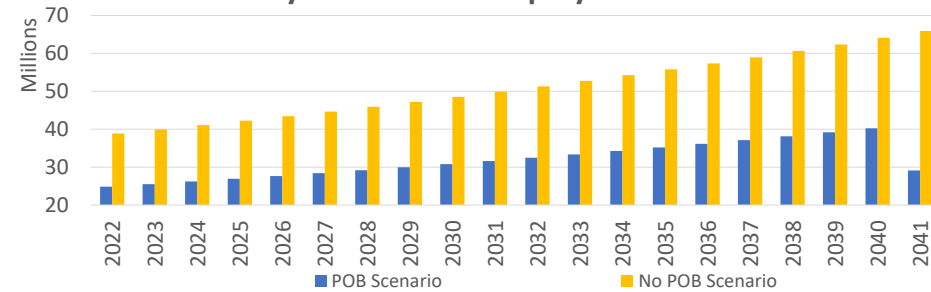
Generating Savings with POB

- ◆ A POB issuance may create budgetary cash flow savings by reducing the unfunded liabilities associated with a plan, and then replacing the UAAL amortization payments associated with those now funded liabilities with lower levels of debt service

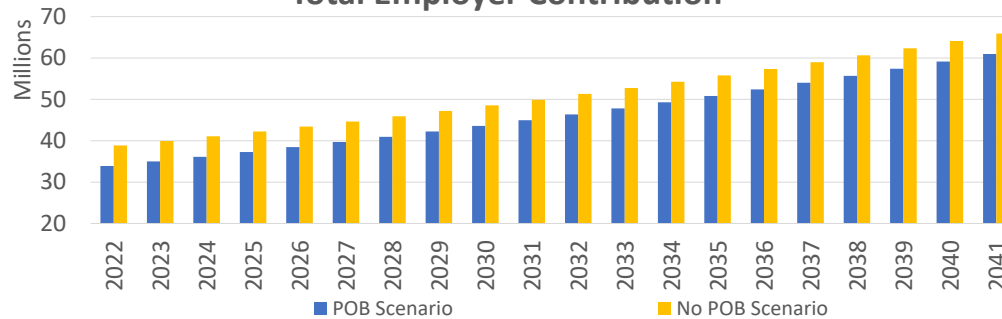
Funded Ratio - Beginning



Actuarially Determined Employer Contribution



Total Employer Contribution





POB Strategy Risks

- Failing to achieve the target rate could create additional costs that reduce, or exceed anticipated budgetary savings
 - If the pension system earns less over the life of the bonds than the interest paid on the POBs, then the issuance of the POBs become a net cost
 - Market timing greatly impacts the long-term economics of a POB
 - Investment losses soon after a POB issuance could contribute to a new unfunded liability and could require many years of future gains in order to reach a “breakeven” threshold
- Trading a soft cost (i.e., annual pension contribution requirement) for a hard cost (i.e., debt)
 - Actuarial assumptions and contribution policies have some flexibility which can be adjusted over time to better fit overall general budgetary needs
 - The issuer will no longer have the flexibility they once had to decide how to amortize the portion of the unfunded actuarial accrued liability (UAAL) that is funded via the POB as that will now have been converted to mandatory debt service requirements
- Improved financial health of the pension fund may possibly result in pressure to increase benefits



