



APERS QUARTERLY BOARD MEETING

Date: Wednesday, November 16, 2022
Time: 9:00 A.M.
Location: 124 West Capitol Ave, Suite 400
Little Rock AR 72201

Note: The meeting will be held in the APERS conference room located on the 4th floor.
The meeting will be a hybrid meeting and can be attended via Zoom.
Please contact Linda.Mcgrath@arkansas.gov for video conference details.

AGENDA

1. General

- a. Call to Order
- b. Recognition of the Presence of a Quorum
- c. Notification of Meeting to News Media Pursuant to Act 93 of 1967 (AR Code 25-19-101) – Freedom of Information Act
- d. **Action Item:** Approval of the Minutes for August 17 and October 25, 2022 **(Page 3)**

2. Investments

- a. Quarterly Report for the Period Ending September 30, 2022 –Brienne Weymouth and John Jackson of Callan LLC. and Carlos Borrromeo **(Page 10) (Handout)**
- b. Asset Allocation Study – Brienne Weymouth, John Jackson, John Pirone, and Carlos Borrromeo **(Page 30)(Handout)**
- c. Class Action Settlement Proceeds and Pending Report – Amy Fecher **(Page 57)**

3. Actuarial

- a. 2022 Annual Actuarial Valuation Results –Mita Drazilov and Heidi Barry of Gabriel, Roeder, Smith **(Page 66) (Handout)**
- b. **Action Item:** Updated Actuarial Funding Policy Statement – Amy Fecher **(Page 93)**
- c. **Action Item:** Affirm Employer Contribution Rate for FY2025
- d. Recognize Annual Transfers

4. Administrative

- a. Summary of Retirees for the Quarter Ending September 30, 2022 – Amy Fecher **(Page 102)**
- b. APERS Payouts by County – Amy Fecher **(Page 108) (Handout)**
- c. Public Pension Standards Award – Amy Fecher **(Page 109)**
- d. Financial Statements for the Quarter Ending September 30, 2022 - Jason Willett **(Page 110)**
- e. **Action Item:** Medical Review Board Results

5. Legal

- a. Litigation Report - Laura Gilson (**Page 112**)
- b. **Action Item:** APERS Qualified Domestic Relations Order – Model Update – Laura Gilson (**Page 114**)
- c. 2023 Legislation – Laura Gilson (**Page 122**)

6. Board Meeting Dates

- a. **Action Item:** Proposed Meeting Dates for 2023 – Amy Fecher
 - February 15, 2023
 - May 17, 2023
 - September 20, 2023
 - November 15, 2023
- b. Next Quarterly Board Meeting – Wednesday, February 15, 2023, at 9:00 a.m.

7. Other Business

8. Adjournment

**MINUTES OF THE QUARTERLY MEETING OF THE BOARD OF TRUSTEES
ARKANSAS PUBLIC EMPLOYEES' RETIREMENT SYSTEM
AUGUST 17, 2022**

A regular meeting of the Board of Trustees of the Arkansas Public Employees' Retirement System was held on Wednesday, August 17, 2022, at 9:00 a.m. This hybrid meeting was held via ZOOM remote conferencing in the Conference Room, 124 West Capitol, Little Rock, Arkansas. Ms. Candace Franks presided.

(Remote attendees indicated with an asterisk *).

QUORUM PRESENT:

Ms. Candace Franks recognized the presence of a quorum.

BOARD MEMBERS PRESENT:

Ms. Candace Franks, (State Employee, Retired), Chair, Little Rock, AR
Mr. Larry Walther (Ex-Officio), Vice Chair, Department of Finance and Admin
Mr. David Hudson (Non-State Employee, County Judge), Fort Smith, AR
Mr. Gary Carnahan (Non-State Employee), Hot Springs, AR
Mr. Joe Hurst, (Non-State Employee, Mayor), Van Buren, AR
Mr. Dale Douthit, (State Employee), Russellville, AR
Mr. Daryl Bassett (State Employee), Sherwood, AR
Ms. Kaye Donham, (Retired), Benton, AR*
Mr. Richard Wilson (Retired), Little Rock, AR
Mr. Gary Wallace (Retired Law Enforcement), Greenbrier, AR
Mr. Russell White (Retired Law Enforcement), Alma, AR
Mr. Jason Brady (State Treasurer's Office) *proxy*
Hon. Andrea Lea (Ex-Officio), State Auditor
Ms. Amy Fecher (Executive Director), APERS

BOARD MEMBERS ABSENT:

Hon. Dennis Milligan, (Ex-Officio), State Treasurer

VISITORS PRESENT:

Ms. Brianne Weymouth, Callan LLC
Mr. John Jackson, Callan LLC
Mr. Mita Drazilov, GRS
Ms. Heidi Barry, GRS
Mr. Nick Henry, Auditor's Office
Mr. Paul Louthian, DF&A
Mr. John Shelnutt, DF&A
Mr. Michael Knapp, AR Legislative Audit
Ms. Barbara Brown, AR Bureau of Legislative Review*
Mr. Jack Critcher, AR Municipal League*
Mr. Chris Villines, AR Assoc. of Counties
Ms. Erika Gee, Wright, Lindsey & Jennings LLPC*
Mr. Eli Bauer, Wright, Lindsey & Jennings LLPC*
Mr. John Balaod, With Intelligence Media*
Ms. Lauren Albanese, FIN News*
Mr. Alex Johnson, APERS Member
Ms. Zona Maness, APERS Retired*
Ms. Teresa Grasser, APERS Retired*
Mr. Mike Wickline, *Arkansas Democrat-Gazette*

STAFF PRESENT:

Ms. Allison Woods, APERS Deputy Director
Ms. Laura Gilson, APERS General Counsel
Mr. Carlos Borromeo, APERS Chief Investment Officer
Ms. Tammy Shadwick, APERS HR Manager
Ms. Usha Doolabh, APERS Investments Manager*
Ms. Jennifer Taylor, APERS Director of Benefits Administration*
Ms. Cheryl Wilburn, APERS Benefits Operations Manager
Mr. Jason Willett, APERS Chief Financial Officer

Mr. Phillip Norton, APERS Director of IT*
Mr. John Owens, APERS Accounting Operations Manager
Mr. Jon Aucoin, APERS Retirement Section Manager*
Ms. Shelly George, APERS Retirement Coordinator*
Mr. Stefan Melikian, APERS Retirement Coordinator*
Mr. Ronald Barrick, APERS IT Specialist
Ms. Kristi Brown, APERS Retirement Coordinator*
Ms. Phyllis Franklin, APERS Retirement Coordinator*
Ms. Jacobia Bates, APERS Manager of Education Services
Ms. Linda McGrath, APERS Administrative Specialist

NEWS MEDIA NOTIFIED:

An e-mail with notification of the Arkansas Public Employees' Retirement System Board meeting was sent to the Arkansas Democrat-Gazette, the Associated Press, Television Station KLRT-FOX16, Radio Station KARN, and Radio Station KAAZ. This notification is pursuant to A.C.A § 25-19-101 (Act 93 of 1967) as amended, *a.k.a.* the Arkansas Freedom of Information Act.

INTRODUCE APERS' NEW EXECUTIVE DIRECTOR: MS. AMY FECHER

Ms. Franks introduced Ms. Fecher to everyone at the meeting. Ms. Fecher commented her first seven weeks on the job had been very busy, meeting with all the APERS Staff and attending the NASRA Conference in California.

AFFIRM BOARD CHAIR AND VICE-CHAIR

Judge Hudson motioned to maintain the current Chair and Vice-Chair. He was seconded by Mr. Douthit and the motion passed unanimously.

MINUTES:

Prior to the Board meeting, copies of the minutes from the May 18 and June 1, 2022, meetings were e-mailed to each APERS Board member for review.

Mr. Bassett motioned to accept the minutes as they presented, and he was seconded by Judge Hudson. Motion carried.

INVESTMENTS

QUARTERLY INVESTMENT REPORT FOR THE PERIOD ENDING JUNE 30, 2022- Presented by Ms. Brianne Weymouth and Mr. John Jackson of Callan LLC

Mr. Jackson gave an overview of the capital markets for the final quarter of FY2022. The second quarter of the year had many concerns for investors both domestically and globally. There was an uptick in COVID infections, notably in China, which slowed down the world's second-largest economy. China earned a positive 3.4% return for the quarter, but for the fiscal year, they were down (-31.8%). There were also concerns regarding the ongoing war in Ukraine and inflation, especially the Federal Reserve's determination to get inflation under control by raising interest rates and possibly causing a recession.

The U.S. equity markets, as well as the International Equity markets, were all negative for the quarter. The S&P 500 was down (-16.1%) for the quarter and down (-10.6%) for the fiscal year. The developed international markets were down (-14.5%) for the quarter and (-17.8%) for the fiscal year. Emerging Markets (which includes Russia) were down (-11.4%) for the quarter and down (-25.3%) for the fiscal year. China was down (-31.8%).

Fixed Income suffered the worst six-month start on record for the Bloomberg Aggregate Index since 1975. Rare period when both Equity and Fixed Income were negative; statistically this occurs less than 10% of the time. The Federal Reserve has raised interest rates, and more rate increases are forecasted. The only bright spot was Real Estate. Open-End Diversified Core Index increased 4.5% for the quarter and 28.3% for the fiscal year.

Ms. Weymouth detailed the portfolio's performance. Virtually every asset class in the APERS' portfolio experienced negative returns for the quarter. It outperformed its index slightly for the quarter, returning (10.31%), while the benchmark was down (10.45%). Over the past 12 months the portfolio returned (10.54%) trailing its benchmark by 66 basis points and finishing below 2/3 of its peers. However, the Fund remains in the top third of its peers in all trailing time periods for the last 20 years. The month of July 2022 had seen a positive return for the portfolio. As of June 30, 2022, the Fund had a Market Value of just over \$10.09 billion, down roughly one billion from last quarter. The portfolio was very close to its target allocation.

Ms. Weymouth also noted that APERS' new farmland manager, PGIM, had made its first capital call this quarter for just over \$2 million. PGIM has been allotted \$50 million for farmland investments. LSV continued to benefit from the market shift to value and ranked in the top quarter of their peers and significantly outperforming their benchmark. Baillie Gifford struggled through another quarter, finishing at the bottom of their class for the quarter and for the fiscal year. Callan will continue to watch them closely but did not suggest APERS make any changes at this point.

Domestic Equity Structure Review

Mr. Jackson began with the basic tenets of manager structure and each manager's role in the portfolio, before focusing on the portfolio's Equity structures.

Ms. Weymouth reviewed the APERS US Equity structure. The current APERS US equity structure is well diversified. Due to market movements, over time, the US domestic equity portfolio has tilt towards growth. Ideally, the equity portfolio would be equally balanced between growth and value. Ms. Weymouth detailed where the tilt to growth was in the portfolio, as well as where the value exposure was contained. Callan suggested that the Board may want to rebalance the portfolio and search for another large-cap value manager to bring the portfolio back to parity between growth and value.

She detailed two alternative allocations to bring the portfolio back to the core. Mr. Walther and Mr. Bassett wanted to wait before making any decision. Carlos wanted to come up with some other allocation options.

On another topic, Mr. Brady wondered if APERS might be ready to get into Private Equity and suggested the October Education Conference feature Private Equity. Carlos suggested to the Trustees to also consider the private equity June data before making any decision.

Class Action Settlement Proceeds and Pending Report

Ms. Fecher referred the Board to the class action settlement proceeds information within the board material. There were no questions.

ACTUARIAL

PRELIMINARY 2022 ANNUAL ACTUARIAL VALUATION RESULTS - Presented by Mr. Mita Drazilov and Ms. Heidi Barry of Gabriel Roeder Smith

Mr. Drazilov began by encouraging the board to give GRS input and direction on their desired path for the employer contribution and to make a final decision at the November Board of Trustees meeting.

He reminded members that the annual valuation will be forthcoming. The two objectives of the annual valuation are to set the employer rate and calculate the financial position of the plan. He also noted that the expected return rate is set currently at 7.15%, and the next experience study will occur in February or May of 2023. These are conducted every five years.

His report included noting that there are approximately 6000 in the non-contributory closed plan and 36,728 contributory members, with 4% being increased annually.

The GRS team covered the APERS funded ratio on page nine of the report, the preliminary employer contribution rate on page 11, and the return scenarios on page 14 of the GRS quarterly report with the Board.

Tentative Employer Contribution Rate for FY2025

At the conclusion of his presentation, Mr. Hoffman asked for guidance from the trustees on the employer rate beginning July 1, 2024. After everyone had a chance to voice their opinions, Judge Hudson motioned to maintain the employer rate of 15.32% through the Fiscal Year 2025. He was seconded by Ms. Lea and the motion passed unanimously.

Actuarial Funding Policy Statement

Ms. Fecher reminded the Trustees that the last time an Actuarial Funding Policy had been presented to the Board was in February of 2020, and that a vote was never taken to make any edits to the policy. She explained that the staff and GRS had taken a look at the policy and made suggested updates and indicated that it would be reviewed more fully at the October workshop.

ADMINISTRATIVE

ANNUAL INTERNAL AUDIT RESULTS – Presented by Mr. John Owens, APERS

Internal Auditor

Mr. Owens delivered the results of the nine 2022 audit areas, including the special project - tax tables. Three of the audits were regarding overpayments and were done at the same time. He reminded the Board that he had moved to a different position within APERS, and he indicated that the 2023 audit would be conducted when a new internal auditor is hired. There were no findings on any of the 2022 Audits.

The areas that were audited were as follows:

- Age and Service Benefits – Review the processing of periodic distributions
- Active Members – Review purchases of Military Service
- Active Members – Review repayments of Refunds
- Active Members – Review of purchases of prior year service
- Retired Members – Review process for collection of over payments
- Legislative Changes – Review the process of Legislative changes for FY2022
- Special Project – COMPASS

Mr. Brady motioned to accept the Internal Audit Report as presented. Mr. Walther seconded and the motion carried.

SUMMARY OF RETIREES FOR THE QUARTER ENDING JUNE 30, 2022:

Ms. Fecher read from her report, noting that APERS had 186 members who retired in April, 151 in May, and 166 more retirees in June, for a total of 512 new retirees over the last three months of FY2022. This brought the total number of retirees and beneficiaries receiving monthly checks from APERS to 38,120; up 145 since last quarter.

FINANCIAL STATEMENTS FOR THE QUARTER ENDING JUNE 30, 2022:

Mr. Willett noted that the fund had lost roughly \$1.04 billion since July 1, 2021. APERS' total assets as of March 31, 2022, were over \$11.7 billion. Contributions, both employer and employee, had increased slightly due to salary increases and should continue upwards as the mandatory employee contribution rate increases. During the first half of the fiscal year, APERS paid out over \$478 million in benefit checks; an increase of about \$12.5 million over this time last year.

Medical Review Board Results

Ms. Fecher noted the Medical Review Board met at 9:00 a.m. on Tuesday, August 9, 2022, via ZOOM video conferencing to discuss the case of APERS Member XXX0526.

- After review and discussion, the Medical Review Board recommended the denial of disability retirement to APERS Member XXX0526 pending additional medical information.

There was no further Trustee action needed at this time.

Board Resolution for Signature Authority

Ms. Fecher presented the Trustees with an updated signature authority resolution for the agency with the change in leadership. Ms. Lea motioned to approve the resolution as presented. Mr. Walther seconded and the motion carried.

LEGAL

Member Appeals

Ms. Gilson updated the board regarding the Bolding appeal. Bolding filed a Petition for Review with the Supreme Court, and APERS is awaiting the ruling of the court.

Ms. Gilson also informed the board that there is potential for a board appeal by a member in mid-October. We are awaiting a response from the member's attorney before we set the appeal.

Securities Litigation Cases

Ms. Gilson reported that there are currently no active securities litigation cases in which APERS is the lead plaintiff. "Lobstein, pro se" remains on the report, but it is the lawsuit that involves the plaintiff's objection to a settlement of a securities litigation case in which APERS participated, and it is not a securities litigation case. APERS' outside counsel considers this lawsuit to be frivolous and will likely be dismissed. There have been no changes in this case since the last APERS meeting.

2023 Legislation

Director Fecher and Ms. Gilson discussed a draft APERS legislative package for the upcoming 2023 legislative session. APERS considers all proposed bills to be non-controversial, and a technical corrections bill will focus on aligning and cleaning up language in the Arkansas Code for ease of administration. Director Fecher indicated that APERS is finalizing the language in the bills and that she would send a draft version to the Trustees soon. The legislative package will be addressed again at the October workshop.

OTHER BUSINESS:

Upcoming Board Meetings

The Annual Trustee Workshop is scheduled for October 25, 2022.

The next quarterly Board Meeting is scheduled for Wednesday, November 16, 2022, at 9:00 a.m.

Mr. Walther motioned to go into executive session, but withdrew his motion after it was determined executive session was unnecessary. He indicated that the Board had hired the new executive director to begin on July 1, 2022, at the former director's salary. Doing so, had prohibited the annual performance raise to be added to the new director's salary. He motioned for the Board to increase Ms. Fecher's salary by 3% increase to \$170,357 as the former director would have been paid on July 1, 2022, and Mr. Bassett seconded. The motion carried.

ADJOURNMENT:

There being no further business, the meeting was adjourned.

Ms. Candace Franks, Chair

Ms. Amy Fecher, APERS Executive Director

**PUBLIC EMPLOYEES' RETIREMENT SYSTEM
MINUTES OF THE MEETING OF THE BOARD OF TRUSTEES
33rd ANNUAL TRUSTEE WORKSHOP
WEDNESDAY, OCTOBER 25, 2022**

The Board of Trustees of the Arkansas Public Employees Retirement System held its thirty-third Annual Trustee Workshop beginning at 9:00 a.m. and concluding at 2:30 p.m. on Tuesday, October 25, 2022 which provided remote participation via ZOOM video conferencing. The Workshop was held in the Real Estate Commission Conference Room at 612 South Summit Street, Little Rock. Trustees from both APERS and ASPRS were invited to attend. (* Indicates attended remotely.)

BOARD MEMBERS PRESENT:

Mr. Daryl Bassett (State Employee Member), Sherwood, AR
Hon. Andrea Lea, (Ex-Officio Member), State Auditor
Mr. Gary Carnahan, (Other, Non-State Employee), Little Rock, AR
Judge Barry Moehring, (County Employee), Fort Smith, AR
Mr. Richard Wilson (Retired), Little Rock, AR
Mr. Gary Wallace (Retired Law Enforcement), Greenbrier, AR
Mr. Russell White (Retired Law Enforcement), Alma, AR
Hon. Dennis Milligan, (Ex-Officio Member), State Treasurer
Ms. Kaye Donham (Retired), Benton, AR*
Ms. Amy Fecher, (Executive Director), APERS

BOARD MEMBERS ABSENT:

Mr. Dale Douthit (State Employee), Little Rock, AR
Ms. Candace Franks (State Employee Member), *Chair*, Little Rock, AR
Mr. Larry Walther, (Ex-Officio Member), *Vice Chair*, DF&A
Mayor Joe Hurst, (Non-State Employee), Van Buren, AR
Ms. Kaye Donham (Retired), Benton, AR

ADDITIONAL VISITORS PRESENT:

Ms. Brianne Weymouth, Callan Associates, Inc.
Ms. Heidi Barry, Gabriel Roeder Smith
Mr. Brian Smith, Friday, Eldridge & Clark LLP
Mr. Jason Brady, State Treasurer's Office (*proxy*)
Ms. Denise Bugos, ASPRS Trustee
Captain Kyle Drown, ASPRS Trustee
Mr. Jack Critcher, AR Municipal League*
Mr. Cyril Espanol, Pageant Media*

STAFF PRESENT:

Ms. Allison Woods, APERS Deputy Director
Mr. Carlos Borromeo, APERS Chief Investment Officer
Ms. Usha Doolabh, APERS Investments Manager
Ms. Laura Gilson, APERS General Counsel
Mr. Jon Aucoin, APERS Retirement Section Manager
Ms. Cheryl Wilburn, APERS Retirement Section Manager
Mr. John Owens, APERS Accounting Operations Manager
Ms. Tammy Shadwick, APERS HR Manager
Ms. Cheryl Wilburn, APERS Benefits Operations Manager
Ms. Shelly George, APERS Retirement Section Manager
Mr. Phillip Norton, APERS Director of IT
Mr. Daryl Bussell, APERS IT Manager*
Mr. Ronald Barrick, APERS IT Specialist
Ms. Jacobia Bates, APERS Retirement Section Manager
Ms. Linda McGrath, APERS Administrative Specialist

NEWS MEDIA NOTIFIED:

An e-mail with notification of the Arkansas Public Employees' Retirement System Board meeting was sent to the Arkansas Democrat-Gazette, the Associated Press, Television Station KLRT- FOX16, Radio Station KARN, and Radio Station KAAY. This notification is pursuant to A.C.A § 25-19-101 (Act 93 of 1967) as amended, *a.k.a.* the Arkansas Freedom of Information Act.

WELCOME AND INTRODUCTIONS

Ms. Fecher welcomed everyone to APERS Trustee Workshop and recognized the presence of a quorum. With the attendance of Trustees from both the APERS and ASPRS Boards, she asked everyone to go around the room and introduce themselves. She stated the purpose of the workshop which was to educate Trustees on their duties and responsibilities.

Topics covered were:

FIDUCIARY DUTY OF THE BOARD – Presented by Mr. Brian Smith of Friday, Eldridge & Clark

Mr. Smith explained the fiduciary duty that is required of a trustee. He reviewed the Prudent Investor Rule (A.C.A. §§ 24-2-610 through 24-6-619) and how it applied to the Trustees. He also discussed the importance of having and adhering to the fund’s policies. He complimented the APERS Board for having established strong policies and urged them to review them on a regular basis.

RETIREMENT EQUATION AND CALLAN REPORTS - Presented by Mr. Carlos Borrromeo, APERS CIO and Ms. Brianne Weymouth of Callan LLC

Mr. Borrromeo and Ms. Weymouth covered an example Callan Report and explained to Trustees how to read and interpret the information they will receive quarterly.

ACTUARIAL FUNDING POLICY – Presented by Mr. Carlos Borrromeo, APERS CIO and Ms. Heidi Barry of GRS Consulting

Mr. Borrromeo and Ms. Barry covered an example GRS Report and explained to Trustees how to read and interpret the information they will receive quarterly.

PRIVATE EQUITY - Presented by Mr. Carlos Borrromeo, APERS CIO and Ms. Brianne Weymouth of Callan LLC

Mr. Borrromeo and Ms. Weymouth presented Trustees with information on private equity. They explained what private equity is, how other similar retirement plans are investing in private equity, and the pros and cons of this investment style.

PROPOSED APERS and ASPRS LEGISLATION – Presented by Ms. Amy Fecher, APERS Executive Director, Ms. Allison Woods, APERS Deputy Director and Ms. Laura Gilson, APERS General Counsel

Ms. Gilson, Ms. Woods, and Ms. Fecher presented the proposed legislative package for APERS for the 2023 legislative session.

NEXT QUARTERLY BOARD MEETING:

The next quarterly Board Meeting is scheduled for Wednesday, November 16, 2022, at 9:00 a.m.

ADJOURNMENT:

There being no further business, the meeting was adjourned.

Ms. Candace Franks, Chair

Ms. Amy Fecher, APERS Executive Director



Executive Summary Third Quarter 2022

Arkansas Public Employees
Retirement System

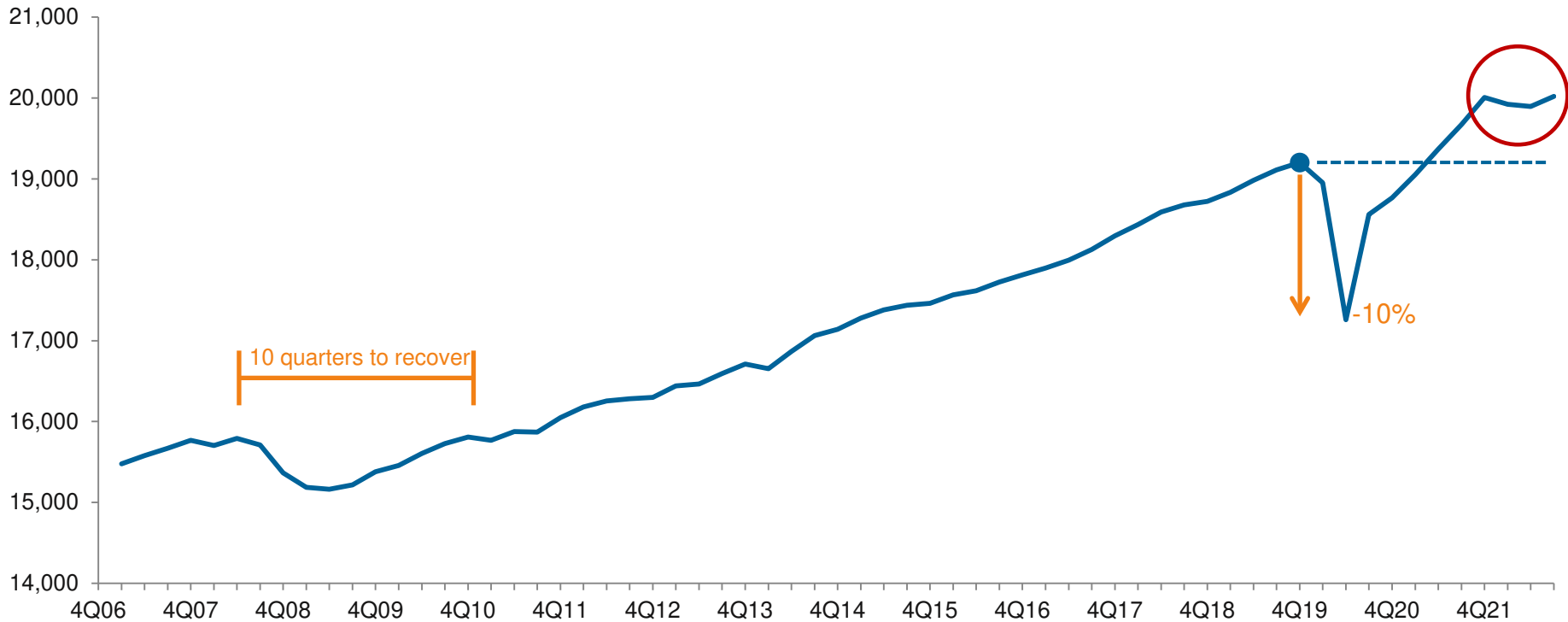
Brianne Weymouth, CAIA
Senior Vice President

John Jackson, CFA
Senior Vice President

GDP Dropped for Two Consecutive Quarters in 1Q and 2Q, Up 2.6% in 3Q

Recovered pre-pandemic level in 2Q21 after deepest drop in 75 years

Seasonally Adjusted Real GDP in Billions of Dollars



Consensus estimates for GDP growth in 2022 have been scaled back, from north of 4% at the start of the year to below 0%

- 3Q22 GDP rose 2.6%, after falling 1.6% in 1Q22, followed by a 0.9% drop in 2Q22.
- Loss of business and consumer confidence followed the start of the conflict in Ukraine.
- Consumer wealth hit by stock and bond market drop, and now a sharp slowdown in residential housing, as mortgage rates doubled from the start of the year.

Source: Federal Reserve Bank of St. Louis

Recession Watch

Common definition of recession: two consecutive quarters of decline in GDP

- Actual definition: The National Bureau of Economic Research (NBER) Business Cycle Dating Committee defines a recession as “a significant decline in economic activity that is spread across the economy and that lasts more than a few months.”

Indicators to watch

- GDP declined in 1Q and 2Q22, the proverbial two-quarters-in-a-row rule of thumb that often indicates recession.
 - However, GDP rose 2.6% in 3Q, reversing the trend, but consensus estimates show another modest decline in 4Q
- Housing market is weakening with more than a doubling of mortgage rates since the start of 2022.
- Job market remains strong, with substantial job creation year to date; job listings remain larger than the number of seekers.
 - Initial unemployment claims are creeping up: a leading indicator.
- PMI is showing initial signs of recession in the Business Activity and Output indices; PMI is also a leading indicator.
- Exports have weakened with slowing growth overseas, geopolitical uncertainty, and a strong dollar.
- Inflation remains historically high, sapping purchasing power and eroding confidence.
- Federal Reserve is committed to raising interest rates to combat inflation; median Fed Funds projection is 4.4% by end of 2022.
- Fed’s resolve may be tested if economy slows sharply in the fourth quarter or the first half of 2023.

Equity and Fixed Income Markets Both Fell Again in 3Q22

Negative returns for stocks and bonds at the same time for three quarters are extremely unusual

Global equity markets down sharply in each quarter, starting with Russian invasion

- Similar impact year-to-date across all equity market segments: developed, emerging, small cap

Fixed income down with sharply higher inflation and interest rates

- Bloomberg Aggregate: -14.6% year-to-date, worst 9 months ever for the index
- CPI-U: +8.2% for the year ended 3Q22

Number of times stocks and bonds have been down together

- 38 quarters in almost 100 years, about 10% of the quarters
- But just twice on annual basis

Inflation spiked to highest rate in decades

Economic data show growth hit 'pause'

- GDP rose 2.6% in 3Q22 after falling in both 2Q22 and 1Q22; expect another loss in 4Q
- Forecasters have cut growth estimates for 2022 to below 0%, and to 1.5% for 2023.

Returns for Periods ended 9/30/22

	1 Quarter	Year to Date	1 Year	5 Years	10 Years	25 Years
U.S. Equity						
Russell 3000	-4.46	-24.62	-17.63	8.62	11.39	7.48
S&P 500	-4.88	-23.87	-15.47	9.24	11.70	7.45
Russell 2000	-2.19	-25.10	-23.50	3.55	8.55	6.73
Global ex-U.S. Equity						
MSCI World ex USA	-9.20	-26.23	-23.91	-0.39	3.62	3.69
MSCI Emerging Markets	-11.57	-27.16	-28.11	-1.80	1.05	--
MSCI ACWI ex USA Small Cap	-8.37	-29.37	-28.93	-0.56	4.44	5.64
Fixed Income						
Bloomberg Aggregate	-4.75	-14.61	-14.60	-0.27	0.89	4.02
90-day T-Bill	0.46	0.61	0.62	1.15	0.68	1.92
Bloomberg Long Gov/Credit	-9.03	-28.94	-27.41	-1.17	1.35	5.51
Bloomberg Global Agg ex-US	-8.85	-23.88	-24.77	-4.03	-2.39	2.42
Real Estate						
NCREIF Property	0.57	9.35	16.08	8.62	9.48	9.40
FTSE Nareit Equity	-9.94	-28.13	-16.41	2.93	6.26	7.73
Alternatives						
CS Hedge Fund Index	0.35	0.14	1.08	4.53	4.35	5.87
Cambridge Private Equity*	-5.60	-2.04	3.34	18.22	15.90	14.75
Bloomberg Commodity	-4.11	13.57	11.80	6.96	-2.14	1.47
Gold Spot Price	-7.49	-8.56	-4.84	5.41	-0.59	6.62
Inflation - CPI-U	0.17	6.46	8.20	3.76	2.52	2.47

*Cambridge PE data through 06/30/22.

