AGENDA

DALLAS POLICE & FIRE PENSION SYSTEM

Date: August 2, 2024

The regular meeting of the Dallas Police and Fire Pension System Board of Trustees will be held at **8:30 a.m. on Thursday, August 8, 2024, in the Second Floor Board Room at 4100 Harry Hines Boulevard, Dallas, Texas and via telephone conference for audio at 214-271-5080 access code 588694 or Toll-Free (US & CAN): 1-800-201-5203 and Zoom meeting for visual https://us02web.zoom.us/j/83364156526?pwd=OG5CbEFhajN5V0hWaUFJMlhYcHQ2Zz09 Passcode: 923237.** Items of the following agenda will be presented to the Board:

A. MOMENT OF SILENCE

B. APPROVAL OF MINUTES

Regular meeting of July 11, 2024

C. DISCUSSION AND POSSIBLE ACTION REGARDING ITEMS FOR INDIVIDUAL CONSIDERATION

1. **Independent Actuarial Analysis and Recommendations and Section 2.025 Update**

   Portions of the discussion under this topic may be closed to the public under the terms of Section 551.071 of the Texas Government Code.

2. **Quarterly Financial Reports**

3. **2024 Mid-Year Budget Review**

4. **Financial Audit Status**

5. **Executive Director Approved Pension Ministerial Actions**

6. **Monthly Contribution Report**

7. **Board approval of Trustee Education and Travel**

   a. Future Education and Business-related Travel
   b. Future Investment-related Travel

8. **Actuarial Review Required by Texas Government Code 802.1012**

9. **Portfolio Update**

10. Lone Star Investment Advisors

Portions of the discussion under this topic may be closed to the public under the terms of Section 551.071 of the Texas Government Code.

11. Legal issues - In accordance with Section 551.071 of the Texas Government Code, the Board will meet in executive session to seek and receive the advice of its attorneys about pending or contemplated litigation or any other legal matter in which the duty of the attorneys to DPFP and the Board under the Texas Disciplinary Rules of Professional Conduct clearly conflicts with Texas Open Meeting laws.

12. Closed Session - Board serving as Medical Committee

Discussion of the following will be closed to the public under the terms of Section 551.078 of the Texas Government Code:

a. Application for death benefits for disabled child 2024-1c
b. Disability application 2024-2d

D. BRIEFING ITEMS

1. Public Comment

2. Executive Director's Report

a. Associations' newsletters

- NCPERS Monitor (August 2024)
- NCPERS PERSist (Summer 2024)

b. Open Records

The term "possible action" in the wording of any Agenda item contained herein serves as notice that the Board may, as permitted by the Texas Government Code, Section 551, in its discretion, dispose of any item by any action in the following non-exclusive list: approval, disapproval, deferral, table, take no action, and receive and file. At the discretion of the Board, items on this agenda may be considered at times other than in the order indicated in this agenda.

At any point during the consideration of the above items, the Board may go into Closed Executive Session as per Texas Government Code, Section 551.071 for consultation with attorneys, Section 551.072 for real estate matters, Section 551.074 for personnel matters, Section 551.076 for deliberation regarding security devices or security audits, and Section 551.078 for review of medical records.

DALLAS POLICE & FIRE PENSION SYSTEM

MOMENT OF SILENCE

In memory of our Members and Pensioners who recently passed away

NAME	ACTIVE/ RETIRED	DEPARTMENT	DATE OF DEATH
Clyde Dickerson	Retired	Police	07/02/2024
William L. Johnson	Retired	Police	07/03/2024
Thomas S. Swing	Retired	Fire	07/03/2024
Richard E. Beebe	Retired	Fire	07/06/2024
Craig A. Reynerson	Retired	Police	07/07/2024
Eugene M. Walther	Retired	Fire	07/09/2024
Albert L. Hay	Retired	Police	07/10/2024
Jimmy A. Bollman	Retired	Fire	07/17/2024
David L. Goelden	Retired	Police	07/23/2024
Robert W. Foster	Retired	Fire	07/31/2024

Regular Board Meeting –Thursday, August 8, 2024

Dallas Police and Fire Pension System
Thursday, July 11, 2024
8:30 a.m.
4100 Harry Hines Blvd., Suite 100
Second Floor Board Room
Dallas, TX

Regular meeting, Nicholas A. Merrick, Chairman, presiding:

ROLL CALL

Board Members

Present at 8:32 a.m.	Nicholas Merrick, Tina Hernandez Patterson, Michael Taglienti, Anthony Scavuzzo, Tom Tull, Matthew Shomer, Marcus Smith
By telephone	Michael Brown, Mark Malveaux
Absent	Steve Idoux, Nancy Rocha
Staff	Kelly Gottschalk, Josh Mond, Brenda Barnes, Ryan Wagner, Christina Wu, Akshay Patel, Kyle Schmit, John Holt, Nien Nguyen, Milissa Romero, Cynthia J. Thomas
Others	David Elliston, Robert Gassett, Jose Rivas, Farrah Ali
By telephone	Aaron Lally, Leandro Festino, Ken Haben

* * * * * * * * *

The meeting was called to order at 8:32 a.m.

* * * * * * * * *

A. MOMENT OF SILENCE

The Board observed a moment of silence in memory of retired police officers James F. Steen, V.A. McDaniel, Thurman A. Ross, and retired firefighters Jerald F. Pickard, Richard G. York, Carlton T. Evans, Albert W. Kirksey, Charles R. Prater, Roy C. Chapman, Donald P. Little, Stephen M. Gouse.

No motion was made.

* * * * * * * * *

Regular Board Meeting
Thursday, July 11, 2024

B. APPROVAL OF MINUTES

1. Regular meeting of June 13, 2024

After discussion, Mr. Scavuzzo made a motion to approve the minutes of the Regular meeting of June 13, 2024. Mr. Shomer seconded the motion, which was unanimously approved by the Board.

* * * * * * * *

Mr. Brown and Mr. Malveaux arrived in person at 8:46 a.m.

* * * * * * * *

C. DISCUSSION AND POSSIBLE ACTION REGARDING ITEMS FOR INDIVIDUAL CONSIDERATION

1. Independent Actuarial Analysis and Recommendations and Section 2.025 Update

The Executive Director provided an update on the process involving Section 2.025 of Article 6243a-1 and the Board provided feedback.

No motion was made.

* * * * * * * *

2. Financial Audit Status

The Chief Financial Officer provided a status update on the annual financial audit.

No motion was made.

* * * * * * * *

3. Executive Director Approved Pension Ministerial Actions

The Executive Director reported on the June pension ministerial actions.

No motion was made.

* * * * * * * *

Regular Board Meeting
Thursday, July 11, 2024

4. Monthly Contribution Report

The Executive Director reviewed the Monthly Contribution Report.

No motion was made.

* * * * * * * *

5. Board approval of Trustee education and travel

a. Future Education and Business-related Travel
b. Future Investment-related Travel

The Board and staff discussed future Trustee education. There was no future Trustee business-related travel or investment-related travel scheduled.

After discussion, Ms. Hernandez Patterson made a motion to approve Mr. Taglienti's request to attend the TEXPERS Summer Educational Forum. Mr. Merrick seconded the motion, which was unanimously approved by the Board.

* * * * * * * *

6. Pension Administration Software

Staff discussed the steps taken and the information learned related to the Pension Administration Software project.

After discussion, Mr. Shomer made a motion to authorize the Executive Director, in her discretion, to take any or all of the following actions (i) after consultation with the Chairman, hire a consultant to advise DPFP on the acquisition and implementation of a pension administration software system ("PAS"), (ii) disseminate a Request for Proposal for a new PAS; and (iii) negotiate with the current PAS vendor with respect to a new PAS. Mr. Tull seconded the motion, which was unanimously approved by the Board.

* * * * * * * *

7. Portfolio Update

Investment staff briefed the Board on recent events and current developments with respect to the investment portfolio.

No motion was made.

* * * * * * * *

Regular Board Meeting
Thursday, July 11, 2024

8. Custodian Selection

Staff reviewed the search process and recommendation on the selection of a new custodian bank.

After discussion, Mr. Tull made a motion to authorize the Executive Director to negotiate and execute a custodian agreement with BNY Mellon. Mr. Taglienti seconded the motion, which was unanimously approved by the Board.

* * * * * * * *

9. Lone Star Investment Advisors

The Board went into closed executive session – Legal at 10:18 a.m.

The meeting reopened at 10:33 a.m.

Investment staff updated the Board on investments managed by Lone Star Investment Advisors.

No motion was made.

* * * * * * * *

10. Legal issues - In accordance with Section 551.071 of the Texas Government Code, the Board will meet in executive session to seek and receive the advice of its attorneys about pending or contemplated litigation or any other legal matter in which the duty of the attorneys to DPFP and the Board under the Texas Disciplinary Rules of Professional Conduct clearly conflicts with Texas Open Meeting laws.

The Board went into closed executive session – Legal at 10:18 a.m.

The meeting reopened at 10:33 a.m.

The Board and staff discussed legal issues.

No motion was made.

* * * * * * * *

Regular Board Meeting
Thursday, July 11, 2024

D. BRIEFING ITEMS

1. Public Comments

Prior to commencing items for Board discussion and deliberation, the Chairman extended an opportunity for public comment. No one requested to speak to the Board.

* * * * * * * *

2. Executive Director's Report

a. Associations' newsletters
- NCPERS Monitor (July 2024)

b. Open Records
c. Employee Service Awards

* * * * * * * *

Ms. Gottschalk stated that there was no further business to come before the Board. On a motion by Mr. Taglienti and a second by Mr. Tull, the meeting was adjourned at 10:34 a.m.

Nicholas A. Merrick,
Chairman

ATTEST:

Kelly Gottschalk,
Secretary

Regular Board Meeting
Thursday, July 11, 2024

This Page was Intentionally Left Blank

DISCUSSION SHEET

ITEM #C1

Topic: **Independent Actuarial Analysis and Recommendations and Section 2.025 Update**

Portions of the discussion under this topic may be closed to the public under the terms of Section 551.071 of the Texas Government Code.

Discussion: Section 2.025 of Article 6243a-1 requires the Texas Pension Review Board to select, and DPFP to hire, an independent actuary to perform an actuarial analysis of DPFP's most recently completed actuarial valuation to (i) determine if DPFP meets Texas statutory funding requirements and (ii) recommend changes to benefits and contribution rates for employees and the City of Dallas. This analysis is due on or before October 1, 2024.

Cheiron, Inc., was hired as the independent actuary. In November 2023, Cheiron presented the preliminary report based on DPFP's January 1, 2022 actuarial valuation. In February 2024, Cheiron presented its official report under Section 2.025 based on DPFP's January 1, 2023 actuarial valuation. Cheiron submitted their final report, which reflects their presentation from February 2024 with some refinements based on questions and feedback received after the February presentation.

Staff presented information on this topic each month beginning November 2023. Staff will provide updates on the process and recommendations.

DALLAS POLICE & FIRE PENSION SYSTEM

Staff Recommendation on 2.025 Funding Requirement Considering the Independent Actuarial Analysis

August 8, 2024
Board Meeting

Update Since July Board Meeting

- A Briefing of the full council was held on August 7th.

- Our understanding is that the plan is for the Council to adopt the ERF Plan on the 14th and set a ballot question to remove the limit on City contributions to the fund. The vote on the DPFP plan will happen later in September, allowing additional time for negotiation.

- Governance and the COLA remain the largest areas of disagreement.

- Additional information is provided on the next few slides regarding the update on the COLA and governance issues.

Governance – City of Dallas Proposals

The city-recommended governance was described in their August 7th presentation as the following: "Adding City oversight to better manage City's liability, mitigate year over year increases, and ensure fiduciary responsibility."

The City proposed the following to receive the City Contributions:

- The City approves all assumptions
- The City approves granting an ad hoc COLA even when all requirements are met
- The annual change in the ADC is limited to 5% per year
- Any change in the ADC calculation between the City actuary and the DPFP actuary over 2% be negotiated and averaged.
- Lawsuit settlements that increase the liability of the Fund require City approval

Governance – City of Dallas Proposals

Although not disclosed publicly, in draft documents received from the City they go much further and have proposed numerous ways to deem any agreement void. Examples include:

- The City can cancel any agreement if they perceive a trustee, employee, agent or associate has a direct or indirect conflict of interest.
- There is a section titled "Gifts to Public Servant," which is unclear as to what exactly it means, but the remedies include that the City no longer must follow the contributions agreement or that the City may require DPFPS to terminate the employment of any DPFPS officer or employee who violates the restrictions.
- There are other provisions for the City to cancel the contribution agreement, including a change in local law.

COLA Conversations With the City

In discussions with the City Manager, it is clear that the City does not intend to put more in the recommended budget for DPFP than the City's recommended proposal.

City-recommended COLA prior to 70% funding:

- a one-time 1% COLA for anyone retired prior to 1-1-2025, and
- a stipend in years with positive returns of 1% (this does not add to payment each year)

This basically amounts to one 1% COLA in 2025 and then only one more COLA for the entire next 20 years (2026-2046).

COLA Conversations With the City

Although the base COLA recommendation from the City has not changed, recent discussions were more productive about how to get more money into the plan for possible future funding for a COLA or stipend. The concept of accumulating funds in a "COLA pool" was discussed. The challenge will be how to make any commitment binding and not be used only to reduce the City's ADC. Sources of funds could include:

Monetize Assets

Issue Pension Obligation Bonds

' On-going revenue contingent on changes in State law

The City plans to discuss these items at an Ad Hoc Pension committee meeting on August 22nd.

Moving Forward

- DPFP and the City received the first report from Cheiron in November 2023 and DPFP Board has discussed the issues every month since that meeting with Cheiron.
- The staff has meticulously reviewed Cheiron's work, including evaluating the pros and cons of more than 30 COLA options.
- The staff has had dozens of calls/meetings with the City trying to find agreement.
- The Board has considered carefully the recommendations of Cheiron.
- The following slides highlight the critical components, comments, and recommendations from the Cheiron report, summarizing what has been discussed in previous meetings.

Revised DPFP Staff Recommendation - Summary

- Actuarial Determined Contribution (ADC) – No Change
  - ADC Based on the 3-Year Step Up and the Cheiron Methodology

- Employee Contribution Rate – No Change
  - Do not implement a reduction to the employee contribution rate at this time; although we agree with the Cheiron recommendation that the employee contribution rate should be reduced as the funding level improves, the ADC and COLA are a higher priority.

- Cost of Living Increase – Revised Recommendation
  - Simplified the prior COLA Recommendation
  - Tied to plan funding and inflation prior to the Current COLA

Key Benefits of an ADC

- **Predictability**: An ADC makes relatively small changes each year, avoiding sudden cost increases or decreases and making budgeting more predictable over the long term.

- **Sustainability**: Ensures the pension plan is always on track to meet its obligations and always complies with the Texas Pension Review Board's funding guidelines.

- **Fairness**: Costs are spread more evenly across generations of taxpayers. The current fixed rate has resulted in a prior generation of taxpayers paying less than what was needed and transferring those costs to a future generation. While an ADC does not eliminate generational transfers, it limits them by making continuous annual cost adjustments.

Source Cheiron Final Report – Page 6

How an ADC Works

The ADC has three parts:

1. **Normal cost**: The cost of benefits attributed to the current year of service for employees. This cost is designed to be a level percentage of payroll over each employee's career.
2. **Administrative expenses**: The annual cost of running the pension plan.
3. **Amortization payment**: The annual cost of paying down the System's Unfunded Actuarial Liability (the difference between the System's assets and what it should have based on the valuation model). Think of this like paying down a mortgage over time.

Source Cheiron Final Report – Page 6

Actuarially Determined Contribution

UAL Base,

Admin Expenses,

Future Layers

Fixed Dollar Amount – Not based on Payroll

Normal Cost % of Payroll

Implement Cheiron's Recommended UAL Payment Structure

- The UAL payment will be a fixed dollar amount paid bi-weekly based on the amortization schedule independent of actual payroll. Note: fixed dollar amount does not mean the dollar amount doesn't change.
- The City's share of the normal cost will be applied to actual payroll and paid bi-weekly in addition to the UAL.

Cheiron's Amortization Recommendation

We recommend a 'layered' amortization approach to gradually pay down the unfunded liability over the next 30 years. This approach combines a responsible schedule of payments to pay off the entire current unfunded liability within 30 years with additional schedules of payments or credits transitioning to 20-year layers to pay off any future gains, losses, or assumption changes. This amortization period balances the stability and predictability of contributions with generational equity while ensuring continuous compliance with the Texas Pension Review Board's funding guidelines. To ease the transition, the ADC can include a step-up period where the City's contribution increases gradually over a few years, and similarly, it can include a step-down period at the end of the 30 years.

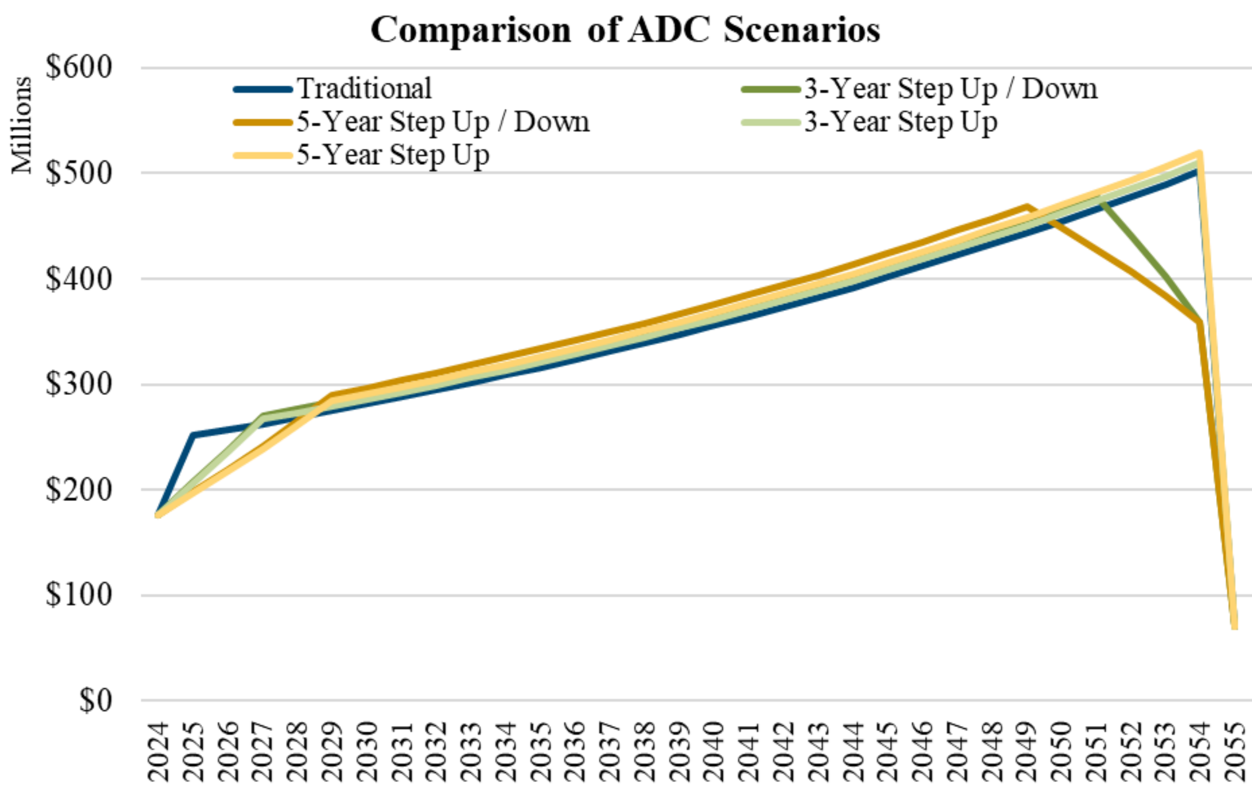
We developed five alternative amortization policies outlined on the following page. Each alternative is reasonable. Given the current funding situation, we prefer the policies that require a higher level of contributions more quickly.

Source Cheiron Final Report – Page 7

Cheiron's - Amortization Options

- Cheiron modeled 5 acceptable amortization options and ranked them from Most Preferred to Least Preferred.
    1. Traditional
    2. 3-Year Step Up/Down
    3. 5-Year Step Up/Down
    4. 3-Year Step Up
    5. 5-Year Step Up
- The minimum funded level is 34% under the Traditional scenario and 32% under each other option.
- The funding is projected to reach 70% in 2047 for options 1, 3, and 5 above (Traditional, 3-Year Step Up, and 5-Year Step Up) and one year sooner for the two options with the Step-Down features (2 & 3).
- The net cash flow improvement is significant under all options; delaying the contributions based on the full ADC delays the improvement.
- The City has not changed its preference for the 5-year Step Up option. The City states that this model best fits the budget increase the City has targeted from the beginning of this process.

Cheiron's - Amortization Options



Cheiron quote from the ADC Recommendation: "Given the current funding situation, we prefer policies that require a higher level of contributions more quickly."

Source Cheiron Final Report – Pages 7 and 9

Cheiron's ADC Conclusions

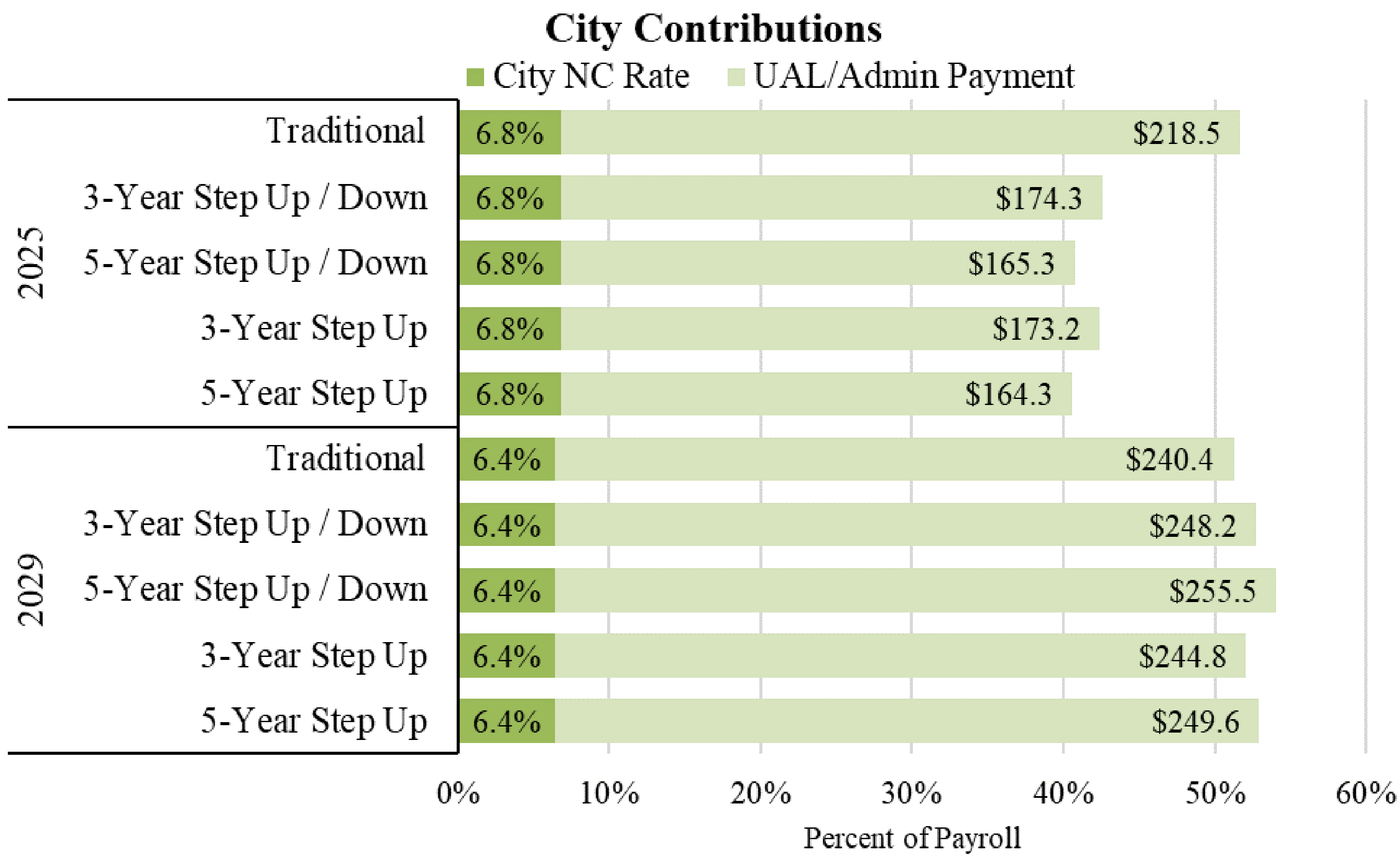
The most important recommendation in our report is to adopt an Actuarially Determined Contribution (ADC). An ADC will ensure the System improves its funded position in an orderly and affordable manner, automatically adjusting contributions annually to always satisfy the Texas Pension Review Board's funding guidelines. There are a range of reasonable alternatives to structure the transition to an ADC. All the alternatives outlined in this report are expected to achieve 70% funding by 2046 or 2047 and 100% by 2055.

Given the currently low funded status of the System, we prefer the ADC alternatives that transition to the needed higher level of contributions as quickly as possible while recognizing the realities of the City's budgeting process.

We also understand that there has been some discussion of potential lump sum contributions from the City. While not directly built in, all the ADC alternatives would automatically reduce contributions after a lump sum contribution was made to reflect the improved funded status due to the lump sum contribution.

Source Cheiron Final Report – Page 11

Cheiron's - Amortization Options



Source Cheiron Final Report – Page 10

ADC dollars for the period 2025 – 2030 for selected options (millions)

ADC in millions

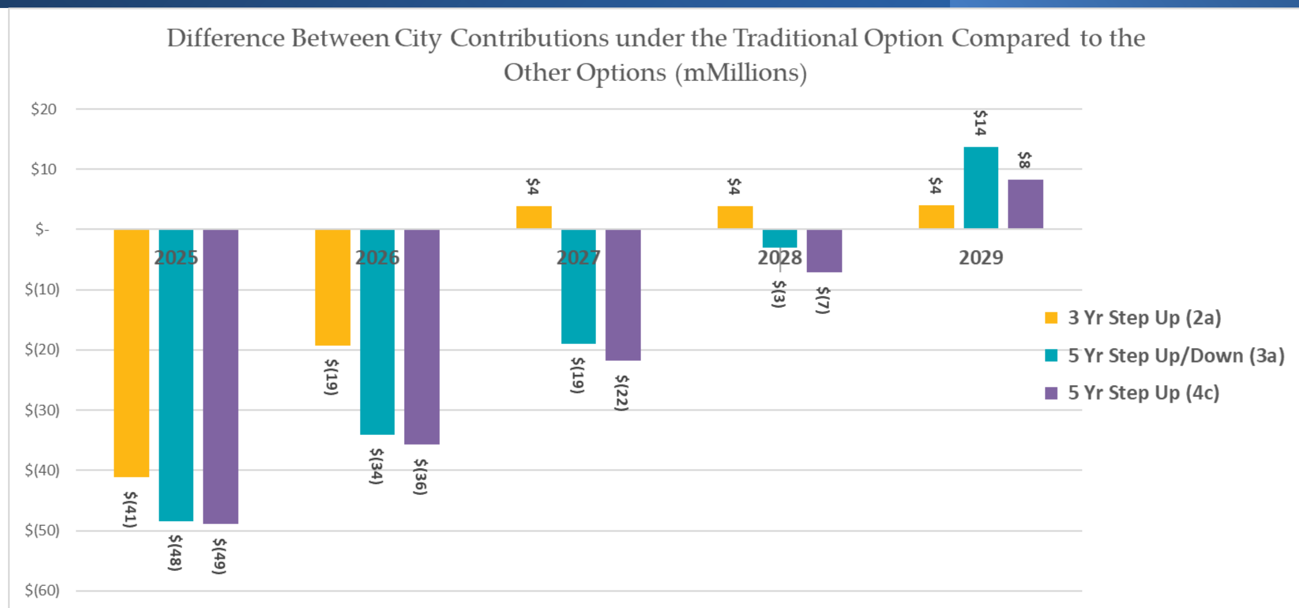
	Traditional (1a)	3 Yr Step Up (2a)	5 Yr Step Up/Down (3a)	5 Yr Step Up (4c)
2024 as is	$ 184	$ 184	$ 184	$ 184
2025	$ 251	$ 210	$ 203	$ 202
2026	$ 256	$ 236	$ 222	$ 220
2027	$ 260	$ 264	$ 242	$ 239
2028	$ 265	$ 269	$ 262	$ 258
2029	$ 271	$ 275	$ 284	$ 279
5 Yr Total	$ 1,303	$ 1,255	$ 1,213	$ 1,198
Amounts less than the Traditional scenario		$ (49)	$ (91)	$ (105)

Year-over-year increase

	Traditional (1a)	3 Yr Step Up (2a)	5 Yr Step Up/Down (3a)	5 Yr Step Up (4c)
2025	$ 67	$ 26	$ 19	$ 18
2026	$ 5	$ 27	$ 19	$ 18
2027	$ 5	$ 28	$ 20	$ 19
2028	$ 5	$ 5	$ 21	$ 20
2029	$ 5	$ 5	$ 22	$ 21

Note: the 3 Yr Step Up/Down option was not included on this page and other pages because the available data didn't have consistent assumptions.

Difference in the ADC dollars for the period 2025 – 2030 for selected options compared to the Traditional option. (millions)



- The fund's net benefits outflow is significant monthly. We have been fortunate to be able to cover monthly pension payments with private market sales in the past few years. However, those opportunities are limited going forward.
- Having more money come to the fund earlier protects the fund from potentially having to sell assets in a down market to meet pension payments and enhances the ability to achieve the assumed rate of return.

ADC as a percentage for the Traditional, 3-Year Step Up, 5-Yr Step Up/Down options and the 5 Yr Step Up options

	Traditional (1a)	3 Yr Step Up (2a)	5 Yr Step Up/Down (3a)	5 Yr Step Up (4c)
2024 as is	39%	39%	39%	39%
2025	52%	43%	42%	42%
2026	51%	47%	44%	44%
2027	51%	52%	47%	47%
2028	51%	51%	50%	49%
2029	50%	51%	53%	52%
2030	50%	51%	53%	52%
2031	50%	51%	53%	52%
2032	50%	51%	53%	52%
2033	50%	51%	52%	51%
2034	50%	51%	52%	51%
2035	50%	51%	52%	51%
2036	50%	50%	52%	51%
2037	50%	50%	52%	51%
2038	50%	50%	52%	51%
2039	50%	50%	52%	51%
2040	50%	50%	52%	51%
2041	49%	50%	52%	51%
2042	49%	50%	52%	51%
2043	49%	50%	52%	51%
2044	49%	50%	52%	51%
2045	49%	50%	52%	51%
2046	49%	50%	52%	51%
2047	49%	50%	52%	51%
2048	49%	50%	52%	51%
2049	49%	50%	52%	51%
2050	49%	50%	49%	51%
2051	49%	50%	46%	51%
2052	49%	50%	43%	51%
2053	49%	50%	40%	51%
2054	49%	50%	36%	51%
2055	7%	7%	7%	7%

- Stepping in and/or out of the ADC increases the ADC in the periods that do not include the phasing.
- These ADC percentages do not include any COLA options. The percentage reflects Cheiron's modifications, 2023 estimated returns, and 2024 contribution changes since the February meeting.

ADC Calculation and Implementation Timing

- City contributions will be at least $184,733,295 for the period 10/1/2023 to 9/30/2024 as agreed to by the City CFO.

- Recommend that ADC is based on the Cheiron methodology using the 3-year step-up scenario. The methodology is described in detail in the Cheiron final report.

- City contributions for the period 10/1/2024 – 9/30/2025 are based on the 1-1-2023 actuarial valuation, which will not be restated. Therefore, Cheiron will determine the bi-weekly payment for the 2024-25 fiscal year only based on the methodology discussed.

- Future City contributions will be based on the actuarial valuation, with a measurement date 21 months before the beginning of the City's fiscal year. For example, the 1/1/2024 valuation will be used to determine the contributions for the City fiscal year beginning 10/1/2025.

Limiting the Actuarially Determined Contribution

The City has proposed limiting its contribution to a 5% change each year. Based on the information in the Cheiron report, staff recommends against this proposal. The limits are not necessary.

One of the benefits of an Actuarially Determined Contribution is that it automatically adjusts to the System's experience each year. The size of these adjustments is controlled by the five-year asset smoothing method and the amortization method. As a result, only 20% of any investment gain or loss is recognized in a given year, and when recognized, the payment for a loss or credit for a gain is amortized over at least 20 years (29 years initially).

Source: Cheiron Final Report Page 10.

Actuarial Determined Contributions (ADC) – Resetting Smoothing

- Based on a request from the City to smooth year-to-year increases in the ADC, the actuarial value of assets will be reset to the market value of assets as of 1-1-2023. This change will result in a lower actuarial funded ratio by recognizing the deferred losses immediately.

Key Findings on the COLA Analysis

- **COLA Absence:** The System has not provided a COLA since 2016. Current provisions prevent a COLA from being paid until the fund achieves a 70% funded status – an unlikely scenario for at least 20 years, even with increased contributions.
- **Inflation's Impact:** The lack of COLA protection significantly erodes the purchasing power of retirement benefits over time. This is a critical issue, given members' lack of Social Security coverage.
- **Competitive Landscape:** The City's Employees' Retirement Fund and many other public safety pension systems offer inflation protection, creating a competitive disadvantage in recruitment and retention.

Source: Cheiron Final Report Page 45

Why Consider Improving the COLA Now

- Given the System's poor funded status, it is tempting to delay any decision on improving the COLA until the funded status improves. Any increase to COLAs will require additional contributions to fully fund the System, and the increases required to fund the System without improving the COLA are already substantial.

- However, even with the increased contributions discussed above, no COLA is expected to be paid for an additional 20 years or longer. With no Social Security coverage to provide inflation protection and with the remainder of the Dallas workforce receiving annual COLAs in retirement, can Dallas maintain its Police and Fire workforce without offering at least some COLA in the next 20 years?

- We believe Dallas will likely need to provide a COLA earlier than would be provided under the current plan provisions. If so, these costs should be included in the budget plan now rather than waiting until later. Ignoring or deferring these costs may lead to inadequate funding and a failure to meet the objective of fully funding the System.

Source: Cheiron Final Report, Pages 45 & 46

PRB Principles of Plan Design

In 2018, the PRB Board adopted the "Principles of Plan Design". The PRB intends the Principles to guide and inform public retirement systems and the associated governmental entities on how to structure retirement plans.

The 12 Principles include two that specifically address the crucial need for an adequate COLA:

- Benefits should be designed to place employees on the path to financial security in retirement in consideration of participation or nonparticipation in Social Security. (Principle 5)
- Retirement benefits should be protected against the erosion of the benefit's value due to inflation; such benefits should not exceed actual inflation and should be funded in accordance with the Pension Review Board's Pension Funding Guidelines. (Principle 8)

DPFP Current COLA – Purchasing Power Erosion

Purchasing Power Erosion

In retirement, inflation erodes purchasing power to the extent that retirees' benefits are not increased by COLAs. Since the last COLA was provided in 2016, inflation has reduced retirees' purchasing power to about 76% of what it was then. The total reduction in purchasing power for individual retirees varies by the inflation experienced since their retirement compared to the COLAs granted over that same period. Table I-2 shows the remaining purchasing power in 2024 for retirees by year of retirement and projects future purchasing power under the current COLA provisions, assuming 2.5% inflation each year.

Source: Cheiron Final Report Page 48 & 49

Purchasing Power – DPFP Current COLA and the Dallas Employees COLA

Dallas Police and Fire – Current COLA

Purchasing Power – Current DPFP COLA

Retirement Year	2024	2029	2034	2039	2044	2049	2054
2023	100%	88%	78%	69%	61%	56%	53%
2022	96%	85%	75%	66%	58%	54%	51%
2021	88%	77%	68%	60%	53%	49%	47%
2020	83%	73%	65%	57%	50%	47%	44%
2019	82%	73%	64%	57%	50%	46%	44%
2018	81%	71%	63%	56%	49%	45%	43%
2017	79%	70%	61%	54%	48%	44%	42%
2016	76%	67%	60%	53%	47%	43%	41%
2015	78%	69%	61%	54%	47%	44%	41%
2010	86%	76%	67%	59%	52%	48%	45%
2005	93%	83%	73%	65%	57%	52%	48%
2000	94%	83%	73%	65%	57%	52%	
1995	92%	82%	72%	64%	56%		
1990	90%	79%	70%	62%			
1985	84%	75%	66%				
1980	70%	62%					

Dallas ERF – (modeled at 2.5%)

Purchasing Power – Current DERF COLA

Retirement Year	2024	2029	2034	2039	2044	2049	2054
2023	100%	99%	98%	95%	92%	88%	83%
2022	96%	95%	93%	91%	88%	84%	80%
2021	88%	87%	86%	83%	80%	77%	73%
2020	83%	82%	81%	79%	76%	72%	69%
2019	82%	82%	80%	78%	75%	72%	69%
2018	81%	80%	79%	77%	74%	71%	67%
2017	79%	78%	77%	75%	72%	69%	66%
2016	76%	76%	74%	72%	70%	67%	64%
2015	78%	77%	75%	73%	70%	67%	64%
2010	86%	84%	81%	77%	74%	70%	66%
2005	93%	90%	86%	81%	77%	72%	68%
2000	94%	89%	85%	80%	75%	70%	
1995	92%	87%	82%	77%	72%		
1990	90%	84%	79%	73%			
1985	84%	79%	73%				
1980	70%	65%					

All current retirees are Tier A with a maximum COLA of 5%. The purchasing power reflected in the Table above was calculated as if they were Tier B with a maximum COLA of 3%. The majority of the current employees will be eligible for the higher COLA up to 5%.

Source: Cheiron Final Report Pages 45 & 14

City Recommended COLA (City Presentation June 6, 2024)

Supplemental Pay – City Staff Recommendation

- HB3158 suspended COLA until DPFP reaches 70% funding (forecast to be 2046)
- City staff recommends two-part supplemental pay to bridge 2025 to 2046
  - Provide 1% increase to retiree base pension in 2025 (for all retirees as of December 31, 2024)
  - Provide additional 1% per year as stipend that does not add to retiree base pension, and contingent on DPFP having a positive return (2026-2046)

Growth of the Pension Benefit under DPFP with the City's recommendation and ERF.

Annual Pension Payments			
Two Employees retiring Under DPFP and ERF in 2024 with the same pension benefit			
	ERF Tier A (cap of 5%, modeled to match GRS assumption of 2.5%)	ERF Tier B (cap of 3%, modeled at GRS assumption of 2.2%)	DPFP with the City's recommended 1% one-time COLA in 2025 until 2045 and COLA up to 1.5% after 2046.
2024	$ 54,000	$ 54,000	$ 54,000
2025	$ 55,350	$ 55,188	$ 54,540
2026	$ 56,700	$ 56,376	$ 55,080
2027	$ 58,050	$ 57,564	$ 55,080
2028	$ 59,400	$ 58,752	$ 55,080
2029	$ 60,750	$ 59,940	$ 55,080
2030	$ 62,100	$ 61,128	$ 55,080
2031	$ 63,450	$ 62,316	$ 55,080
2032	$ 64,800	$ 63,504	$ 55,080
2033	$ 66,150	$ 64,692	$ 55,080
2034	$ 67,500	$ 65,880	$ 55,080
2035	$ 68,850	$ 67,068	$ 55,080
2036	$ 70,200	$ 68,256	$ 55,080
2037	$ 71,550	$ 69,444	$ 55,080
2038	$ 72,900	$ 70,632	$ 55,080
2039	$ 74,250	$ 71,820	$ 55,080
2040	$ 75,600	$ 73,008	$ 55,080
2041	$ 76,950	$ 74,196	$ 55,080
2042	$ 78,300	$ 75,384	$ 55,080
2043	$ 79,650	$ 76,572	$ 55,080
2044	$ 81,000	$ 77,760	$ 55,080
2045	$ 82,350	$ 78,948	$ 55,080
2046	$ 83,700	$ 80,136	$ 54,810
2047	$ 85,050	$ 81,324	$ 55,620
2048	$ 86,400	$ 82,512	$ 56,430
2049	$ 87,750	$ 83,700	$ 57,240
2050	$ 89,100	$ 84,888	$ 58,050
2051	$ 90,450	$ 86,076	$ 58,860
2052	$ 91,800	$ 87,264	$ 59,670
2053	$ 93,150	$ 88,452	$ 60,480
2054	$ 94,500	$ 89,640	$ 61,290
2055	$ 95,850	$ 90,828	$ 62,100
2056	$ 97,200	$ 92,016	$ 62,910
2057	$ 98,550	$ 93,204	$ 63,720
2058	$ 99,900	$ 94,392	$ 64,530
2059	$ 101,250	$ 95,580	$ 65,340
2060	$ 102,600	$ 96,768	$ 66,150
Total	$ 2,897,100	$ 2,789,208	$ 2,117,340
Extra Lifetime Payments to the ERF Employee			$ 779,760

Beginning in 2026, the City's proposal includes a possible Supplemental Payment that does not get added to the base. The Supplemental Payment is not guaranteed. The calculations in the table assume the Supplemental Payment is received each year. Of the $55,080 that is received each year from 2026-2045, $540 is the Supplemental Payment.

If inflation averages 2.5% per year, a benefit of $54,000 in 2024 will have the purchasing power of $33,000 in 20 years. If inflation averages 3%, the purchasing power of the benefit in 20 years will be less than $30,000.

Inflation and Cost of Living Increases

- A cost-of-living adjustment (COLA) is important to avoid benefit erosion. This is especially important since retirees from the City of Dallas do not have social security.

- The disparity in the COLA feature between retirees from the two City of Dallas retirement systems makes zero sense from a policy, equity or impartiality perspective.

- Since January 2017 Inflation has increased 28%
- ERF retirees have received COLAs equal to 27%
- DPFP retirees have received COLAs equal to 0%

Providing an adequate COLA to current and future retirees of DPFP is a priority.

Staff's Prior COLA Recommendation (May)

Recommending a 2-part COLA and modifications to the Current COLA

Bridge

1. Bridge: some COLA now to bridge until the new COLA starts
   - $5 per Year of Service times Years Retired since 2017

New COLA

2. New COLA: Current COLA & 70% Purchasing Power COLA

Modify Current COLA

3. Modify the Current COLA in the Statute:
   - The Current COLA is a component of most of the Cheiron-modeled COLAs. It is a component of item 2 above.
   - The modifications do not increase the cost of the current COLA.
   - Modifications align the Current COLA with the purpose of a COLA to avoid erosion of the benefit due to inflation.

Why was the COLA Recommendation Revised?

- The prior recommendation has many advantages, but it is very difficult to explain and would be difficult for members to understand.
- The City did not like the Purchasing Power component of the prior recommended COLA and said it would not support it.
- The calculation was based on when the member set their benefit, which is the earlier of joining DROP or retirement. The "per year of service" portion of the COLA did not include time employed by the City when a member was in DROP.
- The recommended COLA had no direct tie to inflation.

Revised Staff COLA Recommendation

- Implement a variation of the **Immediate Partial COLA** that Cheiron provided in their November and February presentations.
- Before the plan is 70% funded, a limited simple COLA would be tied to both the funded level of the plan and inflation (CPI-U Dallas Statistical Area). The COLA is limited to 1.5% annually. The funded level of the plan will be based on the market value of assets as reported in the actuarial valuation.
  - Calculation:
    - Immediate Partial COLA is equal to the annual change in CPI-U multiplied by the funded ratio on a market value basis
      - If annual change in CPI-U is 2% and funded ratio is 40%, the COLA payable is 0.8% = 2% x 40%
      - If annual change in CPI-U is 5% and funded ratio is 40%, the COLA payable is 1.5%. 5% x 40% = 2%, however the COLA is limited to 1.5%.
  - After 70% funded keep the current COLA as drafted in the Statute.
  - The first Partial COLA is assumed to be effective October 1, 2025.

Revised Staff COLA Recommendation

- Advantages to the Revised COLA
  - Provides some COLA earlier compared to the Current COLA which is a primary recommendation from Cheiron
  - Eliminates the Purchasing Power component of the COLA that the City did not like.
  - Is directly tied to an inflation factor
  - Is tied to the funding level of the plan, which indirectly ties in investment performance
  - Provides improvement to purchasing power
  - Dramatically less costly than the ERF COLA
  - The COLA is limited to 1.5%
  - Not difficult to understand
  - Not changing the COLA after 70% funded simplifies the process and keeps investment returns as a trigger, which is a concern for the City

Purchasing Power Comparison

- The Revised Staff Recommended COLA improves the Purchasing Power erosion caused by inflation prior to 70% funding compared to the Prior Recommended COLA. The Revised COLA will have a bigger impact on current retirees.

	Purchasing Power						
COLA Scenarios	2024	2029	2034	2039	2044	2049	2054
Current COLA	100%	88%	78%	69%	61%	56%	53%
Prior Recommended COLA - $5 per Year of Service times per Year Retired after 2017 & 70% Purchasing Power COLA	100%	89%	80%	71%	70%	70%	70%
Revised Recommendation - Immediate Partial CPI COLA up to 1.5% until 70%+ Funded & Current COLA	100%	91%	84%	78%	74%	69%	65%

2.5% Assumed Inflation for All Years

35

Comparison of the Cost of the City and DPFP Recommendations

The table below compares the cost of the ADC and the COLA with the City Recommendation, Dallas ERF civilian COLA, the previously DPFP recommended COLA, and the Revised DPFP Recommendation COLA.

Cost of ADC & COLA Recommendations	City Recommended COLA	ERF COLA	DPFP Prior Recommended COLA	DPFP Revised Recommended COLA
30-Year City Contribution (billions)	$ 11.20	$ 13.82	$ 11.61	$ 11.70
Increase over the City's Recommendations $ (billions)		$ 2.63	$ 0.42	$ 0.50
Increase over the City's Recommendations %		23.5%	3.7%	4.5%

Note: these numbers are were developed on a calendar year basis by Cheiron. The conversations with the City have been that the ADC would be developed and paid based on the City's fiscal year.

Summary of Recommendations

1. Adopt the ADC funding model based on Cheiron's recommendation, phasing the percentage of the ADC that is contributed up over a 3-year period to 100% of the ADC.

2. No change to the employee contributions.

3. Modify the COLA to provide some COLA earlier:
   - Below 70% Funding: annually grant an Immediate Partial COLA. The Immediate Partial COLA will be calculated as the market value funded percentage multiplied by the increase in CPI, with a maximum COLA of 1.5%.
   - Above 70% Funding: the COLA is granted per the current language in the Statute.

CHEIRON

Classic Values, Innovative Advice

Dallas Police and Fire Pension System

Independent Actuarial Analysis

Produced by Cheiron

August 2024

www.cheiron.us 1.877.CHEIRON (243.4766)

TABLE OF CONTENTS

DALLAS POLICE AND FIRE PENSION SYSTEM
INDEPENDENT ACTUARIAL ANALYSIS

SECTION I – EXECUTIVE SUMMARY

Background

The Texas Pension Review Board selected Cheiron in accordance with Section 2.025 of the Dallas Police and Fire Pension System (the System or DPFP) to provide an independent actuarial analysis. The analysis is required to include:

- The independent actuary's conclusion regarding whether the System meets the Pension Review Board's pension funding guidelines (primarily a funding period no longer than 30 years) and
- The independent actuary's recommendations regarding changes to benefits or member or city contribution rates.

No later than November 1, 2024, the System Board is required to adopt a plan that:

1. Complies with the funding and amortization period requirements of Subchapter C, Chapter 802 of the Texas Government Code; and
2. Takes into consideration the independent actuary's recommendations in this report.

Cheiron's Process

Our process started by replicating the January 1, 2022, actuarial valuation performed by the System's actuary. This replication ensured we correctly programmed the current plan provisions and applied the correct assumptions based on accurate census data. As a result, we would expect any cost estimates we develop to be consistent with calculations performed by the System's actuary. While the final analysis is based on the 2023 actuarial valuation, starting with the 2022 actuarial valuation gave us more time to develop options and receive feedback before issuing a final report.

While replicating the valuation and building our projection models, we also performed a high-level comparison of the benefits provided by other public safety pension systems for large cities in Texas and the Dallas Employees' Retirement Fund. Any benefit changes we recommend would need to allow Dallas to remain competitive in attracting and retaining police officers and firefighters.

Key Steps in Independent Actuarial Analysis

- ✓ Replicate January 1, 2022 actuarial valuation performed by the System's actuary.
- ✓ Build projection models and perform high level comparisons to other Texas pension systems.
- ✓ Develop alternative benefit/contribution scenarios.
- ✓ Draft recommendations based on 2022 actuarial valuation presented to System Board, City Council Ad Hoc Pension Committee, and Texas Pension Review Board (PRB).
- ✓ Replicate January 1, 2023 actuarial valuation performed by the System's actuary.
- ✓ Preliminary recommendations based on 2023 actuarial valuation presented to System Board and City Council Ad Hoc Pension Committee.
- ✓ Final report with recommendations to be delivered to:
  - Dallas Police & Fire Pension System,
  - City of Dallas, and
  - Texas PRB.

SECTION I – EXECUTIVE SUMMARY

With this baseline of information, we developed our draft recommendations and presented our analysis to the System Board and the City Council's Ad Hoc Pension Committee on November 9, 2023. We also presented this information to the Texas Pension Review Board on January 25, 2024.

We updated our analysis by replicating the January 1, 2023, actuarial valuation performed by the System's actuary and updating our projection models to reflect the latest information. We refined and updated our recommendations, reflecting feedback from the initial presentations. The same principal recommendations remained, and we presented our preliminary analysis and recommendations based on the 2023 valuation to the System's Board and the City Council's Ad Hoc Pension Committee on February 8, 2024.

Following our last presentation, we received questions and feedback that caused us to refine our proposed methodology further. As a result, the projections shown in this final report differ in some details from those in our February presentation.

System Status Based on January 1, 2023 Actuarial Valuation

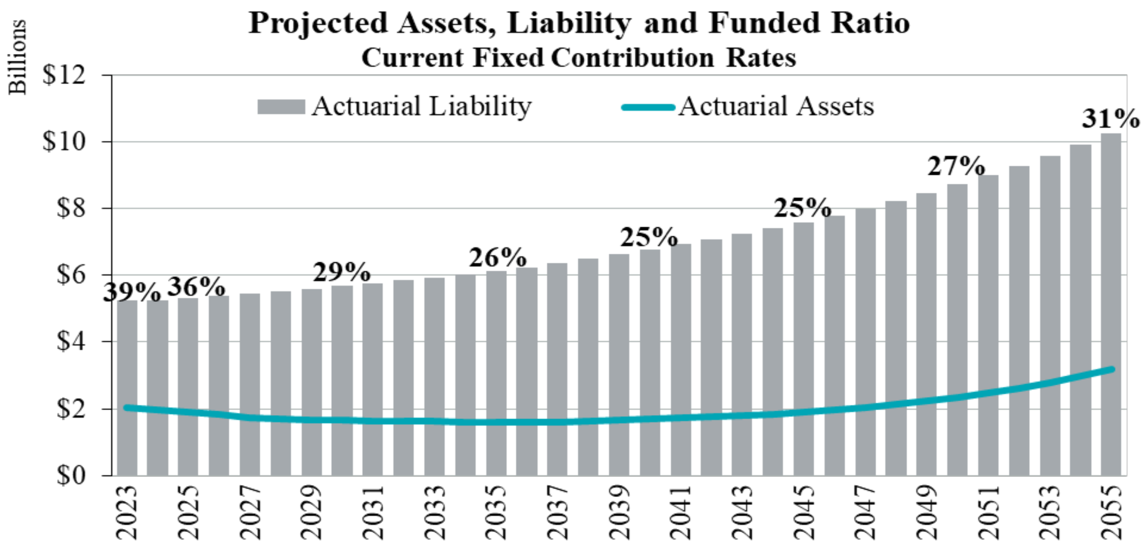
The System's 2023 actuarial valuation reports a funded ratio based on the smoothed actuarial value of assets of 39%. However, based on the market value of assets, the System is only 34% funded and carries an unfunded actuarial liability of more than $3.4 billion. Based on the current fixed contribution rates (including the floor on City contributions through 2024) and the City's Hiring Plan payroll projection, the System actuary estimates an effective funding period of 82 years. This period is not consistent with the Texas Pension Review Board's funding guidelines, which require a funding period no longer than 30 years.

Chart I-1 on the next page shows our projection of smoothed actuarial assets (teal line), liabilities (gray bars), and funded ratio through 2055 based on the January 1, 2023, actuarial valuation. Note that the funded ratio is projected to continue declining for decades even if investment returns and all other assumptions are met. Eventually, the funded ratio begins to improve, but it is only projected to be 31% in 2055.

DALLAS POLICE AND FIRE PENSION SYSTEM
INDEPENDENT ACTUARIAL ANALYSIS

SECTION I – EXECUTIVE SUMMARY

Chart I-1



Aggravating the effort to improve the funded status is the fact that current benefit payments being paid out of the System are significantly larger than the contributions coming into the System. Net cash flow (contributions minus benefit payments and expenses) is approximately -7.1% of assets. At a time when the System would like to invest in growing its assets, it also must plan redemptions greater than its expected investment returns just to pay benefits. These liquidity requirements can create a significant headwind to investment performance.

Finally, the System offers its retirees a potential Cost-of-Living Adjustment (COLA) once it is 70% funded. In the System's 2023 actuarial valuation, it is assumed, based on the current fixed rate of contributions, that no COLA will be payable until 2073. This assumption produces a lower Actuarial Liability and lower normal cost than if COLAs were payable earlier. Consequently, increasing contributions so that the System is expected to reach 70% funding earlier also increases the normal cost, Actuarial Liability, and Unfunded Actuarial Liability due to COLAs being paid earlier. For example, if the System were 70% funded in 2023, the actuarial liability would be about $5.8 billion (instead of $5.2 billion), and the normal cost rate would be approximately 21.4% of payroll (instead of 18.7%).

Key Considerations

In developing our recommendations, we recognize that there is a balance between competing objectives:

- **Benefit Security and Adequacy** – The benefits promised by the System must be secured with the assets in the trust, future investment earnings on those assets, and future contributions from members and the City of Dallas. Investment earnings are uncertain, so there must be some mechanism to adjust either benefits or contributions for unexpected changes in investment earnings. At the same time, benefits must be adequate to get the necessary support from members to make the System sustainable.

- **Contribution Stability, Predictability, and Sustainability** – The contributions required of both employees and the city must be at a level that each can sustain over a long period. Ideally, those contributions would be stable so that employees and the city could plan their budgets around the known contribution amounts. To the extent contributions need to change, the changes should be relatively predictable, and move in steps that allow for adjustments to the related budgets.
- **Generational Equity** – Ideally, each generation of taxpayers pays for the benefits of the employees who provided services for that generation. Given the current funding situation, prior generations have not paid the full cost related to the services that they received. The challenge for the System is to create a plan to restore funding without overly burdening the current generation and without simply shifting the burden to future generations. The Pension Review Board's funding guidelines put a limit of 30 years on paying for the unfunded liability left by prior generations.

Principal Recommendations

Ultimately, in a pension plan, the contributions and investment earnings must add up to the benefits and expenses paid by the System. Expenses are relatively small, so to restore the System, some combination of higher contributions, better investment returns, and benefit reductions may be necessary. Investment returns are outside the scope of our analysis, so our focus is strictly on benefits and contributions.

Benefits under the System have already been reduced as a part of efforts to shore up the System, particularly in 2011 and 2017. Based on comparisons to other large public safety systems in Texas, we do not believe that further reductions in the final average pay multiplier or increases in the retirement age could be sustained without eroding the ability of the city to recruit and retain police officers and firefighters. In fact, our analysis indicates that it may be necessary to improve the COLA provisions soon, and if so, we believe those improvements should be incorporated into budget plans now to avoid further underfunding the System.

With little funding improvement to gain from benefit changes, most of the improvement will need to be from higher contributions. Since the employee contribution rate is already high as a proportion of the total normal cost compared to similar peers, our recommendation is thus primarily higher contributions from the City of Dallas.

