

**BOARD OF PENSION TRUSTEES
FOR THE
CITY OF JACKSONVILLE RETIREMENT SYSTEM
Thursday, January 26, 2023, at 2 PM
City Hall Conference Room 3C**

AGENDA

1. **CALL TO ORDER**
2. **PUBLIC COMMENT**
3. **MINUTES**
 - a. Copy of December 15, 2022, and January 5, 2023, Board of Trustees Minutes;
RECOMMENDED ACTION: APPROVAL
4. **NEW BUSINESS**
 - a. GEPP December 2022 Consent; PAC RECOMMENDED ACTION: APPROVAL.
COPP December 2022 Consent; COPAC RECOMMENDED ACTION: APPROVAL
 - b. Actuarial Valuation Update
 - 10/1/2022 Valuation Preliminary Results
 - c. **INVESTMENT AND FINANCIAL MATTERS**
 - a. Private Markets Pacing Analysis
 - Real Estate & Private Equity
 - b. Adams Street Private Equity Recommendation
 - c. December Investment Performance Review
 - d. Staff Update
 - Investment Activity Report
6. **OLD BUSINESS**

None
7. **ADMINISTRATIVE**
 - a. Staff Update
8. **INFORMATION**
 - a. Manager Review Meeting with PGIM – Real Estate scheduled for Thursday, February 2, 2023, at 12:30 PM (meet and greet starts at 12:00)
 - b. Next regular BOT meeting scheduled for Thursday, February 23, 2023, at 2 PM
9. **PRIVILEGE OF THE FLOOR**
10. **ADJOURNMENT**

**BOARD OF PENSION TRUSTEES
FOR THE
CITY OF JACKSONVILLE RETIREMENT SYSTEM
December 15, 2022**

MINUTES

2:00 PM, held in Person in City Hall Conference Room 3C and via Zoom

Members Present

Jeffrey Bernardo, Chair
Joey Greive, Vice-Chair
David Kilcrease, Secretary
Brian Hughes
Julie Bessent
Diane Moser
Valerie Gutierrez
Jonathan Snell
Richard Wallace

Members Not Present

N/A

Staff Present

Paul Barrett, Treasurer
Brennan Merrell, Senior Investment Officer
John Sawyer, OGC
Tom Stadelmaier, Pension Administrator
Stephanie Smith, Pension Consultant
Andy Robinson, Assistant Pension Administrator

Others Present

Jordan Cipriani, RVK (via Zoom)
Kevin Schmidt, RVK (via Zoom)
Jeffrey Williams, Segal (via Zoom)

1. CALL TO ORDER

Chair Bernardo called the meeting to order at about 2:00 PM.

2. PUBLIC COMMENT

There was none.

3. MINUTES

Ms. Moser motioned to approve the minutes. Mr. Greive seconded the motion. The Chair asked for discussion and there was none. The Chair took a vote and the motion passed unanimously.

4. NEW BUSINESS

a. Consent agendas

Ms. Moser motioned to approve the consents. Mr. Greive seconded the motion. The Chair asked for discussion and there was none. The Chair took a vote and the motion passed unanimously.

b. Resolution

The Chair recognized departing City of Jacksonville Pension Administrator, Thomas Stadelmaier. The Board thanked him for his many years of service both to the City and the Board of Trustees. The Chair read a prepared resolution and presented Mr. Stadelmaier with a framed copy of the resolution. Mr. Stadelmaier thanked the Board and was appreciative of the honor to serve the Board for the past several years.

c. Actuarial Valuation Update

Mr. Stadelmaier mentioned the Pension Office is moving the valuation timeline forward and Segal has been able to prepare a preliminary analysis based on the updated financials of the plan. The analysis utilizes prior year liabilities, and the Pension Office does not anticipate any large changes between last year's liabilities and current liabilities. The memo was prepared with three potential assumed rates of return for the Board to consider. The current rate of 6.625%, along with 6.5%, and 6.4% were provided. Mr. Williams presented an overview of the memo and emphasized the numbers are estimates. He said the goal is to provide preliminary valuation results at the January Board meeting. Mr. Greive asked if there is a sense of current unrecognized gains and losses considering smoothing methodologies that have been employed. Mr. Williams provided data based on those methodologies. Mr. Greive mentioned he is comfortable having a discussion based on an assumed rate of 6.5% and Ms. Bessent agreed. Mr. Greive made a motion to adopt the 6.5% assumed rate of return for the 10/1/22 actuarial valuation. Ms. Moser seconded the motion. Chair Bernardo and Mr. Hughes mentioned they were comfortable with the 6.5% rate as well. The Chair asked for further discussion and there was none. The Chair took a vote and the motion passed unanimously.

Mr. Stadelmaier continued with a discussion on surtax smoothing. Mr. Barrett asked Segal to research how smoothing the surtax would affect the plans. The Police and Fire Pension Fund (PFPF) adopted this methodology, and the question has arisen if the General Employees Pension Plan (GEPP) and Corrections Officers Pension Plan (COPP) would benefit from the same procedure regarding predictions of surtax utilization. Mr. Williams recommended a review by both legal counsel and state actuaries, but Segal does not see an issue with GEPP and COPP adopting the methodology. Mr. Williams

spoke more on how surtax smoothing would affect the plans. Mr. Greive inquired about the real value of the impact on revenue smoothing and asked Staff to inquire with OGC and the state to confirm this process is permissible. Mr. Hughes asked about applying this methodology to revenue projections and if recessionary decreases are anticipated. Further discussion continued between the Board, staff, and Mr. Williams. Mr. Stadelmaier recognized the Board would like to pause the decision on this topic and instructed Segal to proceed with the current valuation process without smoothing the surtax.

Mr. Stadelmaier spoke on the current contract with Segal. The contract expires at the end of the year 2022 and staff recommends an extension of the contract for Segal to complete the 10/1/22 valuations. The Board will then have the opportunity to make a change to the actuary through RFP or extend the services of Segal for another year. Mr. Stadelmaier mentioned the contract extension comprises a two-year period, but the Fund will have the option to amend the timing and only contract for certain services. Chair Bernardo inquired about prorating annual expenses. Mr. Stadelmaier and Mr. Williams spoke on the required experience study for the period October 2017 through September 2022. Mr. Greive asked if the experience study is mandated by state statute. Mr. Williams commented the state requires the study every five years. Mr. Kilcrease motioned to extend the contract to allow Segal to finish the 10/1/22 valuation process. Mr. Greive seconded the motion. The Chair asked for further discussion and there was none. The Chair took a vote and the motion passed unanimously. Mr. Hughes asked staff to provide a sense of the timeline for the experience study and if a partial contract extension is warranted at the next Board meeting.

5. INVESTMENT AND FINANCIAL MATTERS

Mr. Merrell provided details on the November preliminary investment report. The total fund was up 2.5% MTD, up 5.3% FYTD, and the market value totaled \$2.2 billion. Mr. Merrell highlighted that the Loomis Large Cap Growth Fund beat the benchmark by 3%. Mr. Schmidt provided performance MTD for December down -.06%, up 5.3% FYTD, and down -13.4% CYTD.

Ms. Cipriani spoke on 2023 Strategic Initiatives. She spoke on key investment initiatives including pacing studies, non-core real estate commitments, private equity commitments, asset allocation study, US equity structure study, investment policy statement review, the asset / liability study, and ongoing comprehensive performance reporting. Ms. Cipriani mentioned potential real estate opportunities, an investment policy guideline review, and Large Cap Value manager strategies. Chair Bernardo thanked RVK for their presentation and inquired which items are priorities in 2023. Ms. Cipriani provided a timeline on the highest priority topics. Further discussion was held on experience and asset / liability studies, timeframes, and fees. Mr. Stadelmaier mentioned that staff recommends moving forward with the asset / liability study in 2023. Mr. Greive motioned to direct RVK with beginning the asset / liability study. Ms. Moser seconded the motion. The Chair asked for discussion and there was none. The Chair took a vote and the motion passed unanimously. Further discussion was held regarding market conditions, capital calls, the manager watchlist, and investment selections.

Mr. Merrell provided an update on the contract status with Bell Partners, and he mentioned the upcoming manager meetings. He spoke on capital calls and provided follow-up data that was requested by the Board at prior meetings.

6. OLD BUSINESS

None

7. ADMINISTRATIVE

Mr. Robinson provided an update on the new IRS W-4P requirements scheduled to be implemented on January 1, 2023. He said the testing process was successful from an internal standpoint and the process is now live in both the pension software platform and the online pension portal. Mr. Robinson said communications to pensioners informing them of the changes will be completed by year end. Mr. Stadelmaier mentioned the new process will allow retirees to estimate their withholding tax before making a change and the new process is an added benefit to pensioners.

Chair Bernardo asked for any Board questions and there were none.

8. INFORMATION

The next regular BOT meeting is scheduled for Thursday, January 26, 2023, at 2 PM.

Investment due diligence workshop will be held Thursday, January 5, 2023, at 12:30 PM.

9. PRIVILEGE OF THE FLOOR

Several staff members thanked Mr. Stadelmaier for his service to the City and the Pension Office.

10. ADJOURNMENT

The Chair adjourned the meeting at about 3:30 PM.

**BOARD OF PENSION TRUSTEES
FOR THE
CITY OF JACKSONVILLE RETIREMENT SYSTEM
January 5, 2023**

MINUTES

12:30 PM, held in Person in City Hall Conference Room 3C and via Zoom

Members Present

Jeffrey Bernardo, Chair
Richard Wallace
Diane Moser (via Zoom)

Members Not Present

Joey Greive, Vice Chair
Brian Hughes
Jonathan Snell
Julie Bessent
David Kilcrease, Secretary
Valerie Gutierrez

Staff Present

Roger Phillips, Sr. Manager of Debt and Investments
Brennan Merrell, Senior Investment Officer
Robin Adams, Manager – Treasury Accounting
Tom Stadelmaier, Pension Administrator
Hannah Wells, Pension Coordinator

Others Present

Darren Kleis, Managing Director, Portfolio Management, Principal
Mirka Luoto, Managing Director, Inst. Sales & Relationship Mgr, Principal
Bob Blanco, COJ Planning Services Manager

1. CALL TO ORDER

Chair Bernardo called the meeting to order at about 12:30 PM.

This is a workshop for educational purposes. No votes will take place at the meeting.

2. PUBLIC COMMENT

There was none.

3. INVESTMENT AND FINANCIAL MATTERS

Principal – Real Estate

Mr. Merrell introduced Darren Kleis and Mirka Luoto from the Principal U.S. Property Account. The Principal U.S. Property Account is a daily valued, open-ended, commingled core real estate portfolio. The account has over \$98.5 billion in assets under management (AUM) as of 9/30/22. The COJ General Pension Fund has an allocation of approximately \$170 million or about 7.31% of the overall portfolio invested in the fund. Mr. Kleis and Ms. Luoto covered the provided material in detail.

Ms. Luoto presented an overview of Principal Real Estate including their sectors of focus in private and public equity, and private and public debt. Mr. Kleis spoke on commercial real estate investments, property ownership, diversification, leasing risks, and stable, steady returns. He mentioned competition within the Open-End Diversified Core Equity Index (ODCE) benchmark. Mr. Kleis highlighted several commercial property ventures that are currently in the portfolio, the portfolio and investment team, and an overview of the profile of the account. Chair Bernardo inquired about the range of debt the fund manages. Mr. Kleis said between 18-27% leverage has been in the fund within the past ten years. Mr. Kleis spoke on occupancy rates and Chair Bernardo asked about rented properties that are not physically being utilized. Mr. Kleis responded to his question and spoke on leases and sub-leases. Mr. Phillips asked about steps being taken to mitigate tenant departures. Mr. Kleis provided an answer to his question by speaking on relationships, capital improvement projects, refining lease language, and being tenant focused. Mr. Kleis mentioned contributions to and withdrawals from the fund. He said they use the proceeds of sales to pay down debt rather than refinance at higher interest rates. Ms. Luoto spoke on capital calls, Mr. Phillips inquired about cash shortfalls for redemptions, and Chair Bernardo inquired about discounted NAV's regarding movement of capital.

Mr. Kleis spoke on lifecycle diversification and said the fund allows up to 15% to be invested in non-core activities such as leasing or development at any given time. He gave an overview of investment geographic sectors and Principal's investment portfolio including industrial, residential, commercial office, and retail. Chair Bernardo asked about rent renewals. Mr. Kleis spoke on renewal rates for newer and established properties. Mr. Merrell inquired about the future of single-family units held within the portfolio. Mr. Kleis mentioned purposely built single family housing for lease and future projections. Chair Bernardo asked about over and underweight strategies and results and how they are viewed by the investment team. Mr. Kleis mentioned how the research group recommends decisions on buy and sell strategies. He spoke on property sector diversification including alternative property subsectors, partner relationships, and pipeline opportunities. Mr. Kleis presented lists of recent acquisitions, dispositions, and development activity. Chair Bernardo asked about Environmental, Social, and Governance (ESG) within the fund. Mr. Kleis said they approach ESG with a fiduciary responsibility to their clients and responsible property investing.

Mr. Kleis provided data on portfolio returns over the past few years as compared to the benchmark. He mentioned volatility in values, positive and negative appreciations, income returns, and growing income. Mr. Wallace asked about net operating income and Mr. Kleis spoke on that income.

Mr. Merrell asked about the investment process and Mr. Kleis provided details on their methodology.

Mr. Merrell asked for any other Board questions.

Mr. Merrell thanked Principal for their presentation. Principal thanked the Board for their time and commitment.

4. OLD BUSINESS

N/A

5. ADMINISTRATIVE

N/A

6. INFORMATION

The next regular BOT meeting is scheduled for Thursday, January 26, 2023, at 2 PM.

7. PRIVILEGE OF THE FLOOR

None

8. ADJOURNMENT

The Chair adjourned the meeting at about 2:00 PM.

**GENERAL EMPLOYEES PENSION ADVISORY COMMITTEE
FOR THE
BOARD OF PENSION TRUSTEES**

December 2022

CONSENT AGENDA FOR RECOMMENDED BENEFITS

ALL CALCULATIONS AND DOLLAR AMOUNTS HAVE BEEN AUDITED IN ACCORDANCE WITH ACCEPTED PROCEDURES.

1. TIME SERVICE RETIREMENTS

Jose Rivera Diaz, (P&D), effective November 17, 2022, in the monthly base amount of \$1,901.15 at the rate of 55.83% (22 years, 4 months), 15% PLOP \$52,201.53

Dorothy Dixon, (Clerk of Court), effective November 19, 2022, in the monthly base amount of \$3,265.80 at the rate of 80% (32 years), 16 months BACKDROP \$53,756.73

Clarence Harden (PW), effective November 17, 2022, in the monthly base amount of \$2,368.39 at the rate of 75% (30 years), 45-month BACKDROP \$113,584.46

David Johnson, (PW), effective December 3, 2022, in the monthly base amount of \$2,258.07 at the rate of 55% (22 years)

Robin Karoly, (JEA), effective December 3, 2022, in the monthly base amount of \$4,064.59 at the rate of 60.21% (24 years, 1 month), 15% PLOP \$134,324.83

Parison Manigo, (P&D), effective November 19, 2022, in the monthly base amount of \$3,219.40 at the rate of 75% (30 years), 50-month BACKDROP \$172,724.33

James L. Robinson, Jr., (P&D), effective November 19, 2022, in the monthly base amount of \$3,192.28 at the rate of 77.5% (31 years), 15% PLOP \$87,277.15

2. VESTED RETIREMENTS

New Commencements

Jesse Giles, effective November 14, 2022, in the monthly base amount of \$5,066.43

Martin Smellie, effective November 29, 2022, in the monthly base amount of \$281.30

New Deferrals

Nicole Lewis, (R&E), effective December 4, 2033, in the monthly base amount of \$481.81

3. SURVIVOR BENEFITS

Carol Alsobrook, (Charles Alsobrook), effective November 23, 2022, in the monthly COLA base amount of \$3,072.40

Patricia Drayton, (Roosevelt Drayton), effective December 5, 2022, in the monthly COLA base amount of \$1,356.59

Claudia Hughes, (Joseph Hughes), effective October 12, 2022, in the monthly COLA base amount of \$1,331.16

Rebecca Wainwright, (Allan Wainwright Jr.), effective November 20, 2022, in the monthly COLA base amount of \$2,145.59

Dollie Williams, (Raymond Williams), effective November 2, 2022, in the monthly COLA base amount of \$781.41

4. RESTORATION OF SURVIVOR BENEFITS

None

5. CHILDREN/ORPHAN/GUARDIANSHIP BENEFITS

None

6. TIME SERVICE CONNECTIONS COMPLETED

Charles Bedwell, (JEA), 70.33 months in the amount of \$55,204.63

Erik Larsen, (Library), 5.37 months in the amount of \$2,800.10

Errol Schell, (R&E), .33 months in the amount of \$157.58

Leroy Smith, (JEA), 7.7 months in the amount of \$4,712.50

Vernita Williams Goldson, (PW), 24 months in the amount of \$4,459.00

7. TIME SERVICE CONNECTIONS COMPLETED PURSUANT TO ORDINANCE 2000- 624-E (Independent Agency)

None

8. TIME SERVICE CONNECTIONS COMPLETED PURSUANT TO ORDINANCE 2003-573-E (Military)

None

9. REFUNDS

None

10. DB TO DC TRANSFER

Timothy F Allen (JEA), 22 years and 8 months, \$842,976.91

Trina R Cull (Clerk of Court), 19 Years and 5 months, \$59,745.91

Mary Nash (KHA), 12 years and 10 months, \$112,409.44

Tangela A Wells (PW), 5 Years and 7 months, \$27,570.35

11. OTHER PAYMENTS AND TIME CONNECTIONS

None

12. RE-RETIREE

None

13. DISABILITY

None

PAC Secretary Approval

Date

BOT Secretary Approval

Date

Notes and Comments regarding Approval:

CORRECTIONAL OFFICERS PENSION ADVISORY COMMITTEE

December 2022

CONSENT AGENDA FOR RECOMMENDED BENEFITS

ALL CALCULATIONS AND DOLLAR AMOUNTS HAVE BEEN AUDITED IN ACCORDANCE WITH ACCEPTED PROCEDURES.