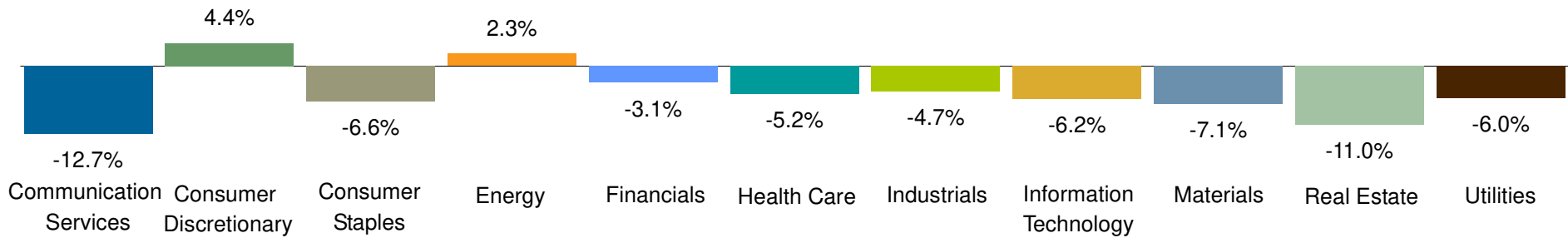
Sources: Bloomberg, Callan, Cambridge, Credit Suisse, FTSE Russell, MSCI, NCREIF, S&P Dow Jones Indices

U.S. Equity Performance: 3Q22

Worst Three-Quarter Start to Year in Decades

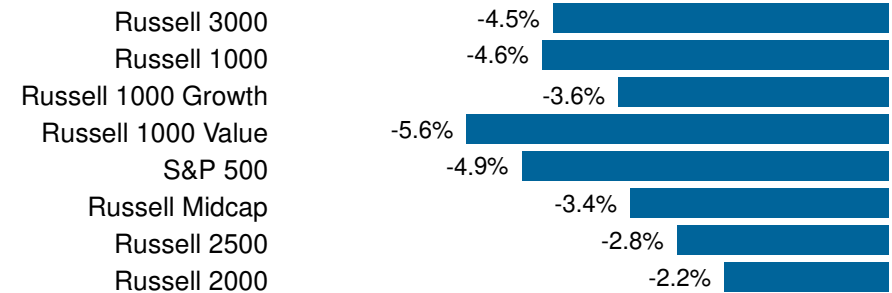
- The S&P 500 Index fell 4.9% in 3Q22; all major U.S. indices across styles and market cap ranges were negative except for the Russell 2000 Growth Index, which gained 0.24%.
- During the quarter, all sectors posted negative returns except for Energy (+2%) and Consumer Discretionary (+4%). Returns for Real Estate and Communication Services were the worst, down 11% and 13%, respectively.
- Small cap (Russell 2000) outpaced large cap (Russell 1000) and growth outperformed value during the quarter, a reversal from previous quarters this year.
- Continued concerns around inflation and a potential recession, along with geopolitical headlines, contributed to a volatile and risk-averse environment.
- High inflation and interest rates continued to pressure the markets. While some inflationary data (particularly around energy) seemed to soften, other data points around food, shelter, and services remained elevated.

Industry Sector Quarterly Performance (S&P 500)

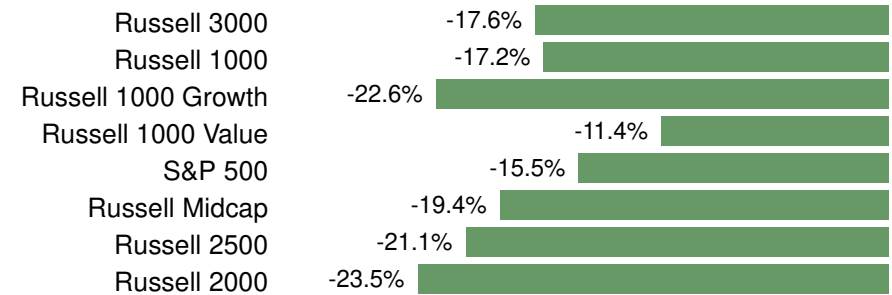


Sources: FTSE Russell, S&P Dow Jones Indices

U.S. Equity: Quarterly Returns



U.S. Equity: One-Year Returns



Global/Global ex-U.S. Equity Performance: 3Q22

Market Turmoil Around the World

- Global and global ex-U.S. equity markets waned for three straight quarters due to inflation, rising rates, and fears of global recession.

Geopolitical and macro factors plague market

- Political instability in Italy and the U.K. as a result of prime minister departures weighed on the market.
- U.K. equities lost confidence as its newly elected prime minister Liz Truss announced her economic policy.
- China’s COVID-19 lockdowns and growing concerns around the property sector sapped sentiment and economic activity.

Growth vs value switch places globally

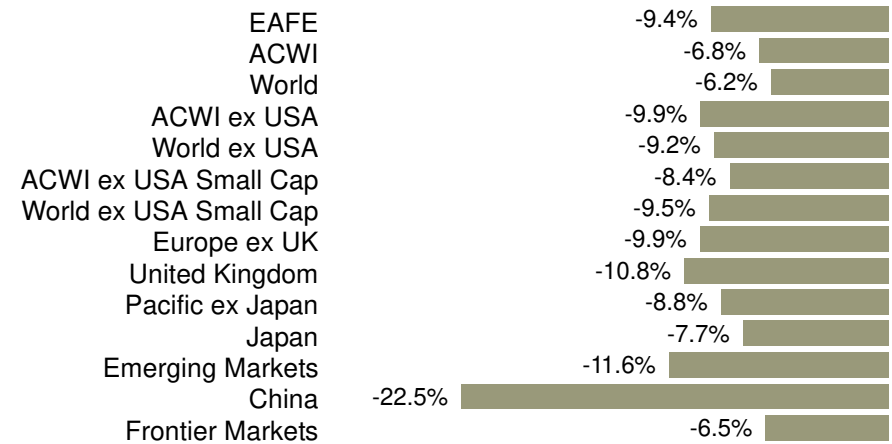
- Growth outpaced value in developed markets but lagged value in emerging markets.
- Rate-sensitive sectors in developed markets (e.g., Communication Services and Real Estate) were challenged given the tightening cycle by global central banks.
- The profitability of Chinese internet companies has compressed due to lockdowns and regulation, and a cyclical downturn in electronics weakened Taiwan and Korean semiconductors.

U.S. dollar vs. other currencies

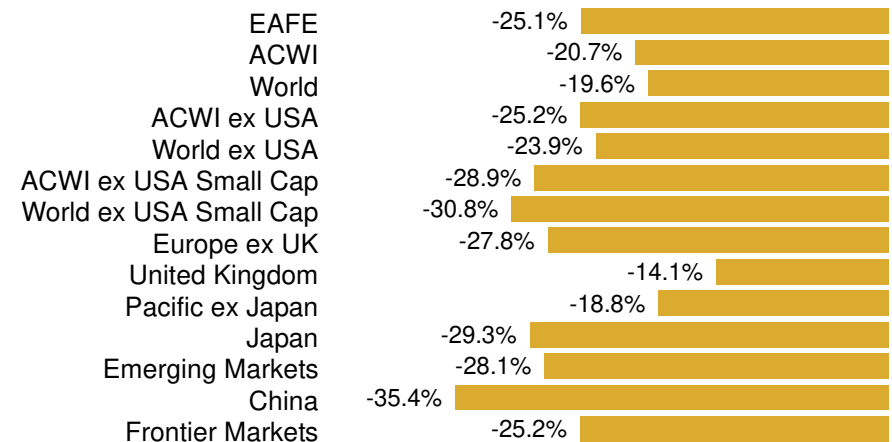
- Growth and the interest rate differential as well as its safe-haven status fueled the U.S. dollar to its highest level in decades.
- The dollar gained vs. the euro and the yen by about 6%.

Source: MSCI

Global Equity: Quarterly Returns



Global Equity: One-Year Returns



U.S. Fixed Income Performance: 3Q22

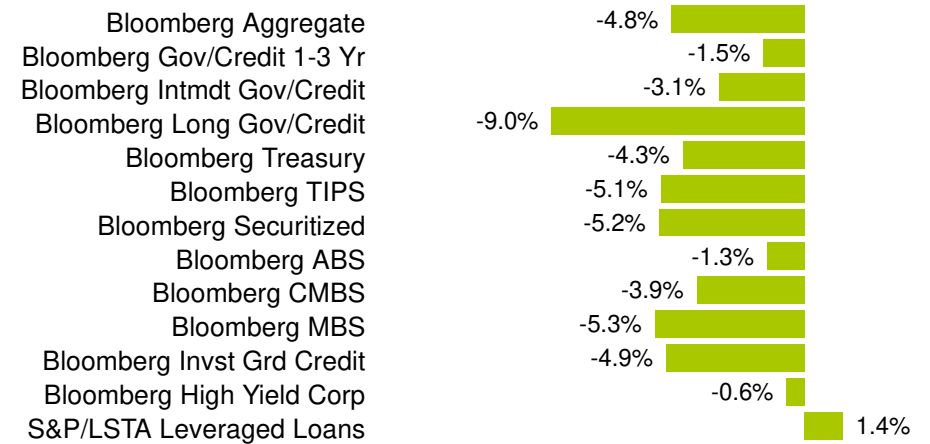
Bonds hit hard as rates rose sharply (again)

- Bloomberg U.S. Aggregate saw its worst nine-month return in its history—as did trailing 1-, 3-, 5- and 10-year returns!
- 10-year annualized return for Aggregate is a mere 0.9%.
- The yield curve was inverted at quarter-end; 10-year at 3.83% and 2-year at 4.22%.
- The 10-year jumped to 4% briefly in late September; first time since 2009.
- TIPS underperformed nominal Treasuries, and 10-year breakeven spreads fell to 2.11% from 2.33% as of 6/30/22.
- Fed raised rates by 150 bps during the quarter, bringing target from 3.0% to 3.25%.
- Median expectation from Fed is 4.4% at year-end and 4.6% at the end of 2023. Longer-term expectations are much lower.
- Volatility climbed to levels not seen since early 2020.

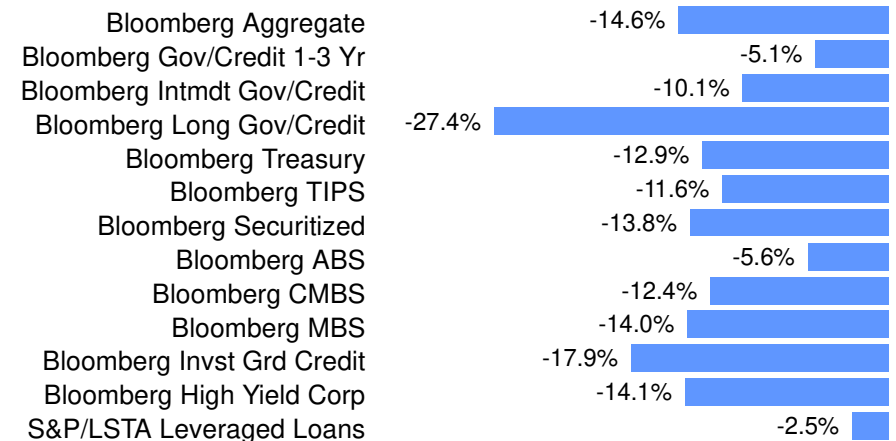
Spread sectors underperformed

- Mortgages had worst month ever vs. like-duration U.S. Treasuries in September; underperformed by 169 bps for 3Q.
- Corporates also underperformed: 33 bps of excess return; Bloomberg Corporate Bond Index yield-to-worst 5.7%.
- High yield fared better and loans posted a positive return.
- Bloomberg High Yield Corp yield-to-worst was 9.7%.

U.S. Fixed Income: Quarterly Returns



U.S. Fixed Income: One-Year Returns



Sources: Bloomberg, S&P Dow Jones Indices

U.S. Private Real Estate Performance: 3Q22

Appreciation returns turn negative, as sector returns are mixed

Another strong quarter for real estate

- Income returns were positive across sectors.
- Valuations are reflective of strong fundamentals in Industrial and Apartment and continued uncertainty in Office and Retail.
- Return dispersion by manager within the ODCE Index was due to the composition of underlying portfolios, and increased borrowing costs are impacting values.
- Niche sectors such as self-storage and life sciences continued to be accretive.

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
NCREIF ODCE	0.3%	21.0%	11.4%	9.3%	9.9%
Income	0.6%	2.7%	3.0%	3.1%	3.5%
Appreciation	-0.3%	17.9%	8.2%	6.0%	6.3%
NCREIF Property Index	0.6%	16.1%	9.9%	8.6%	9.5%
Income	0.9%	4.0%	4.2%	4.3%	4.7%
Appreciation	-0.4%	11.8%	5.6%	4.2%	4.6%

Returns are geometrically linked

NCREIF Property Index Quarterly Returns by Region and Property Type



Source: NCREIF, ODCE return is net

Multi-Asset Class (MAC) Performance: 3Q22

Significant market volatility caused MACs to end the quarter lower

Long biased MACs

- The median Callan Long Biased manager fell 4.6% in 3Q22, topping the 60% ACWI/40% Agg, which lost 5.9%, as both equities and fixed income exposure put downward pressure on the index.

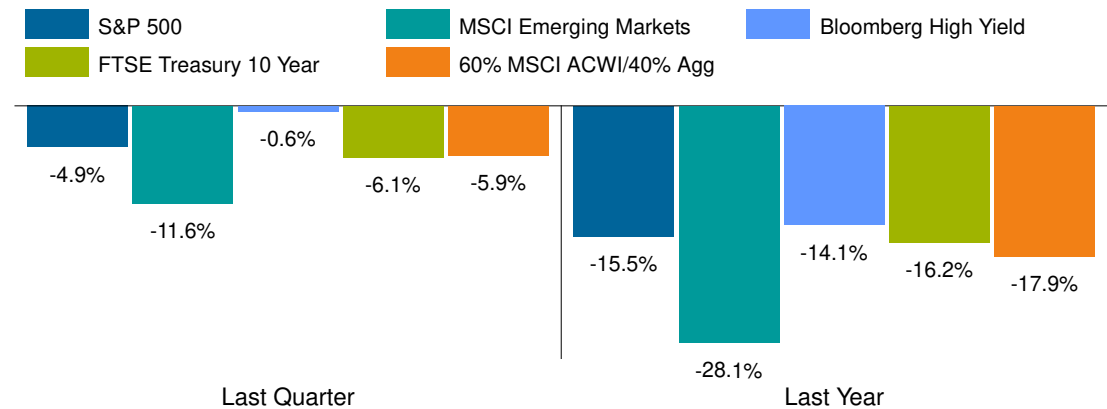
Risk parity MACs

- The median Callan Risk Parity manager fell 6.6%, as equities were the biggest drag on performance with the U.S. dollar slightly offsetting some of the negative return.

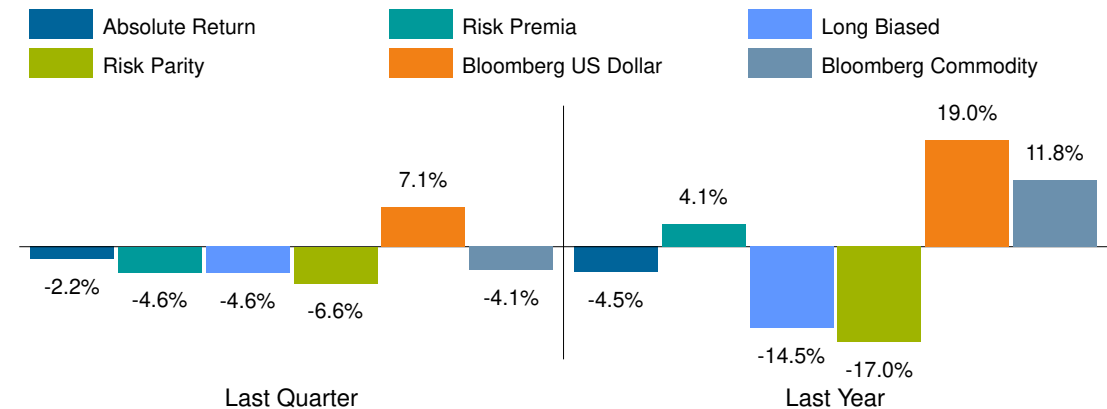
Absolute return MACs

- The median Callan Absolute Return manager fell 2.2%, as equity and fixed income volatility continued to pressure performance.
- The U.S. dollar was positive during the quarter, while the Japanese yen and Australian dollar were the biggest detractors.
- The Bloomberg GSAM Risk Premia 6% Vol moved up 2.9% in 3Q.
- The median Callan Risk Premia manager fell 4.6%, as a tilt toward equities and fixed income hurt performance.

Traditional Market Beta Returns

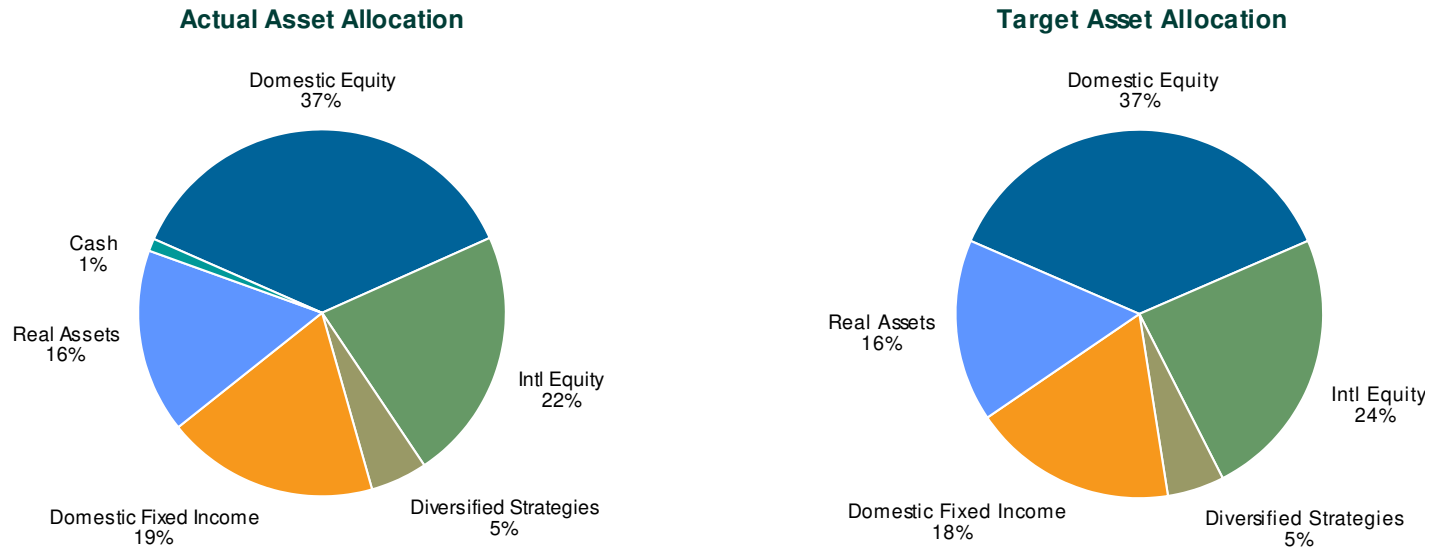


Callan MAC Style Group and Market Returns



Sources: Bloomberg, Bloomberg Goldman Sachs Asset Management, FTSE Russell, MSCI, S&P Dow Jones Indices

Actual vs. Target Asset Allocation



Asset Class	\$Millions Actual	Weight Actual	Target	Percent Difference	\$Millions Difference
Domestic Equity	3,525	36.7%	37.0%	(0.3%)	(25)
Intl Equity	2,139	22.3%	24.0%	(1.7%)	(163)
Diversified Strategies	482	5.0%	5.0%	0.0%	3
Domestic Fixed Income	1,792	18.7%	18.0%	0.7%	65
Real Assets	1,554	16.2%	16.0%	0.2%	19
Cash	102	1.1%	0.0%	1.1%	102
Total	9,595	100.0%	100.0%		

- The APERS Investment Policy states that rebalancing to the target asset allocation should take place when the actual asset allocation falls outside of a +/- 5% range from the target asset allocation. All asset classes are within their allowable ranges.

Investment Manager Asset Allocation

	September 30, 2022			June 30, 2022		
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Domestic Equity	\$3,524,929,947	36.74%	\$(62,122,731)	\$(137,272,119)	\$3,724,324,798	36.88%
Lazard Asset Mgmt	417,630,211	4.35%	(334,210)	(28,114,324)	446,078,745	4.42%
CastleArk Mgmt. LLC	432,493,634	4.51%	(30,395,256)	(14,771,938)	477,660,827	4.73%
Mellon S&P 500 Index Fd	566,822,969	5.91%	(19,868)	(29,072,421)	595,915,258	5.90%
Horrell Capital Passive	176,675,043	1.84%	(73,395)	(2,410,319)	179,158,757	1.77%
Wellington Management	427,245,886	4.45%	(29,371,417)	(26,069,416)	482,686,719	4.78%
Intech	398,685,318	4.16%	(412,247)	(16,020,327)	415,117,893	4.11%
LSV Asset Management	301,179,455	3.14%	(448,116)	(12,108,767)	313,736,339	3.11%
Stephens Investment Mgmt.	407,129,542	4.24%	(668,287)	(5,675,423)	413,473,252	4.09%
Froley Revy Investment	397,067,889	4.14%	(399,935)	(3,029,183)	400,497,007	3.97%
International Equity	\$2,139,473,185	22.30%	\$(2,223,287)	\$(221,003,260)	\$2,362,699,733	23.40%
Artisan Partners	506,679,078	5.28%	(746,799)	(50,013,194)	557,439,071	5.52%
Mellon ACWI ex US Fund	484,128,501	5.05%	(84,735)	(52,914,217)	537,127,453	5.32%
Baillie Gifford Overseas	422,582,679	4.40%	(469,670)	(40,990,439)	464,042,789	4.59%
Lazard Asset Mgmt.	446,725,475	4.66%	(377,744)	(48,447,750)	495,550,969	4.91%
Acadian ACW ex US SmallCap	156,233,157	1.63%	(296,134)	(12,420,059)	168,949,350	1.67%
Franklin Templeton Intl SmallCap	122,874,682	1.28%	(247,511)	(16,200,838)	139,323,031	1.38%
Manning & Napier Advisors	249,614	0.00%	(694)	(16,763)	267,071	0.00%
Diversified Strategies	\$482,433,907	5.03%	\$(719,193)	\$(9,761,207)	\$492,914,307	4.88%
AQR Capital	137,856,666	1.44%	0	(7,848,150)	145,704,816	1.44%
Blackstone Alt. Asset Mgmt.	210,624,872	2.20%	(528,546)	2,596,295	208,557,123	2.07%
Newton Capital	133,952,369	1.40%	(190,647)	(4,509,352)	138,652,368	1.37%
Domestic Fixed Income	\$1,791,626,083	18.67%	\$(922,061)	\$(83,762,987)	\$1,876,311,131	18.58%
DoubleLine Capital	573,144,323	5.97%	(279,368)	(23,958,719)	597,382,409	5.92%
MacKay Shields	604,190,355	6.30%	(315,752)	(31,178,000)	635,684,108	6.29%
PGIM	614,291,405	6.40%	(326,942)	(28,626,268)	643,244,615	6.37%
Real Assets	\$1,554,360,032	16.20%	\$(45,038,789)	\$13,019,119	\$1,586,379,703	15.71%
Energy	\$14,849	0.00%	\$0	\$(60)	\$14,909	0.00%
CastleArk Glob Energy Fd	14,849	0.00%	0	(60)	14,909	0.00%
REITS	\$59,409,161	0.62%	\$(41,639,463)	\$(13,978,419)	\$115,027,044	1.14%
MCM EB DV Non-SL REIT Fd	59,409,161	0.62%	(41,639,463)	(13,978,419)	115,027,044	1.14%
Core Real Estate	\$1,066,973,164	11.12%	\$(3,842,062)	\$16,143,496	\$1,054,671,730	10.44%
Invesco Real Estate	652,628,000	6.80%	(508,450)	9,075,232	644,061,218	6.38%
Heitman Real Estate Trust LP	414,345,164	4.32%	(3,333,612)	7,068,264	410,610,512	4.07%
Value Add Real Estate	\$318,013,406	3.31%	\$(18,941,819)	\$6,655,379	\$330,299,846	3.27%
Harrison Street Fund VIII	30,484,637	0.32%	(187,500)	85,549	30,586,588	0.30%
Heitman Value Partners IV	56,338,332	0.59%	(11,437,276)	3,227,833	64,547,775	0.64%
LaSalle Inc & Growth VI LP	7,570,682	0.08%	(12,271)	(562,425)	8,145,379	0.08%
LaSalle Inc & Growth VII LP	34,178,267	0.36%	(5,875,795)	(501,238)	40,555,299	0.40%
Starwood SOF XII	17,416,894	0.18%	(233,733)	1,167,260	16,483,367	0.16%
TA Associates Realty Fund X	29,785	0.00%	(353)	1,456	28,682	0.00%
TA Associates Realty Fund XI	54,974,595	0.57%	(259,473)	(585,207)	55,819,275	0.55%
TA Associates Realty Fund XII	117,020,214	1.22%	(935,418)	3,822,151	114,133,481	1.13%
Farmland	\$22,913,870	0.24%	\$20,824,177	\$0	\$2,089,693	0.02%
IFC Core Farmland Fund	19,988,300	0.21%	19,988,300	0	-	-
PGIM Agriculture	2,925,570	0.03%	835,877	0	2,089,693	0.02%
Timber	\$87,035,582	0.91%	\$(1,439,622)	\$4,198,722	\$84,276,481	0.83%
Pinnacle	87,035,582	0.91%	(1,439,622)	4,198,722	84,276,481	0.83%
Cash	\$101,815,322	1.06%	\$45,445,303	\$129,161	\$56,240,859	0.56%
Total Fund	\$9,594,638,477	100.0%	\$(65,580,760)	\$(438,651,294)	\$10,098,870,531	100.0%

Asset Class Performance and Market Values

	Market Value \$(Dollars)	Ending Weight	Last Quarter	Last Year	Last 3 Years	Last 5 Years
Domestic Equity Russell 3000 Index	\$3,524,929,947 -	37.13% -	(3.80%) (4.46%)	(17.70%) (17.63%)	7.79% 7.70%	8.60% 8.62%
International Equity Benchmark***	\$2,139,473,185 -	22.54% -	(9.37%) (9.69%)	(27.17%) (25.72%)	(0.15%) (2.57%)	0.36% (1.28%)
Diversified Strategies Diversified Strategy Trgt**	\$482,433,907 -	5.08% -	(1.98%) (5.61%)	(6.35%) (17.43%)	2.39% 1.98%	4.40% 3.51%
Domestic Fixed Income Blmbg Aggregate	\$1,791,626,083 -	18.87% -	(4.47%) (4.75%)	(15.46%) (14.60%)	(2.67%) (3.26%)	0.37% (0.27%)
Real Assets CPIU + 4%	\$1,554,360,032 -	16.37% -	0.82% 1.15%	24.63% 12.21%	13.45% 8.95%	10.44% 7.76%
Total Fund*** Benchmark*	\$9,492,823,155 -	100.00% -	(4.41%) (4.93%)	(14.34%) (14.56%)	4.66% 3.74%	5.28% 4.68%

- **Domestic Equity** outperformed the benchmark in the third quarter, and nearly matches the benchmark over the last 5-year period.
- **International Equity** outperformed the benchmark in the third quarter and leads its benchmark over the last 3- and 5-year periods.
- **Diversified Strategies** outperformed the target return in the third quarter, and leads over longer time periods shown above.
- **Domestic Fixed Income** outperformed the benchmark in the third quarter, and leads the index over longer trailing time periods due to its Core Plus orientation.
- **Real Assets** trailed the benchmark in the third quarter, but has outperformed over longer periods.

* Benchmark consists of 37% Russell 3000 Index, 24% MSCI ACWI ex US IMI Index, 18% Blmbg Aggregate Index, 16% CPI All Urban Cons +4%, 3% MSCI World Index and 2% Blmbg Aggregate Index

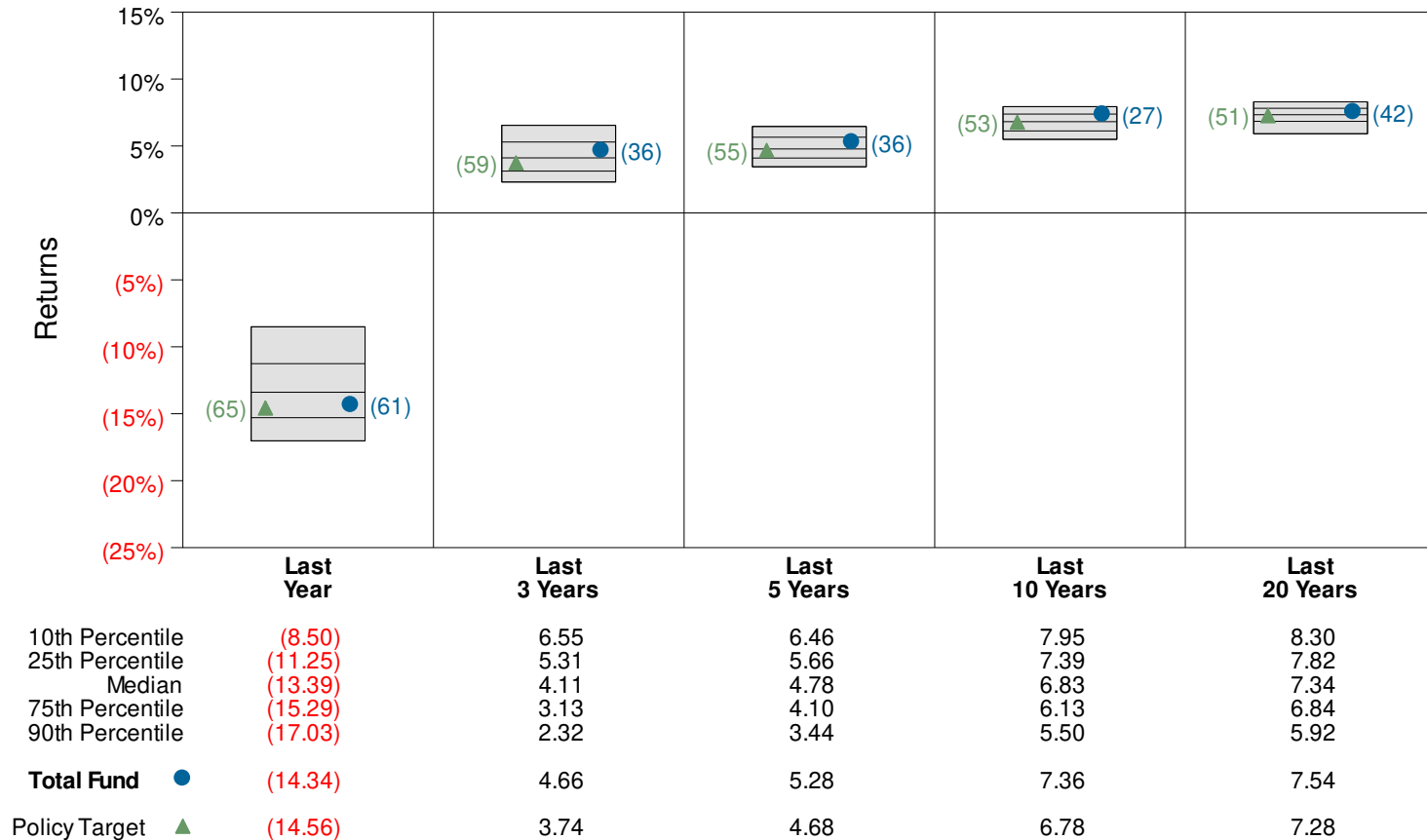
** 60% MSCI World and 40% Bloomberg Aggregate.