Considerations and Questions to Ask for POB Strategy Development

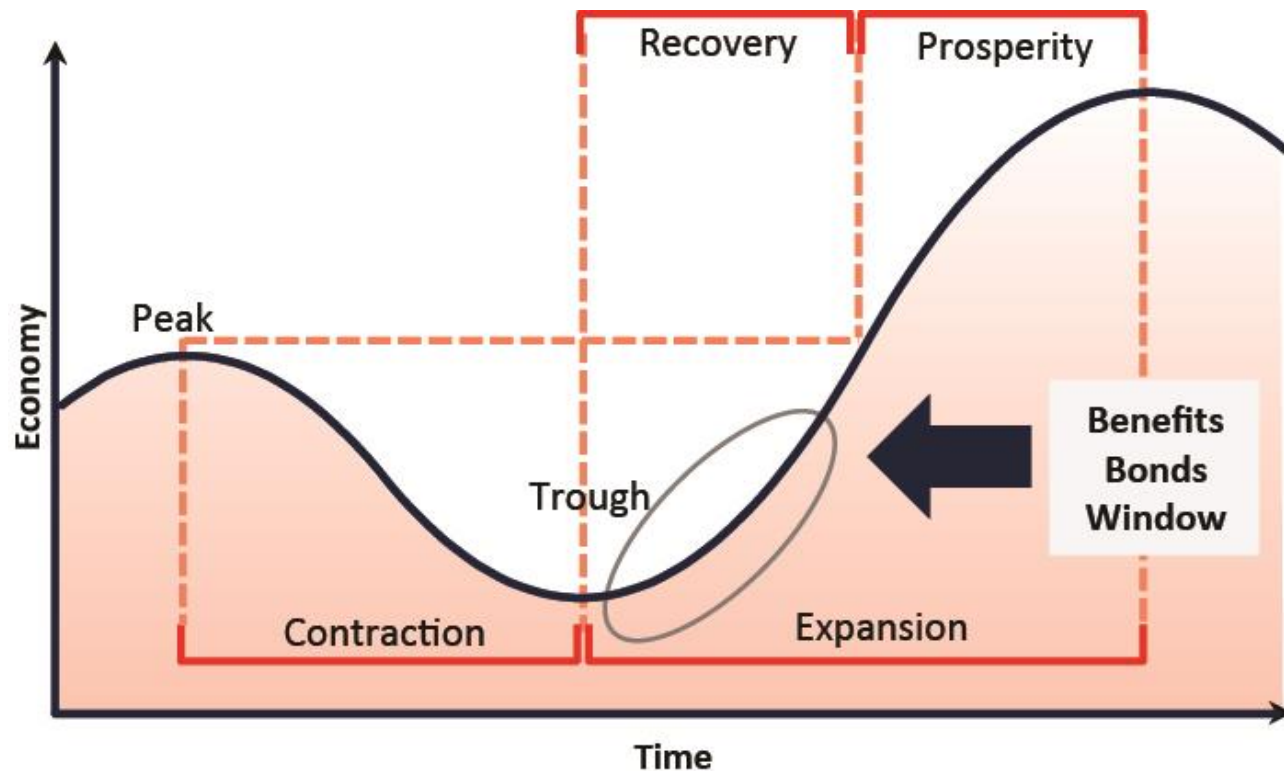
- What is the appropriate target funded ratio, and how will that impact the size of the POB?
 - If POB issuance is sizeable, consider multi-tranche approach
- What is the proper pension funding policy such that the client is in a better position to contribute 100% of Actuarially Determined Employer Cost (ADEC)?
 - Contributing 100% reduces the probability of compounding future losses through poor funding discipline
- Should adjustment to existing plan policies be implemented to enhance future sustainability of the plan? Examples of policy updates include:
 - COLAs will only be made if they are included fully in the actuarially determined employer contribution (ADEC)
 - No retroactive benefits will be provided unless fully funded up front
 - No new prospective benefits will be provided while the POB is outstanding
- Should a POB trust be created within or alongside the pension trust to hold and invest the POB assets?
- Should an investment policy be adopted that directs the specific investment of POB proceeds? Examples of policy include:
 - Fully invest proceeds in equities (or equivalents) for at least 10 years
 - If proceeds are managed in a pension stabilization trust, then the proceeds should be transitioned to the main corpus of the pension in a disciplined contribution pattern over the remaining life of the POB



What is the Pension Obligation Bond Window?