SECTION I – EXECUTIVE SUMMARY

While there are alternative scenarios within our recommendations, the three principal recommendations are:

Adopt an Actuarially Determined Contribution	Reduce Employee Contribution Rate as Funding Improves	Provide Some COLA Earlier Than Current Provisions Permit
• Contribution amounts adjust to circumstances • System will always comply with the PRB funding guidelines	• Current rate is high as a proportion of the normal cost rate compared to peers • As funding improves, grade employee rate down to 50% of normal cost rate	• Members are not covered by Social Security, so they have no inflation protection in retirement • Lack of COLA is likely to create a recruitment and retention issue

Actuarially Determined Contributions

The Dallas Police and Fire Pension System's current fixed contribution rate is inadequate and unsustainable. Contributions must be increased substantially to meet the Texas Pension Review Board's funding guidelines. Simply increasing the fixed rate risks the possibility of violating the funding guidelines again in the future if the System's experience does not meet expectations. Each time a fixed rate must be changed, it can lead to sudden, large changes in contributions that can be disruptive and difficult for the City's budget to absorb, creating a financial risk for the City and potentially putting member benefits at risk.

Consequently, we recommend switching to an Actuarially Determined Contribution (ADC). This means the City's contribution to the pension plan is calculated each year based on the plan's actual financial situation. The ADC automatically adjusts to reflect:

- Changes in the plan's investments,
- Changes in retirement or termination patterns, and
- Other financial factors.

Key Benefits of an ADC

- **Predictability**: An ADC makes relatively small changes each year, avoiding sudden cost increases or decreases and making budgeting more predictable over the long term.
- **Sustainability**: Ensures the pension plan is always on track to meet its obligations and always complies with the Texas Pension Review Board's funding guidelines.
- **Fairness**: Costs are spread more evenly across generations of taxpayers. The current fixed rate has resulted in a prior generation of taxpayers paying less than what was needed and transferring those costs to a future generation. While an ADC does not eliminate generational transfers, it limits them by making continuous annual cost adjustments.

How an ADC Works

The ADC has three parts:

1. **Normal cost**: The cost of benefits attributed to the current year of service for employees. This cost is designed to be a level percentage of payroll over each employee's career.
2. **Administrative expenses**: The annual cost of running the pension plan.
3. **Amortization payment**: The annual cost of paying down the System's Unfunded Actuarial Liability (the difference between the System's assets and what it should have based on the valuation model). Think of this like paying down a mortgage over time.

While the normal cost is a percentage of each individual's pay, the administrative expenses and amortization payments are dollar amounts that are independent of payroll.

SECTION I – EXECUTIVE SUMMARY

Recommendation

Since an ADC changes with each valuation, there needs to be time between when the ADC is calculated and when it is reflected in the City's contribution so the City can adjust its budget. We recommend that the January 1 valuation, which is typically completed near the end of the calendar year, be used to set the ADC for either the fiscal year beginning 21 months after the valuation date or the calendar year beginning 24 months after the valuation date.

We recommend a 'layered' amortization approach to gradually pay down the unfunded liability over the next 30 years. This approach combines a responsible schedule of payments to pay off the entire current unfunded liability within 30 years with additional schedules of payments or credits transitioning to 20-year layers to pay off any future gains, losses, or assumption changes. This amortization period balances the stability and predictability of contributions with generational equity while ensuring continuous compliance with the Texas Pension Review Board's funding guidelines. To ease the transition, the ADC can include a step-up period where the City's contribution increases gradually over a few years, and similarly, it can include a step-down period at the end of the 30 years.

We developed five alternative amortization policies outlined on the following page. Each alternative is reasonable. Given the current funding situation, we prefer the policies that require a higher level of contributions more quickly. We ordered the policies from most preferred on the left to least preferred on the right.

DALLAS POLICE AND FIRE PENSION SYSTEM
INDEPENDENT ACTUARIAL ANALYSIS

SECTION I – EXECUTIVE SUMMARY

Traditional	3-Year Step Up / Down	5-Year Step Up / Down	3-Year Step Up	5-Year Step Up
• Single initial 30-year amortization layer for entire UAL • 2.5% annual increase in payments • No step up or down in payments	• 30-year base amortization layer approximating current contribution rate for 2024 • 2.5% annual increase in payments • 30-year amortization layer for remainder of UAL • Payments step up over three years to full payment level • 2.5% annual increase in payments once at full payment level • Payments step down over three years at end of amortization	• 30-year base amortization layer approximating current contribution rate for 2024 • 2.5% annual increase in payments • 30-year amortization layer for remainder of UAL • Payments step up over five years to full payment level • 2.5% annual increase in payments once at full payment level • Payments step down over five years at end of amortization	• 30-year base amortization layer approximating current contribution rate for 2024 • 2.5% annual increase in payments • 30-year amortization layer for remainder of UAL • Payments step up over three years to full payment level • 2.5% annual increase in payments once at full payment level • No step down at end of amortization	• 30-year base amortization layer approximating current contribution rate for 2024 • 2.5% annual increase in payments • 30-year amortization layer for remainder of UAL • Payments step up over five years to full payment level • 2.5% annual increase in payments once at full payment level • No step down at end of amortization

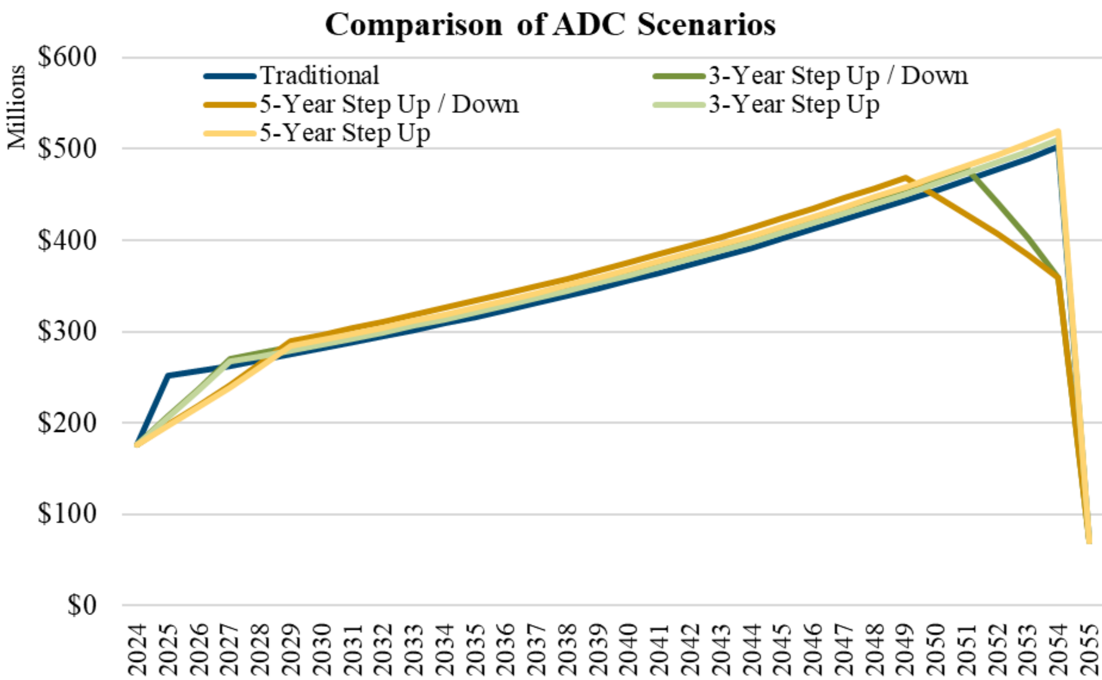
Comparison of Options

All five scenarios require a significant increase in City contributions and are expected to achieve 100% funding in 2055 if all assumptions are met. To smooth the projected pattern of contributions, we recommend re-setting the Actuarial Value of Assets to equal the Market Value of Assets as of January 1, 2023. The five-year asset smoothing would resume with investment returns following the reset. In addition, the valuation should take into account projected contributions and projected changes in normal cost during the period from the valuation date to when the contributions change to reflect the ADC.

All five scenarios are expected first to reach the 70% threshold to pay a COLA in 2046 or 2047, and all five scenarios are expected to experience minimum funded ratios of 32% to 34%. The System's current negative net cash flow of -7.1% is expected to improve to better than -2.0% by 2029 and to become positive net cash flow by 2036 under all five scenarios. The differences between the ADC options are less important than adopting an ADC compared to the current or even an increased fixed contribution rate. Nevertheless, there are differences in the level and pattern of payments, which are shown in Chart I-2.

SECTION I – EXECUTIVE SUMMARY

Chart I-2

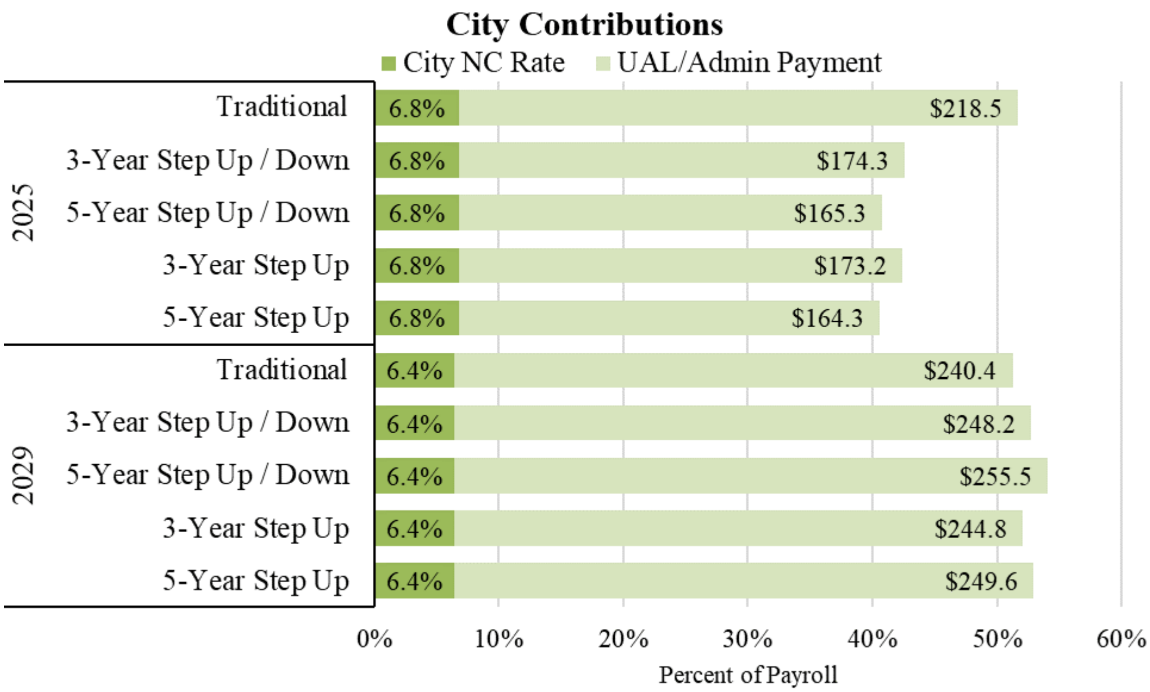


In general, any step up or step down employed by the method necessitates a higher contribution in the middle years. So, the Traditional option has the highest initial cost but the lowest cost in the middle years. The five-year step-up and down option has the second lowest initial cost but the highest cost in the middle years.

Chart I-3 compares the contributions required under each of these scenarios in 2025 (the first year) and 2029 (after all step-ups have been completed).

SECTION I – EXECUTIVE SUMMARY

Chart I-3

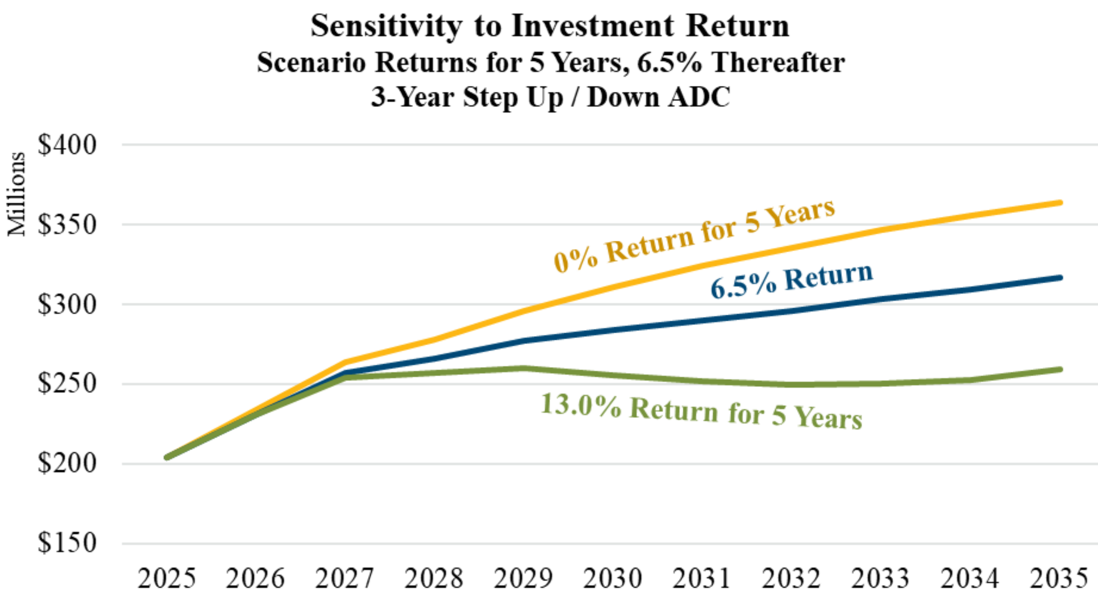


Sensitivity to Investment Returns

One of the benefits of an Actuarially Determined Contribution is that it automatically adjusts to the System's experience each year. The size of these adjustments is controlled by the five-year asset smoothing method and the amortization method. As a result, only 20% of any investment gain or loss is recognized in a given year, and when recognized, the payment for a loss or credit for a gain is amortized over at least 20 years (29 years initially). To provide a sense of the potential change in ADC from one year to the next, Chart I-4 shows the ADC under the 3-Year Step Up / Down scenario assuming either 0% investment returns, 6.5% investment returns, and 13.0% investment returns for the first five years of experience.

SECTION I – EXECUTIVE SUMMARY

Chart I-4



The asset smoothing and amortization cause the differences in the ADC to emerge slowly, even in these extreme scenarios. Ultimately, the differences for these scenarios are significant, but the ADC transitions the contributions to the new required level in steps to make the adjustments more budget-friendly. These are unrealistic extreme scenarios designed to illustrate how the ADC manages such a situation. In more likely and realistic scenarios with a mix of offsetting gains and losses, the asset smoothing and amortization methods serve to keep contributions stable by not overreacting to changes in any individual year.

ADC Conclusions

The most important recommendation in our report is to adopt an Actuarially Determined Contribution (ADC). An ADC will ensure the System improves its funded position in an orderly and affordable manner, automatically adjusting contributions annually to always satisfy the Texas Pension Review Board's funding guidelines. There are a range of reasonable alternatives to structure the transition to an ADC. All the alternatives outlined in this report are expected to achieve 70% funding by 2046 or 2047 and 100% by 2055.

Given the currently low funded status of the System, we prefer the ADC alternatives that transition to the needed higher level of contributions as quickly as possible while recognizing the realities of the City's budgeting process.

We also understand that there has been some discussion of potential lump sum contributions from the City. While not directly built in, all the ADC alternatives would automatically reduce contributions after a lump sum contribution was made to reflect the improved funded status due to the lump sum contribution.

Employee Contribution Rate

Our second recommendation is to reduce the employee contribution rate as funding improves. The employee contribution rate of 13.5% of pay currently covers almost 74% of the normal cost rate. The normal cost rate represents the expected cost of the benefits attributable to the current year of service, and this proportion of that cost being allocated to employees is high compared to peer systems. However, given the System's current funded status, it would be difficult to reduce employee contributions.

Under the current provisions, once the System is 100% funded, employees would only pay 50% of the normal cost rate. Our recommendation is simply to establish a schedule so that as the funded ratio improves, the employee contribution rate gradually declines to equal 50% of the normal cost rate. This recommendation is intended to be combined with the prior recommendation of adopting an Actuarially Determined Contribution. Furthermore, if any additional COLA is adopted as in our final recommendation, the schedule and ultimate employee contribution rate would need to be adjusted to reflect that COLA.

Table I-1 shows an example of a schedule that could be adopted to accomplish this recommendation. To develop the schedule, the base employee rate is first set equal to 50% of the normal cost rate applicable for members hired on or after March 1, 2011, rounded to the nearest 0.5%. By the time the System is well funded, virtually all active members will have been hired after this date. For this scenario, we calculate this base employee contribution rate to be 9.5% of pay. Then, a schedule to increase this employee contribution rate for various funding levels is established. In the schedule in Table I-1, there is no adjustment once the System is 90% funded, and the full increase of 4.0% is applied whenever the System is less than 50% funded.

Table I-1

Sample Employee Contribution Rate Adjustment Schedule

Funded Ratio	Base Employee Contribution Rate	Rate Adjustment	Total Employee Contribution Rate
90% or Greater	9.5%	0.0%	9.5%
85% – 89%	9.5%	0.5%	10.0%
80% – 84%	9.5%	1.0%	10.5%
75% – 79%	9.5%	1.5%	11.0%
70% – 74%	9.5%	2.0%	11.5%
65% – 69%	9.5%	2.5%	12.0%
60% – 64%	9.5%	3.0%	12.5%
50% – 59%	9.5%	3.5%	13.0%
Under 50%	9.5%	4.0%	13.5%

SECTION I – EXECUTIVE SUMMARY

When the employee contribution rate is adjusted, there is an exactly equal offsetting adjustment to the employer's normal cost rate. The employer's normal cost rate equals the total normal cost rate minus the employee contribution rate. Consequently, these adjustments do not affect the contribution amount received by the System but simply shift contributions between employees and the city.

Other adjustment schedules would also be appropriate. The schedule on the previous page is simply an example. The recommendation is to create a schedule that gradually reduces the employee contribution rate to 50% of the normal cost rate as the System's funded status improves rather than make a significant adjustment all at once when the System becomes 100% funded.

Cost-of-Living Adjustments

Our final recommendation is that the System be amended to provide some Cost-of-Living Adjustments (COLAs) earlier than the current plan provisions permit. While recognizing the large increases in contributions required to fully fund the System within 30 years, we believe the current COLA provisions will need to be improved to provide some level of COLA prior to the System reaching 70% funded, which will require even higher contributions. Under the current provisions, no COLA is expected to be paid until 2046. Even in relatively low inflation environments, this period without a COLA will result in a significant loss in purchasing power for retirees that will likely result in significant pressure to provide some level of COLA, at least for the retirees who have experienced the largest decline in purchasing power. Consequently, the costs of an increased COLA should be included in the contribution budget now. Ignoring or deferring these costs may lead to inadequate funding and further generational transfers. The COLA to be provided is a policy decision that will need to balance the benefits of providing a COLA and protecting purchasing power for retirees against the additional costs. This report provides a range of options to illustrate the tradeoff between additional benefits and additional costs of providing COLAs to members earlier than currently anticipated.

Key Findings of COLA Analysis

- **COLA Absence:** The System has not provided a COLA since 2016. Current provisions prevent a COLA from being paid until the fund achieves a 70% funded status – an unlikely scenario for at least 20 years, even with increased contributions.
- **Inflation's Impact:** The lack of COLA protection significantly erodes the purchasing power of retirement benefits over time. This is a critical issue, given members' lack of Social Security coverage.
- **Competitive Landscape:** The City's Employees' Retirement Fund and many other public safety pension systems offer inflation protection, creating a competitive disadvantage in recruitment and retention.

Purchasing Power Erosion

In retirement, inflation erodes purchasing power to the extent that retirees' benefits are not increased by COLAs. Since the last COLA was provided in 2016, inflation has reduced retirees' purchasing power to about 76% of what it was then. The total reduction in purchasing power for individual retirees varies by the inflation experienced since their retirement compared to the COLAs granted over that same period. Table I-2 shows the remaining purchasing power in 2024 for retirees by year of retirement and projects future purchasing power under the current COLA provisions, assuming 2.5% inflation each year.

SECTION I – EXECUTIVE SUMMARY

Table I-2

Retirement Year	Purchasing Power 2024	2029	2034	2039	2044	2049	2054
2023	100%	88%	78%	69%	61%	56%	53%
2022	96%	85%	75%	66%	58%	54%	51%
2021	88%	77%	68%	60%	53%	49%	47%
2020	83%	73%	65%	57%	50%	47%	44%
2019	82%	73%	64%	57%	50%	46%	44%
2018	81%	71%	63%	56%	49%	45%	43%
2017	79%	70%	61%	54%	48%	44%	42%
2016	76%	67%	60%	53%	47%	43%	41%
2015	78%	69%	61%	54%	47%	44%	41%
2010	86%	76%	67%	59%	52%	48%	45%
2005	93%	83%	73%	65%	57%	52%	48%
2000	94%	83%	73%	65%	57%	52%	
1995	92%	82%	72%	64%	56%		
1990	90%	79%	70%	62%			
1985	84%	75%	66%				
1980	70%	62%					

For members who retired in 2023, purchasing power is expected to decline to nearly 60% of their current purchasing power before the System is expected to reach the 70% funded ratio at which a COLA could potentially be paid under the current provisions.

COLA Options for Consideration

The report presents a range of potential COLA options with varying levels of benefits and associated costs. These options aim to assist the City of Dallas and the Retirement Board in finding a solution that balances the additional benefits with the additional cost.

The range of options presented extends from the current System COLA to the current COLA provided by the Dallas Employees' Retirement Fund (DERF) for non-safety employees of the City of Dallas and includes the following seven options:

- **Current System COLA** – Ad hoc simple COLA equal to 5-year average investment return minus 5.0% with a maximum COLA of 4.0%. COLA can only be provided if the System is at least 70% funded after providing the COLA.
- **Current DERF COLA** – Automatic simple COLA equal to inflation up to a maximum of 5.0% for members hired prior to January 1, 2017 and 3.0% for members hired thereafter.
- **Immediate Partial COLA** – Ad hoc simple COLA equal to 5-year average investment return minus 5.0%, all multiplied by the current funded percentage with a maximum COLA of 4.0%.

SECTION I – EXECUTIVE SUMMARY

- **Current System COLA with 70% Purchasing Power Protection** – Same as current System COLA except that COLAs are also provided to individual retirees as needed to ensure their purchasing power is not less than 70% of what it was in 2024.
- **Current System COLA with 80% Purchasing Power Protection** – Same as current System COLA except that COLAs are also provided to individual retirees as needed to ensure their purchasing power is not less than 80% of what it was in 2024.
- **Immediate Current COLA with 80% Purchasing Power Protection** – Same as current System COLA except without the 70% funded status restriction and providing COLAs to individual retirees as needed to ensure their purchasing power is not less than 80% of what it was in 2024.
- **Compound Immediate Current COLA with 80% Purchasing Power Protection** – Compound (instead of simple) version of current System COLA without the 70% funded status restriction and providing COLAs to individual retirees as needed to ensure their purchasing power is not less than 80% of what it was in 2024.

Table I-3 shows the expected purchasing power under each of these options, assuming future inflation is 2.50% each year.

Table I-3

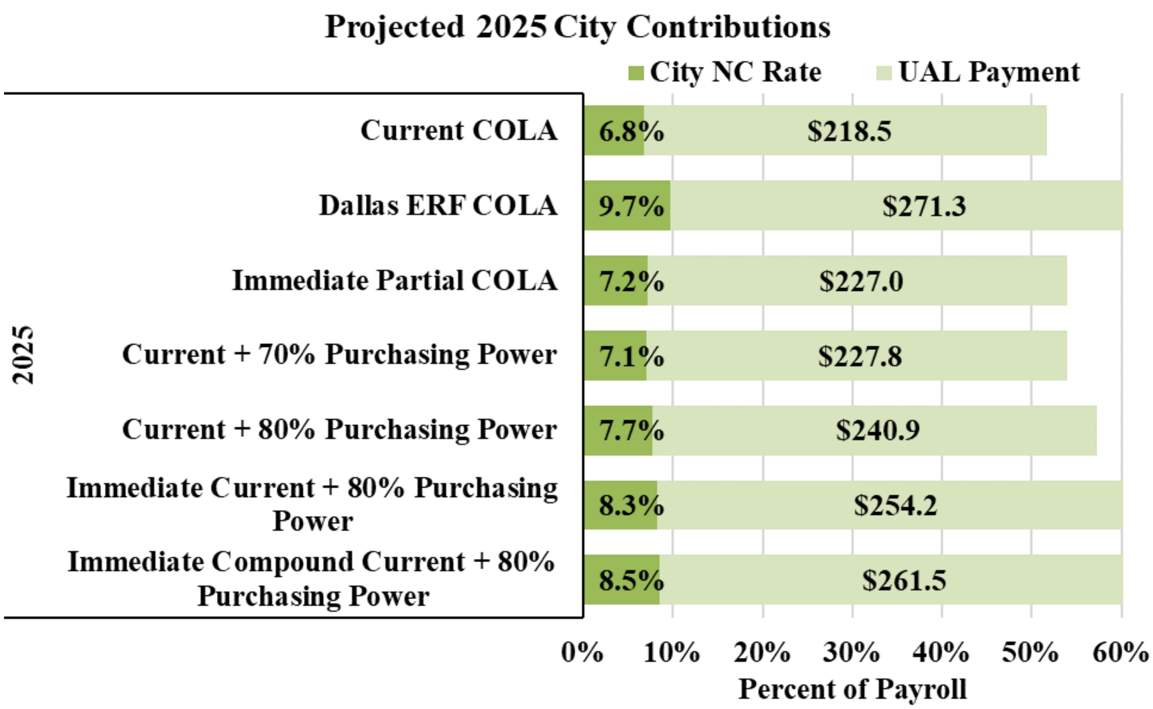
COLA Scenario	Purchasing Power						
	2024	2029	2034	2039	2044	2049	2054
Current	100%	**88%**	*78%*	*69%*	*61%*	*56%*	*53%*
Dallas ERF COLA	100%	99%	98%	95%	92%	**88%**	**83%**
Immediate Partial COLA	100%	**89%**	**81%**	*74%*	*68%*	*63%*	*59%*
Current + 70% Purchasing Power Protection	100%	**88%**	*78%*	*70%*	*70%*	*70%*	*70%*
Current + 80% Purchasing Power Protection	100%	**88%**	*80%*	*80%*	*80%*	*80%*	*80%*
Current Immediate + 80% Purchasing Power Protection	100%	95%	**90%**	**85%**	*80%*	*80%*	*80%*
Compound Current Immediate + 80% Purchasing Power Protection	100%	95%	91%	**86%**	**82%**	*80%*	*80%*

Any additional COLAs would also increase the normal cost, unfunded actuarial liability (UAL), and the City's Actuarial Determined Contributions. Chart I-5 summarizes the estimated cost impact by comparing the projected City contributions in 2025 using the Traditional ADC. Note that while we have shown these with the Traditional ADC option for illustrative purposes, these COLA scenarios could be combined with any of the ADC options in our recommendations.

DALLAS POLICE AND FIRE PENSION SYSTEM
INDEPENDENT ACTUARIAL ANALYSIS

SECTION I – EXECUTIVE SUMMARY

Chart I-5



COLA Conclusions

We recommend amending the System to implement earlier COLA provisions for the following reasons:

- **Preserving Purchasing Power:** COLAs are crucial to offset inflation and ensure retired members' financial well-being.
- **Competitive Necessity:** Aligning with market practices and considering parity with other City of Dallas employees is essential to attract and retain qualified Police and Fire personnel.
- **Fiscal Responsibility:** We believe the System will have to provide some level of COLA before the current provisions anticipate one being paid. Proactively incorporating the cost of these future COLAs into the budget plan ensures sustainable, long-term funding of the System.

Addressing the COLA issue is paramount to ensuring a financially secure retirement for valued Police and Fire personnel while maintaining the City of Dallas' competitiveness as an employer. The COLA options presented offer a starting point for policy decisions to achieve these dual objectives while maintaining an affordable contribution level.

Conclusion

A sustainable pension system requires contributions and investment earnings to accumulate over time to equal the benefits and expenses paid from the system. The current level of contributions to the Dallas Police and Fire Pension System is inadequate to support the benefits promised. Benefit reductions in 2011 and 2017 have already significantly reduced the liability, and further reductions would put the City of Dallas at a competitive disadvantage. Furthermore, employee contributions already pay for a larger portion of the expected cost of benefits than peer systems in Texas. Consequently, our primary recommendation is to increase city contributions.

City contributions have historically been a fixed percentage of pay. This approach provides budget stability for the city, but the contributions do not automatically adjust to the needs of the System. We strongly recommend the adoption of an Actuarially Determined Contribution that adjusts annually as the experience of the System changes. We have outlined some alternatives that balance the city's need for budget stability with the System's need for contributions that change as experience emerges. These alternatives will ensure that the Dallas Police and Fire Pension System remains in compliance with the Texas Pension Review Board's funding guidelines.

Employees currently pay for over 70% of the expected cost of their benefits, which is well above the average for peer systems. Under current provisions, this percentage will drop to 50% once the System is 100% funded. Rather than maintaining these high employee contribution rates all the way until the System is 100% funded and then dropping the rate in one year, we recommend establishing a schedule of employee contribution rate adjustments based on the funded status of the System that will gradually reduce employee contribution rates as the System is better funded.

Finally, the System currently cannot pay a COLA until it is 70% funded, which is not expected for over 20 years. Given the loss of purchasing power retirees face the fact that employees are not covered by Social Security, we believe the System will need to pay a COLA before it is 70% funded. Consequently, we recommend that the System determine what COLA it will need to pay and build the additional costs of that COLA into the budget plan today. Failure to do so means that when the System needs to pay the COLA, none of it will have been funded in advance, and the entire cost will fall to future generations.

While we do not recommend a specific COLA, we have outlined a range of options for the System to consider. These options are not all-encompassing but are intended to provide a starting point for analysis of the balance between the purchasing power protection the COLAs can provide and the additional cost of providing that protection.

SECTION II – CERTIFICATION

The purpose of this report is to present the results of our independent actuarial analysis of the Dallas Police and Fire Pension System, including providing alternative benefit and contribution scenarios that comply with the requirements of Texas Government Code Section 802. This analysis is based on our replication of the 2023 actuarial valuation performed by Segal.

In preparing our report, we relied on information, some oral and some written, supplied by the System and its ongoing actuary, Segal. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23, *Data Quality*.

The economic and demographic assumptions used in our analysis are the same as those used by Segal for the 2023 actuarial valuation. We believe these assumptions are reasonable for the purpose of this analysis. A summary of the data, assumptions, methods, and plan provisions used to prepare our analysis can be found in Segal's 2023 actuarial valuation report, supplemented by additional information in the appendix of this report.

The funding ratios in this report are for the purpose of establishing contribution rates. These measures are not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.

Cheiron utilizes ProVal actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate liabilities, normal costs, and project benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have used it in accordance with its original intended purpose. We have not identified any material inconsistencies in the assumptions or output of ProVal that would affect this analysis.

Deterministic projections in this valuation report were developed using *P-Scan*, a proprietary tool used to illustrate the impact of changes in assumptions, methods, plan provisions, or actual experience (particularly investment experience) on the future financial status of the System. *P-Scan* uses standard roll-forward techniques that implicitly assume a stable active population. Because *P-Scan* does not automatically capture how changes in one variable affect all other variables, some scenarios may not be consistent.

Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and, changes in plan provisions or applicable law.

This report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board, as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

SECTION II – CERTIFICATION

This report was prepared for the Dallas Police and Fire Pension System, the City of Dallas, and the Texas Pension Review Board for the purposes described herein. This report is not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

William R. Hallmark

William R. Hallmark, ASA, EA, MAAA, FCA
Consulting Actuary

Elizabeth Wiley, FSA, EA, MAAA, FCA
Consulting Actuary

Jake Libauskas

Jake Libauskas, FSA, EA, MAAA, FCA
Consulting Actuary

SECTION III – COMPETITIVENESS OF BENEFITS PROVISIONS

Overview

Part of the independent actuarial analysis requirements is to recommend benefit changes. Recognizing the importance of competitive benefits to a sustainable retirement system, we assessed the System´s benefits, both in absolute terms and in comparison to the City of Dallas Employees' Retirement Fund (ERF) and other Texas municipal public safety plans.

Public pension plans typically have a primary benefit formula that multiplies service by a final average compensation and a benefit multiplier. Adjusting the definition of final average compensation and the level of the benefit multiplier are powerful ways to increase or decrease the benefits provided by the System. In the 2011 and 2017 reforms of the System, the final average compensation had already been extended to a 60-consecutive month period, which is not uncommon but is longer than most public plans. Consequently, we did not explore additional adjustments to the averaging period. The retirement benefit is also sensitive to the types of pay included in the calculation, but our analysis did not examine whether any pay elements currently included in pensionable compensation should be excluded. We suspect any adjustments would have at most, a modest impact. Instead, our analysis focused primarily on benefit multipliers at various retirement ages to compare the initial benefit amount at retirement and on post-retirement cost-of-living adjustments to assess the preservation of purchasing power.

Comparison of Benefit Multipliers

The System reforms in 2011 and 2017 reduced the maximum benefit multiplier to 2.50% for future service. Although the System could reduce the multiplier for future service further, for example to 2.25%, we do not recommend such a reduction for competitive reasons. The System's current multiplier of 2.5% matches that of the newest tiers of Austin Police, both El Paso Fire and Police, and both Ft. Worth Police and Fire. The Houston and San Antonio plans feature multipliers that vary with service and are lower than the current 2.5% for DPFP for some or all service bands. Austin Fire currently provides a significantly higher benefit multiplier at 3.3%. The System's 2.5% benefit multiplier thus lies in the middle of the peer group and is also the multiplier of the majority of this group.

The newest tier of Dallas' ERF also has a 2.50% multiplier. Reducing the System's 2.5% benefit multiplier would result in lower retirement benefits for Dallas's public safety employees than for its nonpublic safety employees with the same service and salary levels.

Comparison of Retirement Ages

The full 2.5% benefit multiplier is currently available at age 58 with five years of service. This benefit multiplier is reduced at earlier retirement ages, with smaller reductions for members who have completed at least 20 years of service. Although it would be possible to change these requirements for future service, we advise against doing so due to the impact on the competitiveness of the System's benefits.

SECTION III – COMPETITIVENESS OF BENEFITS PROVISIONS

Generally, other Texas municipal public safety plans also establish normal retirement eligibility based on some combination of age and service. They also often adjust the benefit multiplier for earlier retirements based on different age and service criteria.

The retirement eligibility conditions for Tier B of ERF include three pathways to eligibility:

- Age 65 with five years of service,
- 40 years of service at any age, or
- Rule of 80 (age plus service greater than or equal to 80) with reduction if the member is under age 65.

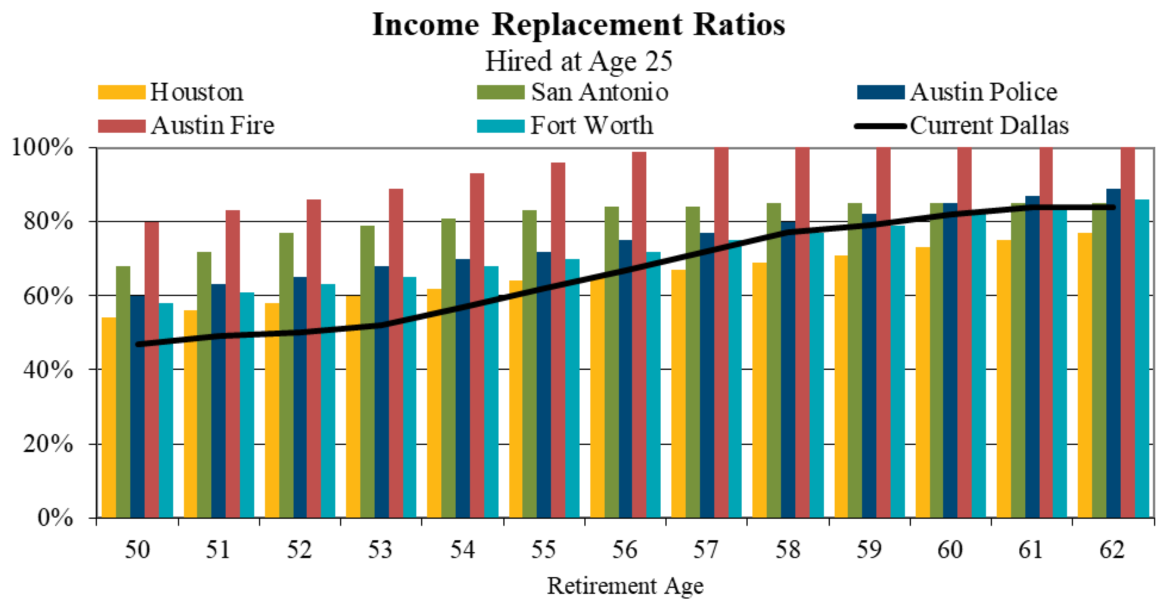
While these conditions are greater than those for DPFP, it is typical to have earlier eligibility for public safety members relative to nonpublic safety members.

Comparison of Replacement Income at Retirement

We combined the age and service requirements with the multiplier to calculate income replacement ratios to evaluate the competitiveness of the System's benefits compared to other Texas municipal public safety systems. These ratios represent the percentage of pre-retirement salary provided by the benefits paid at the time of retirement.

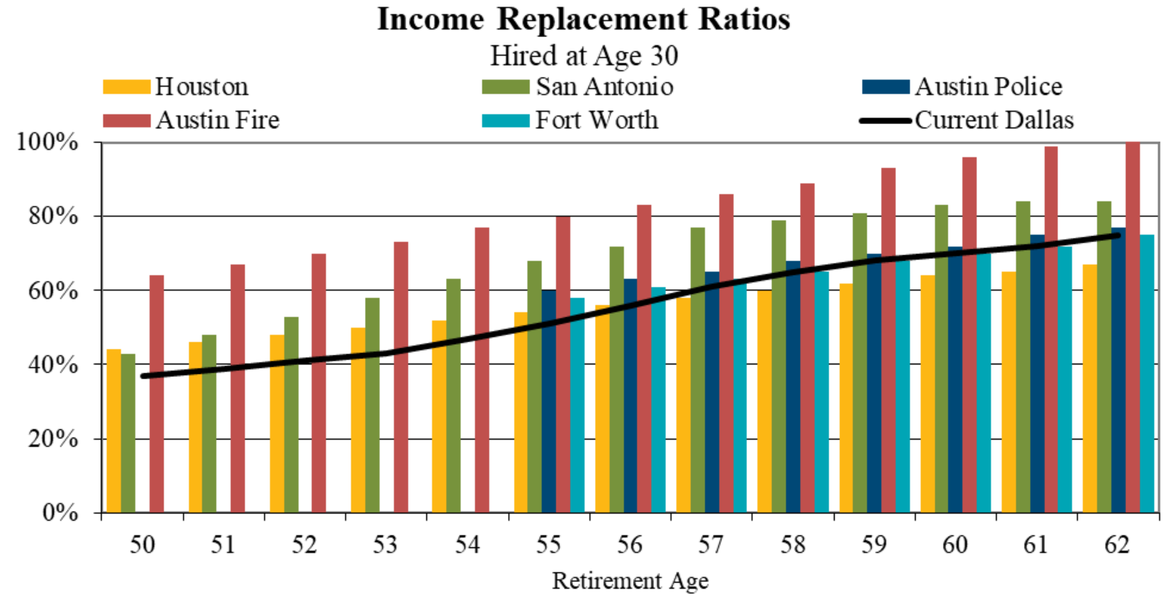
Chart III-1 below compares the income replacement ratios for the various plans for a member hired at age 25 and retiring at the age shown on the X-axis. Chart III-2 on the following page shows the same information for a member hired at age 30.

Chart III-1



SECTION III – COMPETITIVENESS OF BENEFITS PROVISIONS

Chart III-2



Note: Fort Worth Police are eligible for retirement after 25 years of service, but Fire personnel must satisfy the Rule of 80.

For both of these representative hire ages, the DPFP benefits offer lower income replacement ratios generally compared to similar systems, especially at earlier retirement ages. These benefits become more competitive with similar plans at, or beyond, the current DPFP normal retirement age of 58.

SECTION III – COMPETITIVENESS OF BENEFITS PROVISIONS

Comparison of Employee Contribution Rates

In our evaluation of the employee contribution rates, we compared both the absolute level of the employee contribution and the proportion of the total normal cost paid by the employee contribution for the System, the Dallas ERF, and other Texas municipal public safety systems.

Table III-1 summarizes these comparisons based on the most recent valuation reports available.

Table III-1

System	Total Normal Cost Rate	Employee Contribution Rate	Proportion of Normal Cost Paid by Employee
Dallas P&F	18.65%	13.50%	72.39%
Dallas ERF	19.17%	13.32%	69.48%
Austin Fire	30.73%	18.70%	60.85%
Austin Police	24.85%	15.00%	60.37%
Fort Worth Fire	15.86%	13.65%	86.07%
Fort Worth Police	15.86%	14.73%	92.88%
Houston Fire	25.25%	10.50%	41.58%
Houston Police	24.90%	10.50%	42.17%
San Antonio	36.03%	12.32%	34.19%
Average	23.44%	13.58%	62.36%

Fort Worth valuation does not report the total normal cost for Police and Fire separate from general employees, but they have similar benefits.

The System's current 13.5% employee contribution rate constitutes over 70% of the total normal cost. This proportion is even higher for newer employees, who have reduced benefits and thus a lower normal cost than those hired under the earlier tier. This proportion of the normal cost provided by the employee contributions is among the highest in our comparison group, with only the Fort Worth plans being higher. Across the group, the average portion of the normal cost covered by the employee contribution rate is about 62%, including current temporary increases related to funded status. These rates are expected to decrease as the funded status of the systems improves. Similarly, the employee contribution rate for DPFP is set to decrease to 50% of the total normal cost rate once the System achieves 100% funding.

SECTION III – COMPETITIVENESS OF BENEFITS PROVISIONS

Comparison of COLA Provisions

Inflation erodes the purchasing power of retirement benefits unless sufficient Cost-of-Living Adjustments (COLAs) are also provided. The comparisons above focused on the benefits payable at retirement, while this section focuses on how well those benefits are protected from erosion due to inflation. Protection from inflation is particularly important for systems like DPFP, as their members do not receive the full inflation-indexed benefits provided by Social Security due to their municipal employment not being covered by Social Security.

Like DPFP, all the other Texas large municipal public safety plans do not have Social Security coverage except for Austin Police. However, despite this commonality, these plans have a wide range of COLA provisions. At the low end, Austin Police and the Ft. Worth systems cannot pay any COLA without legislative action to amend their statutes. Progressing up the range, Austin Fire offers ad hoc COLAs intended to provide complete purchasing power protection but are limited as necessary based on financial sustainability. Moving from ad hoc to automatic, the Houston Police and Fire plans pay COLAs based on their actual five-year average return, reduced by either 4.75% for Fire or 5% for Police with a minimum of 0% and a maximum of 4%. The most generous system in providing COLAs among this group is San Antonio Police and Fire, offering a COLA equal to 100% of actual inflation for their older tier, 70% of inflation for their newer tier, and potentially additional 13th and 14th checks for all their members based on investment performance.

The nonpublic safety employees of the City of Dallas, who are covered by ERF, receive an automatic simple COLA based on actual inflation with a minimum value of 0% and a maximum value of 3% for the new Tier B and 5% for the old Tier A. This is a simple COLA, meaning it applies to the base benefit determined at retirement and does not compound over time.

Currently, the System's COLA provisions stipulate that no COLA can be paid until funding, reflecting the granting of such COLA, reaches at least 70%, a milestone currently projected not to be met until 2073 based on the January 1, 2023, valuation. Furthermore, no COLA has been granted since 2016.

Conclusions

After considering the System's current benefits, which reflect past benefit reductions, and comparing these current benefits to a peer group of other Texas municipal public safety plans, we recommend no further changes to the multipliers or retirement eligibility requirements.

Our recommendations on employee contribution rates and COLAs are discussed in Sections V and VI of this report.

SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

Overview

Our principal recommendation is that the Dallas Police and Fire Pension System change its employer contribution from a fixed rate to an Actuarially Determined Contribution (ADC). Fixed-rate contributions are difficult to change, and as a result, experience that differs from the assumptions when the fixed rate was established can cause a significant decline in the plan's funded status. When the fixed rate is finally changed, often a significant change is required, disrupting sponsor budgets and shifting costs to a subsequent generation of employees and taxpayers.

The Texas Pension Review Board's funding guidelines require that contributions be sufficient to amortize the Unfunded Actuarial Liability over a period of 30 years or less. The System currently does not satisfy these guidelines, so contributions and/or benefits must be changed to bring the System into compliance. If the System were to fail to meet these guidelines in the future, a Funding Soundness Restoration Plan would be required.

The System could simply increase the fixed contribution rate to satisfy the PRB's funding guidelines, but doing so would risk a failure if the experience of the System did not meet the assumptions. In contrast to a fixed rate, an ADC adjusts the contribution for the System's experience each year so that the PRB's funding guidelines are always satisfied. By making measured adjustments each year, the ADC also avoids large disruptive changes in contributions.

Because the ADC changes each year, a process needs to be established so that the ADC can be calculated in advance and inserted into the sponsor's budget process. The System currently performs actuarial valuations as of January 1 each year, and the valuations are normally completed within 12 months of the valuation date. Consequently, we recommend that the ADC become effective either 21 months (Beginning of the City's fiscal year) or 24 months (Beginning of the System's fiscal year) after each valuation date. This timing allows the ADC to be calculated and known when the City is preparing its budget for the fiscal year when the contribution will change.

SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

Recommended ADC Components

An Actuarially Determined Contribution typically consists of three components:

- Normal cost,
- Administrative expenses, and
- Payment on any Unfunded Actuarial Liability.

Normal Cost

The normal cost represents the expected cost of benefits attributed to the current year of service for each active member of the System under the actuarial cost method. The System, like most public pension plans, currently uses the Entry Age Actuarial Cost Method, which spreads the costs of each member's benefits as a level percentage of pay over their career. Given this actuarial cost method, it is appropriate to collect the normal cost portion of the ADC as a percentage of payroll. Then, any variations in actual payroll from the payroll used in the valuation automatically adjust the amount collected to reflect the expected cost of benefits attributable to the current year of service.

There is one technical change from the methodology used in the current valuation that we believe is important to adopt when the System switches to an ADC. The current normal cost rate is calculated by dividing the dollar amount of the normal cost as of the valuation date by the total expected payroll for the year following the valuation date, assuming no active members retire, terminate employment, become disabled, or die during the year. The dollar amount of the normal cost is calculated using these assumptions, but the payroll is not. For an ADC, it is better practice to determine the normal cost rate by dividing the dollar amount of the normal cost by the expected payroll for the same members, reflecting these assumptions. This approach will prevent liability losses for new entrants to the System each year.

Administrative Expenses

The System currently assumes administrative expenses equal to the greater of $7 million or one percent of payroll each year. This amount is independent of payroll. Consequently, we believe it is more accurate to collect the payment for administrative expenses as a dollar amount rather than a percentage of payroll.

Payment on Unfunded Actuarial Liability

The Unfunded Actuarial Liability is the difference between the Actuarial Liability and the Actuarial Value of Assets. The current methodology for developing the Actuarial Value of Assets recognizes deviations from expected investment returns over a five-year period, effectively smoothing the value of assets. Under the current fixed contribution rate, this smoothing had minimal impact, as it only affected the reported funded percentage and the reported funding period. However, in developing an Actuarially Determined Contribution, asset smoothing helps control how much the City's contribution changes from year to year, which is important for managing the budget process. The current five-year smoothing methodology is appropriate for the development of an ADC, and we recommend that it be retained.

SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

The Actuarial Liability represents the target amount of assets the System should have as of the valuation date to pay for benefits attributable to past service. While the Unfunded Actuarial Liability changes each year based on the System's experience, any assumption or plan changes, and the level of contributions, it is largely independent of future payroll. Hiring additional employees or choosing not to replace existing employees when they retire or otherwise terminate employment has no impact on the UAL. Consequently, we recommend that the UAL payment be set as a fixed dollar amount as opposed to a percentage of payroll. In addition to ensuring the System collects the payment it needs on the UAL, this approach provides the city an amount for the budget that is certain and does not have to be adjusted depending on the positions they fill or don't fill.

We recommend a closed, layered amortization methodology. Under this methodology, a payment schedule is established for the existing UAL. Then, each subsequent year, a new layer is established for any difference between the actual and expected UAL with its own payment or credit schedule while the payments on the original UAL continue as originally scheduled. This approach helps to stabilize contributions while ensuring that there is a timely schedule to pay off the entire UAL.

Amortization payments should be scheduled as a level or declining percentage of expected payroll. Systems that backload their amortization payments such that the payments grow faster than payroll or the sponsor's revenue can run into difficulty making those payments when they are eventually due. Systems that frontload amortization payments too much may experience volatility in contribution levels that disrupt budgeting. Balancing these factors, we recommend that amortization payments be scheduled to increase at the assumed rate of inflation, currently 2.5%. This rate of increase produces a schedule of payments that is expected to be level in terms of real dollars.

One of the most consequential decisions on amortization is the length of the amortization period. Short amortization periods are likely to be too expensive and result in volatile levels of contributions that disrupt budgeting. Long amortization periods stabilize contributions but may shift costs associated with benefits earned by the current generation to future generations. Balancing these perspectives, an amortization period of 15 to 20 years is generally accepted as a model practice for public pension plans.[1]

Given the current level of the UAL, immediately imposing a 20-year amortization period would be very costly, and it is generally recognized that longer amortization periods may be needed to transition to an Actuarially Determined Contribution if prior funding has been inadequate. The Texas Pension Review Board guidelines permit up to a 30-year funding period. Consequently, we recommend that the initial funding period be set at 30 years but that it declines each year until it reaches 20 years. Once the remaining period reaches 20 years, any new layers will be amortized over 20 years, while the prior layers will continue to be paid according to their original schedules.

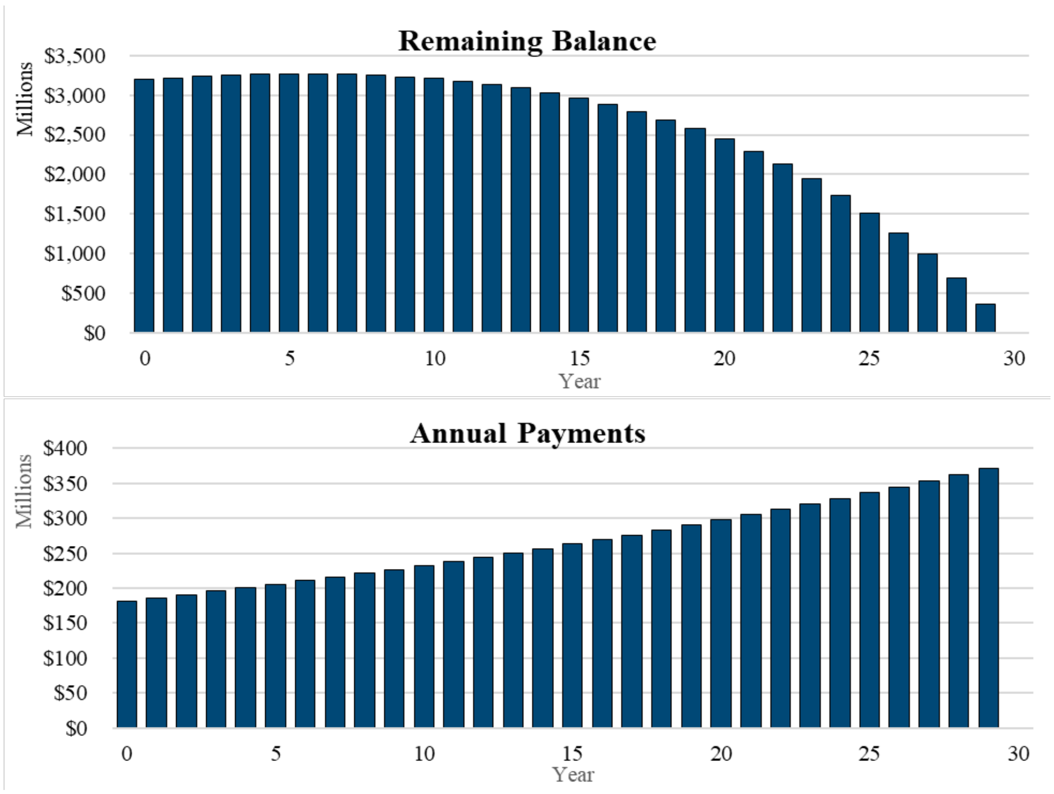
1 See "Actuarial Funding Policies and Practices for Public Pension Plans" published by the Conference of Consulting Actuaries, October 2014.

SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

Illustrations

The Unfunded Actuarial Liability as of January 1, 2023, is approximately $3.2 billion. Chart IV-1 shows the scheduled amortization of this initial UAL over 30 years with the remaining balance each year shown on the top and the annual payment shown on the bottom.

Chart IV-1



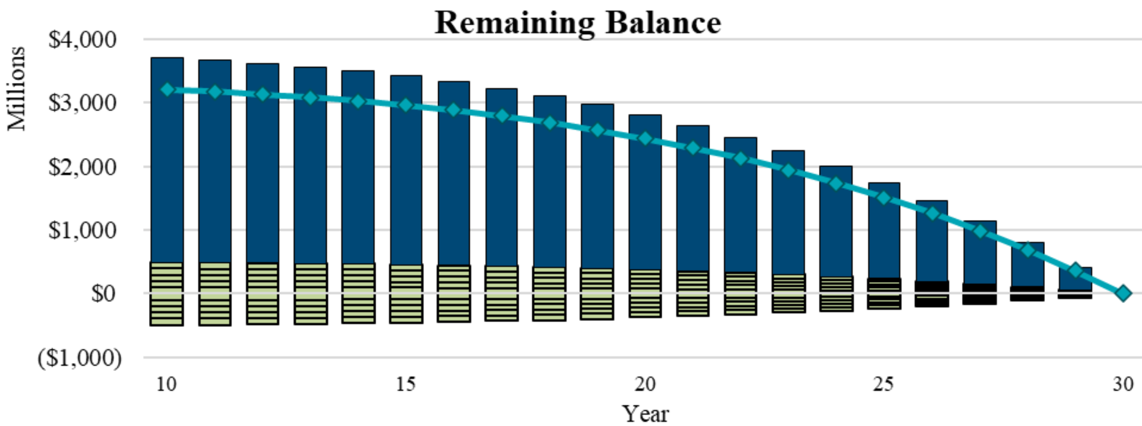
The payments increase by 2.5% each year, which allows for a lower starting payment than if all payments were the same dollar amount. However, as shown on the top, the lower initial payments cause the remaining balance to increase for a few years before it starts to be paid down and gets back to the initial amount after about ten years. This pattern is one reason we recommend transitioning from a 30-year period to a 20-year period. With a 20-year period, the balance of the amortization base will be paid down from the beginning of the amortization period.

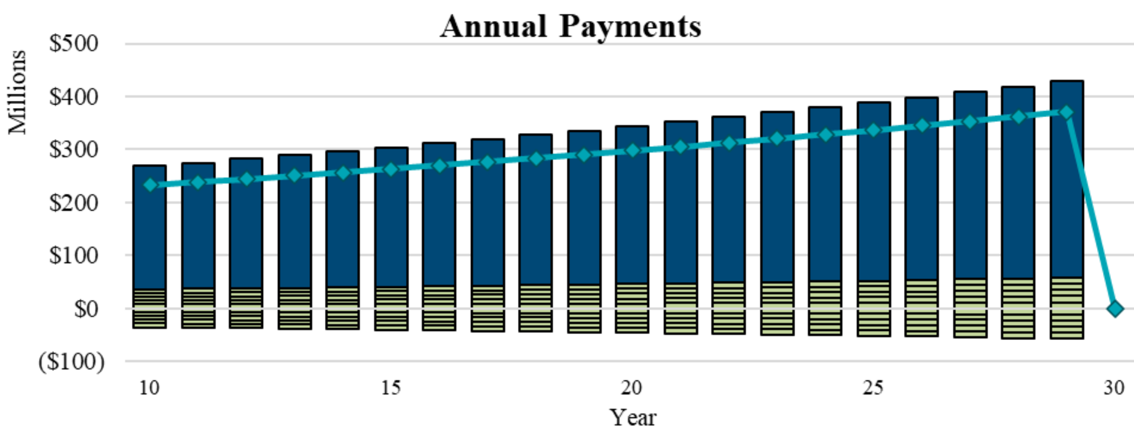
To transition to the 20-year layered amortization method that we recommend, each year, the actuarial gain or loss for the year would be amortized over a period that is one year shorter than the prior year until all the layers have 20 years remaining. To illustrate this process, Chart IV-2 shows the amortization schedule ten years from now with the addition of alternating layers of $100 million actuarial gains with $100 million actuarial losses in light green during the intervening period. The blue bars are the final 20 years of the initial UAL layer and the teal line represents the net remaining balance in the chart on the top and the net amortization payment in the chart on the bottom.