1. TIME SERVICE RETIREMENTS

None

2. TIME SERVICE CONNECTIONS COMPLETED

Brett Hayden, 11.03 months in the amount of \$6,598.78

3. REFUNDS

David Rodarte, 11 years, \$37,838.14

4. SURVIVOR BENEFITS APPLICATION

None

5. CHILDREN/ORPHAN/GUARDIANSHIP BENEFITS

None

6. VESTED BENEFIT

Brett Hayden, effective September 26, 2050, in the amount of \$3,037.24 at the rate of 41.25% (13 years, 9 months)

7. TIME SERVICE CONNECTIONS COMPLETED PURSUANT TO ORDINANCE 2003-573-E (Military)

Michael Caetano, 8.5 months in the amount of \$10,128.65

8. OFFICERS ENTERING DROP January 2023

Michael Caetano #5511

Rose Caetano #5716

Deshon Edgerton #6827

Kenneth Norton, Jr. #7421

Courtney Pitney #7435

Jose Rivera #6321

9. Phase II Biweekly Distribution DROP Program

William Gwaltney biweekly payment of \$207.97 for 30 years

10. DROP Payments

COPAC Secretary Approval

Date

BOT Secretary Approval

Date

Notes and Comments regarding Approval:

Memorandum

To: Board of Trustees - City of Jacksonville Retirement System

From: Jeffrey S. Williams, Vice President and Actuary

Date: January 20, 2023

Re: Preliminary October 1, 2022 Actuarial Valuation Results

The purpose of this memo is to provide preliminary actuarial valuation results as of October 1, 2022 for the City of Jacksonville's General Employees Retirement Plan (GERP) and Corrections Officers' Retirement Plan (CORP). These results include the recently-approved reduction in the discount rate from 6.625% to 6.50%. All numbers contained herein are preliminary and subject to change.

We have also included results showing the effect of "smoothing" the Pension Liability Surtax and the resultant impact on the City's minimum required contribution. Under this methodology, actual surtax receipts over the last five years are compared to the expected surtax growth rate of 4.25%, and then any excess or shortfall compared to that expected rate is reflected 20% per year for five years. Because actual surtax revenue growth in fiscal 2022 exceeded the assumed growth rate of 4.25%, the "smoothed" projected surtax revenue is lower than under the current methodology. The impact of this smoothing on the City's minimum required contribution is therefore an increase of \$2.0 million for GERP and \$0.3 million for CORP.

This work was completed under the supervision of Jeffrey S. Williams. Mr. Williams meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

cc: Paul Barrett – City of Jacksonville
Matt Powell - Segal
Matt Faems - Segal

General Employees

	Oct 1, 2021	Preliminary Oct 1, 2022 Old Assumptions (6.625%)	Preliminary Oct 1, 2022 New Assumptions (6.50%)	Preliminary Oct 1, 2022 New Assumptions with Surtax Smoothing
1. Employer Normal Cost	\$19,666,050	\$19.5 M	\$21.4 M	\$21.4 M
2. Actuarial Accrued Liability	3,529,433,595	3,609.3 M	3,658.1 M	3,658.1 M
3. Actuarial Value of Assets	2,119,188,413	2,079.6 M	2,079.6 M	2,079.6 M
4. Unfunded Actuarial Accrued Liability	1,410,245,182	1,529.6 M	1,578.5 M	1,578.5 M
5. Florida Chapter 112 determined contribution	120,695,825	131.1 M	135.2 M	135.2 M
6. City's minimum required contribution	83,607,476	91.0 M	94.9 M	96.9 M
7. Funded Percentage (AVA/AAL)	60.04%	57.6%	56.9%	56.9%
8. Market Value of Assets	2,299,661,000	1,826.9 M	1,826.9 M	1,826.9 M
9. Funded Percentage (MVA/AAL)	65.16%	50.6%	49.9%	49.9%

Corrections Officers

	Oct 1, 2021	Preliminary Oct 1, 2022 Old Assumptions (6.625%)	Preliminary Oct 1, 2022 New Assumptions (6.50%)	Preliminary Oct 1, 2022 New Assumptions with Surtax Smoothing
1. Employer Normal Cost	\$5,508,798	\$5.7 M	\$5.9 M	\$5.9 M
2. Actuarial Accrued Liability	503,742,335	525.8 M	534.5 M	534.5 M
3. Actuarial Value of Assets	255,558,542	266.6 M	266.6 M	266.6 M
4. Unfunded Actuarial Accrued Liability	248,183,793	259.3 M	268.0 M	268.0 M
5. Florida Chapter 112 determined contribution	23,748,105	25.1 M	25.8 M	25.8 M
6. City's minimum required contribution	17,185,973	18.0 M	18.7 M	19.0 M
7. Funded Percentage (AVA/AAL)	50.73%	50.7%	49.9%	49.9%
8. Market Value of Assets	285,351,000	237.8 M	237.8 M	237.8 M
9. Funded Percentage (MVA/AAL)	56.65%	45.2%	44.5%	44.5%

January 2023



Real Estate Pacing Analysis

City of Jacksonville Employees' Retirement System



Pacing Study Outline

OBJECTIVE

Set a reasonable 5-year target commitment allocation schedule that results in the total fund approaching the private real estate allocation.

- *The commitment pacing plan should be revisited annually*

PROCESS

RVK uses proprietary software to model the existing portfolio and expected forward commitments. A number of assumptions are made throughout this analysis and include the following:

- *Private real estate investment cash flow/valuation patterns based on historical data from Preqin Alternatives*
- *A custom annualized growth rate for the overall total composite, net of spending rate*

OUTPUT

The pacing study provides a recommended annual commitment volume to meet the total fund's private real estate target.

- *Vintage commitments shown below may be made to one or more investment managers depending on the size of the commitment*
- *Likely to approach the private real estate target slowly to minimize vintage year risk*

Pacing Recommendation Summary

1 Current Plan Statistics (as of November 30, 2022)

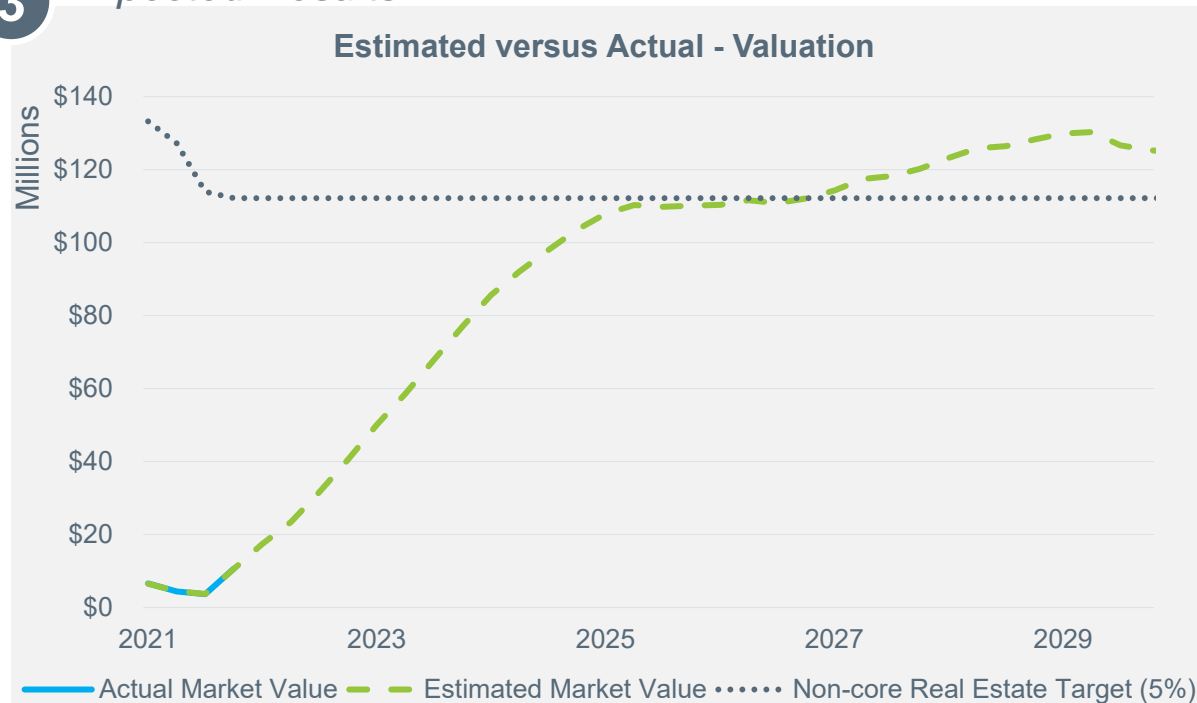
Total plan size	\$2.24 billion
Current non-core real estate target	5.0%
Current non-core real estate allocation	0.5%
Expected plan growth rate	Approximately 0%

2 Recommendation

Year	Commitments
2023	\$20 million
2024	\$20 million
2025	\$20 million
2026	\$20 million
2027	\$20 million

RVK recommends 2023 commitments of \$20 million to achieve the target allocation.

3 Expected Results



Pacing Recommendation Review

- In 2022, RVK recommended annual commitments of \$40 million to reach the target allocation.
- After updating our pacing analysis for 2023, RVK recommends decreasing the annual commitment schedule to \$20 million.
- The decrease in the commitment schedule amount is primarily due to a significant decrease in the total market value of the fund and the decrease in estimated growth rate.
- We now recommend deploying the \$20M across 1-2 funds per year.
- The total plan's allocation to non-core real estate is expected to reach the target allocation of 5% by approximately 2025.

2022 Proposed Commitment Schedule

Year	Commitments
2022	\$40 million
2023	\$40 million
2024	\$40 million
2025	\$40 million
2026	\$40 million



2023 Proposed Commitment Schedule

Year	Commitments
2023	\$20 million
2024	\$20 million
2025	\$20 million
2026	\$20 million
2027	\$20 million

Allocation Analysis

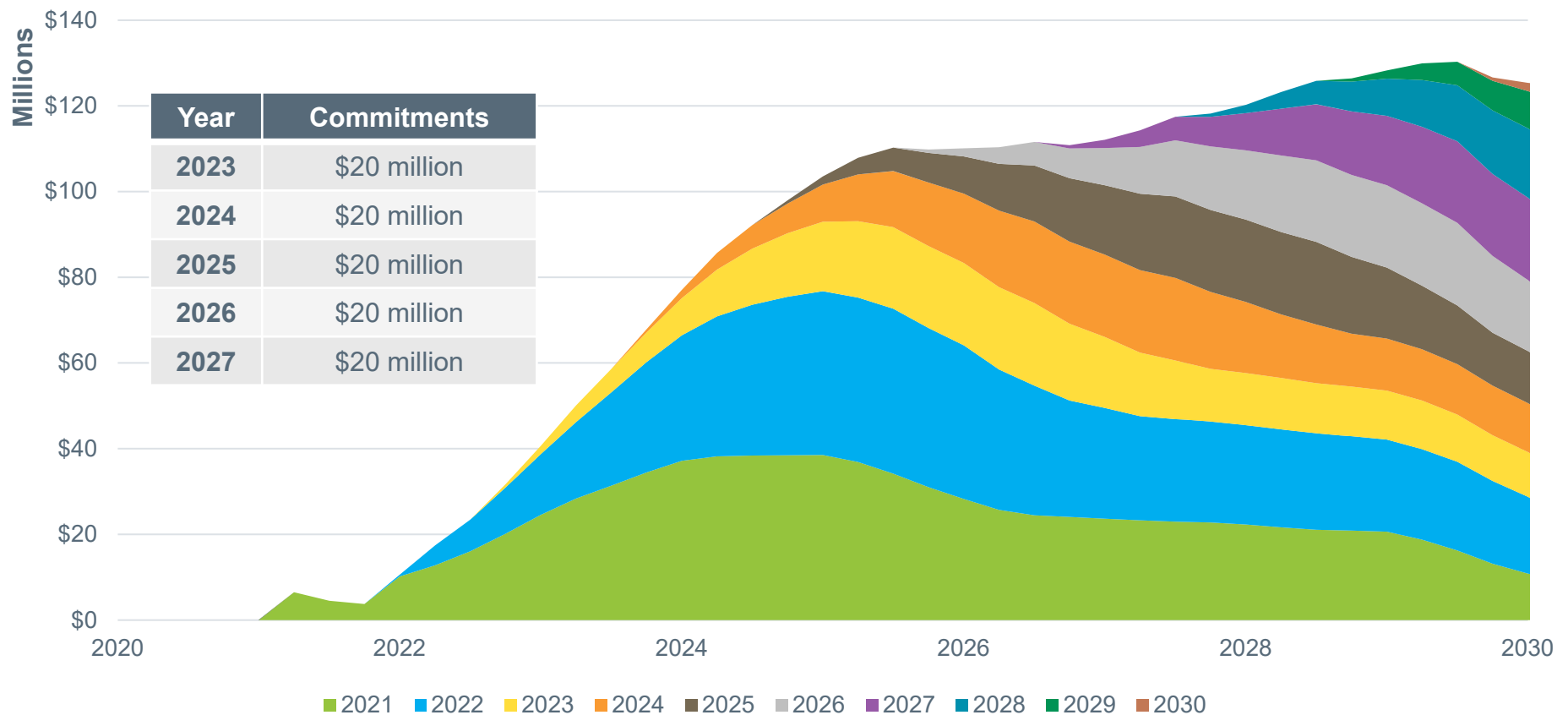


Commitment Recommendation

RVK recommends the following commitment schedule, keeping in mind:

- Vintage year concentration is a large risk in RE
- Annual commitments are likely to represent multiple funds & strategies
- Recommended commitments are approximate
- Attractive RE opportunities may not present equally each year

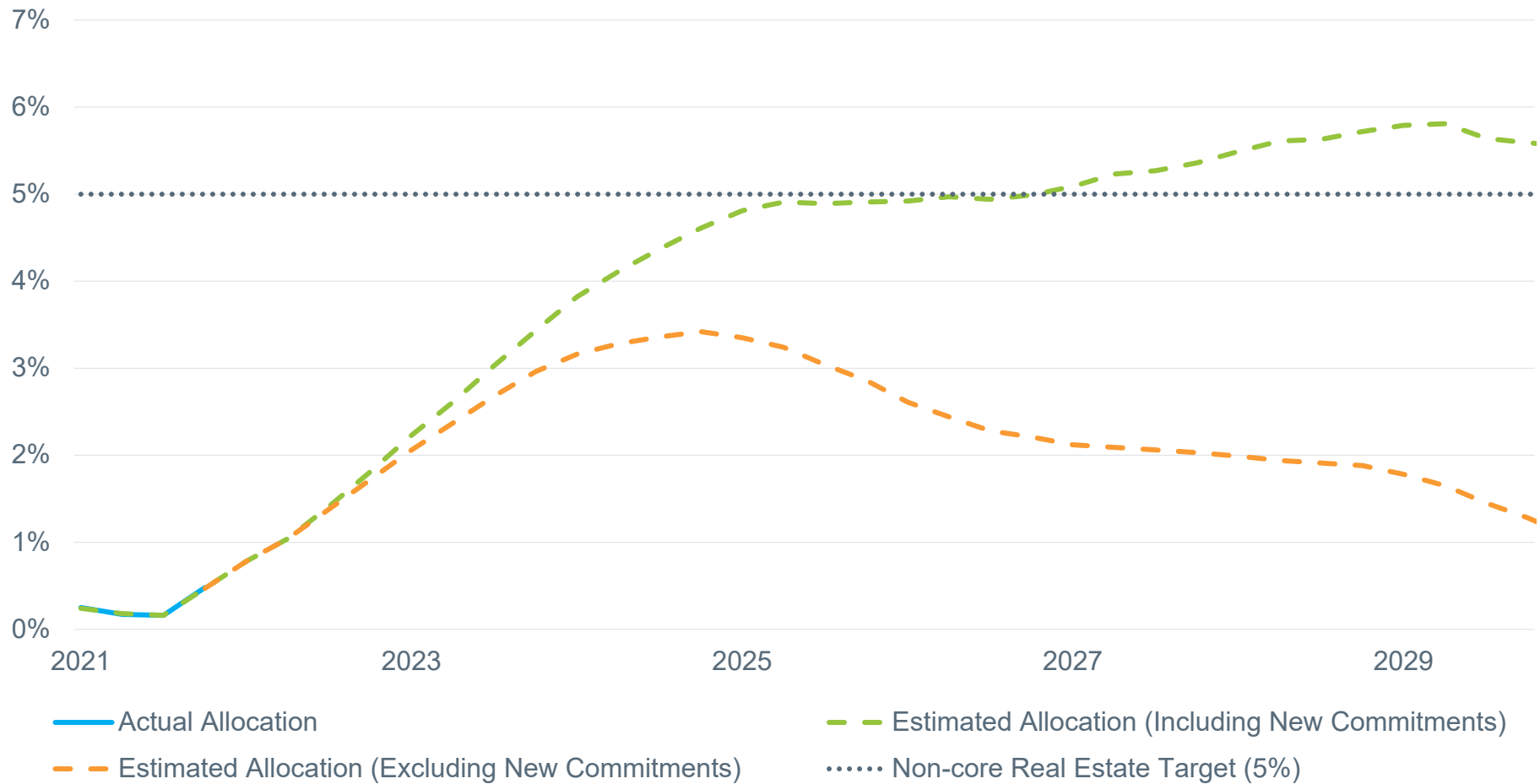
Estimated Total Valuation by Vintage Year



Allocation Analysis

The total fund's allocation to non-core real estate is expected to continue to increase with additional commitments and is anticipated to reach the target allocation by approximately 2025.