*** MSCI EAFE through 12/31/2020; MSCI ACWI ex US IMI (Net) thereafter

*** Performance excludes In-House.

Total Fund Performance

Callan Public Fund Sponsor Database



The Total Fund outperformed its policy target for the last year and ranked at the 61st percentile of its peer group. Over the remaining trailing periods, the fund has beaten the benchmark return and ranked in the top half of peers.

Policy Target consists of 37% Russell 3000 Index, 24% MSCI ACWI ex US IMI Index, 18% Blmbg Aggregate Index, 16% CPI All Urban Cons +4%, 3% MSCI World Index and 2% Blmbg Aggregate Index

Investment Manager Returns and Peer Group Rankings

	Last Quarter		Last Year		Last 3 Years		Last 5 Years	
Total Domestic Equity	(3.80%)	14	(17.70%)	66	7.79%	34	8.60%	29
Russell 3000 Index	(4.46%)	64	(17.63%)	66	7.70%	37	8.62%	28
Pub Pln- Dom Equity	(4.27%)		(16.94%)		7.38%		8.13%	
Lazard Asset Mgmt.	(6.31%)	88	(17.11%)	59	3.79%	85	7.84%	48
Russell 3000 Index	(4.46%)	51	(17.63%)	60	7.70%	44	8.62%	40
Callan All Cap Broad	(4.44%)		(13.74%)		7.12%		7.68%	
CastleArk	(3.51%)	23	(18.93%)	62	12.05%	6	11.76%	9
Russell 3000 Growth Index	(3.37%)	19	(23.01%)	79	10.16%	21	11.57%	10
Callan All Cap Broad	(4.44%)		(13.74%)		7.12%		7.68%	
Mellon S&P 500 Index Fd	(4.88%)	57	(15.47%)	49	7.65%	59	8.93%	50
S&P 500 Index	(4.88%)	57	(15.47%)	49	8.16%	53	9.24%	37
Callan Large Cap Core	(4.73%)		(15.54%)		8.40%		8.96%	
Horrell Capital - Passive	(1.35%)	1	(3.51%)	5	9.49%	25	10.42%	13
Bloomberg Arkansas Index	1.96%	1	9.28%	1	18.39%	1	14.41%	1
S&P 500 Index	(4.88%)	61	(15.47%)	57	8.16%	41	9.24%	33
Callan All Cap Broad	(4.44%)		(13.74%)		7.12%		7.68%	
Wellington Management	(5.79%)	61	(9.95%)	57	5.22%	69	5.84%	62
Russell 1000 Value Index	(5.62%)	56	(11.36%)	72	4.36%	88	5.29%	78
Callan Large Cap Value	(5.24%)		(9.37%)		5.97%		6.37%	
Intech	(3.87%)	43	(23.41%)	37	6.34%	70	9.42%	76
Russell 1000 Growth Index	(3.60%)	34	(22.59%)	30	10.67%	13	12.17%	16
Callan Large Cap Growth	(4.20%)		(25.84%)		7.85%		10.52%	
LSV Asset Management	(3.88%)	36	(9.84%)	21	7.25%	34	2.57%	81
Russell 2000 Value Index	(4.61%)	46	(17.69%)	82	4.72%	70	2.87%	77
Callan Small Cap Value	(4.73%)		(13.50%)		6.13%		3.78%	
Stephens Investment Mgmt.	(1.39%)	57	(27.56%)	39	6.01%	52	8.80%	38
Russell 2000 Growth Index	0.24%	31	(29.27%)	56	2.94%	89	3.60%	96
Callan Small Cap Growth	(0.98%)		(28.75%)		6.14%		8.37%	
Froley Revy Investment	(0.76%)	51	(21.26%)	88	9.62%	20	8.64%	28
ML All Conv	0.29%	6	(20.01%)	79	10.14%	15	9.29%	15
Callan Convert Bonds DR	(0.74%)		(15.97%)		5.75%		6.19%	

- Total **Domestic Equity** outpaced the Russell 3000 Index in the third quarter and finished in the 14th percentile of peers. The asset class is in line with its benchmark over the last 5-year period, and it ranked ahead of its peer group median over the trailing 3- and 5-year periods.
- LSV led its benchmark and ranked ahead of its peer group median for the quarter, and outperformed over the trailing 1- and 3-year periods.
- Intech and CastleArk trailed their respective benchmarks, but ranked in the top half of peers for the quarter. CastleArk leads the benchmark over longer periods, while Intech has underperformed.
- Lazard and Froley Revy (formerly SSI) lagged their respective benchmarks for the third quarter and ranked below median of peers. Froley Revy has outperformed relative to its benchmark and peers over longer periods, while Lazard trails the benchmark.

Investment Manager Returns and Peer Group Rankings

	Last Quarter		Last Year		Last 3 Years		Last 5 Years	
International Equity	(9.37%)	19	(27.17%)	52	(0.15%)	30	0.36%	26
Benchmark(1)	(9.69%)	29	(25.72%)	39	(2.57%)	87	(1.28%)	91
Pub Pln- Intl Equity	(10.02%)		(27.08%)		(0.76%)		(0.19%)	
Artisan Partners	(8.99%)	38	(16.34%)	2	4.01%	2	2.59%	8
MSCI EAFE	(9.36%)	52	(25.13%)	42	(1.83%)	70	(0.84%)	65
Callan NonUS Eq	(9.30%)		(25.79%)		(0.57%)		(0.13%)	
Mellon ACWI ex US Fund	(9.85%)	64	(24.98%)	40	(1.22%)	62	(0.48%)	57
MSCI ACWI ex US	(9.91%)	65	(25.17%)	43	(1.52%)	66	(0.81%)	64
Callan NonUS Eq	(9.30%)		(25.79%)		(0.57%)		(0.13%)	
Baillie Gifford Overseas	(8.85%)	35	(39.98%)	98	(2.36%)	78	(0.62%)	60
MSCI ACWIxUS Gross	(9.80%)	63	(24.79%)	36	(1.07%)	60	(0.34%)	54
Callan NonUS Eq	(9.30%)		(25.79%)		(0.57%)		(0.13%)	
Lazard Asset Mgmt.	(9.79%)	63	(26.00%)	53	(1.68%)	68	0.23%	43
MSCI ACWIxUS Gross	(9.80%)	63	(24.79%)	36	(1.07%)	60	(0.34%)	54
Callan NonUS Eq	(9.30%)		(25.79%)		(0.57%)		(0.13%)	
Acadian ACW ex US SmallCap	(7.37%)	11	(21.05%)	2	-	-	-	-
MSCI ACWI ex US Small Cap	(8.37%)	25	(28.93%)	30	0.38%	28	(0.56%)	30
Callan Intl Small Cap	(9.72%)		(31.16%)		(0.97%)		(1.75%)	
Franklin Templeton Intl SmallCap	(11.66%)	97	(32.03%)	61	-	-	-	-
MSCI ACWI ex US Small Cap	(8.37%)	25	(28.93%)	30	0.38%	28	(0.56%)	30
Callan Intl Small Cap	(9.72%)		(31.16%)		(0.97%)		(1.75%)	
Diversified Strategies	(1.98%)		(6.35%)		2.39%		4.40%	
Diversified Strategy Trgt**	(5.61%)		(17.43%)		1.98%		3.51%	
AQR Capital	(5.39%)	59	(17.80%)	75	(1.82%)	79	2.31%	48
Diversified Strategy Trgt**	(5.61%)	60	(17.43%)	71	1.98%	41	3.51%	26
Intl/Global Balanced DB	(4.89%)		(13.33%)		1.51%		2.26%	
Blackstone Alt. Asset Mgmt.	1.24%	1	2.82%	1	4.93%	10	5.67%	8
T-Bills + 4%	1.43%	1	4.62%	1	4.59%	12	5.15%	11
Intl/Global Balanced DB	(4.89%)		(13.33%)		1.51%		2.26%	
Newton Capital	(3.26%)	22	(6.10%)	7	3.31%	21	4.79%	13
LIBOR + 4%	1.65%	1	5.08%	1	4.70%	11	5.26%	11
Intl/Global Balanced DB	(4.89%)		(13.33%)		1.51%		2.26%	

- Total **International Equity** outperformed the benchmark and ranked at the 19th percentile of peers for the quarter. Artisan, Baillie Gifford, and Acadian led their benchmarks and ranked ahead of their respective peer group medians. Franklin Templeton was the largest detractor for the quarter.
- Over the last 3- and 5-year periods, Total International Equity leads the benchmark and ranks in the top third of peers.
- **Diversified Strategies** outperformed its target in the third quarter. AQR outpaced its target return and ranked in the third quartile of peers. BAAM trailed its benchmark but finished at the top of its peer group for the quarter. Newton trailed its benchmark but ranked in the top quartile of its peer group.
- The Diversified Strategies portfolio beat its benchmark over the last 3- and 5-year periods.

(1) MSCI EAFE through 12/31/2020; MSCI ACWI ex US IMI (Net) thereafter

**60% MSCI World/40% Blmbg Aggregate

Investment Manager Returns and Peer Group Rankings

	Last Quarter		Last Year		Last 3 Years		Last 5 Years	
Domestic Fixed Income	(4.47%)	77	(15.46%)	87	(2.67%)	79	0.37%	62
Blmbg Aggregate Index	(4.75%)	86	(14.60%)	75	(3.26%)	98	(0.27%)	97
Pub Pln- Dom Fixed	(3.45%)		(13.37%)		(1.69%)		0.60%	
DoubleLine Capital	(4.01%)	28	(13.73%)	20	(2.79%)	79	0.03%	91
MacKay Shields	(4.91%)	92	(16.61%)	91	(2.30%)	42	0.53%	38
PGIM	(4.45%)	64	(15.91%)	79	(2.97%)	89	0.51%	39
Blmbg Aggregate Index	(4.75%)	88	(14.60%)	43	(3.26%)	94	(0.27%)	96
Callan Core Plus FI	(4.30%)		(14.86%)		(2.45%)		0.41%	
Real Assets	0.82%		24.63%		13.45%		10.44%	
CPIU + 4%	1.15%		12.21%		8.95%		7.76%	
REITS	(10.35%)		(17.22%)		(3.59%)		-	
S&P DJ US Select REIT	(10.37%)		(17.15%)		(3.29%)		1.95%	
MCM EB DV Non-SL REIT Fd	(10.35%)	48	(17.22%)	63	(3.59%)	92	-	
S&P DJ US Select REIT	(10.37%)	50	(17.15%)	62	(3.29%)	87	1.95%	90
Callan Real Estate REIT	(10.37%)		(16.61%)		(0.41%)		4.49%	
Core Real Estate	1.54%		25.65%		11.90%		9.94%	
NCREIF NFI-ODCE Eq Wt Net	0.77%		21.68%		12.13%		9.87%	
Invesco Real Estate	1.41%	79	19.90%	65	11.36%	52	9.98%	29
Heitman Real Estate Trust LP***	1.74%	72	35.69%	2	12.82%	22	10.22%	27
NCREIF NFI-ODCE Eq Wt Net	0.77%	84	21.68%	54	12.13%	34	9.87%	37
Callan OE Core Cmngld RE	3.12%		22.26%		11.57%		9.24%	
Value Add Real Estate	2.03%		45.06%		23.15%		19.52%	
NCREIF Total Index	0.57%		16.08%		9.91%		8.62%	
Harrison Street Fund VIII	0.28%		6.19%		-		-	
Heitman Value Partners IV	5.01%		40.34%		20.36%		-	
LaSalle Inc & Growth VI LP	(6.91%)		(3.92%)		(3.94%)		(0.38%)	
LaSalle Inc & Growth VII LP	(1.28%)		36.95%		13.34%		13.15%	
Starwood SOF XII	7.18%		-		-		-	
TA Associates Realty Fund X	5.09%		33.78%		9.37%		16.75%	
TA Associates Realty Fund XI	(1.05%)		57.13%		33.98%		25.49%	
TA Associates Realty Fund XII	3.37%		60.87%		-		-	
NCREIF Total Index	0.57%		16.08%		9.91%		8.62%	
Farmland	0.00%		-		-		-	
PGIM Agriculture	0.00%		-		-		-	
NCREIF Farmland Index	1.98%		11.49%		6.91%		6.58%	
Timber	5.00%		20.54%		6.45%		3.23%	
Pinnacle	5.00%		20.54%		6.45%		3.23%	
NCREIF Timberland Index	2.38%		12.54%		5.80%		4.69%	
Total Fund	(4.41%)	59	(14.34%)	61	4.66%	36	5.28%	36
Benchmark*	(4.93%)	76	(14.56%)	65	3.74%	59	4.68%	55
Callan Public Fund Spr DB	(4.23%)		(13.39%)		4.11%		4.78%	

- **Domestic Fixed Income** outperformed the Bloomberg Aggregate Index in the third quarter and ranked in the bottom quartile of peers. PGIM and DoubleLine finished ahead of the benchmark, while Mackay Shields underperformed. The Fixed Income composite leads the index over longer periods.
- The **Real Assets** composite trailed its real return benchmark during the quarter. The Value-Add Real Estate, Core Real Estate, and Timber allocations outperformed their respective benchmarks. The composite leads the benchmark over longer periods.
- The **Total Fund** outperformed its benchmark and finished below its peer group median for the quarter. The Fund has delivered excess returns versus the benchmark and ranks near the top third of peers over the last 3- and 5-year periods.

*Policy Target consists of 37% Russell 3000 Index, 24% MSCI ACWI ex US IMI Index, 18% Blmbg Aggregate Index, 16% CPI All Urban Cons +4%, 3% MSCI World Index and 2% Blmbg Aggregate Index
 *** Funded July 8, 2015. Performance prior to October 1, 2015 represents fund composite returns.

Organizational Developments

Mackay Shields – On September 20th, 2022, Mackay Shields announced that John Loffredo, Co-Head of MacKay Municipal Managers has been named Vice Chairman of MacKay Shields with oversight responsibilities for investment teams across both Taxable and Tax-Exempt markets. Leveraging his deep investment knowledge and 30 plus years of experience and leadership across research, portfolio construction and risk management over multiple market cycles, John will work alongside Jeff Phlegar, CEO to ensure the investment platform and teams are fully resourced and well positioned to serve our clients.

John will retain his current responsibilities as Co-Head of MacKay Municipal Managers (MMM) as will the leaders of the other investment teams. There will be no changes to MacKay’s longstanding “boutique within a boutique” philosophy that combines the investment agility of autonomous investment teams with a strong institutional infrastructure.

Janelle Woodward, President of MacKay Shields, has decided to leave the firm to explore other opportunities. To ensure a smooth and seamless transition, she will remain with the firm through the end of the year.

Work Plan Update

Asset Liability Study

- Completed in February 2019. The Board decided to keep the current asset allocation unchanged

Investment Policy Review and Update – Completed in August 2019

Non-US Equity Structure Study

- The Board reviewed the Non-US Equity Structure Study at the November 2019 Board Meeting
- The Board selected a structure which included a new allocation to Non-US Small Cap Equity
- The Non-US Small Cap Equity search was concluded in November 2020 with the selection of Acadian Asset Management and Franklin Templeton Investments

Real Assets Structure Study

- The Board reviewed the Real Assets Structure at the February 2021 meeting. The Board chose to eliminate the Energy equity allocation, in favor of additional Core and Core Plus real estate, and Farmland. Additional Allocations to Value-add real estate were also approved
- At the May 2021 Board Meeting, the Board approved the Real Estate Pacing Study and new commitments to Starwood and Harrison Street Partners
- At the November 2021 Board Meeting, Farmland managers were interviewed and both IFC and PGIM were allocated \$50 million.
- Core Plus Real Estate Manager Interviews occurred at the February Board Meeting, all three managers, Carlyle, Principal, and Clarion, were hired to manage \$85 million.

Domestic Equity Structure Study

- Presented at the August 2022 Board Meeting. The Board decided to maintain the current Domestic Equity Structure.

Private Equity Education and Total Fund Asset Allocation Review

- Private equity education was provided at the Trustee Workshop in October 2022. In the November 2022 meeting the Board received an asset allocation review which included portfolios containing private equity.

Upcoming Projects:

- **Diversified Strategies Structure Study**
- **Fixed Income Structure Study**

Total Fund Relative Attribution

Relative Attribution Effects for Quarter ended September 30, 2022

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	37%	37%	(3.80%)	(4.46%)	0.24%	(0.00%)	0.24%
Domestic Fixed Income	19%	18%	(4.47%)	(4.75%)	0.05%	0.00%	0.06%
International Equity	24%	24%	(9.37%)	(9.69%)	0.08%	0.02%	0.10%
Diversified Strategies	5%	5%	(1.98%)	(5.61%)	0.18%	0.00%	0.18%
Real Assets	16%	16%	0.82%	1.15%	(0.05%)	(0.00%)	(0.06%)
Total			(4.41%)	(4.93%)	+ 0.50%	+ 0.02%	0.52%

One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	39%	37%	(17.70%)	(17.63%)	(0.07%)	(0.12%)	(0.19%)
Domestic Fixed Income	18%	18%	(15.46%)	(14.60%)	(0.16%)	(0.03%)	(0.19%)
International Equity	25%	24%	(27.17%)	(25.72%)	(0.42%)	(0.06%)	(0.47%)
Diversified Strategies	5%	5%	(6.35%)	(17.43%)	0.51%	0.01%	0.52%
Real Assets	13%	16%	24.63%	12.21%	1.15%	(0.60%)	0.55%
Total			(14.34%)	(14.56%)	+ 1.01%	(0.79%)	0.22%

Five Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	40%	37%	8.60%	8.62%	(0.02%)	0.07%	0.05%
Domestic Fixed Income	16%	18%	0.37%	(0.27%)	0.07%	(0.02%)	0.05%
International Equity	25%	24%	0.36%	(1.28%)	0.43%	(0.06%)	0.37%
Diversified Strategies	5%	5%	4.40%	3.51%	0.04%	0.00%	0.04%
Real Assets	14%	16%	10.44%	7.76%	0.23%	(0.14%)	0.09%
Total			5.28%	4.68%	+ 0.75%	(0.14%)	0.60%

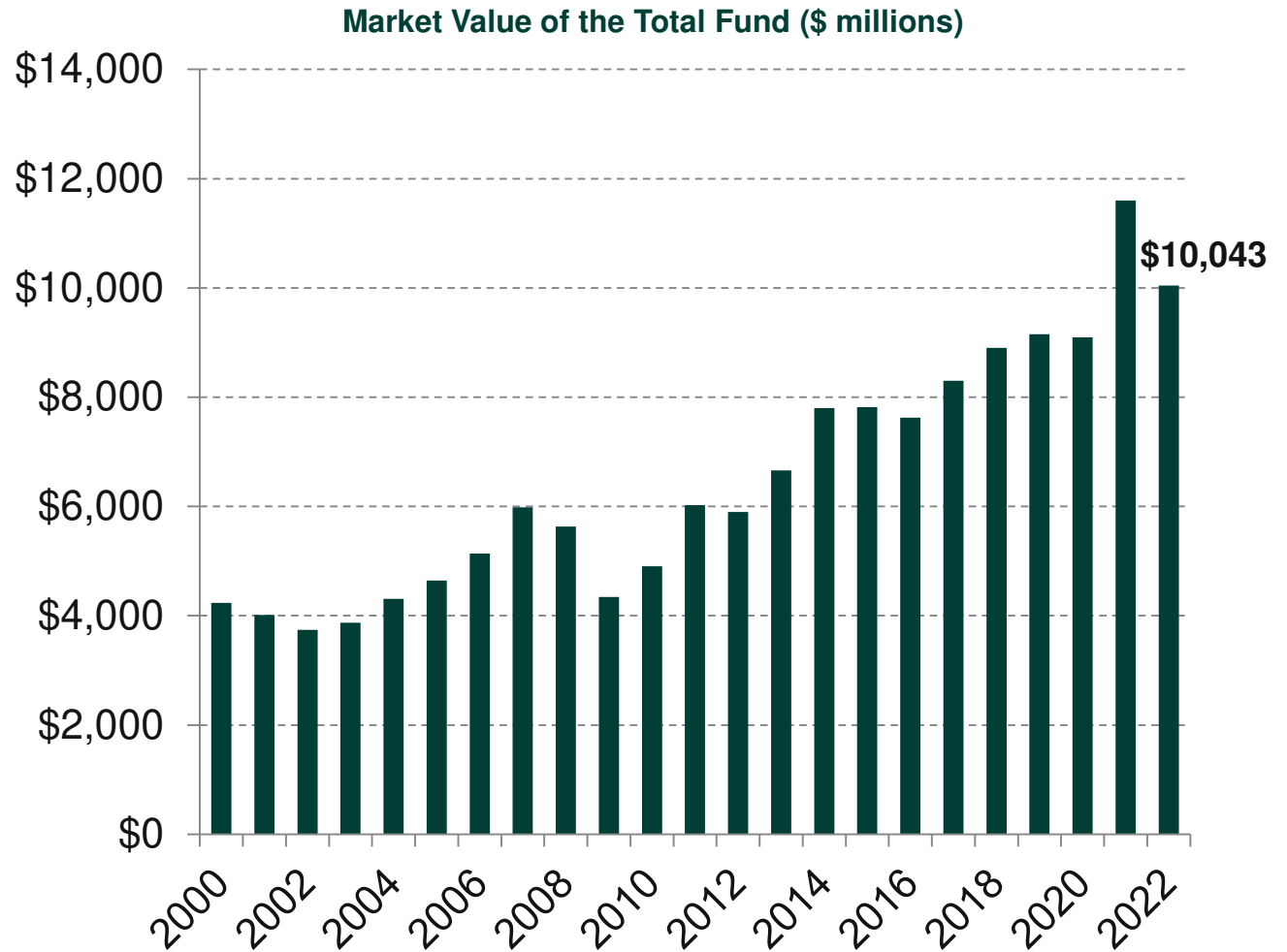
- Active management was the driver of outperformance during the third quarter, while asset allocation decisions were modestly positive. Domestic Equity managers added the most value while Real Assets was the lone detractor.
- Over the last year, active management contributed to positive relative results. Managers within Diversified Strategies and Real Assets added the most value for the period. Variance from policy weights detracted, driven by an underweight to Real Assets.
- Outperformance over the last five years is attributable to positive active management. Domestic Fixed Income, International Equity, Diversified Strategies, and Real Assets managers added value during the period. An underweight to Real Assets was the largest detractor, as variance from policy weights was a headwind to relative results.

Policy Target consists of 37% Russell 3000 Index, 24% MSCI ACWI ex US IMI Index, 18% Blmbg Aggregate Index, 16% CPI All Urban Cons +4%, 3% MSCI World Index and 2% Blmbg Aggregate Index

Historical Market Values of the Total Fund

Fiscal Year-End Market Values

Fiscal Year Ending	Market Value
2000	\$4,236,749,732
2001	\$4,012,745,608
2002	\$3,739,381,695
2003	\$3,869,787,673
2004	\$4,307,589,827
2005	\$4,642,924,118
2006	\$5,136,985,259
2007	\$5,985,111,493
2008	\$5,633,155,289
2009	\$4,341,419,711
2010	\$4,907,734,835
2011	\$6,022,965,592
2012	\$5,896,862,618
2013	\$6,662,631,673
2014	\$7,800,291,923
2015	\$7,820,289,128
2016	\$7,624,665,446
2017	\$8,301,352,120
2018	\$8,904,393,859
2019	\$9,153,121,783
2020	\$9,093,497,703
2021	\$11,602,695,185
2022	\$10,042,629,672





November 16, 2022

Arkansas Public Employees Retirement System

Asset Allocation Analysis

Brianne Weymouth, CAIA

Fund Sponsor Consulting

John Jackson

Capital Markets Research

John Pirone, CFA, FRM, CAIA

Capital Markets Research

Private Equity Overview

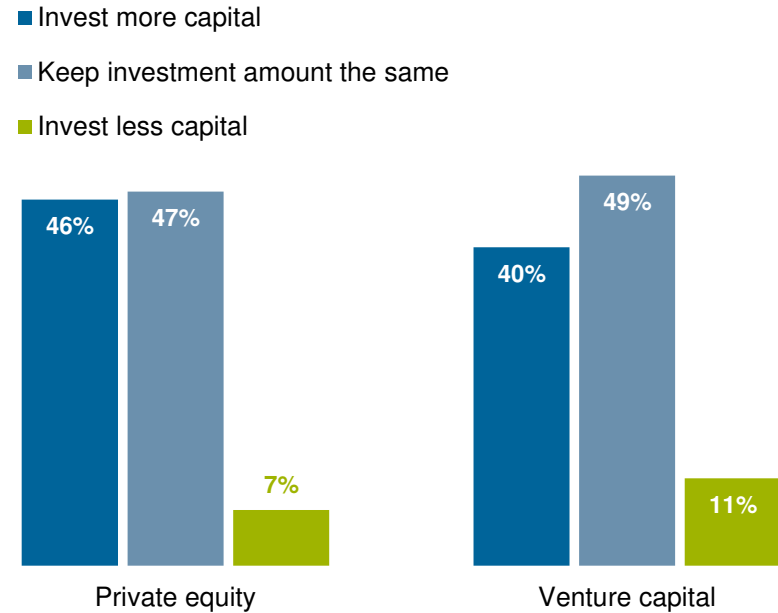
- Private equity can provide high returns, driven largely by operational and financial improvements during an extended holding period. This effect is often called the “illiquidity premium.”
- Private equity has gained greater acceptance within institutional portfolios as a primary driver of returns and is typically included within the growth-oriented portion of the portfolio.
- Private equity has multiple subsectors, each of which focuses on companies with different growth stages.
- Private equity’s investment challenges include illiquidity, high fees, reporting/benchmarking issues, and program complexity.

What Is Private Equity?

Definition: Private, unlisted investments in operating companies, typically accessed through limited partnerships

- ▶ Provides a differentiated return stream and diversification in a portfolio with publicly traded securities
- ▶ Addresses a different opportunity set—private companies
- ▶ Primary appeal: potential to outperform publicly traded stocks and bonds
- ▶ Primary drawbacks: illiquidity, program complexity, high return dispersion
- ▶ Often viewed as a separate asset class, private equity is an extension of equity that encompasses ownership stakes in companies but, unlike public equity, engages in private transactions

Plans to Invest In Private Equity and Venture Capital in 2022
(percentage of investors)

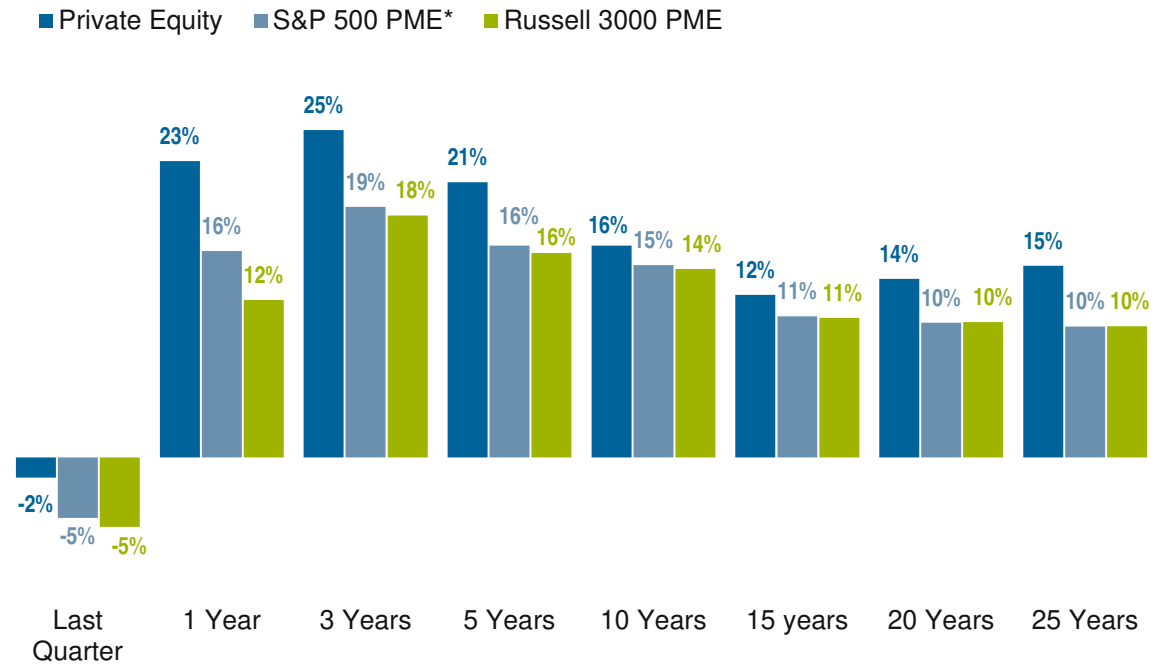


Source: Private Equity International's LP Perspectives 2022 Survey

Why Invest in Private Equity?

- ▶ Potential to outperform public equity
- ▶ Control over value-improvement the key differentiator from public equity
- ▶ Private equity fund managers control and execute value-creation plans:
 - Can grow companies fast, optimizing the use of leverage where applicable
 - Bring best resources to companies, managements, boards, and customers
- ▶ Companies managed for long-term gain, not quarterly earnings:
 - Different objectives and incentives than public companies

Pooled Horizon Net IRRs as of March 31, 2022



Pooled Horizon IRR measures the return for a specific time period, factoring in all the cash flows and the timing of the cash flows for the strategy or funds under review. The IRR is the discount rate that makes the net present value of all cash flows equal to zero.

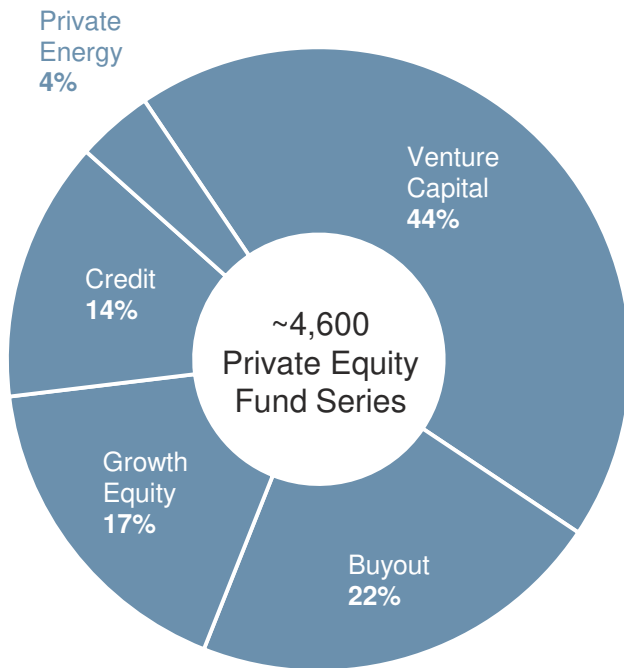
*Public market equivalent

Private Equity Market

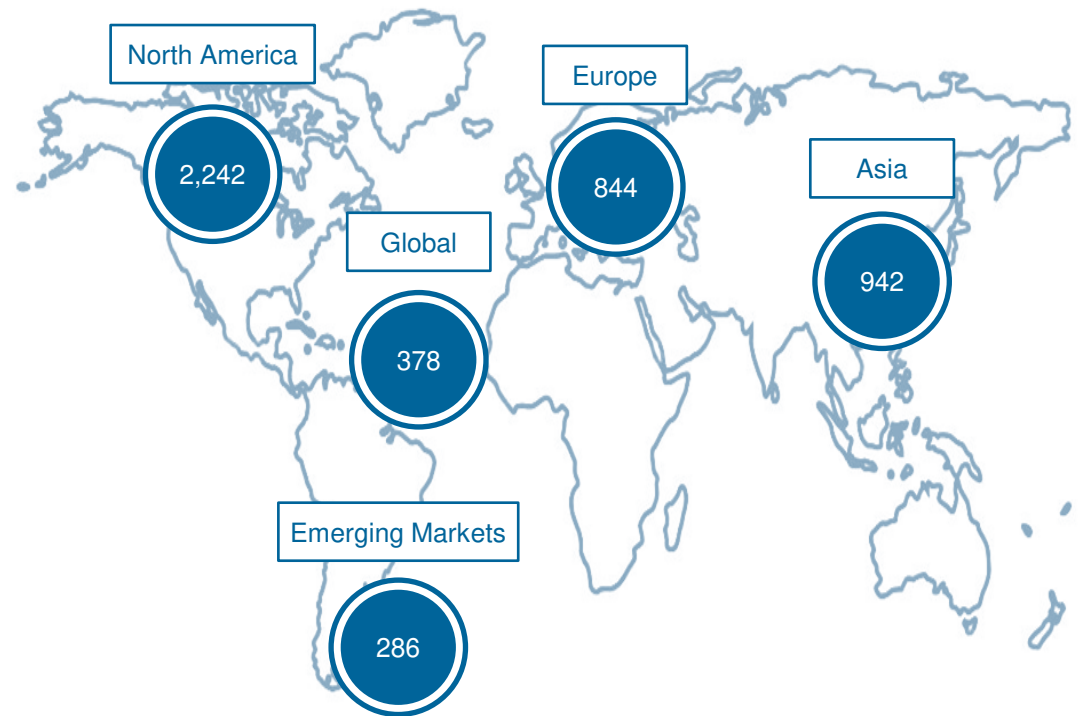
Callan's universe of private equity fund series

As of March 31, 2022, the size of the private equity market was **\$4.7 trillion**. Uncalled commitments represented \$1.5 trillion.