DALLAS POLICE AND FIRE PENSION SYSTEM
INDEPENDENT ACTUARIAL ANALYSIS

SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

Chart IV-2



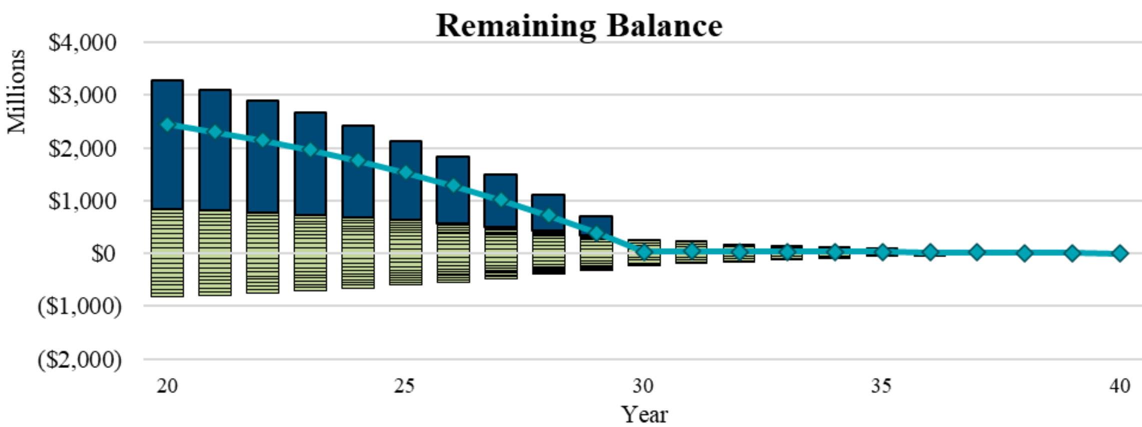


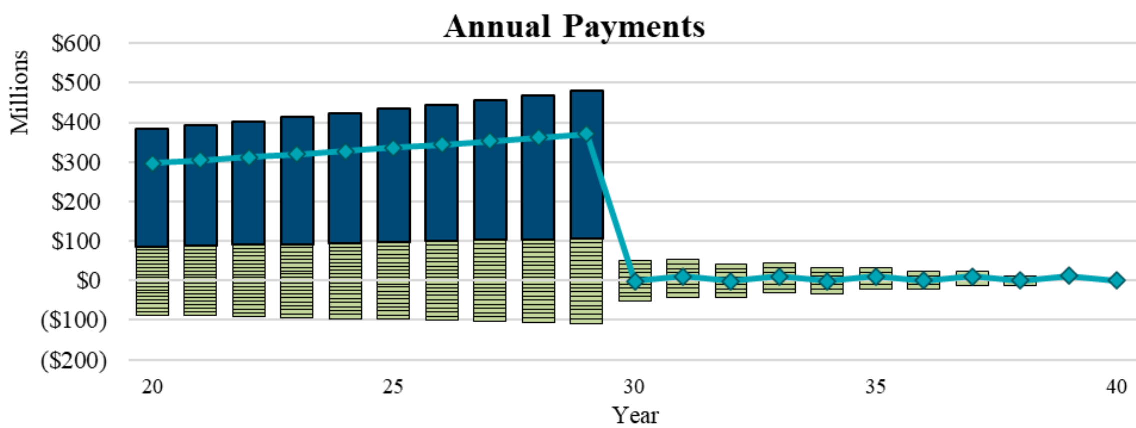
A layer has been added each year, but each layer is fully amortized at the same time. These layers could be combined into a single layer, but keeping the layers distinct shows the history of gains and losses.

After these first ten years, each new layer is amortized over its own 20-year period, resulting in different payoff dates and an extended amortization schedule. However, at any point in time, the remaining funding period is always 20 years or less. Chart IV-3 continues the illustration ten years further in the future to show the staggered payoff periods of the different amortization layers.

SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

Chart IV-3





After ten more years, the initial UAL layer and the first ten annual gain/loss layers are paid off. In this illustration, the net remaining balance and the net annual payments are near zero. Whether they are near zero depends on what gains and losses the System experiences after the first ten years, but in any case, the net amortization payment will drop by the net payment amount on the initial UAL and the first ten annual gain/loss layers.

Five amortization options

We developed five amortization options for consideration. We believe all of the options are reasonable, although given the System's current funded status, we generally prefer the options that require higher contributions as soon as possible. The other variations provide different levels of accommodation for the city to adjust its budget to the higher contributions needed in the near term and transition back to lower contributions at the end of the amortization period. The various accommodations generally result in larger expected total contributions over the 30-year period.

<u>Traditional ADC</u>

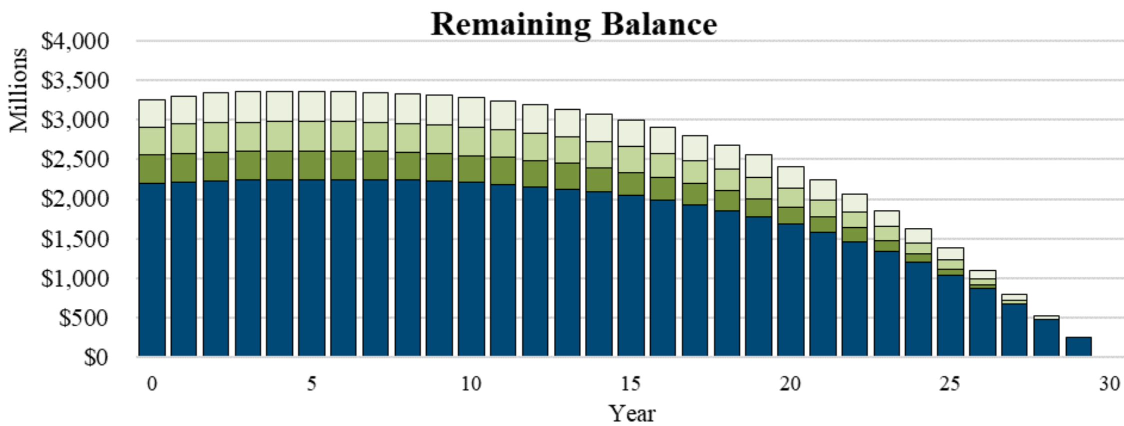
The illustrations shown on page 29 represent a traditional ADC amortization method. This method results in an immediate significant increase in the City's contribution compared to the current fixed rate contribution. The UAL payment increases 2.5% each year, remaining a constant percentage of expected payroll, for the full 30-year period. At the end of the 30-year period, the payment ceases, resulting in a significant drop in the City's contribution.

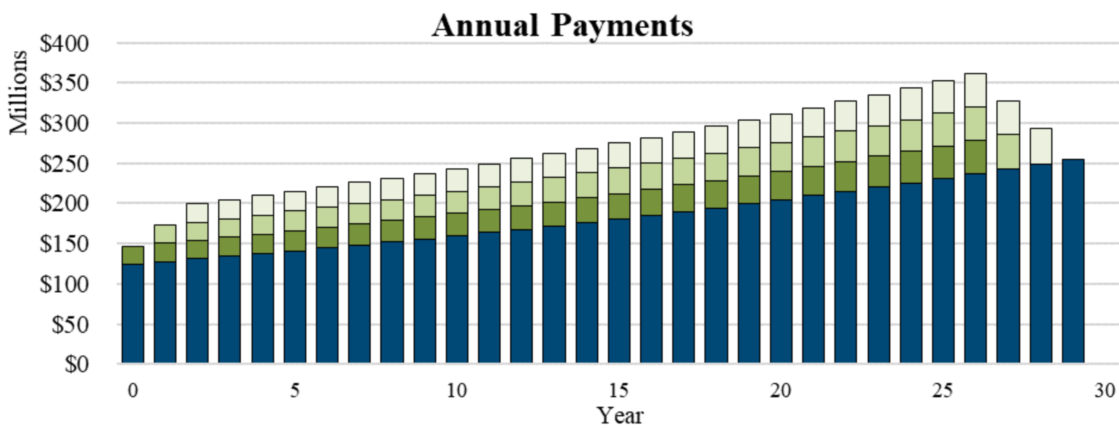
<u>3-Year Step Up and Step Down ADC</u>

The 3-Year Step Up and Step Down option includes a 3-year ramp up to the full ADC at the beginning of the 30-year amortization period and a 3-year ramp down at the end of the 30-year amortization period. For this and the other amortization options with step up and step down features, the initial UAL is split into two layers. The first layer ("base layer") has a $2.2 billion initial balance as of January 1, 2023, and uses the traditional 30-year amortization methodology. The UAL payment is similar to the current fixed rate payment on the UAL.

The second layer ("graded layer") has an initial balance equal to the portion of the UAL not covered by the base layer with payments that step up at the beginning of the period and step down at the end of the period. To construct this ramp up and down, the graded amortization layer described above is effectively divided into three 27-year amortization layers with the payment on the first layer starting immediately, the payment on the second starting in year two, and the payment on the third starting in year three. The illustrations on the next page show the remaining balance and annual payments for the 3-Year Step Up and Step Down option. The blue bars represent the base layer, and the three shades of green bars represent the graded layer's three 27-year amortizations commencing in subsequent years.

SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

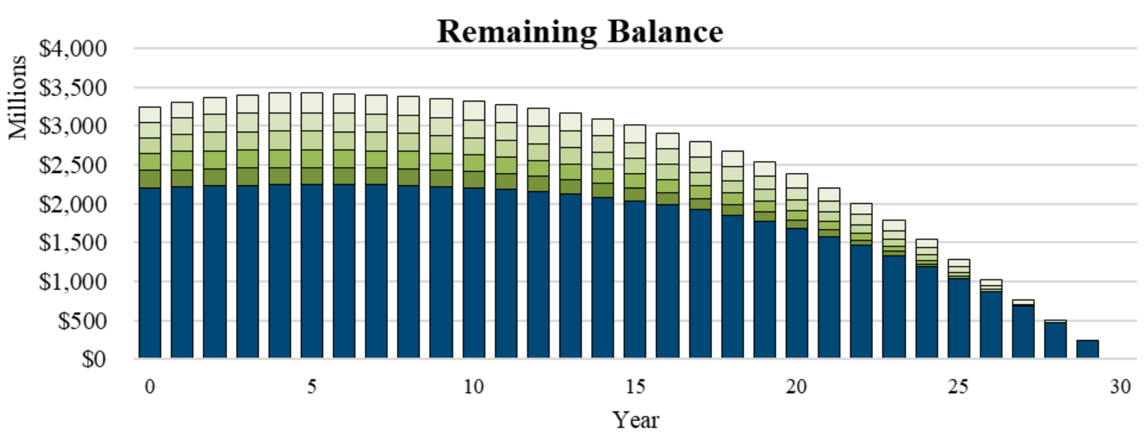


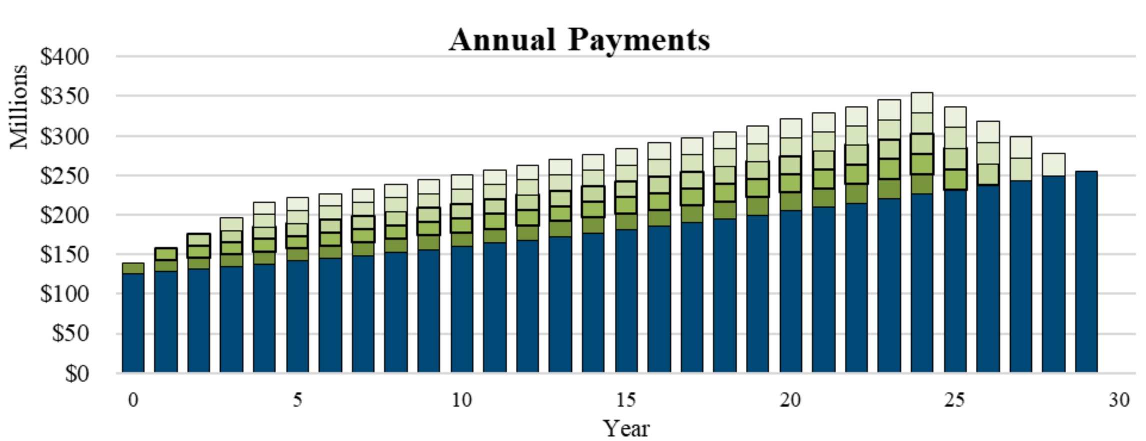


SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

5-Year Step Up and Step Down ADC

The 5-Year Step Up and Step Down option includes a 5-year ramp up to the full ADC at the beginning of the 30-year amortization period and a 5-year ramp down at the end of the 30-year amortization period. To construct this ramp up and down, the graded amortization layer described previously is effectively divided into five 25-year amortization layers, with payments for each layer starting in successive years. The illustrations below show the remaining balance and annual payments for the 5-Year Step Up and Step Down option. The blue bars represent the base layer, and the five shades of green bars represent the graded layer's five 25-year amortizations commencing in subsequent years.



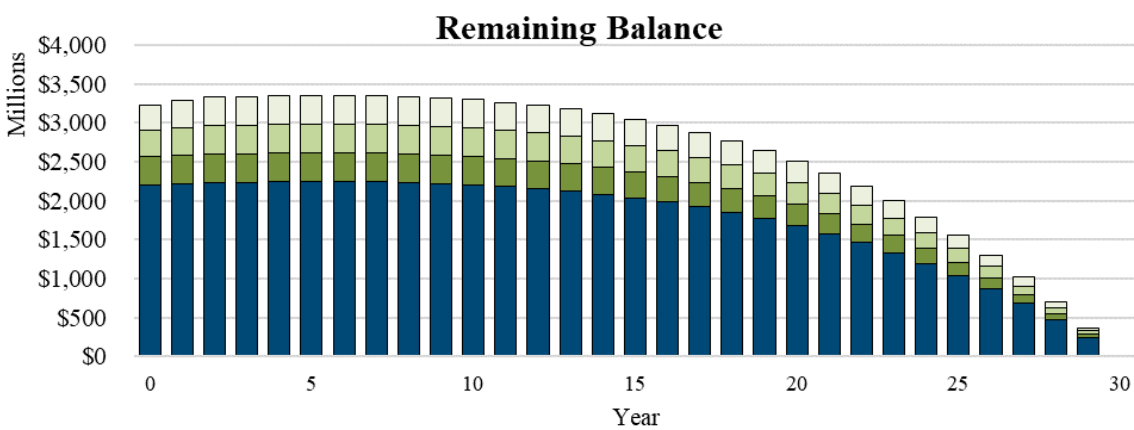


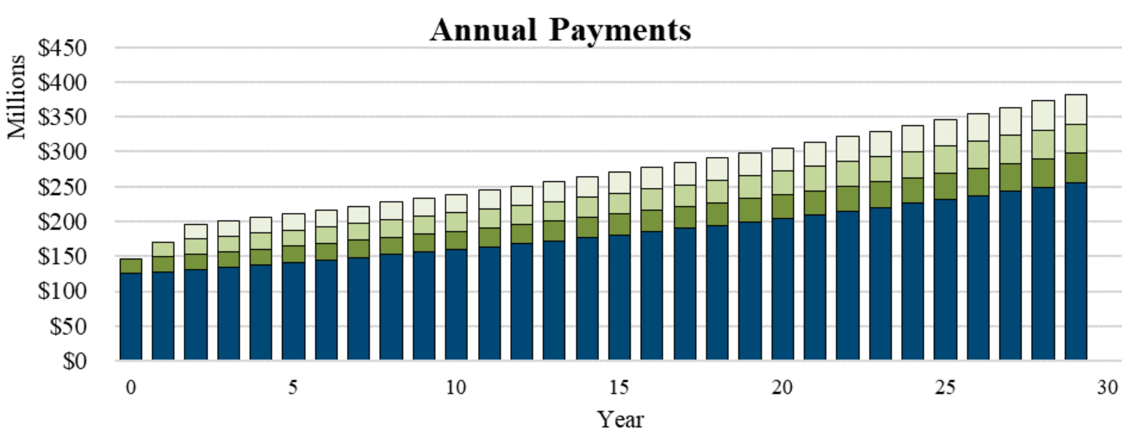
DALLAS POLICE AND FIRE PENSION SYSTEM
INDEPENDENT ACTUARIAL ANALYSIS

SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

<u>3-Year Step Up ADC</u>

The 3-Year Step Up option includes a 3-year ramp up to the full ADC at the beginning of the 30-year amortization period but does not ramp down at the end of the amortization period. To construct this ramp-up, the graded amortization layer described previously is effectively divided into one 30-year amortization layer, one 29-year amortization layer, and one 28-year amortization layer with the 30-year amortization payment starting immediately, the 29-year amortization payment starting in year two, and the 28-year amortization payment starting in year three. The illustrations below show the remaining balance and annual payments for the 3-Year Step Up option. The blue bars represent the base layer, and the three shades of green bars represent the graded layer's 30-year amortization, 29-year amortization, and 28-year amortization commencing in subsequent years.



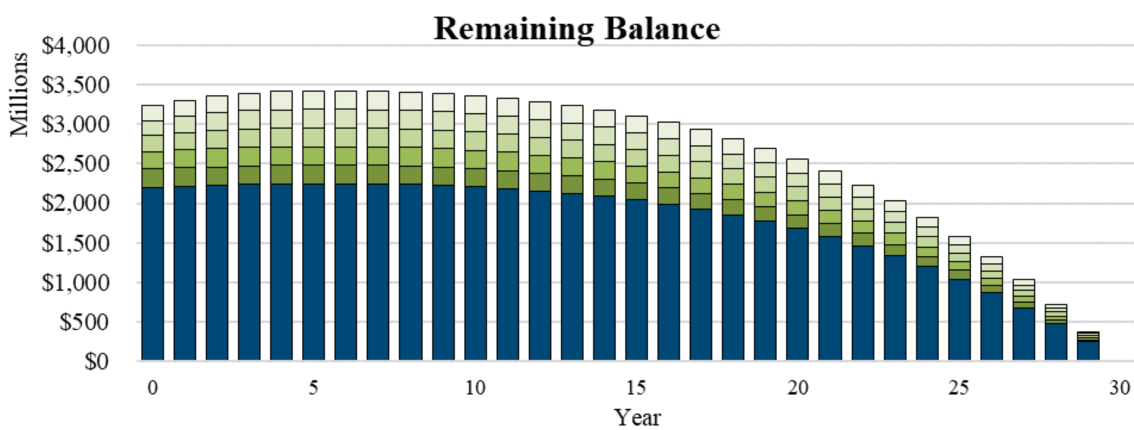


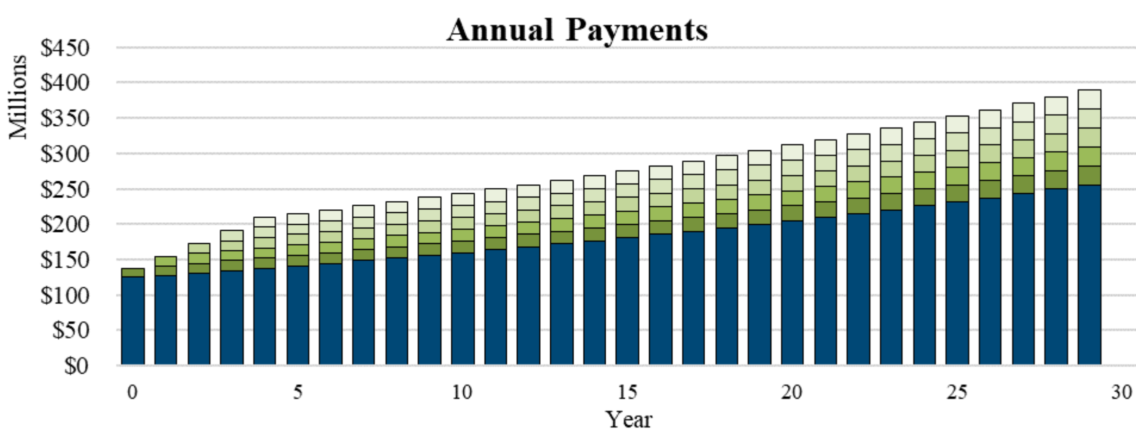
DALLAS POLICE AND FIRE PENSION SYSTEM
INDEPENDENT ACTUARIAL ANALYSIS

SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

<u>5-Year Step Up ADC</u>

The 5-Year Step Up option includes a 5-year ramp up to the full ADC at the beginning of the 30-year amortization period but does not ramp down at the end of the amortization period. To construct this ramp-up, the graded amortization layer described previously is effectively divided into one 30-year amortization layer, one 29-year amortization layer, one 28-year amortization layer, one 27-year amortization layer, and one 26-year amortization layer with payments for each layer starting in successive years such that they all are fully amortized in the 30th year. The illustrations below show the remaining balance and annual payments for the 5-Year Step Up option. The blue bars represent the base layer, and the five shades of green bars represent the graded layer's 30-year amortization, 29-year amortization, 28-year amortization, 27-year amortization, and 26-year amortization commencing in subsequent years.





Comparison of Options

Detailed Calculation of 2025 ADC

As discussed previously, the city's ADC consists of the employer's normal cost, administrative expenses, and a payment on the Unfunded Actuarial Liability (UAL). The total normal cost rate is expected to decline as members hired before March 1, 2011, retire and are replaced with new members who have lower benefits. To calculate the ADC for 2025 based on the 2023 valuation, separate normal cost rates are calculated for members hired before and after March 1, 2023, and a weighted average normal cost rate is calculated for the System based on the expected 2025 payroll for each of the tiers. Table IV-1 shows the weighted average calculation for the 2025 ADC.

Table IV-1

Details of 2025 Actuarially Determined Contribution Calculation Calculation of Employer Normal Cost Rate	Member Participation Date vs. 3/1/2011		
	Before	After	Total
1. 2025 Expected Computation Pay	$ 224,481,823	$ 261,749,222	$ 486,231,045
2. 2025 Total Normal Cost Rate	21.60%	19.14%	20.28%
3. 2025 Employee Contribution Rate			13.50%
4. 2025 Employer Normal Cost Rate: (2) - (3)			6.78%

SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

All of the different amortization options are based on the same measure of Unfunded Actuarial Liability as of January 1, 2023, adjusted for expected payments on the UAL before the ADC is paid in 2025. The expected UAL payments for 2023 and 2024 equal the total expected payments under the fixed rate (with the $13 million supplement) less the normal cost and assumed administrative expenses for 2023 and 2024. These expected UAL payments are discounted to January 1, 2023, and subtracted from the 2023 UAL to get the total outstanding balance of the amortization layers on January 1, 2023. Table IV-2 shows this calculation.

Table IV-2

Details of 2025 Actuarially Determined Contribution Calculation Calculation of Total Outstanding Balance of Amortization Layers		
1.	2023 Actuarial Liability	$ 5,343,156,004
2.	2023 Actuarial Value of Assets	1,806,567,341
3.	2023 Unfunded Actuarial Liability: (1) - (2)	$ 3,536,588,663
4.	2023 Expected UAL Payment	131,674,929
5.	2024 Expected UAL Payment	136,599,244
6.	PV UAL Payments 1/1/2023 - 12/31/2024	$ 251,879,902
7.	Total Outstanding Balance of Amortization Layers: (3) - (6)	$ 3,284,708,761

SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

Table IV-3 shows the development of each of the amortization options and summarizes the city's 2025 ADC for each of these options.

Table IV-3

Details of 2025 Actuarially Determined Contribution Calculation
Calculation of Amortization Options and Summary of ADC

	UAL Amortization Options				
	Traditional	3-Yr Step Up & Down	5-Yr Step Up & Down	3-Yr Step Up	5-Yr Step Up
Amortization Layers					
1. 2023 Base Layer	3,284,709	2,200,000	2,200,000	2,200,000	2,200,000
2. 2023 Graded Layer	0	1,084,709	1,084,709	1,084,709	1,084,709
3. Total Layers: (1) + (2)	$ 3,284,709	$ 3,284,709	$ 3,284,709	$ 3,284,709	$ 3,284,709
Amortization Payments in 2025					
4. 2023 Base Layer	$ 211,465	$ 141,633	$ 141,633	$ 141,633	$ 141,633
5. 2023 Graded Layer	0	25,622	16,691	24,614	15,621
6. Total Payments: (4) + (5)	$ 211,465	$ 167,255	$ 158,324	$ 166,247	$ 157,255
7. Administrative Expenses	$ 7,000	$ 7,000	$ 7,000	$ 7,000	$ 7,000
Actuarially Determined Contribution Summary					
8. Dollar Portion of ADC: (6) + (7)	$ 218,465	$ 174,255	$ 165,324	$ 173,247	$ 164,255
9. Percent of Pay Portion of ADC[1]	6.78%	6.78%	6.78%	6.78%	6.78%
10. Estimated Total ADC[2]	$ 251,411	$ 207,201	$ 198,270	$ 206,193	$ 197,200
11. Estimated Total ADC Rate[2]	51.71%	42.61%	40.78%	42.41%	40.56%

[1] Employer Normal Cost Rate from Table IV-1.

Dollar Amounts in Thousands

[2] Provided for comparison purposes only.

SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

Expected 2029 ADC

Since the UAL amortization payment under the various ADC options step up to the full amount over, at most, a five-year period, the 2029 ADC is the first year that all ADC options are expected to reach their peak as a percentage of payroll. The ADC options that step up to the full amount more gradually will have a lower ADC in 2025 and will have a higher ADC in 2029 to adjust for the lower contributions during the step-up period. Table IV-4 shows the expected 2029 ADC under the five ADC options, assuming 6.50% annual investment returns for 2023 and thereafter, and all other experience emerging as assumed. The actual 2029 ADC will be calculated in the January 1, 2027, actuarial valuation report and will reflect System experience through 2026.

Table IV-4

Details of 2029 Actuarially Determined Contribution Calculation
Calculation of Amortization Options and Summary of ADC

	UAL Amortization Options				
	Traditional	3-Yr Step Up & Down	5-Yr Step Up & Down	3-Yr Step Up	5-Yr Step Up
Amortization Payments in 2029					
1. 2023 Base Layer	$ 233,418	$ 156,336	$ 156,336	$ 156,336	$ 156,336
2. 2023 Graded Layer	0	84,846	92,118	81,508	86,216
3. Total Payments: (1) + (2)	$ 233,418	$ 241,182	$ 248,454	$ 237,845	$ 242,552
4. Administrative Expenses	$ 7,000	$ 7,000	$ 7,000	$ 7,000	$ 7,000
Actuarially Determined Contribution Summary					
5. Dollar Portion of ADC: (3) + (4)	$ 240,418	$ 248,182	$ 255,454	$ 244,845	$ 249,552
6. Percent of Pay Portion of ADC[1]	6.45%	6.45%	6.45%	6.45%	6.45%
7. Estimated Total ADC[2]	$ 275,029	$ 282,794	$ 290,065	$ 279,456	$ 284,164
8. Estimated Total ADC Rate[2]	51.24%	52.69%	54.05%	52.07%	52.95%

[1] Employer Normal Cost Rate for 2029. *Dollar Amounts in Thousands*

[2] Provided for comparison purposes only.

Rationale for Preferences

All five of the ADC options presented in this report are reasonable and will put the System on the path to becoming fully funded in compliance with the funding requirements of Chapter 802. However, Tables IV-3 and IV-4 list the ADC options in order from left to right as most preferred to least preferred based on our professional judgment. Given the current funded status, we prefer

SECTION IV – ACTUARIALLY DETERMINED CONTRIBUTIONS

higher contributions as soon as possible to prevent future declines in the funded status and to reduce the negative net cash flow. Reducing the negative net cash flow reduces the System's risk of having to sell investments to pay benefits during market downturns, which could have a significant short-term impact on System asset levels.

Therefore, the most preferred option is the traditional ADC because it immediately increases the City's contributions to the ADC. However, we understand that the City's budget may not be able to accommodate such a large increase in one year, which is why we have included alternative ADC options to facilitate more gradual increases in the City's budget. The ADC should step into the full contribution over as short a period as financially possible, which is why the 3-year step-up options are preferred over the 5-year step-up options.

The Step Up & Down options are preferred over the Step Up only options because the step-down provides a mechanism to allow time for the City's budget to adjust to lower contribution levels at the end of the 30-year amortization period. The Step Up & Down options also result in the System's funded status being slightly greater throughout the initial 30-year amortization period. The improved funded status is the result of slightly higher contributions for most of the amortization period, which is necessary to allow the contributions to gradually step down at the end of the 30-year period.

It is important to build any contribution step-up into the ADC methodology rather than having fixed dollar contribution increases because the ADC will adjust the contributions as experience emerges during the step-up period. The annual recognition of experience gains and losses ensures a more level annual contribution increase during the step-up period. For example, if the City were to implement a 5-year step up using four years of fixed dollar contribution increases with the 5th year being the full ADC where all five step ups were originally designed to be the same dollar amount, then experience losses during the step up period may result in the 5th step up to the full ADC being significantly larger than the City had budgeted. In this scenario, steps 1-4 would not increase as losses emerged, so the entire impact of those experience losses is first recognized in the 5th year step up to the full ADC.

SECTION V– EMPLOYEE CONTRIBUTION RATE

Overview

Our second recommendation is to reduce the employee contribution rate as the System's funding improves. The current employee contribution rate of 13.5% of pay covers 72.4% of the expected cost of the benefits, which is high compared to peer systems. However, given the system's current funded status, it would be difficult to reduce employee contributions immediately.

Under the current plan provisions, once the System is 100% funded, employees would only pay 50% of the normal cost rate. Assuming an Actuarially Determined Contribution is adopted, we would expect the System to become fully funded in 30 years. In the interim, employees would continue to pay 13.5% – a substantial portion of the expected cost of their benefits.

In Section III, we showed that the average peer system only required employee contribution rates to cover 62.4% of normal cost compared to the System's 72.4% of normal cost. Furthermore, several systems have temporary increases in the employee rate due to their low funded ratios. As their funding improves, the employee rates will become lower.

Our recommendation is simply to establish a schedule so that as the funded ratio improves, the employee contribution rate gradually declines to equal 50% of the normal cost rate.

Development of Proposed Adjustment Schedule

To accomplish this objective, we suggest that first a base employee contribution rate be established equal to 50% of the normal cost rate for employees hired after March 1, 2011. These employees have lower benefits and a lower normal cost rate than employees hired prior to March 1, 2011, but by the time the System nears 100% funding, virtually all active members will have been hired after that date.

Setting the base employee contribution rate equal to 50% of this normal cost rate also automatically adjusts the employee contribution rate when the expectations of the System change due to plan amendments, assumption changes, or demographic changes. To avoid having to make minor changes each year, we suggest rounding this rate to the nearest 0.5% of payroll. In our baseline scenario, this produces a base employee contribution rate of 9.5%. If an additional COLA is added or assumptions are changed, the base employee contribution rate may also change.

Once the base employee contribution rate is set, a schedule of adjustments to that contribution rate should be developed ranging from 0% to an amount that, when added to the base employee contribution rate, produces a total contribution rate of 13.5%. In our baseline scenario, the top adjustment is 4.0%, which, when combined with the base rate of 9.5%, produces a total employee contribution rate of 13.5%.

There are many different options for the schedule. The objective is simply to gradually adjust the employee contribution rate as funding improves from its current level to 50% of normal cost rather than have a significant adjustment all in the year the System becomes 100% funded.

SECTION V– EMPLOYEE CONTRIBUTION RATE

When the employee contribution rate is adjusted, there is an exactly equal offsetting adjustment to the employer's normal cost rate. The employer's normal cost rate equals the total normal cost rate minus the employee contribution rate. Consequently, these adjustments do not affect the contribution amount received by the System, but simply shift contributions between employees and the city.

Table V-1 shows three possible adjustment schedules that could be adopted in conjunction with the base employee rate to accomplish this recommendation. To develop the schedule, the base employee rate is first set equal to 50% of the normal cost rate applicable for members hired on or after March 1, 2011, rounded to the nearest 0.5%. By the time the System is well funded, virtually all active members will have been hired after this date. For this scenario, we calculate this base employee contribution rate to be 9.5% of pay. Then, a schedule to increase this employee contribution rate for various funding levels is established. In the schedule in Table I-1, there is no adjustment once the System is 90% funded and the full increase of 4.0% is applied whenever the System is less than 50% funded. Table V-1 below shows three alternative adjustment schedules. These schedules are examples of possibilities and are not an exhaustive list of the possible options.

Table V-1

Sample Employee Contribution Rate Adjustment Schedules

	Possible Adjustment Schedules Assuming 9.5% Base Rate		
Funded Ratio	Schedule 1	Schedule 2	Schedule 3
100% or Greater	0.00%	0.00%	0.00%
95% – 99%	0.00%	0.50%	0.00%
90% – 94%	0.00%	0.50%	0.50%
85% – 89%	0.50%	1.00%	1.00%
80% – 84%	1.00%	1.00%	1.50%
75% – 79%	1.50%	1.50%	2.00%
70% – 74%	2.00%	1.50%	2.25%
65% - 69%	2.50%	2.00%	2.50%
60% – 64%	3.00%	2.00%	2.75%
55% – 59%	3.50%	2.50%	3.00%
50% - 54%	3.50%	2.50%	3.25%
45% – 49%	4.00%	3.00%	3.50%
40% – 44%	4.00%	3.50%	3.75%
Under 40%	4.00%	4.00%	4.00%

This recommendation is intended to be combined with the prior recommendation of adopting an Actuarially Determined Contribution. Furthermore, if any changes are adopted that affect the base normal cost rate, the schedule of adjustments to employee contribution rates would need to be changed.

SECTION VI – COST-OF-LIVING ADJUSTMENTS

Overview

Our final recommendation is that the System be amended to provide some Cost-of-Living Adjustments (COLAs) earlier than the current plan provisions permit. No COLA has been provided since 2016 and under the current plan provisions, no COLA can be provided until the System is at least 70% funded following the granting of such COLA. Given the current funding level, even with the dramatically increased contributions recommended above, the System is not expected to be 70% funded for more than 20 years.

Historically the System provided a four percent annual simple COLA automatically. For members hired after December 31, 2006, the COLA was changed from automatic to ad hoc. HB 3158 changed the COLA provisions to only allow a COLA to be granted if the System is at least 70% funded after providing the COLA. If the funded status requirement is met, an ad hoc simple COLA can be provided equal to the average investment return over the previous five years less five percent. The COLA can't be less than zero, and it can't exceed four percent. With an assumed return of 6.50%, this formula is expected to produce a COLA of 1.50%.

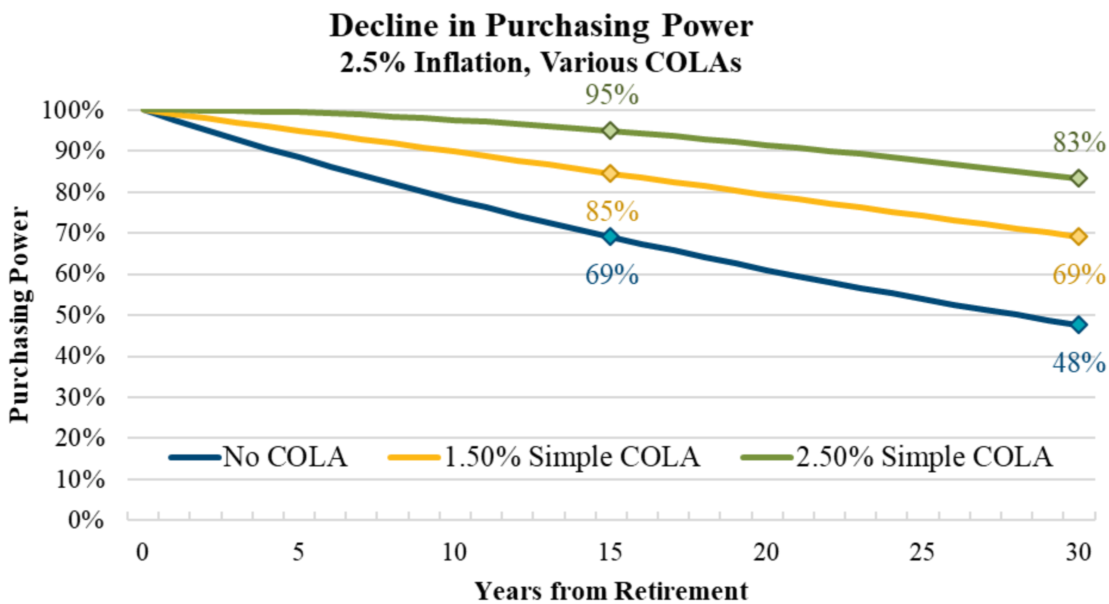
As noted in our analysis of benefits above, some other Police and Fire pension systems in Texas also do not currently provide a COLA, while others provide a significant COLA. Also, the Dallas Employees' Retirement Fund provides an automatic simple COLA each year equal to inflation up to a maximum of 3.0% for members hired after December 31, 2016, and up to 5.0% for members hired before January 1, 2017. Consequently, we believe there will be significant competitive pressure to provide a COLA. While new hires who are just starting their careers typically don't consider pension benefits, mid-career employees and mid-career transfers from other locations often do, making the lack of a COLA a potential issue in attracting and retaining mid-career employees.

Finally, Dallas Police and Fire members are not covered by Social Security and may not have any protection in retirement for inflation other than what is provided by the System.

In retirement, inflation erodes purchasing power to the extent it is not offset by COLAs. For example, if a member retires with a benefit of $1,000 and inflation for the year after retirement is 2.5%, the member will need a COLA increasing the benefit to $1,025 to preserve the member's purchasing power. The member's purchasing power erodes if the benefit is not increased to this level. Chart VI-1 shows how purchasing power would erode if inflation were 2.5% each year under various COLAs.

SECTION VI – COST-OF-LIVING ADJUSTMENTS

Chart VI-1



With no COLA, after 15 years in retirement, the purchasing power of the pension benefit is expected to erode to 69% of the original benefit and to 48% after 30 years. If instead, a 1.5% simple COLA (the expected COLA once the System is 70% funded) is provided, the purchasing power would be expected to erode to 85% after 15 years and 69% after 30 years. And if a 2.5% simple COLA (the COLA under the Dallas ERF for this scenario) is provided, the purchasing power would be expected to only erode to 95% after 15 years and 83% after 30 years.

Why Consider Improving the COLA now?

Given the System's poor funded status, it is tempting to delay any decision on improving the COLA until the funded status improves. Any increase to COLAs will require additional contributions to fully fund the System, and the increases required to fund the System without improving the COLA are already substantial.

However, even with the increased contributions discussed above, no COLA is expected to be paid for an additional 20 years or longer. With no Social Security coverage to provide inflation protection and with the remainder of the Dallas workforce receiving annual COLAs in retirement, can Dallas maintain its Police and Fire workforce without offering at least some COLA in the next 20 years?

We believe Dallas will likely need to provide a COLA earlier than would be provided under the current plan provisions. If so, these costs should be included in the budget plan now rather than waiting until later. Ignoring or deferring these costs may lead to inadequate funding and a failure to meet the objective of fully funding the System.

SECTION VI – COST-OF-LIVING ADJUSTMENTS

The COLA that will need to be provided is not an actuarial decision but is rather a policy decision that balances the benefits against the costs of providing the COLA. The options outlined in this report are intended to illustrate the tradeoff between additional benefits and additional costs for a spectrum of COLAs ranging from the current System COLA to the COLA provided by the Dallas Employees' Retirement Fund. The options are not exhaustive, and the City and System may find other options to better fit their needs.

COLA Design Considerations

Several aspects must be considered in developing the System's COLA. This section provides a high-level overview of these considerations as background to the options modeled in this report and for reference in the event there is a desire to develop an alternative design.

Inflation Versus Investment Return

Living expenses for retirees increase with inflation, so it is common for COLA provisions to be based on a measure of inflation such as CPI-U. The Dallas Employees Retirement Fund, for example, bases its COLA on the CPI change for the year. However, the System's resources to pay for a COLA depend significantly on the investment return on the System's assets. When the System's investment returns are below expectations, it can be doubly difficult to pay for a COLA. Consequently, some Systems base all or a portion of the COLA on investment returns. The System's current COLA, for example, is based on average investment returns over the prior five years in excess of 5.0%. This approach better aligns the provision of a COLA with the resources needed to pay for the COLA. It also reduces the range of projected outcomes because investment losses are offset by the gain of a reduced COLA and investment gains are offset by the loss of higher COLAs. However, this approach does not align as well with the needs of retirees because it is not directly connected to the actual inflation they experience.

Simple Versus Compound COLAs

Inflation compounds. When prices rise by 3.00% two years in a row, prices are 6.09% higher than at the beginning of the two years. A compound 3.0% COLA would match this increase, while a simple 3.0% COLA would only increase by 6.00%, eroding some of the original purchasing power. This difference between a simple COLA and a compound COLA is small at first but grows over time. As a result, simple COLAs are less expensive to fund, but also don't protect retirees from inflation as well.

Funded Status Requirement

Funded status requirements are a way to ensure sufficient resources are available before a COLA is paid. The requirement automatically reduces or eliminates the COLA when the System is not funded well enough as defined by the threshold. The idea is to reduce costs when the System needs it most. Reducing COLAs is often an easy and powerful reduction when the System needs to improve its funded status, but they can force retirees to go many years without a COLA.

SECTION VI – COST-OF-LIVING ADJUSTMENTS

From an actuarial perspective, funded status requirements can also add some complications to be aware of. Projections are more uncertain, particularly when the funded status is near the threshold, because slight changes that put the System slightly above or below the threshold can have a material impact. In addition, Board decisions about assumptions and other changes may be influenced by whether the decision may cause the System to rise above or fall below the threshold.

Purchasing Power Protection

In the previous section, the potential decline in purchasing power assuming 2.5% inflation was illustrated for a few different COLA provisions. A purchasing power protection provision simply adds a purchasing power floor to the System's COLA provisions. For example, a 70% purchasing power protection provision would allow the regular COLA provision to operate until a retiree's purchasing power had declined to 70% of the retiree's purchasing power at retirement, after which the retiree would receive COLAs equal to inflation unless the regular COLA was greater.

Purchasing power protection provisions are not normally the only COLA provision but are more common when the regular COLA provisions may not always be viewed as adequate usually due to a cap on the regular COLA that may be lower than actual inflation. Purchasing power protection provisions are generally less expensive than simply raising the COLA because only some retirees will qualify for the purchasing power protection in any given year.

Expected, Minimum, and Maximum Amounts

The COLA provisions combined with relevant assumptions (e.g., inflation, investment return, etc.) produce an expected amount of COLA provided each year. In addition, Systems often include minimums and maximums to the COLA to manage costs and the volatility of benefits. For example, the System's current COLA has a minimum of 0% and a maximum of 4%.

In addition, some Systems with maximums allow retirees to "bank" any excess of actual inflation over the maximum amount to be applied in a future year when the COLA would otherwise be less than the maximum. For example, if inflation were 6% one year and 2% the following year, a System with a 4% maximum that did not allow "banking" would pay COLAs of 4% and 2% while a System that did allow "banking" would pay COLAs of 4% and 4%, respectively.

COLA Options Modeled

This section of the report describes a range of alternative COLA options for consideration, showing the purchasing power and projected city contributions under each COLA option using the Traditional ADC option. The options are designed to span the range of costs from the current COLA to an alternative that provides the same COLA as the Dallas Employees' Retirement Fund.

The purchasing power percentage shown in each table represents the portion of purchasing power remaining compared to the purchasing power in the first year of retirement assuming 2.5% inflation for 2024 and all future years. The actual CPI for the Dallas area and the actual COLA awarded under DPFP were used for 2023 and all prior years.

DALLAS POLICE AND FIRE PENSION SYSTEM
INDEPENDENT ACTUARIAL ANALYSIS

SECTION VI – COST-OF-LIVING ADJUSTMENTS

The projected contribution graphs show the City's normal cost rate (dark green bars), and City UAL and administrative expense payment (light green bars). The y-axis is a percentage of payroll but the labels for the City UAL and administrative expense payment show the dollar amounts in millions. Employee contributions are 13.5% of pay for all years in all the projections, so they are not shown on the charts.

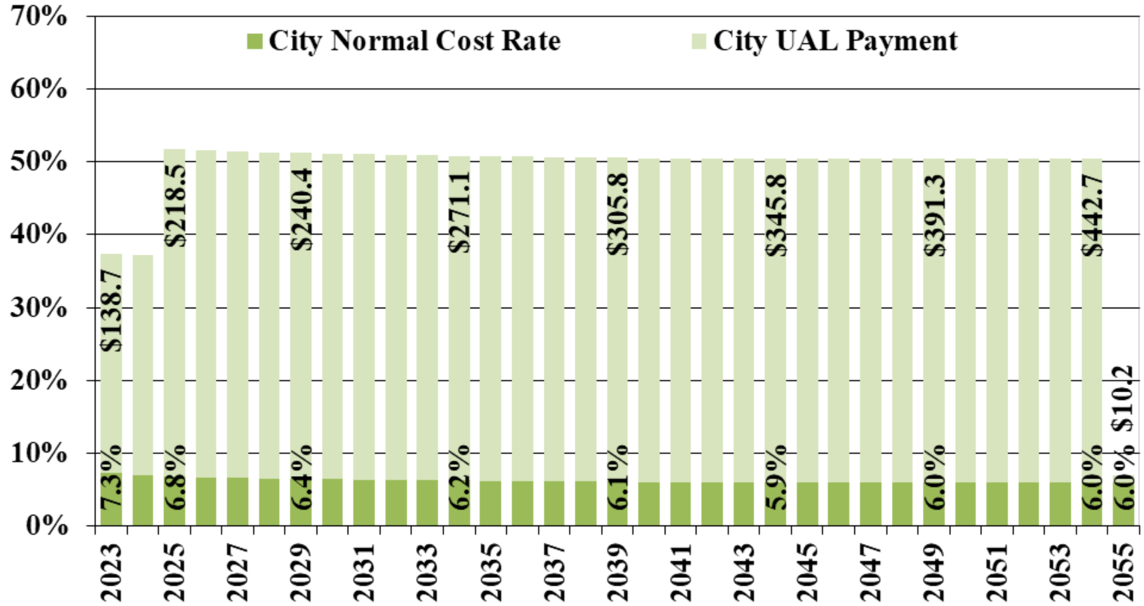
Current DPFP COLA provisions

Based on the System's current COLA provisions, a 1.5% simple COLA is assumed to be payable annually starting October 1, 2046, when the System is expected to reach the 70% funded ratio.

Retirement Year	Purchasing Power – Current DPFP COLA						
	2024	2029	2034	2039	2044	2049	2054
2023	100%	88%	78%	69%	61%	56%	53%
2022	96%	85%	75%	66%	58%	54%	51%
2021	88%	77%	68%	60%	53%	49%	47%
2020	83%	73%	65%	57%	50%	47%	44%
2019	82%	73%	64%	57%	50%	46%	44%
2018	81%	71%	63%	56%	49%	45%	43%
2017	79%	70%	61%	54%	48%	44%	42%
2016	76%	67%	60%	53%	47%	43%	41%
2015	78%	69%	61%	54%	47%	44%	41%
2010	86%	76%	67%	59%	52%	48%	45%
2005	93%	83%	73%	65%	57%	52%	48%
2000	94%	83%	73%	65%	57%	52%	
1995	92%	82%	72%	64%	56%		
1990	90%	79%	70%	62%			
1985	84%	75%	66%				
1980	70%	62%					

SECTION VI – COST-OF-LIVING ADJUSTMENTS

The expected costs for the current COLA using the traditional ADC are shown in the chart below. This is the least expensive option.



DALLAS POLICE AND FIRE PENSION SYSTEM
INDEPENDENT ACTUARIAL ANALYSIS

SECTION VI – COST-OF-LIVING ADJUSTMENTS

Current DERF COLA provisions

The current Dallas Employees' Retirement Fund COLA provisions provide an automatic simple COLA equal to inflation up to 3% for members hired after December 31, 2016, and up to 5% for members hired before January 1, 2017. If DPFP adopts this COLA design, a 2.5% simple COLA is assumed to be paid immediately since the current inflation assumption is 2.5%.

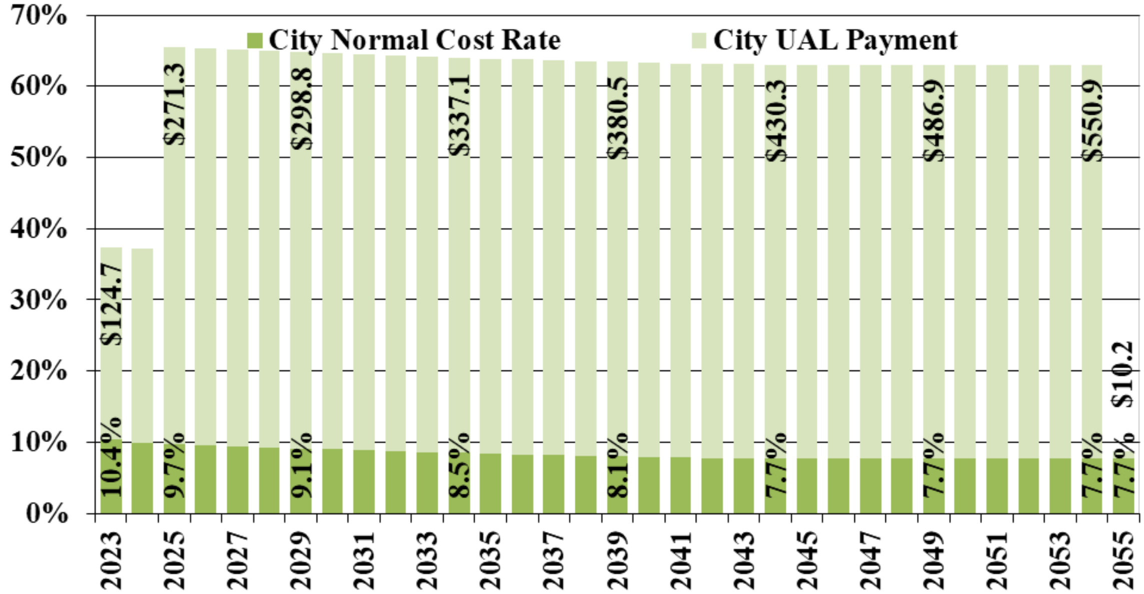
As shown in the table below, the DERF COLA is expected to better maintain retirees purchasing power. Purchasing power only declines gradually due to the difference between the simple COLA and compound inflation.

Retirement Year	Purchasing Power – Current DERF COLA						
	2024	2029	2034	2039	2044	2049	2054
2023	100%	99%	98%	95%	92%	88%	83%
2022	96%	95%	93%	91%	88%	84%	*80%*
2021	88%	87%	86%	83%	*80%*	*77%*	*73%*
2020	83%	82%	81%	*79%*	*76%*	*72%*	*69%*
2019	82%	82%	*80%*	*78%*	*75%*	*72%*	*69%*
2018	81%	*80%*	*79%*	*77%*	*74%*	*71%*	*67%*
2017	*79%*	*78%*	*77%*	*75%*	*72%*	*69%*	*66%*
2016	*76%*	*76%*	*74%*	*72%*	*70%*	*67%*	*64%*
2015	*78%*	*77%*	*75%*	*73%*	*70%*	*67%*	*64%*
2010	86%	84%	81%	*77%*	*74%*	*70%*	*66%*
2005	93%	90%	86%	81%	*77%*	*72%*	*68%*
2000	94%	89%	85%	*80%*	*75%*	*70%*	
1995	92%	87%	82%	*77%*	*72%*		
1990	90%	84%	*79%*	*73%*			
1985	84%	*79%*	*73%*				
1980	*70%*	*65%*					

DALLAS POLICE AND FIRE PENSION SYSTEM
INDEPENDENT ACTUARIAL ANALYSIS

SECTION VI – COST-OF-LIVING ADJUSTMENTS

The expected costs for the DERF COLA using the traditional ADC are shown in the chart below. Implementing the DERF COLA for DPFP would increase costs significantly, while all the other alternatives have lower costs.



DALLAS POLICE AND FIRE PENSION SYSTEM
INDEPENDENT ACTUARIAL ANALYSIS

SECTION VI – COST-OF-LIVING ADJUSTMENTS

Immediate partial COLA

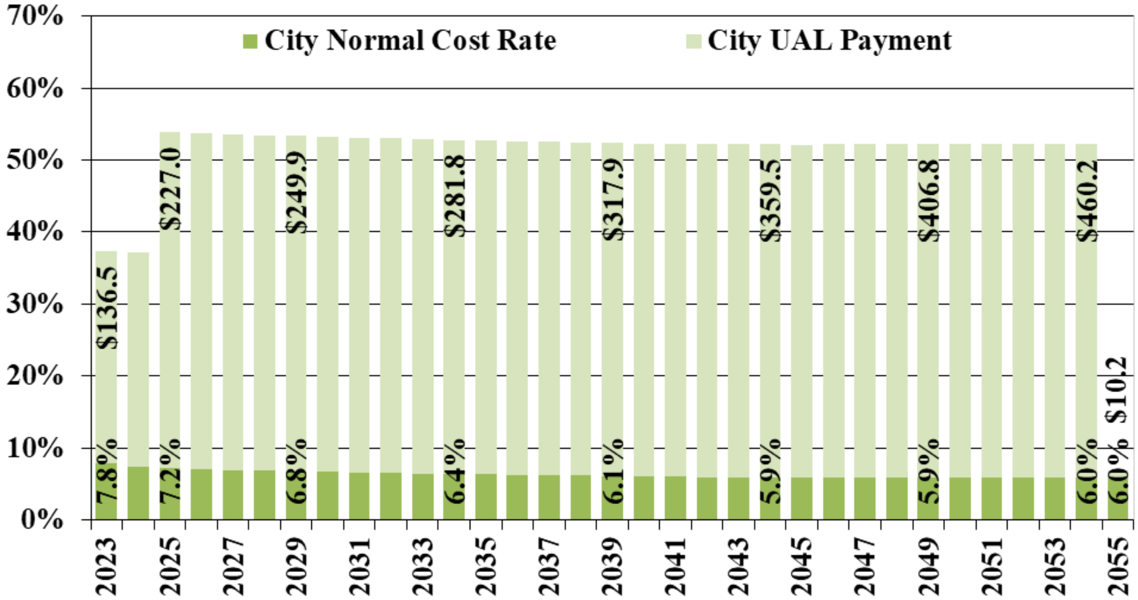
The immediate partial COLA option maintains the current DPFP COLA design but eliminates the 70% funded ratio threshold and instead multiplies the COLA by the funded ratio before applying the 4% maximum COLA. For example, if the System's five-year average return is 6.5% and the funded ratio is 40%, the COLA payable that year would be 0.6% = [(6.5% – 5.0%) x 40%]. This COLA option provides a partial COLA immediately when the five-year average return exceeds 5%. However, it also provides a lower COLA than under the current COLA provisions when the System's funded ratio is between 70% and 100%. For example, if the System's five-year average return is 6.5% and the funded ratio is 80%, the COLA payable that year would be 1.2% = [(6.5% – 5.0%) x 80%] which is less than the 1.5% COLA that would be payable under the current COLA provisions.

As shown in the table below, the immediate partial COLA provides some minor improvement in purchasing power over the next 20 years compared to the current COLA, but the expected COLAs are still substantially lower than assumed inflation.

	Purchasing Power – Immediate Partial COLA						
Retirement Year	**2024**	**2029**	**2034**	**2039**	**2044**	**2049**	**2054**
2023	**100%**	**89%**	**81%**	*74%*	*68%*	*63%*	*59%*
2022	**96%**	**85%**	*77%*	*71%*	*65%*	*60%*	*56%*
2021	**88%**	*78%*	*71%*	*65%*	*60%*	*55%*	*52%*
2020	**83%**	*73%*	*67%*	*61%*	*56%*	*52%*	*49%*
2019	**82%**	*73%*	*67%*	*61%*	*56%*	*52%*	*49%*
2018	**81%**	*72%*	*65%*	*60%*	*55%*	*51%*	*47%*
2017	*79%*	*70%*	*64%*	*58%*	*54%*	*50%*	*46%*
2016	*76%*	*68%*	*62%*	*56%*	*52%*	*48%*	*45%*
2015	*78%*	*69%*	*63%*	*57%*	*53%*	*49%*	*45%*
2010	**86%**	*76%*	*69%*	*63%*	*57%*	*53%*	*49%*
2005	**93%**	**83%**	*75%*	*68%*	*62%*	*56%*	*52%*
2000	**94%**	**83%**	*75%*	*68%*	*61%*	*56%*	
1995	**92%**	**82%**	*73%*	*66%*	*60%*		
1990	**90%**	*79%*	*71%*	*64%*			
1985	**84%**	*75%*	*67%*				
1980	*70%*	*62%*					

SECTION VI – COST-OF-LIVING ADJUSTMENTS

The expected costs for the immediate partial COLA using the traditional ADC are shown in the chart below. The immediate partial COLA option would increase costs moderately compared to the current COLA.