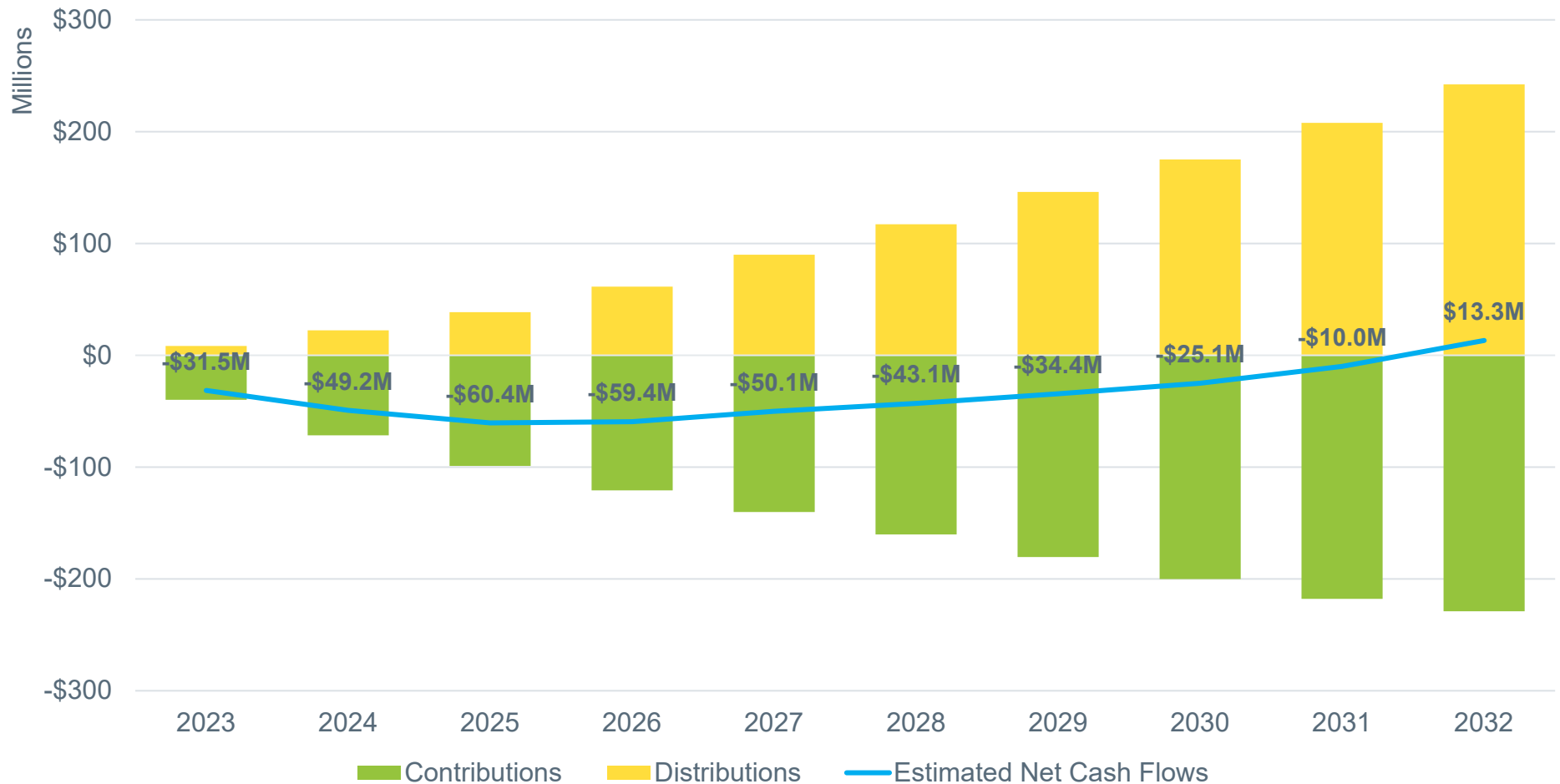
Estimated versus Actual - Allocation Percentage



Cash Flows

Decreasing the annual commitments to \$20M per year pushes forward the self funding status of the portfolio. Including new commitments, the portfolio is now expected to achieve self funding status around 2032.

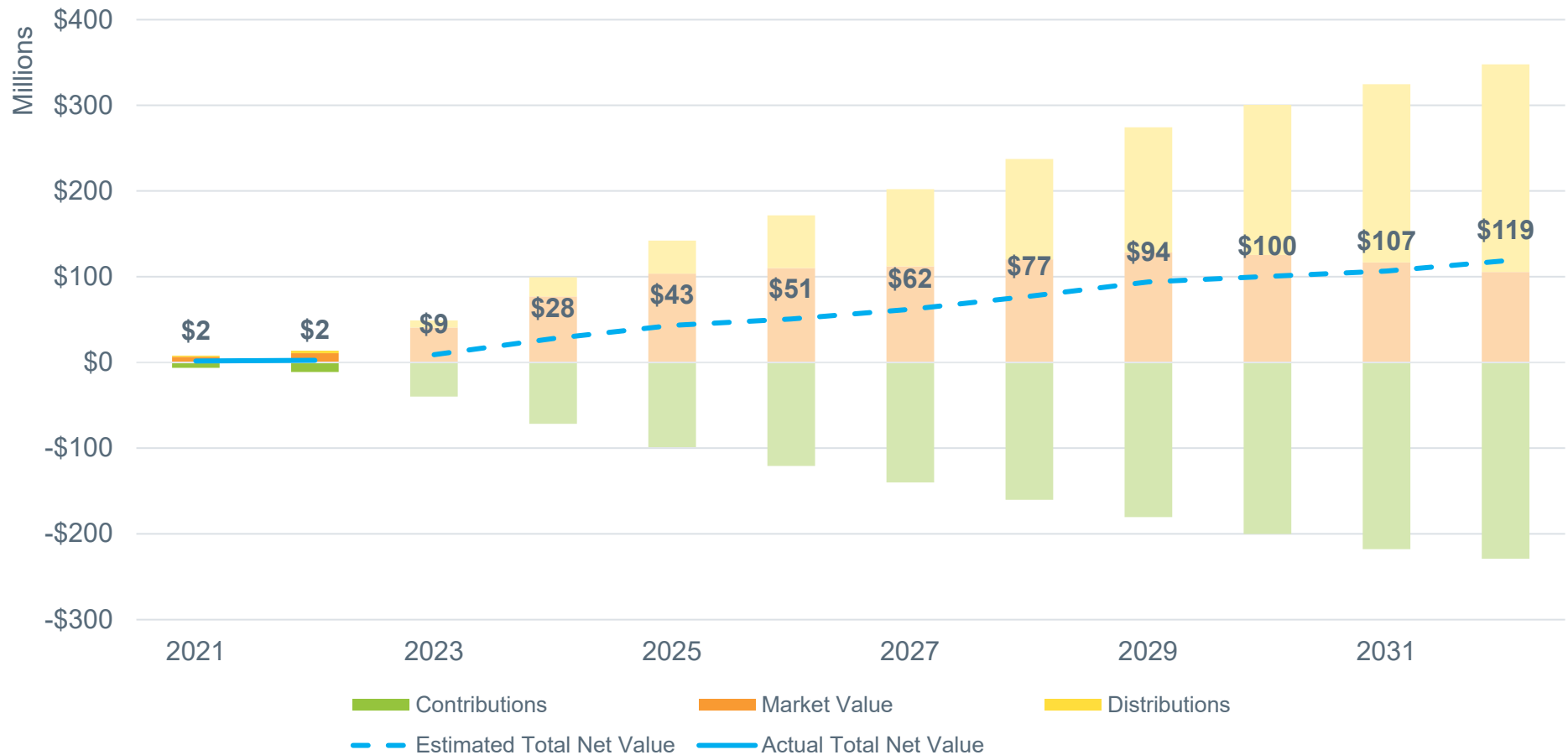
Estimated Portfolio Cash Flows



Value Creation Analysis

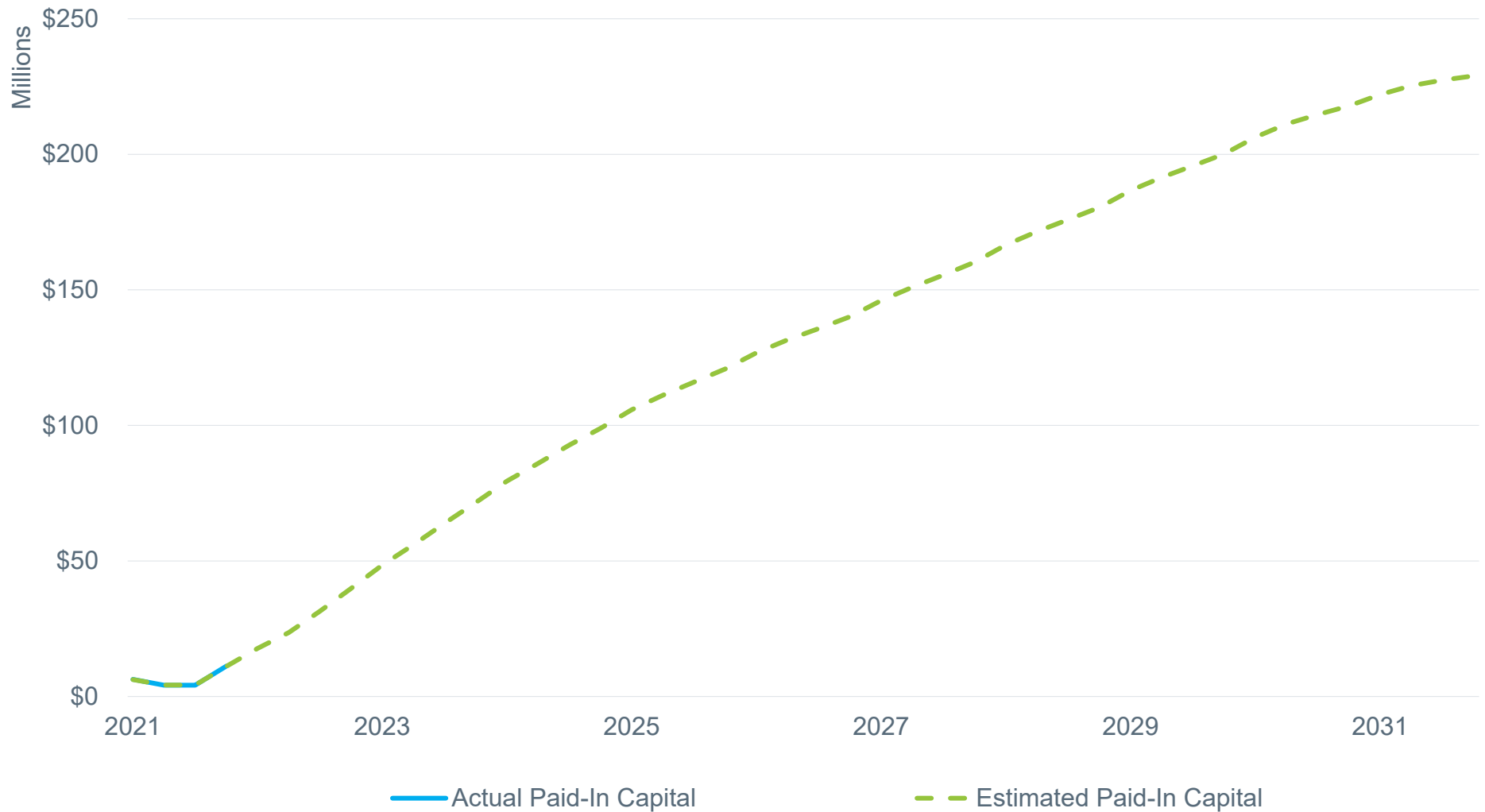
Including new commitments, valuation of the private equity portfolio is expected to increase over time as existing investments mature and capital is contributed to the portfolio. RVK estimates the private equity portfolio will have created \$119 million in total net value from inception through 2032.

Total Net Value



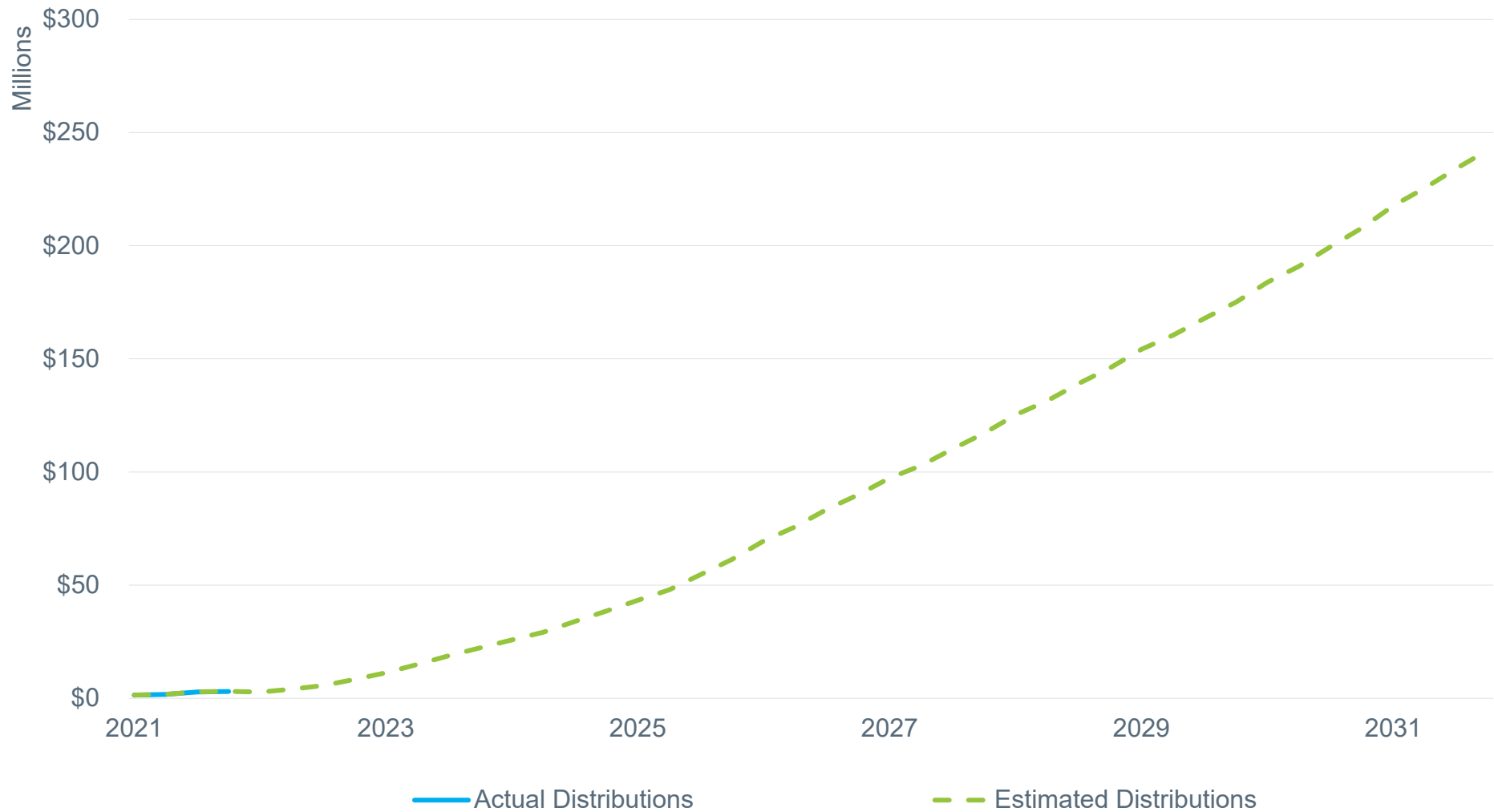
Paid-In Capital Analysis

Estimated versus Actual - Paid-In Capital



Distribution Analysis

Estimated versus Actual - Distributions



Assumptions

RVK utilized the following assumptions in this analysis:

An expected net growth rate of approximately 0%, based on the most recent asset allocation study and an annual spending rate.