Number of Fund Series by Strategy



Number of Fund Series by Region

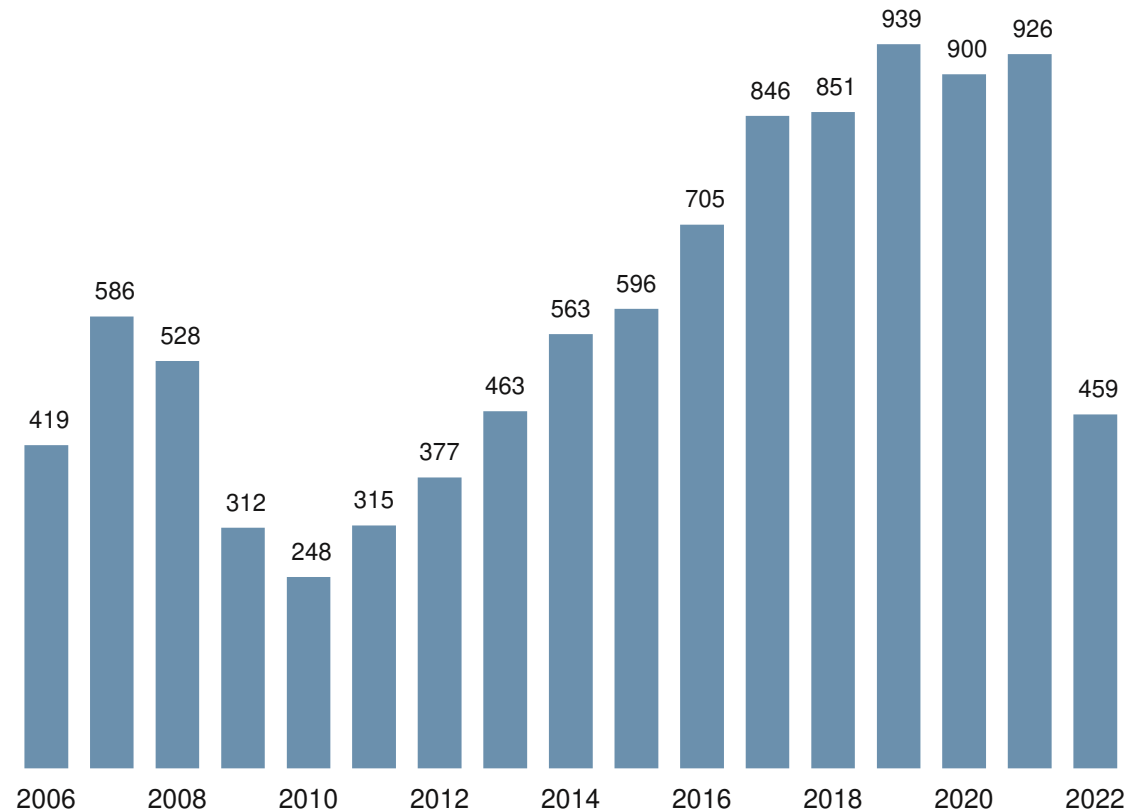


Source: PitchBook and Callan database, as of March 2022

Private Equity Market

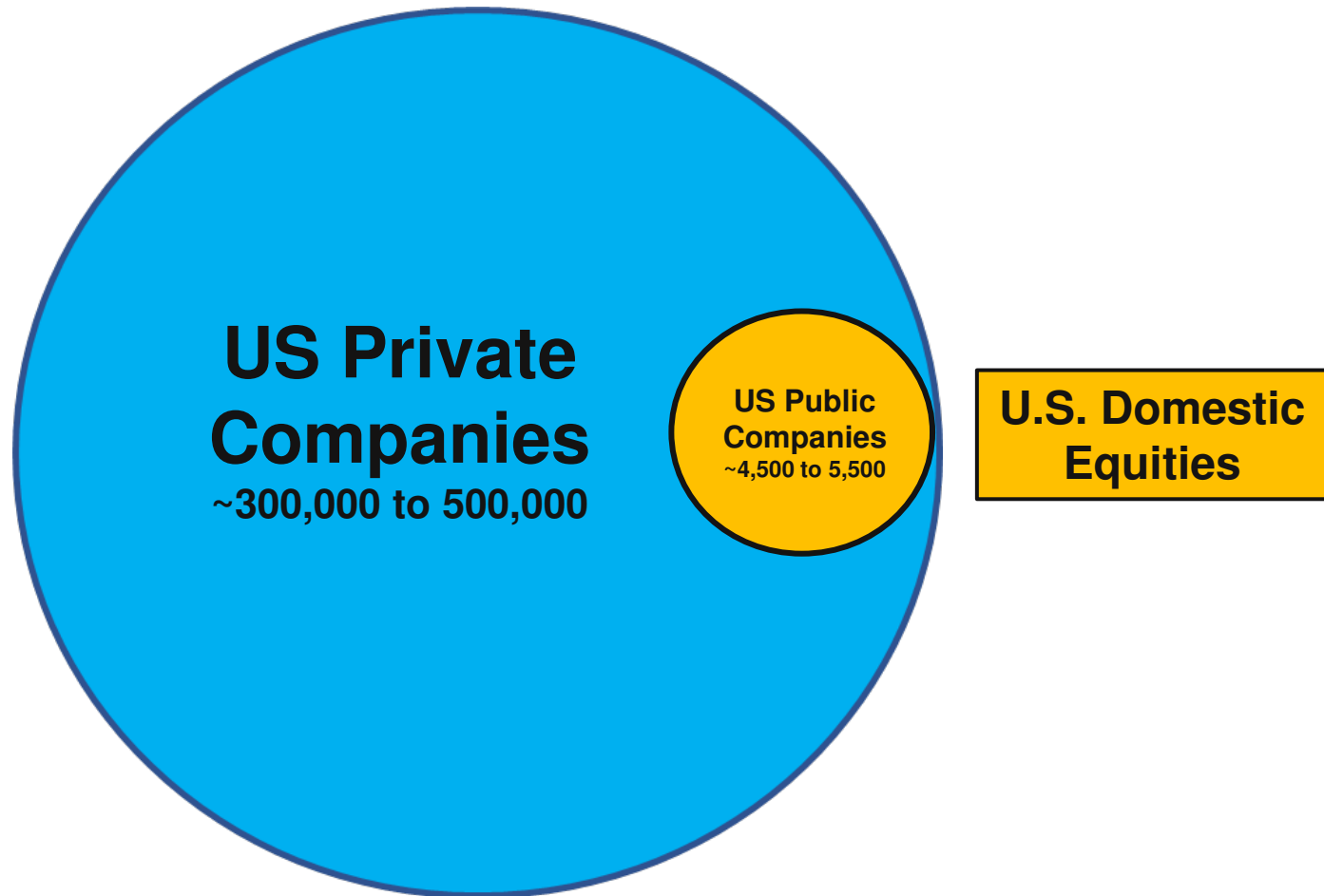
- ▶ Flows into Private Equity have seen a measurable increase in recent years.
- ▶ In addition to overall flows, fund sizes have also increased to all-time highs.

Private Equity Fundraising (\$billions)



Source: PitchBook and Callan database, as of March 31, 2022

Private Equity Opportunity Set

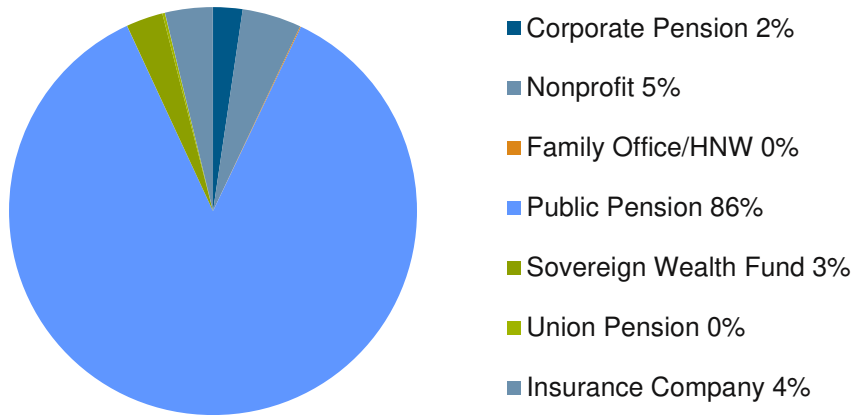


- ▶ The number of private companies far exceeds the number of public companies
- ▶ Private companies tend to be smaller in capitalization than public companies included in the Russell 2000 Index.

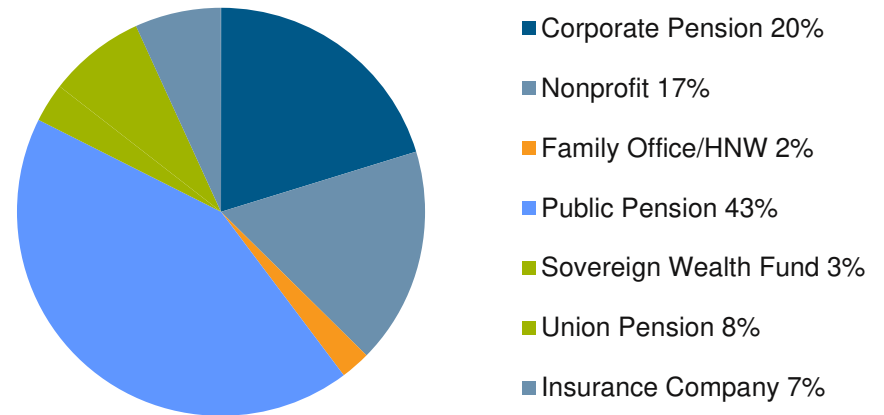
Who Invests in Private Equity?

- ▶ A diverse set of limited partners invests in private equity in search of high returns to enhance the performance of their portfolios.
- ▶ In addition to Institutions, individual/taxable investors also represent one of the faster growing segments of the private equity LP base, partly due to the development of new vehicles, broader use of technology platforms to enable access to 3(c)7 funds, and significant wealth creation leading to rapid growth in the establishment of new single and multi-family investment offices.

LP Type by Commitment Amounts



LP Type by Number



Source: PitchBook, as of May 2022

Characteristics of Private Equity

Illiquidity

Considerations

- Imperfect and infrequent valuations
- Difficult to “rebalance”—structural hindrances to selling partnership interests
- Unpredictable cash flows—managing liquidity and exposure is challenging

Merits

- No mark-to-market volatility as associated with public equities
- Long-term focus, with emphasis on ROI

Return

Considerations

- High return dispersion—manager selection integral to developing a successful program
- No replicable benchmark
- Investing primarily in blind pool funds

Merits

- Historically higher returns relative to public equities
- Opportunity set unique relative to public equities

Cost

Considerations

- High fee structure relative to public equities—management fees and other embedded costs
- Lack of complete fee and expense transparency

Merits

- Carried interest generated only if return hurdle is met
- Greater, not complete, transparency on fees and expenses
- Lower costs do not equate to higher returns

Complexity

Considerations

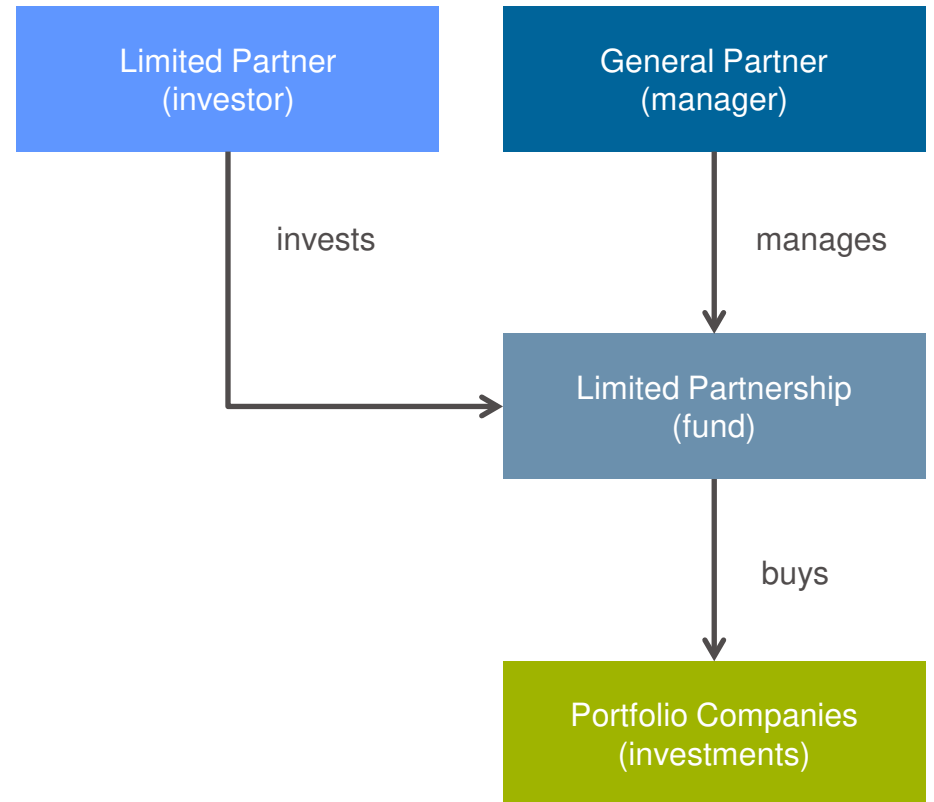
- Successful execution requires a long-term plan and collaboration of board and staff
- Requires depth and breadth of staff for execution
- Access to quality general partners may be limited
- Distinct agreements; buyer’s remorse can be costly

Merits

- A structured program, a well-defined process and strategy, an experienced staff, and a supportive board can achieve targeted returns

How to Invest in Private Equity

- ▶ Private equity is accessed through a limited partnership vehicle in which the manager is the general partner (GP) and the investor is the limited partner (LP).
- ▶ GPs raise distinct pools of capital every 3–4 years and LPs commit capital to those funds. The vehicles are typically known as Fund I, Fund II, Fund III, etc.
- ▶ Over time the GP draws down LP commitments and makes 10–30 investments into portfolio companies. The LP receives a capital call once the GP is ready to invest in a new company.
- ▶ After holding the companies for 3–5+ years, the GP exits through a sale or IPO. Once all portfolio companies are exited, the partnership liquidates. Therefore, LPs continually invest in new partnerships as older ones expire.

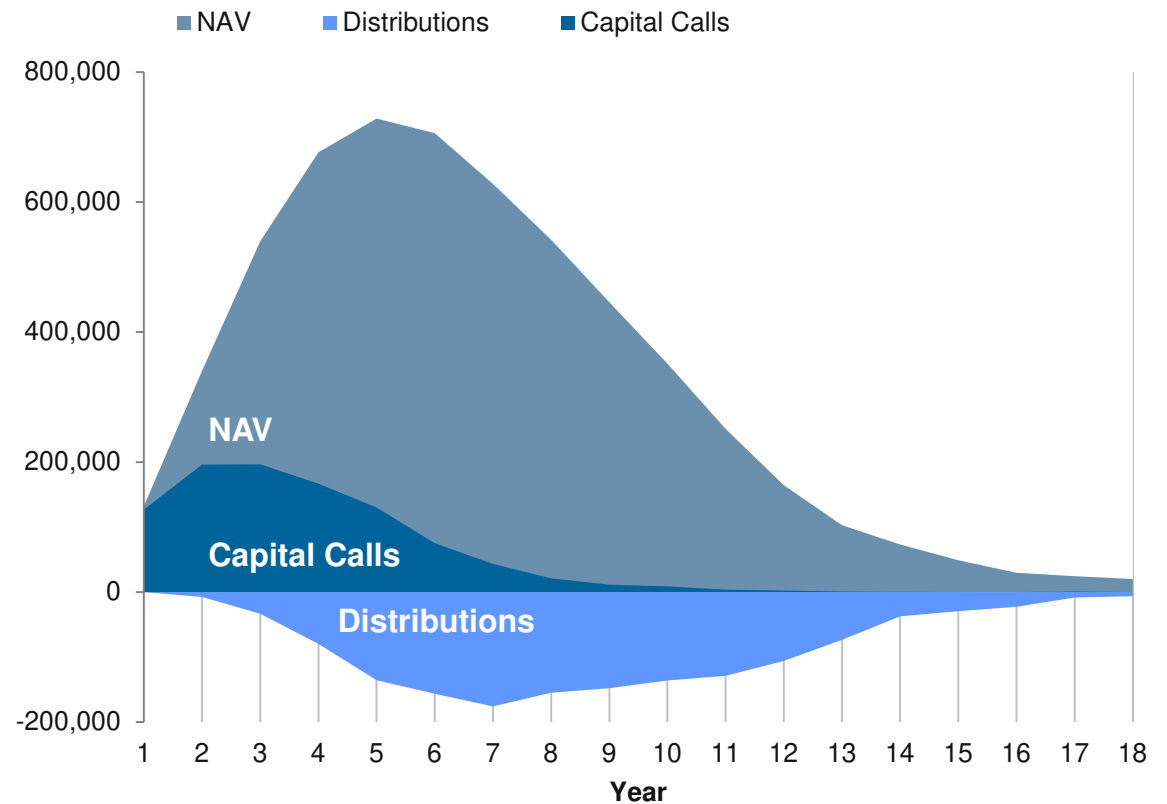


Timeline of a Private Equity Fund

A finite life

- ▶ The net asset value (NAV) builds as capital is called from LPs and invested.
- ▶ The NAV then declines as investments are sold (realized) and capital and earnings are distributed back to LPs.
- ▶ Funds can sometimes have an extended tail of holdings past the original end of the fund term if they are unable to sell the few remaining portfolio companies.

Annual Cash Flows of a \$1 Million Commitment



Source: Callan using Refinitiv/Cambridge Private Equity benchmark cash flows

Private Equity Strategy Types



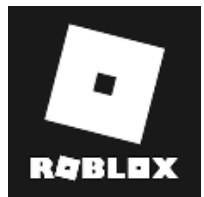
Buyout

Acquire control positions in mature businesses that typically have long operating histories, established end markets, and developed product or service offerings



Growth Equity

Acquire minority interests in growing businesses that are typically at or near profitability and need the capital to scale



Venture Capital

Acquire minority interests in startup businesses or ideas with significant growth potential, generally in the technology, consumer, or health care industries



Distressed/Restructuring

Acquire mature businesses facing operational or market challenges



Private Energy

Acquire interests in growing or mature energy-related businesses, typically oil and gas companies focused on exploration, production, transportation, refining, and/or processing

Private Equity Investment Challenges

Illiquidity	Capital locked up for 10-15+ years Secondary market a liquidity option, but assets are sold at a discount
Implementation	Manager selection critical as mistakes are long-lasting and cannot be easily liquidated
Fees	Management Fee (1.25%-2.5%) + Carried Interest (20% of profits) + Additional Partnership Expenses
Performance Calculation & Benchmarking	Reliance on internal rate of return (IRR) and multiples of invested capital (e.g., total value / paid-in capital, or TVPI), rather than time-weighted returns (TWR) used for public equity Data often lagged, creating a timing issue for reporting No perfect benchmark exists; investors use a variety of methodologies (e.g., Russell 3000 + 2%). Performance data is only available in a small number of private equity databases, making peer group rankings difficult.
J-Curve Effect	Negative returns in the fund's early years as the portfolio is invested and developed These are eventually offset by potentially outsized investment gains in the latter years
Program Complexity	Investors cannot rebalance a private equity portfolio to move it closer to target Requires annual commitment pacing to ensure investors meet and maintain private equity targets

Asset Allocation Analysis

Callan's 2023-2032 Expected Return and Risk Assumptions

Asset Class	2023 Expected Return	2022 Expected Return	Change in Expected Return	Risk
Domestic Equity	7.35%	6.60%	0.75%	18.00%
International Equity	7.60%	6.80%	0.80%	20.70%
Convertible Bonds	7.00%	6.25%	0.75%	14.10%
Fixed Income	4.50%	1.75%	2.75%	3.75%
Real Assets	6.40%	5.80%	0.60%	13.80%
<i>Real Estate</i>	6.35%	5.75%	0.60%	14.20%
<i>Timber</i>	5.90%	5.40%	0.50%	15.60%
<i>Farmland</i>	6.00%	5.50%	0.50%	15.95%
Diversified Strategies	5.25%	4.10%	1.15%	8.20%
Private Equity	8.75%	8.00%	0.75%	27.60%
Cash	2.75%	1.20%	1.55%	0.90%
<i>Inflation (CPI-U)</i>	2.50%	2.25%	0.25%	

- ▶ Fixed income expected returns increased by 2.75% for 2023, driven by materially higher yields resulting from the Federal Reserve raising interest rates
- ▶ Equity expected returns increased by roughly 0.75% for 2023, driven by the combination of lower valuations, higher dividend yields, and a 0.25% increase in expected inflation

Expected return forecasts are annualized over a 10 year horizon. 2023 Callan assumptions as of October 31, 2022.

Comparison of Callan's Plan Level Expected Return and the APERS Discount Rate

	Price Inflation	+	Real Return	=	Total Return
2022 Callan	2.25%	+	3.70%	=	5.95%
2023 Callan	2.50%	+	4.58%	=	7.08%
Actuarial ROA	2.50%	+	4.65%	=	7.15%

- ▶ Callan's 2023 plan level expected return assumption is significantly higher than 2022, driven by higher bond yields and declining equity markets
- ▶ Callan's 2023 plan level expected return assumption is very similar to the plan's actuarial ROA used by GRS
- ▶ Callan's price inflation forecast is now the same as the GRS price inflation assumption

Liquidity Considerations

- ▶ APERS' target asset allocation has a 16% allocation to illiquid assets, stemming from its private real estate, timber, and farmland allocations

- ▶ Key considerations in determining whether APERS increases its exposure to illiquid assets by adding private equity:
 - 1) Funding status as of 6/30/2022 is estimated at 82% on a market value basis
 - 2) Net cash outflows (benefit payments minus contributions) are modest at roughly 3% per year
 - 3) APERS has a history of making required contributions

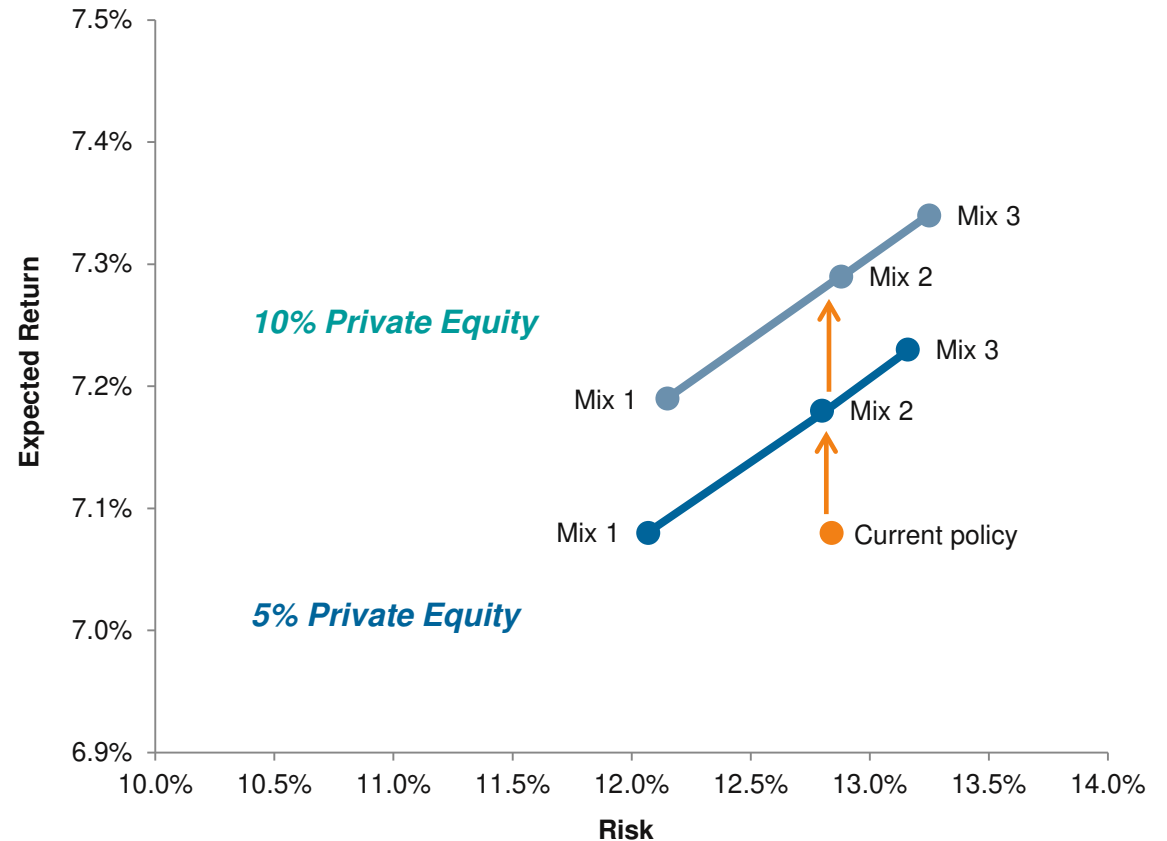
A 5% to 10% allocation of private equity is supported by APERS' liquidity profile

3% net outflow projection sourced from the May 15, 2019 Callan Asset/Liability study.

Impact of Private Equity on Expected Return

Efficient frontiers

- ▶ Adding private equity at either a 5% or a 10% allocation increases the plan's expected return at a similar level of risk
- ▶ By adding private equity, It is also possible to reduce the portfolio's risk as well as increase the plan's expected return
- ▶ Private equity is forecasted to outperform private equity by roughly 140 basis points annualized
- ▶ As a new asset class, private equity provides a degree of portfolio diversification as well



Candidate Mixes with 5% Private Equity

	Current Policy	5% PE: Mix 1		5% PE: Mix 2		5% PE: Mix 3	
			change		change		change
Domestic Equity	33%	33%	0%	35%	2%	36%	3%
International Equity	24%	17%	-7%	19%	-5%	20%	-4%
Convertible Bonds	4%	0%	-4%	0%	-4%	0%	-4%
Fixed Income	18%	24%	6%	20%	2%	18%	0%
Real Assets	16%	16%	0%	16%	0%	16%	0%
Diversified Strategies	5%	5%	0%	5%	0%	5%	0%
Private Equity	0%	5%	5%	5%	5%	5%	5%
	100%	100%		100%		100%	
Portfolio Characteristics:							
Expected Return	7.08%	7.08%	0.00%	7.18%	0.10%	7.23%	0.15%
Risk	12.84%	12.07%	-0.77%	12.80%	-0.04%	13.16%	0.32%
Sharpe Ratio	0.318	0.338	0.020	0.327	0.009	0.321	0.003

► Relative to the current policy:

- 1) Mix 1: Has same expected return and lower risk
- 2) Mix 2: Has higher expected return and similar risk
- 3) Mix 3: Has higher expected return and higher risk

► All candidate mixes have a higher expected return per unit of risk (Sharpe ratio) than the current policy

Real asset allocation modeled as 90% private real estate, 5% timber, and 5% farmland. Sharpe Ratio defined as (portfolio expected return minus 2.75% projected cash rate) divided by portfolio risk.

Candidate Mixes with 10% Private Equity

	Current Policy	10% PE: Mix 1		10% PE: Mix 2		10% PE: Mix 3	
			change		change		change
Domestic Equity	33%	29%	-4%	31%	-2%	32%	-1%
International Equity	24%	15%	-9%	17%	-7%	18%	-6%
Convertible Bonds	4%	0%	-4%	0%	-4%	0%	-4%
Fixed Income	18%	25%	7%	21%	3%	19%	1%
Real Assets	16%	16%	0%	16%	0%	16%	0%
Diversified Strategies	5%	5%	0%	5%	0%	5%	0%
Private Equity	0%	10%	10%	10%	10%	10%	10%
	100%	100%		100%		100%	
Portfolio Characteristics:							
Expected Return	7.08%	7.19%	0.11%	7.29%	0.21%	7.34%	0.26%
Risk	12.84%	12.15%	-0.69%	12.88%	0.04%	13.25%	0.41%
Sharpe Ratio	0.318	0.345	0.027	0.333	0.015	0.328	0.010

► Relative to the current policy:

- 1) Mix 1: Has higher expected return and lower risk
- 2) Mix 2: Has higher expected return and similar risk
- 3) Mix 3: Has higher expected return and higher risk

► All candidate mixes have a higher return per unit of risk (Sharpe ratio) than the current policy

Real asset allocation modeled as 90% private real estate, 5% timber, and 5% farmland. Sharpe Ratio defined as (portfolio expected return minus 2.75% projected cash rate) divided by portfolio risk.