• The period of time an issuer of benefits bonds can most reasonably expect to invest bond proceeds in the stock market without witnessing lower stock prices in the subsequent economic recession

- Measured from the bottom of the stock market (which typically corresponds to the trough of an economic business cycle) until the stock market 'breakeven' level with the subsequent stock market bottom
- Theoretically, the period in which the risk of subsequent cycle loss is < 50%
- Quantifiable only in hindsight.
- No one can ever predict in real-time when there is a bottom





Investment of POB Proceeds

- Consider investing proceeds of a POB issuance differently than other retirement system assets
 - Typical pension plan investment strategies have asset allocation targets that include equities, fixed income, and other asset classes

Annual Returns for Key Indices Ranked in Order of Performance (2004–2023)

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Real Estate 37.96%	Emerging Market Equity 34.00%	Real Estate 42.12%	Emerging Market Equity 39.38%	U.S. Fixed Income 5.24%	Emerging Market Equity 76.51%	Small Cap Equity 26.85%	U.S. Fixed Income 7.84%	Real Estate 27.73%	Small Cap Equity 38.82%	Real Estate 15.02%	Large Cap Equity 1.38%	Small Cap Equity 21.31%	Emerging Market Equity 37.28%	Cash Equivalent 1.87%	Large Cap Equity 31.49%	Small Cap Equity 19.96%	Large Cap Equity 28.71%	Cash Equivalent 1.46%	Large Cap Equity 26.29%
Emerging Market Equity 25.55%	Real Estate 15.35%	Emerging Market Equity 32.17%	Developed ex-U.S. Equity 12.44%	Global ex-U.S. Fixed 4.39%	High Yield 58.21%	Real Estate 19.63%	High Yield 4.98%	Emerging Market Equity 18.23%	Large Cap Equity 32.39%	Large Cap Equity 13.69%	U.S. Fixed Income 0.55%	High Yield 17.13%	Developed ex-U.S. Equity 24.21%	U.S. Fixed Income 0.01%	Small Cap Equity 25.52%	Large Cap Equity 18.40%	Real Estate 26.09%	High Yield -11.19%	Developed ex-U.S. Equity 17.94%
Developed ex-U.S. Equity 20.38%	Developed ex-U.S. Equity 14.47%	Developed ex-U.S. Equity 25.71%	Global ex-U.S. Fixed 11.03%	Cash Equivalent 2.06%	Real Estate 37.13%	Emerging Market Equity 18.88%	Global ex-U.S. Fixed 4.36%	Developed ex-U.S. Equity 16.41%	Developed ex-U.S. Equity 21.02%	U.S. Fixed Income 5.97%	Cash Equivalent 0.05%	Large Cap Equity 11.96%	Large Cap Equity 21.83%	High Yield -2.08%	Developed ex-U.S. Equity 22.49%	Emerging Market Equity 18.31%	Small Cap Equity 14.82%	U.S. Fixed Income -13.01%	Small Cap Equity 16.93%