DALLAS POLICE AND FIRE PENSION SYSTEM
INDEPENDENT ACTUARIAL ANALYSIS

SECTION VI – COST-OF-LIVING ADJUSTMENTS

Current DPFP COLA with 70% of 2024 Purchasing Power Protection

The current DPFP COLA provision could be modified to add a purchasing power floor that would prevent a retiree's purchasing power from declining too far. For this option, we have used a purchasing power floor equal to 70% of the 2024 purchasing power for current retirees and 70% of the purchasing power at retirement for future retirees. The purchasing power is expected to erode with inflation until it reaches the floor. Once the purchasing power reaches the floor, inflationary COLAs are provided to maintain the floor purchasing power level. Current retirees are expected to reach the floor in about 15 years, assuming 2.5% annual inflation at which point they are assumed to receive 2.5% compound COLAs to maintain the floor purchasing power level.

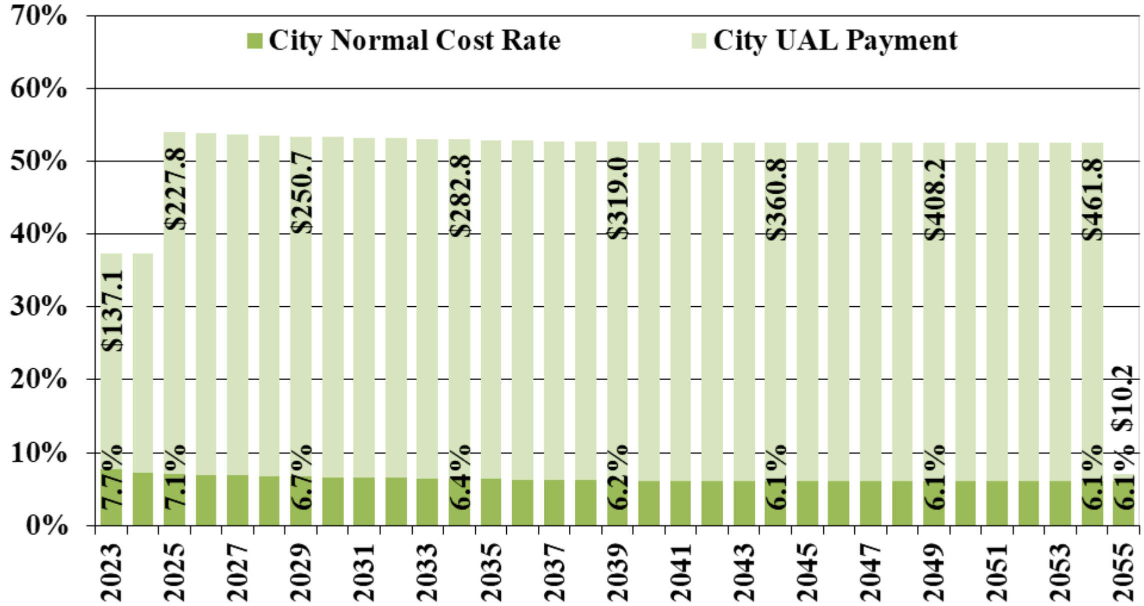
To balance financial stability and benefit security, this COLA option combines two design features: the investment return requirements of the Current COLA and the inflationary protection of the purchasing power floor. The Current COLA is only payable when investment returns support the cost of the COLA, and the purchasing power floor protects retirees from "too much" inflationary erosion if the Current COLA is not payable due to either poor investment returns or due to the 70% funded ratio requirement.

Using the 2024 purchasing power as the benchmark for current retirees limits the cost increase but does not protect all retiree cohorts at the same level as shown in the table below.

Retirement Year	Purchasing Power – Current COLA & 70% Purchasing Power Floor						
	2024	2029	2034	2039	2044	2049	2054
2023	100%	88%	78%	70%	70%	70%	70%
2022	96%	85%	75%	67%	67%	67%	67%
2021	88%	77%	68%	61%	61%	61%	61%
2020	83%	73%	65%	58%	58%	58%	58%
2019	82%	73%	64%	58%	58%	58%	58%
2018	81%	71%	63%	56%	56%	56%	56%
2017	79%	70%	61%	55%	55%	55%	55%
2016	76%	67%	60%	53%	53%	53%	53%
2015	78%	69%	61%	54%	54%	54%	54%
2010	86%	76%	67%	60%	60%	60%	60%
2005	93%	83%	73%	65%	65%	65%	65%
2000	94%	83%	73%	66%	66%	66%	
1995	92%	82%	72%	65%	65%		
1990	90%	79%	70%	63%			
1985	84%	75%	66%				
1980	70%	62%					

SECTION VI – COST-OF-LIVING ADJUSTMENTS

The expected costs for the current COLA with a 70% Purchasing Power Floor using the traditional ADC are shown in the chart below. This option would increase costs moderately compared to the current COLA.



SECTION VI – COST-OF-LIVING ADJUSTMENTS

Current DPFP COLA with 80% of 2024 Purchasing Power Protection

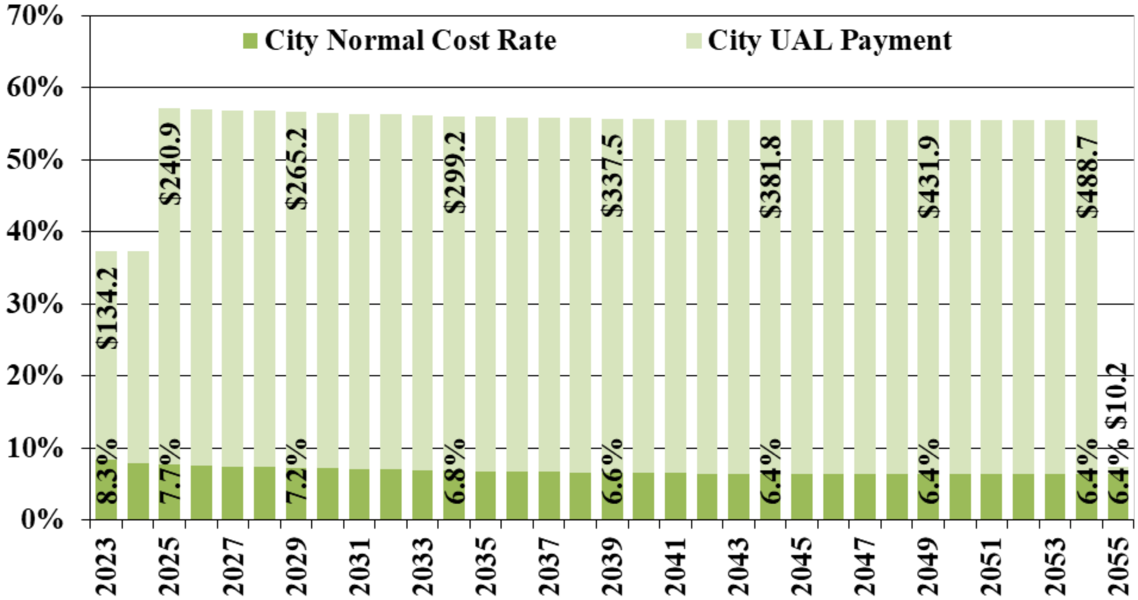
Like the prior COLA option, this option keeps the current COLA provision and adds a purchasing power floor equal to 80% of the 2024 purchasing power for current retirees and 80% of the purchasing power at retirement for future retirees. Current retirees are expected to reach the floor in about ten years, assuming 2.5% annual inflation.

As shown in the table below, this option provides a higher purchasing power guarantee than the 70% purchasing power option.

	Purchasing Power – Current COLA & 80% Purchasing Power Floor						
Retirement Year	**2024**	**2029**	**2034**	**2039**	**2044**	**2049**	**2054**
2023	**100%**	**88%**	*80%*	*80%*	*80%*	*80%*	*80%*
2022	**96%**	**85%**	*77%*	*77%*	*77%*	*77%*	*77%*
2021	**88%**	*77%*	*70%*	*70%*	*70%*	*70%*	*70%*
2020	**83%**	*73%*	*66%*	*66%*	*66%*	*66%*	*66%*
2019	**82%**	*73%*	*66%*	*66%*	*66%*	*66%*	*66%*
2018	**81%**	*71%*	*64%*	*64%*	*64%*	*64%*	*64%*
2017	*79%*	*70%*	*63%*	*63%*	*63%*	*63%*	*63%*
2016	*76%*	*67%*	*61%*	*61%*	*61%*	*61%*	*61%*
2015	*78%*	*69%*	*62%*	*62%*	*62%*	*62%*	*62%*
2010	**86%**	*76%*	*69%*	*69%*	*69%*	*69%*	*69%*
2005	**93%**	**83%**	*75%*	*75%*	*75%*	*75%*	*75%*
2000	**94%**	**83%**	*75%*	*75%*	*75%*	*75%*	
1995	**92%**	**82%**	*74%*	*74%*	*74%*		
1990	**90%**	*79%*	*72%*	*72%*			
1985	**84%**	*75%*	*67%*				
1980	*70%*	*62%*					

SECTION VI – COST-OF-LIVING ADJUSTMENTS

The expected costs for the Current COLA with an 80% Purchasing Power Floor using the traditional ADC are shown in the chart below. This option would substantially increase costs compared to the current COLA.



SECTION VI – COST-OF-LIVING ADJUSTMENTS

Current DPFP COLA with no funded status requirement and with 80% of 2024 Purchasing Power Protection

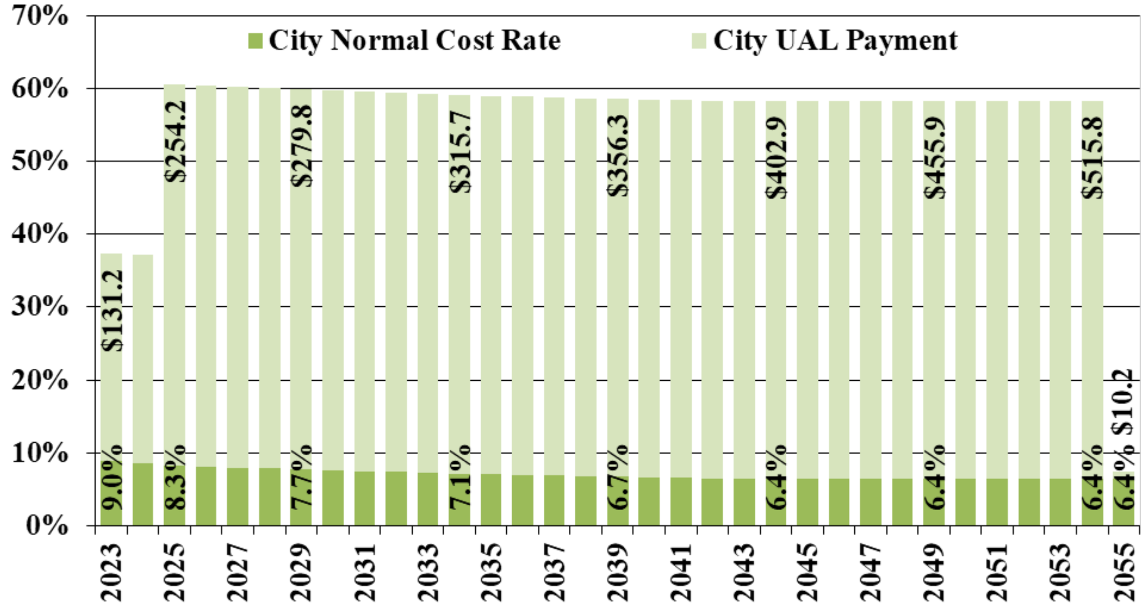
This option builds off the prior option and removes the 70% funded ratio requirement from the Current COLA provision. This option is assumed to provide 1.5% simple COLAs immediately until the purchasing power floor is reached when 2.5% compound COLAs are assumed to be paid. Under this option, current retirees are expected to reach the purchasing power floor in about 20 years, assuming 2.5% annual inflation.

As shown in the table below, this option provides higher purchasing power before reaching the floor further in the future.

	Purchasing Power – Current COLA with No Funded Status Requirement & 80% Purchasing Power Floor						
Retirement Year	**2024**	**2029**	**2034**	**2039**	**2044**	**2049**	**2054**
2023	**100%**	**95%**	**90%**	**85%**	*80%*	*80%*	*80%*
2022	**96%**	**91%**	**86%**	**81%**	*77%*	*77%*	*77%*
2021	**88%**	**83%**	*79%*	*74%*	*70%*	*70%*	*70%*
2020	**83%**	*79%*	*74%*	*70%*	*66%*	*66%*	*66%*
2019	**82%**	*78%*	*74%*	*70%*	*66%*	*66%*	*66%*
2018	**81%**	*77%*	*72%*	*68%*	*64%*	*64%*	*64%*
2017	*79%*	*75%*	*71%*	*67%*	*63%*	*63%*	*63%*
2016	*76%*	*72%*	*69%*	*65%*	*61%*	*61%*	*61%*
2015	*78%*	*74%*	*69%*	*65%*	*62%*	*62%*	*62%*
2010	**86%**	**81%**	*75%*	*70%*	*69%*	*69%*	*69%*
2005	**93%**	**87%**	**81%**	*75%*	*75%*	*75%*	*75%*
2000	**94%**	**87%**	*80%*	*75%*	*75%*	*75%*	
1995	**92%**	**85%**	*78%*	*74%*	*74%*		
1990	**90%**	**82%**	*75%*	*72%*			
1985	**84%**	*77%*	*70%*				
1980	*70%*	*64%*					

SECTION VI – COST-OF-LIVING ADJUSTMENTS

The expected costs for the Current COLA with No Funded Status Requirement and 80% Purchasing Power Floor using the traditional ADC are shown in the chart below. This option would increase costs substantially compared to the current COLA.



SECTION VI – COST-OF-LIVING ADJUSTMENTS

Compound Current DPFP COLA with no funded status requirement and with 80% of 2024 Purchasing Power Protection

This option builds on the prior option and changes the Current COLA from simple to compound. This option is assumed to provide 1.5% compound COLAs immediately until the purchasing power floor is reached when 2.5% compound COLAs are assumed to be paid. Under this option, current retirees are expected to reach the purchasing power floor in about 25 years, assuming 2.5% annual inflation.

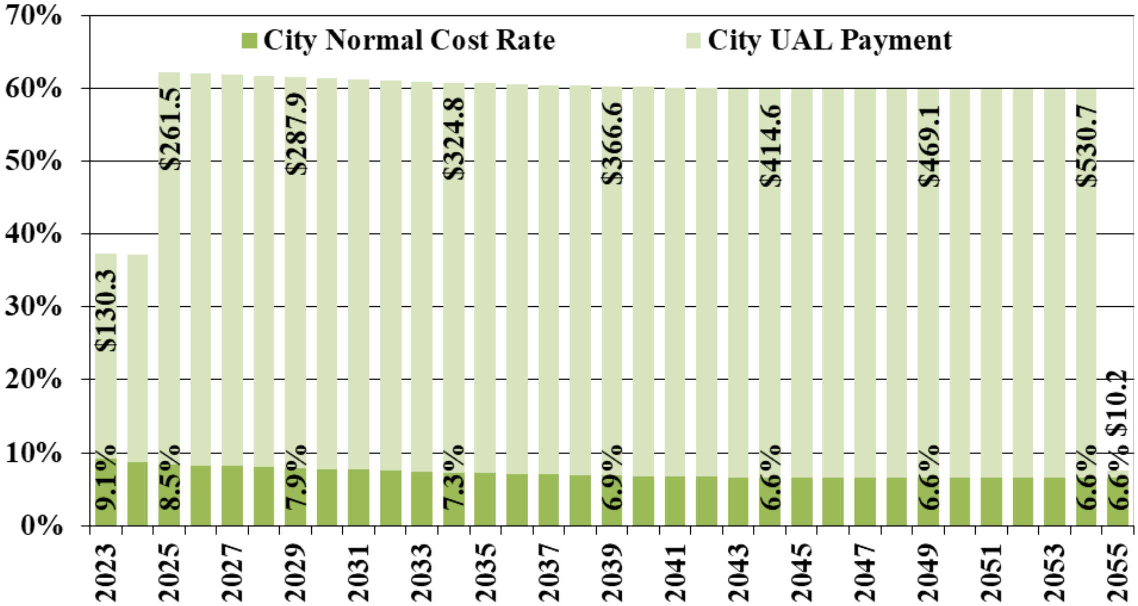
As shown in the table below, this option provides higher purchasing power before reaching the floor even further in the future.

Retirement Year	Purchasing Power – Compound Current COLA with No Funded Status Requirement & 80% Purchasing Power Floor						
	2024	2029	2034	2039	2044	2049	2054
2023	100%	95%	91%	86%	82%	80%	80%
2022	96%	91%	87%	83%	79%	77%	77%
2021	88%	83%	79%	76%	72%	70%	70%
2020	83%	79%	75%	71%	68%	66%	66%
2019	82%	78%	75%	71%	68%	66%	66%
2018	81%	77%	73%	70%	66%	64%	64%
2017	79%	75%	71%	68%	65%	63%	63%
2016	76%	73%	69%	66%	63%	61%	61%
2015	78%	74%	70%	67%	64%	62%	62%
2010	86%	82%	78%	74%	71%	69%	69%
2005	93%	89%	85%	81%	77%	75%	75%
2000	94%	90%	85%	81%	77%	75%	
1995	92%	88%	84%	80%	76%		
1990	90%	85%	81%	77%			
1985	84%	80%	76%				
1980	70%	67%					

DALLAS POLICE AND FIRE PENSION SYSTEM
INDEPENDENT ACTUARIAL ANALYSIS

SECTION VI – COST-OF-LIVING ADJUSTMENTS

The expected costs for the Compound Current COLA with No Funded Status Requirement and 80% Purchasing Power Floor using the traditional ADC are shown in the chart below. This option would increase costs significantly compared to the current COLA.



Comparison of Options

The chart below compares the expected purchasing power for new retirees under each of the COLA options outlined above.

COLA Scenario	Purchasing Power						
	2024	2029	2034	2039	2044	2049	2054
Current	100%	**88%**	*78%*	*69%*	*61%*	*56%*	*53%*
Dallas ERF COLA	100%	99%	98%	95%	92%	**88%**	**83%**
Immediate Partial COLA	100%	**89%**	**81%**	*74%*	*68%*	*63%*	*59%*
Current + 70% Purchasing Power Protection	100%	**88%**	*78%*	*70%*	*70%*	*70%*	*70%*
Current + 80% Purchasing Power Protection	100%	**88%**	*80%*	*80%*	*80%*	*80%*	*80%*
Current Immediate + 80% Purchasing Power Protection	100%	95%	**90%**	**85%**	*80%*	*80%*	*80%*
Compound Current Immediate + 80% Purchasing Power Protection	100%	95%	91%	**86%**	**82%**	*80%*	*80%*

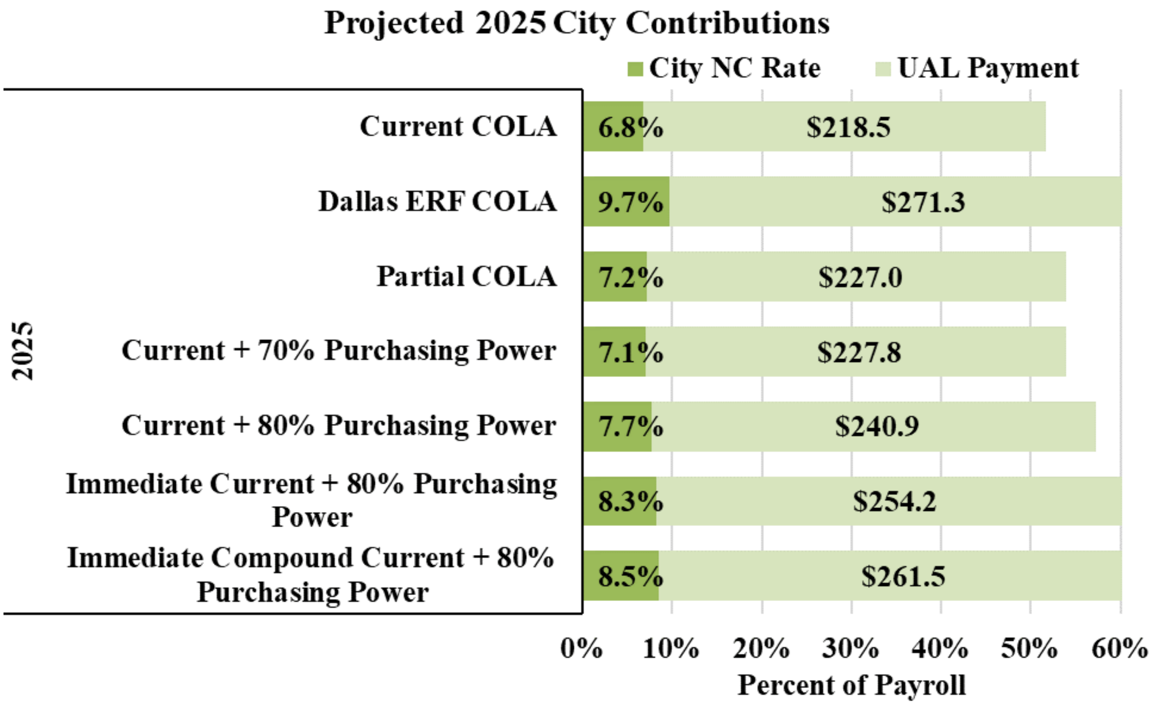
The table below compares the recalculated 2023 UAL and funded ratio using each of the COLA options outlined above.

COLA Scenario	2023 UAL ($ in Millions)	2023 Funded Ratio
Current	$ 3,537	33.8%
Dallas ERF COLA	$ 4,331	29.4%
Immediate Partial COLA	$ 3,666	33.0%
Current + 70% Purchasing Power Protection	$ 3,679	32.9%
Current + 80% Purchasing Power Protection	$ 3,877	31.8%
Current Immediate + 80% Purchasing Power Protection	$ 4,077	30.7%
Compound Current Immediate + 80% Purchasing Power Protection	$ 4,189	30.1%

DALLAS POLICE AND FIRE PENSION SYSTEM
INDEPENDENT ACTUARIAL ANALYSIS

SECTION VI – COST-OF-LIVING ADJUSTMENTS

The chart below compares the 2025 city contribution using the Traditional ADC option under each of the COLA options outlined above.



<u>Observations and Rationale for Recommendation</u>

We do not have a recommendation for a specific COLA option because the COLA that will need to be provided is a policy decision and not an actuarial decision. However, we believe it is likely that Dallas will need to provide some COLAs earlier than would be provided under the current plan provisions. Furthermore, it is important to include any anticipated COLAs in the current projections so the costs can be anticipated and pre-funded. Consequently, we recommend that a decision be made on a COLA option now so it can be incorporated into the projected contributions.

Each COLA option has benefits and weaknesses as described on the previous page. However, it is worth highlighting that the combination of the Current COLA and a purchasing power floor provides a balance between financial stability and benefit security. The current COLA only provides COLAs when investment returns support the cost of the COLA, and the purchasing power floor protects retirees from "too much" inflationary erosion of their purchasing power.

APPENDIX A – REPLICATION OF 2023 ACTUARIAL VALUATION

Via Electronic Mail

December 22, 2023

Ms. Kelly Gottschalk, Executive Director
Dallas Police & Fire Pension System
4100 Harry Hines Blvd., Suite 100
Dallas, TX 75219

***Re: Replication of the January 1, 2023 Actuarial Valuation Results
Dallas Police & Fire Pension System***

Dear Ms. Gottschalk:

As requested, we have completed our replication of the January 1, 2023 actuarial valuation results for the Dallas Police & Fire Pension System (DPFPS). The following tables compare our replication results to Segal's valuation results.

Present Value of Benefits ($ in Millions)	Segal	Cheiron	% Diff
Actives Hired Before 3/1/2011	$ 1,847	$ 1,854	0.4%
Actives Hired On/After 3/1/2011	643	656	2.0%
Retirees & Beneficiaries	3,566	3,564	-0.1%
Inactive Members	31	31	0.0%
Total	$ 6,088	$ 6,105	0.3%

Actuarial Liability ($ in Millions)	Segal	Cheiron	% Diff
Actives Hired Before 3/1/2011	$ 1,454	$ 1,453	-0.1%
Actives Hired On/After 3/1/2011	198	196	-1.0%
Retirees & Beneficiaries	3,566	3,564	-0.1%
Inactive Members	31	31	0.0%
Total	$ 5,249	$ 5,244	-0.1%

APPENDIX A – REPLICATION OF 2023 ACTUARIAL VALUATION

Normal Cost ($ in Millions)	Segal	Cheiron	% Diff
Members Hired Before 3/1/2011	$ 49.7	$ 50.9	2.3%
Members Hired On/After 3/1/2011	33.9	33.2	-2.0%
Total Normal Cost (NC)	$ 83.7	$ 84.1	0.6%
Normal Cost with Interest[1]	$ 86.3	$ 86.8	0.6%
Payroll	$ 462.8	$ 462.8	0.0%
NC Rate for Members Hired Before 3/1/2011	19.7%	20.2%	0.5%
NC Rate for Members Hired On/After 3/1/2011	17.3%	16.9%	-0.4%
Total NC Rate	18.7%	18.8%	0.1%

[1] Half year of interest to reflect mid-year contribution timing

Our replication results are based on the January 1, 2023 census data provided by Segal and the assumptions, methods, and plan provisions used in the January 1, 2023 actuarial valuation report. All the differences are within normal tolerances for replicating a valuation. We don't view these differences as material.

We appreciate Segal's assistance in this matter. If you have any questions or need additional information on the replication, please let us know.

Sincerely,
Cheiron

William R. Hallmark, ASA, EA, MAAA, FCA
Consulting Actuary

Jake Libauskas, FSA, EA, MAAA, FCA
Consulting Actuary

APPENDIX B – DATA, ACTUARIAL ASSUMPTIONS AND METHODS

Member Data

This report is based on the January 1, 2023, census data provided by Segal. See Segal's January 1, 2023, actuarial valuation report for a summary of the census data.

Actuarial Assumptions

This report is based on the actuarial assumptions used in Segal's January 1, 2023, actuarial valuation report, unless noted otherwise. See Segal's January 1, 2023, actuarial valuation report for a summary of the actuarial assumptions.

These assumptions were adopted by the Board based on recommendations from an experience study covering the five-year period ended December 31, 2019. We performed a high-level review of these assumptions for reasonability and a more thorough review of the assumptions was outside our scope of services.

In addition, the following assumptions were used:

- Annual investment return for 2023 and thereafter: 6.5%
- Payroll growth: 2.5% per year
- Stable active population
- 1.5% Simple COLA is assumed to be payable annually effective October 1, 2046, unless noted otherwise.
- The COLA is assumed to be based on the regular pension benefit. Any supplemental or DROP benefits are not subject to the COLA.

This analysis would be materially changed if the System receives an adverse result in pending litigation on annual benefit adjustments.

Actuarial Methods

This report is based on the actuarial methods used in Segal's January 1, 2023, actuarial valuation report, unless noted otherwise. See Segal's January 1, 2023, actuarial valuation report for a summary of the actuarial methods.

The Actuarially Determined Contribution was calculated assuming that the Actuarial Value of Assets is reset to equal the Market Value of Assets as of January 1, 2023, and that the annual payments begin two years after the corresponding valuation date. The components of the Actuarially Determined Contribution are detailed below.

1. The UAL payment was calculated as of the valuation date and two and a half years of interest were added to approximate payments that begin two years after the valuation date and are made throughout the year. The present value of expected UAL payments during the two-year delay were subtracted from the UAL.

APPENDIX B – DATA, ACTUARIAL ASSUMPTIONS AND METHODS

2. The administrative expense payment was calculated based on the expected administrative expense for the payment year.

3. The normal cost rate is based on the expected normal cost rate for the payment year, which reflects the expectation that a larger percentage of the active population will be members hired on or after March 1, 2011, and that the COLA is closer to being payable when it is assumed to start being payable in 2046. The normal cost rate is based on the mid-year normal cost dollar amount divided by the expected payroll during the year, which reflects the same expected decrements during the year as used in the calculation of the normal cost. This methodology produces a normal cost rate that can be applied to all payroll for the year and appropriately fund benefit accruals of current members and those hired throughout the year.

Future normal costs for members hired before March 1, 2011, are based on a closed group projection that calculates the normal cost at each future valuation date. Future normal costs for members hired on or after March 1, 2011, are based on a linear interpolation between 2023 and 2046 starting with the normal cost rate reflecting the COLA payable starting in 2046 and gradually increasing to the normal cost rate reflecting the COLA payable starting immediately.

APPENDIX C – SUMMARY OF PLAN PROVISIONS

This report is based on the plan provisions used in Segal's January 1, 2023, actuarial valuation report, unless noted otherwise. See Segal's January 1, 2023, actuarial valuation report for a summary of the plan provisions.

APPENDIX D – GLOSSARY OF TERMS

1. Actuarial Liability

The Actuarial Liability is the difference between the present value of future benefits and the present value of total future normal costs. This is also referred to by some actuaries as the "accrued liability" or "actuarial accrued liability." The Actuarial Liability represents the amount of assets a plan should have as of a valuation date according to the actuarial cost method.

2. Actuarial Assumptions

Estimates of future experience with respect to rates of mortality, disability, turnover, retirement rate or rates of investment income, and salary increases. Demographic actuarial assumptions (rates of mortality, disability, turnover, and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (price inflation, wage inflation, and investment income) are generally based on expectations for the future that may differ from a plan's past experience.

3. Actuarial Cost Method

A mathematical budgeting procedure for allocating the dollar amount of the present value of future benefits between future normal cost and Actuarial Liability.

4. Actuarial Gain or Loss

The difference between actual experience and the anticipated experience based on the actuarial assumptions during the period between two actuarial valuation dates.

5. Actuarial Present Value

The amount of funds currently required to provide a payment or series of payments in the future. It is determined by discounting future payments at the discount rate and by probabilities of payment.

6. Actuarially Determined Contribution

The payment to a plan as determined by the actuary using a contribution allocation procedure. It may or may not be the actual amount contributed to a plan.

7. Amortization Method

A method for determining the amount, timing, and pattern of payment of the Unfunded Actuarial Liability.

APPENDIX D – GLOSSARY OF TERMS

8. Asset Valuation Method

The method used to develop the Actuarial Value of Assets from the Market Value of Assets typically by smoothing investment returns above or below the assumed rate of return over a period of time.

9. Contribution Allocation Procedure

A procedure typically using an actuarial cost method, an asset valuation method, and an amortization method to develop the Actuarially Determined Contribution.

10. Cost-of-Living Adjustment (COLA)

An increase to retirement benefit payments intended to help those benefits keep up with the rate of inflation.

11. Discount Rate

The rate of interest used to discount future benefit payments to determine the actuarial present value. For purposes of determining an Actuarially Determined Contribution, the discount rate is typically based on the long-term expected return on assets.

12. Funded Status or Funding Ratio

Either the Market or Actuarial Value of Assets divided by the Actuarial Liability. For purposes of this report, the funded status represents the proportion of the actual assets as of the valuation date compared to the assets expected by the actuarial cost method. These measures are for contribution budgeting purposes and are not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.

13. Net Cash Flow

Total contributions (employee and employer) minus benefit payments and administrative expenses.

14. Normal Cost

The portion of the present value of future benefits allocated to the current year by the actuarial cost method.

15. Present Value of Future Benefits

The actuarial present value of all benefits both earned as of the valuation date and expected to be earned in the future by current plan members based on current plan provisions and actuarial assumptions.

APPENDIX D – GLOSSARY OF TERMS

16. Purchasing Power

The amount of goods or services that a certain amount of money can buy. As inflation increases the cost of goods and services, the purchasing power of a fixed amount of money decreases. In this report, Purchasing power is calculated as the percentage of the purchasing power a retirement benefit retains compared to the initial purchasing power it had at retirement. It is calculated as the product of the ratios for each year since retirement of (1+COLA)/(1+Inflation), where COLA is the percentage increase in the retirement benefit from the prior year.

17. Unfunded Actuarial Liability (UAL)

The Unfunded Actuarial Liability is the difference between Actuarial Liability and either the Market or the Actuarial Value of Assets. This value is sometimes referred to as "unfunded actuarial accrued liability." It represents the difference between the actual assets and the amount of assets expected by the actuarial cost method as of the valuation date.

CHEIRON

Classic Values, Innovative Advice

DISCUSSION SHEET

ITEM #C2

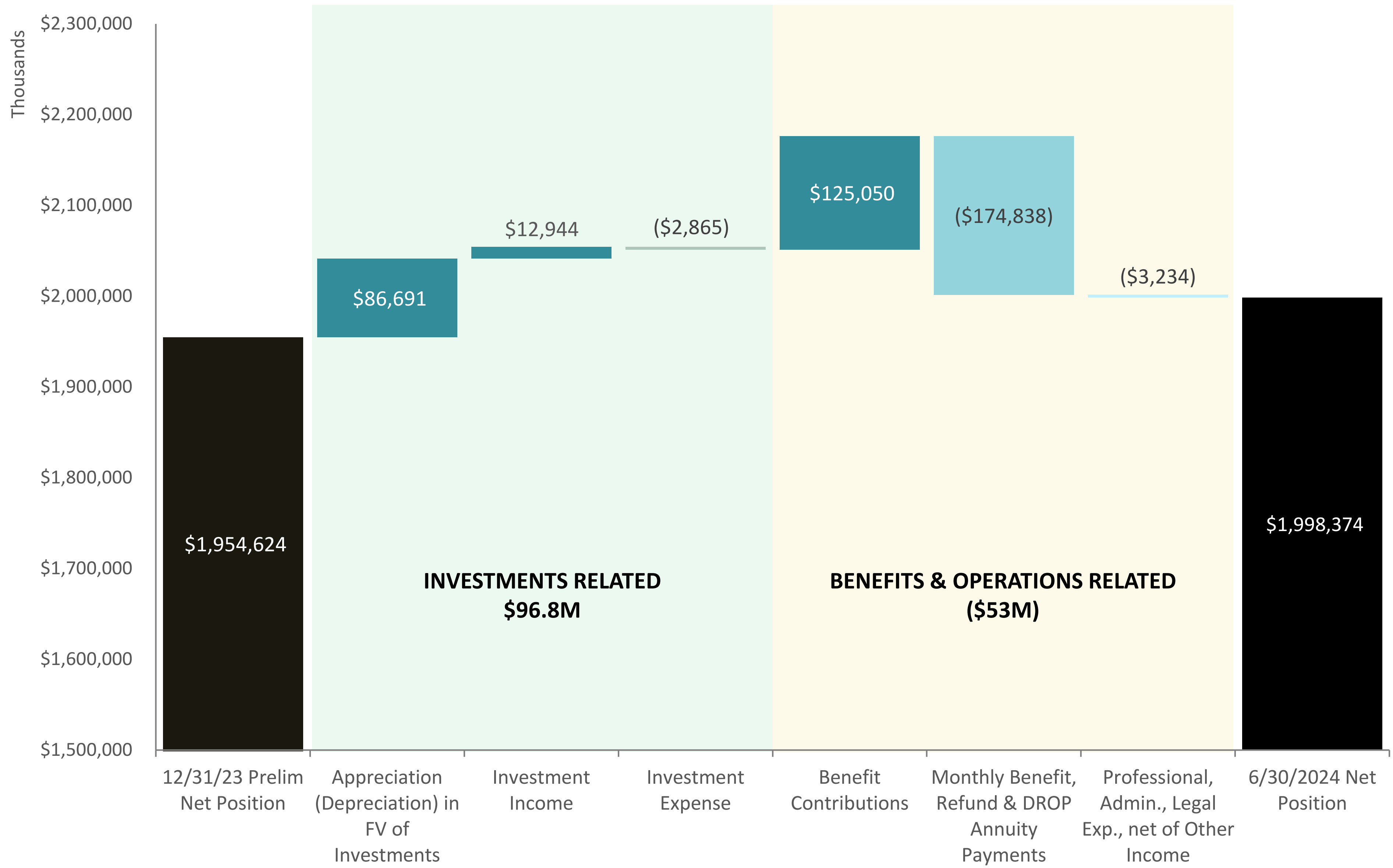
Topic: **Quarterly Financial Reports**

Discussion: The Chief Financial Officer will present the second quarter 2024 financial statements.

Regular Board Meeting – Thursday, August 8, 2024

Change in Net Fiduciary Position

December 31, 2023 – June 30, 2024



Components may not sum exactly due to rounding.

DALLAS POLICE & FIRE PENSION SYSTEM
Combined Statements of Fiduciary Net Position

	June 30, 2024	PRELIMINARY December 31, 2023		$ Change	% Change
Assets					
Investments, at fair value					
Short-term investments	$ 15,478,014	$ 16,982,561		$ (1,504,547)	-9%
Fixed income securities	372,267,285	365,809,375		6,457,910	2%
Equity securities	1,057,396,743	995,629,628		61,767,115	6%
Real assets	277,885,160	278,554,675		(669,515)	0%
Private equity	209,838,392	218,856,730		(9,018,338)	-4%
Forward currency contracts	(55)	-		(55)	0%
Total investments	1,932,865,539	1,875,832,969		57,032,570	3%
Receivables					
City	6,063,061	5,728,687		334,374	6%
Members	2,215,352	2,083,312		132,040	6%
Interest and dividends	4,401,604	4,668,499		(266,895)	-6%
Investment sales proceeds	1,234,279	1,963		1,232,316	62777%
Lease Receivable	2,269,523	2,269,523		-	0%
Other receivables	81,300	596,578		(515,278)	-86%
Total receivables	16,265,119	15,348,562		916,557	6%
Cash and cash equivalents	46,920,691	62,346,331		(15,425,640)	-25%
Prepaid expenses	966,563	561,465		405,098	72%
Capital assets, net	11,596,031	11,455,745		140,286	1%
Total assets	$ 2,008,613,943	$ 1,965,545,072		$ 43,068,871	2%
Liabilities					
Payables					
Securities purchased	4,293,297	4,476,298		(183,001)	-4%
Deferred Inflow of Resources	2,137,972	2,137,972			
Accounts payable and other accrued liabilities	3,808,877	4,306,413		(497,536)	-12%
Total liabilities	10,240,146	10,920,683		(680,537)	-6%
Net position restricted for pension benefits	$ 1,998,373,797	$ 1,954,624,389	*	$ 43,749,408	2%

***The ending period amounts are preliminary and may change as the 2023 results are finalized.**

DALLAS POLICE & FIRE PENSION SYSTEM
Combined Statements of Changes in Fiduciary Net Position

	Six Months Ended June 30, 2024		Six Months Ended June 30, 2023	$ Change	% Change
Contributions					
City	$ 91,391,541		$ 85,050,904	$ 6,340,637	7%
Members	33,658,898		31,038,511	2,620,387	8%
Total Contributions	125,050,439		116,089,415	8,961,024	8%
Investment income					
Net appreciation (depreciation) in fair value of investments	86,691,125		119,855,945	(33,164,820)	-28%
Interest and dividends	12,944,222		12,070,564	873,658	7%
Total gross investment income	99,635,347		131,926,509	(32,291,162)	-24%
less: investment expense	(2,864,528)		(3,200,622)	336,094	11%
Net investment income	96,770,819		128,725,887	(31,955,068)	-25%
Other income	233,447		47,551,052	(47,317,605)	-100%
Total additions	222,054,705		292,366,354	(70,311,649)	-24%
Deductions					
Benefits paid to members	172,186,204		169,071,538	3,114,666	2%
Refunds to members	2,652,139		2,605,333	46,806	2%
Legal expense	159,578		150,758	8,820	6%
Legal expense reimbursement	-		-	-	0%
Legal expense, net of reimbursement	159,578		150,758	8,820	6%
Staff Salaries and Benefits	1,894,013		1,808,288	85,725	5%
Professional and administrative expenses	1,413,363		1,417,451	(4,088)	0%
Total deductions	178,305,297		175,053,368	3,251,929	2%
Net increase (decrease) in net position	43,749,408		117,312,986		
Beginning of period	1,954,624,389	*	1,823,207,743		
End of period	$ 1,998,373,797		$ 1,940,520,729		

***The beginning period amounts are preliminary and may change as the 2023 results are finalized.**

DALLAS POLICE & FIRE PENSION SYSTEM

DISCUSSION SHEET

ITEM #C3

Topic: **2024 Mid-Year Budget Review**

Discussion: Attached is a review of the 2024 Operating Expense Budget detailing expenses for the first six months of the calendar year.

Expense items with variances to the prorated budget by more than 5% and $10,000 as of June 30, 2024 are discussed in the attached review.

Supplemental Plan expenses are deducted from total expenses in arriving at total Regular Plan expenses. Expenses are allocated to the two plans on a pro-rata basis, according to the ratio of each plan's assets to the total Group Trust assets. The ratio is derived from the Unitization Report prepared by JPMorgan as of June 30, 2024. The ratio is 99.03% Regular Plan to .97% Supplemental Plan.

Regular Board Meeting – Thursday, August 8, 2024

BUDGET REVIEW
2024 MID -YEAR REVIEW

	Description	2024 6 months Actual	2024 6 months Budget	2023 6 months Actual	Budget vs Actual Variance $ Over/(Under)	Budget vs Actual Variance % Over/(Under)
1	Legal fees, no insurance reimb for any category	159,578	100,000	150,758	59,578	59.6%
2	Building expenses, incl depreciation	386,033	329,012	332,479	57,021	17.3%
3	Salaries and benefits	1,894,013	1,837,352	1,808,288	56,661	3.1%
4	Depreciation exp - IT hardware	8,622	3,673	7,343	4,949	134.7%
5	Postage	15,183	10,350	11,172	4,833	46.7%
6	Business continuity	23,249	19,000	6,850	4,249	22.4%
7	Bank Fees	5,562	5,000	3,538	562	11.2%
8	Memberships and dues	10,511	10,138	9,100	373	3.7%
9	Staff meetings	461	250	-	211	84.4%
10	Records storage	1,550	1,500	1,428	50	3.3%
11	Elections	-	-	11,862	-	100.0%
12	Board meetings	1,119	1,350	826	(231)	-17.1%
13	Printing	1,763	2,550	3,580	(787)	-30.9%
14	Employee service recognition	908	2,000	849	(1,092)	-54.6%
15	Subscriptions	284	1,440	513	(1,156)	-80.3%
16	Accounting services	29,500	30,975	29,500	(1,475)	-4.8%
17	Network security monitoring	110,901	112,500	107,818	(1,599)	-1.4%
18	Member educational programs	-	1,675	-	(1,675)	-100.0%
19	Office supplies	12,100	14,513	11,503	(2,413)	-16.6%
20	Employment expenses	10,549	13,175	1,584	(2,626)	-19.9%
21	Communications (phone/internet)	12,594	15,264	9,217	(2,670)	-17.5%
22	Leased equipment	9,804	12,500	10,968	(2,696)	-21.6%
23	IT software/hardware	9,328	12,500	3,744	(3,172)	-25.4%
24	Disability medical evaluations	-	3,500	500	(3,500)	-100.0%
25	Conference registration/materials - board	450	6,000	50	(5,550)	-92.5%
26	Miscellaneous expense	-	6,000	4	(6,000)	-100.0%
27	Travel - board	762	11,000	2,033	(10,238)	-93.1%
28	Miscellaneous professional services	14,405	25,475	5,639	(11,070)	-43.5%
29	Conference/training registration/materials - staff	3,691	15,500	5,081	(11,809)	-76.2%
30	Travel - staff	9,476	21,650	17,250	(12,174)	-56.2%
31	Pension administration software & WMS	138,821	154,500	149,156	(15,679)	-10.1%
32	Liability insurance	259,383	279,495	308,777	(20,112)	-7.2%
33	Legislative consultants	63,000	84,000	94,478	(21,000)	-25.0%
34	Actuarial services	177,215	198,875	42,250	(21,660)	-10.9%
35	IT subscriptions/services/licenses	65,605	97,307	61,801	(31,702)	-32.6%
36	Repairs and maintenance	16,488	54,354	47,999	(37,866)	-69.7%
37	Independent audit	-	71,650	66,150	(71,650)	-100.0%
38	Information technology projects	14,045	357,500	52,410	(343,455)	-96.1%
	Gross Total	3,466,953	3,923,523	3,376,498	(456,570)	**-11.6%**
	Less: Allocation to Supplemental Plan Budget*	33,634	38,064	29,099	(4,429)	-11.6%
	Total Regular Plan Budget	**$ 3,433,319**	**$ 3,885,459**	**$ 3,347,399**	**$ (452,141)**	**-11.6%**

**Split to Supplemental is based on unitization*

1	Investment due diligence	20,787	27,908	20,605	(7,121)	-25.5%
2	Custodian fees	108,129	117,500	109,004	(9,371)	-8.0%
3	Investment portfolio operating expenses	195,935	256,000	266,892	(60,065)	-23.5%
4	Investment consultant and reporting	175,000	276,500	202,500	(101,500)	-36.7%
5	Fund management fees (direct only)	2,364,677	2,802,125	2,601,620	(437,448)	-15.6%
	Total Investment Expenses	**$ 2,864,528**	**$ 3,480,033**	**$ 3,200,621**	**$ (615,505)**	**-17.7%**

BUDGET
2024 MID-YEAR REVIEW

Budget Changes (>5% and $10K)

	Description	2024 6 months Actual	2024 6 months Budget	Budget vs Actual Variance $ Over/(Under)	Budget vs Actual Variance % Over/(Under)	Explanation
	INCREASES:					
1	Legal fees, no insurance reimb for any category	159,578	100,000	59,578	59.6%	Variance primarily due to possible settlement discussions related to current litigation
2	Building expenses, incl depreciation	386,033	329,012	57,021	17.3%	Unbudgeted large repair of second floor AC
	REDUCTIONS:					
3	Information technology projects	14,045	357,500	(343,455)	-96.1%	Most planned IT projects are underway and we expect higher expenses in the second half of the year.
4	Independent audit	-	71,650	(71,650)	-100.0%	The variance relates to the timing of expenses. Should be within budget by year end.
5	Repairs and maintenance	16,488	54,354	(37,866)	-69.7%	The variance relates to both the timing of expenses and actual expenses less than budgeted.
6	IT subscriptions/services/licenses	65,605	97,307	(31,702)	-32.6%	The variance relates to the timing of some expenses, as well as actual expenses being less than budgeted.
7	Actuarial services	177,215	198,875	(21,660)	-10.9%	Variance was due in part to the timing and quantity of specialized services required.
8	Legislative consultants	63,000	84,000	(21,000)	-25.0%	Budgeted additional legislative services not yet incurred.
9	Liability insurance	259,383	279,495	(20,112)	-7.2%	Budget included expected increases in insurance that were able to be renewed at lower costs.
10	Pension administration software & WMS	138,821	154,500	(15,679)	-10.1%	Variance related to budgeted enhancements in the pension administration software and web member services that have not yet been incurred.
11	Travel - staff	9,476	21,650	(12,174)	-56.2%	Most staff travel YTD has been less than budgeted.
12	Conference/training registration/materials - staff	3,691	15,500	(11,809)	-76.2%	Most staff conference / training YTD has been less than budgeted.
13	Miscellaneous professional services	14,405	25,475	(11,070)	-43.5%	Budgeted expenses for communication services have not yet been incurred.
14	Travel - board	762	11,000	(10,238)	-93.1%	Board travel has been less than budgeted so far this year.

INVESTMENT EXPENSES

	Description	2023 6 months Actual	2023 6 months Budget	Budget vs Actual Variance $ Over/(Under)	Budget vs Actual Variance % Over/(Under)	Explanation
1	Fund management fees (direct only)	2,364,677	2,802,125	(437,448)	-15.6%	Budget and Actual are for direct fees only. Variance is due in part to the timing of expenses. Some performance fees are due and paid at year end.
2	Investment consultant and reporting	175,000	276,500	(101,500)	-36.7%	Budgeted expenses for private markets services not yet incurred.
3	Investment portfolio operating expenses	195,935	256,000	(60,065)	-23.5%	The variance relates primarily to the timing of expenses.

DALLAS POLICE & FIRE PENSION SYSTEM

DISCUSSION SHEET

ITEM #C4

Topic: **Financial Audit Status**

Discussion: The Chief Financial Officer will provide a status update on the annual financial audit.

DALLAS POLICE & FIRE PENSION SYSTEM

DISCUSSION SHEET

ITEM #C5

Topic: **Executive Director Approved Pension Ministerial Actions**

Discussion: The Executive Director approved ministerial membership actions according to the Retirement and Payments Approval Policy. Membership actions approved are summarized in the provided report.

Regular Board Meeting – Thursday, August 8, 2024

Membership Actions -2024

	January	February	March	April	May	June	July	August	September	October	November	December	YTD Totals
Refunds	23	22	21	26	16	21	13	19					161
DROP - Join	1	1	2	0	5	1	1	1					12
Estate Payments	2	1	3	5	3	1	4	5					24
Survivor Benefits	4	6	3	8	5	4	6	5					41
Retirements	10	10	16	9	13	10	9	11					88
Alternate Payees	2	0	2	1	1	1	0	0					7
Spouse Wed After Retirement	0	0	0	0	0	0	0	0					0
Service Purchases	0	2	0	1	7	2	1	2					15
Earnings Test*	0	0	0	0	0	0	10	0					10

Membership Actions -2023

	January	February	March	April	May	June	July	August	September	October	November	December	YTD Totals
Refunds	26	19	12	13	17	14	23	13	57	53	18	21	286
DROP - Join	3	3	0	2	2	2	0	0	3	0	3	0	18
Estate Payments	0	5	7	5	1	2	4	92	5	3	5	9	138
Survivor Benefits	1	6	8	6	4	3	5	6	6	2	3	6	56
Retirements	12	16	11	14	11	12	10	13	10	17	6	12	144
Alternate Payees	0	2	1	0	2	3	1	3	2	0	0	1	15
Spouse Wed After Retirement	1	0	0	0	0	0	0	0	1	1	1	0	4
Service Purchases	2	0	0	1	0	2	0	1	0	0	2	0	8
Earnings Test	0	0	0	0	0	9	0	0	0	0	0	0	9

Data is based on Agenda/Executive Approval Date

Service purchases include Military, DROP Revocation, and Previously Withdrawn Contributions

The increase in Refunds in September 2023 and October 2023 is due to the Refund Project

87 of the Estate Payments in August 2023 are approvals for the Pending Death Project

*In 2024, 9 of 10 of the Earnings Tests did not require an benefit reduction. A piece of information is still needed to determine if the last member will require a reduciton.

G:\Kelly\Executive Director Ministerial Action Approvals\Membership Actions Data 2024

DALLAS POLICE & FIRE PENSION SYSTEM

DISCUSSION SHEET

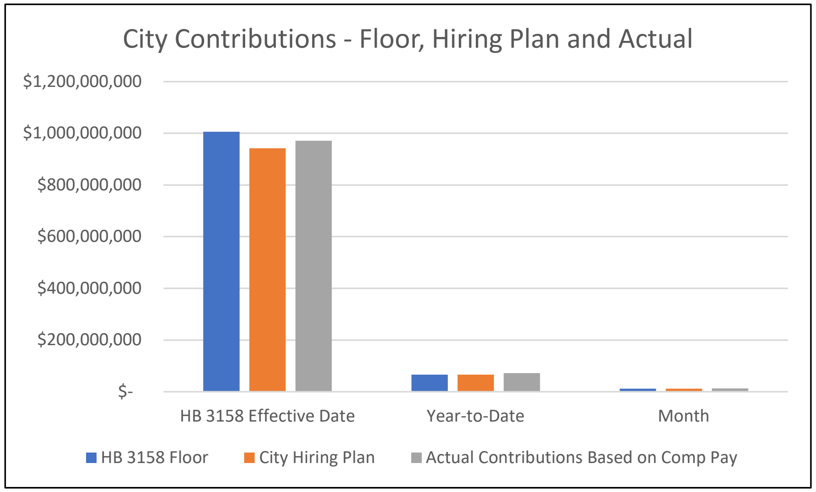
ITEM #C6

Topic: **Monthly Contribution Report**

Discussion: Staff will review the Monthly Contribution Report.

Regular Board Meeting – Thursday, August 8, 2024

Contribution Tracking Summary - July 2024 (May 2024 Data)

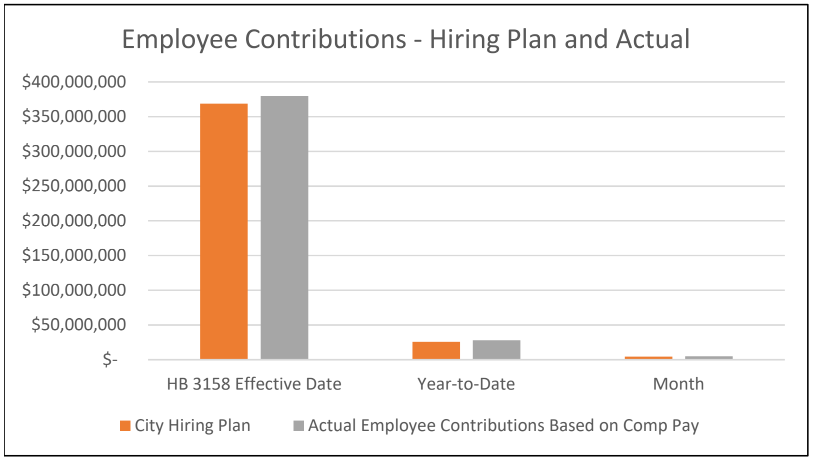


Actual Comp Pay was 103% of the Hiring Plan estimate since the effective date of HB 3158.

The Floor for 2024 is equal to the Hiring Plan estimate of $6,024,000 per pay period. The Hiring Plan increased by 3.65% in 2024. It is expected that actual contributions will exceed the Floor through 2024.

Through 2024 the HB 3158 Floor is in place so there is no City Contribution shortfall.

The combined actual employees were 31 **more** than the Hiring Plan for the pay period ending May 10, 2024. Fire was over the estimate by 280 Fire Fighters and Police was under by 249 Police Officers.



Employee contributions exceeded the Hiring Plan estimate for the month, the year and since inception.

There is no Floor on employee contributions.

Contribution Summary Data

City Contributions

May-24	Number of Pay Periods Beginning in the Month	HB 3158 Floor	City Hiring Plan	Actual Contributions Based on Comp Pay	Additional Contributions to Meet Floor Minimum	Comp Pay Contributions as a % of Floor Contributions	Comp Pay Contributions as a % of Hiring Plan Contributions
Month	2	$ 12,048,000	$ 12,048,462	$ 13,157,092	$ -	109%	109%
Year-to-Date		$ 66,264,000	$ 66,266,538	$ 72,082,033	$ -	109%	109%
HB 3158 Effective Date		$ 1,006,597,000	$ 942,486,923	$ 971,438,445	$ 48,990,866	97%	103%

Due to the Floor through 2024, there is no cumulative shortfall in City Contributions
Does not include the flat $13 million annual City Contribution payable through 2024.
Does not include Supplemental Plan Contributions.

Employee Contributions

May-24	Number of Pay Periods Beginning in the Month	City Hiring Plan	Actual Employee Contributions Based on Comp Pay	Actual Contribution Excess Compared to Hiring Plan	Actuarial Valuation Contribution Assumption	Actual Contributions as a % of Hiring Plan Contributions	Actual Contributions as a % of Actuarial Val Assumption
Month	2	$ 4,714,615	$ 5,045,058	$ 330,443	$ 4,236,924	107%	119%
Year-to-Date		$ 25,930,385	$ 28,103,029	$ 2,172,645	$ 23,303,082	108%	121%
HB 3158 Effective Date		$ 368,799,231	$ 379,842,353	$ 11,043,122	$ 355,122,760	103%	107%

Potential Earnings Loss from the Shortfall based on Assumed Rate of Return $ 626,093

Does not include Supplemental Plan Contributions.