Aggregate spending rate of approximately \$163M per year.

One to two non-core fund commitments per year, for the next several vintage years, to maintain vintage and commitment diversification.

Fund cash flow projections for both existing and proposed commitments based on historical, weighted averages by Preqin stage (non-core, distressed real estate debt, opportunistic, etc.).

Non-Core Real Estate Portfolio (as of September 30, 2022)

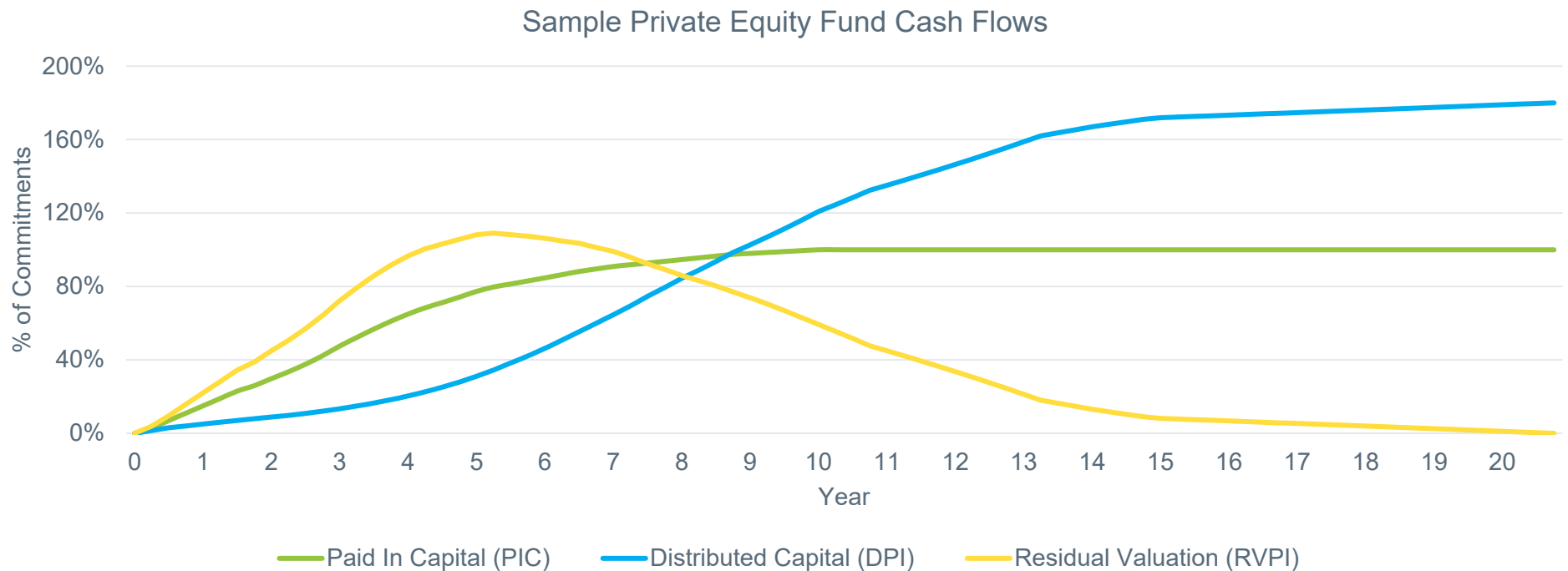
Fund Name	Vintage	Commitment (\$)	Paid In Capital (\$)	Distributions (\$)	Valuation (\$)	Fund IRR (%)	Index IRR (%)	Fund Multiple
H.I.G Realty Partners IV	2021	25,000,000	10,434,814	3,054,088	10,152,124	N/M	N/M	1.27
Hammes Partners IV	2021	15,000,000	0	0	0	N/M	N/M	N/M
Abacus Multi-Family Partners Fund VI	2022	20,000,000	810,645	0	525,696	N/M	N/M	0.65
Bell Fund VIII*	2022	20,000,000	0	0	0	N/M	N/M	N/M
TOTAL		80,000,000	11,245,459	3,054,088	10,677,820			1.22

Bell Fund VIII was committed to after September 30, 2022.

Methodology

The purpose of the pacing study is to develop estimates based on long-term industry averages for use in general cash flow and allocation target planning. The previous pages depict cash flow and valuation estimates utilizing averaged historical data. This data is collected from Preqin Alternatives and represents more than 5,000 funds.

Actual cash flows and allocation percentages may vary substantially from these estimates as a result of market conditions. This analysis should be used for planning purposes only, and no expectations should be made that actual cash flows and allocation percentages will occur at the exact time and level depicted in the preceding pages.



Glossary

Contribution	A cash flow into the private market investment, sent by the investor. Also described as 'Paid In (Capital)'.
Distribution	A cash flow out of the private market investment, received by the investor.
Commitment	The maximum amount of capital an investor expects they would invest during a fund's life. Most funds call between 95% and 100% of commitments.
Net Cash Flows	The sum of contributions and distributions.
Total Net Value	(Distributions + Net Asset Value) – Contributions This represents all value created by an investment, both realized and unrealized.
Total Value to Paid In (TVPI)	The ratio (Distributions + Net Asset Value) / Contributions. This represents the total value created in a fund as a normalized value.
Distributions to Paid In (DPI)	The ratio Distributions / Contributions. This represents the realized value created in a fund as a normalized value.
Residual Valuation (RVPI)	The ratio Net Asset Value / Contributions. This represents the unrealized value created in a fund as a normalized value.
Internal Rate of Return (IRR)	A dollar-weighted measure of return. IRR is defined as the discount rate that reduces the net present value of an investment to zero. IRR almost always represents inception to date annualized returns.
Growth Rate	The assumed growth rate of the total fund. The total fund is assumed to grow at the geometric value from the client's most recent asset allocation minus any expected spending rate plus any expected contributions unless otherwise stated.

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January 2023



Private Equity Pacing Analysis

City of Jacksonville Employees' Retirement System



Pacing Study Outline

OBJECTIVE

Set a reasonable 5-year target commitment allocation schedule that results in the total fund approaching the private equity allocation.

- *The commitment pacing plan should be revisited annually*

PROCESS

RVK uses proprietary software to model the existing portfolio and expected forward commitments. A number of assumptions are made throughout this analysis and include the following:

- *Private equity investment cash flow/valuation patterns based on historical data from Preqin Alternatives*
- *A custom annualized growth rate for the overall total composite, net of spending rate*

OUTPUT

The pacing study provides a recommended annual commitment volume to meet the total fund's private equity target.

- *Vintage commitments shown below may be made to one or more investment managers depending on the size of the commitment*
- *Likely to approach private equity target slowly to minimize vintage year risk*

Pacing Recommendation Summary

1 Current Plan Statistics (as of November 30, 2022)

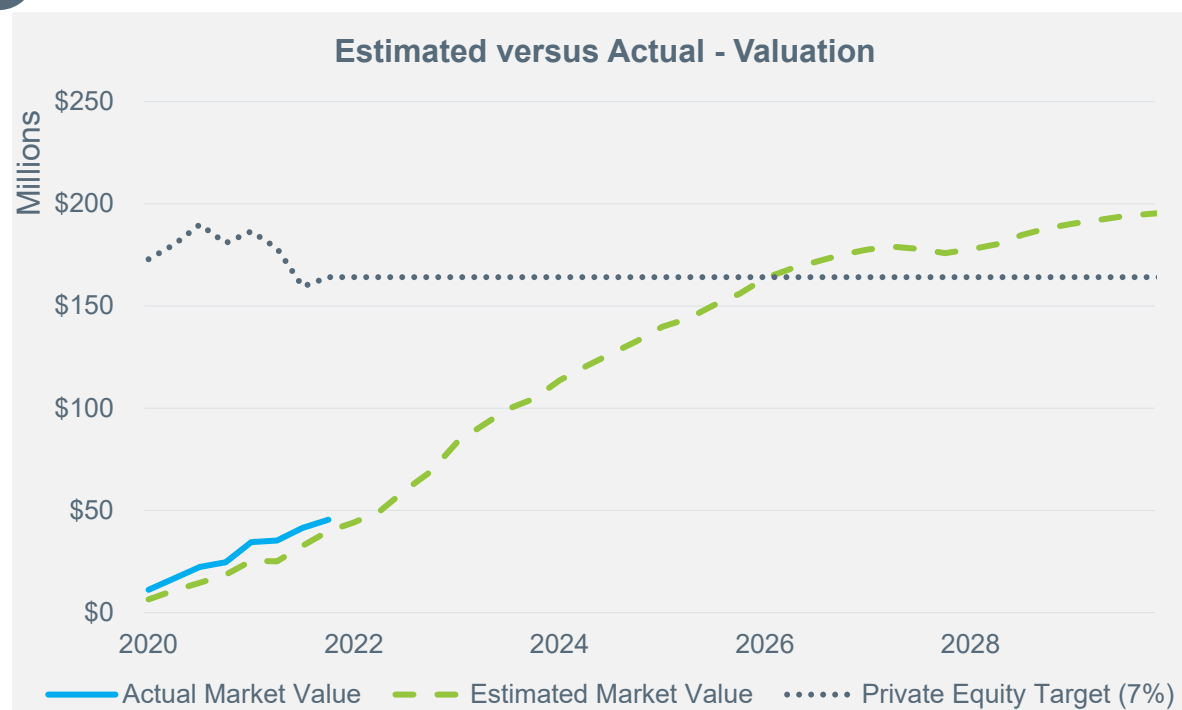
Total plan size	\$2.24 billion
Current private equity target	7.0%
Current private equity allocation	1.9%
Expected growth rate	Approximately 0%

2 Recommendation

Year	Commitments
2023	\$20 million
2024	\$20 million
2025	\$20 million
2026	\$20 million
2027	\$20 million

RVK recommends annual commitments of \$20 million to achieve the target allocation.

3 Expected Results



Pacing Recommendation Review

- In 2019, RVK recommended annual commitments of \$35 million to reach the target allocation.
- After updating our analysis in 2022, RVK recommends decreasing the annual commitment schedule to \$20 million.
- The decrease in commitments is primarily due to the following factors:
 - A decrease in the growth rate to 0%.
 - A decrease in the total plan market value to \$2.3 billion.
- We are now currently expecting to reach the plan's 7% allocation by approximately 2026.

2019 Proposed Commitment Schedule

Year	Commitments
2019	\$35 million
2020	\$35 million
2021	\$35 million
2022	\$35 million
2023	\$35 million



2023 Proposed Commitment Schedule

Year	Commitments
2023	\$20 million
2024	\$20 million
2025	\$20 million
2026	\$20 million
2027	\$20 million

Allocation Analysis

January
19, 2023

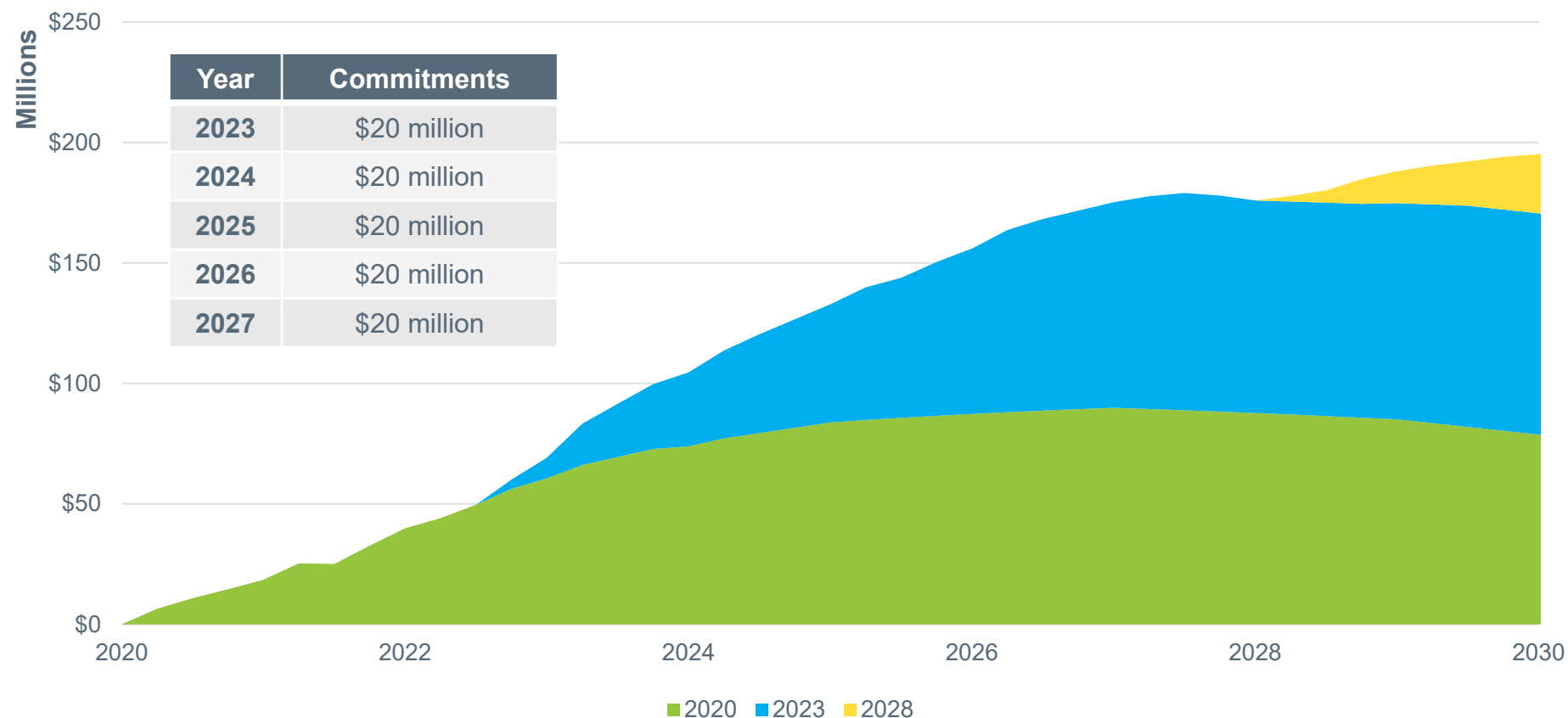


Commitment Recommendation

RVK recommends the following commitment schedule, keeping in mind:

- Vintage year concentration is a large risk in PE
- Annual commitments are likely to represent multiple funds & strategies
- Recommended commitments are approximate
- Attractive PE opportunities may not present equally each year