Small Cap Equity 18.33%	Large Cap Equity 4.91%	Small Cap Equity 18.37%	U.S. Fixed Income 6.97%	High Yield -26.16%	Developed ex-U.S. Equity 33.67%	High Yield 15.12%	Large Cap Equity 2.11%	Small Cap Equity 16.35%	High Yield 7.44%	Small Cap Equity 4.88%	Real Estate -0.79%	Emerging Market Equity 11.19%	Small Cap Equity 14.65%	Global ex-U.S. Fixed -2.15%	Real Estate 21.91%	Global ex-U.S. Fixed 10.11%	Developed ex-U.S. Equity 12.62%	Developed ex-U.S. Equity -14.29%	High Yield 13.44%
Global ex-U.S. Fixed 12.54%	Small Cap Equity 4.55%	Large Cap Equity 15.79%	Large Cap Equity 5.49%	Small Cap Equity -33.79%	Small Cap Equity 27.17%	Large Cap Equity 15.06%	Cash Equivalent 0.10%	Large Cap Equity 16.00%	Real Estate 3.67%	High Yield 2.45%	Developed ex-U.S. Equity -3.04%	Real Estate 4.06%	Global ex-U.S. Fixed 10.51%	Large Cap Equity -4.38%	Emerging Market Equity 18.44%	Developed ex-U.S. Equity 7.59%	High Yield 5.28%	Large Cap Equity -18.11%	Emerging Market Equity 9.83%
High Yield 11.13%	Cash Equivalent 3.07%	High Yield 11.85%	Cash Equivalent 5.00%	Large Cap Equity -37.00%	Large Cap Equity 26.47%	Developed ex-U.S. Equity 8.95%	Small Cap Equity -4.18%	High Yield 15.81%	Cash Equivalent 0.07%	Cash Equivalent 0.03%	Small Cap Equity -4.41%	Developed ex-U.S. Equity 2.75%	Real Estate 10.36%	Real Estate -5.63%	High Yield 14.32%	U.S. Fixed Income 7.51%	Cash Equivalent 0.05%	Global ex-U.S. Fixed -18.70%	Real Estate 9.67%
Large Cap Equity 10.88%	High Yield 2.74%	Global ex-U.S. Fixed 8.16%	High Yield 1.87%	Developed ex-U.S. Equity -43.56%	Global ex-U.S. Fixed 7.53%	U.S. Fixed Income 6.54%	Real Estate -6.46%	U.S. Fixed Income 4.21%	U.S. Fixed Income -2.02%	Emerging Market Equity -2.19%	High Yield -4.47%	U.S. Fixed Income 2.65%	High Yield 7.50%	Small Cap Equity -11.01%	High Yield 8.72%	High Yield 7.11%	U.S. Fixed Income -1.54%	Emerging Market Equity -20.09%	Global ex-U.S. Fixed 5.72%
U.S. Fixed Income 4.34%	U.S. Fixed Income 2.43%	Cash Equivalent 4.85%	Small Cap Equity -1.57%	Real Estate -48.21%	U.S. Fixed Income 5.93%	U.S. Fixed Income 4.95%	Global ex-U.S. Fixed -12.21%	Global ex-U.S. Fixed 4.09%	Emerging Market Equity -2.80%	Global ex-U.S. Fixed -3.09%	Global ex-U.S. Fixed -5.02%	U.S. Fixed Income 1.49%	U.S. Fixed Income 3.54%	Developed ex-U.S. Equity -14.09%	Global ex-U.S. Fixed 5.09%	Cash Equivalent 0.67%	Emerging Market Equity -2.54%	Small Cap Equity -20.44%	U.S. Fixed Income 5.53%
Cash Equivalent 1.33%	Global ex-U.S. Fixed Income -8.65%	U.S. Fixed Income 4.33%	Real Estate -7.39%	Emerging Market Equity -53.33%	Cash Equivalent 0.21%	Cash Equivalent 0.13%	Emerging Market Equity -18.42%	Cash Equivalent 0.11%	Global ex-U.S. Fixed -3.08%	Developed ex-U.S. Equity -4.32%	Emerging Market Equity -14.92%	Cash Equivalent 0.33%	Cash Equivalent 0.86%	Emerging Market Equity -14.57%	Real Estate 2.28%	Real Estate -9.04%	Global ex-U.S. Fixed -7.05%	Real Estate -25.10%	Cash Equivalent 5.01%