Reference Information

City Contributions: HB 3158 Bi-weekly Floor and the City Hiring Plan Converted to Bi-weekly Contributions

	HB 3158 Bi-weekly Floor	City Hiring Plan-Bi-weekly	HB 3158 Floor Compared to the Hiring Plan	Hiring Plan as a % of the Floor	% Increase/ (decrease) in the Floor	% Increase/ (decrease) in the Hiring Plan
2017	$ 5,173,000	$ 4,936,154	$ 236,846	95%		
2018	$ 5,344,000	$ 4,830,000	$ 514,000	90%	3.31%	-2.15%
2019	$ 5,571,000	$ 5,082,115	$ 488,885	91%	4.25%	5.22%
2020	$ 5,724,000	$ 5,254,615	$ 469,385	92%	2.75%	3.39%
2021	$ 5,882,000	$ 5,413,846	$ 468,154	92%	2.76%	3.03%
2022	$ 6,043,000	$ 5,599,615	$ 443,385	93%	2.74%	3.43%
2023	$ 5,812,000	$ 5,811,923	$ 77	100%	-3.82%	3.79%
2024	$ 6,024,000	$ 6,024,231	$ (231)	100%	3.65%	3.65%

The HB 3158 Bi-weekly Floor ends after 2024

Employee Contributions: City Hiring Plan and Actuarial Val. Converted to Bi-weekly Contributions

		City Hiring Plan Converted to Bi-weekly Employee Contributions	Actuarial Valuation Assumption Converted to Bi-weekly Employee contributions	Actuarial Valuation as a % of Hiring Plan
2017		$ 1,931,538	$ 1,931,538	100%
2018		$ 1,890,000	$ 1,796,729	95%
2019		$ 1,988,654	$ 1,885,417	95%
2020		$ 2,056,154	$ 2,056,154	100%
2021		$ 2,118,462	**$ 2,118,462**	100%
2022		$ 2,191,154	**$ 2,191,154**	100%
2023		$ 2,274,231	**$ 2,274,231**	100%
2024		$ 2,357,308	**$ 2,357,308**	100%

The information on this page is for reference. The only numbers on this page that may change before 2025 are the Actuarial Valuation Employee Contributions Assumptions for the years 2020-2024 and the associated percentage.

Reference Information - Actuarial Valuation and GASB 67/68 Contribution Assumptions

Actuarial Assumptions Used in the Most Recent Actuarial Valuation - These assumptions will be reevaluated annually & may change.

City Contributions are based on the Floor through 2024, the Hiring Plan from 2025 to 2037, after 2037 an annual growth rate of 2.75% is assumed

Employee Contributions for 2018 are based on the 2017 actual employee contributions inflated by the growth rate of 2.75% and the Hiring Plan for subsequent years until 2038, when the 2037 Hiring Plan is increased by the 2.75 growth rate for the next 10 years

Actuarial/GASB Contribution Assumption Changes Since the Passage of HB 3158

	Actuarial Valuation	GASB 67/68
YE 2017 (1/1/2018 Valuation)		
2018 Employee Contributions Assumption - based on 2017 actual plus growth rate not the Hiring Plan Payroll	$ (2,425,047)	*
2019 Estimate (1/1/2019 Valuation)		
2019 Employee Contribution Assumption	$ 9,278	*

**90% of Hiring Plan was used for the Cash Flow Projection for future years in the 12/31/2017 GASB 67/68 calculation. At 12-31-17, 12-31-18 and 12-31-2019 this did not impact the pension liability or the funded percentage.*

The information on this page is for reference. It is intended to document contribution related assumptions used to prepare the Actuarial Valuation and changes to those assumptions over time, including the dollar impact of the changes. Contribution changes impacting the GASB 67/68 liability will also be included.

City Hiring Plan - Annual Computation Pay and Numbers of Employees						
	Computation Pay			Number of Employees		
Year	Hiring Plan	Actual	Difference	Hiring Plan	Actual EOY	Difference
2017	$ 372,000,000	Not Available	Not Available	5,240	4,935	(305)
2018	$ 364,000,000	$ 349,885,528	$ (14,114,472)	4,988	4,983	(5)
2019	$ 383,000,000	$ 386,017,378	$ 3,017,378	5,038	5,104	66
2020	$ 396,000,000	$ 421,529,994	$ 25,529,994	5,063	4,988	(75)
2021	$ 408,000,000	$ 429,967,675	$ 21,967,675	5,088	4,958	(130)
2022	$ 422,000,000	$ 439,104,541	$ 17,104,541	5,113	5,074	(39)
2023	$ 438,000,000	$ 460,982,051	$ 22,982,051	5,163	5,136	(27)
2024	$ 454,000,000			5,213		
2025	$ 471,000,000			5,263		
2026	$ 488,000,000			5,313		
2027	$ 507,000,000			5,363		
2028	$ 525,000,000			5,413		
2029	$ 545,000,000			5,463		
2030	$ 565,000,000			5,513		
2031	$ 581,000,000			5,523		
2032	$ 597,000,000			5,523		
2033	$ 614,000,000			5,523		
2034	$ 631,000,000			5,523		
2035	$ 648,000,000			5,523		
2036	$ 666,000,000			5,523		
2037	$ 684,000,000			5,523		

Comp Pay by Month - 2024	Annual Divided by 26 Pay Periods	Actual	Difference	2024 Cumulative Difference	Number of Employees - EOM	Difference
January	$ 52,384,615	$ 56,848,897	$ 4,464,281	$ 4,464,281	5,183	(30)
February	$ 34,923,077	$ 37,710,735	$ 2,787,658	$ 7,251,939	5,166	(47)
March	$ 34,923,077	$ 38,150,554	$ 3,227,478	$ 10,479,417	5230	17
April	$ 34,923,077	$ 38,086,745	$ 3,163,668	$ 13,643,085	5216	3
May	$ 34,923,077	$ 38,136,499	$ 3,213,422	$ 16,856,507	5244	31
June	$ 34,923,077					
July	$ 52,384,615					
August	$ 34,923,077					
September	$ 34,923,077					
October	$ 34,923,077					
November	$ 34,923,077					
December	$ 34,923,077					

DALLAS POLICE & FIRE PENSION SYSTEM

DISCUSSION SHEET

ITEM #C7

Topic: **Board Approval of Trustee Education and Travel**

a. Future Education and Business-related Travel
b. Future Investment-related Travel

Discussion:

a. Per the Education and Travel Policy and Procedure, planned Trustee education and business-related travel and education which does not involve travel requires Board approval prior to attendance.

Attached is a listing of requested future education and travel noting approval status.

b. Per the Investment Policy Statement, planned Trustee travel related to investment monitoring, and in exceptional cases due diligence, requires Board approval prior to attendance.

There is no future investment-related travel for Trustees at this time.

Future Education and Business Related Travel & Webinars
Regular Board Meeting – August 8, 2024

			ATTENDING	APPROVED
1.	**Conference**	**NCPERS Public Pension Funding Forum**		
	Dates:	August 18-20, 2024		
	Location:	Boston, MA		
	Est Cost:	$745		
2.	**Conference**	**TEXPERS Summer Educational Forum**	**MT**	
	Dates:	August 18-20, 2024		
	Location:	San Antonio, TX		
	Est Cost:	$25		
3.	**Conference:**	**NCPERS Public Pension HR Summit**		
	Dates:	September 24-26, 2024		
	Location:	Denver, CO		
	Est Cost:	$750		
4.	**Conference:**	**NCPERS Accredited Fiduciary (NAF)**		
	Dates:	October 26-27, 2024		
	Location:	Palm Springs, CA		
	Est Cost:	$900		

Future Education and Business Related Travel & Webinars
Regular Board Meeting – August 8, 2024

ATTENDING APPROVED

5. **Conference** **NCPERS Program for Advanced Trustee Studies (PATS)**
   Dates: October 26-27, 2024
   Location: Palm Springs, CA
   Est Cost: $900

6. **Conference:** **NCPERS Public Safety Conference**
   Dates: October 27-30, 2024
   Location: Palm Springs, CA
   Est Cost: $775

DALLAS POLICE & FIRE PENSION SYSTEM

DISCUSSION SHEET

ITEM #C8

Topic: **Actuarial Review Required by Texas Government Code 802.1012**

Discussion: Section 802.1012 of the Texas Government Code requires that the City of Dallas hire an independent actuary to audit the most recently prepared actuarial valuation every five years. Staff will provide an overview of the process and the timeline with the Board.

Regular Board Meeting – Thursday, August 8, 2024

DALLAS POLICE & FIRE PENSION SYSTEM

DISCUSSION SHEET

ITEM #C9

Topic: **Portfolio Update**

Discussion: Investment Staff will brief the Board on recent events and current developments with respect to the investment portfolio.

Regular Board Meeting – Thursday, August 8, 2024

DALLAS POLICE & FIRE PENSION SYSTEM

Portfolio Update

August 8th, 2024

Board Meeting

Executive Summary

- **Estimated YTD Return (As of 7/31/24):** 6.4% for DPFP Portfolio; 9.6% for Public Portfolio (ex-Cash) which makes up 73% of the assets.
- **Liquidation of private market assets remains a top focus.**
  - $19M of distributions received YTD with ~$9M coming from AEW during month of July.
- **Custodian Search:** Board approved hiring BNY for custodian services on July 11th, 2024.
- **Rebalancing Actions:** At the end of July 2024, the staff rebalanced $17M from active Public Equity managers to restore the Safety Reserve back to the 9% target.

Investment Initiatives – 2024 Plan

Q3 2024

- Recommended Asset Allocation mix presented to IAC
- Albourne Private Credit Overview to IAC
- Albourne On-Boarding
- Agriculture Portfolio Review
- Asset Allocation Review to Board

Q4 2024

- Investment Policy Statement review and updates
- Discussion of when to initiate new private market investments
- Private Market Planning – Update IPS provision, pacing studies, etc.

2025 & Beyond

- Initial New Private Market Investments

2024 Asset Allocation Study Timeline

January IAC
Meketa Mean Reversion Presentation and Staff Asset Allocation Planning Review.

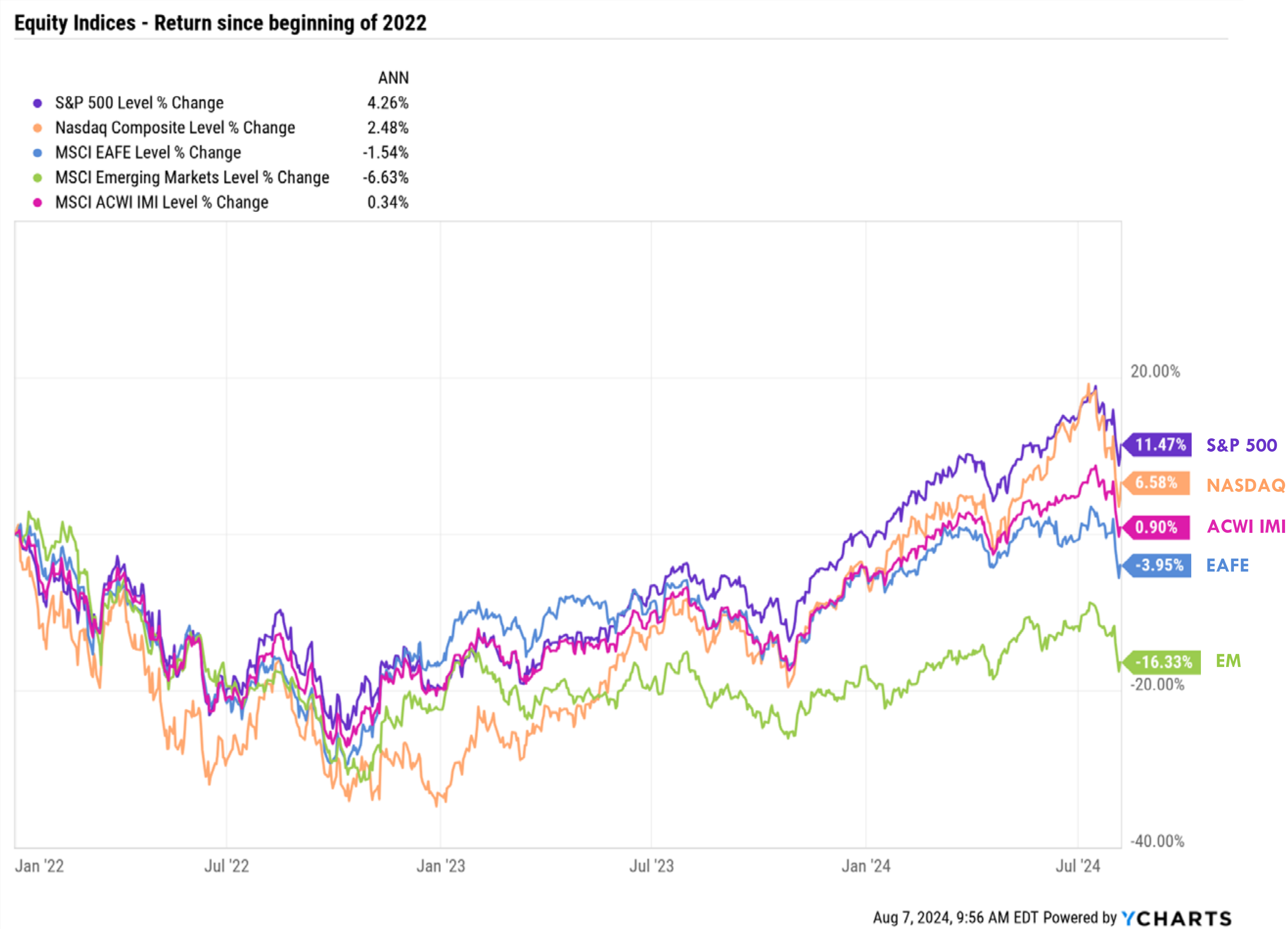
Late January
Meketa releases 2024 Asset Allocation Assumptions.

March IAC
Staff and Meketa review possible Asset Allocation mixes with IAC.

August IAC
EM Education and review of recommended mix with IAC.

September Board
Asset Allocation study presented to Board.

Equity Market Returns (1/1/22 to 8/6/24)



DALLAS POLICE & FIRE PENSION SYSTEM

Recent Equity Market Drawdown

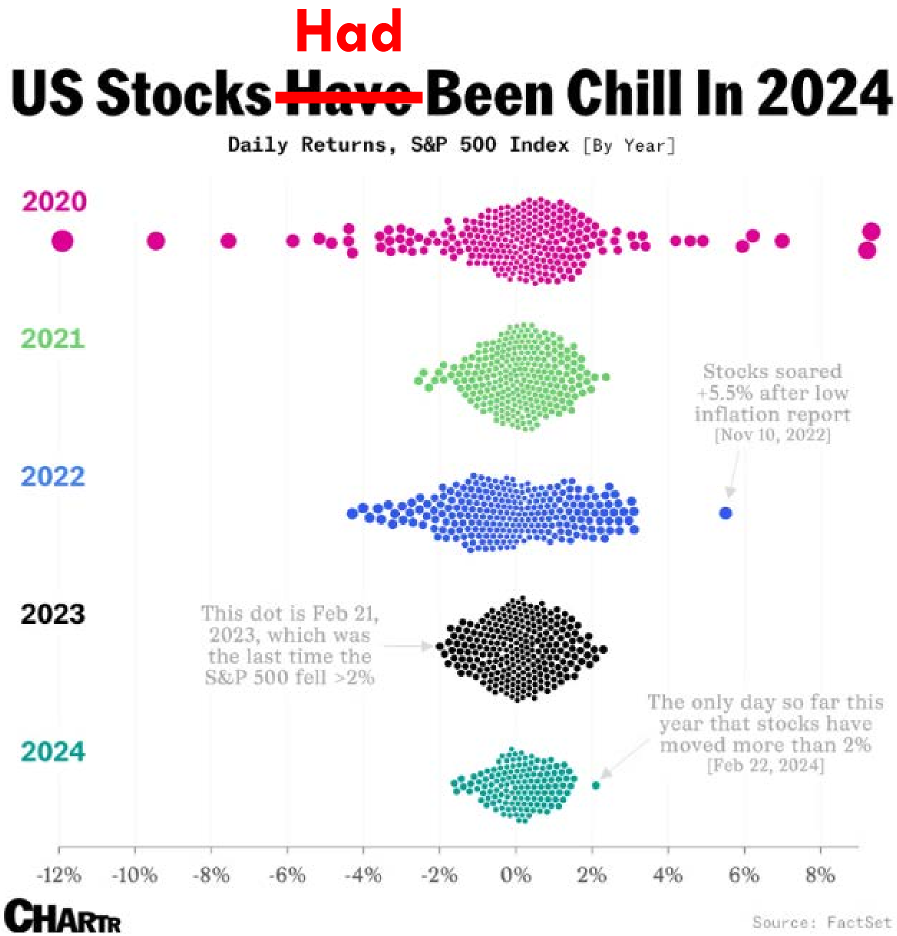
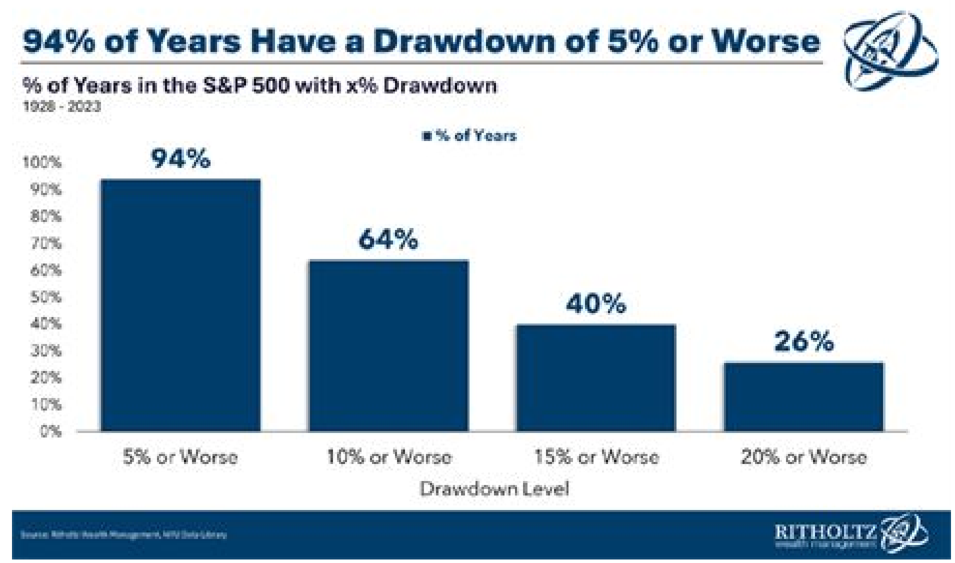
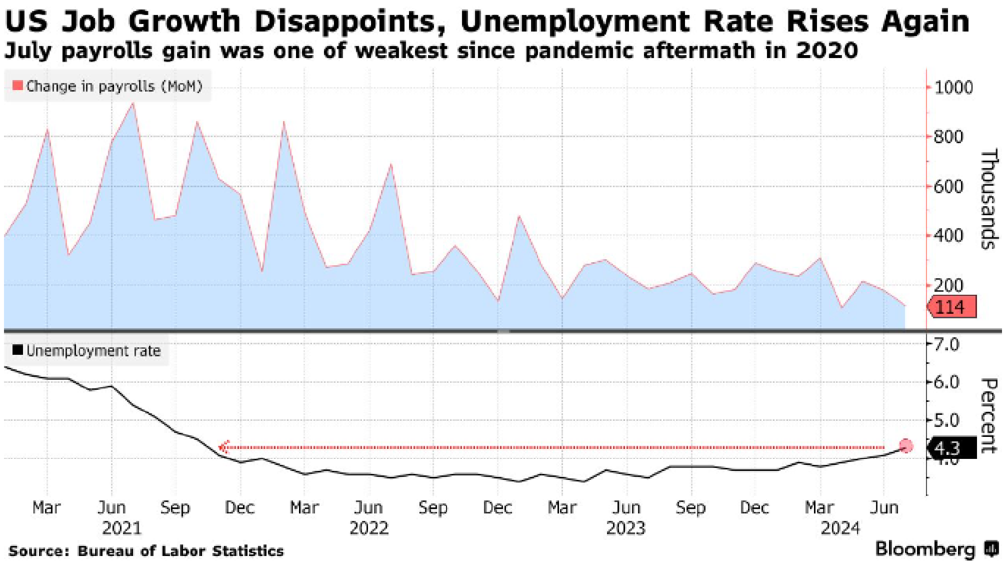


Chart as of 7/17/2024



Jobs Report & Interest Rates



25bp Cuts by EOY	Probability implied by Fed Funds Futures			
	Today 7-Aug-24	- 1 Day 6-Aug-24	- 1 Week 31-Jul-24	- 1 Month 5-Jul-24
6 Cuts	4.80%	5.10%	0.00%	0.00%
5 Cuts	28.50%	29.90%	0.10%	0.00%
4 Cuts	47.80%	48.30%	7.90%	1.80%
3 Cuts	18.90%	16.60%	62.70%	27.20%
2 Cuts	0.00%	0.00%	29.20%	47.50%
1 Cut	0.00%	0.00%	0.10%	20.90%
No Cuts	0.00%	0.00%	0.00%	2.70%

Source: CME Group FedWatch Tool. Based on Fed Funds Futures pricing as of 8/7/24.

- **Dovish Tone:** The Fed tone was more dovish in July, and heavy emphasis continued to be placed on upcoming economic data driving future Fed decisions.
- **Jobs Disappoint:** Unemployment rose as the economy added few jobs in July.
- **Markets Reacted Sharply:** Futures pricing now implies a 100% probability of at least 3 rate cuts by year end, compared with just 29.0% in early July.

Public Markets Performance Snapshot

Public Markets (ex-Cash) currently make up 73% of DPFP Investment Portfolio.

Asset Allocation & Performance | As of July 31, 2024

Performance Summary Ending July 31, 2024	Market Value ($)	1 Mo (%)	YTD (%)	3 Yrs (%)	5 Yrs (%)
Total Public Portfolio (ex-Cash)	1,459,166,712	2.3	9.6	3.5	7.3
60% MSCI ACWI IMI Net/40% Bloomberg Global Aggregate Index		*2.3*	*7.2*	*1.2*	*6.0*
Public Equity	1,078,618,672	2.5	11.8	4.5	10.4
MSCI AC World IMI Index (Net)		*2.1*	*12.5*	*5.2*	*10.7*
Global Equity	978,691,687	2.8	12.2	5.0	10.8
MSCI AC World IMI Index (Net)		*2.1*	*12.5*	*5.2*	*10.7*
Boston Partners Global Equity Fund	120,521,538	5.0	11.4	9.0	11.8
MSCI World Net		*1.8*	*13.7*	*6.8*	*12.1*
Manulife Global Equity Strategy	120,593,386	3.8	13.0	7.3	10.8
MSCI ACWI Net		*1.6*	*13.1*	*5.8*	*11.0*
Walter Scott Global Equity Fund	120,760,767	0.7	8.4	3.9	10.4
MSCI ACWI Net		*1.6*	*13.1*	*5.8*	*11.0*
WCM Global Equity	120,970,025	-0.1	16.8	--	--
MSCI AC World Index Growth (Net)		*-0.9*	*15.3*	*4.7*	*13.4*
NT ACWI Index IMI	376,290,114	2.0	12.7	5.7	--
MSCI AC World IMI Index (Net)		*2.1*	*12.5*	*5.2*	*10.7*
Eastern Shore US Small Cap	61,377,822	8.8	13.4	--	--
Russell 2000 Index		*10.2*	*12.1*	*1.9*	*8.9*
Global Alpha International Small Cap	58,178,037	4.6	5.4	--	--
MSCI EAFE Small Cap (Net)		*5.7*	*6.2*	*-2.1*	*5.5*

Source: Meketa Investment

Public Markets Performance Snapshot

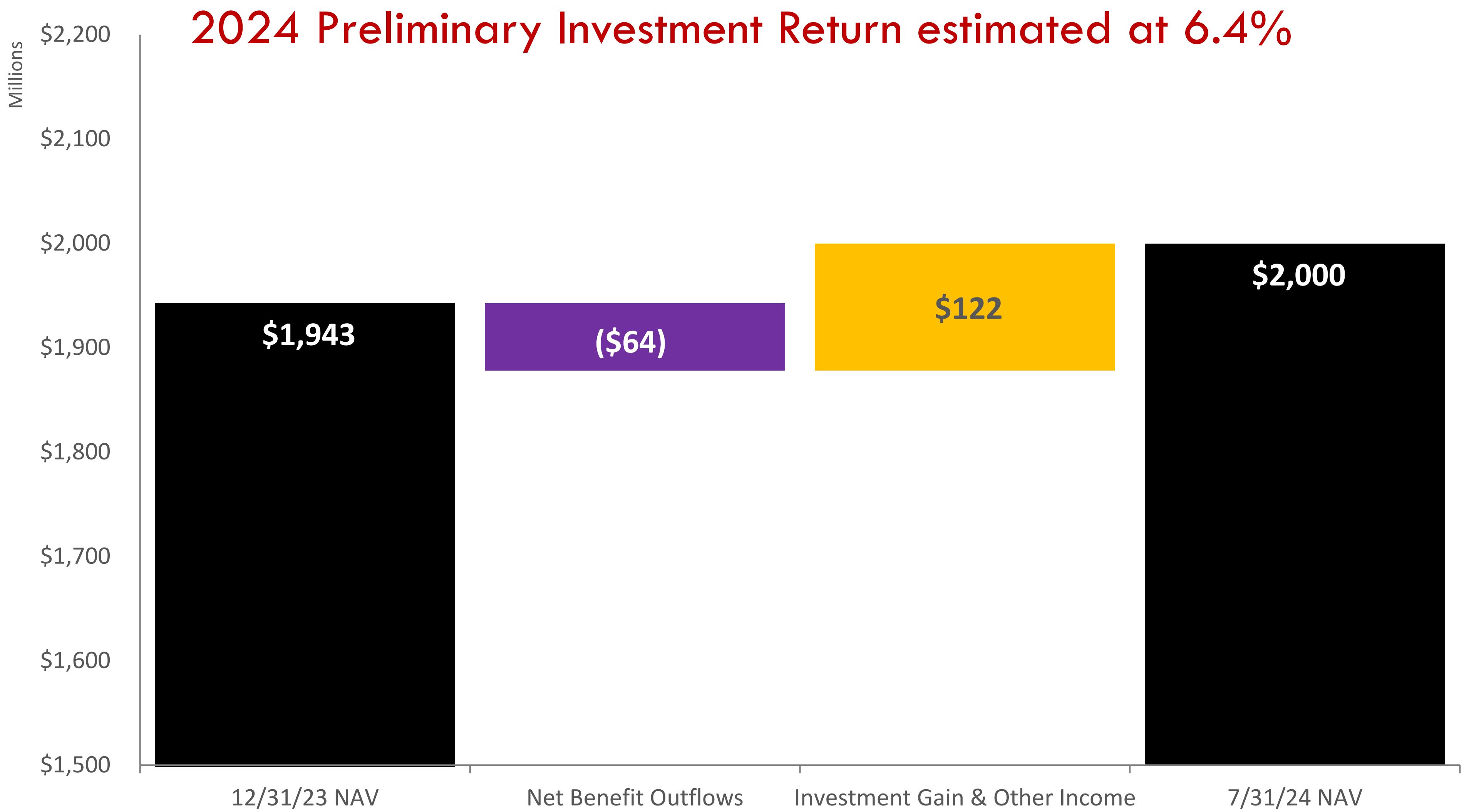
Asset Allocation & Performance | As of July 31, 2024

	Market Value ($)	1 Mo (%)	YTD (%)	3 Yrs (%)	5 Yrs (%)
Emerging Markets Equity	99,926,985	0.4	7.8	0.2	4.0
MSCI Emerging Markets IMI (Net)		*0.2*	*7.7*	*-2.0*	*4.2*
RBC Emerging Markets Equity	99,926,985	0.4	7.8	0.2	4.0
MSCI Emerging Markets IMI (Net)		*0.2*	*7.7*	*-2.0*	*4.2*
Public Fixed Income	380,548,040	1.7	3.6	-0.6	1.8
Bloomberg Global Multiverse Index		*2.7*	*-0.3*	*-4.8*	*-1.3*
IR&M 1-3 Year Strategy	118,092,438	1.3	3.0	1.3	2.0
Blmbg. U.S. Aggregate 1-3 Yrs		*1.2*	*2.6*	*0.9*	*1.4*
Longfellow Core Fixed Income	65,393,494	2.3	2.5	-2.2	--
Blmbg. U.S. Aggregate Index		*2.3*	*1.6*	*-2.6*	*0.2*
Aristotle Pacific Capital Bank Loan	64,214,138	0.8	5.2	6.8	5.6
Credit Suisse Leveraged Loan		*0.7*	*5.2*	*6.2*	*5.4*
Loomis US High Yield Fund	65,581,482	1.9	4.1	0.9	--
Blmbg. U.S. High Yield - 2% Issuer Cap		*1.9*	*4.6*	*2.2*	*4.2*
Metlife Emerging Markets Debt Blend	67,266,488	2.3	3.5	--	--
35% JPMEMBI Glbl/35% JPM CEMBI Broad Div/30% JPMGBI-EM Di		*1.8*	*2.7*	*--*	*--*

Source: Meketa Investment

2024 - Change in Market Value Bridge Chart

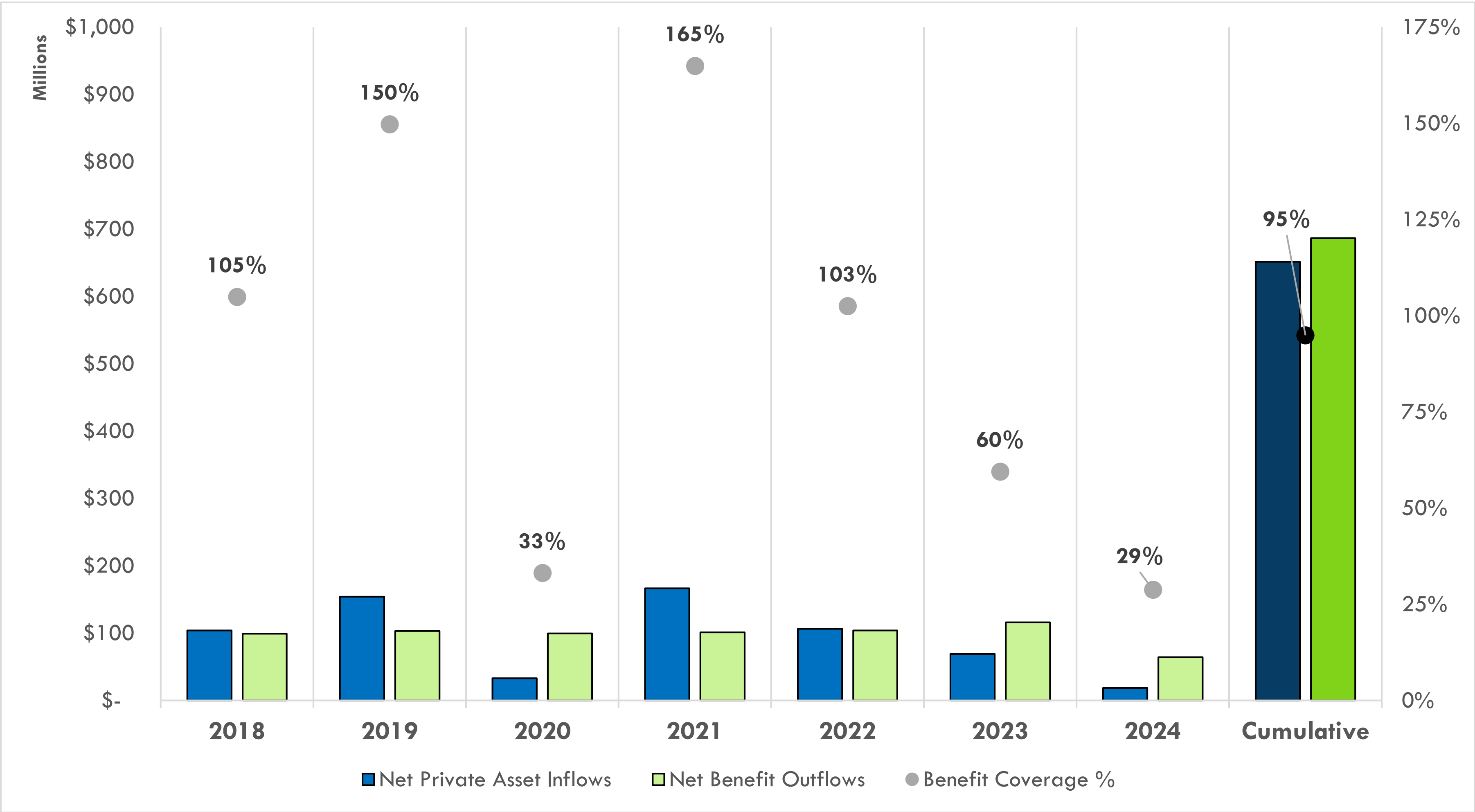
In Millions



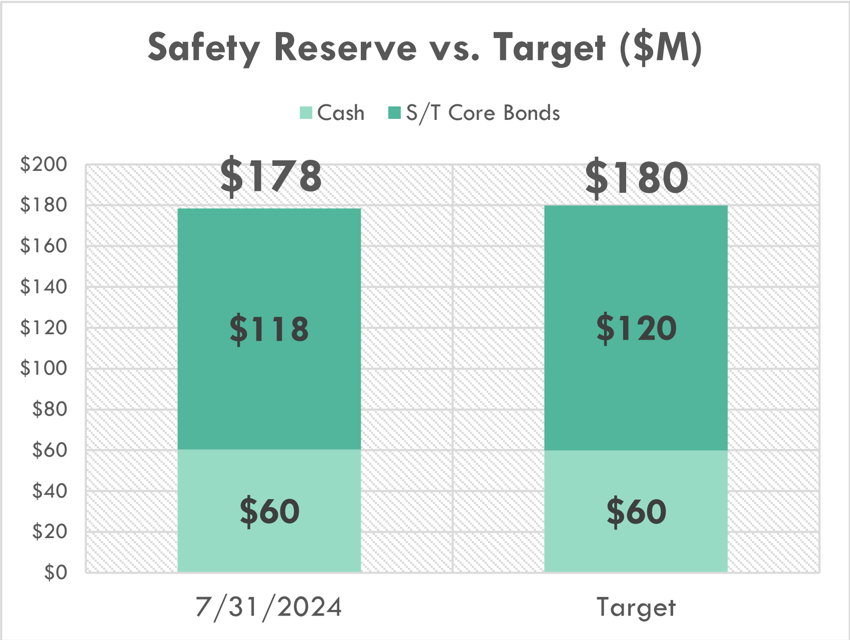
The beginning 12/31/23 value is from the Q4 2023 Meketa Performance Report and includes a one-quarter lag on private assets.
Numbers may not foot due to rounding.

Benefit Outflow Coverage

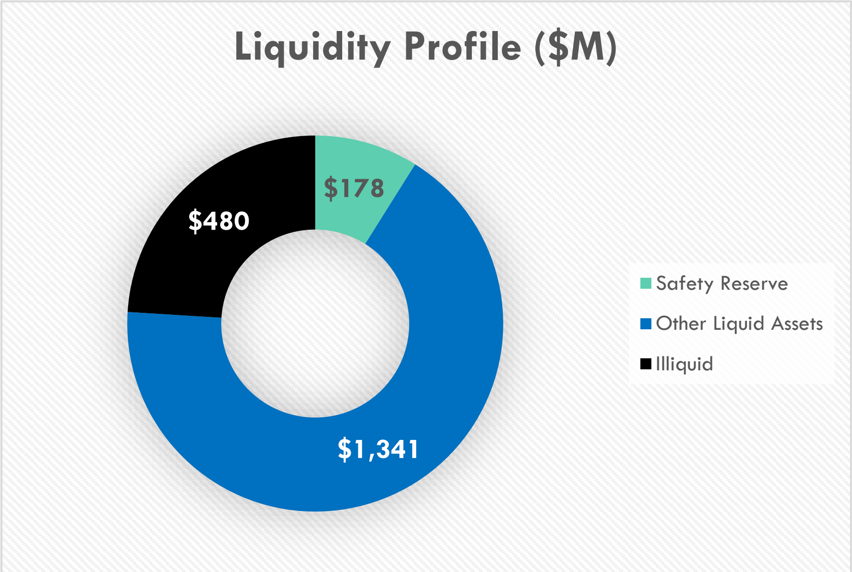
Since 2018, net Private Asset inflows have covered 95% of net benefit outflows.



Safety Reserve Dashboard



Projected Net Monthly outflows of **$8.6M** per month. Safety Reserve of **$178M** would cover net monthly outflows for next **20 months** or through **April 2026.**



Expected Cash Activity	Date	Amount ($M)	Projected Cash Balance ($M)	Projected Cash (%)
	7/31/24		**$60.4**	**3.0%**
City Contribution	8/2/24	$9.6	$60.6	**3.0%**
City Contribution	8/16/24	$9.6	$70.2	**3.5%**
Pension Payroll	8/28/24	($28.7)	$41.5	**2.1%**
City Contribution	8/30/24	$9.6	$51.2	**2.6%**
City Contribution	9/13/24	$9.6	$60.8	**3.0%**
Pension Payroll	9/25/24	($28.7)	$32.1	**1.6%**
City Contribution	9/27/24	$9.6	$41.8	**2.1%**
City Contribution	10/11/24	$9.6	$60.8	**3.0%**
Pension Payroll	10/23/24	($28.7)	$32.1	**1.6%**
City Contribution	10/25/24	$9.6	$41.8	**2.1%**

Numbers may not foot due to rounding.

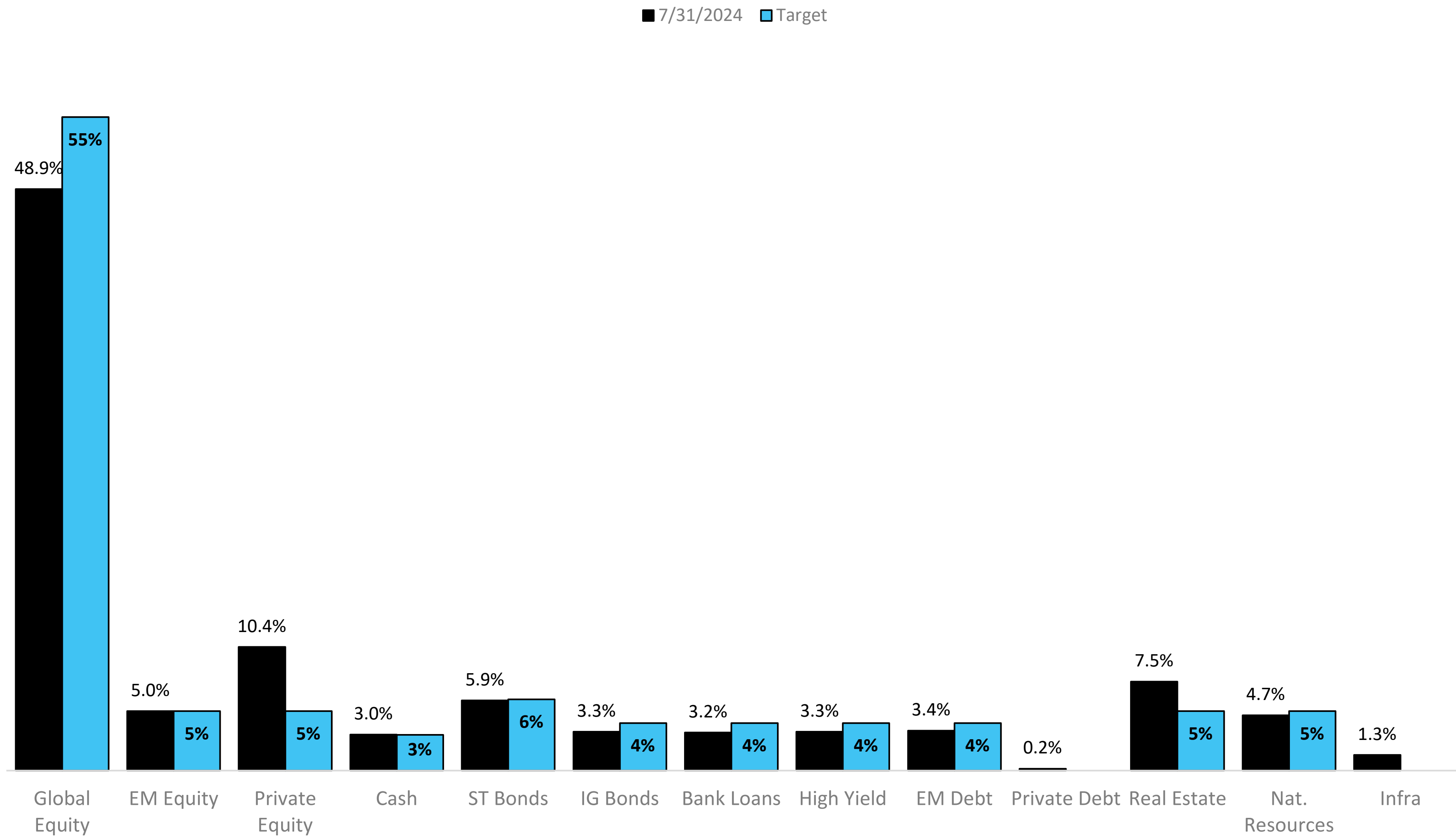
DALLAS POLICE & FIRE PENSION SYSTEM

Asset Allocation Detail

DPFP Asset Allocation	7/31/2024 NAV	%	Targets $ mil.	%	% of Target	Variance $ mil.	%
Equity	**1,287**	**64.3%**	**1,300**	**65%**	**99%**	**-13**	**-0.7%**
Global Equity	979	48.9%	1,100	55%	89%	-121	-6.1%
Boston Partners	*121*	*6.0%*	*120*	*6%*	*100%*	*1*	*0.0%*
Manulife	*121*	*6.0%*	*120*	*6%*	*101%*	*1*	*0.0%*
Walter Scott	*121*	*6.0%*	*120*	*6%*	*101%*	*1*	*0.0%*
WCM	*121*	*6.0%*	*120*	*6%*	*101%*	*1*	*0.0%*
Northern Trust ACWI IMI Index	*376*	*18.8%*	*500*	*25%*	*75%*	*-124*	*-6.2%*
Eastern Shore US Small Cap	*61*	*3.1%*	*60*	*3%*	*102%*	*1*	*0.1%*
Global Alpha Intl Small Cap	*58*	*2.9%*	*60*	*3%*	*97%*	*-2*	*-0.1%*
Emerging Markets Equity - RBC	100	5.0%	100	5%	100%	0	0.0%
Private Equity*	208	10.4%	100	5%	208%	108	5.4%
Fixed Income	**444**	**22.2%**	**500**	**25%**	**89%**	**-56**	**-2.8%**
Cash	60	3.0%	60	3%	101%	0	0.0%
S/T Investment Grade Bonds - IR+M	118	5.9%	120	6%	98%	-2	-0.1%
Investment Grade Bonds - Longfellow	65	3.3%	80	4%	82%	-15	-0.7%
Bank Loans - Aristotle Pacific	64	3.2%	80	4%	80%	-16	-0.8%
High Yield Bonds - Loomis Sayles	66	3.3%	80	4%	82%	-14	-0.7%
Emerging Markets Debt - MetLife	67	3.4%	80	4%	84%	-13	-0.6%
Private Debt*	3	0.2%	0	0%		3	0.2%
Real Assets*	**269**	**13.5%**	**200**	**10%**	**135%**	**69**	**3.5%**
Real Estate*	150	7.5%	100	5%	150%	50	2.5%
Natural Resources*	93	4.7%	100	5%	93%	-7	-0.3%
Infrastructure*	26	1.3%	0	0%		26	1.3%
Total	**2,000**	**100.0%**	**2,000**	**100%**		**0**	**0.0%**
Safety Reserve ~$162M=18 mo net CF	178	8.9%	180	9%	99%	-1	-0.1%
*Private Market Assets	480	24.0%	300	15%		180	9.0%

Source: Preliminary JP Morgan Custodial Data, Staff Estimates and Calculations.
Numbers may not foot due to rounding

Asset Allocation – Actual vs Target



DALLAS POLICE & FIRE PENSION SYSTEM

DISCUSSION SHEET

ITEM #C10

Topic: **Lone Star Investment Advisors**

Portions of the discussion under this topic may be closed to the public under the terms of Section 551.071 of the Texas Government Code.

Discussion: Investment staff will update the Board on investments with this manager.

Regular Board Meeting – Thursday, August 8, 2024

DISCUSSION SHEET

ITEM #C11

Topic: **Legal issues - In accordance with Section 551.071 of the Texas Government Code, the Board will meet in executive session to seek and receive the advice of its attorneys about pending or contemplated litigation or any other legal matter in which the duty of the attorneys to DPFP and the Board under the Texas Disciplinary Rules of Professional Conduct clearly conflicts with Texas Open Meeting laws.**

Discussion: Counsel will brief the Board on these issues.

DALLAS POLICE & FIRE PENSION SYSTEM

DISCUSSION SHEET

ITEM #C12

Topic: **Closed Session - Board serving as Medical Committee**

Discussion of the following will be closed to the public under the terms of Section 551.078 of the Texas Government Code:

a. Application for death benefits for disabled child 2024-1c
b. Disability application 2024-2d

Discussion: Staff will present applications for survivor benefits for a disabled child and a disability retirement in accordance with Sections 6.06(n) and 6.03 of Article 6243a-1 for consideration by the Board.

DALLAS POLICE & FIRE PENSION SYSTEM

DISCUSSION SHEET

ITEM #D1

Topic: **Public Comment**

Discussion: Comments from the public will be received by the Board.

Regular Board Meeting – Thursday, August 8, 2024

DALLAS POLICE & FIRE PENSION SYSTEM

DISCUSSION SHEET

ITEM #D2

Topic: **Executive Director's Report**

a. Associations' newsletters
- NCPERS Monitor (August 2024)
- NCPERS PERSist (Summer 2024)

b. Open Records

Discussion: The Executive Director will brief the Board regarding the above information.

Regular Board Meeting – Thursday, August 8, 2024

THE NCPERS
MONITOR

The Latest in Legislative News August 2024

NCPERS **Executive Director's Corner**

Mid-year Member Update from NCPERS: New Resources for Public Pension Professionals

By Hank Kim, Executive Director and Counsel, NCPERS

Photo Illustration © 2024, istock.com

Reflecting back on the first half of this busy year, I am extremely proud of how much NCPERS has accomplished so far and excited about how much we have grown in 2024. We have added several new hires to our headquarters staff, increasing our bandwidth for member programs. This mid-year point offers the chance to highlight important activities to date and our big plans for the remainder of 2024. Please make sure your organization is taking advantage of these resources and services we're providing the community.

2024 ACE Hits New Highs

Thank you for making our Annual Conference & Exhibition (ACE) in Seattle such a resounding success! This year's conference saw the highest participation by pension plan staff and trustees in the last five years. The program featured more than 70 plan leaders and industry experts sharing their valuable perspectives on top-of-mind issues. View our upcoming conferences to find your next opportunity to learn from and connect with members of the public pension community.

Interested in speaking at an upcoming event? Be sure to submit a speaker proposal for our upcoming Public Safety Conference by Monday, August 5th!

New Roundtable for Member Services Leads

We launched another new Pension Professional Roundtable, this one for directors of Member Services at pension plans. Over 60 pension plans attended these Roundtable calls in April and July, sharing their day-to-day challenges and solutions with their peers. Sign up here to participate in our pension fund roundtables for CEOs, CIOs, Communications, HR, and Member Services staff. Also, if there is a class of fund professionals who would benefit from having their own Roundtable, please email me. We're always open to exploring ways to support our members!

NCPERS Research Delivering Fresh Insights

Our research shines a light on the current state of public pensions, and several new studies were released in the first half of the year. Our *2024 Public Retirement System Study*, released in January, explores pension funds' fiscal condition and their fiscal and operational integrity. Access the member-only dashboard to see how your plan stacks up.

Our newest study *The Hidden Costs of Pension Reforms: Rising Income Inequality, Lagging Economic Growth*, finds that policies that reduce pension benefits or promote transitions to defined contribution plans, which are usually implemented to save money, may end up costing more due to the dynamic interrelationship between pension reforms, income inequality, the economy, and market returns. Learn more about the key findings at our 11th annual Public Pension Funding Forum, held August 18-20 in Boston.

We are currently analyzing data from the more than 150 funds that participated in the 2024 Public Pension Compensation Survey and expect to release our most comprehensive dataset yet on public pension professional salaries and benefits in September. Participating funds will receive free access to the in-depth survey data to help them make informed decisions about compensation, benefits, and hiring strategies. Pension funds that did not participate will still be able to purchase the report for $2,500.

Educational Webinar Series

The popularity of our Center for Online Learning has encouraged us to expand our webinar series this year with more frequent events and a broader range of topics. In the just the last few months we have provided webinars to our members on key proxy votes to watch, how DEI policies can impact recruitment and retention, and new research exploring how rising income inequality impacts pension reform and GDP growth. You can find all of our past webinar recordings at the NCPERS Center for Online Learning.

With education at the core of our mission and Hunter Bryant, our new Education Manager, expanding our capacities, you will find a continued emphasis on virtual learning opportunities in the coming months.

NCPERS Resource: Best Governance Practices for Public Retirement Systems

Earlier this year, NCPERS released a newly revised version of Best Governance Practices for Public Retirement Systems. This popular resource can provide plan leaders with a better understanding of governance documents, policies, strategic planning, and many other areas of responsibility.

Developed in collaboration with Segal Marco Advisors, contributing author Julian Regan talked with NCPERS about the purpose of this guide, common governance-related challenges, and best practices for public retirement systems to consider.

Legislative Recap

Most state legislatures are winding down or finished passing legislation for this session. In November, the election and pre-filing will kick off the next round of activity, of course, both nationally and at the state level.

This current pause is a good time for members to assess what's happened to date in the legislative arena. See our 2024 Legislative Summary for the enacted legislation from calendar year 2024 that relates to pension plans and retirement systems. On this national map, states with darker blue had more pension-related activity this year. Simply click a state and then scroll down the page to see a list of enacted legislation from the 2024 session relevant to pension issues, bill titles, and links to the language.

As always, NCPERS will keep its members updated on any legislative activity impacting pension plans over the rest of 2024.

What's Next?

There's plenty more on the horizon! Later this month, we're heading to Boston for the Public Pension Funding Forum, where pension executives, industry leaders, and academics will highlight the latest research and case studies on emerging funding solutions.

In late September, we're looking forward to bringing together HR professionals in Denver for three days of networking, peer-to-peer learning, and hands-on training with industry experts during the Public Pension HR Summit. This one-of-a-kind event will equip you with the knowledge and resources needed to navigate the complexities of public sector HR. Be sure to register by September 2nd to secure the discounted early-bird rates!

We're also gearing up for the Public Safety Conference, held October 27-30 in Palm Springs, and the pre-conference NCPERS University events—the Program for Advanced Trustee Studies (PATS) and NCPERS Accredited Fiduciary (NAF) program.

Outside of our educational events, you can always find the latest research, updates on legislative and legal issues, insights into investment trends, and much more in our publications or on our blog.

Stay tuned for updates in the coming months highlighting additional opportunities to take advantage of the many resources from NCPERS. I encourage you to reach out to our membership team at membership@ncpers.org with any questions. ◆

NCPERS **Feature**

Court Rules LACERA Can Oversee Its Own Personnel Decisions to Fulfill Fiduciary Duties

The decision from the California 2nd District Court of Appeals may be useful to other systems in supporting their independent fiduciary authority and responsibility over personnel as a key element of system administration.

By: Lizzy Lees, Director of Communications, NCPERS

Photo Illustration © 2024, istock.com

Nearly 60 percent of public pensions are struggling to attract and retain top talent, according to NCPERS 2023 Public Pension Compensation Survey. Compensation can certainly play a role, as plans are often unable to compete with private sector salaries, but some funds are struggling with the added challenge of not having oversight of their staff's employment classifications and salaries.

Los Angeles County Employees Retirement Association (LACERA) was recently facing these limitations until a June 2024 ruling from the California 2nd District Court of Appeals provided the fund with the authority to manage its personnel decisions in order to effectively fulfill its fiduciary duties.

NCPERS spoke with LACERA CEO Santos Kreimann about what led up the recent court ruling and what it means for the nearly $80 billion AUM fund going forward.

Historically, what kinds of challenges has LACERA had with recruitment and retention?

The LACERA Boards and the fund's executive leadership regularly assess staffing needs to meet the changing benefits and investment environment in which LACERA performs its fiduciary duty to our 190,000 members. LACERA's challenge, as with all public pension systems, is to build and evolve the right team with the right skills to fulfill the fund's fiduciary duty. The organizational chart that worked in the past may not be the best personnel structure for the future. The job market in which we recruit for the best talent also changes and has become more fluid and competitive. When position changes are required – such as new job classifications, a change in salary ranges for existing staff, or a change in the number of existing positions – and the Boards in their prudent judgment approve them as necessary for the required work of the association, LACERA must be able to move forward promptly to obtain final approval from the County of Los Angeles and begin recruiting.

LACERA values its relationship with the County as plan sponsor; however, LACERA's Boards must have the ability to make fiduciary decisions as to the personnel needs of the organization. Delay impacts LACERA's ability to serve members.

What led up to the 2021 lawsuit, *Los Angeles County Employees Retirement Association v. County of Los Angeles*, where LACERA sought to regain its right to manage the salaries and employment classifications of its staff?

In 2016 and 2017, LACERA conducted comprehensive personnel reviews, identifying the need for several new positions and salary adjustments to meet its strategic priorities and uphold its fiduciary duties to its members and beneficiaries. In 2018 and 2021, the County Board of Supervisors (BOS) ignored many years of its own precedent of implementing such changes without hesitation, and instead refused to adopt the necessary changes to the salary ordinance effectively blocking LACERA from implementing its personnel decisions. The County cited a decades-old case from a different Appellate District, claiming it provided them the authority to block the new classifications and salaries adopted by LACERA's independent fiduciary boards.

LACERA attempted to negotiate with the County to resolve the dispute, but these efforts were ultimately unsuccessful. After the County's 2021 action, LACERA filed a petition for writ of mandate, directing the BOS to comply with the law and adopt the LACERA approved salary ordinance. The trial court was bound to follow the decades-old case and ruled in favor of the County, but LACERA appealed the decision, which has resulted in the recent favorable ruling by the 2nd District. The opinion may be found here.

What does this ruling mean for your organization going forward?

The recent decision recognizes that, under the California Constitution and other governing law and trust principles, LACERA's independent fiduciary Boards have the authority to make final decisions as to necessary classifications and salaries, free of political influence by nonfiduciaries. The decision means that, going forward, LACERA's Boards will be able to make personnel decisions when needed and implement them promptly for the benefit of members without delay or change by the Board of Supervisors or County personnel.

What could this decision potentially mean for other public pensions across the country?

Fiduciary and trust law are similar across the country. The decision may be useful to other systems in supporting their independent fiduciary authority and responsibility over personnel as a key element of system administration. How can interested candidates apply for open roles at LACERA?

LACERA is an award-winning workplace with career opportunities for professionals in areas ranging from investments to human resources. Open LACERA positions may always be found at www.lacera.com/who-we-are/careers. ◆

NCPERS **Feature**

Recognizing the July 2024 Class of NCPERS Accredited Fiduciaries

NCPERS would like to recognize the 13 public pension trustees and staff who most recently earned their Accredited Fiduciary designation, demonstrating their commitment to and knowledge of plan governance best practices.

By: Lizzy Lees, Director of Communications, NCPERS

The NCPERS Accredited Fiduciary (NAF) Program is an accreditation program specifically designed and tailored for individuals involved in public pension governance. Divided into two parts, NAF 1&2: Governance & Finance and NAF 3&4: Risk Management & Human Capital, trustees and staff who complete the program have the opportunity to earn their Accredited Fiduciary (AF) designation, signaling their expertise in these critical areas.

NAF is held twice per year (in the spring and the fall) allowing for small class sizes where participants can freely discuss challenges and opportunities while diving into best practices for plan governance, oversight, and administration. The fall 2024 program will be held October 26-27 in Palm Springs, immediately before the Public Safety Conference.

NAF participants who complete the program—covering governance and the board's role; investment and finance; legal, risk management, and communication; and human capital—are eligible to earn their Accredited Fiduciary designation. In order to do so, they must first demonstrate mastery of the content through an exam.