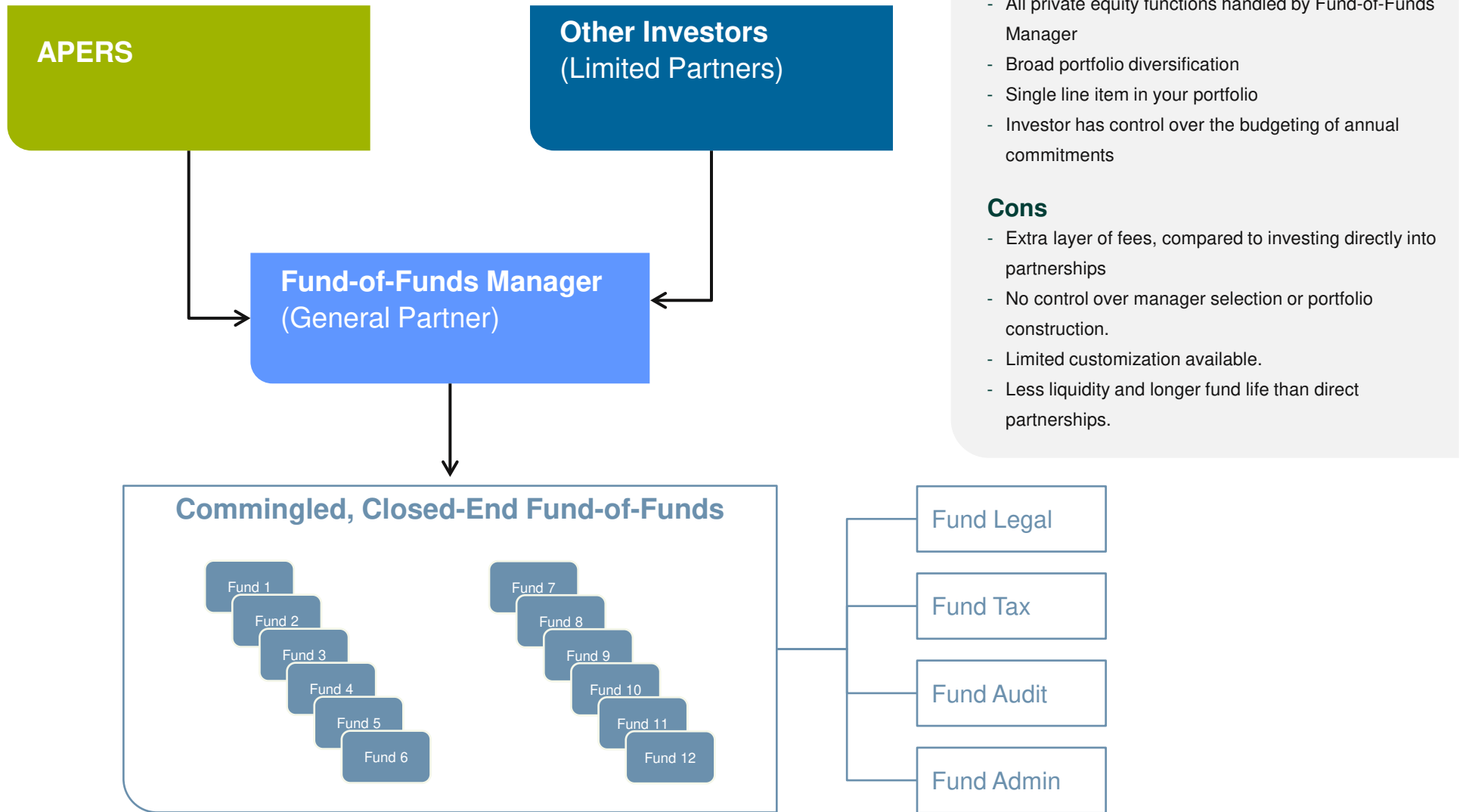
Private Equity Implementation Considerations

Implementation Options

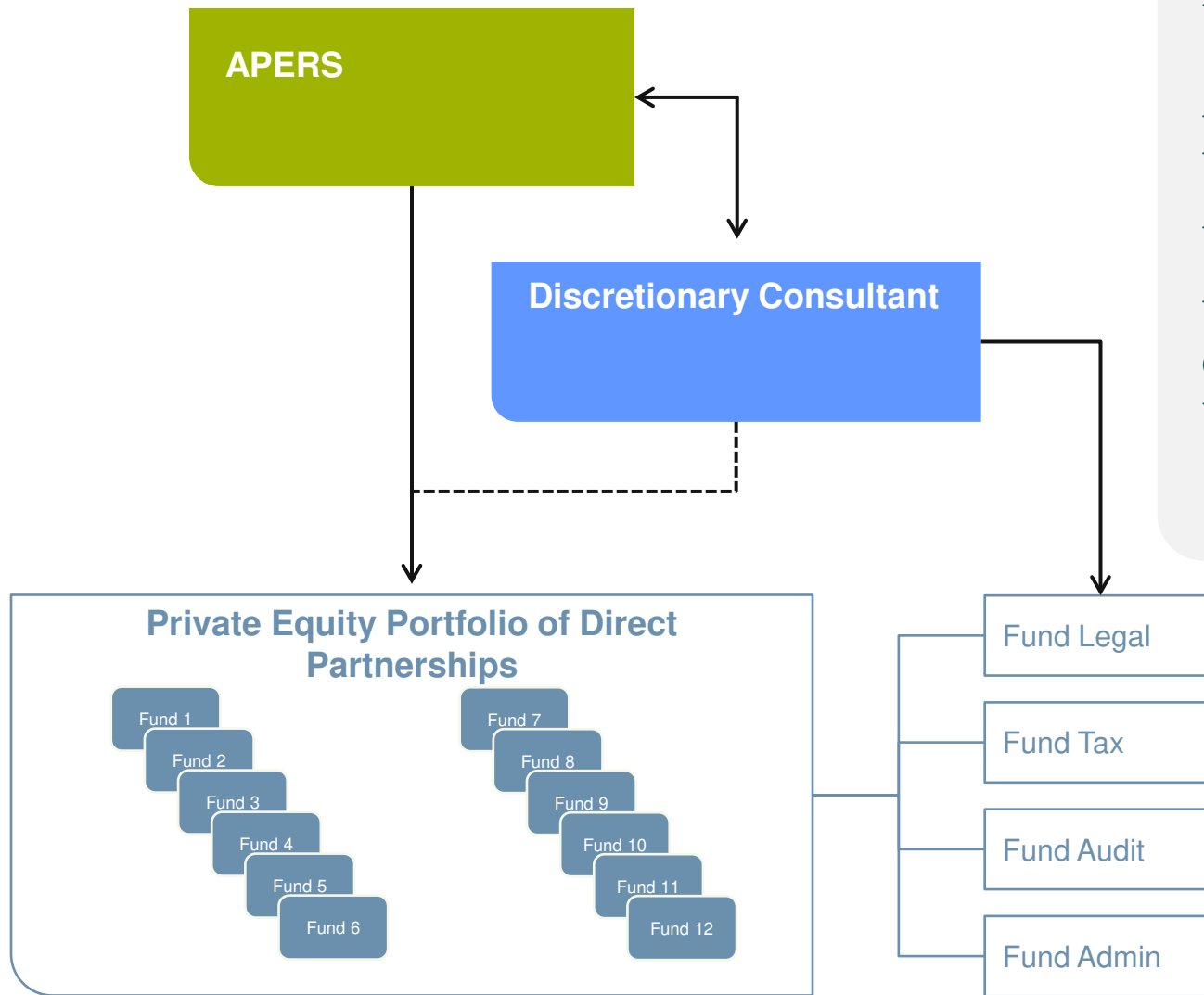
	Fund-of-Funds (Commingled)	Hybrid Structure	Direct (Primary Fund) Program
Summary	Commingled fund-of-funds	Combination of FoF, direct funds, and/or evergreen (commingled, tender, platform, etc.)	Tailored portfolio of private markets funds with non-discretionary consultant assistance
Implementation Risk	Low	Moderate	High
Program Complexity	Low	Moderate	High
Diversification	High	Moderate	Custom
Fee Structure (mgmt. fee and carried interest est. fee range)*	0.5%-1.0% mgmt fee / 5%-10% carried interest for FOFs plus underlying fund fees*	Weighted average of FOF and direct fund fees, and potentially “access” fees where applicable	Advisory fee + underlying fund fees*
Net Returns	Low	Low / moderate	High
Return Dispersion	Low	High	High
Degree of Investor (LP) Collaboration	Low	Low to Moderate	High
Key Benefits	<ul style="list-style-type: none"> – Lower complexity (“turnkey”) – Broad exposure, including primary funds, secondaries and co-investments – Lower minimum investment (<\$5mm) – Outsourced admin and operations – Delegated investment authority 	<ul style="list-style-type: none"> – Potentially lower complexity – FoF may serve as entrée to developing relationships with GPs – Liquidity enhancement if utilizing tender, interval and other evergreen vehicles 	<ul style="list-style-type: none"> – Customized portfolio construction and risk profile – Opportunity to collaborate with staff – Lower cost vs. FOFs (lowest cost option) – Flexible degrees of delegation
Key Considerations	<ul style="list-style-type: none"> – No investor input – Additional fee layer – Potential over-diversification – No consideration of any legacy funds – Potential for return dilution, which will impact liquidity 	<ul style="list-style-type: none"> – Minimum program size >\$5mm – Additional fee layer from FOF portion – Multiple “platforms” could lead to growing pains on administration/reporting – Flexibility limited depending on FOF exposure 	<ul style="list-style-type: none"> – Minimum program size >\$10mm – Need process for fund selection – Investor may retain portfolio administration – More time and resource-intensive

*Underlying fund level management fee typically 1%-2%; carried interest typically 15%-20% (lower for private credit; higher for private equity); typically 0% mgmt fee on co-investments

Private Equity Implementation via Fund-of-Funds



Private Equity Implementation via Discretionary Consultant



Pros

- Discretionary Consultant can construct a tailored private equity portfolio that matches the needs and objectives of the client
- Client can retain some input over portfolio construction
- Program administration can be outsourced to Discretionary Consultant
- Lower fees and no carried interest, compared to a fund-of-funds
- Greater liquidity than a fund-of-funds

Cons

- Additional cost from outsourcing investments and operations, compared to managing an in-house direct program

Appendix

Disclosures

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Class Action Settlement Proceeds

Fiscal		
Year		Total Proceeds
2009	\$	2,808,033.51
2010	\$	2,333,548.87
2011	\$	1,222,467.30
2012	\$	734,293.86
2013	\$	501,060.63
2014	\$	1,034,993.49
2015	\$	499,547.35
2016	\$	1,367,167.89
2017	\$	354,154.24
2018	\$	801,714.62
2019	\$	1,442,809.72
2020	\$	1,319,992.13
2021	\$	575,013.13
2022	\$	553,429.10
2023	\$	90,270.13
	\$	<u>15,638,495.97</u>

Claims Filing Deadline Date between 07/01/2022 and 09/30/2022

Class Action Account Number	Account Name	Notice Date Account Open	Exclusion Date Status Date	Claim Due Account	Period Begin Claim Status	Period End Comments	Currency	Gross Settlement
CHICAGO BRIDGE & IRON COMPANY N.V., Securities Litigation (17CV01580)		N/A	07/01/2022	07/01/2022	10/30/2013	06/23/2015	USD	44,000,000.0000
AR4F1001602	CASTLEARK MGMT	09/05/2008	10/13/2022	CLOSED	FILED			
SASOL LTD Securities Litigation		N/A	07/28/2022	07/05/2022	03/10/2015	01/13/2020	USD	24,000,000.0000
								NO SELECTED ACCOUNTS AFFECTED
Exactech Shareholder Securities Litigation		N/A	04/18/2022	07/05/2022	04/01/1996	04/15/2018	USD	5,600,000.0000
								NO SELECTED ACCOUNTS AFFECTED
OPHTHOTECH CORPORATION, Securities Litigation		N/A	08/18/2022	07/06/2022	03/01/2015	03/10/2017	USD	29,000,000.0000
								NO SELECTED ACCOUNTS AFFECTED
GOSSAMER BIO INC Securities Litigation		N/A	06/03/2022	07/07/2022	02/08/2019	12/13/2019	USD	2,375,000.0000
								NO SELECTED ACCOUNTS AFFECTED
RA MEDICAL SYSTEMS, INC., Securities Litigation		N/A	05/23/2022	07/09/2022	07/16/2018	02/26/2020	USD	10,000,000.0000
								NO SELECTED ACCOUNTS AFFECTED
COVIA HOLDINGS Fair Fund		N/A	N/A	07/12/2022	08/22/2014	03/25/2019	USD	1,000,000.0000
								NO SELECTED ACCOUNTS AFFECTED
NMC HEALTH PLC Securities Litigation (Dr. B.R. Shetty Settlement)		N/A	07/26/2022	07/15/2022	03/13/2016	03/10/2020	USD	300,000.0000
								NO SELECTED ACCOUNTS AFFECTED
NIELSEN HOLDINGS PLC, Securities Litigation (18CV07143)		N/A	06/29/2022	07/15/2022	02/11/2016	07/25/2018	USD	73,000,000.0000

Claims Filing Deadline Date between 07/01/2022 and 09/30/2022

Class Action Account Number	Account Name	Notice Date Account Open	Exclusion Date Status Date	Claim Due Account	Period Begin Claim Status	Period End Comments	Currency	Gross Settlement
NO SELECTED ACCOUNTS AFFECTED								
NIELSEN HOLDINGS PLC, Securities Litigation (18CV07143)		N/A	06/29/2022	07/15/2022	02/11/2016	07/25/2018	USD	73,000,000.0000
AR2F1001002	ROBECO BOSTON PRTNRS	09/08/2008	07/15/2022	CLOSED	FILED			
AR4F1001502	INTECH	09/05/2008	07/15/2022	CLOSED	FILED			
AR4F1001402	WELLINGTON MGMT	09/04/2008	07/15/2022	CLOSED	FILED			
CV SCIENCES, INC., Securities Litigation		N/A	07/01/2022	07/15/2022	06/18/2017	11/15/2018	USD	712,500.0000
NO SELECTED ACCOUNTS AFFECTED								
MICROCHIP TECHNOLOGY INC., Securities Litigation		N/A	11/02/2021	07/20/2022	03/01/2018	11/07/2018	USD	9,000,000.0000
NO SELECTED ACCOUNTS AFFECTED								
MICROCHIP TECHNOLOGY INC., Securities Litigation		N/A	11/02/2021	07/20/2022	03/01/2018	11/07/2018	USD	9,000,000.0000
965702	ARKANSAS PERS INTECH	11/16/2016	07/23/2022	OPEN	FILED			
965701	ARKANSAS PERS WELLINGTON MGMT	11/16/2016	07/23/2022	OPEN	FILED			
Reliq Health Technologies, Inc. (CANADA)		N/A	03/23/2022	07/21/2022	01/01/2018	10/15/2018	USD	1,967,200.0000
NO SELECTED ACCOUNTS AFFECTED								
NOVO NORDISK A/S, Securities Litigation		N/A	10/13/2020	07/27/2022	02/02/2015	05/02/2017	USD	100,000,000.0000
NO SELECTED ACCOUNTS AFFECTED								
NOVO NORDISK A/S, Securities Litigation		N/A	10/13/2020	07/27/2022	02/02/2015	05/02/2017	USD	100,000,000.0000

Claims Filing Deadline Date between 07/01/2022 and 09/30/2022

Class Action Account Number	Account Name	Notice Date Account Open	Exclusion Date Status Date	Claim Due Account	Period Begin Claim Status	Period End Comments	Currency	Gross Settlement
NO SELECTED ACCOUNTS AFFECTED								
NETAPP, INC., Securities Litigation		N/A	08/11/2022	08/02/2022	05/23/2019	08/01/2019	USD	2,250,000.0000
NO SELECTED ACCOUNTS AFFECTED								
NETAPP, INC., Securities Litigation		N/A	08/11/2022	08/02/2022	05/23/2019	08/01/2019	USD	2,250,000.0000
NO SELECTED ACCOUNTS AFFECTED								
MESOBLAST LTD, Securities Litigation		N/A	07/25/2022	08/07/2022	12/13/2018	10/02/2020	USD	2,000,000.0000
NO SELECTED ACCOUNTS AFFECTED								
BELEAVE INC., Securities Litigation		N/A	08/08/2022	08/08/2022	04/24/2018	11/26/2018	CAD	1,842,624.0000
NO SELECTED ACCOUNTS AFFECTED								
SCWorx Corp Securities Litigation		N/A	06/08/2022	08/09/2022	04/12/2020	04/21/2020	USD	3,300,000.0000
NO SELECTED ACCOUNTS AFFECTED								
ATERIAN, INC., Securities Litigation		N/A	08/19/2022	08/10/2022	08/24/2020	05/03/2021	USD	1,300,000.0000
NO SELECTED ACCOUNTS AFFECTED								
ATERIAN, INC., Securities Litigation		N/A	08/19/2022	08/10/2022	08/24/2020	05/03/2021	USD	1,300,000.0000
NO SELECTED ACCOUNTS AFFECTED								
DEPOMED, INC., Securities Litigation (17CV04830)		N/A	07/07/2022	08/17/2022	07/29/2015	08/07/2017	USD	1,000,000.0000
NO SELECTED ACCOUNTS AFFECTED								

Claims Filing Deadline Date between 07/01/2022 and 09/30/2022

Class Action Account Number	Account Name	Notice Date Account Open	Exclusion Date Status Date	Claim Due Account	Period Begin Claim Status	Period End Comments	Currency	Gross Settlement
DEPOMED, INC., Securities Litigation (17CV04830)								
		N/A	07/07/2022	08/17/2022	07/29/2015	08/07/2017	USD	1,000,000.0000
AR4F1001602	CASTLEARK MGMT	09/05/2008	08/15/2022	CLOSED		FILED		
MILLER ENERGY RESOURCES, INC., Securities Litigation								
		N/A	06/16/2022	08/18/2022	08/29/2011	03/29/2016	USD	35,000,000.0000
		NO SELECTED ACCOUNTS AFFECTED						
MILLER ENERGY RESOURCES, INC., Securities Litigation								
		N/A	06/16/2022	08/18/2022	08/29/2011	03/29/2016	USD	35,000,000.0000
		NO SELECTED ACCOUNTS AFFECTED						
SANDRIDGE ENERGY, INC. Securities Litigation (12CV01341W)								
		N/A	09/15/2022	08/19/2022	02/24/2011	11/08/2012	USD	21,807,500.0000
		NO SELECTED ACCOUNTS AFFECTED						
SANDRIDGE TRUST OFFERINGS Securities Litigation (15CV00634M)								
		N/A	09/02/2022	08/19/2022	04/05/2011	11/08/2012	USD	13,942,500.0000
		NO SELECTED ACCOUNTS AFFECTED						
SANDRIDGE ENERGY, INC. Securities Litigation (12CV01341W)								
		N/A	09/15/2022	08/19/2022	02/24/2011	11/08/2012	USD	21,807,500.0000
AR4F2001502	CASTLEARKGBL ENERGY	10/27/2009	08/17/2022	CLOSED		FILED		
OVASCIENCE, INC., Securities Litigation								
		N/A	07/05/2022	08/22/2022	12/17/2014	09/28/2015	USD	15,000,000.0000
		NO SELECTED ACCOUNTS AFFECTED						
OVASCIENCE, INC., Securities Litigation								
		N/A	07/05/2022	08/22/2022	12/17/2014	09/28/2015	USD	15,000,000.0000
		NO SELECTED ACCOUNTS AFFECTED						
BAYERISCHE MOTOREN WERKE AKTIENGESELLSCHAFT, Securities Litigation								
		N/A	08/25/2022	08/25/2022	11/03/2015	09/24/2020	USD	1,750,000.0000

Claims Filing Deadline Date between 07/01/2022 and 09/30/2022

Class Action Account Number	Account Name	Notice Date Account Open	Exclusion Date Status Date	Claim Due Account	Period Begin Claim Status	Period End Comments	Currency	Gross Settlement
NO SELECTED ACCOUNTS AFFECTED								
CONNECTURE Stockholder Litigation		N/A	N/A	08/25/2022	10/20/2014	06/30/2018	USD	2,800,000.0000
NO SELECTED ACCOUNTS AFFECTED								
BAYERISCHE MOTOREN WERKE AKTIENGESELLSCHAFT, Securities Litigation		N/A	08/25/2022	08/25/2022	11/03/2015	09/24/2020	USD	1,750,000.0000
NO SELECTED ACCOUNTS AFFECTED								
CONNECTURE Stockholder Litigation		N/A	N/A	08/25/2022	10/20/2014	06/30/2018	USD	2,800,000.0000
NO SELECTED ACCOUNTS AFFECTED								
TRITERRAS INC., Securities Litigation (20-CV-10795-CS)		N/A	08/16/2022	09/01/2022	06/29/2020	01/14/2021	USD	9,000,000.0000
NO SELECTED ACCOUNTS AFFECTED								
BLACKBERRY LIMITED Securities Litigation (13CV07060)		N/A	09/07/2022	09/07/2022	03/28/2013	09/20/2013	USD	165,000,000.0000
AR4F9009002	APERS TRANSITION	09/08/2008	09/29/2022	CLOSED	FILED			
BLACKBERRY LIMITED Securities Litigation (13CV07060)		N/A	09/07/2022	09/07/2022	03/28/2013	09/20/2013	USD	165,000,000.0000
NO SELECTED ACCOUNTS AFFECTED								
Airbus SE : American Depositary Shares, Securities Litigation		N/A	09/09/2022	09/13/2022	02/24/2016	07/30/2020	USD	5,000,000.0000
NO SELECTED ACCOUNTS AFFECTED								
Airbus SE : American Depositary Shares, Securities Litigation		N/A	09/09/2022	09/13/2022	02/24/2016	07/30/2020	USD	5,000,000.0000
NO SELECTED ACCOUNTS AFFECTED								

Claims Filing Deadline Date between 07/01/2022 and 09/30/2022

Class Action Account Number	Account Name	Notice Date Account Open	Exclusion Date Status Date	Claim Due Account	Period Begin Claim Status	Period End Comments	Currency	Gross Settlement
NISSAN MOTOR CO., LTD., Securities Litigation		N/A	08/29/2022	09/14/2022	05/11/2014	11/16/2018	USD	36,000,000.0000
NO SELECTED ACCOUNTS AFFECTED								
NISSAN MOTOR CO., LTD., Securities Litigation		N/A	08/29/2022	09/14/2022	05/11/2014	11/16/2018	USD	36,000,000.0000
NO SELECTED ACCOUNTS AFFECTED								
LIBERTY OILFIELD SERVICES INC Securities Litigation		N/A	09/16/2022	09/16/2022	01/11/2018	04/03/2020	USD	3,900,000.0000
NO SELECTED ACCOUNTS AFFECTED								
CANADIAN IMPERIAL BANK OF COMMERCE Securities Litigation (Canada)		N/A	01/03/2017	09/16/2022	05/31/2007	02/28/2008	CAD	97,945,000.0000
NO SELECTED ACCOUNTS AFFECTED								
CANADIAN IMPERIAL BANK OF COMMERCE Securities Litigation (Canada)		N/A	01/03/2017	09/16/2022	05/31/2007	02/28/2008	CAD	97,945,000.0000
NO SELECTED ACCOUNTS AFFECTED								
LIBERTY OILFIELD SERVICES INC Securities Litigation		N/A	09/16/2022	09/16/2022	01/11/2018	04/03/2020	USD	3,900,000.0000
NO SELECTED ACCOUNTS AFFECTED								
TESLA, INC. SEC FAIR FUND		N/A	N/A	09/17/2022	08/07/2018	08/08/2018	USD	20,000,000.0000
NO SELECTED ACCOUNTS AFFECTED								
TESLA, INC. SEC FAIR FUND		N/A	N/A	09/17/2022	08/07/2018	08/08/2018	USD	20,000,000.0000
NO SELECTED ACCOUNTS AFFECTED								
CBS CORPORATION, Securities Litigation (18CV07796)		N/A	09/19/2022	09/19/2022	11/29/2017	07/27/2018	USD	14,750,000.0000

Claims Filing Deadline Date between 07/01/2022 and 09/30/2022

Class Action Account Number	Account Name	Notice Date Account Open	Exclusion Date Status Date	Claim Due Account	Period Begin Claim Status	Period End Comments	Currency	Gross Settlement
965672	ARKANSAS ROBECO BOSTON PRTNRS	11/16/2016	09/16/2022	OPEN	FILED			
CBS CORPORATION, Securities Litigation (18CV07796)		N/A	09/19/2022	09/19/2022	11/29/2017	07/27/2018	USD	14,750,000.0000
NO SELECTED ACCOUNTS AFFECTED								
CBS CORPORATION, Securities Litigation (18CV07796)		N/A	09/19/2022	09/19/2022	11/29/2017	07/27/2018	USD	14,750,000.0000
965702	ARKANSAS PERS INTECH	11/16/2016	09/16/2022	OPEN	FILED			
RCI HOSPITALITY HOLDINGS, INC., Securities Litigation		N/A	07/22/2022	09/23/2022	12/13/2016	07/18/2019	USD	2,200,000.0000
NO SELECTED ACCOUNTS AFFECTED								
RCI HOSPITALITY HOLDINGS, INC., Securities Litigation		N/A	07/22/2022	09/23/2022	12/13/2016	07/18/2019	USD	2,200,000.0000
NO SELECTED ACCOUNTS AFFECTED								
AMNEAL PHARMACEUTICALS, INC., Securities Litigation		N/A	07/25/2022	09/26/2022	05/07/2018	05/05/2021	USD	25,000,000.0000
965701	ARKANSAS PERS WELLINGTON MGMT	11/16/2016	09/28/2022	OPEN	FILED			
AMNEAL PHARMACEUTICALS, INC., Securities Litigation		N/A	07/25/2022	09/26/2022	05/07/2018	05/05/2021	USD	25,000,000.0000
NO SELECTED ACCOUNTS AFFECTED								
CPI AEROSTRUCTURES, INC Securities Litigation		N/A	08/19/2022	09/26/2022	03/22/2018	02/14/2020	USD	3,600,000.0000
NO SELECTED ACCOUNTS AFFECTED								
MINDBODY, INC., Securities Litigation		N/A	09/27/2022	09/27/2022	11/06/2018	02/15/2019	USD	9,750,000.0000
NO SELECTED ACCOUNTS AFFECTED								

Claims Filing Deadline Date between 07/01/2022 and 09/30/2022

Class Action Account Number	Account Name	Notice Date Account Open	Exclusion Date Status Date	Claim Due Account	Period Begin Claim Status	Period End Comments	Currency	Gross Settlement
MINDBODY, INC., Securities Litigation		N/A	09/27/2022	09/27/2022	11/06/2018	02/15/2019	USD	9,750,000.0000
NO SELECTED ACCOUNTS AFFECTED								
GOGO INC., Securities Litigation (18CV04473)		N/A	08/09/2022	09/29/2022	02/27/2017	05/04/2018	USD	17,300,000.0000
NO SELECTED ACCOUNTS AFFECTED								
GOGO INC., Securities Litigation (18CV04473)		N/A	08/09/2022	09/29/2022	02/27/2017	05/04/2018	USD	17,300,000.0000
NO SELECTED ACCOUNTS AFFECTED								



APERS Annual Valuation Results June 30, 2022

November 16, 2022 Board Meeting

Presented by: Heidi G. Barry, ASA, FCA, MAAA
Mita D. Drazilov, ASA, FCA, MAAA



Agenda

- Results as of the June 30, 2022 actuarial valuation
 - APERS
 - District Judges
 - Projections

APERS

Overview

- The June 30, 2022 valuation determines the employer contribution rate for the fiscal year beginning July 1, 2024
- Board actions today:
 - Confirm the employer contribution rate for APERS of 15.32% of payroll preliminarily adopted at the August 2022 meeting
 - Approve the computed employer contributions for District Judges that are to apply beginning July 1, 2024
 - Approve the reserve transfers from the Employer Accumulation Account to the Retirement Reserve Account and the Deferred Annuity Account

Participant Data

Valuation Date	Active Members				Retired Lives (Including DROP Members)			
	No.	Valuation Payroll			No.	Active per Retired	Annual Benefits	
		\$ Millions	Average	% Incr.			\$ Millions	As a % of Pay
6/30/11	45,145	\$ 1,542.9	\$ 34,177	1.9%	28,137	1.6	\$ 375.7	24.3%
6/30/12	45,937	1,606.1	34,962	2.3%	29,282	1.6	399.5	24.9%
6/30/13	45,707	1,612.7	35,285	0.9%	30,533	1.5	426.2	26.4%
6/30/14	45,841	1,638.0	35,735	1.3%	31,914	1.4	457.1	27.9%
6/30/15	45,722	1,645.0	35,979	0.7%	33,106	1.4	483.9	29.4%
6/30/16	45,676	1,686.5	36,923	2.6%	34,214	1.3	509.7	30.2%
6/30/17	46,094	1,668.8	36,204	(1.9)%	36,260	1.3	540.1	32.4%
6/30/18	46,207	1,723.6	37,302	3.0%	37,398	1.2	575.1	33.4%
6/30/19	45,965	1,802.4	39,212	5.1%	38,543	1.2	609.1	33.8%
6/30/20	44,373	1,795.7	40,469	3.2%	39,805	1.1	637.1	35.5%
6/30/21	42,669	1,781.8	41,759	3.2%	40,762	1.0	658.8	37.0%
6/30/22	42,771	1,925.5	45,020	7.8%	41,390	1.0	671.2	34.9%

Participant Data (Concluded)

- There are 36,728 members who participate in the New Contributory Plan
 - This total includes members who have made an election to participate in the New Contributory Plan
- There are an additional 1,426 members with a \$93 million payroll who participate in the DROP plan (not included in the active count above)
 - Employers will make contributions on the pay of these DROP participants

Investment Experience

- Under the APERS asset valuation method, market gains and losses are spread over a four-year period
- As of June 30, 2022, the funding value of assets exceeds the market value of assets by approximately \$517 million
- As this difference is fully realized and if near term experience matches expectations
 - The contribution rate is expected to decrease or
 - The amortization period is expected to decrease to maintain a 15.32% employer rate

Development of Funding Value of Assets

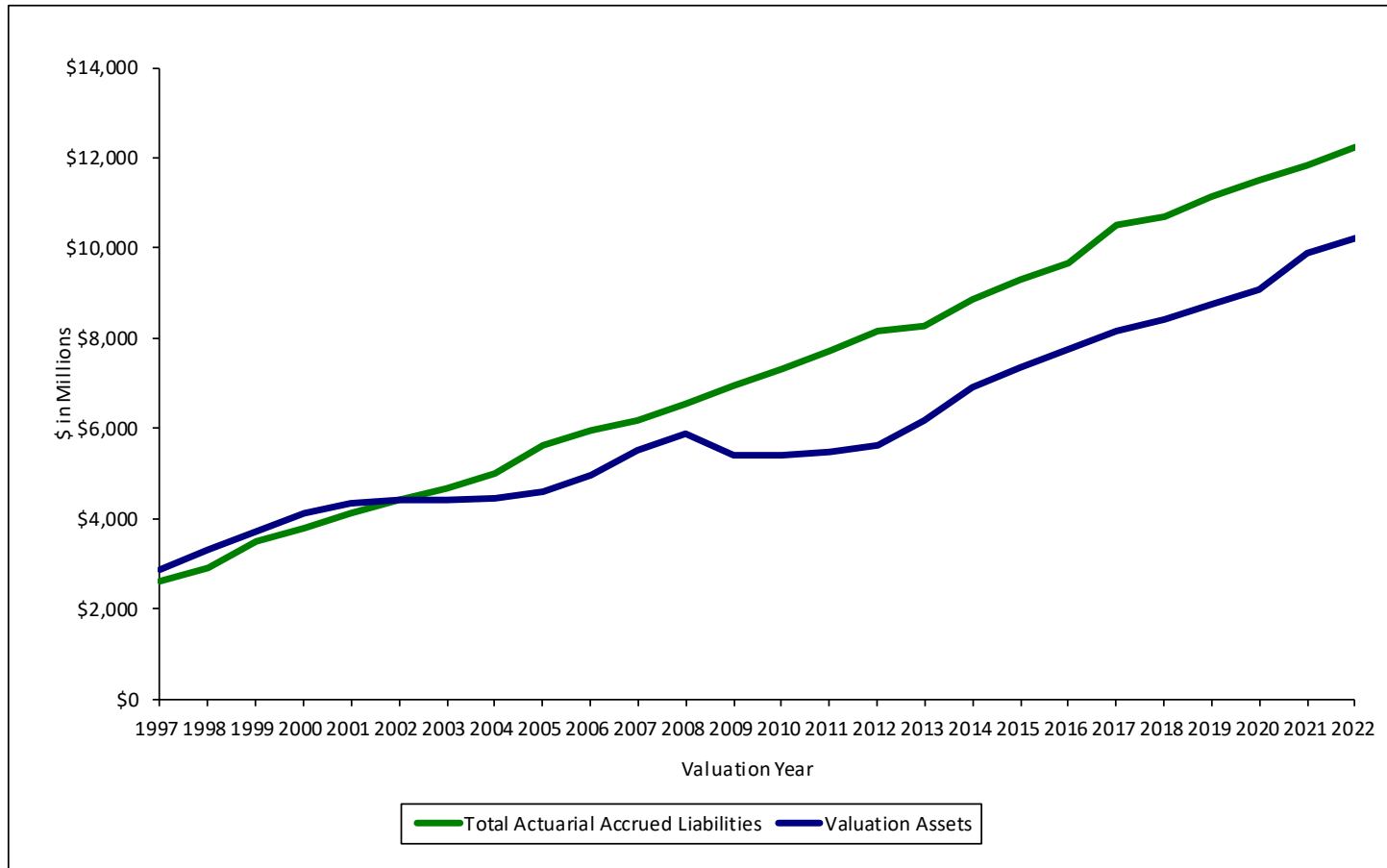
Valuation Date June 30:	2020	2021	2022	2023	2024	2025
A. Funding Value Beginning of Year	\$ 8,738,714,746	\$ 9,090,423,393	\$ 9,892,522,828			
B. Market Value End of Year	8,738,362,156	11,148,502,679	9,703,178,137			
C. Market Value Beginning of Year	8,803,211,537	8,738,362,156	11,148,502,679			
D. Non-Investment Net Cash Flow	(238,916,672)	(248,381,476)	(256,674,121)			
E. Investment Income						
E1. Market Total: B - C - D	174,067,291	2,658,521,999	(1,188,650,421)			
E2. Assumed Rate	7.15%	7.15%	7.15%			
E3. Amount for Immediate Recognition	\$ 616,375,135	\$ 641,187,831	\$ 698,244,890			
E4. Amount for Phased-In Recognition	(442,307,844)	2,017,334,168	(1,886,895,311)			
F. Phased-In Recognition of Investment Income						
F1. Current Year: 0.25 x E4	(110,576,961)	504,333,542	(471,723,828)			
F2. First Prior Year	(35,866,854)	(110,576,961)	504,333,542	\$ (471,723,828)		
F3. Second Prior Year	51,403,353	(35,866,854)	(110,576,961)	504,333,542	\$ (471,723,828)	
F4. Third Prior Year	69,290,646	51,403,353	(35,866,853)	(110,576,961)	504,333,542	\$ (471,723,827)
F5. Total Phase-Ins	(25,749,816)	409,293,080	(113,834,100)	(77,967,247)	32,609,714	(471,723,827)
G. Preliminary Funding Value End of Year: A + D + E3 + F5	\$ 9,090,423,393	\$ 9,892,522,828	\$ 10,220,259,497			
H. Adjustment to Minimum of 75% of B, Maximum 125% of B	0	0	0			
I. Funding Value End of Year	\$ 9,090,423,393	\$ 9,892,522,828	\$ 10,220,259,497			
J. Difference Between Market & Funding Value	(352,061,237)	1,255,979,851	(517,081,360)			
K. Recognized Rate of Return	6.9%	11.7%	6.0%			
L. Market Rate of Return	2.0%	30.9%	(10.8)%			
M. Ratio of Funding Value to Market Value	104%	89%	105%			



APERS Funded Ratio

- Valuation assets total \$10.22B
- Actuarial accrued liabilities total \$12.23B
- The APERS funded ratio is 84%
- On a market value basis, the funded ratio is 79%
- The ratios were 84% and 94%, respectively, in the previous valuation

APERS Funded Ratio (Concluded)



Employer Contribution Rate

Contribution for	Contributions Expressed as %'s of Active Payroll for Fiscal Year Beginning July 1, 2024			
	Non-Contributory	Contributory	DROP	Total
Normal Cost:				
Age and Service Annuities (including DROP and reduced retirement)				8.35%
Separation Benefits				2.45%
Disability Benefits				0.53%
Death-in-Service Annuities				0.31%
Administrative Expenses				0.40%
Total	9.50%	12.73%	9.29%	12.04%
Member Contributions	0.00%	5.75%	0.00%	4.52%
Employer Normal Cost	9.50%	6.98%	9.29%	7.52%
Unfunded Actuarial Accrued Liabilities				7.80% *
Total Employer Contribution				15.32%

The unfunded actuarial accrued liability and total payroll is projected to the beginning of Fiscal Year 2024 when determining the unfunded amortization rate. Unfunded actuarial accrued liabilities were amortized over a 14-year period.