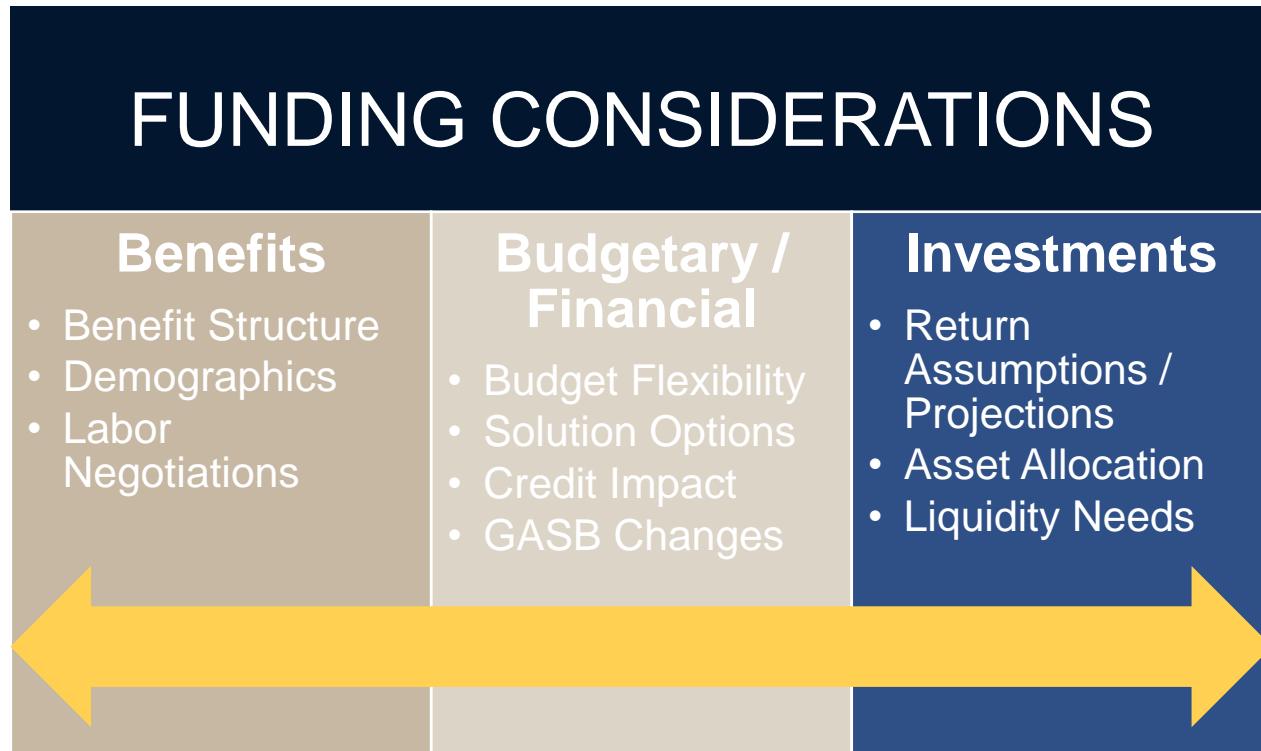
*Source: Callan Institute, 2024

- Issuers may consider investment strategies for POB proceeds that are different than the typical asset allocation strategies of the plan, with heavier weighting applied to assets with greater potential for increased long-term returns.
- Over a 20-year history, equity asset classes have typically out-performed fixed income classes, on a relative basis.



The Three Prongs of Retirement Funding

- To be effective and sustainable, a funding strategy must be considered across three primary areas.