NCPERS would like to recognize the 13 public pension trustees and staff who most recently passed the exam to earn their AF designation, demonstrating their commitment to and knowledge of plan governance best practices:

- Edward Bean, Somerville Retirement Board
- Angela Budde, City of Key West General Pension Plan
- Louis Fiorino, San Bernardino County Employees' Retirement Association (SBCERA)
- Danny Gregg, District of Columbia Retirement Board
- Donald Kendig, Fresno County Employees Retirement Association
- Chad King, Louisiana Municipal Police Employees' Retirement System
- Everett Robbins, Anchorage Police & Fire Retirement System
- Anthony Ross, City of Austin Employees' Retirement System (COAERS)
- Diana Thomas, Austin Police Retirement System
- James Thompson, Denver Employees Retirement Plan (DERP)
- Grant Walker, Prince George's County Fire Pension Fund
- Belinda Weaver, Austin Fire Fighters Relief & Retirement Fund
- Lina Zapata, City of Sunrise General Employees Retirement Plan

NAF is part of NCPERS University, a suite of recurring educational programs tailored to the needs of trustees at each level of their journey. NAF is intended for trustees and public pension administrators with at least two years of experience. Learn more about the NAF Program and enroll in the fall 2024 class to start earning your Accredited Fiduciary designation. ◆

NCPERS **Feature**

Defined Benefit Plan Court Rulings: NYC Pension Fossil Fuel Divestment Case Dismissed

By: Tony Roda & Kimber Y. Brewer, Williams & Jensen

Photo Illustration © 2024, istock.com

On June 1, 2020, the U.S. Supreme Court dismissed *Thole v. U.S. Bank* in a 5-4 opinion, holding that defined benefit (DB) plan participants do not have proper authority under the law to bring a breach of fiduciary duty claim where the participants do not have a "concrete" financial stake in the lawsuit.

Thole involved an ERISA plan, not a public pension plan governed by the federal Internal Revenue Code and applicable state and local law. However, on July 3, 2024, the New York State Supreme Court dismissed *Wong v. New York City Employees' Retirement System* for lack of standing, thereby providing a valuable example of how *Thole* may find practical application to public pension plans in state courts.

To establish standing, a plaintiff generally must show that the defendant's actions have caused the plaintiff to suffer a specific loss or harm to an extent requiring judicial intervention. In *Thole*, the plaintiffs brought a class action lawsuit under ERISA against several parties, including U.S. Bank, for allegedly mismanaging the DB plan in which they are participants. In this case, the plaintiffs needed to show that they suffered a concrete injury as a result of the defendants' purportedly inappropriate investment decisions, presently or in the future.

A crucial factor impacting the Court's decision was that the plan in question was not a defined contribution plan (DC) or a trust, but instead was a DB plan. The overall value of the payments distributed to participants by a DC plan or private trust typically fluctuate in direct relation to investment decisions made by the fiduciaries. Conversely, in general, participants in a DB plan receive a fixed distribution for life that does not change despite successful or ineffective investment choices.

Applied to the circumstances in *Thole*, the pension plan participants were not at risk of any current or future financial loss as a result of any alleged mismanagement on the plan fiduciary's part because they would receive the same monthly pension payments regardless of the litigation's outcome. In short, the plaintiffs were unable to show an adequate financial stake beyond their ERISA statutory right to bring a claim.

In *Wong*, the pension plans at issue were also DB plans and the plaintiffs made several standing arguments analogous to those in *Thole*. In this era of full-throated attacks on any decisions using environmental, social, or governance (ESG) factors in investment decisions, the underlying claims made by the plaintiffs were that the fiduciaries who made the investment decisions for the three New York City pension funds – the New York City Employees Retirement System, the Teachers' Retirement System of the City of New York, and the Board of Education Retirement System of New York – breached their fiduciary duties of loyalty and prudence to plan participants by divesting from oil and gas industry equities.

Primarily relying on *Thole*, the New York State Supreme Court opinion held that the *Wong* plaintiffs were not at risk of current or future monetary loss due to alleged mismanagement because they are similarly entitled to a fixed monthly DB distribution. As such, the plaintiffs in *Wong* also were unable to establish the requisite concrete loss or injury.

The *Wong* plaintiffs presented arguments to distinguish their circumstances from *Thole* in order to establish standing, but these arguments failed. Although state courts are not required to comply with federal standing requirements, New York state law has an equivalent requirement, and *Wong* did not meet that standard. Also, the New York State Supreme Court did not apply trust law to *Wong* for the same reasons as *Thole*, i.e., DB pension distributions are less like disbursements to trust beneficiaries and more like a contract. It dismissed the remaining arguments for being speculative, including that defendants would be able to avoid judicial review if the plaintiffs were not granted standing by this specific court in this lawsuit. Finally, a DB plan's theoretical inability to fulfill its payment obligations was found equally insufficient to establish a legal injury.

As I've mentioned in prior articles, ESG will continue to play out in the courts, in the halls of Congress, and in the Executive Branch agencies for years to come. The New York lawsuit at its core was motivated by anti-ESG thinking, but fiduciary breach suits are nothing new to the judicial system. I expect to see more cases in this vein brought in the state court system in the next few years, despite the strong rulings on lack of standing in the DB context thus far. ◆

Tony Roda *is a partner at the Washington, D.C. law and lobbying firm* ***Williams & Jensen****, where he specializes in legislative, regulatory, and fiduciary matters affecting state and local pension plans. He represents the National Conference on Public Employee Retirement Systems and state-wide, county, and municipal pension plans in California, Colorado, Georgia, Kentucky, Ohio, Tennessee, and Texas. Tony has an undergraduate degree in government and politics from the University of Maryland, J.D. from the Catholic University of America, and LL.M (tax law) from the Georgetown University Law Center.*

Kimber Y. Brewer is a Legal Intern at Williams & Jensen. She is currently a J.D. candidate at American University Washington College of Law.

NCPERS **Feature**

Worthwhile Canadian Initiative?

By: Neil Hrab

Photo Illustration © 2024, Pexels.com

Worthwhile Canadian Initiative" was once, with tongue firmly in cheek, selected by the *New Republic* magazine in an informal contest as the most boring headline imaginable. The recent news that Canada's federal government has officially set itself a goal of "Encouraging Pension Funds to Invest in Canada" might be similarly greeted by deep yawns south of the border.

However, the broader issues raised by this decision will be of more than slight interest to American defined benefit (DB) plans and their stakeholders.

This effort will be brought to life through an official working group headed by a highly-respected former Bank of Canada governor, Stephen Poloz (equivalent to a US Federal Reserve chief) and aided by the federal Canadian Ministry of Finance. In typical understated Canadian style, it will likely rely more on private meetings and written submissions to gather input than large-scale public hearings.

The working group's goal is, as summarized by the government, to "explore how to catalyze greater domestic investment opportunities for Canadian pension funds. This working group will identify priority investment opportunities that will grow Canadians' pension savings – that meet Canadian pension plans' fiduciary and actuarial responsibility, spur innovation, and drive economic growth."

To put this into the American political vernacular, it sounds as if the Canadian government believes it can separate "winners and losers" when it comes to domestic investment opportunities, and wants to try to steer the pensions accordingly.

This development may come as a surprise to informed American ears. Haven't many of the large Canadian pensions for years been attributing a good degree of their consistent success in generating steady returns to the fact that they are run at arms-length from pressures coming from elected officials, or other self-interested parties?

Hasn't that long been part of the Canadian pensions' "secret sauce" – that their leaders and managers answer for the success or failure of their strategies to independent boards of directors, allowing the plans to orient themselves to making optimal asset allocations based on their projected liabilities?

What happens to that successful formula if the large Canadian pensions become answerable in some way for their investment mix to distant bureaucrats working in Ottawa, Canada's capital?

With a timely paper, the reigning academic authority on Canada's pensions, Keith Ambachtsheer has, with help from two colleagues, answered this question in precise terms.

To sum up, Ambachtsheer's paper makes the case that if the arms'-length character of the Canadian pension plans' operations and decision-making is undermined through government-directed investments, this would "compromise existing governance functions" and "expose pension plan members to potential financial losses."

The paper goes on to argue that the government would be wiser to try to foster more pension investment in the domestic market by helping these pools of capital to become more active investors in cash-generative parts of Canada's infrastructure that are currently out of the pensions' reach for a variety of reasons. This would include the country's major airports, for example.

Ambachtsheer's paper subtly makes another crucial point that Canada's government may want to consider while it awaits the working group's findings. As his paper notes in passing, the large Canadian pensions collectively serve the interests of "millions" of individuals by investing their retirement savings.

The implied warning to elected officials in the Ambachtsheer paper could be taken to mean something like: *Tread carefully here, because there are far more people watching than you may think. Especially if they stand to lose money because of government trying to "fix" something that isn't broken.*

Interestingly, shortly after the paper's appearance, Stephen Poloz, the government-announced working group's head, emphasized publicly that he is more focused on achievable and "actionable ideas" rather than proposing major changes to how the pensions currently invest at home.

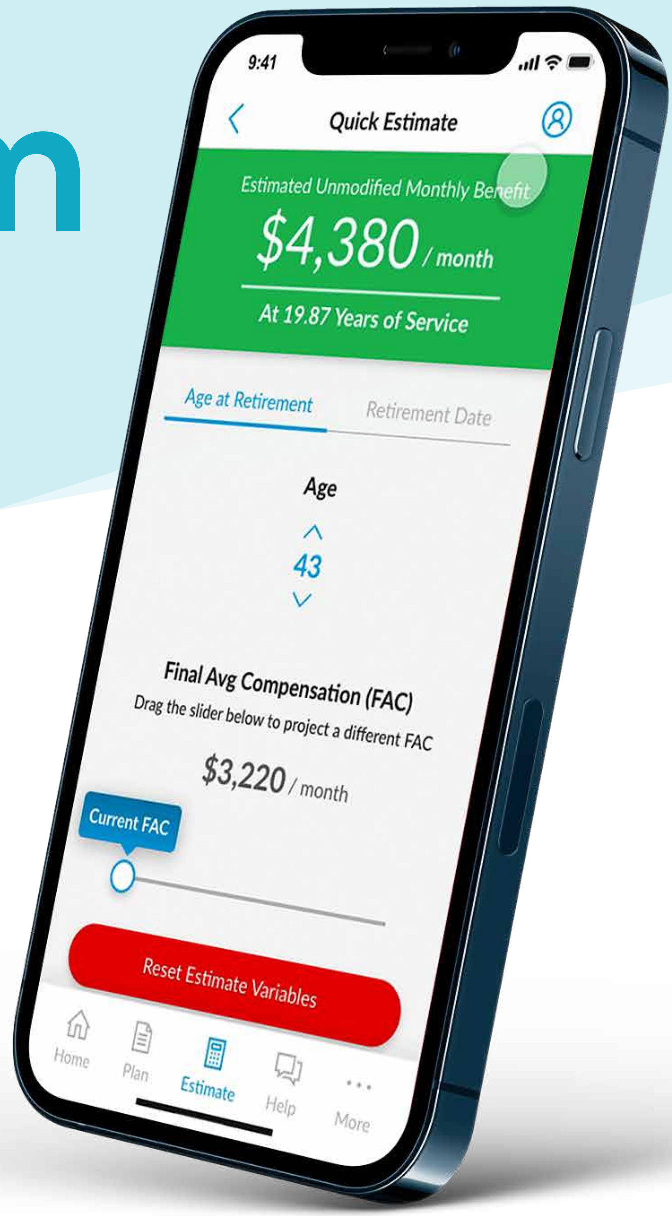
This could be taken to mean Poloz is more likely to focus in his final report on what government can do to make domestic investing more attractive and profitable for the pensions, rather than how the pensions can be muscled into following government investment diktats that could prove costly to their respective memberships.

One expression that Canadian and US politics share is that of "the third rail," in reference to policy proposals which are so controversial as to be absolutely untouchable – like the dangerous electrified third rail in a railway line.

As the government reviews Keith Ambachtsheer's paper, it may come to realize it owes him a debt of thanks. In careful and nuanced language, he's reminded elected officials to be careful and not get singed — or worse — by carelessly playing on the pension third rail. ◆

Neil Hrab worked for more than 12 years in the Canadian pension sector. This piece is written in a purely personal capacity.

NCPERS PensionX Digital Platform



NCPERS has partnered with Digital Deployment to offer its members a **10% DISCOUNT** on PensionX, the premier digital platform that securely enables pensions to engage with active and retired participants via a mobile self-service app and portal.

Learn more about this new NCPERS member benefit at ncpers.org/pensionx

NCPERS Around the Regions

Oklahoma Judge Permanently Blocks Enforcement of Controversial Anti-ESG Law

Oklahoma District Court Judge Sheila Stinson issued a permanent injunction against enforcement of a controversial anti-ESG law banning public pension funds from doing business with financial firms said to be hostile to the oil and gas industry.

READ MORE *Source: Pensions & Investments*

NYC Pension Adopts 'First in Nation' Guidelines for Private Real Estate Investments

The standards were developed by the Office of the New York City Comptroller, which manages the investments of New York City pension funds, as well as For the Long Term, a nonprofit organization which advises treasurers, comptrollers, controllers and auditors at pension funds across the country.

READ MORE *Source: Chief Investment Officer*

Omaha, Nebraska Teacher Pension Fund Facing $1 Billion Shortfall; State Takeover Looms

Omaha Public Schools, the largest school district in Nebraska, is less than 50 days from handing over management of its pension fund to the state. But a new state audit widened the scope of problems Nebraska could inherit from the Omaha School Employees Retirement System, leaders of the state retirement system were told.

READ MORE *Source: Nebraska Examiner*

Should All Colorado Substitute Teachers Be Members of PERA? The Question is Headed to Court.

A group of five Colorado school districts has turned to the courts to fight a new policy that would allow substitute teachers they hire through outside staffing agencies to benefit from the state's retirement system. The policy, school districts say, could cost them millions of dollars worth of retirement contributions for substitutes and make the already difficult task of finding enough subs to cover classrooms even harder.

READ MORE *Source: The Colorado Sun*

Don't Lump Us In' — Ohio Police Reject GOP's Pension System Overhaul Due to Teachers' Controversy

Ohio police officers are urging lawmakers not to punish them and the rest of the retirees for the controversy going on inside the teachers' retirement pension fund. Statehouse Republicans proposed combining all five public systems to cut costs and stop alleged corruption.

READ MORE *Source: News 5 Cleveland*

Led by Texas Teachers, Pension Funds Press Hedge Funds to Use Cash Hurdles with Fees

Institutional investors, including some of the largest pension funds, are calling on hedge funds to adopt cash hurdles in their incentive fee arrangements as a best practice standard for the industry, arguing that hedge funds are collecting "significant incentive fees based solely on skill-less returns generated from short rebate, securities lending, unencumbered cash."

READ MORE *Source: Pensions & Investments*

Photo Illustration © 2024, istock.com

UPCOMING EVENTS

August

Public Pension Funding Forum

August 18-20
Boston, MA

September

Public Pension HR Summit

September 24-26
Denver, CO

October

NCPERS Accredited Fiduciary (NAF) Program

October 26–27
Palm Springs, CA

Program for Advanced Trustee Studies (PATS)

October 26–27
Palm Springs, CA

Public Safety Conference

October 27-30
Palm Springs, CA

View all upcoming NCPERS conferences at www.ncpers.org/future-conferences.

NCPERS 1941 The Voice for Public Pensions

The Monitor is published by the National Conference on Public Employee Retirement Systems.
Website: www.NCPERS.org • E-mail: info@ncpers.org

PERSist

The Voice for Public Pensions

Summer 2024 | Volume 37 | Number 3

NCPERS Message

Which Pension Reform Initiatives Have (And Haven't) Worked?

Photo illustration © 2024, istock.com

"Public Pension Contributions Reach Record Yet Problems Persist." "State, Municipal Retirement Systems Remain Stuck in 'Pension Debt Paralysis." These are just two of the headlines that appeared recently in July. Coincidentally, the same week it was quietly reported that state and local pension plan's funded status continued to rise for the third consecutive quarter.

Even when the underlying news is good, the headlines around public pensions are often riddled with negative connotations. The push for so-called pension 'reforms' remains strong, despite extensive research showing that pensions are indeed sustainable, cost-effective, and critical to recruiting and retaining employees.

The latest research from NCPERS, *The Hidden Costs of Pension Reforms: Rising Income Inequality, Lagging Economic Growth*, explores the far-reaching effects of pension reforms that reduce benefits or close plans altogether. The study finds that these types of policies—which are usually implemented for the purpose of saving money—may end up costing more due to the dynamic interrelationship between pension reforms, income inequality, the economy, and market returns.

Policymakers are often tempted to make cuts to pensions in the face of tightening budgets, but this approach is rarely an effective tactic in the long run. Unfortunately, there is no one-size-fits-all approach to funding public pensions. But to fend off damaging reforms and to support the long-term health of our funds, we can learn what works—and what doesn't—from case studies, academics, and peer funds. This is how NCPERS Public Pension Funding Forum was developed.

Now in its eleventh year, the Forum showcases emerging funding solutions and delves into case studies that offer a practical perspective on which pension reform initiatives are most effective. The program provides insights into the fiscal, political, social, and economic forces impacting pension systems across the country.

This year's Forum, held August 18-20 in Boston, has a special focus on funding solutions for plans with a negative cashflow. These plans—often referred to as mature plans—are becoming increasingly common. Looking collectively at state and local plans in the US, all but four states had negative cashflows as of July 2023.

The 2024 program invites discussions on how demographic shifts and AI will likely impact the workforce, exacerbating the challenges already facing mature plans. Public plan trustees, executives, and industry leaders will share innovative investment, policy, and actuarial strategies to address these funding gaps. View the agenda here to see the full lineup of speakers.

While funding levels are generally trending up, it's still crucial for plan staff and trustees to stay informed about funding solutions (and threats) to ensure the long-term health of their funds. Understanding the landscape can help us better protect our funds from damaging rhetoric and reform initiatives that are bad for plans, participants, and the public. Register here to join this important conversation at the 2024 Public Pension Funding Forum. ◆

In This Issue

NCPERS In This issue

NCPERS In This issue

The Unintended Consequences of Benefit-Tier-Related Pension Reforms

By: Jonathan Scarpa, Segal

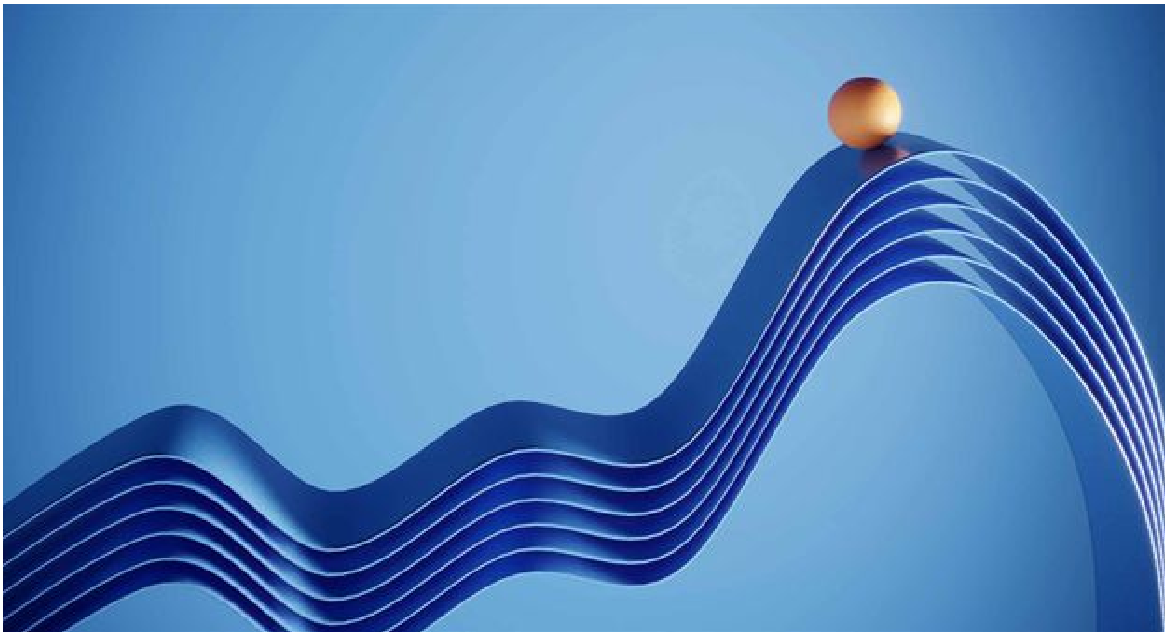


Photo illustration © 2024, istock.com

In the wake of the global financial crisis of 2008 and 2009, many public pension plans adopted reforms intended to address rising pension costs and improve funded levels. One common approach was to create less valuable, lower-cost benefit tiers for new hires. Often, these new benefit tiers included some combination of adjusting retirement ages, the period of compensation in which a benefit is determined, and the benefit multiplier (the percent of salary replaced for each year of service).

Applicable for new hires, these changes alone did not reduce a plan's then-current unfunded liability. Rather, cost savings were expected to be realized over the long term as members of the new benefit tier gradually phased into the active population.

Backpedaling on reform

Fast-forward fifteen years and we have seen increasing pressure to reverse the benefit reforms. Some plans have already done so, while others are proposing legislation or at least considering it.

At the time of enactment, it was clear these changes would reduce member benefits. What may not have been as clear was the influence the changes would have on employee behavior and morale as well as the resulting broader impact.

The most critical point to remember is the historical value public employees place on retirement benefits. Those benefits are an essential component of their working career. And the importance of defined benefit plans is not limited to employees. For employers, the plans and their individual provisions represent valuable attraction, retention, and workforce-management tools.

Multiple layers of impact from reform

On the surface, descriptions of benefit tier reductions do not always capture the true impact on members. Digging deeper to quantify the impact helps to illustrate why these changes can influence employee behavior in unexpected ways.

Consider a sample plan that increased the final average compensation period from three to five years and decreased the benefit multiplier from 1.75% to 1.50% per year of service. For a member of the new tier entering the plan at age 30 and retiring at age 65, the percentage of salary replaced at retirement decreases from 59% to 50%.

However, this example does not consider a potential elimination in benefit subsidies prior to normal retirement age. Changes like this were common and can exaggerate the difference highlighted above. To illustrate this, consider the same plan that also added a modest 3% reduction in benefits per year of retirement below age 65 for the new benefit tier. In this scenario, the same member retiring at age 60 would have a decrease in the percent of salary replaced at retirement from 51% to 36%.

Understanding the full picture

These examples highlight the material loss in benefits for a career public employee. If a public employee were to remain in the system, they must supplement their retirement income with personal savings to close the gap, delay retirement, or do both. Considering the value public employees place on retirement benefits, this situation can create a negative impact on morale. This drop in morale is a partial motivation for the push from public employee organizations to reverse the reforms implemented years ago. The timing of this trend, a decade or more after reforms, is relevant because members in the newer, less generous tiers represent an increasingly larger percentage of the working population.

Alternatively, members may be incentivized to leave the plan for either a similar public job that provides a more attractive benefit or the private sector. Numerous recent studies have shown increased member turnover among plans that have implemented significant benefit reductions, highlighting a direct link between benefit levels and employee behavior.

There are several outcomes of high attrition felt by the employer, the public, or both. When a member leaves employment, an employer must allocate resources to hire and train new employees. Attracting new employees may prove to be difficult given the less-attractive benefit levels. Higher attrition also results in a less-experienced workforce and may contribute to a loss in the quality of public services. This may be especially true in industries where a significant amount of expertise is required, like public safety employees and teachers.

Finding the balance

The balance between benefit levels and the cost of funding them is delicate. The reforms adopted over a decade ago were intended to manage the cost of public pensions. However, in retrospect, the unintended consequences of benefit-tier-related changes on employee behavior, morale and the public plan environment require understanding and consideration. ◆

Jonathan Scarpa, FSA, MAAA, EA *is a Vice President and Consulting Actuary in Segal's New York Office, where he works with statewide and local public retirement systems. His responsibilities include presenting to boards of trustees and other audiences, reviewing actuarial valuations, conducting experience studies and managing special projects for public sector retirement systems. Examples of special projects include analyzing benefit design changes, evaluating legislative proposals and helping clients navigate complex funding and solvency issues. Mr. Scarpa is a member of Segal's New York Region Experience Study Committee and Segal's Public Plan Report Committee that ensures valuation reports meet client needs and adhere to actuarial standards.*

Financial Gravity

By: Kevin Kneafsey, Allspring Global Investments

Photo Illustration © 2024, istock.com

Why has the rapid rise in interest rates—from 0% to 5.5%—had such little impact on the U.S. economy? Many speculate it's due to a continued shift away from manufacturing and toward services, making the economy less debt dependent and less rate sensitive. But manufacturing hasn't changed much, hovering around 10% to 13% of gross domestic product (GDP) since the 1950s.

What has changed is the amount of borrowing. Scaled by GDP, borrowing has continued to trend upward from around 130% through the 1950s, 1960s, and 1970s to roughly double that today. As with much of the world, the U.S. economy has become *more* debt dependent, making it crucial to solve this puzzle. To shed some light, we introduce two concepts—first is the idea of financial gravity and second is the tale of a 4-foot man in a 5-foot hole.

Financial gravity posits that the weight of interest rates on the economy is a function of the level of interest rates and the period of time that rates stay at that level.

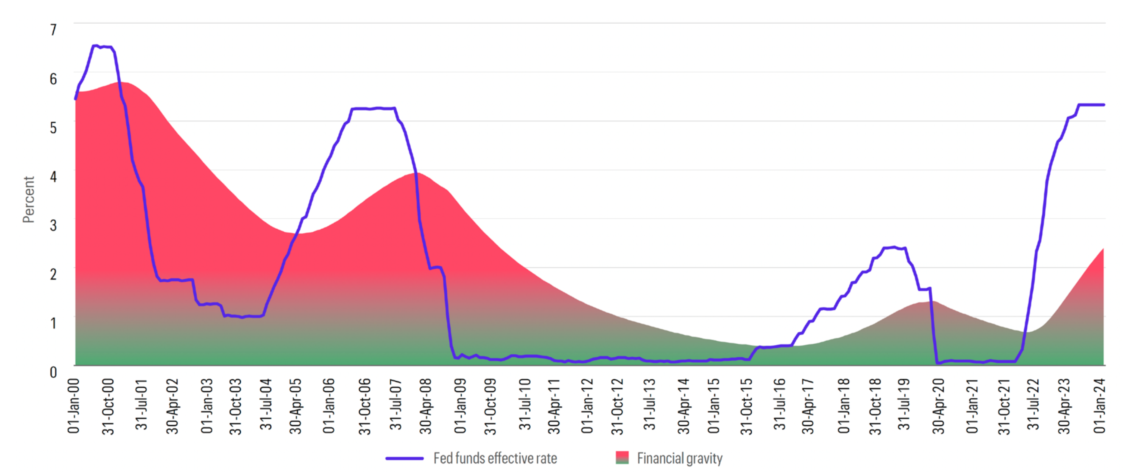
Financial gravity = rate x time

Markets have focused on the number of rate cuts. But the better question is how long rates stay at the higher level. Consider that a 500% interest rate for one minute would capture headlines but have virtually no impact. However, a 5% rate increase for five years could crush the economy. We are currently less than two years into the higher rate environment.

> ***Markets have focused on the number of rate cuts. But the better question is how long rates stay at the higher level.***

This is illustrated by the period from the post Global Financial Crisis (Q2 2009) through 2021. Financial gravity was very weak, with rates near zero for most of these 12 years. In that kind of environment, all assets tend to rise as there's little gravity to hold them down. Rates rose rapidly in 2022, but it takes time for the weight of higher rates to be felt. The equity market has priced in very low financial gravity, expecting significant rate cuts soon.

Financial Gravity Lags Changes in the Federal Funds Rate



Sources: Allspring and Bloomberg Finance L.P., 31-Jan-00 to 31-Mar-24

Time is an important factor because 1) it takes time for investors' expectations to adjust, 2) the longer the interval, the more debt that needs to be refinanced and the more new debt that needs to be issued, and 3) how long it takes to adjust is determined, in part, by how much debt is floating rate (the impact is swift) versus fixed rate (the impact is more delayed). Most U.S. debt is fixed rate, but heavy users of floating-rate debt—such as private equity—are already feeling the pinch of higher rates. In Europe and elsewhere, floating-rate debt is weighing more heavily on consumers.

The tale of a 4-foot man in a 5-foot hole illustrates another key point: the path of interest rates matters a lot. For this analogy, let the maximum base rate an investor can afford be represented by how tall he is. If an investor's maximum base rate is 4%, he is 4 feet tall; the depth of the hole he's in is set by the prevailing base rate, currently 5%. A 4-foot man in a 5-foot hole cannot get out—he can't afford higher loan payments, and he can't afford to refinance. So, a rate cut from 10% to 5% reveals a bunch of tall people in waist-deep holes. These borrowers can refinance, and many new borrowers—those 6-, 7-, 8-, and 9-feet tall—can also afford to borrow.

In Europe and elsewhere, floating-rate debt is weighing more heavily on consumers.

Conversely, we've just moved from a 12-year period of near-zero base rates to 5%, which means a lot of 1-, 2-, 3-, and 4-foot-tall people are now stuck in 5-foot-deep holes. A higher-for-longer environment may spark many defaults. Time and rate—financial gravity—determine the impact.

Investors should think about potential implications of a higher-for-longer scenario, including:

- Equities have priced in a no-landing scenario. If you're waiting for a meltdown, be patient—equity markets will crack along with the economy.
- Europe may lead the next global recession as over-leveraged consumers spend less.

- Real estate and other rate-sensitive assets have put off reality by not transacting. Financial gravity is not their friend, and neither is time.
- Private equity could struggle to return capital in a falling market and to pay more on debt than expected. Bankruptcies by private equity–owned firms would then spike.
- As the economy slows and rates fall, investors may prefer fixed-rate over floating-rate debt. Private credit has their money now but will struggle to raise new capital.
- Possible winners include gold; high-quality, medium-to-longer-term fixed-rate debt; trend-following strategies; long-volatility strategies; and market-neutral strategies. ◆

Real estate and other rate-sensitive assets have put off reality by not transacting. Financial gravity is not their friend, and neither is time.

Disclosures:

Material is for informational purposes only and professional, institutional or qualified investors. Not for retail use outside the U.S.

MATERIAL DOESN'T CONSTITUTE AN OFFER/SOLICITATION, NOT INTENDED TO BE USED IN JURISDICTION OR WITH PERSON WHERE WOULD BE UNLAWFUL.

Allspring Global Investments™ is the trade name for the asset management companies of Allspring Global Investments Holdings, LLC, a holding company indirectly owned by certain private funds of GTCR LLC and Reverence Capital Partners, L.P. Unless otherwise stated, Allspring is the source of all data, current or as of date stated; past performance not a guarantee of future results; all investments contain risk; content for informational purposes with no representation regarding adequacy, accuracy or completeness. Opinions/estimates aren't necessarily that of Allspring, are subject to change. This communication doesn't contain investment advice, recommendations or research, as defined under local jurisdiction regulation.

ALL-06182024-dcleavkn

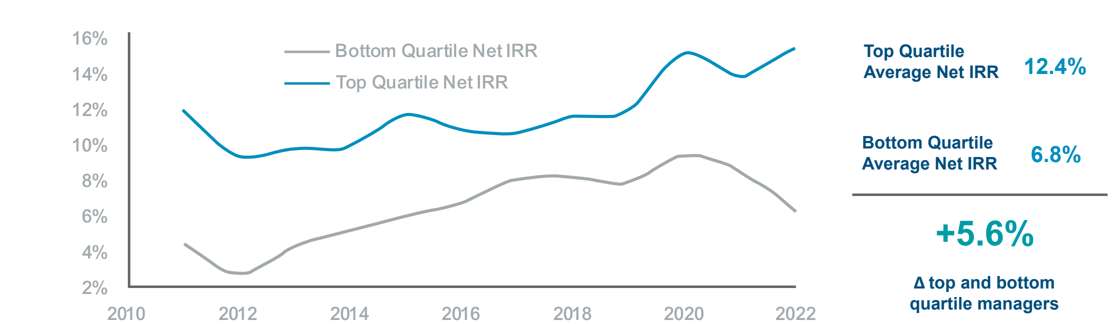
Kevin Kneafsey, Ph.D., *is a senior investment strategist for the Systematic Edge Multi-Asset team at Allspring Global Investments. He joined Allspring from its predecessor firm, Wells Fargo Asset Management (WFAM). He has taught classes at the University of Arizona in the Eller College of Management and at the University of California, Berkeley, in the masters in financial engineering program at the Haas School of Business. He currently teaches at CalPoly San Luis Obispo. Kevin began his investment industry career in 1994. He earned a bachelor's of business administration degree in accounting and finance from the University of New Mexico and a Ph.D. in finance from the University of Arizona.*

What Drives A Private Credit Manager's Outperformance?

By: Zia Uddin, Monroe Capital

Photo Illustration © 2024, istock.com

Secular tailwinds in Private Credit from higher base rates, regulatory changes, portfolio resiliency, and an increasingly supportive economic environment have led to the rapid growth of Private Credit. However, not all managers within Private Credit are the same, and extensive diligence is required by public pension plans on where to allocate capital within the asset class. We expect there will be increased divergence between managers over the coming years as elevated interest rates reduce operating flexibility for borrowers and increase the potential for defaults. There is also more competition for deals today due to asset class growth from new entrants. Outperformance in any asset class is typically most pronounced in periods of higher volatility. Managers that deliver top quartile performance will likely have a differentiated strategy, extensive track record, scaled origination platform, and a focus on capital preservation with lender protections to avoid losses.



Source: Preqin - Direct Lending North America (2024)

We believe the following factors are critical for alpha generation in Private Credit:

Differentiated Strategy

Private Credit managers that specialize and avoid commoditized lending will experience lower levels of competition and provide differentiated offerings to borrowers leading to higher returns. Examples of differentiated strategies include specialized sector expertise (e.g. Software, Healthcare or Recurring Revenue lending), highly bespoke/structured loans (e.g. Opportunistic, Distressed lending), or focus on highly fragmented markets with supply/demand imbalances (e.g. smaller transactions). These competitive attributes lead to higher pricing, lower leverage, and superior lender protections than more commoditized offerings.

Private Credit managers that specialize and avoid commoditized lending will experience lower levels of competition and provide differentiated offerings to borrowers leading to higher returns.

Extensive Track Record

With many new entrants into the direct lending space, it is important to assess whether managers have delivered consistently strong performance across multiple economic cycles. This will demonstrate that a manager has the ability to consistently apply a credit philosophy across vintages and not just during the recent bull market. According to Preqin, experience is also rewarded by the market when fundraising. New managers have flatlined in terms of average fund size, while experienced managers have grown rapidly.

A strong track record of deals can also generate incumbency lending opportunities. The ability to deploy capital via add-ons is an important tool for managers to grow their portfolio as M&A levels declined from the peaks observed in 2021 and 2022. In 2023, add-on acquisitions represented 35% of all transactions, versus 21% at the end of 2021. Along with generating deal flow, incumbency lending provides significant history and information on a borrower, resulting in materially lower risk of loss.

The ability to deploy capital via add-ons is an important tool for managers to grow their portfolio as M&A levels declined from the peaks observed in 2021 and 2022.

Scaled Originations Platform

A large origination team allows a manager to generate diverse deal flow and enables a manager to be highly selective and allocate towards high-quality borrowers. A dedicated originations platform *separate* from underwriting and workout teams reduces bias in credit evaluation and allows experts in workout/recovery to handle the distressed credits in the portfolio.

Focus on Capital Preservation to Avoid Losses:

With rates expected to stay higher for longer, alpha will be generated through a persistent focus on capital preservation rather than reaching for incremental yield that may lead to losses down the road.

- *Emphasis on Defensive, Recession Resilient Sectors*: Managers should focus on industries that have products and services that can generate sales no matter what stage the economic cycle is in. For example, portfolio mixes that prioritize industries including healthcare, business services, and technology are often more recession resilient and defensive than investments that focus on retail and consumer companies.

- *Bottoms-up Underwriting Approach*: Deal fundamentals must be underwritten from the bottom up rather than relying on the caliber and reputation of a sponsor. Managers who work with a wide array of sponsors are not beholden to a few sponsors for deal flow and are more able to have constructive conversations if a deal is underperforming.

- *Dedicated Workout Capabilities*: In-house workout experience can be a key differentiator when evaluating GPs. Dedicated workout teams can focus on early intervention, allowing a lender and borrower to have flexibility to discuss potential solutions before a borrower breaches a covenant or defaults on payment. The enhanced and more frequent oversight of underperforming deals can lead to fewer defaults and higher recoveries than the market.

In conclusion, Private Credit will continue to grow due to secular tailwinds in the asset class, however, not all lenders are created equal. In this higher current yield environment, strong managers with differentiated strategy, track record and capabilities will outshine commoditized lenders. ◆

Zia Uddin *currently serves as President of Monroe Capital. He is also responsible for the Institutional Direct Lending activities, as Co-Portfolio Manager, Institutional Portfolios of Monroe Capital. As President, he focuses on Monroe's day-to-day and strategic long-term growth initiatives. He joined the firm in 2007 and is a member of Monroe's Investment Committee. Mr. Uddin has 32 years of management consulting, corporate finance, private equity, turnaround and investing experience.*

Maritime Private Credit: The Investment Opportunity Set Making Waves

By: Bryan Schneider, EnTrust Global

Photo Illustration © 2024, istock.com

Over the last few years, private credit has garnered extensive attention from institutional investors with assets under management across the strategy now approaching record levels. Allocators looking to deploy capital across the strategy generally fall into two categories. One, a group of allocators who have developed their strategic roadmap for building out their exposure; these investors have made initial allocations and are now in the market seeking diversifying approaches. The second is a group of allocators earlier in their capital deployment cycle, who are seeking value-added strategies within private credit while aiming to avoid some of the pitfalls often associated with investment areas that have experienced rapid growth. Maritime Finance, with its compelling fundamentals, offers a solution that can solve the needs of both allocator groups.

Maritime Industry Overview

The global maritime industry, or shipping, plays a pivotal role in the worldwide economy. With 85% of world trade carried out by sea,[1] its importance cannot be overstated. The industry serves as the backbone of international trade and commerce, facilitating the movement of goods, raw materials, and energy resources across the world.

The global fleet, which is generally mobile and can relocate and operate globally, is comprised of approximately 108,000 assets (vessels that have a combined estimated value of approximately $1.8 trillion).[1] The industry consists of numerous differentiated and uncorrelated sectors whose earnings and values are driven by idiosyncratic supply and demand factors. The industry's ownership structure is highly fragmented and is estimated to consist of approximately 3,900 shipowners, of which the vast majority are considered small- or medium-sized operations. The industry is capital intensive, requiring an estimated $90 billion per annum[2] to facilitate the purchase of new and used vessels and refinancing of existing loans.

Compelling Fundamentals of Maritime Finance

Historically, traditional bank lenders provided the majority of debt capital to service the maritime industry. However, the maritime industry has experienced a steady trend of declining lending activity from such banks, that can be traced back to the aftermath of the 2007-2008 Global Financial Crisis. As a result of the new banking regulations that followed the Global Financial Crisis (Basel III & IV, among others), banks were required to raise the amount of capital they held against certain loans, greatly diminishing their economic desire to add maritime exposure, leading to a material retreat – a decline of 36% in total bank lending and a decline of 62% in European bank lending since 2010 – from providing financing to the capital-intensive maritime industry (see Figure 1).[3] Concurrently, the maritime fleet has grown by 30% since 2010, together with global GDP expansion (see Figure 2), amplifying the disparity between capital needed by the industry and its actual availability. Moreover, recent turmoil within the banking sector, exemplified by the collapse of Silicon Valley Bank and the distressed acquisition of Credit Suisse (which had a $10 billion shipping portfolio), has further dampened banks' extension of credit.

Figure 1: Bank Shipping Portfolios Have Decreased Over Time ($ billions)

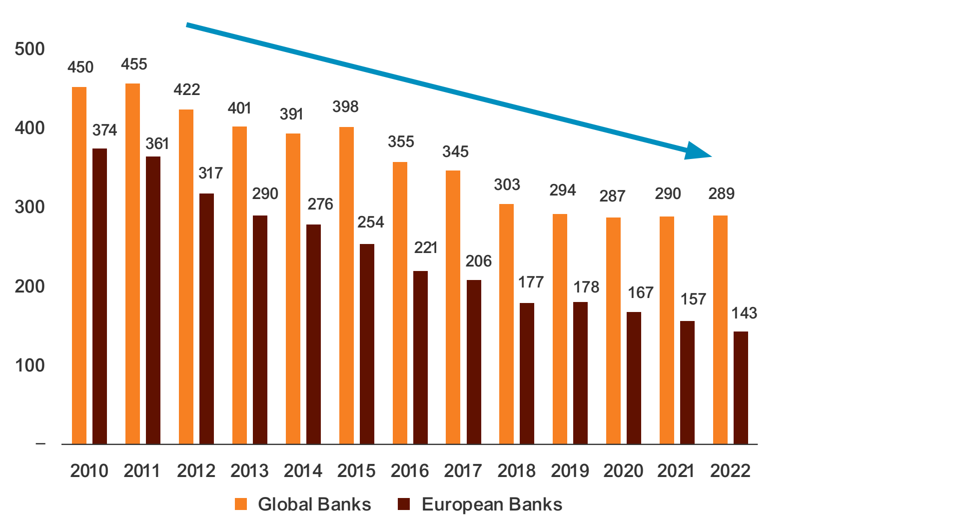
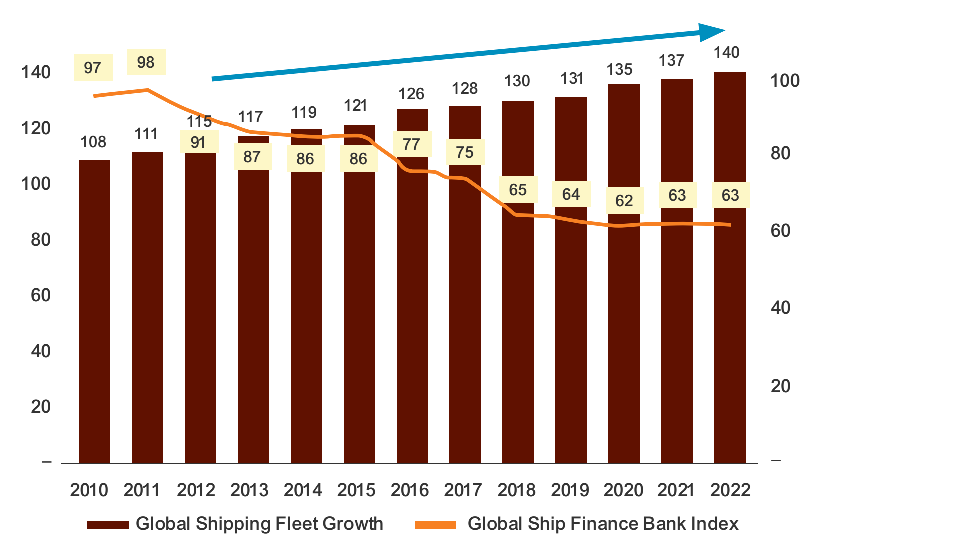


Figure 2: The Global Shipping Fleet Has Increased Over Time



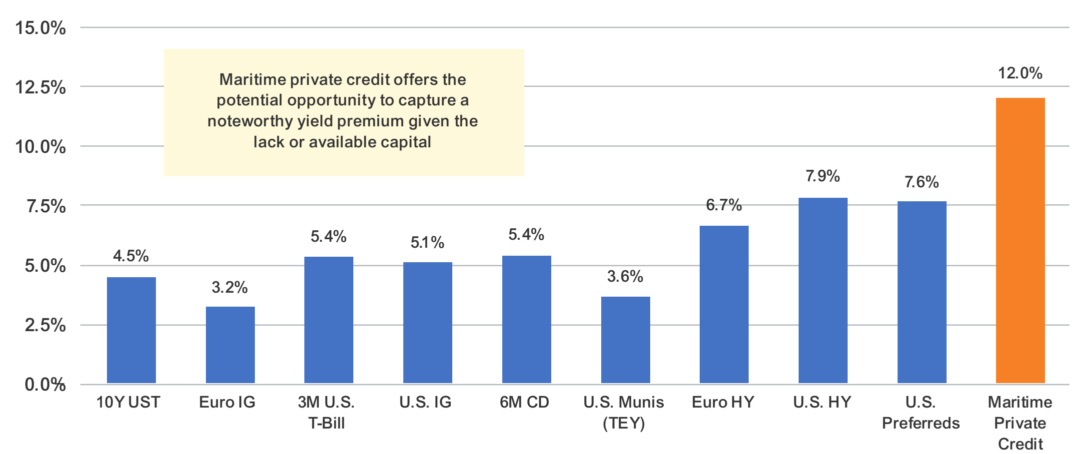
Potential Investor Advantages

Given the supply/demand imbalance between the ever-increasing capital required by shipowners and the limited availability of credit due to the pullback by traditional bank lenders, alternative lenders exert a degree of negotiating leverage that generally enables them to extract favorable terms for their investors, due to the scarcity of the capital they provide. These favorable terms come in the form of a notable return premium that can be achieved, and tight risk controls though robust security and covenant packages.

A strong understanding of the maritime industry and the differences among the various assets, as well as proprietary sourcing capabilities, are essential to building a durable portfolio of shipping loans and investments. These conditions have greatly limited new entrants. This distinctiveness sets the maritime industry apart from other over-banked areas characterized by intense competition and easier access to capital – factors that have led to the proliferation of "covenant-lite" structures over time in those other industries.

It is important to highlight that the potential yield premium from maritime private credit, as shown in the table below (Figure 3), is achieved through investments typically characterized by moderate leverage, which are senior in borrowers' capital structures and collateralized by highly liquid assets that are indispensable to global trade, and which have consistently demonstrated limited correlation with a wide range of investment alternatives, including other real asset sectors. For allocators, the attractive fundamentals of maritime finance allow them to diversify their portfolios, while participating in opportunities that can offer superior returns on a risk-adjusted basis. ◆

Figure 3: Current Yields Across Various Fixed Income Type Investment Options



***Bryan Schneider** is a Senior Managing Director & Product Specialist at EnTrust Global on the Blue Ocean team. Mr. Schneider joined the firm as a Senior Vice President in January 2010 with 10 years of prior experience in the financial services industry. Before joining the firm, Mr. Schneider was a Senior Consultant at NEPC where he was responsible for overseeing more than $20 billion of client investments. Mr. Schneider holds a BA in Mathematics from Saint Anselm College and is a member of the Boston Security Analysts Society, the CFA Institute and holds the Chartered Financial Analyst designation.*

Endnotes:

1 Source: Clarksons Shipping Intelligence Network as of January 2024.

2 Source: Clarksons World Fleet Monitor - September 2022.

3 Petrofin Research – 2023.

Supreme Court Holds That Pure Omissions Are Not Actionable Under Rule 10b–5(b)

By: Joshua W. Ruthizer and Antoinette Adesanya, Wolf Popper

Photo Illustration © 2024, alamy.com

On April 12, 2024, the U.S. Supreme Court decided *Macquarie Infrastructure Corp. v. Moab Partners, L.P.,*[1] and held that SEC Rule 10b–5(b)[2] prohibits only affirmative misstatements and half-truths (i.e., an affirmative statement that is misleading because it omits information). It does not prohibit pure omissions. In our view, this decision should not have a significant practical impact on future securities litigation.

Macquarie Infrastructure Corporation, through its subsidiary International-Matex Tank Terminals ("IMTT"), operated terminals that stored, among other things, No. 6 fuel oil. In 2016, the United Nations International Maritime Organization adopted regulation IMO 2020, which capped the sulfur content of fuel oil used in shipping at 0.5% by the beginning of 2020. No. 6 fuel oil has a sulfur content closer to 3.0%. Macquarie did not discuss IMO 2020 until February 2018, when Macquarie announced that IMTT's contracted storage capacity had dropped in part because of the structural decline in the No. 6 fuel oil market. Macquarie's stock price fell around 41%.

Moab Partners sued Macquarie, alleging violations of Section 10(b) of the Securities Exchange Act of 1934 and Rule 10b-5(b). Pursuant to the authority in Section 10(b), Rule 10b-5(b) makes it unlawful for persons to "make any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made, in the light of the circumstances under which they were made, not misleading."[3]

Moab alleged that Macquarie's statements were "false and misleading" because Macquarie "concealed from investors that IMTT's single largest product . . . was No. 6 fuel oil," which "faced a near-cataclysmic ban on the bulk of its worldwide use through IMO 2020."[4] Moab alleged, among other things, that (a) Macquarie was required to disclose the impact of IMO 2020 under Item 303 of SEC Regulation S-K, which requires disclosure of "a trend, demand, commitment, event or uncertainty is both presently known to management and reasonably likely to have material effects on the registrant's financial conditions,"[5] and (b) the omission of this information rendered affirmative statements false and misleading.

The District Court dismissed the complaint. The Second Circuit Court of Appeals reversed and reinstated the complaint. On review of the Second Circuit's decision, the Supreme Court unanimously held that "[p]ure omissions are not actionable under Rule 10b–5(b)."[6] The Court looked to the text of Rule 10b-5, which prohibits omitting material facts necessary to make the "statements made . . . not misleading," and concluded that "[l]ogically and by its plain text, the Rule requires identifying affirmative assertions (i.e., 'statements made') before determining if other facts are needed to make those statements 'not misleading.'"[7]

While this decision is important, in our view it is likely to have limited impact. Under Section 11 of the Securities Act of 1933, investors can still allege claims for pure omissions in connection with IPOs, SPOs, and other securities offerings. Section 11 prohibits any registration statement that "contain[s] an untrue statement of a material fact or omit[s] to state a material fact required to be stated therein or necessary to make the statements therein not misleading."[8] As the Court noted when comparing Section 11 to Rule 10b-5, Section 11 creates liability for both half-truths and a "failure to speak on a subject at all."[9] Also, most complaints alleging violations of Rule 10b-5(b) already allege affirmative statements that were rendered misleading due to the defendants' omissions. This is because prior to the Court's decision in *Macquarie*, there was a circuit split since at least three Courts of Appeals (Third, Ninth, and Eleventh) covering 15 states had ruled that a failure to disclose information required by Item 303 did not support a Rule 10b-5(b) claim.

Further, *Macquarie* does not address pure omissions under Rule 10b-5(a) or 10b-5(c),[10] which make it unlawful for any person to "employ any device, scheme, or artifice to defraud" or "engage in any act, practice, or course of business which operates or would operate as a fraud or deceit upon any person."[11] In 2019, the Supreme Court stated that "[i]t would seem obvious that the words in these provisions are, as ordinarily used, sufficiently broad to include within their scope the dissemination of false or misleading information with the intent to defraud."[12] We expect future securities actions to allege that pure omissions are violations of Rule 10b-5(a) and 10b5-(c), and for courts to opine whether these rules are broad enough to include claims for pure omissions. ◆

The author's bios can be found online at the Wolf Popper website:

Joshua W. Ruthizer, Partner

Antoinette Adesanya, Associate

Endnotes:

1 601 U.S. 257 (2024).

2 17 C.F.R. § 240.10b-5(b).

3 *Id.*

4 *Macquarie*, 601 U.S. at 261 (quoting *City of Riviera Beach Gen. Emps. Ret. Sys. v. Macquarie Infrastructure Corp.*, 2021 WL 4084572, *6 (S.D.N.Y. Sept. 7, 2021)).

5 17 C.F.R. § 229.303(a)(3)(ii).

6 *Macquarie*, 601 U.S. at 266.

7 *Id.* at 264.

8 15 U.S.C. § 77k.

9 *Macquarie*, 601 U.S. at 264.

10 *Id.* at 266 n.2.

11 17 C.F.R. § 240.10b-5.

12 *Lorenzo v. SEC*, 587 U.S. 71, 78 (2019).

The Supreme Court's *Macquarie Infrastructure* Decision: Pure Omissions and Half-Truths

By: James T. Christie and Jacqueline Meyers, Labaton Keller Sucharow LLP

Photo Illustration © 2024, istock.com

The United States Supreme Court's unanimous opinion in *Macquarie Infrastructure Corp. v. Moab Partners, L.P.* which held that claims premised on pure omissions are not actionable under Rule 10b-5(b).[1] Rather, actionable omissions must make an affirmative statement a misleading half-truth.

Through its holding, the Court resolved a longstanding circuit split and created consistency. Practically, the Court's decision is narrow because relatively few claims allege pure omissions as the sole basis for liability under Rule 10b-5(b). The decision also carries the potential to disincentivize companies from speaking on a particular troublesome subject matter, given that silence alone cannot give rise to a private securities fraud claim under Rule 10b-5(b).

Question Before the Supreme Court

Promulgated under Section 10(b) of the Securities and Exchange Act of 1934, Rule 10b-5(b) makes it unlawful to omit material facts in connection with buying or selling securities when that omission renders "statements made" misleading.[2] In *Macquarie*, the Court addressed the question of whether a failure to disclose certain known trends and uncertainties required by Item 303 of SEC Regulation S-K ("Item 303") could support a private action under Rule 10b-5(b), if the failure alleged is a "pure omission" and does not render any "statements made" misleading.[3]

Throughout its opinion, the Court declined to opine on issues "tangential to the question presented," including the meaning of "statements made" or application of its pure omission analysis to other subsections of Rule 10b-5.[4]

Factual & Procedural Background

Petitioner Macquarie Infrastructure Corporation ("MIC") owns a subsidiary that handles and stores certain chemicals, including No. 6 fuel oil, a byproduct with a typical sulfur content of 3%.[5] In 2016, the United Nations' International Maritime Organization ("IMO") formally adopted a regulation capping the sulfur content of fuel oil used in shipping at 0.5% by 2020.[6]

Despite IMO 2020 impacting MIC's subsidiary's ability to store No. 6 fuel oil due to its sulfur content, MIC did not discuss IMO 2020 in its public offering documents following its 2016 enactment.[7] In February 2018, however, MIC announced a drop in the amount of storage contracted for use by its subsidiary due in part to the decline in the No. 6 fuel oil market. Following this disclosure, MIC's stock price fell 41%.[8]

Moab Partners, L.P. ("Moab") filed suit in the Southern District of New York, alleging, among other things, a violation of Rule 10b-5(b) premised on MIC staying silent on IMO 2020's impact despite its Item 303 disclosure obligations.[9] The District Court dismissed Moab's complaint, and the Second Circuit reversed, concluding that a failure to disclose under Item 303—a pure omission—can support a claim under §10(b) and Rule 10b-5(b), without an otherwise-misleading statement.[10]

Analysis: Pure Omissions v. Half-Truths

In the context of Section 10(b) cases, pure omissions occur in a vacuum, "when a speaker says nothing, in circumstances that do not give any special significance to that silence."[11] By contrast, half-truths "state the truth only so far as it goes, while omitting critical qualifying information."[12] As the Court analogized, "[i]n other words, the difference between a pure omission and a half-truth is the difference between a child not telling his parents he ate a whole cake and telling them he had dessert."[13]

The Court reasoned that Rule 10b-5(b) does not proscribe pure omissions through its text.[14] Extending the analogy above, the Court interpreted Rule 10b-5(b) as requiring "disclosure of information necessary to ensure that the statements already made are clear and complete (*i.e.*, that the dessert was, in fact, a whole cake)."[15]

Despite its narrow holding, the Court clarified that private parties remain free to bring claims based on misleading half-truths and the SEC retains authority to prosecute regulatory violations.[16]

Practical Impact

The Court's decision resolved a long-standing circuit split.[17] However, cases alleging only pure omissions under Item 303 as a basis for liability under Rule 10b-5(b) are relatively rare.

Further, the Court declined to opine on the impact this ruling would have on claims brought pursuant to other subsections of Rule 10b-5, including scheme liability. The Court also did not opine on the effect that its rejection of pure omissions theories under Rule 10b-5(b) would have on lower court's analysis of actionable half-truths.[18] As a result, lower courts will be left to perform potentially varied analyses with respect to these open issues as they arise.

Practically, the most important aspect of the decision for plaintiffs will be that they must plead an affirmative representation, or half-truth, in connection with omissions-based theories under Rule 10b-5(b). Accordingly, to plead their claims effectively, practitioners will need to scour publicly available sources that are sufficiently related to the omitted information to render the statement a half-truth.