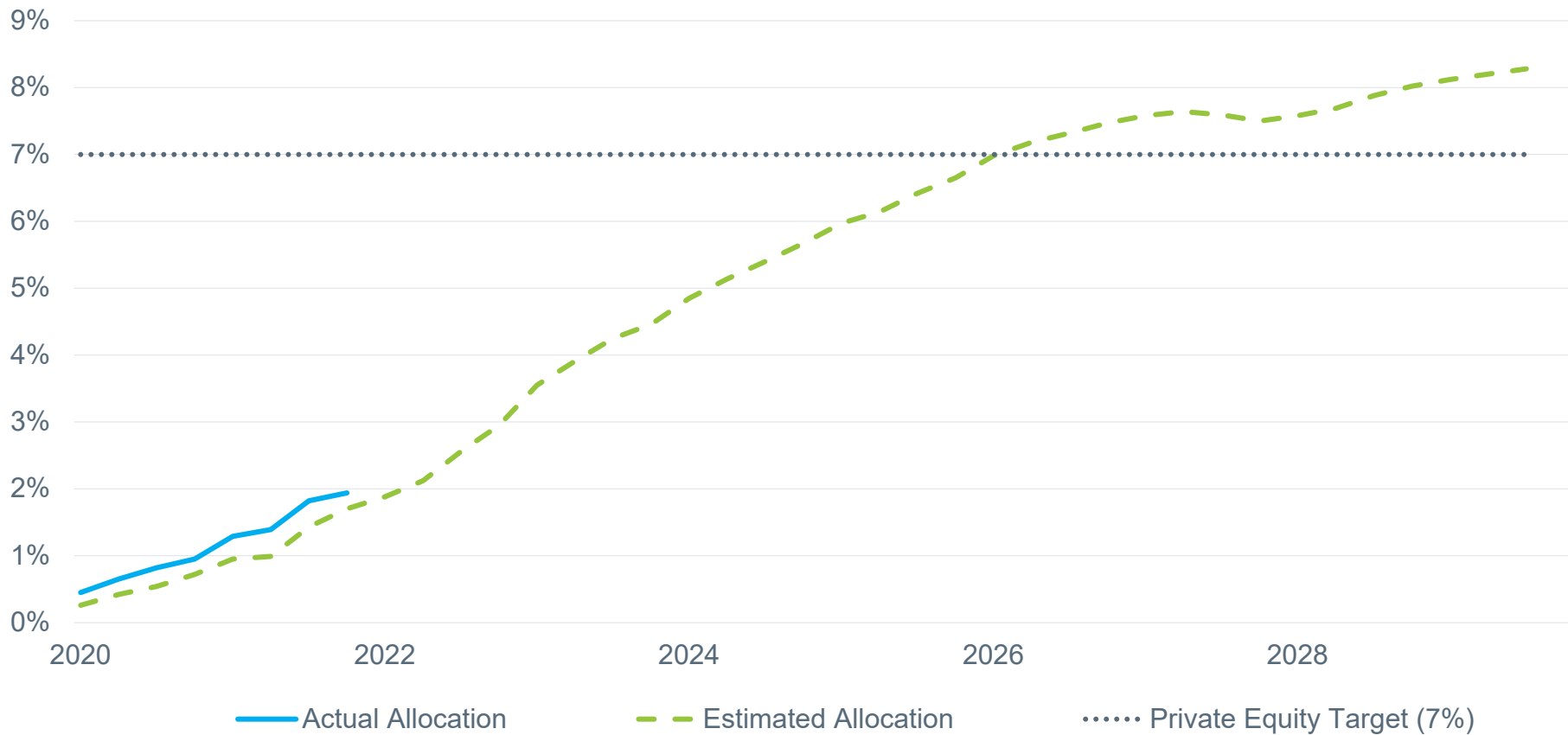
Estimated Total Valuation by Vintage Year



Allocation Analysis

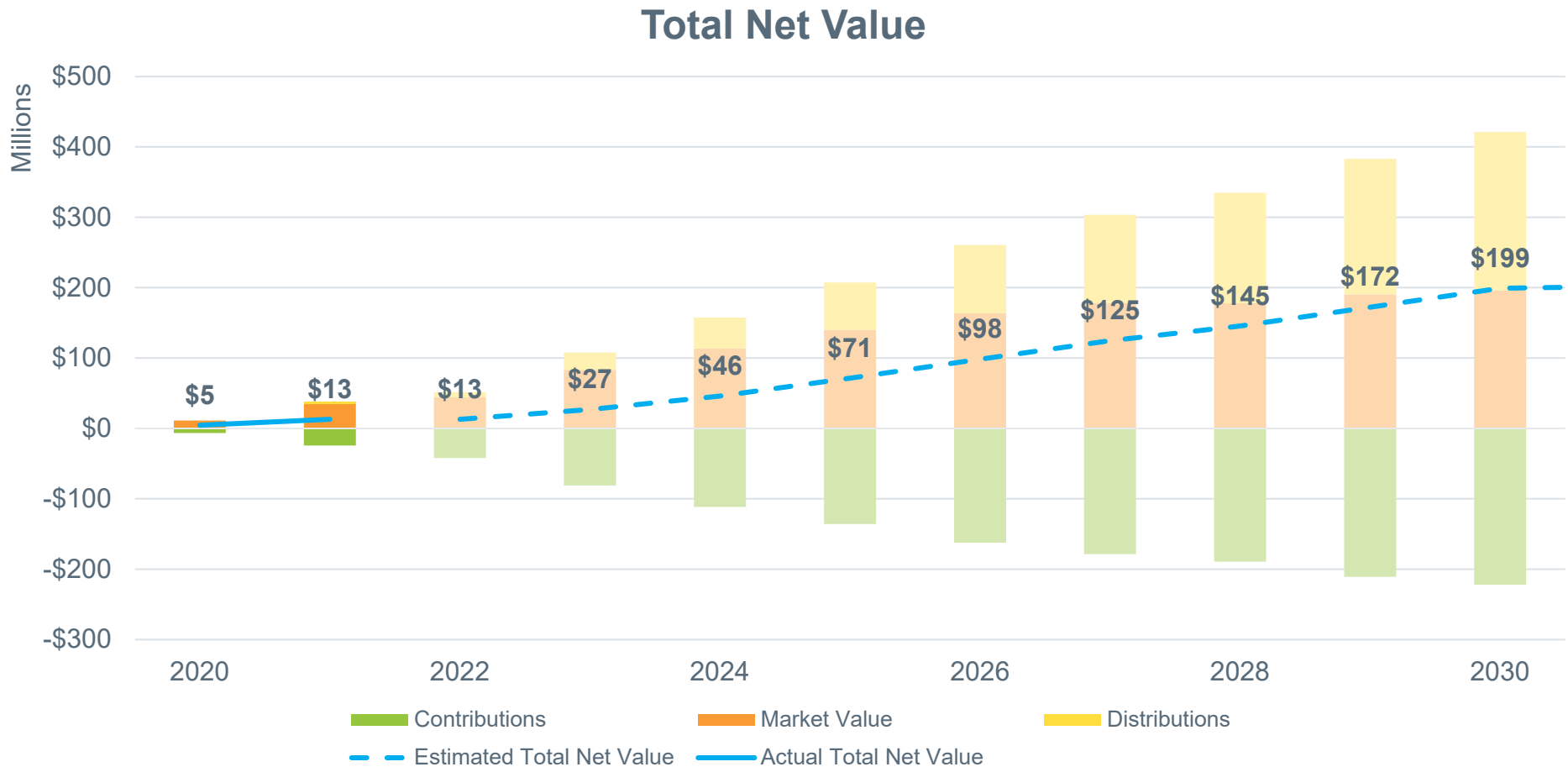
The total fund's allocation to private equity is expected to continue to increase with additional commitments and is anticipated to reach the target allocation in approximately 2026.

Estimated versus Actual - Allocation Percentage



Value Creation Analysis

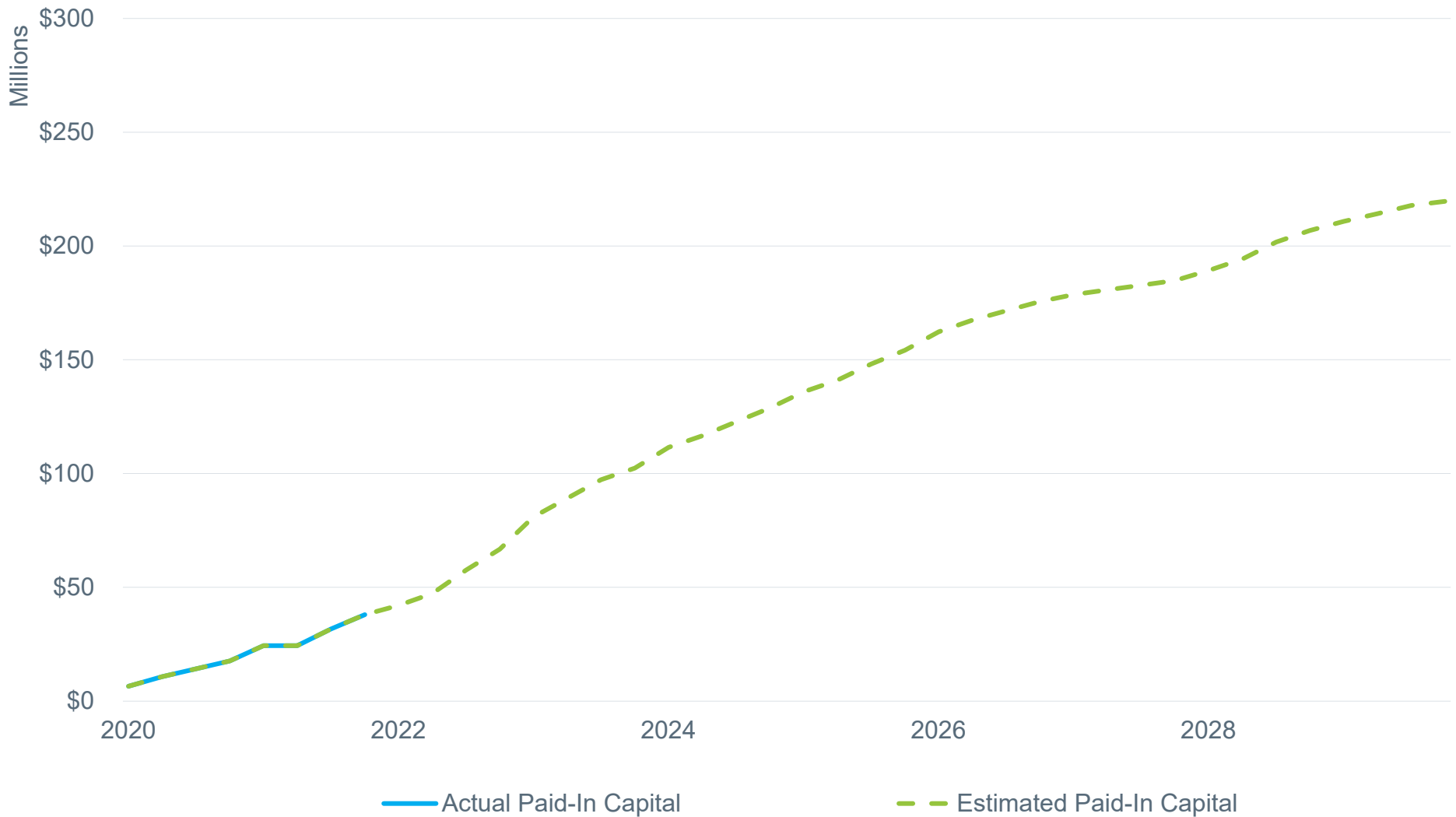
Including new commitments, valuation of the private equity portfolio is expected to increase over time as existing investments mature and capital is contributed to the portfolio. RVK estimates the private equity portfolio will have created \$199 million in total net value from inception through 2030.



Value creation analysis is based on projected future returns and does not guarantee investment outcomes will occur as expected.

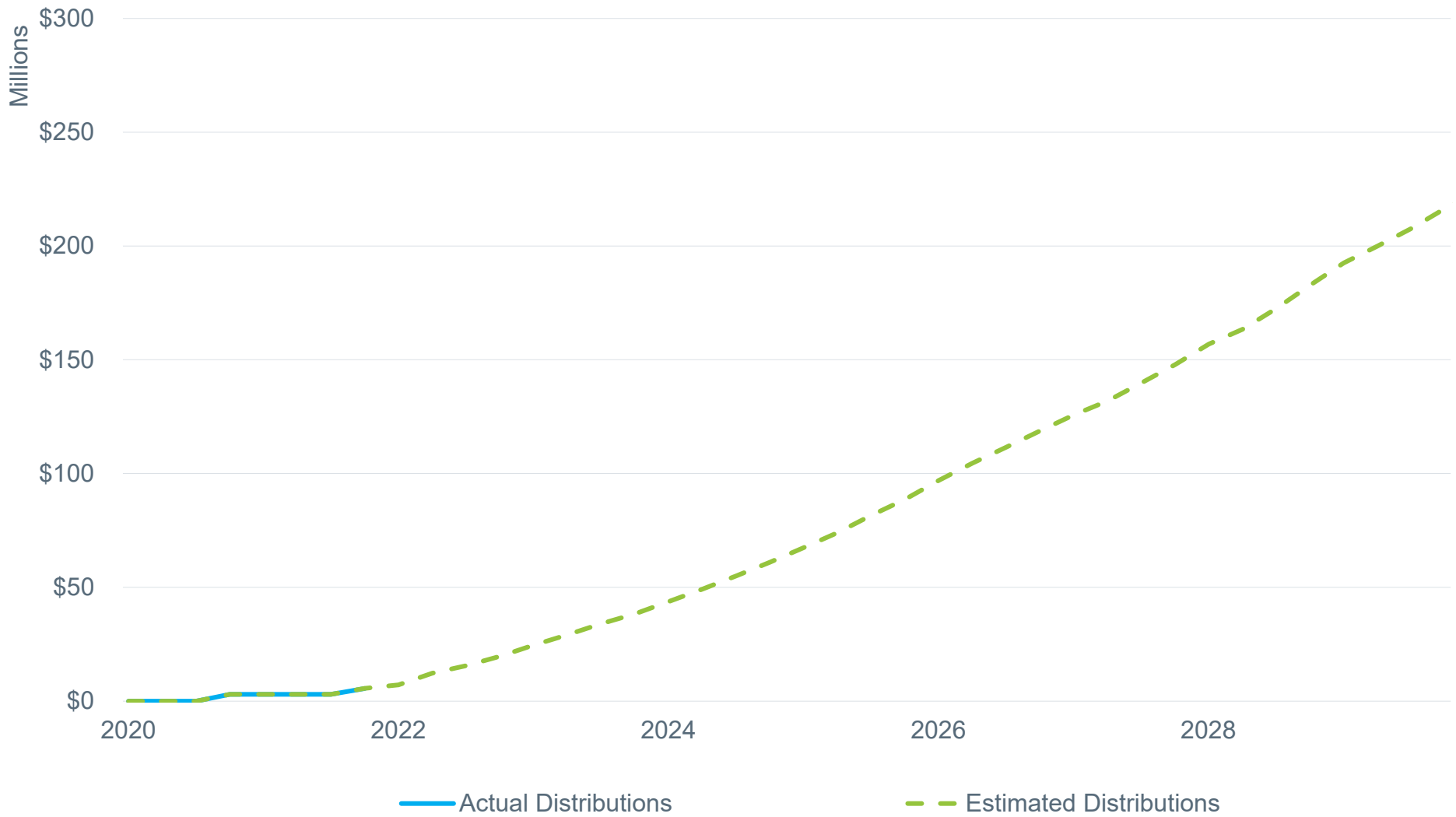
Paid-In Capital Analysis

Estimated versus Actual - Paid-In Capital



Distribution Analysis

Estimated versus Actual - Distributions



Assumptions

RVK utilized the following assumptions in this analysis:

A growth rate of 0%, encompassing the compound return and future expected spending.

A compound return of 6.27%

Future proposed commitments are modeled as a fund of one.

Fund cash flow projections for both existing and proposed commitments based on historical, weighted averages by Preqin stage (buyout, growth, venture, fund of funds, secondaries, etc.).

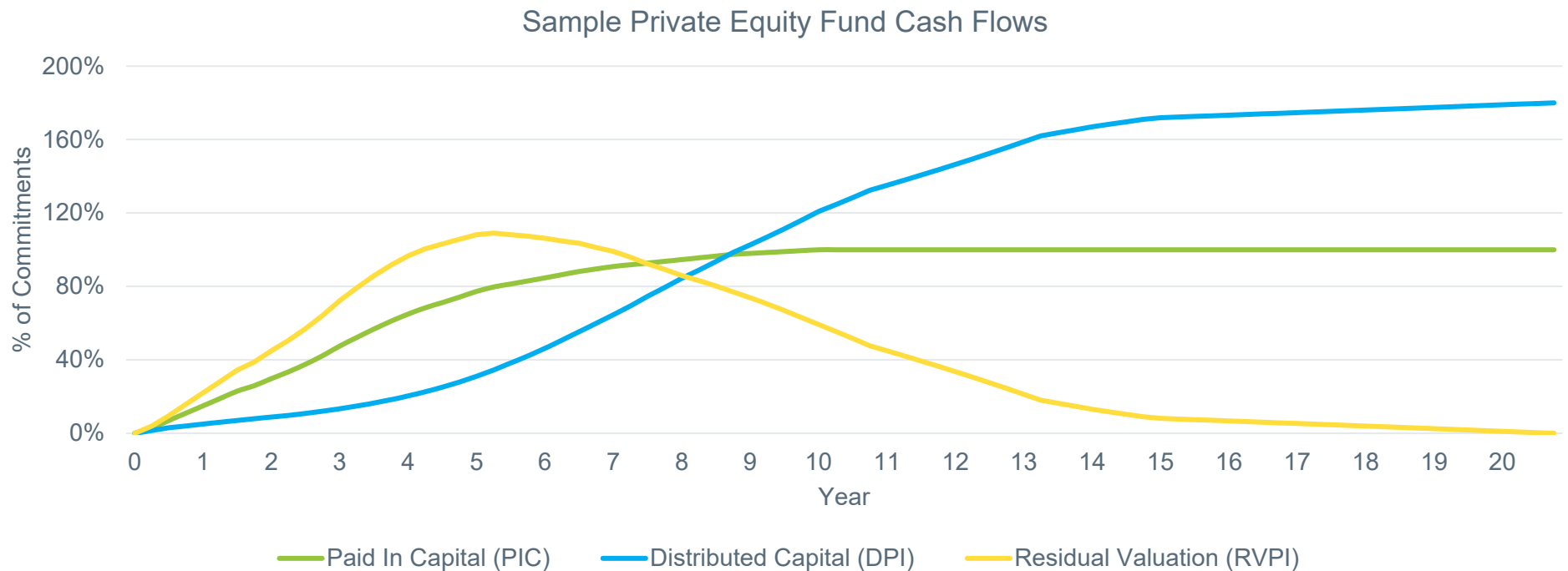
Private Equity Portfolio (as of September 30, 2022)

Fund Name	Vintage	Commitment (\$)	Paid In Capital (\$)	Distributions (\$)	Valuation (\$)	Fund IRR (%)	Index IRR (%)	Fund Multiple
ASP COJ PE Fund LP	2020	105,000,000	37,992,892	5,564,720	45,424,999	36.24	-4.02	1.34
TOTAL		105,000,000	37,992,892	5,564,720	45,424,999	36.24	-4.02	1.34

Methodology

The purpose of the pacing study is to develop estimates based on long-term industry averages for use in general cash flow and allocation target planning. The previous pages depict cash flow and valuation estimates utilizing averaged historical data. This data is collected from Preqin Alternatives and represents more than 5,000 funds.