Amortization Period

- The maximum advisable amortization period is 30 years
- Given current assumptions, an amortization period of 21 years or below results in an amortization payment that covers at least the interest on the UAAL
- An amortization period greater than 21 years results in an amortization payment that is less than the interest on the UAAL

Summary of Risk Measures

Valuation Date June 30,	Funded Ratio		UAAL Amortization Period	Total UAAL / Total Payroll	Total Actuarial Value of Assets / Total Payroll		Standard Deviation of Investment Return / Total Payroll
	Based on AVA	Based on MVA			Total AAL / Total Payroll		
2005 @#	82 %	83 %	22	0.9	3.8	4.6	**
2006	83	87	19	0.8	3.9	4.7	**
2007 @	89	97	18	0.5	4.2	4.7	**
2008 #	90	86	14	0.5	4.3	4.7	**
2009 @	78	62	30	1.1	3.8	4.8	**
2010	74	65	30	1.2	3.6	4.8	**
2011 #	71	75	30	1.5	3.4	4.8	**
2012	69	70	30	1.5	3.3	4.8	**
2013 #	74	77	25	1.3	3.6	4.9	**
2014 #	78	85	23	1.1	4.0	5.1	59 %
2015 #	79	81	25	1.1	4.2	5.3	58 %
2016	80	76	21	1.1	4.3	5.4	56 %
2017 #	78	76	25	1.3	4.6	5.9	56 %
2018	79	80	26	1.2	4.6	5.8	63 %
2019	79	79	24	1.2	4.5	5.8	62 %
2020	79	76	23	1.3	4.7	6.0	62 %
2021 @	84	94	16	1.0	5.2	6.2	76 %
2022	84	79	14	1.0	5.0	6.0	70 %

@ After legislated changes in benefit provisions.

After changes in actuarial assumptions.

** Unavailable.



Reserve Transfers

- Each year reserve transfers are recommended so that there will be a balance between assets and actuarial accrued liabilities in the Retirement Reserve Account and the Deferred Annuity Account.
 - The Retirement Reserve Account is responsible for future annuity payments to present retired lives.
 - The Deferred Annuity Account is responsible for future annuity payments to present inactive members.
- This year’s recommended transfer amounts are as follows:

Employer Accum. Account before Transfers	Transfers as of July 1, 2022 (from) to:		Employer Accum. Account after Transfers
	Retirement Reserve Account	Deferred Annuity Account	
\$1,986,317,059	\$301,611,408	\$33,652,126	\$1,651,053,525



DISTRICT JUDGES



District Judges Division

- District Judges Retirement System (DJRS) was incorporated into APERS in 2007
- DJRS became a separately experience-rated division within APERS beginning with the June 30, 2007 actuarial valuation
- District Judges division consists of two plans
 - Old Plan
 - Benefits for service prior to January 1, 2005
 - New Plan (closed to new hires)
 - Benefits for service on or after January 1, 2005

District Judges Division

- Old Plan
 - Each participating employer separately experience rated until UAAL is paid off
 - 30 employers still paying off Old Plan UAAL
 - When UAAL is paid off, becomes cost sharing
- New Plan
 - Cost sharing arrangement
- Purpose of the June 30, 2022 actuarial valuation
 - Determine July 1, 2024 employer contribution for 30 still paying Old Plan employers (expressed in \$)
 - Determine July 1, 2024 employer contribution for New Plan and Paid Off Old Plan (expressed as a % of pay)

District Judges Division - Participants

- 11 remaining active members with payroll of \$1.6 million in New Plan
- 191 benefit records in all plans with annual benefits of \$2.6 million
 - A retiree's monthly benefit may be allocated to more than one employer or more than one plan
 - The actual number of retired members was reported to be 133
- 82 inactive records with future annual benefits of \$0.4 million
 - An inactive member's monthly benefit may be allocated to more than one employer or more than one plan
 - The actual number of deferred members was reported to be 70

District Judges Division – Liabilities and Assets

- New Plan and Paid-Off Old Plans
 - Actuarial accrued liabilities of \$30.0 million
 - Funding value of assets of \$26.1 million
 - Funded ratio of 87%
- Old Plans
 - Actuarial accrued liabilities of \$7.3 million
 - Funding value of assets of \$2.3 million
 - Funded ratio of 32%
- Combined funded ratio is 76%

District Judges Division – Computed Employer Contributions

Contribution for	Computed Employer Contributions	
	New Plan and Paid-Off Old Plan (% of Active Payroll)	Still Paying Old Plan (Annual \$)
Normal Cost:		
Age and Service Annuities (including reduced retirement)	17.36%	
Separation Benefits	1.83%	
Disability Benefits	1.60%	
Death-in-Service Annuities	1.27%	
Total	22.06%	
Member Contributions	5.00%	
Employer Normal Cost	17.06%	
Unfunded Actuarial Accrued Liabilities	69.36% *	\$582,021 **
Total Employer Contribution	86.42%	\$582,021

* Unfunded actuarial accrued liabilities were amortized over a 4.6-year period.

** Unfunded actuarial accrued liabilities were amortized over a 13-year period.



PROJECTIONS

Projections

- Return scenarios
 - Scenario A: The market returns are 7.15% in the next 4 years
 - Scenario B: The market returns are 10.0% in the next year and 7.15% in the 2nd, 3rd and 4th years
 - Scenario C: The market returns are 5.0% in the next year and 7.15% in the 2nd, 3rd and 4th years
 - Scenario D: The market returns are 2.0% in the next year and 7.15% in the 2nd, 3rd and 4th years
 - Scenario E: The market returns are 0.0% in the next year and 7.15% in the 2nd, 3rd and 4th years
 - Scenario F: The market returns are (5.0)% in the next year and 7.15% in the 2nd, 3rd and 4th years
- The projection results assume returns after June 30, 2022 are equal to the assumed rate of return – 7.15%

Projections (Continued)

- The projection results shown on page 25 assume that the unfunded actuarial accrued liabilities would be amortized over a closed 14-year period, with a minimum employer contribution rate of 15.32%
- These projections are intended to show the near term effect on employer contributions of the phase-in of unrecognized investment gains and losses
- The projections do not consider non-investment gains and losses which can have a material effect on future valuation results

Projections (continued)

- The projections that follow are based upon many assumptions about the future
- Actual future valuation results will take all known future information into account and will differ from the projections -- perhaps materially
- Note that payroll growth at lower than assumed rates will generally result in employer contribution rates that are higher than shown on the following page

Arkansas Public Employees Retirement System

Projected Valuation Results (Concluded)

(Amounts in \$ Millions)

	MV Return 2023	Expected Results as of June 30, 2026					Expected Results as of June 30, 2023	
		Valuation				Funded Ratio	Employer Rate*	
		AAL	Assets (FV)	UAAL	MV-FV		Applicable for Plan Year Beginning July 1, 2025	Amortization Period (Yrs.)#
Scenario A	7.15%	\$ 13,861	\$ 11,390	\$ 2,471	\$ (30)	82%	15.50%	13.9
Scenario B	10.00%	13,861	11,707	2,154	(16)	84%	15.32%	13.2
Scenario C	5.00%	13,861	11,153	2,708	(40)	80%	15.75%	14.4
Scenario D	2.00%	13,861	10,823	3,038	(54)	78%	16.08%	15.2
Scenario E	0.00%	13,861	10,603	3,258	(63)	76%	16.31%	15.7
Scenario F	-5.00%	13,861	10,053	3,808	(87)	73%	16.87%	17.1

Notes: ** Employer rate that results from decreasing amortization period by one year every year.
Employer rate is never set lower than 15.32%.
Amortization period that is needed to set 2026 valuation rate at 15.32%.
Totals may not add due to rounding.*



THANK YOU



Disclaimers

- This presentation is intended to be used in conjunction with the June 30, 2022 actuarial valuation report dated October 28, 2022. This presentation should not be relied on for any purpose other than the purpose described in the valuation report.
- This presentation should not be relied on for any purpose other than the purpose described in the presentation.
- Mita D. Drazilov and Heidi G. Barry are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.
- This presentation shall not be construed to provide tax advice, legal advice or investment advice.
- Readers are cautioned to examine original source materials and to consult with subject matter experts before making decisions related to the subject matter of this presentation.
- This presentation expresses the views of the authors and does not necessarily express the views of Gabriel, Roeder, Smith & Company.

Arkansas Public Employees Retirement System
Board of Trustees

ACTUARIAL FUNDING POLICY – DRAFT

~~February~~ October 25, 2022 ~~19, 2020~~

**Arkansas Public Employees Retirement System
Board of Trustees**

Actuarial Funding Policy

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Actuarial Funding Policy

Introduction

The purpose of this Actuarial Funding Policy is to record the funding objectives and policy set by the Board of Trustees (Board) for the Arkansas Public Employees Retirement System (APERS). The Board establishes this Funding Policy to help ensure the systematic accumulation of assets needed to pay future benefits for members of APERS.

In 2012, the Governmental Accounting Standards Board (GASB) approved two new financial reporting standards. GASB Statement No. 67, “Financial Reporting for Pension Plans” replaced the requirements of Statement No. 25. GASB Statement No. 68, “Accounting and Financial Reporting for Pensions” replaced the requirements of Statements No. 27 and No. 50. The new GASB statements separate accounting cost (expense) from funding cost (contributions), necessitating the creation of this funding policy.

The APERS Board of Trustees adopted this Funding Policy in ~~November, 2022~~ ~~August, 2014~~ ~~February, 2020~~. This funding policy shall be reviewed by the Board ~~annually through the completion of the first next experience study after adoption of this Funding Policy. Subsequently, it shall be reviewed periodically, but at least~~ every five years in conjunction with the experience study.

Funding Objectives

1. Maintain adequate assets so that current plan assets plus future contributions and investment earnings should be sufficient to fund all benefits expected to be paid to members and their beneficiaries.
2. Maintain stability of employer contribution rates, consistent with other funding objectives.
3. Maintain public policy goals of accountability and transparency. Each policy element is clear in intent and effect, and each should allow an assessment of whether, how and when the funding requirements of the plan will be met.
4. Monitor material risks to assist in any risk management strategies the Board deems appropriate.
5. Promote intergenerational equity. Each generation of members and employers should incur the cost of benefits for the employees who provide services to them, rather than deferring those costs to future members and employers.
6. Provide a reasonable margin for adverse experience to help offset risks.
7. Review investment return assumption in conjunction with the periodic asset liability study and in consideration of the Board’s risk profile.
8. Continue progress of systematic reduction of the Unfunded Actuarial Accrued Liabilities (UAAL).

Elements of Actuarial Funding Policy

1. Actuarial Cost Method

The Individual Entry Age Normal actuarial cost method of valuation shall be used in determining Actuarial Accrued Liability (AAL) and Normal Cost for all benefits. Differences in the past between assumed experience and actual experience (“actuarial gains and losses”) shall become part of the AAL. The Normal Cost shall be determined on an individual basis for each active member.

2. Actuarial (Funding) Value of Assets Method

The investment gains or losses of each valuation period, resulting from the difference between actual investment return and assumed investment return, shall be recognized annually in level amounts over 4 years in calculating the Funding Value of Assets. Regardless of the results obtained from the smoothing method described above, the Funding Value of Assets shall not diverge from the Market Value of Assets by more than 25%. For the District Judges Old Plan Still Paying, the market value of assets shall be used as the Funding Value of Assets.

3. Amortization Method

For APERS:

a. A level percent of payroll amortization method shall be used to systematically pay off the UAAL over a closed period of years.

b. Beginning with the 2022 annual actuarial valuation, once APERS reaches a 20-year amortization period, the amortization period will remain closed and the remaining UAAL will be amortized over that period.

~~a-c.~~ Each year, changes in the UAAL due to the actuarial gains or losses for each annual actuarial valuation or from changes to the actuarial assumptions will be amortized over a closed 20-year period.

~~b.~~ Beginning with the 2015 annual actuarial valuation, once APERS reached a 20-year amortization period, the amortization period will remain closed and the remaining UAAL will be amortized over that period.

~~c.~~ Each year, changes in the UAAL due to actuarial gains or losses for each annual actuarial valuation or from changes to actuarial assumptions will be amortized over a closed 20-year period.

d. Changes in the UAAL due to changes in benefit provisions that would result in an increase in the employer contribution rate ~~will~~ shall be amortized over a closed 15-~~year~~ period for active members and a closed 5-~~year~~ period for non-active members (i.e., retired members and deferred members).

e. Changes in the UAAL due to changes in benefit provisions that would result in a decrease in the employer contribution rate shall be amortized over a closed 30-year period for active members and a closed 15-year period for non-active members (i.e., retired members and deferred members).

-

~~The UAAL amortization period may be adjusted to maintain the employer contribution rate as described in Element 4.~~

~~The amortization period shall not be greater than 30 years.~~

d. ~~_____~~

For District Judges:

- a. A level dollar amortization method shall be used to systematically pay off the UAAL over a closed period of years.
- b. A closed ~~6-15~~-year period (as of the June 30, 20~~21-13~~ valuation) shall be used for the New Plan and Paid-Off Old Plan.
- c. A closed ~~14-22~~-year period (as of the June 30, 20~~21-13~~ valuation) shall be used for the Still Paying Old Plan.

4. Funding Target and Computed Employer Contribution Rate

- a. The targeted funded ratio shall be 100%.
- b. The employer contribution rate for APERS shall at least be equal to the employer normal cost unless the funded ratio exceeds 120%. If the funded ratio exceeds 120%, the amount of the actuarial value of assets in excess of 120% of the actuarial accrued liability shall be amortized over a 30-year period to reduce the normal cost contribution.
- c. The employer contribution rate for APERS shall not be less than the Contributory Group member contribution rate.
- d. The Board may establish a minimum employer contribution rate for APERS. The employer contribution rate shall not be less than the Board established minimum employer contribution rate in effect as of the adoption date of this policy (i.e., 15.32% of payroll) until such time as it is prudent to consider an employer contribution rate lower than this amount. The Board has the discretion to establish, change or remove the minimum employer contribution rate at any time.
~~— The employer contribution rate shall not be allowed to decrease as a result of benefit changes.
— For these valuations, the UAAL amortization period may be adjusted to align to the corresponding employer contribution rate.~~
- e. The employer contribution rate for APERS and District Judges shall be for the fiscal year beginning two years after the actuarial valuation date.
~~d. For the 2015, 2016 and 2017 annual actuarial valuations, the computed employer contribution rate shall not decrease by more than 0.25% of payroll from the previous valuation's computed employer contribution rate. For these valuations, the UAAL amortization period may be adjusted to determine the corresponding employer contribution rate.~~
- e.f. Once the District Judges New Plan and Paid Off Old Plan achieve a funded ratio of 100% or greater, the UAAL contribution for this portion of District Judges will become part of the APERS overall contribution rate.

5. Risk Management

- a. Assumption Changes
 - i. The actuarial assumptions used shall be those last adopted by the Board based on the most recent experience study and upon the advice of the actuary. The actuary shall conduct an experience study at least every five years. The results of the study shall be the basis for the actuarial assumption changes adopted by the Board.
 - ii. The actuarial assumptions can be updated during the five-year period if significant plan design changes or other significant events occur, as advised by the actuary.
- b. Amortization Method

The amortization method, Level Percent Closed, will ensure full payment of the UAAL over a finite, systematically decreasing period not to exceed 30 years.
- c. Risk Measures

The following risk measures will be annually determined to provide quantifiable measurements of risk and their movement over time.

- i. Classic Measures Currently Determined
 - A. Funded ratio (actuarial value of assets / actuarial accrued liability)
 - B. UAAL amortization period (years required to pay down the UAAL based on current funding rates)
 - ii. Dollar Standard Deviation of Investment Return / Total Payroll
 - A. Measures the risk associated with negative asset returns relative impact on the funded status of the plan. A decrease in this measure indicates a decrease in investment risk.
 - iii. Total UAAL / Total Payroll
 - A. Measures the risk associated with contribution decreases relative impact on the ability to fund the UAAL. A decrease in this measure indicates a decrease in contribution risk.
 - iv. Total Actuarial Value of Assets / Total Payroll
 - A. Measures the risk associated with the ability to respond to asset experience through adjustments in contributions. A decrease in this measure indicates a decrease in asset risk.
 - v. Total AAL / Total Payroll
 - A. Measures the risk associated with the ability to respond to liability experience through adjustments in contributions. A decrease in this measure indicates a decrease in experience risk. This also provides a long-term measure of the asset risk in situations where the System has a funded ratio below 100%.
- d. Risk Control

The Board shall carefully monitor the risk measures above and shall consider steps to mitigate risk, particularly as the funded ratio increases. Risk mitigation may involve a reduction in the assumed rate of investment return. Examples of risk mitigating techniques include, but are not limited to:

- i. Review asset allocation with a goal of reducing the standard deviation of the portfolio return
- ii. Reduce asset-liability mismatching

Glossary

1. **Actuarial Accrued Liability (AAL):** The difference between (i) the actuarial present value of future plan benefits, and (ii) the actuarial present value of future normal cost. Sometimes referred to as “accrued liability” or “past service liability.”
2. **Actuarial Assumptions:** Estimates of future plan experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.
3. **Actuarial Cost Method:** A mathematical budgeting procedure for allocating the dollar amount of the “actuarial present value of future plan benefits” between the actuarial present value of future normal cost and the actuarial accrued liability. Sometimes referred to as the “actuarial funding method.”
4. **Actuarial Gain (Loss):** A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used. For example, if during a given year the assets earn more than the investment return assumption, the amount of earnings above the assumption will cause an unexpected reduction in UAAL, or “actuarial gain” as of the next valuation. These include contribution gains and losses that result from actual contributions made being greater or less than the level determined under the policy.
5. **Actuary:** A person who is trained in the applications of probability and compound interest to problems in business and finance that involve payment of money in the future, contingent upon the occurrence of future events. Most actuaries in the United States are Members of the American Academy of Actuaries (MAAA). The Society of Actuaries is an international research, education and membership organization for actuaries in the life and health insurance, employee benefits, and pension fields. It administers a series of examinations leading initially to Associateship and the designation ASA and ultimately to Fellowship with the designation FSA.
6. **Amortization:** Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.
7. **Asset Liability Study:** A comprehensive strategic asset allocation review designed to assess the continuing appropriateness of the Investment Objectives and Asset Allocation Policy. It includes a study of future benefit payments, liabilities, required funding, the appropriateness of the actuarial interest rate assumption and the prospective funded status of liabilities. It may also include a study of portfolio design for optimal diversification and comparisons with peer practices.
8. **Entry Age Normal Actuarial Cost Method:** A funding method that calculates the Normal Cost as a level percentage of pay over the working lifetime of the plan’s members.
9. **Experience Study:** An actuarial investigation of demographic and economic experiences of the system during the period studied. The investigation is made for the purpose of updating the actuarial assumptions used in valuing the actuarial liabilities.
10. **Funding Value of Assets:** The value of current plan assets recognized for valuation purposes. Generally based on a phased-in recognition of all or a portion of market related investment

return. Sometimes referred to as Actuarial Value of Assets.

11. **Market Value of Assets:** The fair value of plan assets as reported in the plan's financial statements.
12. **Normal Cost (NC):** The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as "current service cost." Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.
13. **Unfunded Actuarial Accrued Liability (UAAL):** The difference, if any, between the actuarial accrued liability and valuation assets. Sometimes referred to as "unfunded accrued liability."

Revised

August 15, 2014

~~February~~ November 16, 2022~~20~~

ARKANSAS PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Board Report

New Retirees Summary for Month of 07/2022

	No. of Retirees Contributory	No. of Retirees Non - Contributory	Total No. of Retirees	Monthly Benefit Contributory	Monthly Benefit Non - Contributory	Total Benefit	Average Benefit Contributory	Average Benefit Non - Contributory
County	19	46	65	\$12,387.23	\$70,836.32	\$83,223.55	\$651.96	\$1,539.92
Municipality	10	12	22	\$6,785.23	\$19,653.75	\$26,438.98	\$678.52	\$1,637.81
School	1	17	18	\$241.85	\$14,929.85	\$15,171.70	\$241.85	\$878.23
State	56	88	144	\$48,375.24	\$142,825.26	\$191,200.50	\$863.84	\$1,623.01
TOTAL	86	163	249	\$67,789.55	\$248,245.18	\$316,034.73	\$788.25	\$1,522.98

ARKANSAS PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Board Report

All Retirees Summary for Month of 07/2022

	No. of Retirees Contributory	No. of Retirees Non - Contributory	Total No. of Retirees	Monthly Benefit Contributory	Monthly Benefit Non - Contributory	Total Benefit	Average Benefit Contributory	Average Benefit Non - Contributory
County	1,967	8,034	10,001	\$1,671,109.56	\$9,916,961.16	\$11,588,070.72	\$849.57	\$1,234.37
Municipality	586	2,489	3,075	\$501,704.09	\$3,633,025.13	\$4,134,729.22	\$856.15	\$1,459.63
Municipality-Non- Participating	7	18	25	\$3,824.17	\$11,386.42	\$15,210.59	\$546.31	\$632.58
Non-State	39	109	148	\$36,936.99	\$103,035.84	\$139,972.83	\$947.10	\$945.28
Others	0	0	168	\$0.00	\$0.00	\$232,538.12	\$0.00	\$0.00
School	509	3,796	4,305	\$541,779.78	\$3,046,224.69	\$3,588,004.47	\$1,064.40	\$802.48
State	3,655	16,817	20,472	\$3,643,088.14	\$28,662,331.30	\$32,305,419.44	\$996.74	\$1,704.37
TOTAL	6,763	31,263	38,194	\$6,398,442.73	\$45,372,964.54	\$52,003,945.39	\$946.10	\$1,451.33

ARKANSAS PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Board Report

New DROP Summary for Month of 07/2022

	No. of Retirees Contributory	No. of Retirees Non - Contributory	Total No. of Retirees	Monthly Benefit Contributory	Monthly Benefit Non - Contributory	Total Benefit	Average Benefit Contributory	Average Benefit Non - Contributory
County	2	14	16	\$8,378.83	\$34,718.66	\$43,097.49	\$4,189.42	\$2,479.90
Municipality	1	6	7	\$1,555.68	\$10,434.94	\$11,990.62	\$1,555.68	\$1,739.16
Non-State	1	0	1	\$3,043.09	\$0.00	\$3,043.09	\$3,043.09	\$0.00
School	0	2	2	\$0.00	\$4,636.84	\$4,636.84	\$0.00	\$2,318.42
State	11	45	56	\$12,767.90	\$91,595.97	\$104,363.87	\$1,160.72	\$2,035.47
TOTAL	15	67	82	\$25,745.50	\$141,386.41	\$167,131.91	\$1,716.37	\$2,110.24

ARKANSAS PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Board Report

New Termination Refunds Summary for Month of 07/2022

	No. of Payees	Total Benefit	Total Service Credit	Average Benefit	Average Service Credit
County	71	\$447,267.54	259 Y(s) 10.25 M(s)	\$6,299.54	3 Y(s) 7.92 M(s)
Municipality	31	\$175,415.12	99 Y(s) 4.00 M(s)	\$5,658.55	3 Y(s) 2.45 M(s)
Municipality-Non-Participating	1	\$2,158.75	1 Y(s) 6.00 M(s)	\$2,158.75	1 Y(s) 6.00 M(s)
State	128	\$845,581.74	404 Y(s) 9.50 M(s)	\$6,606.11	3 Y(s) 1.95 M(s)
TOTAL	231	\$1,470,423.15	765 Y(s) 5.75 M(s)	\$6,365.47	3 Y(s) 3.77 M(s)

ARKANSAS PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Board Report

New Retirees Summary for Month of 08/2022

	No. of Retirees Contributory	No. of Retirees Non - Contributory	Total No. of Retirees	Monthly Benefit Contributory	Monthly Benefit Non - Contributory	Total Benefit	Average Benefit Contributory	Average Benefit Non - Contributory
County	23	28	51	\$13,361.88	\$43,669.24	\$57,031.12	\$580.95	\$1,559.62
Municipality	9	6	15	\$5,969.12	\$6,223.51	\$12,192.63	\$663.24	\$1,037.25
Non-State	1	2	3	\$277.36	\$1,960.37	\$2,237.73	\$277.36	\$980.19
School	1	4	5	\$1,631.87	\$1,714.39	\$3,346.26	\$1,631.87	\$428.60
State	37	67	104	\$32,949.69	\$94,914.12	\$127,863.81	\$890.53	\$1,416.63
TOTAL	71	107	178	\$54,189.92	\$148,481.63	\$202,671.55	\$763.24	\$1,387.68

ARKANSAS PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Board Report

All Retirees Summary for Month of 08/2022

	No. of Retirees Contributory	No. of Retirees Non - Contributory	Total No. of Retirees	Monthly Benefit Contributory	Monthly Benefit Non - Contributory	Total Benefit	Average Benefit Contributory	Average Benefit Non - Contributory
County	1,982	8,036	10,018	\$1,681,623.25	\$9,930,159.60	\$11,611,782.85	\$848.45	\$1,235.71
Municipality	594	2,493	3,087	\$506,838.54	\$3,635,782.56	\$4,142,621.10	\$853.26	\$1,458.40
Municipality-Non- Participating	7	18	25	\$3,824.17	\$11,386.42	\$15,210.59	\$546.31	\$632.58
Non-State	40	111	151	\$37,214.35	\$104,996.21	\$142,210.56	\$930.36	\$945.91
Others	0	0	167	\$0.00	\$0.00	\$225,675.49	\$0.00	\$0.00
School	507	3,787	4,294	\$538,139.71	\$3,038,100.33	\$3,576,240.04	\$1,061.42	\$802.24
State	3,684	16,826	20,510	\$3,665,589.83	\$28,673,169.49	\$32,338,759.32	\$995.00	\$1,704.10
TOTAL	6,814	31,271	38,252	\$6,433,229.85	\$45,393,594.61	\$52,052,499.95	\$944.12	\$1,451.62

ARKANSAS PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Board Report

New DROP Summary for Month of 08/2022

	No. of Retirees Contributory	No. of Retirees Non - Contributory	Total No. of Retirees	Monthly Benefit Contributory	Monthly Benefit Non - Contributory	Total Benefit	Average Benefit Contributory	Average Benefit Non - Contributory
County	0	7	7	\$0.00	\$14,073.22	\$14,073.22	\$0.00	\$2,010.46
Municipality	0	2	2	\$0.00	\$4,295.64	\$4,295.64	\$0.00	\$2,147.82
School	0	1	1	\$0.00	\$156.15	\$156.15	\$0.00	\$156.15
State	1	13	14	\$1,249.07	\$25,644.20	\$26,893.27	\$1,249.07	\$1,972.63
TOTAL	1	23	24	\$1,249.07	\$44,169.21	\$45,418.28	\$1,249.07	\$1,920.40