Further, the Court's ruling has the potential to incentivize companies to stay silent with respect to troubling topics. Because companies can choose not to speak on a given subject, plaintiffs might have to rely on savvy analysts to ask pointed questions about such topics to elicit company responses that plaintiffs can use to plead their claims. ◆

James T. Christie *is a Partner in Labaton Keller Sucharow's New York office, where he serves as Assistant General Counsel and as a member of the Firm's Executive Committee. He specializes in litigating complex securities fraud cases on behalf of institutional investors.*

Jacqueline Meyers *is an Associate in Labaton Keller Sucharow's New York office. She concentrates her practice on litigating securities fraud class actions, representing institutional investors.*

Endnotes:

[1] *Macquarie Infrastructure Corp. v. Moab Partners, L.P.*, 601 U.S. 257 (2024).
[2] *Id.* at 263.
[3] *Id.* at 257.
[4] *Id.* at 266, n.2.
[5] *Id.* at 261.
[6] *Id.*
[7] *Id.*
[8] *Id.*
[9] *Id.* at 261-62.
[10] *Id.*
[11] *Id.* at 263.
[12] *Id.*
[13] *Id.* at 264.
[14] *Id.* at 264-65.
[15] *Id.*
[16] *Id.* at 266, n.2.
[17] Compare *Stratte-McClure v. Morgan Stanley*, 776 F. 3d 94, 101 (2d Cir. 2015) (finding Item 303's affirmative duty to disclose can serve as the basis for a private securities fraud claim under Section 10(b)), with *In re Nvidia*, 768 F. 3d 1046, 1056 (9th Cir. 2014) (finding Item 303's affirmative duty to disclose insufficient to form the basis of a private securities fraud claim under Section 10(b)).
[18] *Macquarie Infrastructure Corp.*, 601 U.S. at 266, n.2.

Waistlines and GLP-1s—Expanding in Unison

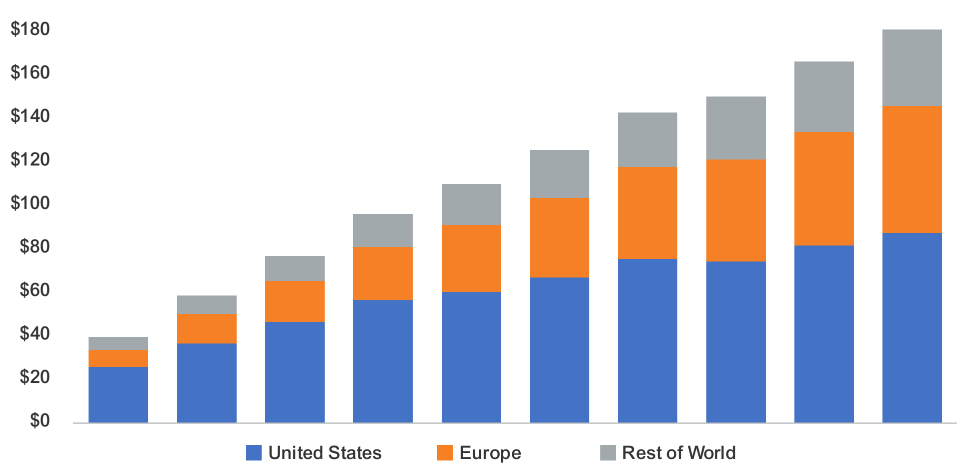
By: Tommy Sternberg and Daria Fomina, William Blair Investment Management

Photo Illustration © 2024, istock.com

It seems like everyone is talking about Ozempic, but this popular weight loss drug is only one of many glucagon-like peptide-1 (GLP-1) medications establishing themselves as the cornerstone in the management of obesity. What are the opportunities and risks for investors?

To frame the potential total addressable market (TAM) for GLP-1 medications, we can start with the 800 million people who are estimated to be overweight or obese worldwide.

Projected Obesity and Diabetes Market Size Increasing (in Billions)



Source: William Blair estimates.

If even a quarter of these individuals receive treatment at an estimated cost of $2,500 each, the TAM could reach $500 billion. Our internal models anticipate the market for obesity treatments alone (excluding diabetes treatments) to be around $180 billion by 2032. To put that number in perspective, the oncology sector, the largest single category within the prescription drug market, is forecast to be a $200 billion category.

Our internal models anticipate the market for obesity treatments alone (excluding diabetes treatments) to be around $180 billion by 2032.

Looking for Market Leaders

Only two companies, Eli Lilly and Novo Nordisk, have sizable GLP-1s available today, and we expect them to dominate the market over the intermediate term.[1]

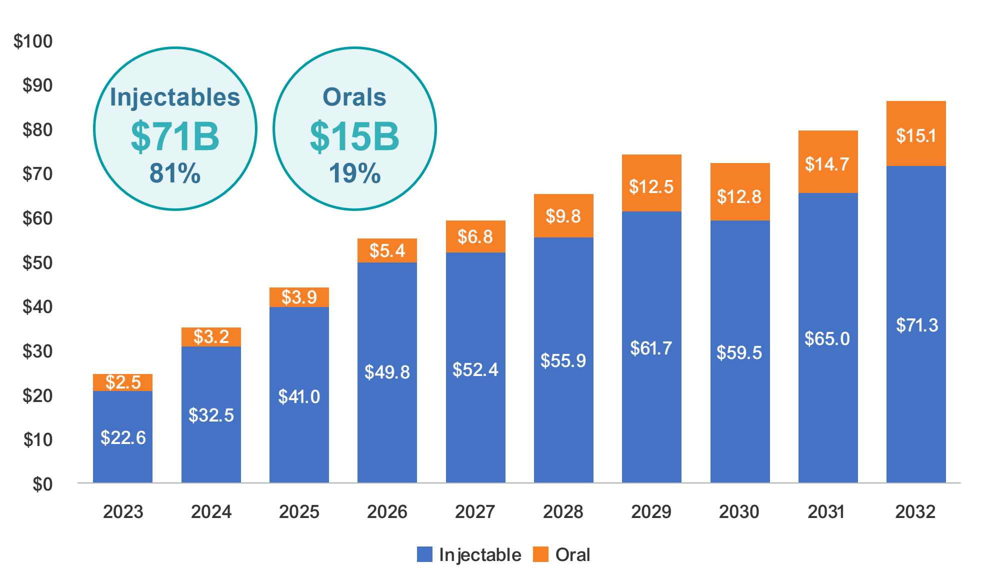
Both benefit from significant scale advantages, which are evident not only in their substantial investments in developing next-generation medicines but also in their production capabilities as well as sales and marketing efforts.

It could take years for competitors to make inroads given the time it takes to bring new drugs to market, and in our opinion, competitors will have to differentiate on other factors, such as convenience or tolerability.

Changing Market Dynamics

Speaking of convenience, current GLP-1 medications for weight loss take the form of injectables, but oral versions are on the horizon, and the price will likely be lower. We expect this to further expand the market. The chart below illustrates our anticipated market split.

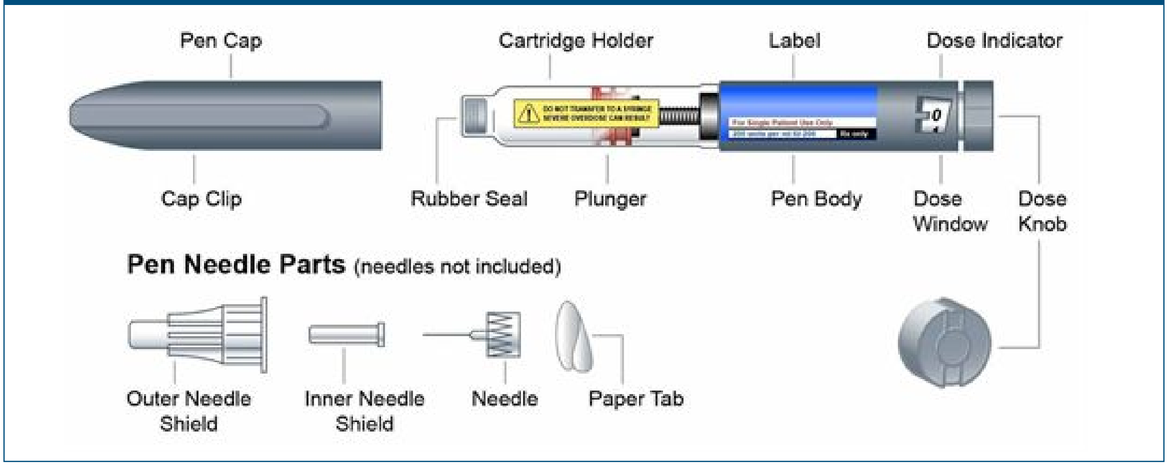
GLP-1 Sales by Delivery Mechanism (in Billions)



Source: William Blair estimates.

Companies beyond drug manufacturers might ride this tailwind. Certainly, companies involved with the production of injectable components and assembly of the devices stand to benefit, as do drug distributors (such as wholesalers and pharmacy benefit managers).

Pen Parts



And then there are complementary therapeutics. Because GLP-1s stop working when not taken, weight loss maintenance is another category of interest. So is muscle preservation, since part of any weight loss entails loss of muscle mass.

Of course, where there are winners, there are losers. For example, manufacturers of robotic equipment used in bariatric surgeries have seen a slowdown in demand as patients postpone bariatric surgeries while they try GLP-1 medications. We could also see a slowing demand for the obstructive sleep apnea market, which includes continuous positive airway pressure (CPAP) devices; joint replacements; and continuous glucose monitors and insulins pumps.

As companies navigate these shifts, understanding the broader economic and sector-specific dynamics is critical for investors.

The Ripple Effects on Consumer Markets

GLP-1 agonists are also impacting various consumer industries. Studies indicate that GLP-1 users consume 20% to 30% less energy, and the impact is particularly pronounced in junk food and other high-calorie foods. They also have the potential to make a profound impact on broader lifestyle choices, such as alcohol and tobacco consumption. These preference changes affect entire households, as studies indicate that GLP-1 users affect their household food procurement.

There are some dramatic left-tail-risk scenarios—for example, if all people with above-average body mass index take GLP-1 medications and stick to the prescribed regimen for a prolonged period, this could drive a decline in food consumption of more than 10%. However, we think the more likely scenario is a one- to two-percentage-point volume reduction over the course of a decade or more.

Different product types could also fare differently in this changing landscape. Early studies indicate growth (or slower decline) in volume for protein-forward products like some dairy products that appear to be less affected. In contrast, carbonated drinks and snacks might see severe cuts in consumption.

As companies navigate these shifts, understanding the broader economic and sector-specific dynamics is critical for investors. Active management certainly plays a role. ◆

This article is excerpted from our blog, which you can read in full here.

Tommy Sternberg, CFA, partner, global equity research analyst, covers large-cap healthcare companies. Before joining William Blair, Tommy spent two years as an equity analyst in Oak Brook Bank's investment management and trust department. Tommy received a B.S. in economics from Duke University and an M.B.A. from the University of Chicago's Booth School of Business. Daria Fomina, global equity research analyst, covers large-cap consumer companies. Before joining William Blair, Daria was head of the Pan-European leisure research team at Goldman Sachs Global Investment Research in London. Daria received a bachelor's degree in economics (with honors) and a master's degree in financial markets from the Higher School of Economics.

Disclosures:

This content is for informational and educational purposes only and not intended as investment advice or a recommendation to buy or sell any security. Investment advice and recommendations can be provided only after careful consideration of an investor's objectives, guidelines, and restrictions.

Information and opinions expressed are those of the authors and may not reflect the opinions of other investment teams within William Blair Investment Management, LLC, or affiliates. Factual information has been taken from sources we believe to be reliable, but its accuracy, completeness or interpretation cannot be guaranteed. Information is current as of the date appearing in this material only and subject to change without notice. Statements concerning financial market trends are based on current market conditions, which will fluctuate. This material may include estimates, outlooks, projections, and other forward-looking statements. Due to a variety of factors, actual events may differ significantly from those presented.

References to specific companies are for illustrative purposes only and should not be construed as investment advice or a recommendation to buy or sell any security. Past performance is not indicative of future returns.

Endnotes:

[1] Elli Lilly and Novo Nordisk do not only produce GLP-1s and thus the companies' profits and losses are not solely correlated to these medications. Past performance is not indicative of future results, and it should not be assumed that any investment in the securities referenced was or will be profitable. References to specific securities and their issuers are for illustrative purposes only. William Blair may or may not own any securities of the issuers referenced and, if such securities are owned, no representation is being made that such securities will continue to be held. The securities referenced do not represent all of the securities purchased, sold, or recommended for advisory clients.

A Paradigm Shift: Infrastructure Equity 2.0

By: Nina Pacheco Nazemi and Addie Sparks, Barings

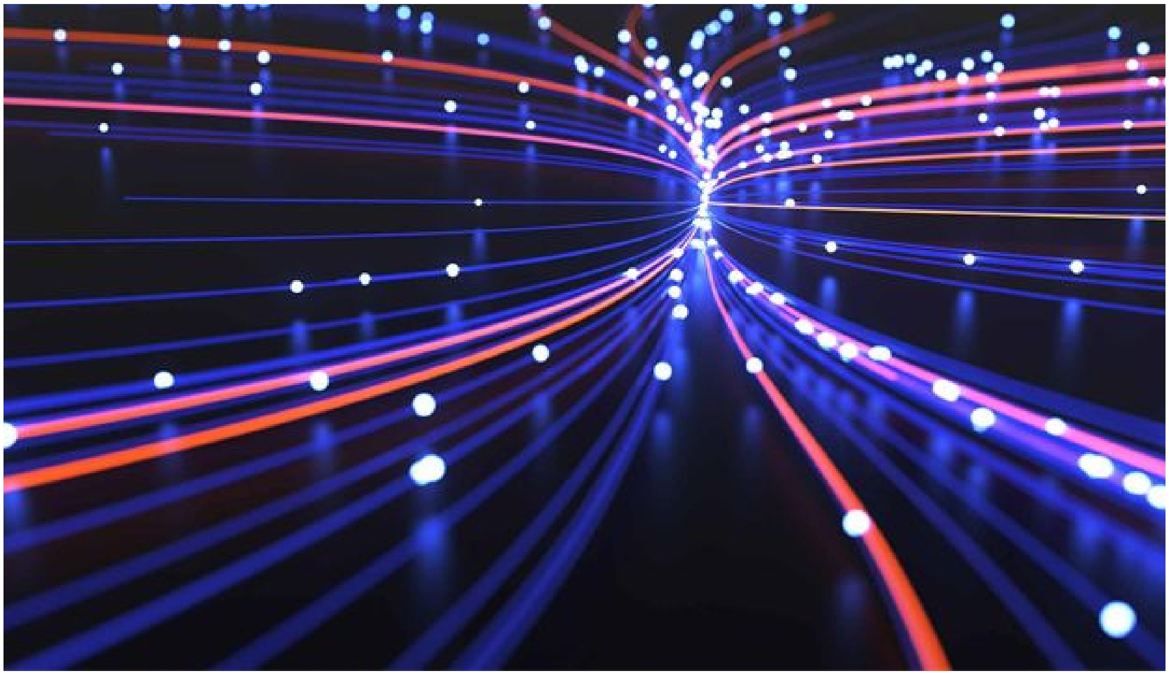


Photo Illustration © 2024, istock.com

Infrastructure Equity 2.0: The Evolution from Toll Roads to Carbon Capture

Infrastructure investing is changing. For decades, the asset class has been characterized by assets that provide essential services that are highly regulated—including toll roads, utilities, and ports. However, over the past 10 years, the opportunity set has evolved into a new version of infrastructure. Compared with the toll roads of the past, "Infrastructure Equity 2.0" includes companies and projects that are more distributed in nature (i.e., typically fixed assets that are distributed spatially), smaller in scale, and composed of multiple assets. These companies and projects are typically characterized by:

- More conservative capital structures (often with modest or no leverage),
- Fixed-rate debt with medium- to long-term maturities,
- Inflation protection,
- Contracted cash flows.

There are a number of secular tailwinds driving growth in both supply and demand for these assets over the coming years—from the exponential increase in data consumption globally, which is driving the need for enhanced digital infrastructure, to global efforts to meet climate goals, which is increasing demand for infrastructure related to the energy transition. These trends are shaping attractive investment opportunities in the next generation of infrastructure, particularly at the lower end of the market (i.e., enterprise values of $200-500 million).

Given that these trends are likely to persist and possibly even accelerate, we believe this segment of the market has the potential to outperform over the next decade—which is supported by the historical outperformance of the middle market, generally, over market cycles. Specifically, we see these opportunities across four key sectors (Figure 1):

Figure 1: Sectors Positioned for Strength Over the Next Decade

Source: Barings. For illustrative purposes only.

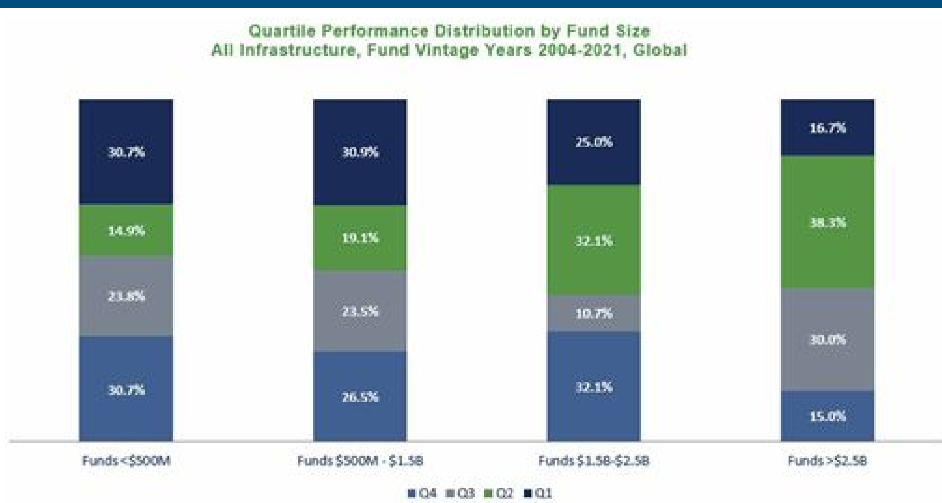
Record-level Fund Sizes are Emerging in Infrastructure

Infrastructure is currently experiencing trends similar to those that have characterized the private equity industry over the last decade. For one, there are fewer funds raising record-breaking fund sizes in the market. At the same time, there is a desire by limited partners (LPs) to consolidate their fund commitments with larger checks to fewer sponsors. In short, LPs are aggregating their capital to fewer and larger managers with 81% of the capital raised in infrastructure for the last five years funneling to funds over $1 billion.[1] This dynamic has led to a dearth of capital being raised in the lower and middle market.

Are Middle Market Funds Positioned to Generate Stronger Returns?

As investors in the asset class for over 10 years, we have observed that as infrastructure funds have grown larger and more established, performance has historically reverted to the mean (Figure 2). Alternatively, smaller infrastructure funds have historically outperformed their mega fund peers due to a number of reasons—including relatively attractive valuations, a wider opportunity set, and expanded exit environment.

Figure 2: Smaller Funds Have Historically Outperformed Mega Funds



Source: Barings, Pitchbook. As of March 1, 2024. PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS. Data set includes primary funds (i) employing infrastructure strategies, (ii) with vintages between 2004 and 2021, and (iii) domiciled globally. Funds must have performance data and fund size to be considered.

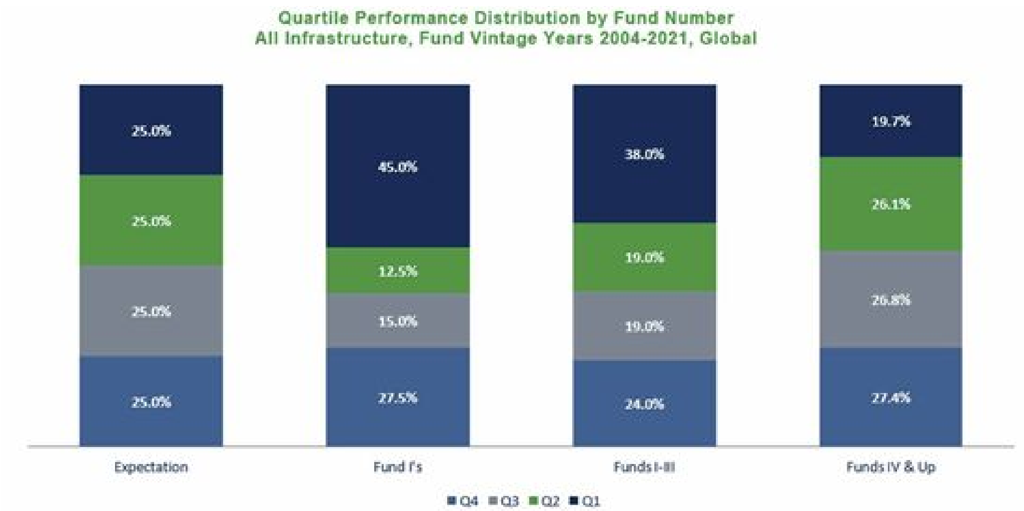
The middle-market, value-add segment of the market looks particularly attractive today. In addition to less competition, because funds in the middle market tend to be smaller in size, they allow managers to be more nimble and invest in less-efficient corners of the financial markets. As a result, smaller managers are well-positioned to identify companies that could potentially outperform and have historically benefited from more attractive valuations and capital structures.[2]

The middle-market, value-add segment of the market looks particularly attractive today.

Emerging Managers: Potential to Generate Outsized Alpha

In addition, the performance of larger, established managers has historically been trending toward the median (Figure 3). For the largest and most mature funds (Funds IV and higher), data shows that performance has declined over time, with more of these funds falling into middle quartiles. There are a number of reasons why, including the fact that larger GPs are often overseeing funds in various lifecycle stages (fundraising, investing, portfolio management, and exiting), while emerging managers can typically dedicate the majority of their time and attention to investing and managing a smaller portfolio with fewer assets. Also, emerging managers tend to be more strongly aligned with their investors, both financially and psychologically, as their long-term success is predicated on making strong investments out of the gate.

Figure 3: Emerging Managers Have Historically Generated Outsized Alpha



Source: Barings and Pitchbook. As of March 1, 2024. PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS. Data set includes primary funds (i) employing infrastructure strategies, (ii) with vintages between 2004 and 2021, and (iii) domiciled globally. Funds must have performance data and fund size to be considered.

Key Takeaway

We believe the opportunity appears most attractive in the middle market, where smaller infrastructure funds have historically outperformed their mega fund peers. That said, given the number of potential challenges that could impact private markets going forward, we believe disciplined manager selection and maintaining active portfolio management are key factors for success.

Mina Pacheco Nazemi *is the Head of the Diversified Alternative Equity team and serves on the investment committee. She is responsible for originating, underwriting and monitoring GP relationships, direct/co-investments and continuation vehicle opportunities for private equity and real assets. Mina has worked in the industry since 1998 with experience as a general partner and limited partner investor in private markets and focused on underwriting direct/co-investment opportunities. She is also a board member of the Pan American Development Fund and serves on the investment committee for the City of Hope and Cal State Los Angeles. Additionally, Mina is a current Finance Fellow for The Aspen Institute. Mina holds a Bachelor of Arts with honors in Economics and Political Science from Stanford University and her Master of Business Administration from Harvard Business School.*

Addie Sparks *is a member of Barings' Diversified Alternative Equity team and is responsible for originating, underwriting, and monitoring of private equity and real assets and co-investment & continuation vehicle opportunities in North America and Europe. Prior to joining the firm full-time in 2019, Addie interned on the Barings' Global Business Development team. Addie holds a B.S. in international business and finance and a minor in Chinese studies from the University of South Carolina.*

Endnotes:

1 Source: Barings, Pitchbook Q1 2023 Global Real Assets Report. As of March 31, 2024.

2 Source: DealEdge. As of October 4, 2023.

Don't Get Your Value from an Index

By: Andrew Wellington, Lyrical Asset Management

Photo Illustration © 2024, istock.com

Value stocks have a long history of delivering market-beating returns. But how you get your value exposure is a critical decision. For large-cap value, it is tempting to get exposure through low-cost passive products. However, these products have a serious problem: they track the large-cap value indices, and you don't want to get your value from an index.

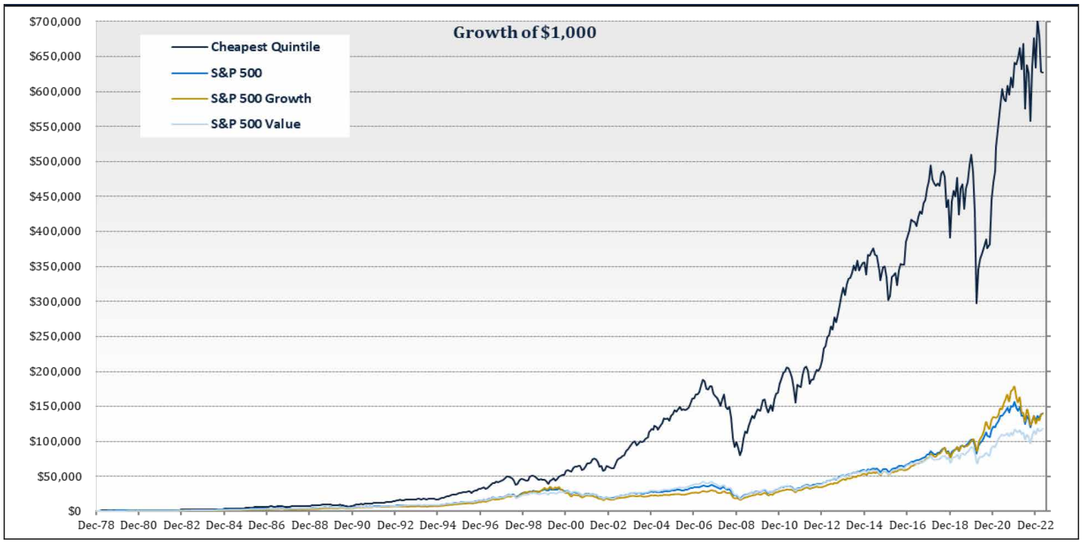
Over the decades, value stocks have handily outperformed the S&P 500.

VALUE STOCKS VS. VALUE INDEX

Over the decades, value stocks have handily outperformed the S&P 500. Since 1979 when S&P created their value and growth style indices, the cheapest stocks have outperformed the S&P 500 by nearly 400 bp per annum.

The graph below tells the story. The dark blue line plots the cumulative return of the cheapest quintile of our investment universe of the top 1000 stocks. Specifically, we sort that universe by valuation and then calculate the return of investing in an equal-weighted portfolio of the cheapest quintile, with quarterly reconstruction.

Why Value Stocks?



Source: FactSet. See Important Notes.

Below the returns of the cheapest quintile, you can see the lower historical performance of the S&P 500 and its Value and Growth style indices. Notice the pale blue line at the bottom, which is the S&P 500 Value index. Amazingly, over this 40+ year period when the cheapest stocks outperformed by so much, the worst performing S&P style index was their Value index. This is why you don't want to get your value from an index.

HOW MANY STOCKS ARE IN THE VALUE INDEX?!?

Why is the large-cap value index so bad?

One of the reasons is the huge number of stocks in the index. When S&P divides the S&P 500 into Value and Growth, it seeks to put half the cumulative market cap in each. Since many of the largest market cap companies fall into the growth index, they must put many more stocks into the value index to balance it out. Furthermore, by their methodology, some stocks are partially allocated to both the value and growth indices. As a result of this approach, there is an enormous number of holdings in their large-cap value index. In fact, more than 80% of the S&P 500 constituents are in the S&P 500 Value!

This means that the S&P 500 Value is not a value index concentrated in the cheapest stocks. Rather, it is more of a core index that owns everything except some of the most expensive stocks. To the extent that the cheapest stocks are in that index, their returns are diluted by the hundreds of other stocks also in that index. This is not just an S&P issue, as other popular "value" indexes follow similar methodologies.

ERROR OF TRACKING

It is not just the passive products you have to worry about. If you don't want to get your value from the index, you need to avoid many active products, too.

Many active large-cap value products are managed for a low tracking error to the value indices. Given the flawed construction and poor historical performance of the value index, the last thing you want to do is track it. In large-cap value, low tracking error is a liability, not an asset.

DON'Ts AND DOs

Large-cap value stocks have a long history of delivering market-beating returns. Unfortunately, getting access to these returns requires some homework. The large-cap value indices, and the passive and active products that track them, have been poor proxies for value stock returns.

Large-cap value stocks have a long history of delivering market-beating returns. Unfortunately, getting access to these returns requires some homework.

You don't want to get your value from an index. Instead, we suggest you look for value managers that are focused on value, not the index. Doing so, by necessity, will mean high active share and high tracking error, but that should be okay. Why would you want to look like or track the value index, given its disappointing history? ◆

Disclosures:

PAST PERFORMANCE IS NOT NECESSARILY INDICATIVE OF FUTURE RESULTS.

Cheapest Quintile:

For the period January 1960 – December 1984 we use Sanford Bernstein data for the cheapest quintile within the 1,000 largest U.S. stocks by market capitalization based on price to book value.

For the period January 1985 – December 1997 each quarter, based on FactSet data, we divided the 1,000 largest U.S. stocks by market capitalization into quintiles based on their beginning of quarter price to median trailing earnings multiple. Return for the lowest p/e quintile is the simple average of the total returns, including dividends, of each stock in that quintile. Returns for stocks that ceased trading are included through the date they ceased trading.

For periods after 1997, each calendar quarter, based on FactSet data, we divided the 1,000 largest U.S. stocks by market capitalization into quintiles based on their beginning of quarter price to median forward earnings multiple. Return for each quintile is the simple average of the total returns, including dividends, of each stock in that quintile. The universe average is the simple average total return of the 1,000 stocks over the period presented.

Returns for stocks that ceased trading are included through the date they ceased trading.

Andrew Wellington*, Co-Founder, Managing Partner & Chief Investment Officer of Lyrical Asset Management ("LAM"), has been a value investor for over a quarter century. After five years in management consulting, in 1996 Andrew joined Pzena Investment Management as a founding member and its first research analyst. Five years later, Andrew joined Neuberger Berman, where he went on to run their institutional mid-cap value product. At Neuberger, his investment performance improved his fund's 3-year Morningstar rating from 3-stars to 5-stars while product AUM tripled to $3.3bn in 2005. After Neuberger, Andrew spent two years in activist investing at New Mountain Capital.*

Andrew graduated summa cum laude and as the top graduating senior from the University of Pennsylvania's Management & Technology Program in 1990, earning a Bachelor of Science in Economics from the Wharton School and a Bachelor of Science in Engineering from the School of Engineering.

How the Inflation Reduction Act is Reshaping the Investment Landscape

By: Tom Osborne, IFM Investors

Photo Illustration © 2024, istock.com

This article is provided for informational purposes only. It does not constitute an investment recommendation, offer or solicitation and should not be relied upon as investment advice or as the basis for any contract or commitment. This information does not constitute investment, legal, accounting, regulatory, taxation or other advice. IFM Investors Pty Ltd ("IFM Investors") recommends that before making an investment decision, each prospective investor should consult a financial advisor and should consider whether any investments are appropriate considering their particular investment needs, objectives, and financial circumstances. Tax treatment depends on each prospective investor's individual circumstances and may be subject to change in the future. This information should not be reproduced without the written consent of IFM Investors.

Following decades of decline in public infrastructure spending and the failure of successive U.S. Administrations to properly address the funding shortfall, President Joe Biden's flagship Inflation Reduction Act (IRA) was heralded as a welcome investment in the future of U.S. renewables, manufacturing, and skills and training.

The $1.2trn IRA and companion Infrastructure Investment and Jobs Act (IIJA) are the envy of many countries, helping the private sector deliver the energy transition the U.S. requires while promoting a just transition that delivers apprenticeships and well-paid jobs. However, it initially drew the ire of some commentators outside the U.S. over concerns it would unduly distort the flow of private capital. Re-adjusting the U.S. investment tax credit (ITC) to a base rate of 6%, rather than 30%, projects are now instead rewarded with a 24% bonus credit where they meet wage and apprenticeship requirements – with the ITC rising as high as 50% depending on an investee's ability to draw on local steel, iron, and other goods. As a result, IRA-eligible projects immediately became more attractive to build stateside than nearly anywhere else in the world, placing the emphasis on the private sector to make investment decisions capturing the value of tax credits for their investors, rather than applying for the government grants offered through the IIJA where a successful application was not guaranteed.

It is hard to overstate the impact of the IRA. From the $739bn total funding under the IRA, $369bn will be provided for clean energy and climate investment, including tax incentives for investments in renewable energy, decarbonization, and energy security. Making the U.S. a highly attractive investment destination was a stated goal of the legislation. The IRA has led to significant investment inflows into the U.S., estimated by the White House at $110bn one year after its ratification. However, as it has shifted the weight of investment decisions towards the U.S., it has led to concerns of protectionism, which the U.S. Administration has addressed by opening up the benefits of the Act to other friendly nations and jurisdictions, such as those within the European single market, Australia and those with which the U.S. enjoys free trade agreements.

The IRA's introduction nevertheless resulted in calls from parliaments across the world for similar targeted tax breaks and subsidies to ensure each country's domestic manufacturing base and private capital market did not focus entirely on projects in America and could be similarly turbo-charged.

The transferability of tax credits

Benefits of investing under the IRA principally stem from the allocation of the tax credits – but also the ability to trade those credits if they are not fully utilized by the company that qualify for them. As the IRA is set to support the growth of renewable energy and other, newer climate change mitigation technologies, many projects taking advantage of the tax credits will be start-ups with little-to-no tax to pay. These entities may now trade their tax credits on the open market and bring forward their benefit by several years, thus further improving potential returns.

While a typical tax equity scheme allows project tax credits to be acquired by another entity, a specific allowance in the Act for transferability of credits greatly widens the field of buyers for those projects. As a result, the broader market means credits can be sold faster and on more favorable terms. Credit Suisse estimated that the tax equity market will grow to $49bn in 2024, a near doubling compared to 2022, and overall trade in tax credits will reach $500bn in the decade since the Act's introduction.

Prospects for pension capital

Ultimately, the large-scale rollout of renewable energy generation and transition to net zero will not be successful unless private, long-term capital can be deployed to support and accelerate the transition. This sustained investment can come from a number of places, but notably, pension funds will be a key source of this patient capital.

The IRA not only allows investors to benefit from the transferability of tax credits, but it should also ease the investment risk associated with a range of renewable energy projects. Overall, the IRA increases the potential returns for many climate-aligned and transition-friendly projects and is already driving immediate investment in both production and energy generation – creating a decade of policy certainty by expanding tax credits to a broad range of green and renewable projects in need of funding. From that perspective, the legislation is, arguably, unprecedented. ◆

***Tom Osborne**, Executive Director, Infrastructure at IFM Investors, is responsible for the origination, analysis, structure and execution of IFM Investors' global infrastructure investments.*

Prior to joining IFM Investors, Tom was Head of Americas - Infrastructure in the Investment Banking Division of UBS. In this role, Tom was the founding group head of the Americas Infrastructure advisory practice with responsibility for strategic advice, mergers and acquisitions, lending and capital markets finance for major investors. At UBS, he also held the roles of Co-Head of US Infrastructure and Managing Director - Power and Utilities. Previously, Tom was a Director in the Power and Utilities Group at Credit Suisse First Boston and a First Vice President - Utilities Group at PaineWebber Incorporated.

Assessing the Impact of the Inflation Reduction Act on the Renewables Sector: From Job Creation to Domestic Energy Security

By: David Boyce, Greencoat America/Schroders

Photo Illustration © 2024, istock.com

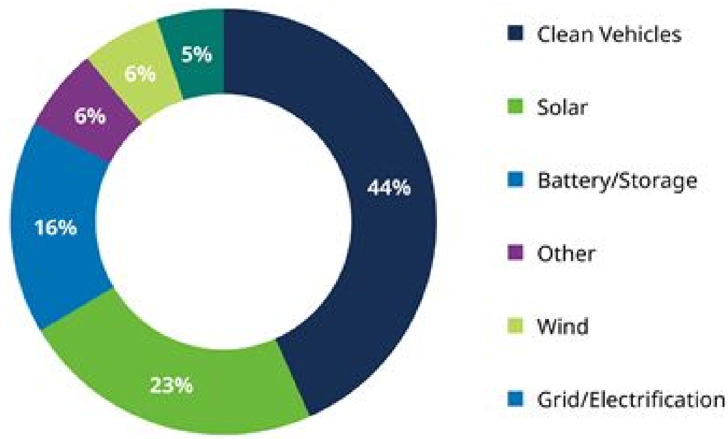
Geopolitical instability in recent years has laid bare the risks of interconnectedness or globalization, particularly in the energy sector. Ongoing conflicts in Europe and the Middle East have posed threats to the reliable supply of oil and gas, while the Covid-19 pandemic triggered a multi-year period of global disruption, dislocation, and bottlenecks. The deglobalization dynamic that we are seeing has hastened the need for governments and populations to identify secure energy sources with low geopolitical risk (i.e., conventional supply that is closer to home or located in stable, democratic regimes).

At a domestic level, the importance of energy self-sufficiency is growing. In August 2022, President Biden signed into law the Inflation Reduction Act (IRA). The Act provides tax breaks and subsidies worth an estimated $369 billion (1.5% of 2022 US GDP) for companies (i) building new renewable power generation projects, (ii) manufacturing components related to wind, solar and batteries, as well as critical mineral components, or (iii) involved in the production of electric vehicles. This legislation represents a new industrial strategy aimed at fostering onshoring of capabilities and skills, as well as building a long-term investment base for these industries in the U.S.

Job creation through new clean energy projects

According to data from E2, companies have announced over 300 new clean energy projects across 41 states that should qualify for the IRA tax credits since the passage of the legislation. These projects are projected to attract more than $120bn in investments and generate over 100,000 jobs, boosting the US economy (as of May 15, 2024).

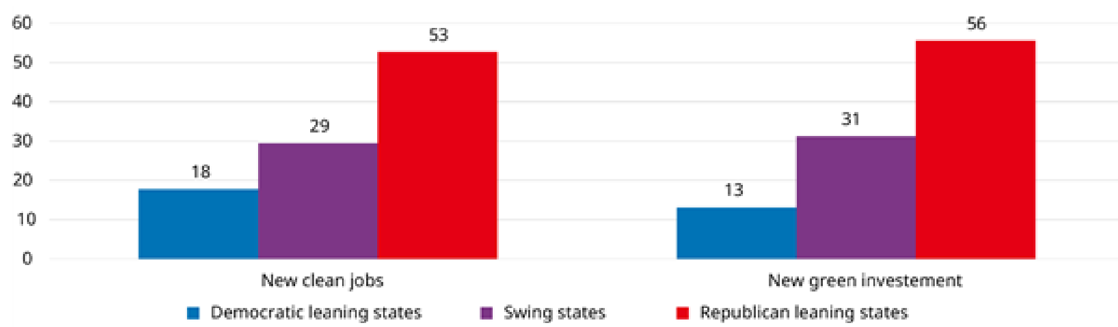
Figure 1: Investment breakdown by sector since August 2022



Source: E2, June 2024. Data from 8/25/2022 - 5/15/2024. The Other category includes biofuel, energy efficiency, geothermal, and hydrogen projects. Shown for illustrative purposes and should not be interpreted as investment guidance.

Interestingly, our analysis of the data on green energy projects reveals that, since the implementation of the IRA, more than 50% of newly created jobs and capital expenditure have been announced in Republican-leaning states compared to 20% in Democrat-leaning states (see chart below). It is also worth highlighting that swing states have seen large benefits from the IRA tax credits. More than 30% of the green investments since August 2022 have been in states like Arizona, Georgia, Michigan, Pennsylvania, and Wisconsin, boosting job creation locally.

Figure 2: Jobs and CAPEX since August 2022



Source: Source: E2, Schroders Economics Group, February 2024. Classification for states based on the political leanings of the previous two terms. It is a swing state if it switched from one majority to another in the last presidential election in 2020, it is a red (blue) state if the majority voted Republican (Democrat) in the past two elections.

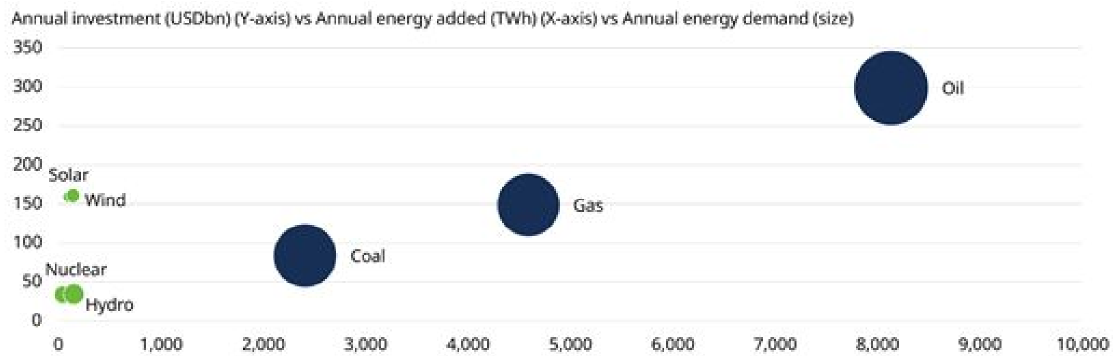
Increased focus on energy security

Ensuring energy security and diversifying energy sources has become a top priority for governments. The goal is not only to accelerate the energy transition from a climate perspective, but also to safeguard against potential energy security risks. These dual drivers emphasize the importance of rolling out renewable energy sources to secure various methods of energy supply.

Several factors have contributed to these heightened concerns. For example, underinvestment has caused a reduction in spare capacity, while there has been an acceleration in demand growth for energy in both developed and emerging countries. For another example, supply chains were severely disrupted during the pandemic, particularly for key components flowing into the U.S., uncovering a vulnerability to the power plant build out.

In the U.S. alone, our electricity needs – excluding electric vehicles or a massive transition from gas to electric heating – are growing at a rate of 1% annually. Further, there is another approximate 1% of the existing fleet, such as coal plants from the 1950's, retiring each year. Based on US EIA figure of installed domestic capacity, just keeping up with electricity demand would necessitate building over 150 new power plants per year. Renewables such as wind and solar will need to play a significant role and will require substantial levels of investment. Unlike oil and gas, renewables can be accessed by most countries and owned domestically, making them highly attractive from an energy security standpoint.

Figure 3: Annual investment required to meet the annual energy demand



Source: Thunder Said Energy, IEA, World Bank, Schroders - February 2024. Forecast may not be realized.

In conclusion, developing a domestic renewable energy supply could be far less susceptible to geopolitical tremors such as war, terrorism, and global health events than the status quo. However, it may require committed upfront capital on a scale that has never been seen before.

To learn more, visit our energy transition landing page. ◆

David Boyce *joined Greencoat in July 2021 to head Greencoat's US business. David has worked in the US power generation industry since 1997 and full time in renewables since 2007. Since 2012, prior to joining Greencoat, David has held CEO roles at both Wind Capital Group, a fully integrated US wind generation business and Conifer Power, a US wind, solar and storage developer. Prior to that, David held senior finance and commercial roles at Wind Capital Group, Airtricity and SkyGen/Calpine. He also ran the project finance group of CoBank from 2002 to 2007, which covered the energy sector with a focus on power generation. David holds finance and accounting degrees from the University of Illinois and an MBA from the University of Chicago.*

Disclosures:

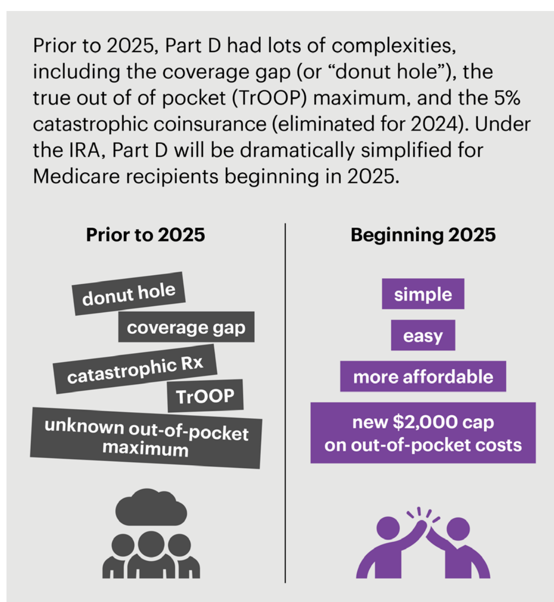
Inflation Reduction Act Cuts Retiree Drug Costs: Employers Face Tough Choices

By: Barry Carleton, WTW's Via Benefits

Photo Illustration © 2024, istock.com

The Inflation Reduction Act (IRA), passed in 2022, includes major changes to Medicare Part D intended to control prescription costs, cap maximum retiree out-of-pocket costs, and simplify coverage for Medicare enrollees. This strengthening of Part D offers improved coverage for retirees as well as new risks and opportunities for employers who sponsor group Medicare Part D plans.

The current Part D benefit contains a range of complex program terms, which confuses retirees and leaves them without a clear understanding of their maximum out-of-pocket cost liability. With the IRA comes a new (in 2025) Part D benefit approach that eliminates the prior complexities by adopting a much simpler structure, plus a $2,000 cap on an enrollee's annual out-of-pocket costs. In addition, for the first time, the federal government is capping prescription drug cost inflation and negotiating drug prices with the pharmaceutical makers. These changes go far to realize the vision of Part D as a comprehensive and fully adequate source of Medicare prescription drug coverage.



The new Part D program eliminates provisions such as the coverage gap (the "donut hole") and the "true out of pocket" (TrOOP) maximum. Also eliminated (in 2024) is the 5% cost share paid by enrollees after their annual spending has reached the TrOOP maximum. Starting in 2025, Part D plans may have a deductible and then cost sharing will apply until the member has reached $2,000 in out-of-pocket costs, after which the plan will pay 100% of the cost for the remainder of the year. It's as simple as that.

While these changes are highly beneficial to enrollees, there may be financial risks to employers sponsoring group Medicare Part D plans (a.k.a. Employer Group Waiver Plans or EGWPs).

How does the IRA impact Part D plan sponsors?

While Part D is becoming far more attractive to Medicare seniors, the changes under the IRA may not be beneficial for EGWP sponsors. This is because the IRA is mandating substantial benefit enhancements and changing how it pays Part D plans in a way that could be adverse to EGWP sponsors. Under Part D, EGWP sponsors receive funding from various sources to offset the cost of the group plan. The government provides these funding sources to EGWP sponsors as an inducement to retain group post-65 prescription drug coverage. Changes in 2025 to the formulas for determining these funding sources (e.g., direct subsidies, pharmaceutical discounts and federal reinsurance) could reduce the total level of these third-party payments to an EGWP sponsor, thus increasing their net plan cost. This presents plan sponsors with some unpleasant choices:

- Absorb the cost increase, making retirees happy, but their finance department unhappy.
- Pass the cost increase onto retirees in the form of contribution increases or benefit cuts, leading to a happy finance department, but less-than-happy retirees.

To avoid these unpleasant options, employers can cease group plan sponsorship and instead direct retirees to obtain individual Medicare Part D coverage (and medical coverage) through a marketplace exchange, with employer funding through a Health Reimbursement Arrangement (HRA). With this approach, retirees gain all the benefits of the new Part D program while employers enjoy a reduction in their administrative effort and potentially in their coverage costs. Many employers have done exactly this over the years as individual market insurance coverage has become more attractive compared to group plan coverage. With the IRA-driven enhancements to Part D, 2025 may be the year for some employers to consider (or reconsider) a shift to an individual market for their retirees.

Additional improvements to Part D

Insulin copay capped at $35/month per prescription

Access to recommended adult vaccines without cost-sharing

Expansion of the low-income subsidy program (LIS or "Extra Help") under Medicare Part D to 150% of the federal poverty level starting in 2024

Medicare has started to negotiate directly with drug manufacturers to lower the price of some of the costliest brand-name Medicare Part B and Part D drugs.

New $2,000 cap on member out-of-pocket costs

Employers sponsoring EGWPs are advised to assess the possible financial impact of the IRA on their group Part D plans. A modeling of the IRA impact on their EGWP, such as one that Via Benefits provides, will help plan sponsors make the best decision for the organization and its retirees. ◆

Barry Carleton *is a WTW consultant with over 35 years of experience specializing in all aspects of retiree medical strategy, financial evaluation, market dynamics, procurement, implementation and communication. His expertise covers the range of group and individual market programs for Medicare and pre-Medicare retirees.*

In his current role, he is an advisor to the Senior Actuary of WTW's Via Benefits individual marketplace. He also functions as a liaison between the individual marketplace business and Retirement and Health & Benefits consultants on market, legislative and regulatory developments affecting group and individual retiree medical plans.

Prior to joining WTW's individual market business, Barry spent many years as a WTW Health & Benefits consultant working with an array of clients on all aspects of retiree medical consulting.

From Stability to Agility: Nine Implications for a New Investment Landscape

By: Nathan Shetty, Nuveen

Photo Illustration © 2024, istock.com

Most institutional investors agree we have entered a period of elevated macroeconomic and geopolitical uncertainty, according to Nuveen's 2024 EQuilibrium survey. In response, they are exploring a variety of avenues to build more resilient portfolios and capitalize on new opportunities in the post-pandemic world.

While nearly half of institutional investors surveyed are focused on improving their flexibility and adjusting their regional allocations, most are overlooking key strategies that we believe will lead to greater portfolio resilience.

Nuveen identified nine themes that investors should consider to enhance portfolio resilience and adapt portfolios for the new investment landscape.

1. Reframe resiliency after decades of distortion

Investors should use caution when relying on forecasts derived from relationships that were dependent on the conditions that existed during the great moderation. These conditions are highly unlikely to repeat. Going forward, it is likely that the strategies that were laggards during the era of loose money will play a more constructive role in diversified portfolios.

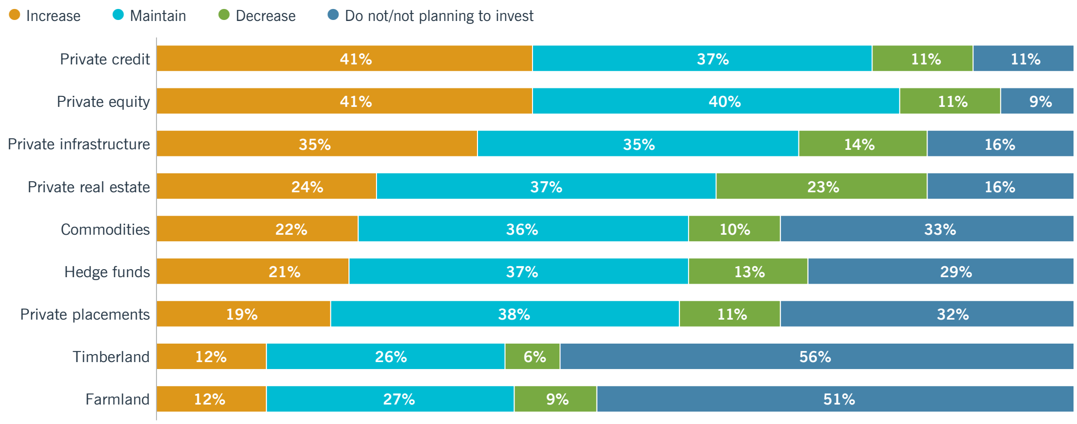
2. Privates are not compelling just because they are private

Investors looking to move into private markets should keep the following dynamics in mind: 1) product wrappers are not a feature of economic exposures or risk, 2) private assets do not strengthen or add diversification to a portfolio simply because they are private, and 3) some private market investment exposures are easily and cheaply accessed publicly.

Investors should focus on the idiosyncrasies that private markets deliver, often derived from unique investments not replicable in public markets, such as deal sourcing, operational improvements, and structuring expertise.

FIGURE 1: Institutional allocation plans across alternative asset classes

Please select the alternative investments you are currently allocated to and how you plan to adjust allocations over the next two years. (800 respondents)



Figures may not sum to 100% due to rounding.

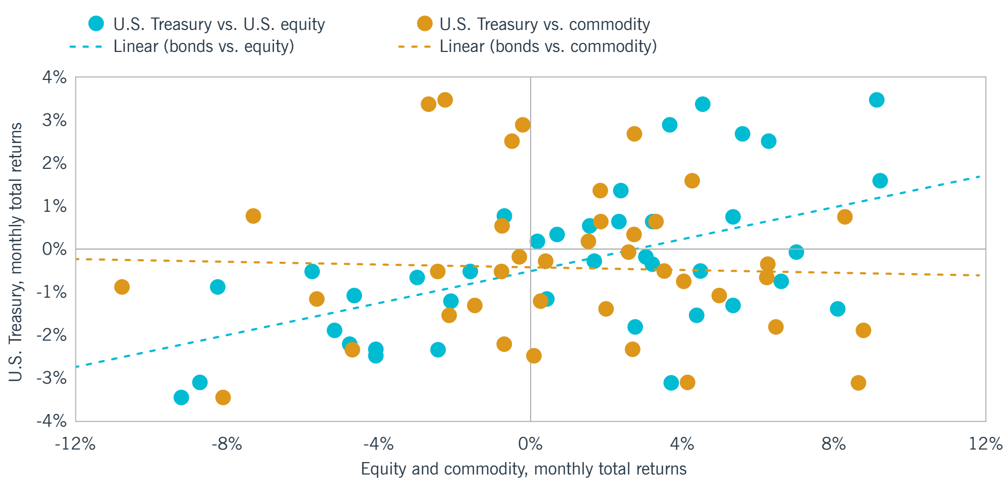
Source: Nuveen, 2024 EQuilibrium survey

3. Appreciate the scarcity value of real assets

Many of the underlying risk factors that drive the value of real assets are unique. These idiosyncrasies, when combined with supply limitations, enable real assets to retain their portfolio diversification benefits in a post-moderation world where heavily financialized assets may have lost some luster.

FIGURE 2: Real assets provide diversification in a post-moderation world

In the post-moderation period, the correlation between equities and bonds has reverted back to its normal, positive relationship. The correlation between bonds and commodities, however, continues to show no relationship.



Source: Bloomberg monthly data S&P 500 Total Return Index, Bloomberg Commodity Index Total Return, and Bloomberg US Treasury Total Return Unhedged USD from 31 Dec 2020 through 30 April 2024.

4. Be active where you can have the greatest impact

In a world of heightened macro variability, the unintentional risk and return drift incurred by holding asset allocations constant will likely be much larger. Expected risks and returns, which are driven by a common set of macro factors, are changing. This warrants a more active asset allocation.

5. Beware the declining utility of global cap-weighted allocations

From a portfolio construction perspective, global market capitalization-weighted indices will likely be suboptimal vehicles to achieve geographic diversification. Instead, investors can more effectively build their geographic allocations by placing a greater weight on the economic forces that drive a country's or region's market risks and return. Incorporating geopolitical factors, such as rule of law, military prowess, strong property rights, access to innovation, advanced financial markets, capitalistic tendencies, and plentiful natural resources, will further aid in fine-tuning geographic allocations.

6. Respect the limits of central banks' power to control inflation

While monetary policy may be effective to control inflation in the short-term, investors should be mindful that inflation is not solely a function of central bank behavior over the long term. Four structural trends will impede global central banks from achieving their low targeted rates of inflation: de-globalization, energy transition, aging demographics, and deficit spending.

7. Artificial intelligence is a double-edged sword when it comes to inflation

Despite AI's enormous potential as a productivity enhancer, investors should not take for granted that it will completely offset the wide range of inflationary tailwinds mentioned above. The massive amount of computing power required for AI's ongoing expansion will consume exorbitant amounts of materials, physical space, and energy — real-world inputs that are in limited supply.

8. Rethink government bonds' role in portfolios

It may be more appropriate to view government bonds as risk assets rather than diversifiers. Although they are mostly free from default risk, developed market government bonds are not free from interest rate risk. Even long-term investors should evaluate whether they are duly compensated for the risk they bear, particularly when term premiums are depressed.

9. Do not take more risk than you need

Now that the risk-free rate has reset higher, targeted returns can be achieved with less risk. Today's environment creates a greater need to adopt a more nuanced approach to diversification and risk management, as well as a more dynamic approach to strategic asset allocation. Analyzing portfolio risk factor exposures will become increasingly important in the new regime.

To learn more, visit Nuveen's Equilibrium hub or download the full version of "From stability to agility: nine implications for a new investment landscape". ◆

__Nathan Shetty__ oversees Nuveen's Multi-Asset team. He joined the firm from UBS, where he was global co-head of portfolio management for Investment Solutions. In that role, he oversaw $110 billion of client assets and managed a large team of portfolio managers. Similar to Nuveen, the team delivered customized investment solutions to institutional and wealth management clients around the globe. Prior to that, he launched the Investment Solutions group at Mesirow Financial after having been a senior portfolio manager in the currency group. Prior to that, he was at Pareto Partners. He started in the industry in 2001.