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Memorandum

To	City of Jacksonville Employees' Retirement System
From	RVK, Inc.
Subject	Private Equity Fund of One Recommendation
Date	January 26, 2023

Background

The purpose of this memo is to support the private equity allocation of the City of Jacksonville Employees' Retirement System ("City of Jacksonville ERS") by recommending additional commitments to the asset class. In 2020, the City of Jacksonville ERS hired Adams Street Partners ("Adams Street") to implement a private equity fund of one, investing \$105 million with the manager over three years. This fund of one, ASP COJ PE Fund, will be fully committed to investments in the second quarter of 2023. Additional commitments in private equity are necessary to continue to approach the City of Jacksonville ERS's 7% private equity target.

The objective of this diligence process was to review Adams Street as the City of Jacksonville ERS's private equity fund of one provider and the suitability of the firm for a follow on fund with similar objectives. This allocation, in concert with the existing private equity investments, will further the City of Jacksonville ERS's progress towards meeting its 7% target allocation to the asset class.

Recommendation

Our recommendation is that City of Jacksonville ERS retain Adams Street to continue to invest in private equity investments on your behalf, via the implementation of a second fund of one consisting of \$100 million of capital, to be deployed over approximately five years. As covered in greater detail in a subsequent section, the recommended pace of deployment in private equity for City of Jacksonville ERS has declined due to a decline in the size of the total fund and an increase in expected distributions over subsequent years, resulting in reduced recommended annual commitments in private equity.

2019 Fund of one Search and Implementation

In 2019, Staff and RVK conducted a search for a private equity fund of one manager to implement a portfolio of primary fund commitments, secondary fund interests, and direct co-investments on behalf of the City of Jacksonville ERS. Due to the economies of scale and infrastructure required to offer globally diversified private equity fund of ones, there are a limited number of firms capable of offering such products. RVK is familiar with substantially all of the providers in the space due to similar mandates and RVK's ongoing research. RVK and Staff issued a Request for Information seeking responses from seven firms regarding each firm's structure, investment team, philosophy, investment process, experience with similar mandates, and prior performance. After a series of proposal reviews, conference calls, and presentations, Staff and RVK selected Adams Street Partners, HarbourVest, and Neuberger Berman as the finalists for the private equity fund of one



mandate. Adams Street was selected by the Investment Committee and was retained after successful contract negotiations in 2020.

Review of COJ PE Fund LP

The City of Jacksonville ERS hired Adams Street to invest \$105 million in private equity over approximately three years in 2020, in a fund of one structure named COJ PE Fund LP. Summary statistics are outlined below and full details on the investments held in COJ PE Fund LP can be found in Appendix 2. To date, the implementation of COJ PE Fund LP is in-line with our expectations, as determined when hiring and contracting with Adams Street.

Figure 1: Summary of COJ PE Fund LP as of September 30, 2022

Commitments (\$M)	\$105,000,000	Unrealized (\$M)	\$45,424,999
Investment Commits (\$M)	\$95,000,000	Realized (\$M)	\$5,564,720
Capital Called (\$M)	\$37,992,892	Inception Date	Oct 2020

Through January 2023, COJ PE Fund LP has committed to 8 primary funds, representing 63% of commitments by dollars. These funds are invested across a range of stages and geographies, though the largest allocation consists of small/mid-market buyout funds investing in US based companies. This primaries allocation includes a \$7 million commitment to Adams Street's Global Growth Equity Fund VII, an in-house direct fund designed to leverage Adams Street's network in venture capital and growth equity.

In addition to the primary fund commitments, commitments to Adams Street's dedicated co-investment and secondaries funds round out the portfolio. Secondaries represent 21% of current COJ PE Fund LP's commitments by dollars while direct co-investments comprise 16% of current committed capital. The remaining committed capital is expected to be allocated to two additional primary fund commitments. Finally, the fund of one is well diversified geographically (20% non-US primary commitments, predominantly Europe). Capital was committed at the fund's inception to Adams Street's internal secondaries and co-investment funds given the closing schedule for these funds and to move the City of Jacksonville ERS toward the fund's private equity target.

Performance of COJ PE Fund LP

Broadly, early performance for COJ PE Fund LP is in-line with or above expectations for the structure and asset class. Due to the cash flow structure of private equity investments, early returns can be less meaningful due to the small amount of capital invested and the lack of real time security prices like those found in public markets. In spite of the performance measurement issues faced by all relatively immature private equity investments, early results for COJ PE Fund



LP appear promising.

Figure 2: COJ PE Fund LP Gross & Net Performance as of September 30, 2022

	Gross IRR	Net IRR	Gross Multiple	Net Multiple
COJ PE Fund LP	45.4%	36.2%	1.43x	1.34x

Performance for COJ PE Fund LP is attractive on an absolute basis as of September 30, 2022, with a net return of 35.0% and net multiple of 1.34x. While RVK's alternatives data provider (Preqin) does not provide full peer rankings until funds are at least three years old, COJ PE Fund LP would rank in the first quartile among the most appropriate peer group. The median 2020 fund of funds achieved a 1.13x net multiple and a first quartile lower bound of 1.23x, which COJ PE Fund LP exceeded as of 9/30/2022. RVK would note that the peer group's returns are preliminary and subject to change pending greater data availability.

Performance of COJ PE Fund LP also compares positively to public markets. As of September 30, the public market equivalent IRR of COJ PE Fund LP is -12.2%, owing to the significant downturn in public equities in 2022. Private equity public market equivalents are calculated by matching the size and timing of the private equity fund's cash flows with an equivalent investment in a public index. In this case, the MSCI World Index was used as the equivalent. The positive absolute return, performance relative to public markets, and outperformance relative to peers are early, positive indications of COJ PE Fund LP's results.

City of Jacksonville ERS Private Equity Pacing

There are challenges associated with managing and maintaining a private equity target allocation as a percentage of the total portfolio. These challenges are primarily due to the structure of closed-end investment vehicles where general partners control cash flows and call and distribute capital over time. The result of this investment structure is a series of cash flows into and out of the investments at somewhat irregular intervals.

In order to account for these issues, RVK completed a private equity pacing study for the City of Jacksonville ERS in January of 2023. This analysis uses detailed cash flow modeling to forecast the cash flow patterns of the City of Jacksonville ERS's existing investments and potential new private equity investments. The goal of this study was to determine the appropriate level of new commitments to meet and maintain the 7% target allocation to private equity. The results of this study indicated that the City of Jacksonville ERS should commit \$100 million to new investments over a five year time period to move toward the target allocation.

This amount has decreased from the prior pacing study, due to a smaller total fund market value, modestly reduced growth expectations for the plan in the intermediate term, as well as adjustments in RVK's expectations for future private equity cash flows through a process that occurs on an annual basis. In the 2019 pacing study, RVK expected the total fund to increase in market value over time net of distributions; given that City of Jacksonville is only beginning deployment in private equity, RVK's pacing analysis is targeting a private equity market value consistent with a 7% allocation in the future and, as such, changes in the expected total fund value have an outsize effect on recommended private equity commitments. Adams Street confirmed they can construct a sufficiently diversified portfolio with \$20 million of annual commitments over a five year investment period and thus RVK believes a smaller commitment volume is necessary to avoid overshooting the private equity allocation.

During this process, RVK evaluated other commitment volumes both greater than and lesser than \$20 million annually; exceeding \$20 million annual significantly crowds out future commitments, while less than \$15 million in annual commitments causes reaching the target to take longer and may be below the minimum scale necessary to implement a fund of one. Given the length of the commitment period for the proposed second tranche, RVK expects to conduct additional pacing analyses every one to two years or following major market events to ensure pacing remains appropriate for the City of Jacksonville ERS's total fund value and expected growth rate. RVK also expects additional commitments will be required after this period to maintain the target allocation, and a similar pacing study will be required to determine appropriate sizing for the next series of commitments.

Investment Structure

Following the pacing study work, Staff and RVK reviewed structure options within private equity. After these discussions, Staff and RVK determined that a fund of one continues to be the best approach to the asset class for the City of Jacksonville ERS. The fund of one structure allows the City of Jacksonville ERS to own a diversified private equity portfolio with a custom investment objective, while still maintaining the administrative advantages of a single investment relationship. A fund of one also provides City of Jacksonville ERS with the ability to customize the strategy and stage allocations.

Proposal Economics & Terms

Within private equity, fund of one providers generally charge a management fee on committed capital. Management fees are typically highest during the investment period of the fund, the period of a private equity fund that requires the most effort in sourcing and investment implementation. In addition to this fee, providers also use a form of profit sharing called carried interest. Through carried interest, managers earn a percentage of the investment's profits over a certain hurdle. This hurdle is also called the preferred return. The amount charged over this hurdle varies based



on the strategy used (e.g., primary fund commitments, secondary fund purchases, and direct co-investments), with market rates for more tactical strategies typically exceeding those for primary fund commitments. Figure 3 details the fee and carried interest structure of COJ PE Fund.

Figure 3: ASP COJ PE Fund Terms

Average Annual Management Fee	23 basis points (0.23%)
Preferred Return	7% on secondaries 8% on co-investments
Carried Interest on Primary Fund Commitments	0%
Carried Interest on Secondary Fund Purchases	10%
Carried Interest on Co-Investments	10%

Adams Street expects the management fees and other economic terms for COJ PE Fund II LP to remain consistent with those established in COJ PE Fund LP. Adams Street and most other fund of one providers charge a predetermined fee schedule, with higher fees occurring when the investments are being made and lower fees during the later years of the vehicle when the provider’s role is mostly monitoring. RVK anticipates that the longer investment period for Fund II will result in Adams Street proposing to extend the higher fee period from three years to five years to coincide with the fund’s investment period, which could slightly increase the average fees paid during the term of COJ PE Fund LP II yet remain consistent with the management fees negotiated in COJ PE Fund I. In RVK’s perspective, we would not expect this change to increase the total fees paid in the overall private equity allocation compared to a shorter investment period for COJ PE Fund II, as any private equity program with active investments will be paying higher fees to whichever funds are currently investing. Other changes to the proposed strategy, such as adding venture capital exposure through Adams Street’s Venture Innovation Fund, could slightly increase average management fees. As noted previously, RVK has conducted fund of one searches for other clients relatively recently and the proposed economic terms are in-line with or better than current market pricing.



Recommendation Details

Staff and RVK recommend the Committee retain Adams Street to manage a second fund of one with \$100 million in commitments and following the parameters established during the diligence process. RVK believes Adams Street has capably managed COJ PE Fund LP and early results are promising, with outperformance relative to public markets and peers. Adams Street remains one of the stronger firms in the fund of one space, with the firm's top down themes, independent ownership structure, and long history of successful investing.



Appendix 1: Adams Street Partners Profile

Firm Established	1972	Total PE AUM	\$51 Billion
Year PE Established	1972	No. of Employees	220
Firm Headquarters	Chicago, IL	% Employee Owned	100%

Firm Overview

Since 1972, Adams Street has solely focused on private equity investment management. Over the past forty five years, Adams Street has grown from a single office in Chicago to six locations around the world, with investments across more than 30 nations. The firm manages over \$36 billion of assets. Investors include more than 300 corporate and public pension plans, endowments, foundations and other institutional investors. Adams Street is a registered investment advisor with the US Securities and Exchange Commission under the Investment Advisors Act of 1940 since 2000.

Private Equity Overview

Adams Street targets managers with definable sources of investment alpha, irrespective of size, geography, or length of track record. In doing so they leverage not just the global reach of the firm's primary investment team, but also bring to bear insights from their direct venture/growth equity portfolio managers as well as the firm's secondary and co-investment team. The team utilizes a top-down approach to strategy, sector, and regional diversification. This is a core tenet of their portfolio construction process, making use of secondary and co-investments as a means of mitigating J-curve and gross/net spreads while also using direct investments as a means of delivering greater upside. This process uses ASPIRE, the firm's analytics and performance reporting platform which is positioned alongside of the investment teams to ensure robust monitoring and risk management.

Key Manager Attributes

Several attributes of Adams Street resulted in their selection as the proposed finalist, including:

- Use of top down themes – Adams Street utilizes a top down approach through the creation of investment themes by the firm's investment teams. These themes are regularly revised based on market conditions and reflect the team's current views on the most attractive areas to invest capital.
- Experience and ownership structure – Adams Street has over 40 years of experience



investing in the private equity asset class and is a 100% employee owned and independent organization. These two traits combine to support a robust culture of independence and a limited partner-focused organization. Adams Streets' extensive history within the industry also contributes to the firm's longstanding relationships with top tier and access constrained general partners.

- Analytics and back office support – Adams Street uses the proprietary ASPIRE system in the portfolio construction and risk management process. ASPIRE is a factor-based attribution model using Adams Streets' database of more than 12,000 portfolio company data points; ASPIRE allows for management of general partner risks and provides insight throughout the firm's portfolio construction process.
- Deep experience in secondary and direct investments – The investment team at Adams Street has extensive experience with investments outside of primary commitments; the firm made its first co-investment in 1989 and secondary purchase in 1986. Since that time, the firm has continued to demonstrate success with a total gross multiple of 1.97x and 1.60x in co-investments and secondaries respectively.



Appendix 2: COJ PE Fund LP Investment Schedule as of 9/30/2022

Strategy / Investment	Commitment Year	Geography	Subclass	Investment Amount (USD M)
Adams Street Co-Investment Select Fund	Year 1	Global	Buyout	15
Adams Street Growth Equity Fund VII LP	Year 1	US	Growth	7
Adam Street Global Secondary Fund 7	Year 1	Global	Buyout	20
Madison Dearborn Capital Partners VIII	Year 1	US	Buyout	7
GTCR XIII LP	Year 1	US	Buyout	7
Arcline Capital Partners II	Year 1	US	Buyout	7
Oak HC/FT Partners IV LP	Year 1	US	Buyout	7
Boyu Capital Fund V LP	Year 1	ROW	Buyout	5
Oakley Capital V	Year 2	EU	Buyout	6
Advent International GPE X	Year 2	EU	Buyout	6
Trivest Discovery II	Year 2	US	Buyout	8
Buyout Partnership To Be Committed	Year 3	US	Buyout	N/A
Buyout Partnership To Be Committed	Year 3	EU	Buyout	N/A

Monthly Investment Performance Analysis

City of Jacksonville Employees' Retirement System

Period Ended: December 31, 2022

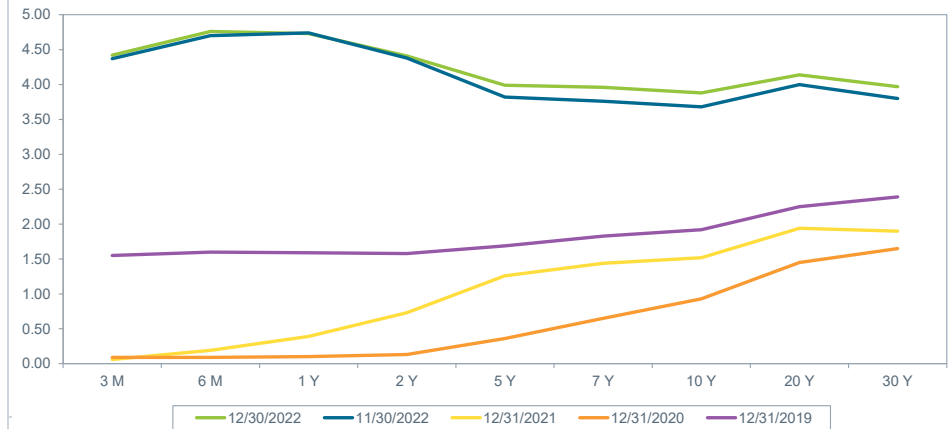


General Market Commentary

- US equity markets declined in December, with most US equity indices posting mid-single digit losses during the month. Developed international equity markets finished the month relatively flat, although emerging markets lagged developed international markets and finished slightly negative.
- Equity markets pulled back primarily due to recession fears and declining economic forecasts, with most experts predicting muted GDP growth in Q4 2022 extending into 2023. Persistent high inflation and geopolitical tension also contributed to the poor equity performance in December.
- At the December 2022 meeting, the Federal Reserve raised interest rates 50 basis point rate to combat the heightened inflation, although the magnitude of this increase was less than the prior four consecutive increases of 75 basis points. The Fed signaled that they expect to keep rates high through 2023 with additional rate hikes, and interest rate reductions are not expected to occur until 2024.
- Equity markets posted mixed returns in December as the S&P 500 (Cap Wtd) Index returned -5.76% and the MSCI EAFE (Net) Index returned 0.08%. Emerging markets returned -1.41%, as measured by the MSCI EM (Net) Index.
- The Bloomberg US Aggregate Bond Index returned -0.45% in December, underperforming the -0.24% return by the Bloomberg US Treasury Intermediate Term Index. International fixed income markets returned 0.25%, as measured by the FTSE Non-US World Gov't Bond Index.
- Public real estate returned -5.14% in December and 3.68% over the trailing five-year period, as measured by the FTSE NAREIT Eq REITs Index (TR).
- The Cambridge US Private Equity Index returned 8.53% for the trailing one-year period and 17.99% for the trailing five-year period ending June 2022.
- Absolute return strategies returned 0.33% for the month and -5.25% over the trailing one-year period, as measured by the HFRI FOF Comp Index.
- Crude oil's price fell by 0.36% during the month but has increased by 6.71% YoY.