ARKANSAS PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Board Report

New Termination Refunds Summary for Month of 08/2022

	No. of Payees	Total Benefit	Total Service Credit	Average Benefit	Average Service Credit
County	63	\$378,562.43	212 Y(s) 3.00 M(s)	\$6,008.93	3 Y(s) 4.43 M(s)
Municipality	19	\$75,229.04	48 Y(s) 6.00 M(s)	\$3,959.42	2 Y(s) 6.63 M(s)
Non-State	1	\$923.66	0 Y(s) 6.00 M(s)	\$923.66	0 Y(s) 6.00 M(s)
State	131	\$805,154.25	425 Y(s) 6.75 M(s)	\$6,146.22	3 Y(s) 2.98 M(s)
TOTAL	214	\$1,259,869.38	686 Y(s) 9.75 M(s)	\$5,887.24	3 Y(s) 2.51 M(s)

ARKANSAS PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Board Report

New Retirees Summary for Month of 09/2022

	No. of Retirees Contributory	No. of Retirees Non - Contributory	Total No. of Retirees	Monthly Benefit Contributory	Monthly Benefit Non - Contributory	Total Benefit	Average Benefit Contributory	Average Benefit Non - Contributory
County	19	30	49	\$11,783.84	\$33,115.80	\$44,899.64	\$620.20	\$1,103.86
Municipality	10	5	15	\$5,880.26	\$7,304.05	\$13,184.31	\$588.03	\$1,460.81
Non-State	3	1	4	\$2,830.15	\$1,745.12	\$4,575.27	\$943.38	\$1,745.12
School	0	4	4	\$0.00	\$3,227.87	\$3,227.87	\$0.00	\$806.97
State	25	76	101	\$14,601.83	\$88,934.99	\$103,536.82	\$584.07	\$1,170.20
TOTAL	57	116	173	\$35,096.08	\$134,327.83	\$169,423.91	\$615.72	\$1,158.00

ARKANSAS PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Board Report

All Retirees Summary for Month of 09/2022

	No. of Retirees Contributory	No. of Retirees Non - Contributory	Total No. of Retirees	Monthly Benefit Contributory	Monthly Benefit Non - Contributory	Total Benefit	Average Benefit Contributory	Average Benefit Non - Contributory
County	2,000	8,046	10,046	\$1,690,418.85	\$9,938,879.98	\$11,629,298.83	\$845.21	\$1,235.26
Municipality	603	2,490	3,093	\$512,166.93	\$3,637,486.12	\$4,149,653.05	\$849.36	\$1,460.84
Municipality-Non- Participating	7	18	25	\$3,824.17	\$11,386.42	\$15,210.59	\$546.31	\$632.58
Non-State	43	112	155	\$40,044.50	\$106,773.85	\$146,818.35	\$931.27	\$953.34
Others	0	0	167	\$0.00	\$0.00	\$225,675.49	\$0.00	\$0.00
School	502	3,781	4,283	\$534,880.22	\$3,036,618.62	\$3,571,498.84	\$1,065.50	\$803.13
State	3,701	16,843	20,544	\$3,669,004.58	\$28,663,854.26	\$32,332,858.84	\$991.35	\$1,701.83
TOTAL	6,856	31,290	38,313	\$6,450,339.25	\$45,394,999.25	\$52,071,013.99	\$940.83	\$1,450.78

ARKANSAS PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Board Report

New DROP Summary for Month of 09/2022

	No. of Retirees Contributory	No. of Retirees Non - Contributory	Total No. of Retirees	Monthly Benefit Contributory	Monthly Benefit Non - Contributory	Total Benefit	Average Benefit Contributory	Average Benefit Non - Contributory
County	0	6	6	\$0.00	\$10,799.29	\$10,799.29	\$0.00	\$1,799.88
Municipality	0	1	1	\$0.00	\$3,545.02	\$3,545.02	\$0.00	\$3,545.02
State	2	15	17	\$3,053.19	\$22,506.70	\$25,559.89	\$1,526.60	\$1,500.45
TOTAL	2	22	24	\$3,053.19	\$36,851.01	\$39,904.20	\$1,526.60	\$1,675.05

ARKANSAS PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Board Report

New Termination Refunds Summary for Month of 09/2022

	No. of Payees	Total Benefit	Total Service Credit	Average Benefit	Average Service Credit
County	65	\$302,603.66	178 Y(s) 7.25 M(s)	\$4,655.44	2 Y(s) 8.97 M(s)
Municipality	29	\$174,355.11	90 Y(s) 9.00 M(s)	\$6,012.25	3 Y(s) 1.55 M(s)
Non-State	2	\$7,189.73	2 Y(s) 6.25 M(s)	\$3,594.87	1 Y(s) 3.13 M(s)
State	147	\$1,095,019.57	578 Y(s) 11.25 M(s)	\$7,449.11	3 Y(s) 11.26 M(s)
TOTAL	243	\$1,579,168.07	850 Y(s) 9.75 M(s)	\$6,498.63	3 Y(s) 6.02 M(s)

**Arkansas Public Employees Retirement System
Fiscal Year 2022**

Arkansas

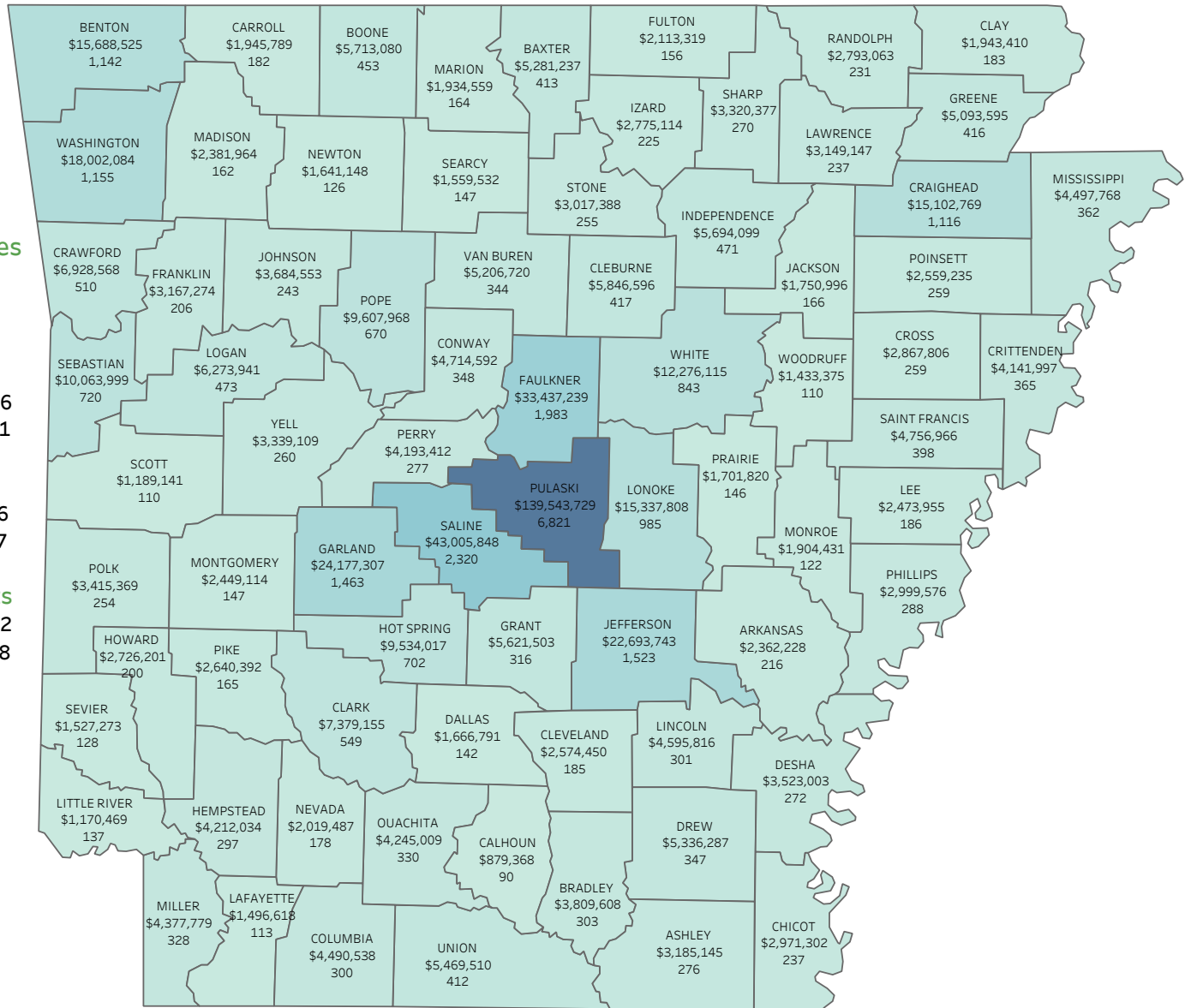
Total Payee 37,606
Total Amount 578,604,251

Out of State

Total Payee 3,516
Total Amount 38,101,407

Total Retirees and Benefits

Total Payee 41,122
Total Amount 616,705,658





Public Pension Coordinating Council

***Public Pension Standards Award
For Funding and Administration
2022***

Presented to

Arkansas Public Employees Retirement System

In recognition of meeting professional standards for
plan funding and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

A handwritten signature in cursive script that reads "Alan H. Winkle".

Alan H. Winkle
Program Administrator

ARKANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
STATEMENT OF FIDUCIARY NET POSITION
AS OF SEPTEMBER 30, 2022

ASSETS	
Cash and Cash Equivalents	\$ 58,475,967
Receivables	
Dec 2004 Actuarial Liability Receivable	4,412,387
Contributions Receivable	2,961,396
Overpayment Receivable	855,066
Allowance for Doubtful Accounts	(834,917)
Total Receivables	<u>7,393,931</u>
Investments at Fair Value	
Investment Assets	9,178,764,908
Securities Lending Collateral	552,355,151
Total Investments	<u>9,731,120,059</u>
Fixed Assets (Net)	11,520,541
Prepays and Other Assets	989,044
 TOTAL ASSETS	 <u><u>9,809,499,543</u></u>
LIABILITIES	
Securities Lending Liability	554,112,356
Accrued Expense and Other Liabilities	4,525,337
Other Post Employment Benefits	6,782,537
 TOTAL LIABILITIES	 <u><u>565,420,230</u></u>
 NET POSITION RESTRICTED FOR PENSION BENEFITS	 <u><u>\$ 9,244,079,313</u></u>

Unaudited
11/8/2022

ARKANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM
STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE PERIOD ENDING SEPTEMBER 30, 2022

ADDITIONS

Contributions

Employer	\$ 80,214,707
Employee	21,804,788
Total Contributions	102,019,494

Investment Income

Investment Income	(421,368,120)
Less: Investment Expense	(2,076,101)
Net Investment Income	(423,444,222)

Other Additions

Transfers from Teachers and Highway	879,693
Miscellaneous Additions	70,103
Miscellaneous Administrative Transfers	409,024
Total Other Additions	1,358,820

TOTAL ADDITIONS (320,065,908)

DEDUCTIONS

Benefits	163,120,726
Refund of Contributions	4,528,364
Administrative Expense	2,044,321
TOTAL DEDUCTIONS	169,693,410

NET INCREASE/(DECREASE) (489,759,318)

ADJUSTMENTS

Actuarial Adjustment to DJ Unfunded Liability -

NET POSITION RESTRICTED FOR PENSION BENEFITS

Beginning of Year	9,733,838,631
End of 1st Quarter	\$ 9,244,079,313

Arkansas Public Employees' Retirement System
LEGAL REPORT
November 16, 2022

ADMINISTRATIVE MEMBER APPEALS

Nita Murray

Member appeals the decision of the Executive Director dated April 8, 2022, denying the member's request to recharacterize her employment to receive additional service credit. **No appeal date set.**

APPEAL FROM ADMINISTRATIVE MEMBER APPEAL - LITIGATION

Bolding v. APERS, APERS Board, and Duncan Baird – CV-21-208 (Ct Appeals) 60CV-19-4050 (Circuit Court)

Bolding appealed to Court of Appeals from Bolding's loss on Circuit Court appeal of APERS' Board decision denying Ms. Bolding's claim that she is entitled to a COLA from APERS, since she is retired under a separate retirement system. Bolding appealed the board's decision to Pulaski County Circuit Court, Judge Herbert Wright in late 2020. Court issued Order entered March 11, 2021, upholding the decision of the Board. Bolding appealed April 5, 2021, to the Court of Appeals. Court of Appeals decision entered June 1, 2022, upholding decision of board and denying Bolding's requests. Bolding asked for a rehearing, which was also denied. Bolding asked for an Arkansas Supreme Court review of the Court of Appeals decision. **Arkansas Supreme Court denied the request and the Court of Appeals decision upholding the ruling of the Board was affirmed September 26, 2022. Case closed.**

RULES PROMULGATION

No current rule promulgation.

SECURITIES LITIGATION CASES

U.S. cases with APERS as Lead Plaintiff

Company name	Case Caption	Date Case Filed	Lead Plaintiff Status	Firm
*Lobstein, pro se	Lobstein v. Washington Mutual, et al.	07/24/2020	Case dismissed. Plaintiff appealed. Counsel filed response to appeal. 3/1/2021	Cohen Milstein

There are no active securities litigation cases with APERS as lead plaintiff.

* For background, this is not a securities litigation case, rather a *pro se* complaint loosely based upon a securities litigation case settled in 2015. The lawsuit by Lobstein regards the foreclosure of property that is part of a mortgage backed securities trust lawsuit that APERS participated in. This lawsuit is considered a frivolous lawsuit by APERS' securities litigation counsel. The *pro se* complaint included all of the plaintiff pension funds who were involved in the original securities litigation, including APERS.

Caveat: This Model QDRO has been approved as to form and content by the Arkansas General Assembly's Legislative Council as required under Act 1143 of 1993. Changes, additions to the language, or other rewording of the document may result in APERS' inability to process this Order for your client and require you to submit a new QDRO to the court. If you have questions, please consult APERS before submitting an Order to the Court. The QDRO **must be filed with APERS after the order is entered.**

ARKANSAS PUBLIC EMPLOYEES' RETIREMENT SYSTEM MODEL QUALIFIED DOMESTIC RELATIONS ORDER

In the Circuit Court Of _____ County, Arkansas

Plaintiff

No. _____

Defendant

QUALIFIED DOMESTIC RELATIONS ORDER

This Order is intended to meet the requirements of a "Qualified Domestic Relations Order" relating to the distribution of benefits or contributions allowed to a member of the Arkansas Public Employees' Retirement System ("APERS") according to applicable law governing such distribution (referred to herein as the "Plan").

The Court finds and orders that this Qualified Domestic Relations Order ("Order"), pursuant to Act 1143 of 1993, as amended, is an integral part of and is incorporated in the judgment, decree, or order of this Court entered on _____ **[date of divorce]**, which grants a divorce to the parties to this Order, and is a part of the equitable distribution of marital property between the parties (including the provision for alimony and child support, if applicable).

A. PARTIES

1. _____ **[Plan Member's name]** is the "Member" whose last known address is _____ and date of birth is _____ **[Member's date of birth]**.

2. _____ **[Alternate Payee's name]** is the "Alternate Payee" whose last known address is _____ and date of birth is _____ **[Alternate Payee's date of birth]**.

3. The Member and the Alternate Payee were married on _____ **[date of marriage]**.

4. Member **[is] -OR- [is not]** retired from the Plan as of the date of divorce.

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B. MEMBER'S RETIREMENT ANNUITY AND DURATION OF MONTHLY BENEFITS TO ALTERNATE PAYEE

If the member is currently receiving monthly benefits (retired), the option chosen under Section B will be applied to the member's monthly benefit. If the member is not retired, the option chosen will be applied to a monthly benefit calculated from the date of marriage to the date of divorce. Choose only one of the four options below:

For a percentage of the Member's monthly benefit for Alternate Payee's lifetime, choose this option:

5. The Alternate Payee is awarded [_____ %] of the Member's accrued monthly retirement benefit for the life of the Alternate Payee, adjusted to the actuarial equivalent of Alternate Payee's share using the Alternate Payee's attained age at his/her last birth date prior to the effective date of this Order, the valuation rate, and the 50/50 mortality table. This percentage portion of the Member's monthly retirement benefit shall be paid to the Alternate Payee in the same manner as is payable to the Member as an annuity, payable for the Alternate Payee's lifetime. All annuity benefits paid to the Alternate Payee shall be paid as a straight life annuity. No survivor or other death benefits will be payable upon the Alternate Payee's death.

-OR-

For a set dollar amount of the Member's monthly benefit for Alternate Payee's lifetime, choose this option:

5. The Alternate Payee is awarded (\$ _____) of the Member's monthly retirement benefit. The set dollar amount of the Member's monthly retirement benefit shall be paid to the Alternate Payee in the same manner as is payable to the Member as an annuity, payable for the Alternate Payee's lifetime. The set dollar amount of the Member's monthly retirement benefit under this Order shall not exceed the Member's total monthly benefits payable as of the date of divorce. All annuity benefits paid to the Alternate Payee shall be paid as a straight life annuity. No survivor or other death benefits will be payable upon the Alternate Payee's death.

For a percentage of the Member's monthly benefit during the Member's lifetime, choose this option:

5. The Alternate Payee is awarded (_____ %) of the Member's monthly retirement benefit. This percentage portion of the Member's monthly retirement benefit shall be paid to the Alternate Payee in the same manner as is payable to the Member as an annuity, payable for the Member's lifetime. In the event the Member dies before the Alternate Payee, the benefits to the Alternate Payee shall cease on such date. All annuity benefits paid to the Alternate Payee shall be paid as a straight life annuity. No survivor or other death benefits will be payable upon the Alternate Payee's death.

Caveat: This Model QDRO has been approved as to form and content by the Arkansas General Assembly's Legislative Council as required under Act 1143 of 1993. Changes, additions to the language, or other rewording of the document may result in APERS' inability to process this Order for your client and require you to submit a new QDRO to the court. If you have questions, please consult APERS before submitting an Order to the Court. The QDRO **must be filed with APERS after the order is entered.**

-OR-

For a set dollar amount of the Member's monthly benefit during the Member's lifetime, choose this option:

5. The Alternate Payee is awarded (\$ _____) of the Member's monthly retirement benefit. The set amount of the Member's monthly retirement benefit shall be paid to the Alternate Payee in the same manner as is payable to the Member as an annuity, payable for the Member's lifetime. In the event the Member dies before the Alternate Payee, the benefits to the Alternate Payee shall cease on such date. The set amount of the Alternate Payee's monthly retirement benefit under this Order shall not exceed the Member's total monthly benefit payable as of the date of divorce. All annuity benefits paid to the Alternate Payee shall be paid as a straight life annuity. No survivor or other death benefits will be payable upon the Alternate Payee's death.

C. EFFECTIVE DATE OF MONTHLY RETIREMENT BENEFITS

6. The Plan shall begin benefit payments to the Alternate Payee in accordance with applicable Plan provisions governing distributions to its members. Payments to the Alternate Payee will occur upon the earlier of the date: (1) the Member retires and begins receiving retirement benefits; or (2) the Member ceases to be an active participant of the Plan and requests a refund of his/her contributions to the Plan.

If the Member is retired at the time of the divorce, monthly benefits to the Alternate Payee will commence the month following the date the Plan approves this Order.

D. NON-RETIRED MEMBER'S REQUEST OF REFUND OF PLAN DEPOSIT ACCOUNT

If the Member is not retired from the Plan as of the date of divorce, choose only one of the two options under Section D below. A request by the Member to refund Member contributions extinguishes any right of a monthly retirement benefit from the Plan for either the Member or the Alternate Payee.

If the Member is retired and receiving monthly benefits from the Plan as of the date of divorce, delete this Section D.

For a percentage of Member contributions, choose this option:

7. If the Member discontinues covered employment with the Plan and withdraws as a lump sum his/her contributions, including interest, to the Plan, the Alternate Payee shall receive (____%) of the Member's contributions and interest deposited from the date of marriage to the date of divorce.

-OR-

Caveat: This Model QDRO has been approved as to form and content by the Arkansas General Assembly's Legislative Council as required under Act 1143 of 1993. Changes, additions to the language, or other rewording of the document may result in APERS' inability to process this Order for your client and require you to submit a new QDRO to the court. If you have questions, please consult APERS before submitting an Order to the Court. The QDRO **must be filed with APERS after the order is entered.**

For a set dollar amount of Member contributions, choose this option:

7. If the Member discontinues covered employment with the Plan and withdraws as a lump sum his/her contributions including interest, deposited by the Plan, the Alternate Payee shall receive the set dollar amount of (\$ _____) from the Member's deposits upon distribution of the refund by the Plan. The set dollar amount of the Member's deposit account assigned to the Alternate Payee in this Order may not exceed the Member's account balance plus interest credited by the Plan as of the date of divorce.

E. NON-RETIRED MEMBER'S DEATH PRIOR TO RETIREMENT

If the Member is not retired from the Plan as of the date of divorce, choose only one of the two options under Section E below.

If the Member is retired and receiving monthly benefits from the Plan as of the date of divorce, delete this Section E.

For a percentage of the Member's contributions to the Plan, choose this option:

8. If the Member dies prior to retirement and a retirement or survivor annuity is not payable by the Plan due to the Member's death, the Alternate Payee shall receive as a lump sum (_____%) of the Member's contributions and interest deposited from the date of marriage to the date of divorce.

-OR-

For a set dollar amount from the Member's contributions to the Plan, choose this option:

8. If the Member dies prior to retirement and a retirement or survivor annuity is not payable by the Plan due to the Member's death, the Alternate Payee shall receive the set dollar amount of (\$ _____) from the Member's contributions and interest deposited by the Plan. The set amount of the Member's deposit account assigned to the Alternate Payee may not exceed the Member's account balance and interest credited by the Plan as of the date of divorce.

F. ADDITIONAL LIMITATIONS

All language in Section F must be included verbatim in the QDRO. If Sections D or E above are not applicable because the member is not retired, renumber the paragraphs below accordingly.

9. If the Alternate Payee dies prior to the receipt of any benefit or payment, the entire amount that may be due to the Alternate Payee reverts to the Member.

Caveat: This Model QDRO has been approved as to form and content by the Arkansas General Assembly's Legislative Council as required under Act 1143 of 1993. Changes, additions to the language, or other rewording of the document may result in APERS' inability to process this Order for your client and require you to submit a new QDRO to the court. If you have questions, please consult APERS before submitting an Order to the Court. The QDRO **must be filed with APERS after the order is entered.**

10. If the Member or Alternate Payee receives any distributions that should not have been paid under this Order, such party is designated a constructive trustee for the amount received and shall immediately notify the Plan and comply with the Plan's instructions to retrieve the unauthorized distributions. The Plan reserves all rights under Ark. Code Ann. § 24-4-207 or any other applicable law to adjust payments or otherwise collect amounts owed to the Plan.

11. Both parties shall provide APERS with prompt written notification of any changes in each of their respective mailing addresses. The Plan shall not make payments to the Alternate Payee under this Order until the Plan has received such documentation as it determines to be necessary for the proper administration of this Order. The Plan will not be liable for failing to make payments to Alternate Payee if the Plan does not have an enforceable Order with a current mailing address for Alternate Payee in its records.

12. If payments from the Plan to the Alternate Payee are determined to be a de minimus amount as set by the Board, the Plan shall disburse the remaining payment to the Member who shall pay same to the Alternate Payee.

13. Either the Member or Alternate Payee shall furnish a final, file-marked copy of this Order to APERS. Upon acceptance of this Order by the Plan, the Member consents to disclosure of his/her Plan account information to the Alternate Payee or his/her authorized representative to the extent necessary to administer this Order.

14. Both parties agree to timely provide to APERS all information and forms and make all elections necessary for it to administer the provisions of the Plan pursuant to this Order.

15. The Court retains sole jurisdiction to amend, terminate, or otherwise modify this Order even though all other matters incident to this action or proceeding have been fully and finally adjudicated. If APERS determines at any time that changes in the law, the administration of the Plan, or any other relevant circumstances make it impossible to calculate the portion of the distributions awarded to Alternate Payee by this Order and so notifies one or both of the parties, either or both parties shall immediately petition the Court for reformation of the Order.

16. The Member and the Alternate Payee understand and acknowledge that this Order cannot be amended after the Member's death.

17. This Order shall not require the Plan to provide any type or form of benefit, or pay options not otherwise available under the Plan, and does not require the Plan to provide increased benefits to the parties beyond those applicable Plan benefits to the

Caveat: This Model QDRO has been approved as to form and content by the Arkansas General Assembly's Legislative Council as required under Act 1143 of 1993. Changes, additions to the language, or other rewording of the document may result in APERS' inability to process this Order for your client and require you to submit a new QDRO to the court. If you have questions, please consult APERS before submitting an Order to the Court. The QDRO **must be filed with APERS after the order is entered.** Member that are in effect as of the entry of this Order. Any provision of this Order that provides otherwise is severable and shall be void and have no effect.

18. This Order shall not require the Plan to provide any type or form of benefit, or option not otherwise available to the Member; nor shall it require the payment of any benefits to the Alternate Payee which are required to be paid to another alternate payee of another order previously determined by the Plan to be a qualified domestic relations order. Any provision of this Order that provides otherwise is severable and shall be void and have no effect.

IT IS SO ORDERED THIS _____ DAY OF _____, 20_____

CIRCUIT JUDGE

Adopted: [date]
(Arkansas Legislative Council)

APERS Discussion of Proposed Legislation

APERS Summary of Proposed Legislation

APERS Technical Corrections Bill

APERS Survivor Benefits Bill

APERS Summary of Proposed Legislation

Arkansas Public Employees' Retirement System

October 25, 2022

Trustees Workshop • Discussion of Proposed Legislation

APERS TECHNICAL CORRECTIONS/CLEANUP BILL

SUMMARY: This proposed bill is intended to:

- Clarify definitions consistent with the current administration of benefits
- Correct and align definitions that were affected by 2021 Acts
- Restore inadvertently-stricken law from a previous session to address the payout of contributions when the monthly benefit is a de minimus amount
- Make certain to members the effect of a refund of contributions if that person returns to covered employment
- Modify the exemption of the monthly benefit from legal proceedings to allow for garnishment of monthly benefit for child support (which is already codified in another section of the law)

SECTIONS 1 - 6 of the law amend existing definitions.

SECTION 1. Amends definition of “compensation” to clarify that positions compensated by the employer are included in the employer payroll on which federal income tax is withheld.

SECTION 2. Amends definition of “contributory member” to align with Act 365 of 2021, which gradually changed the contribution rate for contributory members, and ties the definition to the sections of the plan regarding contribution rates, § 24-4-401.

SECTION 3. Amends definition of “credited service” to delete language under 15(B) and relocate that language to the section of the plan regarding credited service, § 24-4-521.

SECTION 4. Amends definition of “final average compensation,” to align with Act 370 of 2021, which created a new section, § 24-4-623, regarding final average compensation.

SECTION 5. Amends definition of “public safety member” to clarify that the definition applies to a public safety member’s APERS-covered employment, consistent with this board’s ruling and with APERS administration of benefits.

SECTION 6. Amends definition of “public safety member,” *See* previous Section 5.

SECTION 7. Amends § 24-4-521 which defines how credited service is applied to different groups of employees. The technical corrections also reference the code section (in Subchapter 11) regarding contributory employees hired on or after July 1, 2005. An additional amendment pertains to local elected officials to correct a gap in the law for

contributory elected officials and to clarify that those officials receive 2 to 1 service credit in their elected position for a maximum of 10 years, and then revert to the regular rate of 1 to 1 while holding office.

SECTION 8. Clarifies the law concerning the refund of contributions. Once a member terminates their membership, they leave the pre-7/1/22 plan, unless they repurchase their service.

SECTION 9. Adds a new section inadvertently repealed under Act 151 of 2001 (which repealed Subchapter 3 and created Subchapter 4), and is consistent with APERS administration of benefits regarding de minimus monthly benefit payouts.

SECTION 10. Aligns APERS law with the collection of child support payments under § 9-14-102.

APERS SURVIVOR BENEFITS BILL

SUMMARY: This proposed bill is intended to:

- Standardize a 6-month marriage period either pre- or post retirement for a member to select a spousal option beneficiary
- Utilize federal tax returns for proof of support of dependent child or dependent parent for member to select as an option beneficiary
- Allow survivor benefits for dependent child until age 23 to level playing field with surviving children who choose non-college path after high school, reduce financial burden on surviving children, align with non-system existing health benefit coverages, and reduce fraud
- Clarify the effective date of survivor benefits
- Align language and grammar throughout the section for ease of understanding and administration
- Strike an obsolete section of the code

SECTION 1. Aligns and simplifies language, standardizes marriage period to 6 months and eliminates an obsolete section (d)(1).

SECTION 2. Allows survivor benefits for dependent child until age 23, and clarifies that dependency is evidenced by member's federal tax return. Aligns and simplifies language throughout the section.

SECTION 3. Clarifies effective date of benefits and relocates deleted subsection in § 24-4-608(h)(1) concerning effective date of benefits to consolidate provisions regarding effective date of benefits.

APERS Technical Corrections Bill

AN ACT TO MAKE TECHNICAL CORRECTIONS AND CLARIFY LANGUAGE FOR THE PROPER ADMINISTRATION OF BENEFITS UNDER ARKANSAS CODE TITLE 24, CHAPTER 4 CONCERNING RETIREMENT AND PENSIONS UNDER THE ARKANSAS PUBLIC EMPLOYEES' RETIREMENT SYSTEM; AND FOR OTHER PURPOSES.

TO MAKE TECHNICAL CORRECTIONS AND CLARIFY LANGUAGE FOR THE PROPER ADMINISTRATION OF THE ARKANSAS PUBLIC EMPLOYEES' RETIREMENT SYSTEM.

SECTION 1. Arkansas Code § 24-4-101(11)(A), concerning the definition of “compensation” as applicable to the Arkansas Public Employees’ Retirement System, is amended to read as follows:

(11)(A) “Compensation” means the recurring remuneration paid a member by public employers for personal services rendered by a member in a position covered by an employer participating in the Arkansas Public Employees' Retirement System and on which the employer is required to withhold federal income tax under the Internal Revenue Code.

SECTION 2. Arkansas Code § 24-4-101(12), concerning the definition of “contributory member” as applicable to the Arkansas Public Employees’ Retirement System, is amended to read as follows:

(12) “Contributory member” means:

(A) A person who was a member of the Arkansas Public Employees' Retirement System prior to January 1, 1978, and who continues to contribute ~~six percent (6%)~~ a percentage of his or her compensation to the system as set out under § 24-4-401. ~~However, the rate will be five percent (5%) on and after July 1, 2005; or~~

(B) A ~~member person~~ person first hired on or after July 1, 2005, or a noncontributory member ~~who elects to become a contributory member~~ under § 24-4-1101 et seq.;

SECTION 3. Arkansas Code § 24-4-101(15), concerning the definition of “credited service” under the Arkansas Public Employees’ Retirement System, is amended to read as follows:

(15)(A) “Credited service” means the sum of the prior service and current service to the extent credited a member by the board, in accordance with the provisions of § 24-4-521.

~~(B) Any member first hired on or after July 1, 2005, at a rate other than that defined in subdivision (2) of this section shall accrue that credit on no more than ten (10) actual years of service;~~

SECTION 4. Arkansas Code § 24-4-101(18), concerning the definition of “final average compensation” under the Arkansas Public Employees’ Retirement System, is amended to read as follows:

(18) “Final average compensation” means the average of the member’s highest annual compensations ~~paid a member during any period of three (3) years of~~ on which credited service with a public employer as is calculated under § 24-4-623;

SECTION 5. Arkansas Code § 24-4-101(34)(A), concerning the definition of “public safety member” under to the Arkansas Public Employees’ Retirement System is amended to read as follows:

(34)(A) “Public safety member” means, except public safety members covered under § 24-4-1004, a member whose covered employment under the system:

- (i) Is for personal services as a police officer or firefighter; and
- (ii) Began before July 1, 1997.