Poll Question # 6



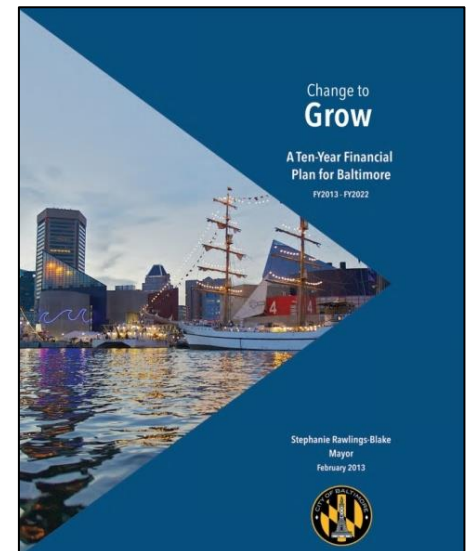
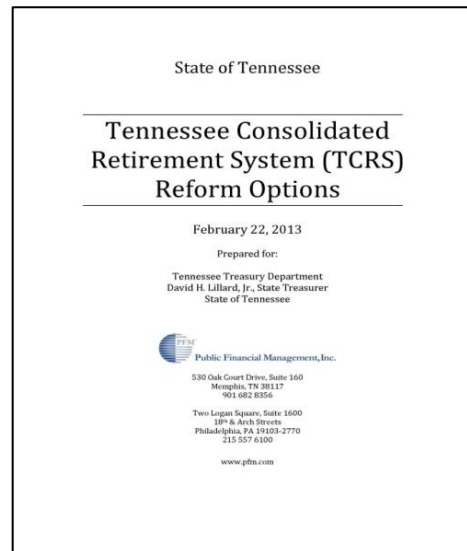
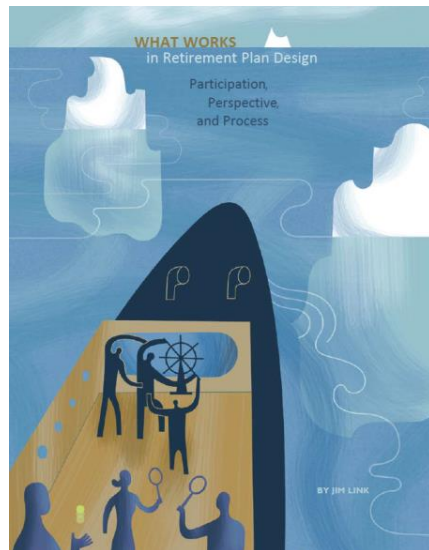
Poll Question:

- ◆ Question: Pension Obligation Bonds or OPEB Obligation Bonds are a riskless arbitrage strategy that will solve your pension troubles.
- ◆ True
- ◆ False



Other Considerations for Pension Reform

- ◆ Evaluating costs in the context of balance sheets, budgets, and long-range fiscal capacity
- ◆ Considering opportunities for system redesign and legislative support
- ◆ Utilizing joint labor-management working groups to achieve benefits redesign and funding alternatives
- ◆ Other Post-Employment Benefit (OPEB) evaluation and policy development





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- ◆ Improved funding
 - Dedicated sales tax revenue
 - Negotiated increases to employee contributions
- ◆ Shift in funding policy
 - Revenue recognition policy
 - Additional contribution(s) above Minimum Municipal Obligation
- ◆ Liability reduction
 - “Stacked hybrid” approach for non-uniformed employees (\$65,000 cap)
- ◆ Reduced risk
 - Revised actuarial assumptions
 - Modified investment approach
 - Continually lowered assumed rate of return
- ◆ Stakeholder engagement
 - Intergovernmental working groups



CREATIVE SOLUTION TO A COMMON CHALLENGE

City of Philadelphia, Pennsylvania

Philadelphia's Road to Pension Recovery

BY JACQUELINE DUNN



About Philadelphia
The City of Philadelphia, the economic and cultural anchor of the greater Delaware Valley, is the largest city in Pennsylvania and the sixth most populous city in the United States.

STRATEGY
The city's plan will improve the pension system's funded level to 80 percent by 2029 and 100 percent by 2033 by:

- Dedicating additional assets to the fund.
- Reducing the rate at which future liabilities grow.
- Reducing the plan's risk profile.

Additional funding comes from dedicated city sales tax revenue, additional employee contributions negotiated through collective bargaining, and payment of the full actuarially required contribution every year. The city created a revenue recognition policy to dedicate these revenues to the city's pension liabilities.

IN 2018, Philadelphia adopted a comprehensive plan to improve the long-term health of its pension system by paying down its unfunded liability more quickly while also reducing the rate at which future liabilities will grow. Its funding ratio has historically been below average compared to peer cities, and the funded level dropped 10 points from 2008 to 2009, to 45 percent. When reform discussions began in 2016, the fund was still only 44.8 percent funded, with just \$4.9 billion available to cover \$11 billion in liabilities.

To combat the underfunding, the city employed a bilateral approach, focusing on reforms that foster effective decision-making and fiscal discipline and wide-ranging partnerships that engage elected officials, union officials, and pension board members. These changes were made to improve the health of the pension fund and to reach full funding by 2033.

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Thank you!



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