Economic Indicators	Dec-22	Nov-22	Dec-21	10 Yr	20 Yr
Federal Funds Rate (%)	4.33 ▲	3.83	0.07	0.78	1.30
Breakeven Inflation - 5 Year (%)	2.38 ▼	2.48	2.91	1.88	1.92
Breakeven Inflation - 10 Year (%)	2.30 ▼	2.37	2.59	1.98	2.08
Breakeven Inflation - 30 Year (%)	2.35 ▼	2.42	2.38	2.04	2.26
Bloomberg US Agg Bond Index - Yield (%)	4.68 ▲	4.56	1.75	2.40	3.22
Bloomberg US Agg Bond Index - OAS (%)	0.51 ▼	0.53	0.36	0.47	0.59
Bloomberg US Agg Credit Index - OAS (%)	1.21 ▼	1.24	0.87	1.18	1.38
Bloomberg US Corp: HY Index - OAS (%)	4.69 ▲	4.48	2.83	4.29	5.03
Capacity Utilization (%)	78.75 ▼	79.66	78.74	77.21	77.00
Unemployment Rate (%)	3.50 ▼	3.60	3.90	5.27	6.01
PMI - Manufacturing (%)	48.40 ▼	49.00	58.80	54.56	53.67
Baltic Dry Index - Shipping	1,383 ▲	1,355	2,251	1,349	2,425
Consumer Conf (Conf Board)	108.30 ▲	101.40	115.20	105.50	91.23
CPI YoY (Headline) (%)	6.50 ▼	7.10	7.00	2.48	2.48
CPI YoY (Core) (%)	5.70 ▼	6.00	5.50	2.49	2.19
PPI YoY (%)	9.00 ▼	10.60	12.30	2.66	3.06
M2 YoY (%)	N/A	N/A	0.00	12.40	8.17
US Dollar Total Weighted Index	122.33 ▼	123.65	115.37	110.21	103.33
WTI Crude Oil per Barrel (\$)	80 ▼	81	75	66	68
Gold Spot per Oz (\$)	1,824 ▲	1,769	1,829	1,438	1,160

Treasury Yield Curve (%)



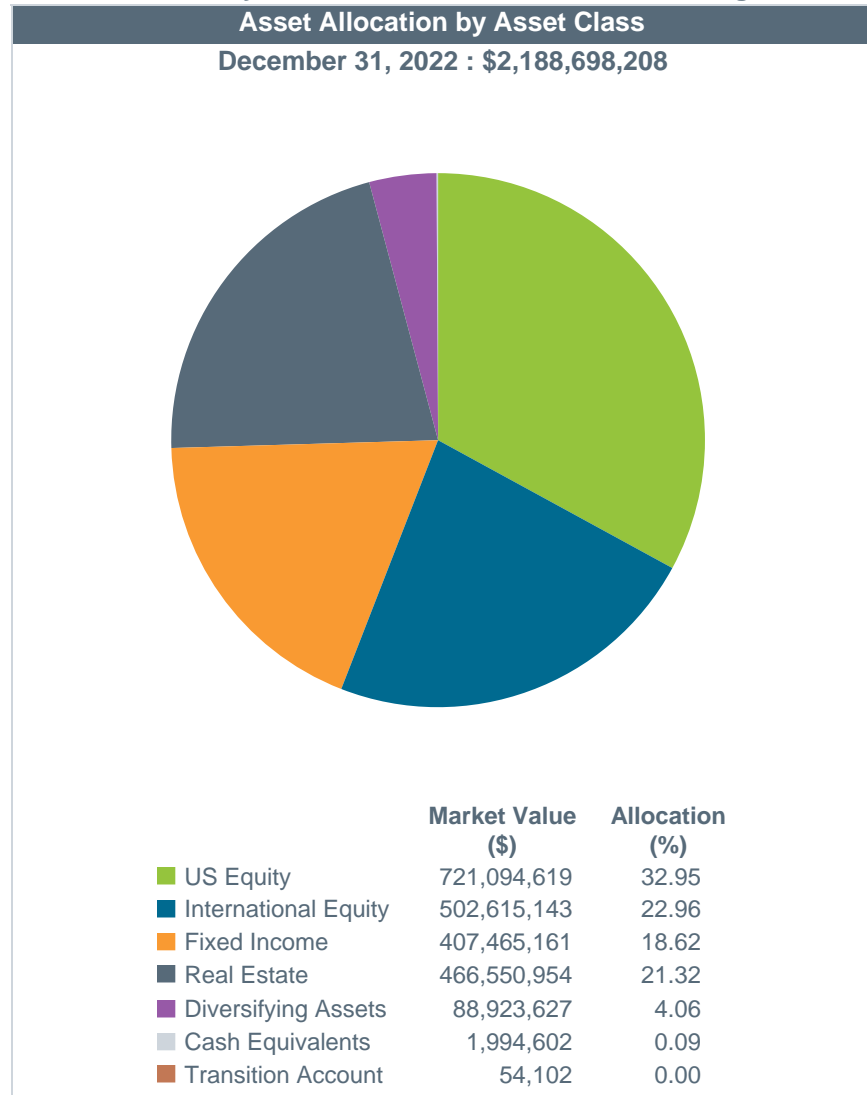
Treasury Yield Curve (%)	Dec-22	Nov-22	Dec-21	Dec-20	Dec-19
3 Month	4.42	4.37	0.06	0.09	1.55
6 Month	4.76	4.70	0.19	0.09	1.60
1 Year	4.73	4.74	0.39	0.10	1.59
2 Year	4.41	4.38	0.73	0.13	1.58
5 Year	3.99	3.82	1.26	0.36	1.69
7 Year	3.96	3.76	1.44	0.65	1.83
10 Year	3.88	3.68	1.52	0.93	1.92
20 Year	4.14	4.00	1.94	1.45	2.25
30 Year	3.97	3.80	1.90	1.65	2.39

Market Performance (%)	MTD	QTD	CYTD	1 Yr	3 Yr	5 Yr	7 Yr	10 Yr
S&P 500 (Cap Wtd)	-5.76	7.56	-18.11	-18.11	7.66	9.42	11.48	12.56
Russell 2000	-6.49	6.23	-20.44	-20.44	3.10	4.13	7.90	9.01
MSCI EAFE (Net)	0.08	17.34	-14.45	-14.45	0.87	1.54	4.53	4.67
MSCI EAFE SC (Net)	1.07	15.79	-21.39	-21.39	-0.93	-0.05	4.45	6.21
MSCI EM (Net)	-1.41	9.70	-20.09	-20.09	-2.69	-1.40	5.17	1.44
Bloomberg US Agg Bond	-0.45	1.87	-13.01	-13.01	-2.71	0.02	0.89	1.06
ICE BofAML 3 Mo US T-Bill	0.36	0.84	1.46	1.46	0.72	1.26	1.07	0.76
NCREIF ODCE (Gross)	-4.96	-4.96	7.47	7.47	9.93	8.68	8.54	10.10
FTSE NAREIT Eq REITs Index (TR)	-5.14	5.24	-24.37	-24.37	-0.11	3.68	4.58	6.53
HFRI FOF Comp Index	0.33	1.79	-5.25	-5.25	3.71	3.02	3.32	3.51
Bloomberg Comdty Index (TR)	-2.45	2.22	16.09	16.09	12.65	6.44	6.49	-1.29

NCREIF performance is reported quarterly; MTD and QTD returns are shown as "N/A" on interim-quarter months and until available. Data shown is as of most recent quarter-end. Treasury data courtesy of the US Department of the Treasury. Economic data courtesy of Bloomberg Professional Service. The previous month's CPI YoY is used as a proxy for the current YoY return until it becomes available.

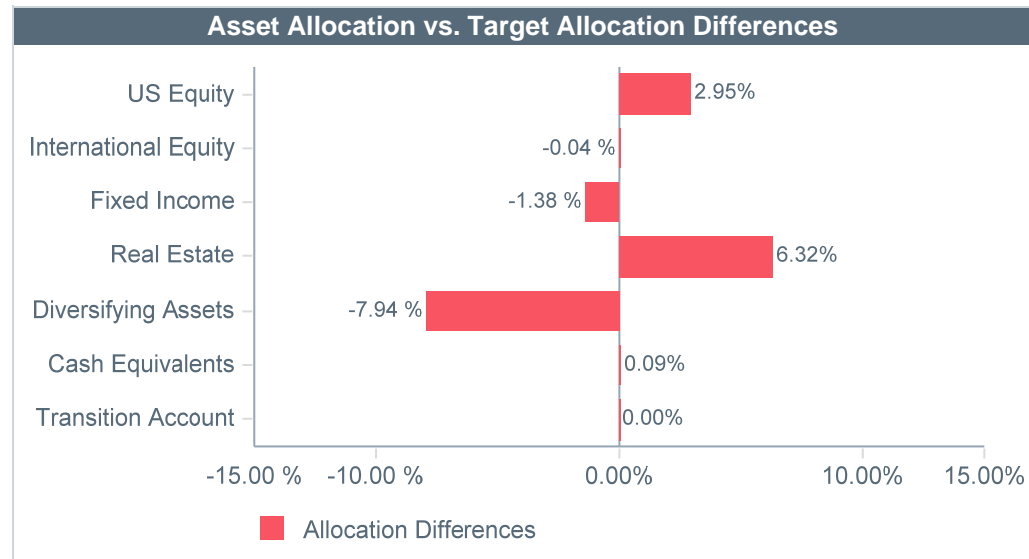


Asset Allocation by Asset Class, Asset Allocation vs. Target, and Schedule of Investable Assets



Asset Allocation vs. Target Allocation

	Market Value (\$)	Allocation (%)	Min (%)	Target (%)	Max (%)
Total Fund	2,188,698,208	100.00	-	100.00	-
US Equity	721,094,619	32.95	20.00	30.00	40.00
International Equity	502,615,143	22.96	13.00	23.00	25.00
Fixed Income	407,465,161	18.62	10.00	20.00	30.00
Real Estate	466,550,954	21.32	0.00	15.00	20.00
Diversifying Assets	88,923,627	4.06	0.00	12.00	20.00
Cash Equivalents	1,994,602	0.09	0.00	0.00	10.00
Transition Account	54,102	0.00	0.00	0.00	0.00



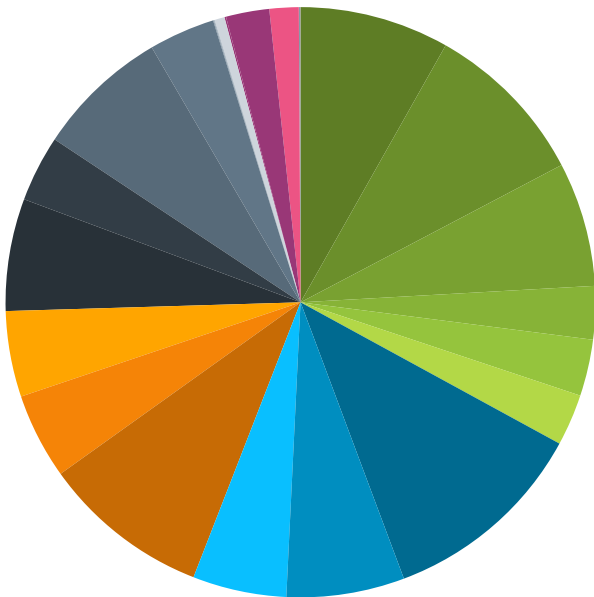
Schedule of Investable Assets

Periods Ending	Beginning Market Value (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)	% Return
CYTD	2,664,636,142	-116,992,163	-358,945,771	2,188,698,208	-13.21

Market values and performance shown are preliminary and subject to change. Performance shown is net of fees. Allocations shown may not sum up to 100% exactly due to rounding.



December 31, 2022 : \$2,188,698,208



	Market Value (\$)	Allocation (%)
Eagle Capital Large Cap Value (SA)	179,242,420	8.19
Mellon Large Cap Core Index (CF)	199,387,513	9.11
Loomis Sayles Large Cap Growth (CF)	149,202,954	6.82
Kayne Anderson US SMID Value (SA)	63,794,516	2.91
Systematic Financial US SMID Value (SA)	67,637,321	3.09
Pinnacle Associates US SMID Cap Growth (SA)	61,829,896	2.82
Silchester International Value (CF)	248,442,794	11.35
Baillie Gifford International Growth (BGEFX)	141,536,339	6.47
Acadian Emerging Markets (CF)	112,636,010	5.15
Baird Core Fixed Income (SA)	201,587,291	9.21
Loomis Sayles Multisector Full Discretion (CF)	102,877,852	4.70
Schroder Flexible Secured Income Fund	103,000,018	4.71
Harrison Street Core Property (CF)	134,571,221	6.15
PGIM Real Estate PRISA II (CF)	79,455,436	3.63
Principal US Property (CF)	159,350,884	7.28
UBS Trumbull Property (CF)	79,208,785	3.62
Vanguard RE Idx;ETF (VNQ)	1,136,185	0.05
Abacus Multi-Family Partners Fund VI (CF)	947,352	0.04
H.I.G. Realty Fund IV	11,881,091	0.54
Hancock Timberland (SA)	2,020,483	0.09
Adams Street Private Equity (SA)	51,961,091	2.37
Hamilton Lane Private Credit (SA)	34,942,053	1.60
Dreyfus Gvt Csh Mgt;Inst (DGCXX)	1,994,602	0.09
Transition Account	54,102	0.00

Market values shown are preliminary and subject to change. Allocations shown may not sum up to 100% exactly due to rounding.