Nathan graduated with a Master of Science in Communication from Northwestern University, an M.B.A. from the University of Chicago and a Master of Science in Statistics from Texas A&M. He holds the Chartered Financial Analyst designation and FRM certification from the Global Association of Risk Professionals.

Disclosures:

Past performance is not a guide to future performance. Investment involves risk, including loss of principal. The value of investments and the income from them can fall as well as rise and is not guaranteed.

Private equity and private debt investments, like alternative investments are not suitable for all investors given they are speculative, subject to substantial risks including the risks associated with limited liquidity, the potential use of leverage, potential short sales, concentrated investments and may involve complex tax structures and investment strategies.
This information does not constitute investment research as defined under MiFID.
Nuveen, LLC provides investment solutions through its investment specialists. GAR-GWP-

3671928CG-O0624X

Data Breaches: A Looming Threat for Pension Administrators

By: ABL Tech Team

Photo Illustration © 2024, istock.com

Data breaches are a constant worry in today's digital age. Even industry giants aren't immune, as high-profile cases involving UnitedHealthcare and AT&T demonstrate. These incidents highlight the vulnerability of sensitive data, which is a major concern for pension administrators entrusted with protecting participants' financial information.

The Risk of Data Breaches in Pension Administration

Pension plans often manage a wealth of sensitive information, including Social Security numbers, addresses, and salary data. A data breach can have severe consequences for both the administrator and plan participants:

- **Identity Theft and Financial Loss:** Exposed data can be used for fraudulent purposes, leaving participants vulnerable to identity theft and potentially leading to financial losses.
- **Regulatory Scrutiny and Investigations:** Data breaches can trigger investigations and from regulatory bodies for both the administrator and any third-party vendors involved.
- **Erosion of Trust:** A breach can shatter plan participant confidence in the administrator's ability to safeguard their financial future. This can lead to reputational damage and even legal action.

Protecting Member Data: A Shared Responsibility

While the primary responsibility lies with the pension administrator, data security is a shared effort.

Here's why:

- **Third-Party Vendors:** Pension administrators often rely on external vendors like data analysis services to streamline operations. This creates a shared responsibility – both the administrator and the vendor must prioritize data security.
- **Evolving Threat Landscape:** Cybercriminals are constantly developing new methods to exploit vulnerabilities. Staying ahead of these threats requires ongoing vigilance and collaboration.

Strategies for Enhanced Security

To mitigate the risk of data breaches, pension administrators can implement several strategies:

- **Strict Data Security Protocols:** Implementing strong encryption for data at rest and in transit, following industry standards and best practices.
- **Vendor Due Diligence:** Carefully vetting and selecting third-party vendors with a proven track record of robust data security practices.
- **Employee Training:** Regularly educating employees on cyber threats and best practices for secure data handling.
- **Regular Security Audits:** Conducting periodic assessments to identify and address potential vulnerabilities in systems and procedures.
- **Disaster Recovery Plan:** Having a well-defined plan in place to respond to a breach, minimize damage, and notify participants promptly.

Building Trust Through Transparency

Transparency is crucial in building trust with plan participants. In the unfortunate event of a data breach, administrators should:

- **Prompt Notification:** Communicate the nature and extent of the breach promptly, providing clear instructions on how members can protect themselves.
- **Credit Monitoring:** Offer affected participants credit monitoring services to help them detect and address potentially fraudulent activity.
- **Ongoing Support:** Provide resources and support to help participants understand the risks and take steps to safeguard their personal information.

Elevated Risks of Partnering with Previously Breached Agencies

Working with agencies that have already experienced data breaches poses a heightened risk to security and operational integrity. These agencies might have unresolved vulnerabilities or insufficiently addressed security gaps, making them prime targets for future attacks. Additionally, compromised data from previous breaches can be exploited by cybercriminals to engineer more sophisticated and targeted attacks.

Choosing the Right Advisors: Putting Members First

In the aftermath of a data breach, pension administrators may consider seeking external assistance. However, it's crucial to choose advisors who prioritize the members' best interests.

Here's why:

- **Alignment of Interests:** Some advisors may have a vested interest in promoting specific products or services, which might not always align with the long-term goals of the pension plan.
- **Understanding Member Needs:** Effective advisors should possess a deep understanding of the specific needs and financial situations of the plan participants. Generic solutions may not be the best approach.
- **Transparency and Disclosure:** Choose advisors who are transparent about their fees and compensation structures. This fosters trust and ensures participants are aware of any potential conflicts of interest.

By prioritizing member-focused advisors, pension administrators can navigate challenges like data breaches while ensuring the financial security of their participants. This focus on member well-being strengthens trust and reinforces the administrator's commitment to its core responsibility. ◆

__ABL Tech__ is a data and technology company that specializes in helping organizations like insurance companies, pension funds, and financial institutions with mortality verification and beneficiary identification. Their services include mortality verification also known as a death audit, data analysis, and algorithms to ensure accurate records and prevent fraud. Their headquarters are in Orlando, Florida and their website is www.abltech.com.

Bridging the Cybersecurity Skills Gap with Virtual Chief Information Security Officer (vCISO) Services

By: Peter Dewar, Linea Solutions

Photo Illustration © 2024, istock.com

The cybersecurity skills gap encompasses a wide range of needs, from policy formulation to vulnerability management. Effective cybersecurity requires personnel who can write and implement comprehensive policy documents that cover access control, back up, incidence response, and acceptable use. These policies must be crafted by someone with broad knowledge of all cybersecurity controls and the ability to communicate and enforce them among staff.

Pension funds face the critical challenge of closing this skills gap – a mix of technical expertise and business operations knowledge – essential for protecting sensitive data and maintaining robust security protocols. Virtual Chief Information Security Officer (vCISO) services offer a strategic solution to this problem, particularly for pension funds who have limited resources.

The cybersecurity skills gap encompasses a wide range of needs, from policy formulation to vulnerability management.

Key Components of vCISO Services

- Vulnerability Management: Identifying vulnerabilities within the organization's environment and mitigating them effectively.

- Third-Party Risk Management: Identifying and mitigating areas of vulnerabilities that these service providers pose to the organization.

- Penetration Testing: Exploiting discovered vulnerabilities to assess the organization's susceptibility to specific threats, including zero-day vulnerabilities.

- Incident Response Planning:
  - Developing and training staff on incident response plans, creating detailed playbooks for various scenarios.
  - Conducting tabletop exercises to simulate responses to system outages and test the robustness of these plans.

- Training and Social Engineering: Educating staff through simulated phishing attempts, phone calls, and other social engineering tactics to recognize and respond to threats.

Hiring a vCISO can bring a wealth of knowledge and expertise to an organization on an as-needed basis. This arrangement can help lower costs for organizations as well.

This approach is particularly beneficial for pension funds, where IT staff sizes are typically small, and maintaining a full-time cybersecurity team is impractical. vCISO services provide the following advantages:

- A vCISO can bring together diverse skill sets that are often not found in a single individual, addressing both technical and strategic needs.
- They work with many other organizations and are able to implement industry best practices.
- They understand the inherent risks specific to the business, such as those associated with third-party interactions, actuarial analysis, and external money managers.

The cybersecurity skills gap poses a significant challenge to protecting funds against the wide variety of cybersecurity threats. By leveraging vCISO services, funds can access the expertise needed to develop robust security measures, manage vulnerabilities, and train staff effectively. This strategic approach not only enhances security but also ensures that funds can adapt to evolving threats without the burden of maintaining a full-time cybersecurity team. Embracing vCISO services is a proactive step towards bridging the skills gap and safeguarding the future of the organization. ◆

Peter Dewar *has over 25 years of experience in cybersecurity and leads the cybersecurity practice for the Linea group of companies that provide services across the United States and Canada. Under his leadership Linea has developed a Pension Cyber Security Framework (PCSF) to complement the generalized standards for protecting information systems. The PCSF focuses on the business process employed, services provided, and technology utilized by pension and benefits organizations, and devises controls to minimize and mitigate the inherent cybersecurity risk experienced by the industry.*

Peter has a Master's degree in Information Systems from the George Washington University, a Bachelor's degree in Information Systems from the University of the District of Columbia, is a Certified Information Systems Security Professional (CISSP), Certified Data Privacy Security Engineer (CDPSE), and has received certificates of achievements from the Harvard Kennedy School of Government, Gartner CIO Academy, and International Foundation of Employee Benefit Plans.

Building Organizational Resilience to Ensure Successful Change Management

By: Karen Chavez, Segal

Photo Illustration © 2024, istock.com

Organizational resilience is the ability of an organization to adapt to changes, both expected and unexpected. Key characteristics of resilient organizations include the ability to anticipate, prepare, respond, and adapt to changes.

The benefits of building a resilient organization are:

- An improved ability to navigate challenges and uncertainty
- Increased organizational agility and adaptability in times of change
- Enhanced employee morale and well-being during disruptions
- Stronger long-term operational performance

Being resilient is particularly advantageous when projects take longer than anticipated. An example is implementing a Pension Administration System (PAS), which, on average, takes 44% longer than projected, as Jeff Mills and Meir Schecter noted in their Spring 2024 *PERSist* article, "Creating a Realistic Schedule for Your New Pension Administration Solution (PAS)."

Resiliency Improves an Organization's Capacity to Cope with Change

Resiliency is important because organizations like public sector retirement plans don't experience one change at a time. Typically, staffing, budget, legislative and policy changes occur at the same time as a major project. The combination of administrative changes and long-running, concurrent or serial projects — change saturation, when too much change is happening simultaneously — can make it hard for an organization to absorb changes. Change fatigue is the sense of exhaustion that comes from being in a continual state of change. Change saturation and change fatigue, which are indicators of insufficient capacity for change, are often accompanied by a reduction in productivity. When capacity is stretched, individuals and teams lose focus and may feel stressed.

Without the proper preparation, this stress response can impact your project and your employees' well-being. It can also lead to morale issues as employees lose enthusiasm for a project or change, leading to a slowing of project progress and increased inefficiencies. Given the dynamic pace and variety of changes in the public retirement systems, you need both traditional change management for key projects and organizational resilience to set your team up for long-term success.

The Key Differences Between Organizational Resilience and Traditional Change Management

Traditional change management and organizational resilience both have their place and when done well, the two disciplines complement each other. Some of the main differences between traditional change management and organizational resiliency include:

- **Reactive vs. Proactive:** Change management reacts to a defined need such as a project, while resilience builds proactive, global capabilities within the workforce and culture, like a growth mindset.
- **Focus:** Change management focuses on the specific change defined by a project's scope, while resilience prepares the organization for anything.
- **Outcome:** Change management aims for successful implementation of the change initiative, while resilience aims for successful implementation and long-term growth to prepare for the next change.

Organizational resilience goes beyond traditional change management, building organizations that are stronger and better able to adapt to the dynamic changes taking place in the world. By building an adaptive response in anticipation of future changes alongside change management practices, your employees are better able to complete projects on time and set up your next projects on the path to success before they begin.

Steps to Build Resiliency

What are the first steps?

- **Build resiliency into your strategic plan.** Identify changes that are likely to occur in the next five to 10 years, including staffing changes, projects, potential threats, and opportunities that you might be able to anticipate.
- **Take a fearless inventory of your organization's change capacity.** Look at the amount of change that has occurred over the past three years and the changes you want to introduce.
- **Foster a culture of learning and emotional intelligence.** Part of your strategic plan should include a path for building trust and psychological safety and creating a culture of learning and growth. Your workforce needs to feel safe expressing concerns and trust those concerns will be taken into consideration.
- **Develop strategies and structures for effective transitions.** Establish clear lines of communication that are compassionate and supportive and provide information and guidance. Be available and listen to how the change is being experienced.

Organizational resilience is about building and maintaining robust and adaptive teams that can navigate through challenges and emerge stronger on the other side.

In the NCPERS 2024 Public Retirement Systems Study, two of the top trends in business practices are updating or enhancing administrative software and updating or enhancing a mobile app for members. Both of these directly impact plan operations and require changes in how you deliver benefits. Changes like these make resilience a strategic imperative for long-term organizational success. ◆

Karen Chavez *is a consultant in Segal's Administration and Technology Consulting (ATC) Practice. She has more than 20 years of experience in public sector pension and health benefits administration. Prior to joining Segal, Karen was the administrator of the Oregon Public Employees Retirement System Retiree Health Insurance Program.*

Balancing a Plan's Risk Exposure with Securitized Fixed Income

By: Dan Dreher, LGIM America

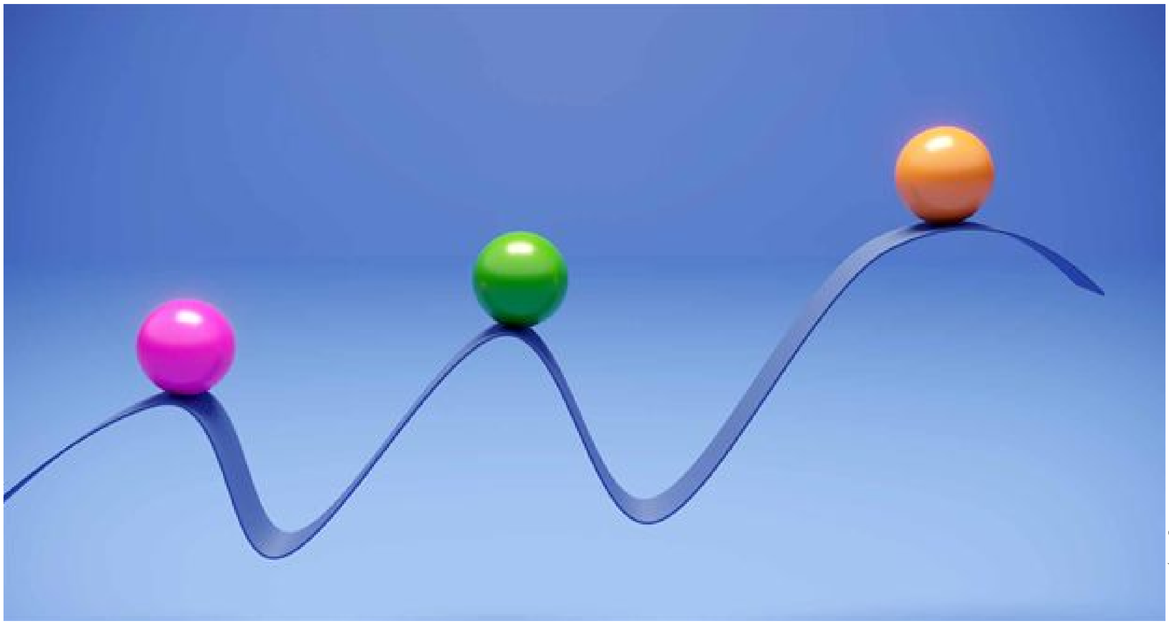


Photo Illustration © 2024, istock.com

Public pension plans have traditionally prioritized three key pillars in their investment strategies: diversification, enhanced return, and liquidity. However, achieving these objectives is increasingly challenging in today's financial landscape. Diversification has become more difficult as a smaller percentage of issuers now make up a larger portion of most standard public indices – i.e., top ten holdings make up 35% of S&P 500. Liquidity has also become a challenge amidst growing allocations to less liquid private market asset classes in exchange for higher expected returns – broad category has seen over $11 trillion in AUM growth in last 10 years.[1,2]

Some plans have identified the need for a portfolio that helps balance these pillars. While oftentimes called "Risk Mitigating" or "Crisis Risk Offset" portfolios, they are designed to better protect assets during deep and extended equity market declines largely comprised of liquid investment strategies. Naming conventions aside, plans are recognizing the need for liquidity as fulfilling private market capital calls, quarterly rebalancing activity, and benefit payments are essential to their operations.

Securitized products: the sweet spot

These optimization efforts frequently include an allocation to securitized products – and in the face of modern financial challenges, securitized assets stand out as a compelling solution. Unlike some public indices, which are concentrated in a smaller percentage of issuers, securitized assets encompass a wide range of underlying asset classes and market sectors. They also offer a level of liquidity typically higher than private market assets, while still providing the potential for enhanced returns relative to other public fixed income investments.

However, at first glance, certain risk metrics can screen concerning – for example, the time series in Figure 1 of auto loan defaults prime and non-prime loans increasing to 2% and 12%, respectively. But a deeper look reveals a different story.

Figure 1: ABS – Auto loan, constant default rate

Source: LGIM America. Data as of April 30, 2024. For illustrative purposes only.

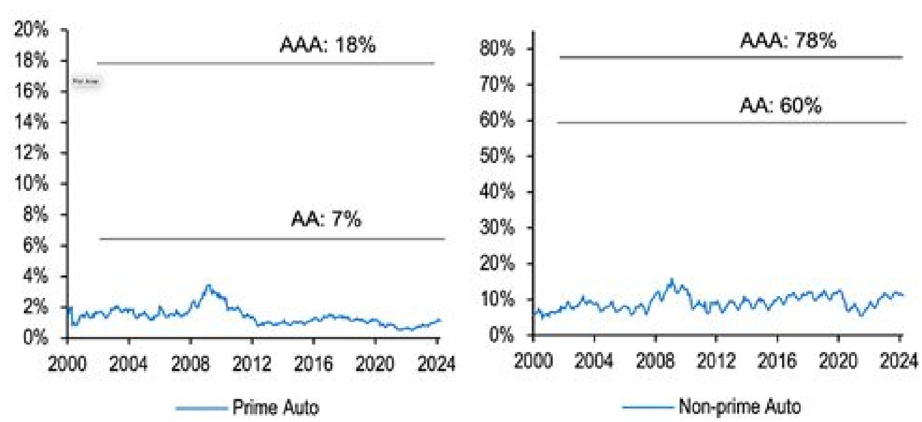
Securitized transactions are unique in that they are structured into multiple tranches, each with its own credit rating, rather than having a single rating for an individual bond. Tranches are arranged in a hierarchy based on seniority and risk. Senior tranches have higher credit ratings and are paid out first, while junior tranches, which are first to absorb losses, have lower ratings and higher yields. Additionally, "default rates" are not always as concerning as it sounds – many transactions are structured with built-in mechanisms for workouts and recoveries.

Customization and credit enhancements

Structuring within transactions is a key aspect of securitization that allows for the creation of securities with varying risk profiles to cater to different investor appetites. Credit enhancements are a primary customization tool and act as protection in the form of financial support against losses on securitized assets in adverse circumstances. From the investor's perspective, so long as the pool of assets does not experience losses above the enhancement level, the investor will receive full economic benefit. The level of credit enhancement, which aligns with the rating of each tranche, varies across asset class. Said differently, an investor with a credit enhancement at 40% would be insulated from the first 40% of losses in the transaction.

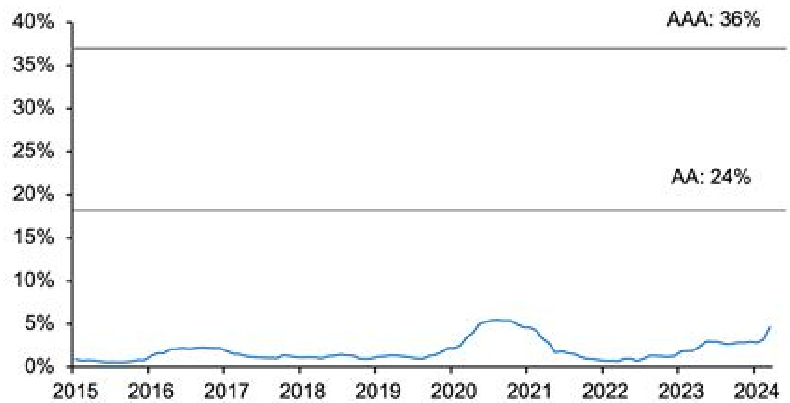
Figure 2 shows the same time series for auto loan defaults but this time we've overlaid recent credit enhancement levels for a given rating. We've also done the same with other securitized sectors (see Figure 3-4).

Figure 2: ABS – Auto loan, constant default rate



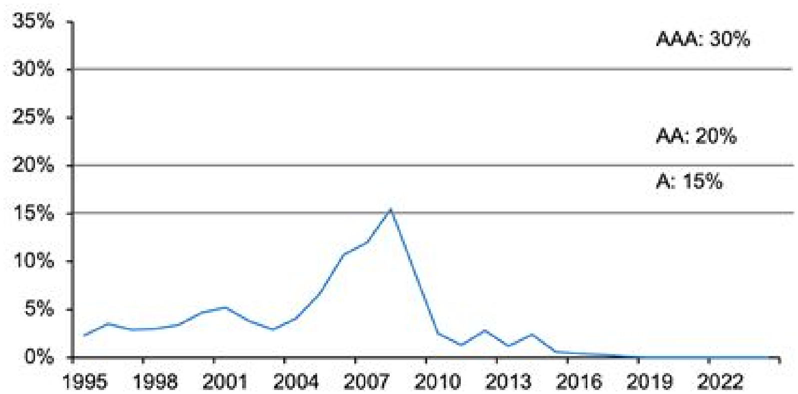
Credit enhancement by rating

Figure 3: CLO – 12-month trailing (including restructuring) over time



Credit enhancement by rating

Figure 4: CMBS (conduit) – Historical loss %



Credit enhancement by rating

The default rates of securitized products can be misleading if not viewed in the context of tranche hierarchy. While lower tranches might experience higher defaults, this does not necessarily reflect the overall quality of the entire asset class. By concentrating on the higher-rated tranches, investors can benefit from strong credit enhancements and lower default risks, which can make the asset class more attractive than it might appear when considering risk metrics at the transaction level.

Securitized in public pension portfolios

Currently, many plans are using securitized products with a policy allocation between 15-20%. Others have recently signaled intentions to increase their allocation to a similar level.

Plans recognize the ability of securitized products to balance out the competing interests of diversification, enhanced return, and liquidity. The diversity of exposures – asset-type, sector, geography, liquidity, cash flow profile, discount margin, etc. – point to securitized products as a means of obtaining customized exposure without sacrificing any of the three pillars. And notably, the use of credit enhancement may offer an outlet for meaningful downside protection in adverse market conditions. ◆

Disclosures:

This material is intended to provide only general educational information and market commentary. This material is intended for Institutional Customers. Views and opinions may change based on market and other conditions. The material contained here is confidential and intended for the person to whom it has been delivered and may not be reproduced or distributed. The material is for informational purposes only and is not intended as a solicitation to buy or sell any securities or other financial instrument or to provide any investment advice or service. Legal & General Investment Management America, Inc. does not guarantee the timeliness, sequence, accuracy or completeness of information included. Past performance is no guarantee of future results. The strategies discussed above utilize investments in derivatives, which include inherently higher risks than other investments/strategies and may not be successful in all market conditions. Derivatives are for sophisticated investors who are able to bear the risk of loss of capital.

Unless otherwise stated, references herein to “LGIM”, “we” and “us” are meant to capture the global conglomerate that includes Legal & General Investment Management Ltd. (a U.K. FCA authorized adviser), LGIM International Limited (a U.S. SEC registered investment adviser and U.K. FCA authorized adviser), Legal & General Investment Management America, Inc. (a U.S. SEC registered investment adviser) and Legal & General Investment Management Asia Limited (a Hong Kong SFC registered adviser). The LGIM Stewardship Team acts on behalf of all such locally authorized entities.

Dan Dreher *is a Solutions Strategist at LGIM America. In his role, he supports the design, structuring, management and business development of LGIM America investment strategies and is the primary liaison between prospects, clients, consultants and LGIM America investment disciplines.*

Dan rejoined LGIM America in 2023 after co-creating Bopdrop Inc., a music sharing platform with over one million users. As Chief Operating Officer, he led all business development efforts while designing and implementing robust analytics tools dynamically synced with growth, revenue and cost models. Prior to this, Dan worked at LGIM America for over five years, most recently as a Senior Strategy Associate where he helped design solutions for LGIM America’s client base as well as supported the development of new products and investment strategies.

Dan earned an AB in Politics from Princeton University. He holds a Series 3 license registered with the NFA.

Endnotes:

1 Bloomberg as of 6/25/2024

2 Preqin from 12/31/2013 – 9/30/2023

Risk Mitigating Strategies

By: Jean-Francois Tormo, Wilshire

Photo Illustration © 2024, istock.com

Over the last several years, Wilshire has observed increased appetite from institutional investors for Crisis Risk Offset, also referenced as Risk Mitigating Strategies ("RMS"). These programs tend to capture several strategies which have in common a low to negative correlation to equity markets. Most are systematic and capitalize on well-documented and researched risk premia and factors.

Each underlying strategy has a different response function to financial market shocks and behaviors. As a result, they can be assembled in multiple ways, depending on the level of expected protection to a prolonged equity market sell-off that is needed by the investor.

Strategy	Key Characteristics
Trend Following ("Trend")	• Low to negative correlation to most asset classes with an implicit long volatility bias. • May be challenged in non-trending environments or around abrupt market reversals.
Global Macro ("Macro")	• Seeks to capture large macro disruptions across most asset classes (primarily fixed income and currencies) and expected to exhibit diversifying behavior around market inflection points. • Implemented in a discretionary or systematic approach.
Alternative Risk Premia ("ARP")	• Seeks to capture traditional and alternative risk premia. • Can be used tactically to enhance returns or provide defensive benefits in stretched markets.

There are multiple ways to construct RMS programs, with key considerations highlighted below for investors who are in the process of building and running these programs:

- Establish the program as a strategic allocation before the actual downturn occurs, while also being prepared to be tactical/active when relevant.
- RMS building blocks need to have defensive strategies (Trend Following) to provide convexity, which should be complemented with income-generating elements (Risk Premia) to offset the negative carry associated with the defensive components. Other components that are more dynamic can play both defensive and income-generating roles (Global Macro).
- Allocate to underlying strategies with low correlations to increase the probability of performing well at different points in the cycle.
- Manager selection is key to implementing these programs, with the goal of ensuring that the managers perform in line with their desired role – defensive, income-generating or both.
- Active rebalancing is essential.
- Maintain the ability to implement tactical tilts to some of the core components in stretch environments.
- Remain disciplined in the allocation to the program during equity bull markets.
- Furthermore, given the challenges that these programs may face in certain market environments, we believe that RMS programs can be enhanced by incorporating additional elements to the core components of Trend, Global Macro and Risk Premia, which may include:
- Actively-managed tail risk strategies to enhance the convexity with managers and/or solutions that actively seek to minimize the negative carry and have systematic monetization rules in periods of strong performance.
- Complement these programs with uncorrelated strategies to improve overall performance when markets rally.

Markets have provided us with numerous shocks during the last five years, which provide a relatively robust set of observations for analysis: Covid in March 2020 and the following extraordinary monetary and fiscal stimulus, rising inflation – exacerbated by the Ukraine-Russia war and associated supply chain disruptions, and the fastest hiking cycle in decades. The U.S. financial markets responded accordingly to these events, all of which have coincided with historical moves in most asset classes.

We believe that RMS programs represent a compelling source of diversification to traditional multi-asset portfolios. ◆

To read more about Wilshire's approach on building an RMS program, please contact us at AltsMAP.ClientServices@wilshire.com.

Jean-Francois Tormo, CAIA *is a Senior Vice President focused on alternatives portfolio management and hedge fund research on Wilshire's alternative managed accounts team. He joined the firm in December 2023 as part of the Lyxor U.S. acquisition.*

Prior to joining Wilshire, Jean-François worked at Lyxor U.S. as the lead portfolio manager in charge of managing discretionary fund of hedge funds and providing customized advisory services on alternative investments. He also worked in hedge fund research, focusing on relative value and fundamental strategies. Before joining Lyxor U.S., Jean-François was based in Paris where he worked on the asset allocation team at Lyxor. Prior to Lyxor he worked at BNP Paribas Arbitrage and Credit Lyonnais in investment banking.

Jean-François holds a master's research degree in economics, banking, and finance from Paris-Panthéon-Assas University and a master's degree in finance from Paris Dauphine – PSL University. Jean-François holds the Chartered Alternative Investment Analyst Association designation.

NCPERS

Three Securitized Debt Trends We're Watching

By Nick Rinaldi, Newfleet Asset Management/Virtus Fixed Income Advisers

Photo Illustration © 2024, istock.com

Securitized debt sectors have seen a lot of action this year: U.S. consumer and office property delinquencies are on the rise, while mortgage rates soared to a 22-year high as investors reconcile themselves to "higher for longer" interest rates. So, what's our outlook for securitized debt? Here are three trends we're following.

1. While we think commercial mortgage-backed securities (CMBS) are still in the early innings of their credit cycle, we expect to see more interesting opportunities to invest in high-quality single-asset single-borrower (SASB) and conduit deals as foreclosures start to tick up. Tighter lending standards within the asset-backed securities (ABS) autos sector first implemented in 2023 are beginning to bear fruit, as we believe subprime auto deterioration has reached its peak.

Even with spiking mortgage rates, record low levels of housing inventory and low levels of mortgage delinquencies have bolstered this market. We think non-agency residential mortgage-backed securities (RMBS) demonstrate the best opportunity within housing due to their stable performance and attractive spreads. The CMBS sector continues to face challenging headwinds, including a looming maturity wall, reduced office demand, and an excess supply of multifamily housing. According to Real Capital Analytics, peak-to-trough valuations for office and multifamily are down 47% and 19%, respectively. That said, CMBS market valuations have rallied while spreads have compressed dramatically from year-end 2023. This signals that a floor may have been set on commercial real estate (CRE) valuations, and that CRE losses may not be as high as initially expected. On a year-to-date basis, new issue supply is up 184% as investors are comfortable putting dollars to work in conservatively underwritten deals.

Our Outlook: Expect to see a lot of extension modifications for maturing loans due to tighter credit conditions. In addition, look for an increase in downgrades as rating agencies evaluate current negative fundamentals.

2. Floating rate coupons are extremely attractive in this higher-for-longer environment. U.S. consumer fundamentals remain strong. Unemployment (3.9%) remains near all-time lows, job openings (8.9 million) are near all-time highs, employment wage growth (4.2%) is nearly double the pre-pandemic growth rate, housing data remains robust, and the stock market is near all-time highs. Tighter underwriting for lower FICO borrowers also commenced in 2023. As a result, we think newer underwritten loans with lower debt-to-income ratios should produce lower losses going forward. Though delinquencies are worsening for all types of borrowers, the increase is more pronounced for lower-scoring FICO borrowers. That said, unemployment is still historically low at 3.9%.

Our Outlook: We're seeing a return to more normal credit metrics. However, we believe consumer credit should still perform well in a high 4% or even low 5% unemployment rate scenario.

3. Despite affordability headwinds from higher rates, mortgage credit fundamentals still look solid, in our view. Though mortgage rates spiked from generational lows, threatening to dampen a hot housing market, the fallout has been relatively mild due to the ongoing housing supply shortage, which remains historically low and creates a floor for any potential price declines. Additionally, most homeowners were able to lock in rates over the last couple of years, creating low mortgage debt service levels. Meanwhile, mortgage delinquency rates are staying low. Homeowner equity levels have ballooned to nearly $30 trillion, and stringent underwriting has helped bolster performance. That, coupled with expected low levels of supply, makes RMBS valuations look attractive as a result.

Our Outlook: Higher mortgage rates and a subsequent fall in housing activity bode well for fundamentals and technicals for this sector. Credit quality remains healthy, while the non-qualified-mortgage market is issuing enough paper to remain stable. Overall, RMBS issuance is expected to be up 40% from 2023, allowing for many opportunities. RMBS spreads should track agency mortgage-backed securities with additional carry, allowing for outperformance.

A disciplined strategy offering exposure to undervalued securitized sectors may offer higher yield and carry at lower levels of volatility compared to corporate bonds of similar duration and credit rating. ◆

Disclosures:

Investing is subject to risk, including the risk of possible loss of principal.

This commentary is the opinion of Newfleet Asset Management. Newfleet provides this communication as a matter of general information. Portfolio managers at Newfleet make investment decisions in accordance with specific client guidelines and restrictions. As a result, client accounts may differ in strategy and composition from the information presented herein. Any facts and statistics quoted are from sources believed to be reliable, but they may be incomplete or condensed and we do not guarantee their accuracy. This communication is not an offer or solicitation to purchase or sell any security, and it is not a research report.

Nick Rinaldi *is a senior managing director and portfolio manager of securitized products at Newfleet Asset Management, a division of Virtus Fixed Income Advisers, LLC ("VFIA"). Mr. Rinaldi is co-head of the securitized products team, specializing in asset-backed and commercial mortgage-backed securities.*

About Newfleet Asset Management
Newfleet Asset Management, distinguished by its longstanding multi-sector approach, dynamic structural integration, experience, and culture of collaboration, has a proven track record of successfully navigating the fixed income markets to consistently generate excess returns over full market cycles.

To learn more about Newfleet Asset Management, please contact us at 877-332-8172 or visit www.newfleet.com.

NCPERS

Understanding India

By: Alison Adams, Meketa Investment Group

Photo Illustration © 2024, istock.com

India, the world's most populous democracy, has emerged as one of the fastest-growing major economies. Its economic journey has been characterized by significant reforms and growth spurts, particularly since the liberalization of the 1990s. This essay explores the key facets of India's economic evolution, challenges, and potential.

> *India, the world's most populous democracy, has emerged as one of the fastest-growing major economies.*

India's economic liberalization in 1991 marked a turning point. The reforms introduced included reducing import tariffs, deregulating markets, and opening up to foreign investment. These changes led to an increase in GDP growth, transforming India into a global economic player. From 1991 to 2022, India's GDP grew at an average annual rate of 6-7%, positioning it as a major driver of global economic growth. The services sector has been a significant contributor, accounting for over 50% of GDP during that period, followed by industry and agriculture. Liberalization attracted substantial foreign direct investment (FDI), with sectors like telecommunications, IT, and automotive seeing robust growth. FDI inflows have helped modernize India's infrastructure and boost employment.

India's economic model is heavily consumption-driven. Private consumption accounts for nearly 60% of GDP currently, supported by a growing middle class and rising incomes. Investment rates, although fluctuating, have generally remained robust, driving infrastructure development and industrial growth. Despite a focus on consumption, India has also strengthened its export base. Key exports include software services, pharmaceuticals, textiles, and machinery. However, the trade deficit remains a concern, driven by high imports of oil and gold.

India's economic journey is not without challenges. Structural issues like poverty, income inequality, and unemployment persist.

India's economic journey is not without challenges. Structural issues like poverty, income inequality, and unemployment persist. The informal service sector, which employs a significant portion of the workforce, lacks social security and stability. Infrastructure gaps, particularly in rural areas, and bureaucratic hurdles also impede growth. Despite economic growth, a substantial part of the population remains below the poverty line. Efforts to alleviate poverty include social welfare programs and financial inclusion initiatives. Reducing income inequality is crucial for sustainable development. The job market faces the dual challenge of creating sufficient employment opportunities and enhancing job quality. Skill development programs and labor market reforms are essential to address these issues.

Agriculture remains a cornerstone of India's economy, employing about half of the workforce but contributing less than 20% to GDP. Modernizing agriculture through technology, better irrigation, and supply chain improvements is vital for enhancing productivity and farmer incomes. The 'Make in India' initiative aims to boost manufacturing, increase exports, and create jobs. However, the sector needs better infrastructure, streamlined regulations, and access to finance to thrive. The services sector, particularly IT and business process management, has been a global success story. Continued investment in education and digital infrastructure is necessary to maintain this momentum.

India's future economic prospects hinge on continued reforms, infrastructure development, and inclusive growth strategies. Leveraging digital technologies will likely drive efficiency, transparency, and financial inclusion. Expanding internet access and digital literacy are critical for a thriving digital economy. Addressing environmental challenges through sustainable practices is essential. Investments in renewable energy, waste management, and green technologies may promote eco-friendly growth. Strengthening trade relations and participating in global value chains should enhance India's economic resilience. Policies that support innovation, entrepreneurship, and competitiveness are vital.

India stands at a crossroads, with immense potential for growth and development. Balancing economic progress with social equity, environmental sustainability, and good governance will be key to realizing this potential. Continued reforms, targeted investments, and inclusive policies can help India achieve its goal of becoming a leading global economy. ◆

Alison Adams *joined Meketa in 2021 and has been in the financial services industry for 19 years. She serves as a research consultant where her responsibilities include global macroeconomic research and writing thought leadership materials. She is also a member of Meketa's Global Macroeconomic Investment, Investment Policy, and Strategic Asset Allocation/Risk Management Committees, and the Defined Contribution Practice Group.*

Ms. Adams earned her Ph.D. from Harvard University Faculty of Arts and Sciences in history. Prior to joining the firm, she was an Associate Consultant at RVK, Inc. Previously, Ms. Adams was employed as an analyst at Fidelity Management & Research and as a case researcher at Harvard Business School.

Do You Know Who's Voting Your Proxies?

By: Simon Zais, Egan-Jones

Photo Illustration © 2024, istock.com

There are only three ways proxies get voted, each fraught with operational peril and ripe for exploitation. Executed properly, the proxy lever for exerting influence on corporate governance is a beautiful thing: a virtuous combination of values alignment and shareholder democracy. Unfortunately for large asset owners and their beneficiaries, there can exist real misalignment and conflict between various stakeholders.

The most obvious way a proxy gets voted is directly by the asset owner. Asset owners looking to keep third-party bulls out of their corporate china shops often choose this option. Far from being a panacean remedy however, the costs associated with this solution can be significant. Even beyond erection of the associated operational and compliance scaffolding, for large institutions with diversified equity portfolios, the associated personnel demand can be staggering. These are valuable man hours that could be spent developing investment theses, performing manager diligence, or even golfing. Not to say corporate governance isn't valuable—it obviously is—but it battles in the hyper-competitive arena for allocator attention.

"So, I'll let my managers vote their portfolio proxies on my behalf," says this allocator after reviewing her organizational capabilities against the aforementioned structural hurdles to vote proxies herself. Whether operating from an SMA or pooled vehicle, delegation of this authority is an invitation to conflict and risk, both regulatory and headline.

These managers often have their own priorities when it comes to the way portfolio companies should be run. The most visible and politicized example is climate and emissions prioritization. Via the Net Zero Asset Managers initiative, over 300 asset managers collectively managing over $57T in assets have committed themselves to both pressure their asset owner clients into decarbonization goals, and develop "escalating" stewardship and engagement strategies against portfolio companies. Are these directives in the best interests of the companies, shareholders, funds, or beneficiaries? Do they drive long term returns? Or are these conflicted managers instead interpolating public policy into boardrooms?

"Luckily I can outsource to a proxy advisor." This manager will finally say, with a sigh of relief. "Surely they will consider only the best interests of my beneficiaries." Unfortunately, stemming from the market concentration and centrality, the agency problems highlighted with asset managers can actually be amplified with proxy advisors if asset owners do not carefully choose and closely monitor these partnerships.

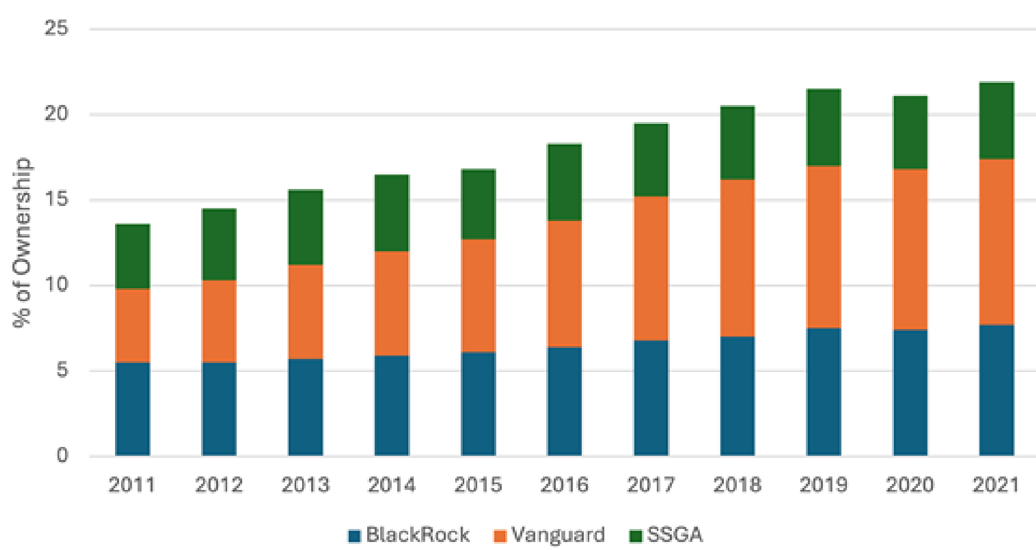
Returning again for illustrative simplicity to the climate example, even custom or hybrid policies may not be enough to guarantee alignment. Advisors' slippery contract language and deep climate religiosity can introduce uncertainty in a best-case scenario, or backdoored activism at worst. In fact, two of the top three proxy advisors have dedicated to using their size and scope to make the world greener through their boardroom influence.

As asked above, how much daylight is appropriate to exist between the goals, objectives, and values of a plan and its beneficiaries, and the political activism of the proxy advisors paid to exercise proxy voting authority?

Even more troubling, however, is the practice by some proxy advisors of providing corporate consulting to the very companies in which they will be voting shares. This is an extreme conflict that has been called out repeatedly by regulators, academics, and industry participants. There is no information firewall or control set that empowers these interlocking and supplemental activities to safely live within one organization. The demand that service providers provide unconflicted advice is supremely reasonable and in the highly visible and scrutinized world of corporate governance, should be table stakes.

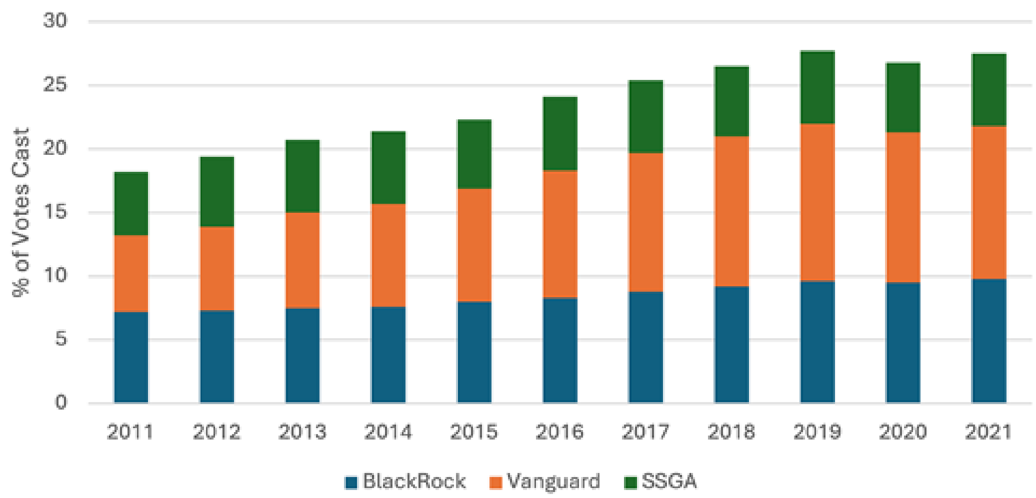
The way a company is managed is important and causal to its outcomes. The owners of a company should get to decide how that company is run. If an asset owner has a company in the portfolio, they should want better outcomes for that company. Starting from these three truisms leads to the conclusion that asset owners need to be invested in the proxy process. Whether owning the process outright or outsourcing certain activities, identifying and mitigating conflicts, and managing tradeoffs is the jumping-off point to doing right by beneficiaries and stakeholders. More and more attention is being paid to corporate governance. It's time for asset owners to ***really*** know, who's voting your proxies? ◆

Median % Ownership of S&P 500 Companies by the Big 3



Graph Souce: [Big Three Power and why it Matters](#)

Median % of Votes at S&P 500 Company Annual Meetings Cast by the Big 3



Graph Souce: [Big Three Power and why it Matters](#)

As a Senior Manager at Egan-Jones Proxy, ***Simon Zais*** *works with asset owners, asset managers, and wealth managers across the proxy landscape to ensure alignment between values and effective corporate governance. He lives in Connecticut with his wife, kids, and dog, who are all very tired of hearing about proxy voting.*

Endnotes:

1 Signatories – The Net Zero Asset Managers initiative
2 The Troubling Case of Proxy Advisors

Private Infrastructure Debt: A Growing Asset Class for Public Pension Investors

By: Brian Collett, I Squared

Photo Illustration © 2024, istock.com

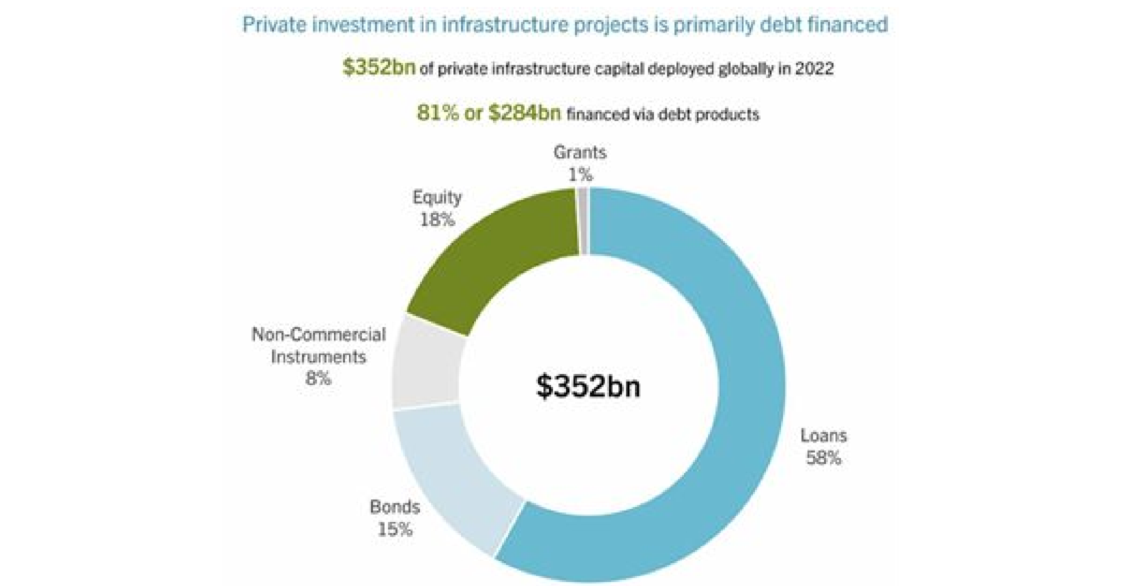
Private infrastructure debt is emerging as an attractive investment opportunity for public pension investors seeking diversification, steady income, and downside protection. This asset class bridges the gap between the significant need for infrastructure funding and the limited capacity of traditional financial sources to meet this demand. This article explores the growth of private infrastructure debt, its benefits, and its role in portfolio construction for public pension investors.

Private infrastructure debt is emerging as an attractive investment opportunity for public pension investors seeking diversification, steady income, and downside protection.

Growing Demand and Supply-Demand Imbalance

The global infrastructure funding gap is substantial. By 2040, the estimated infrastructure expenditure needed worldwide is $94 trillion, yet current spending projections fall short by about $18 trillion. This shortfall highlights the growing opportunity for private infrastructure debt to fill the void left by traditional financing sources, such as commercial banks and capital markets. Regulatory changes have tightened capital requirements for banks, reducing their capacity to finance infrastructure projects. As a result, private market participants have stepped in to address the imbalance, offering more flexible and tailored financing solutions.

Growing Opportunity set for Infrastructure Debt



Source: Global Infrastructure Hub: Infrastructure Monitor 2023.

The graph above illustrates the significant opportunity set for Infrastructure debt with over $284 billion financed via debt in 2022. This underscores the growing recognition of infrastructure debt as a viable standalone investment vehicle, attracting a substantial amount of capital from investors seeking stable and reliable returns.

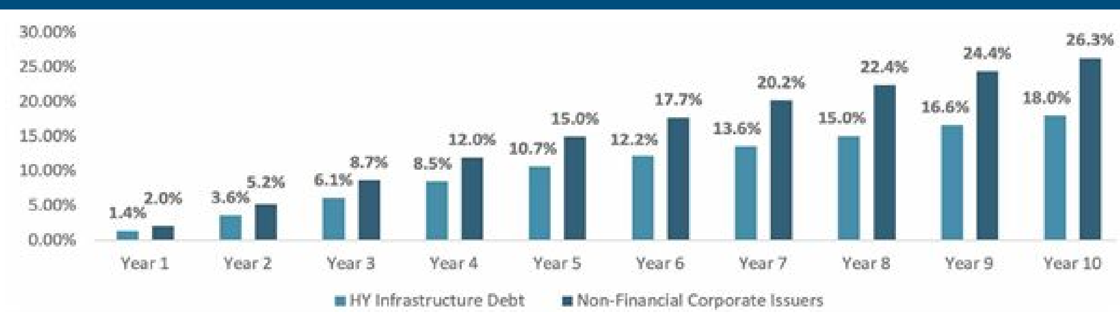
Key Characteristics and Benefits of Infrastructure Debt

Infrastructure assets are vital for social and economic development. They typically generate stable, long-term cash flows that are often inflation-linked, providing a natural hedge against inflation for investors. Additionally, infrastructure debt usually involves secured lending, which offers higher protection compared to corporate debt.

Reduced Risk and Downside Protection

Infrastructure projects generally operate under long-term contracts or regulated environments, ensuring revenue visibility and reducing volatility. This stability is attractive for investors looking for reliable returns. Historical data supports the lower risk profile of infrastructure debt compared to corporate debt, with infrastructure credit showing lower default and loss rates over the past decades.

Average BB/B cumulative default rates, 1983-2021



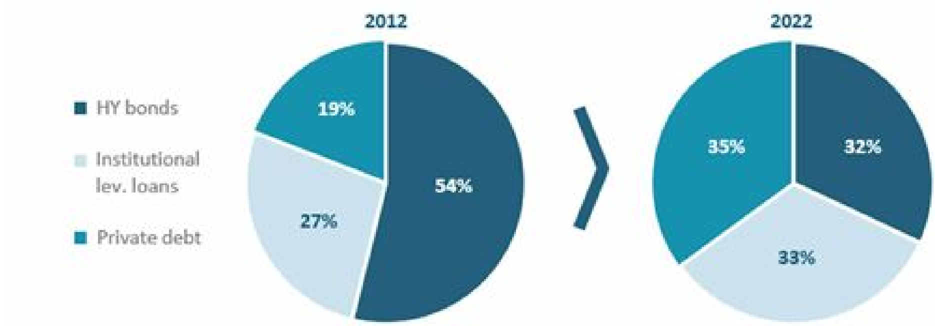
Source: Moody's, September 2021.

The graph above shows the significantly lower default rates for infrastructure debt compared to corporate debt over nearly four decades, reinforcing its lower risk profile.

Attractive Yields and Risk-Adjusted Returns

Despite lower risk, infrastructure debt can offer competitive yields. This is particularly true for private infrastructure debt, which benefits from less competition compared to corporate direct lending. Investors can achieve strong risk-adjusted returns, making infrastructure debt a valuable addition to diversified portfolios.

Annual debt issuance by type



Source: IMF, Deutsche Bank, May 2023.

The comparison between 2012 and 2022 demonstrates the shift in debt issuance, with private debt surpassing high yield bonds and leveraged loans for the first time. In 2022, private debt issuance reached $500 billion, significantly outpacing high yield bonds and institutional leveraged loans, which stood at $350 billion and $450 billion, respectively.

The Role of Private Infrastructure Debt in Portfolio Construction

Private infrastructure debt can enhance public pension portfolios by providing several key benefits:

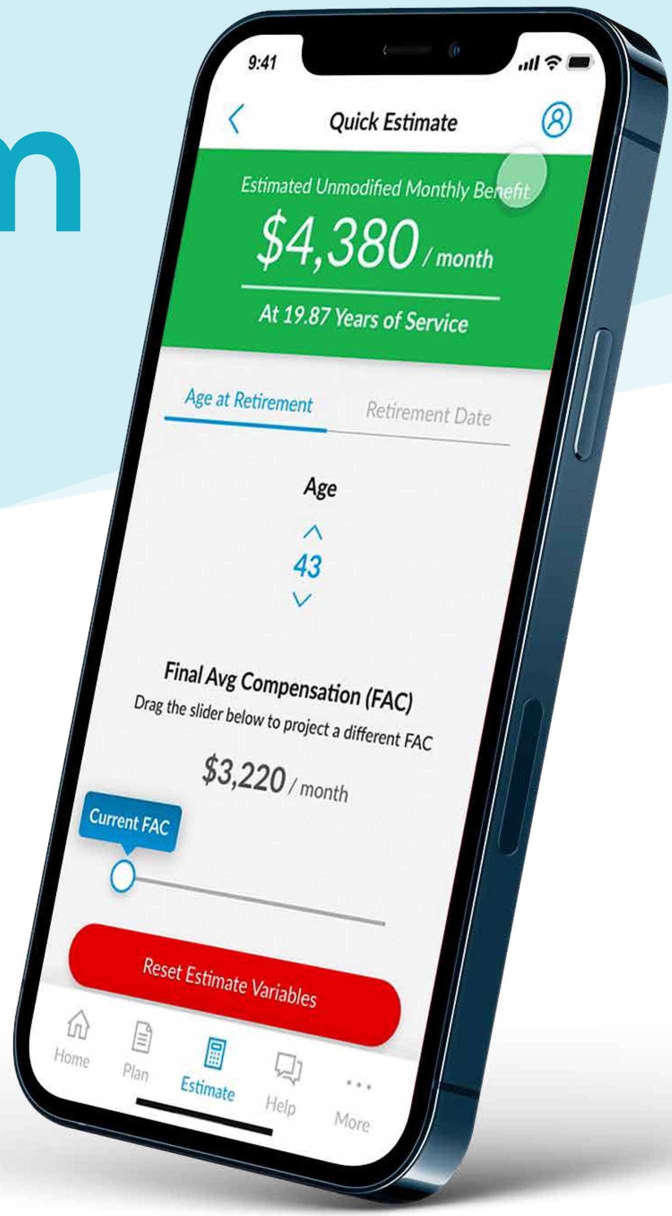
- **Incremental Downside Protection and Portfolio Resilience**: The essential nature of infrastructure assets means they are less sensitive to economic cycles, offering stability and resilience.
- **Attractive Cash Yields**: Infrastructure debt investments typically generate higher yields compared to traditional fixed-income securities.
- **Enhanced Diversification**: Adding infrastructure debt to a portfolio can improve diversification, reducing overall portfolio risk.
- **Improved Risk-Adjusted Returns**: The favorable risk-return profile of infrastructure debt can enhance the overall performance of a portfolio.

Conclusion

The infrastructure sector's evolution and the increasing role of private infrastructure debt present significant opportunities for public pension investors. The ability to provide inflation-linked income, downside protection, and attractive risk-adjusted returns makes private infrastructure debt a compelling addition to public pension portfolios. As traditional financing sources continue to face challenges, private infrastructure debt will play an increasingly vital role in funding essential infrastructure projects, driving economic growth and stability. ◆

Brian Collett, CFA, CAIA*, currently serves as the Managing Director of Strategic Engagement at I Squared Capital. Previously, he was the Chief Investment Officer at Missouri Local Government Employees Retirement System (LAGERS), where he successfully managed a multi-billion-dollar portfolio. At LAGERS, Brian implemented innovative investment strategies and robust qualitative risk management practices, consistently achieving top-decile performance. With over 25 years of experience in asset allocation and investment structuring, Brian has held significant positions at South Carolina Retirement System and Russell Investments. He is an expert in private debt, private equity, hedge funds, public markets, and asset allocation. Brian holds an MBA in Finance from Butler University and a BS in Mathematics from Marian University.*

NCPERS PensionX Digital Platform



NCPERS has partnered with Digital Deployment to offer its members a **10% DISCOUNT** on PensionX, the premier digital platform that securely enables pensions to engage with active and retired participants via a mobile self-service app and portal.

Learn more about this new NCPERS member benefit at ncpers.org/pensionx

UPCOMING EVENTS

August

Public Pension Funding Forum

August 18-20
Boston, MA

September

Public Pension HR Summit

September 24-26
Denver, CO

October

NCPERS Accredited Fiduciary (NAF) Program

October 26–27
Palm Springs, CA

Program for Advanced Trustee Studies (PATS)

October 26–27
Palm Springs, CA

Public Safety Conference

October 27-30
Palm Springs, CA

View all upcoming NCPERS conferences at www.ncpers.org/future-conferences.

The Voice for Public Pensions

The Monitor is published by the National Conference on Public Employee Retirement Systems.
Website: www.NCPERS.org • E-mail: info@ncpers.org