SECTION 6. Arkansas Code § 24-4-101(34)(D)(i), concerning the definition of “public safety member” under the Arkansas Public Employees’ Retirement System is amended to read as follows:

(34)(D)(i) “Public safety member” shall not include a member whose covered employment under the system as a police officer or firefighter commenced on or after July 1, 1997, except as provided for public safety members covered under § 24-4-1004.

SECTION 7. Arkansas Code § 24-4-521, concerning credited service generally, is amended to read as follows:

24-4-521. Credited service generally — Definition.

(a) The Board of Trustees of the Arkansas Public Employees' Retirement System shall establish the amounts of service to be credited its members subject to the provisions of subsection (b) of this section.

(b)(1)(A)(i) Noncontributory employment service by a person who was:

(a) Employed prior to July 1, 1997, as a public safety member shall be credited at one and one-half (1½) times the regular rate for crediting service; and

(b) Employed on and after July 1, 1997, shall be credited at the regular rate for crediting service.

(ii) A person receiving credit for service under subdivision (b)(1)(A)(i)(a) or subdivision (b)(1)(A)(i)(b) of this section shall be required to have five (5) years of actual service to meet the:

(a) Retirement eligibility requirements under §§ 24-4-510 — 24-4-512 and 24-4-601; and

(b) Eligibility requirements for ~~payment upon~~ death benefits under § 24-4-608.

(B)(i) Noncontributory or contributory employment service by a person who qualifies as a public safety member under § 24-4-1004 shall be credited at one and one-half (1½) times the regular rate for crediting service.

(ii) A person receiving credit for service under subdivision (b)(1)(B)(i) of this section shall be required to have five (5) years of actual service to meet the:

(a) Retirement eligibility requirements under §§ 24-4-510 — 24-4-512 ~~and~~ 24-4-601, and 24-4-1103; and

(b) Eligibility requirements ~~of~~ for death benefits under § 24-4-608 and 24-4-1108.

(2)(A)(i) Noncontributory employment as the Governor by a person first elected to a public office covered by the Arkansas Public Employees' Retirement System prior to July 1, 1999, shall be credited as service at three (3) times the regular rate for credited service.

(ii) Noncontributory or contributory employment as the Governor by a person first elected to a public office covered by the system on or after July 1, 1999, shall be credited at the regular rate for crediting service.

(B) A person receiving credit for service under subdivision (b)(2)(A)(i) or subdivision (b)(2)(A)(ii) of this section shall be required to have:

(i) Four (4) years of actual service to meet the retirement eligibility requirements under §§ 24-4-510 — 24-4-512, ~~and~~ 24-4-601, and 24-4-1103; and

(ii) Five (5) years of actual service to meet the eligibility requirements for ~~payment upon~~ death benefits under § 24-4-608 and 24-4-1108.

(3)(A)(i) Noncontributory employment as an elected state constitutional officer by a person first elected to a public office covered by the system prior to July 1, 1999, shall be credited at two and one-half (2½) times the regular rate for crediting service.

(ii) Noncontributory or contributory employment as an elected state constitutional officer by a person first elected to a public office

covered by the system on or after July 1, 1999, shall be credited at the regular rate for crediting service.

(B) A person receiving credit for service under subdivision (b)(3)(A)(i) or subdivision (b)(3)(A)(ii) of this section shall be required to have five (5) years of actual service to meet the:

(i) Retirement eligibility requirements under §§ 24-4-510 — 24-4-512, ~~and 24-4-601, and 24-4-1103~~; and

(ii) Eligibility requirements for ~~payment of~~ death benefits under § 24-4-608 and § 24-4-1108.

(4)(A)(i) Noncontributory or contributory employment as a member of the General Assembly shall be credited at the regular rate for crediting service.

(ii) A person receiving credit for service under subdivision (b)(4)(A)(i) of this section shall be required to have:

(a) Ten (10) years of credited service to meet the retirement eligibility requirements of §§ 24-4-510, 24-4-511, ~~and 24-4-609~~ 24-4-601, and 24-4-1103;

(b) Five (5) years of actual service to meet the eligibility requirements for ~~the payment upon~~ death benefits under § 24-4-608 and 24-4-1108; and

(c) Five (5) years of actual service to be eligible to purchase military service credit under § 24-2-502.

(B) A member of the General Assembly who at any time has served at least six (6) months in the General Assembly shall be credited with no more than one (1) year's actual service.

(5)(A) A person who is employed as an elected public official covered by the system and:

(i) Who has served in a noncontributory elected position covered by the system before July 1, 2011, shall be credited as service at two (2) times the regular rate for crediting service;

(ii) Who has served in a contributory elected position covered by the system between July 1, 2011, and before January 1, 2014, shall be credited as service at two (2) times the regular rate for crediting service.

(iii) Who has never served in a noncontributory elected position covered by the system before July 1, 2011, shall be credited as service at two (2) times the regular rate for crediting service, and the employee shall contribute an additional two and one-half percent (2.5%) of the gross payroll, and the employer shall contribute an additional two and one-half percent (2.5%) of the gross payroll for the additional service that exceeds the regular rate of service; or

~~(iii)~~ (iv) Who has never served in a contributory elected position covered by the system before January 1, 2014, shall be credited as service at two (2) times the regular rate for crediting service, and the employee shall contribute an additional two and one-half percent (2.5%) of the gross payroll, and the employer shall contribute an additional two and one-half percent (2.5%) of the gross payroll for the additional service that exceeds the regular rate of service.

(B) However, at least five (5) years of actual service shall be required to meet:

(i) The retirement eligibility requirements of §§ 24-4-510 — 24-4-512, ~~and 24-4-601,~~ and 24-4-1103; and

(ii) The eligibility requirements ~~of~~ for death benefits under § 24-4-608 and 24-4-1108.

(C) This subdivision (b)(5) does not apply to:

(i) The Governor;

(ii) An elected state constitutional officer;

(iii) A member of the General Assembly; or

(iv) An elected public official under the State Division of the Arkansas Public Employees' Retirement System.

(6)(A)(i) Noncontributory employment as an elected public official under the state division of the system other than the Governor, an elected state constitutional officer, or a member of the General Assembly by a person first elected to a public office covered by the Arkansas Public Employees' Retirement System prior to July 1, 1999, shall be credited as service at two (2) times the regular rate for crediting service.

(ii) A person receiving credit for service under subdivision

(b)(6)(A)(i) of this section shall have five (5) years of actual service to meet the:

(a) Retirement eligibility requirements under §§ 24-4-510 — 24-4-512, ~~and 24-4-601, and 24-4-1103~~; and

(b) Eligibility requirements for ~~payment upon~~ death benefits under § 24-4-608 ~~and 24-4-1108~~.

(B) Noncontributory or contributory employment as an elected public official under the state division of the system other than the Governor, an elected state constitutional officer, or a member of the General Assembly by a person first elected to a public office covered by the system on or after July 1, 1999, shall be credited at the regular rate for crediting service.

(c) As used in this section, “elected state constitutional officer” means the Lieutenant Governor, Attorney General, Secretary of State, Auditor of State, Treasurer of State, and Commissioner of State Lands.

(d)(1) A person first elected to a position beginning on or after July 1, 2005, and covered by the system who will receive service credit at a rate other than the regular rate for crediting service shall accrue that additional service credit on no more than ten (10) years of service.

(2) Employer and employee contributions for a member employed as an elected public official and covered by the system under subdivision (b)(5) of this section shall revert to the regular contribution rate after the member has accrued ten (10) years of additional service credit.

SECTION 8. Arkansas Code § 24-4-603, concerning the refund of contributions, is amended to read as follows:

24-4-603. Refund of contributions.

(a) In the event a former member has left the employ of a participating public employer and requests a refund of his or her accumulated contributions, he or she shall be paid the contributions upon his or her written application for a refund on a form to be supplied by the Arkansas Public Employees' Retirement System.

(b) The former member may receive interest on the contributions if he or she has had accumulated contributions standing to his or her credit in the members' deposit account for at least five (5) years between the date he or she became a member of the system and the date he or she requests the refund of contributions.

(c) The interest shall be paid at a rate and method to be determined by the Board of Trustees of the Arkansas Public Employees' Retirement System and shall be calculated on the balance in the members' deposit account on the last June 30 prior to the date he or she obtains his or her refund.

(d) If a former member has applied for a refund of contributions but returns to employment with a participating public employer prior to the date he or she receives his or her refunded contributions, his or her request shall be void and he or she must again terminate his or her employment to request a refund of contributions.

(e) Refunds of a member's contributions or accumulated contributions, as the case may be, may be made in equal installments according to such rules as the board may adopt from time to time.

(f)(1) If a member receives a refund of contributions from the system upon termination of covered employment and is reemployed by a participating public employer, then they become first hired under this subchapter as of the date of reemployment.

(2)(A) Upon reemployment, the member may reestablish forfeited service credit in the system by depositing the total amount of the refund, with regular interest from the date of withdrawal to the date of deposit.

(B) A member who has reestablished service credit is restored to the date of hire that corresponds to the reestablished actual service.

SECTION 9. Arkansas Code Title 24, Chapter 4, Subchapter 6, is amended to add a new section to read as follows:

24-4-624. Lump sum payment of reserve value.

(a) The plan may pay the reserve value of any annuity benefit to a retirant or beneficiary when the monthly benefit payment is less than one-hundred fifty dollars (\$150.00) except that the consent of the payee shall be required if the monthly benefit is more than one-thousand seven hundred and fifty dollars (\$1750.00).

(b) The reserve value shall be the actuarial equivalent of the annuity otherwise payable.

(c) A lump sum payment made under this section shall be a complete discharge of all liability under the plan and any benefit rights are extinguished.

SECTION 10. Arkansas Code § 24-4-1002, concerning the subjection of annuity rights to process of law, is amended to read as follows:

24-4-1002. Benefit provisions — Subjection of annuity rights to process of law.

(a) The right of a person to an annuity, to the return of accumulated contributions, the annuity itself, any annuity option, any other right accrued or accruing under the provisions of § 24-4-101 et seq., and all moneys belonging to a plan shall not be subject to execution, garnishment,

attachment, the operation of bankruptcy or insolvency laws, or any other process of law whatsoever and shall be unassignable, except as is specifically provided in this chapter.

(b) An exception to the prohibition against subjection of annuity rights to any process of law is allowed for the following:

(1) An employer shall have the right of setoff for any claim arising from embezzlement by or fraud of a member, retirant, or beneficiary.

(2) A court of competent jurisdiction of this state may order the monthly benefit of a retirant to be paid into the registry of the court for such disposition as the court deems just and proper if the retirant is found by the court to be willfully refusing or failing to support his or her minor dependent children in violation of a court order providing for such support.

SECTION 11. EMERGENCY CLAUSE. It is found and determined by the General Assembly of the State of Arkansas that certain provisions of the Arkansas Public Employees' Retirement System Act, a state agency created by the General Assembly for the purpose of providing retirement benefits to public employees of the state, are in need of revision and updating to maintain the retirement laws in conformance with sound public pension policy; that the Arkansas Public Employees' Retirement System operates on a fiscal year of July 1 to June 30; that having a July 1, 2023, effective date is necessary to allow the provisions within this act to begin on the first day of the fiscal year to provide proper administration of the procedures herein; that such revisions and updating are of great importance for actuarial purposes and to protect the benefits to members of the Arkansas Public Employees' Retirement System; and that this act is immediately necessary in order to maintain an orderly system of benefits for the members of the Arkansas Public Employees' Retirement System. Therefore, an emergency is declared to exist and this act being necessary for the preservation of the public peace, health, and safety shall become effective on July 1, 2023.

APERS Survivor Benefits Bills

AN ACT TO AMEND THE ARKANSAS PUBLIC EMPLOYEES' RETIREMENT SYSTEM PLAN REGARDING SURVIVOR BENEFITS; TO SIMPLIFY THE POST-RETIREMENT MARRIAGE PERIOD FOR ELECTION OF SPOUSAL BENEFITS; TO STREAMLINE THE ADMINISTRATION OF SURVIVOR BENEFITS FOR MEMBER'S CHILDREN; TO CLARIFY THE EFFECTIVE DATE OF SURVIVOR'S BENEFITS; TO REMOVE OBSOLETE LAW; AND FOR OTHER PURPOSES.

TO AMEND THE ARKANSAS PUBLIC EMPLOYEES' RETIREMENT SYSTEM PLAN REGARDING SURVIVOR BENEFITS.

SECTION 1. Arkansas Code § 24-4-606 is amended to read as follows:

24-4-606. Annuity options.

(a) ~~Before the date the first payment of a member's annuity becomes due, but not thereafter, a~~ A member may elect to receive his or her annuity as a straight life annuity or ~~may~~ elect to have ~~his or her~~ that annuity reduced and ~~nominate~~ designate a beneficiary in writing and file the elections with the Arkansas Public Employees' Retirement System before that annuity starting date in accordance with the provisions of under one (1) of the following options:

(1) Option A60 — 60 Months Certain and Life Annuity.

(A) Under Option A60, the retirant shall be paid a reduced annuity for life with the provision that if the retirant's death occurs before sixty (60) monthly payments have been made, the full reduced annuity shall continue to be paid for the remainder of the sixty (60) months to such persons and in such shares as the retirant ~~shall have designated in writing and filed with the plan~~. If there is no ~~payee~~ beneficiary surviving, the lump-sum actuarial equivalent of the remaining monthly payments shall be paid to the estate of the last survivor among the retirant and the designated ~~persons~~ beneficiary.

(B) The reduced annuity shall be ninety-eight percent (98%) of the straight life annuity;

(2) Option A120 — 120 Months Certain and Life Annuity.

(A) Under Option A120, the retirant shall be paid a reduced annuity for life with the provision that if the retirant's death occurs before one hundred twenty (120) monthly payments have been made, the full reduced annuity shall continue to be paid for the remainder of the one hundred twenty (120) months to such persons and in such shares as the retirant ~~shall have designated in writing and filed with the plan~~. If there is no ~~payee~~ beneficiary surviving, the lump sum actuarial equivalent of the remaining monthly payments shall be paid to the estate of the last survivor among the retirant and the designated ~~persons~~ beneficiary.

(B) The reduced annuity shall be ninety-four percent (94%) of the straight life annuity;

(3) Option B50 — ~~50~~ Fifty Percent (50%) Survivor Beneficiary Annuity.

(A)(i) Under Option B50, the retirant shall be paid a reduced annuity for life ~~with the provision that, and~~ upon the retirant's death one-half ($\frac{1}{2}$) of the reduced annuity shall ~~be continued~~ continue throughout the future lifetime of and paid to such person as the retirant shall have designated ~~in writing and filed with the plan before his or her annuity's starting date~~.

(ii) ~~However, the person must be~~ The member may elect either his;

(a) His or her spouse, with whom the member has been married for not less than six (6) months immediately preceding the first payment due date; ~~or another person~~

(b) A dependent child aged forty (40) or older receiving who is claimed as a dependent upon the retirant's federal tax return more than one-half ($\frac{1}{2}$) support from the retirant for not less than one (1) year immediately preceding the first payment due date.

(B) The reduced annuity to the retirant shall be eighty-eight percent (88%) if the retirant's age and his or her beneficiary's age are the same on the first payment due date, which shall be decreased by one-half of one percent (0.5%), for each year that the beneficiary's age is less than the retirant's age, or which shall be increased by one-half of one percent (0.5%), up to a maximum of ninety-five

percent (95%), for each year that the beneficiary's age is more than the retirant's age.

(C) ~~However, if~~ If the named beneficiary under Option B50 predeceases the retirant, the original unreduced benefit shall be paid to the retirant prospectively; or

(4) Option B75 — ~~75~~ Seventy-Five Percent (75%) Survivor Beneficiary Annuity.

(A)(i) Under Option B75, the retirant shall be paid a reduced annuity for life ~~with the provision that, and upon his or her~~ the retirant's death, three-fourths ($\frac{3}{4}$) of the reduced annuity shall be continued throughout the future lifetime of, and paid to, such person as the retirant ~~shall have designated in writing and filed with the plan before his or her annuity's starting date.~~

(ii) ~~However, the person must be~~ The member may elect either:

(a) the retirant's His or her spouse to whom the member has been married for not less than six (6) months immediately preceding the first payment due date; or another person

(b) A dependent child aged forty (40) or older receiving who is claimed as a dependent upon the retirant's federal tax return more than one-half ($\frac{1}{2}$) support from the retirant for not less than one (1) year immediately preceding the first payment due date.

(B) The reduced annuity to the retirant shall be eighty-three percent (83%) if the retirant's age and his or her beneficiary's age are the same on the first payment due date, which shall be decreased by seven-tenths of one percent (0.7%) for each year that the beneficiary's age is less than the retirant's age or which shall be increased by seven-tenths of one percent (0.7%) up to a maximum of ninety percent (90%) for each year that the beneficiary's age is more than the retirant's age.

(C) ~~However, if~~ If the named beneficiary under Option B75 predeceases the retirant, the original unreduced benefit shall be paid to the retirant prospectively.

(b)(1)(A) The member may elect to cancel the designation of a beneficiary under Option B50 or Option B75 in writing and file with the system upon:

(i) ~~A The death, of a spouse or divorce, or other marriage dissolution from the member's spouse, or; the~~

(ii) The death of a ~~person~~ the member's dependent child forty (40) years of age or older ~~who is the~~ designated as a beneficiary under ~~Option B50 or Option B75 shall cancel, at the written election of the retirant, Option B50 or Option B75 at retirement, providing continuing lifetime benefits to the designated person, and § 24-4-606(a).~~

(B) The member's election under this subsection 24-4-606(b) shall return the retirant to his or her straight life, ~~or the member may elect~~ Option A60; or Option A120 annuity, to be effective the month following receipt by the system of his or her election ~~by the Arkansas Public Employees' Retirement System.~~

(2)(A) A retirant who is receiving a straight life, Option A60, or Option A120 annuity and who marries after retirement or within ~~the one (1) year~~ six (6) months immediately preceding retirement may elect to cancel his or her straight life, Option A60, or Option A120 annuity and may elect Option B50 or Option B75, ~~providing to provide~~ providing to provide continuing lifetime benefits to his or her spouse, ~~but only if the election is;~~

(i) Elected on a form approved by the system; ~~and is received~~

(ii) Received by the system ~~not no~~ not no earlier than ~~one (1) year~~ six (6) months after the date of the marriage and ~~not no~~ not no later than ~~eighteen (18) months~~ one (1) year after that date.

(B) The election shall be effective the first day of the month following the receipt of the notice.

(c) If a member fails to elect an option, his or her annuity shall be paid to him or her as a straight life annuity.

~~(d)(1) The surviving spouse of a system member who retired prior to July 1, 1967, shall receive a monthly survivor's annuity equal to seventy five percent (75%) of the retirant's monthly benefit at the time of death, provided that the surviving spouse was married to the retirant on the date of retirement, the surviving spouse is unmarried, and the surviving spouse makes application to the system on or before June 30, 1995.~~

~~(2) The monthly survivor's annuity shall be effective the first day of the month following the month of application, and no annuity will be paid the surviving spouse for any period prior to the first of the month following the month of application.~~

~~(e)(d)~~ The surviving spouse of a member of the system who retired on or after February 1, 1991, and who elected a straight life annuity shall be entitled to receive a survivor's annuity equal to the amount that would have been received had the member elected Option B75, provided:

(1) The member dies within twelve (12) months of the effective date of retirement; and

(2) The surviving spouse makes application to the system within twelve (12) months of the date of the member's death.

SECTION 2. Arkansas Code § 24-4-608 is amended to read as follows:

24-4-608. Payment of benefits upon death of member before retirement — Exception.

(a) Effective July 1, 2001, if ~~an active~~ a vested member ~~or former member with five (5) or more years of actual service~~ dies before retirement, the applicable benefits provided in this section shall be ~~paid~~ allowed upon the survivor's written application ~~to~~ filed with ~~the Board of Trustees of the Arkansas Public Employees' Retirement System.~~

(b) ~~For purposes of computing~~ To compute benefits provided by this section, the deceased member's ~~or former member's~~ compensation at the time of death shall be the member's compensation for the year immediately preceding the cessation of his or her pay.

(c)(1) A ~~deceased member's or former member's~~ surviving spouse who was married to the member at least six (6) months immediately preceding ~~his or her~~ the member's death shall receive an annuity computed in the same manner in all respects as if the member or former member had:

(A) Retired the date of his or her death with entitlement to an annuity provided for in § 24-4-601;

(B) Elected the Option B75 survivor annuity provided for in § 24-4-606(a)(4); and

(C) Nominated his or her spouse as joint beneficiary.

(2)(A)(i) If the deceased member or former member had satisfied the age and service requirements provided for in § 24-4-101 or had acquired twenty (20) years of actual service, then the ~~spouse~~ spousal annuity shall ~~commence immediately and~~ be payable for life.

(ii) If the deceased member or former member had not satisfied the age and service requirement provided for in § 24-4-101 or had not acquired twenty (20) years of actual service, then the ~~spouse~~ spousal annuity shall ~~commence immediately and~~ be payable until the earlier of his or her remarriage or death.

(B) A surviving spouse who is otherwise eligible but whose benefit has been deferred because the spouse did not meet the age requirements in effect before July 1, 1999, shall be eligible to commence a ~~spouse~~ spousal annuity effective July 1, 1999. ~~The spouse;~~ however, the spousal annuity shall not be retroactive.

(3) The ~~spouse~~ spousal annuity shall not be less than ten percent (10%) of the deceased ~~member's or former~~ member's covered compensation at the time of death.

(4) ~~In any event, as long as~~ For as long as the surviving spouse has in his or her care any of the deceased member's ~~or former member's~~ dependent children ~~receiving who~~ receive a benefit provided for in this section, there shall be payable to him or her a ~~spouse~~

spousal annuity as indicated in this section which shall not be less than ten percent (10%) of the deceased member's ~~or former member's~~ compensation at the time of death.

(d)(1)(A) A deceased member's ~~or former member's~~ dependent child or dependent children shall each receive an annuity of the greater of either ten percent (10%) of the member's ~~or former member's~~ covered compensation at the time of death or an equal share of one hundred fifty dollars (\$150) monthly.

(B) ~~Where there are~~ For three (3) or more dependent children, each dependent child shall receive an annuity of an equal share of the greater of either twenty-five percent (25%) of the covered compensation or one hundred fifty dollars (\$150) monthly.

(2)(A) A child ~~shall be~~ is considered a dependent child for purposes of receiving a survivor's annuity until the child's death, marriage, or attainment of age ~~eighteen (18)~~ twenty-three (23), whichever occurs first.

(B)(i) ~~However, the age eighteen maximum shall be extended as long as the child continues uninterruptedly being a full-time student at an accredited secondary school, college, or university, but in no event beyond his or her attainment of age twenty three (23).~~

(ii) ~~In addition, the age eighteen~~ The age-twenty-three maximum shall be extended for any child who has been deemed physically or mentally incompetent by an Arkansas court of competent jurisdiction or by the board, for as long as the incompetency exists.

(3) ~~Upon a child's ceasing~~ Once a child ceases to be a dependent child, his or her annuity shall terminate, and there shall be a redetermination of the amounts payable to any remaining dependent children.

(e)(1) If at the time of the deceased member's ~~or former member's~~ death there is neither a spouse nor a dependent child, each dependent parent shall receive an allowance of the greater of ten percent (10%) of the deceased member's covered compensation or an equal share of one hundred fifty dollars (\$150) monthly, ~~but only if the board finds that the parent was dependent~~

for at least fifty percent (50%) of his or her financial support upon the member or former member.

(2) A dependent parent eligible for a survivor benefit under this section shall be claimed as a dependent upon the deceased member's or former member's federal tax return for not less than one (1) year immediately preceding the member's death.

(f)(1) If no annuity can become payable to a dependent child due to the death of the member or former member and ~~a~~, the surviving spouse or dependent parents may elect to receive a refund of the member's or former member's accumulated contributions as provided in § 24-4-602(d) in lieu of any benefits which could become payable under this plan if:

(A) The surviving spouse or dependent parents are the only persons who will be eligible for monthly benefits; and the

(B) The spouse or dependent parents are also the designated beneficiaries of the deceased member or former member, then, in that event, the surviving spouse or dependent parents may elect to receive a refund of the member's or former member's accumulated contributions as provided in § 24-4-602(d) in lieu of any benefits which could become payable under this act.

(2) The option to choose a refund of the deceased member's ~~or former member's~~ contributions shall also be afforded to any spouse or dependent parent qualified under this section whose eligibility for the benefit occurred before the passage of this act and who could not exercise the option.

(3) ~~Once the~~ A refund of the deceased member's ~~or former member's~~ accumulated contributions ~~has been~~ made to the surviving spouse or dependent parents under this section, ~~the person shall have no~~ extinguishes any right or future claim to monthly retirement benefits due to the death of the member or former member.

(g)(1) In the event that all the annuities provided for in this section payable on account of the member's death ~~of a member or former member~~ terminate before there has been paid an aggregate amount equal to his or her accumulated contributions standing to his or her credit in the members' deposit account at the time of his or her death, the difference between the

accumulated contributions and the aggregate amount of annuity payments shall be paid to such person as he or she shall have nominated by written designation duly executed and filed with the ~~board~~ system.

(2) If there is no designated person surviving at termination, the difference shall be paid to the member's ~~or former member's~~ estate.

~~(h)(1) Annuities payable under the provisions of this section shall be effective the first day of the calendar month next following the date of the member's or former member's death or the first day of the month following the month in which the survivor becomes eligible for benefits as provided by law.~~

~~(h)~~ (h) The provisions of this section shall not be applicable in determining survivor benefits under the General Assembly Division or the State Constitutional Officers' Division of the ~~Arkansas Public Employees' Retirement System~~ system if a benefit is provided to the surviving spouse by other laws applicable to the ~~Arkansas Public Employees' Retirement System~~ system.

~~(i)~~ (i) The benefits provided in this section for former members shall not apply to former members who terminated covered employment prior to July 1, 1997, with less than ten (10) years of service or whose death occurred before July 1, 2001.

SECTION 3. Arkansas Code § 24-4-609 is amended to read as follows:

24-4-609. Effective date of benefits – Survivors and Beneficiaries.

~~All monthly benefits payable to survivors of deceased members or retirants of the Arkansas Public Employees' Retirement System shall be effective the first day of the month following the month in which the member or retirant died or the first day of the month following the month in which the survivor becomes eligible for benefits as provided by law.~~

(a) The effective date of monthly benefits payable to a survivor of a deceased member is the first day of the calendar month next following the Arkansas Public Employees' Retirement System's receipt of the survivor application and is not retroactive to the member's death.

(b) The effective date of monthly benefits payable to a beneficiary of a retirant is the first day of the calendar month next following the month in which the retirant died.

SECTION 4. EMERGENCY CLAUSE. It is found and determined by the General Assembly of the State of Arkansas that certain provisions of the Arkansas Public Employees' Retirement System Act, a state agency created by the General Assembly for the purpose of providing retirement benefits to public employees of the state, are in need of revision and updating to maintain the retirement laws in conformance with sound public pension policy; that the Arkansas Public Employees' Retirement System operates on a fiscal year of July 1 to June 30; that having a July 1, 2023, effective date is necessary to allow the provisions within this act to begin on the first day of the fiscal year to provide proper administration of the procedures herein; that such revisions and updating are of great importance for actuarial purposes and to protect the benefits to members of the Arkansas Public Employees' Retirement System; and that this act is immediately necessary in order to maintain an orderly system of benefits for the members of the Arkansas Public Employees' Retirement System. Therefore, an emergency is declared to exist and this act being necessary for the preservation of the public peace, health, and safety shall become effective on July 1, 2023.



October 19, 2022

Ms. Amy Fecher, Executive Director
Arkansas Public Employees Retirement System
One Union National Plaza
124 West Capitol Avenue, Suite 400
Little Rock, Arkansas 72201

**Re: Analysis of Proposed Benefit Changes
Email Request from J. Willet Dated 8/18/2022 (Dependent Children's Survivor Benefit)**

Dear Ms. Fecher:

You have asked us for our analysis of a modification to the dependent children's survivor benefit under Arkansas State Code Section 24-4-608 as it relates to the Arkansas Public Employees Retirement System (APERS).

The current provision under statute provides that if a vested active or former member dies prior to retirement, each dependent child shall receive a benefit of 10% of compensation (with a maximum of 25% for all children) to age 18. However, the benefit may be extended as long as the child continues uninterruptedly being a full-time student at an accredited secondary school, college, or university, but in no event beyond his or her attainment of age 23. In addition, the age eighteen (18) maximum shall be extended for any child who has been deemed physically or mentally incompetent by an Arkansas court of competent jurisdiction or by the Board, for as long as the incompetency exists.

The proposed benefit would eliminate the education requirement and extend the dependent children's survivor benefit to either: 1) age 21; 2) age 22; or 3) age 23 for all dependent children, who are not disabled, of a vested active or former member who dies prior to retirement.

The June 30, 2022 valuation data indicates that there are 190 surviving child benefit recipients receiving benefits totaling \$864,924 annually.

June 30, 2022 Survivor Children Recipients

Age	Number	Annual Benefits
<18	131	\$ 546,924
18	15	65,352
19	9	53,544
20	10	45,708
21	6	37,428
22	4	16,620
>= 23	15	99,348
Total	190	\$ 864,924

This is a small group relative to the size of the System. Assuming that the number of recipients who currently receive surviving child benefits from APERS remains representative of ongoing experience, we believe the cost impact on APERS will be small.

The number of current survivor benefit recipients between the ages of 18 and 22 is 44 with annual benefits of approximately \$200,000. This represents about 0.01% of active member payroll. We do not have a means to estimate the number of individuals who would receive coverage if the proposed changes were enacted but a doubling of benefit recipients in this age group would result in an increase in employer contributions of 0.01% of active APERS member payroll.

If the maximum attained age is lowered from 23 to 21 or 22, the eligibility group would change. Non-students would receive an additional benefit through the extended period, while full-time students who attend college to age 23 would see a reduced benefit. The increase as a result of extending out the maximum attained age for all children survivors would be somewhat offset by the reduction due to the decrease in the maximum attained age for full-time students.

It is our understanding that the current provision is administratively burdensome to APERS staff. There may be concurrent savings in administrative costs to help offset some of the increased costs due to the increased maximum attainment age.

Please review this letter carefully to ensure that we have understood the proposed provisions properly. The analysis in this letter should not be relied upon if there is doubt about our understanding of the proposed benefits. Our analysis relates only to the plan changes described in this correspondence. In the event that other plan changes are being considered, it is very important to remember that the results of separate actuarial analyses cannot generally be added together to produce a total. The total can be considerably greater than the sum of the parts due to the interaction of various plan provisions with each other, and with the assumptions that must be used.

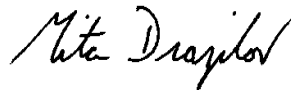


We did not review this proposed benefit provision for compliance with Federal, State, or local laws or regulations, and internal revenue code provisions, nor did we attempt to determine whether these changes would contradict or negate other related State, or local laws. Such a review was not within the scope of our assignment.

Mita D. Drazilov and Heidi G. Barry are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

This communication shall not be construed to provide tax advice, legal advice or investment advice.

Respectfully submitted,
Gabriel, Roeder, Smith & Company



Mita D. Drazilov, ASA, FCA, MAAA



Heidi G. Barry, ASA, FCA, MAAA

MDD/HGB:ah

DRAFT