City of Jacksonville Employees' Retirement System
Asset Allocation & Performance (Net of Fees)

As of December 31, 2022

	Allocation		Performance (%)										
	Market Value (\$)	%	MTD	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Total Fund	2,188,698,208	100.00	-2.48	5.48	5.48	-13.21	-13.21	2.67	3.81	6.12	6.95	5.89	07/01/1999
Total Fund Policy Index			-3.10	6.08	6.08	-12.22	-12.22	3.55	4.47	6.35	6.84	5.60	
Difference			0.62	-0.60	-0.60	-0.99	-0.99	-0.88	-0.66	-0.23	0.11	0.29	
Total Equity	1,223,709,762	55.91	-3.92	10.36	10.36	-20.54	-20.54	2.92	4.57	7.95	8.89	5.90	07/01/1999
US Equity	721,094,619	32.95	-6.08	7.20	7.20	-21.75	-21.75	4.79	7.18	9.31	10.96	6.53	07/01/1999
US Equity Index			-5.86	7.18	7.18	-19.21	-19.21	7.07	8.79	11.04	12.13	6.77	
Difference			-0.22	0.02	0.02	-2.54	-2.54	-2.28	-1.61	-1.73	-1.17	-0.24	
International Equity	502,615,143	22.96	-0.64	15.24	15.24	-19.02	-19.02	-0.19	0.41	5.72	5.18	5.24	07/01/1999
International Equity Index			-0.75	14.28	14.28	-16.00	-16.00	0.07	0.88	4.80	3.80	3.60	
Difference			0.11	0.96	0.96	-3.02	-3.02	-0.26	-0.47	0.92	1.38	1.64	
Fixed Income	407,465,161	18.62	-0.25	1.53	1.53	-12.91	-12.91	-3.15	-0.74	0.77	0.77	4.16	07/01/1999
Fixed Income Index			-0.34	2.24	2.24	-12.99	-12.99	-2.54	0.18	1.00	1.13	3.96	
Difference			0.09	-0.71	-0.71	0.08	0.08	-0.61	-0.92	-0.23	-0.36	0.20	
Real Estate	466,550,954	21.32	-0.91	-1.39	-1.39	12.37	12.37	8.71	7.65	7.61	8.57	6.26	12/01/2005
Real Estate Index			-5.00	-5.00	-5.00	6.75	6.75	9.03	7.76	7.60	9.13	6.65	
Difference			4.09	3.61	3.61	5.62	5.62	-0.32	-0.11	0.01	-0.56	-0.39	
Core Real Estate	453,722,511	20.73	-1.04	-1.53	-1.53	11.84	11.84	8.54	7.55	7.53	8.52	6.23	12/01/2005
NCREIF ODCE Index (AWA) (Net)			-5.13	-5.13	-5.13	6.59	6.59	8.98	7.72	7.58	9.11	6.64	
Difference			4.09	3.60	3.60	5.25	5.25	-0.44	-0.17	-0.05	-0.59	-0.41	
Non-Core Real Estate	12,828,443	0.59	3.97	3.97	3.97	71.78	71.78	N/A	N/A	N/A	N/A	71.78	01/01/2022
NCREIF ODCE Index (AWA)(Net) (Monthly)+2%			0.00	0.00	0.00	14.04	14.04	12.94	10.93	10.48	11.83	14.04	
Difference			3.97	3.97	3.97	57.74	57.74	N/A	N/A	N/A	N/A	57.74	
Diversifying Assets	88,923,627	4.06	-0.36	-1.40	-1.40	22.43	22.43	15.17	8.96	8.24	7.64	8.15	03/01/2011
Diversifying Assets Index			-2.98	7.95	7.95	-10.65	-10.65	-0.19	-0.04	1.57	1.99	2.62	
Difference			2.62	-9.35	-9.35	33.08	33.08	15.36	9.00	6.67	5.65	5.53	

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City of Jacksonville Employees' Retirement System
Asset Allocation & Performance (Net of Fees)

As of December 31, 2022

	Allocation		Performance (%)										
	Market Value (\$)	%	MTD	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
US Equity													
Eagle Capital Large Cap Value (SA)	179,242,420	8.19	-6.25	8.04	8.04	-25.38	-25.38	2.85	6.31	9.21	11.17	9.14	02/01/2007
Russell 1000 Val Index			-4.03	12.42	12.42	-7.54	-7.54	5.96	6.67	9.12	10.29	6.45	
Difference			-2.22	-4.38	-4.38	-17.84	-17.84	-3.11	-0.36	0.09	0.88	2.69	
Mellon Large Cap Core Index (CF)	199,387,513	9.11	-5.80	7.26	7.26	-19.12	-19.12	7.30	N/A	N/A	N/A	8.94	05/01/2019
Russell 1000 Index			-5.81	7.24	7.24	-19.13	-19.13	7.35	9.13	11.26	12.37	8.98	
Difference			0.01	0.02	0.02	0.01	0.01	-0.05	N/A	N/A	N/A	-0.04	
Loomis Sayles Large Cap Growth (CF)	149,202,954	6.82	-6.70	6.24	6.24	-27.49	-27.49	4.49	8.04	N/A	N/A	9.46	08/01/2017
Russell 1000 Grth Index			-7.66	2.20	2.20	-29.14	-29.14	7.79	10.96	12.95	14.10	12.27	
Difference			0.96	4.04	4.04	1.65	1.65	-3.30	-2.92	N/A	N/A	-2.81	
Kayne Anderson US SMID Value (SA)	63,794,516	2.91	-6.57	5.79	5.79	N/A	N/A	N/A	N/A	N/A	N/A	-10.14	03/01/2022
Russell 2500 Val Index			-5.94	9.21	9.21	-13.08	-13.08	5.22	4.75	8.26	8.93	-9.90	
Difference			-0.63	-3.42	-3.42	N/A	N/A	N/A	N/A	N/A	N/A	-0.24	
Systematic Financial US SMID Value (SA)	67,637,321	3.09	-4.69	12.18	12.18	N/A	N/A	N/A	N/A	N/A	N/A	-8.15	03/01/2022
Russell 2500 Val Index			-5.94	9.21	9.21	-13.08	-13.08	5.22	4.75	8.26	8.93	-9.90	
Difference			1.25	2.97	2.97	N/A	N/A	N/A	N/A	N/A	N/A	1.75	
Pinnacle Associates US SMID Cap Growth (SA)	61,829,896	2.82	-5.95	3.57	3.57	-24.73	-24.73	3.85	7.04	9.10	10.54	11.70	03/01/2010
Russell 2500 Grth Index			-5.95	4.72	4.72	-26.21	-26.21	2.88	5.97	8.98	10.62	11.43	
Difference			0.00	-1.15	-1.15	1.48	1.48	0.97	1.07	0.12	-0.08	0.27	
International Equity													
Silchester International Value (CF)	248,442,794	11.35	2.53	18.64	18.64	-5.77	-5.77	1.64	1.12	5.44	6.51	8.07	06/01/2009
MSCI EAFE Val Index (USD) (Net)			1.26	19.64	19.64	-5.58	-5.58	0.65	0.17	3.66	3.51	4.53	
Difference			1.27	-1.00	-1.00	-0.19	-0.19	0.99	0.95	1.78	3.00	3.54	
Baillie Gifford International Growth (BGEFX)	141,536,339	6.47	-5.52	13.09	13.09	-34.36	-34.36	-0.98	2.01	7.32	6.79	8.29	06/01/2009
Baillie Gifford Index			-1.53	12.89	12.89	-23.05	-23.05	-0.40	1.49	4.38	5.11	6.34	
Difference			-3.99	0.20	0.20	-11.31	-11.31	-0.58	0.52	2.94	1.68	1.95	
Baillie Gifford Spliced Index			-0.75	14.28	14.28	-16.00	-16.00	0.07	1.27	4.33	4.53	5.61	
Difference			-4.77	-1.19	-1.19	-18.36	-18.36	-1.05	0.74	2.99	2.26	2.68	
Acadian Emerging Markets (CF)	112,636,010	5.15	-0.98	10.89	10.89	-20.32	-20.32	-1.28	-1.77	5.23	1.52	1.76	02/01/2011
MSCI Emg Mkts Index (USD) (Net)			-1.41	9.70	9.70	-20.09	-20.09	-2.69	-1.40	5.17	1.44	1.13	
Difference			0.43	1.19	1.19	-0.23	-0.23	1.41	-0.37	0.06	0.08	0.63	

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City of Jacksonville Employees' Retirement System
 Asset Allocation & Performance (Net of Fees)

As of December 31, 2022

	Allocation		Performance (%)										
	Market Value (\$)	%	MTD	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Fixed Income													
Baird Core Fixed Income (SA)	201,587,291	9.21	-0.40	1.81	1.81	-13.42	-13.42	N/A	N/A	N/A	N/A	-7.10	03/01/2021
Bloomberg US Agg Bond Index			-0.45	1.87	1.87	-13.01	-13.01	-2.71	0.02	0.89	1.06	-7.01	
Difference			0.05	-0.06	-0.06	-0.41	-0.41	N/A	N/A	N/A	N/A	-0.09	
Loomis Sayles Multisector Full Discretion (CF)	102,877,852	4.70	-0.21	2.55	2.55	-12.41	-12.41	0.18	1.85	3.87	3.29	5.27	10/01/2007
Bloomberg Gbl Agg Bond Index			0.54	4.55	4.55	-16.25	-16.25	-4.48	-1.65	0.12	-0.44	1.67	
Difference			-0.75	-2.00	-2.00	3.84	3.84	4.66	3.50	3.75	3.73	3.60	
Schroder Flexible Secured Income Fund	103,000,018	4.71	0.00	-0.01	-0.01	N/A	N/A	N/A	N/A	N/A	N/A	-0.01	10/01/2022
SOFR+1.75%			0.48	1.34	1.34	3.41	3.41	2.44	N/A	N/A	N/A	1.34	
Difference			-0.48	-1.35	-1.35	N/A	N/A	N/A	N/A	N/A	N/A	-1.35	
SOFR+5%			0.75	2.14	2.14	6.72	6.72	5.71	N/A	N/A	N/A	2.14	
Difference			-0.75	-2.15	-2.15	N/A	N/A	N/A	N/A	N/A	N/A	-2.15	

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City of Jacksonville Employees' Retirement System
Asset Allocation & Performance (Net of Fees)

As of December 31, 2022

	Allocation		Performance (%)										
	Market Value (\$)	%	MTD	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Real Estate													
Harrison Street Core Property (CF)	134,571,221	6.15	0.00	2.16	2.16	14.02	14.02	8.37	8.27	8.44	N/A	8.24	11/01/2015
NCREIF ODCE Index (AWA) (Net)			-5.13	-5.13	-5.13	6.59	6.59	8.98	7.72	7.58	9.11	7.86	
Difference			5.13	7.29	7.29	7.43	7.43	-0.61	0.55	0.86	N/A	0.38	
PGIM Real Estate PRISA II (CF)	79,455,436	3.63	0.00	0.95	0.95	20.42	20.42	11.21	10.09	9.67	N/A	9.92	01/01/2015
NCREIF ODCE Index (AWA) (Net)			-5.13	-5.13	-5.13	6.59	6.59	8.98	7.72	7.58	9.11	8.36	
Difference			5.13	6.08	6.08	13.83	13.83	2.23	2.37	2.09	N/A	1.56	
Principal US Property (CF)	159,350,884	7.28	-2.86	-6.20	-6.20	4.22	4.22	8.84	8.17	8.32	N/A	9.42	01/01/2014
NCREIF ODCE Index (AWA) (Net)			-5.13	-5.13	-5.13	6.59	6.59	8.98	7.72	7.58	9.11	8.70	
Difference			2.27	-1.07	-1.07	-2.37	-2.37	-0.14	0.45	0.74	N/A	0.72	
UBS Trumbull Property (CF)	79,208,785	3.62	0.00	-0.17	-0.17	17.28	17.28	7.17	4.86	5.08	6.69	5.51	12/01/2005
NCREIF ODCE Index (AWA) (Net)			-5.13	-5.13	-5.13	6.59	6.59	8.98	7.72	7.58	9.11	6.64	
Difference			5.13	4.96	4.96	10.69	10.69	-1.81	-2.86	-2.50	-2.42	-1.13	
Vanguard RE Idx;ETF (VNQ)	1,136,185	0.05	-5.04	4.32	4.32	-26.22	-26.22	-0.39	3.65	4.41	6.27	10.96	12/01/2008
Custom REITs Index			-5.08	4.35	4.35	-26.12	-26.12	-0.29	4.07	4.85	6.67	11.69	
Difference			0.04	-0.03	-0.03	-0.10	-0.10	-0.10	-0.42	-0.44	-0.40	-0.73	
Abacus Multi-Family Partners Fund VI (CF)	947,352	0.04	0.00	0.00	0.00	N/A	N/A	N/A	N/A	N/A	N/A	0.00	10/01/2022
NCREIF ODCE Index (AWA)(Net) (Monthly)+2%			0.00	0.00	0.00	14.04	14.04	12.94	10.93	10.48	11.83	0.00	
Difference			0.00	0.00	0.00	N/A	N/A	N/A	N/A	N/A	N/A	0.00	
H.I.G. Realty Fund IV	11,881,091	0.54	4.23	4.23	4.23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	01/01/2022
NCREIF ODCE Index (AWA)(Net) (Monthly)+2%			0.00	0.00	0.00	14.04	14.04	12.94	10.93	10.48	11.83	14.04	
Difference			4.23	4.23	4.23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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City of Jacksonville Employees' Retirement System
Asset Allocation & Performance (Net of Fees)

As of December 31, 2022

	Allocation		Performance (%)										
	Market Value (\$)	%	MTD	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Diversifying Assets													
Hancock Timberland (SA)	2,020,483	0.09	-5.66	-5.66	-5.66	52.32	52.32	25.98	17.20	14.55	12.66	7.29	10/01/2006
NCREIF Timberland Index			0.00	0.00	0.00	7.64	7.64	5.81	4.37	4.01	5.29	5.56	
Difference			-5.66	-5.66	-5.66	44.68	44.68	20.17	12.83	10.54	7.37	1.73	
Adams Street Private Equity (SA)	51,961,091	2.37	0.00	-2.22	-2.22	25.14	25.14	N/A	N/A	N/A	N/A	31.11	11/01/2020
S&P 500 Index+3%			-5.53	8.36	8.36	-15.65	-15.65	10.89	12.71	14.83	15.94	12.66	
Difference			5.53	-10.58	-10.58	40.79	40.79	N/A	N/A	N/A	N/A	18.45	
Hamilton Lane Private Credit (SA)	34,942,053	1.60	-0.56	0.23	0.23	3.52	3.52	N/A	N/A	N/A	N/A	-3.08	04/01/2021
ICE BofAML Gbl Hi Yld Index +2%			0.79	7.51	7.51	-11.53	-11.53	0.26	2.88	6.13	5.22	-5.20	
Difference			-1.35	-7.28	-7.28	15.05	15.05	N/A	N/A	N/A	N/A	2.12	
Dreyfus Gvt Csh Mgt;Inst (DGCXX)	1,994,602	0.09	0.35	0.87	0.87	1.50	1.50	0.78	1.28	1.10	0.79	1.34	04/01/2001
FTSE 3 Mo T-Bill Index			0.34	0.87	0.87	1.50	1.50	0.71	1.25	1.05	0.74	1.32	
Difference			0.01	0.00	0.00	0.00	0.00	0.07	0.03	0.05	0.05	0.02	

Private equity funds tend to underperform in the early stages of their maturity; returns tend to improve as funds mature.

Market values and performance shown are preliminary and subject to change. Performance shown is net of fees and is annualized for periods greater than one year. Allocations may not sum up to 100% due to the exclusion of managers in liquidation. Please see the addendum for custom benchmark definitions. Fiscal year for the COJ ends 09/30. Performance for Harrison Street Core Property, LP, H.I.G Realty Fund IV (CF), PGIM Real Estate PRISA II LP (CF), UBS Trumbull Property (CF), NCREIF ODCE Index (AWA) (Net), NCREIF Timberland Index, Adams Street, LP, and Abacus Multi-Family Partners Fund VI (CF) is available quarterly; interim months assume a 0.00% return. Market Values for Abacus Multi-Family Partners Fund VI (CF), Adams Street, LP, H.I.G Realty Fund IV (CF), and Hamilton Lane Private Credit are preliminary. Asset Valuations for Real Estate and Diversifying Assets are lagged/unlagged as reported by the System's book of record, BNY Mellon.



Performance Related Comments:

- Performance is annualized for periods greater than one year.
- Performance and market values shown are preliminary and subject to change.
- The inception date shown indicates the first full month of performance following initial funding.
- The market value shown for the Transition Account includes residual assets from terminated managers.
- RVK began monitoring the assets of the City of Jacksonville Retirement System on 01/01/2019. Prior historical data was provided by the custodian and previous consultant.

Custom Composite Benchmark Comments:

- **Total Fund Policy Index:** The passive Total Fund Policy Index is calculated monthly and currently consists of 30% Russell 3000 Index, 23% MSCI ACW Ex US Index (USD) (Net), 20% Fixed Income Index, 15% Real Estate Index, and 12% Diversifying Assets Index.
- **US Equity Index:** The passive US Equity Index consists of 100% DJ US TSM Index through 06/2009 and 100% Russell 3000 Index thereafter.
- **International Equity Index:** The passive International Equity Index consists of 100% MSCI EAFE Index (USD) (Gross) through 01/2011 and 100% MSCI ACW Ex US Index (USD) (Net) thereafter.
- **Fixed Income Index:** The passive Fixed Income Index consists of 100% Bloomberg US Agg Bond Index through 10/2017 and 100% Bloomberg US Universal Bond Index thereafter.
- **Real Estate Index:** The active Real Estate Index is calculated monthly using beginning of month investment weights applied to each corresponding primary benchmark return.
- **Diversifying Assets Index:** The active Diversifying Assets Index is calculated monthly using beginning of month investment weights applied to each corresponding primary benchmark return. Prior to 10/01/2020, the Diversifying Assets Index consists of 67% S&P MLP Index (TR)/33% NCREIF Timberland Index. Prior to 11/01/2017, the Diversifying Assets Index consists 50% S&P MLP Index (TR)/50% NCREIF Timberland Index.

Custom Manager Benchmark Comments:

- **Baillie Gifford Index:** The passive Baillie Gifford Index consists of 100% MSCI EAFE Grth Index (USD) (Net) through 10/2017 and 100% MSCI ACW Ex US Grth Index (USD) (Net) thereafter.
- **Baillie Gifford Spliced Index:** The passive Baillie Gifford Spliced Index consists of 100% MSCI EAFE Index (USD) (Net) through 11/2019 and 100% MSCI ACW Ex US Index (USD) (Net) thereafter.
- **Custom REITs Index:** The passive Custom REITs Index consists of 100% MSCI US REIT Index (USD) (Gross) through 01/2019 and 100% Vanguard Spl Real Estate Index thereafter.
- **Vanguard Spliced Real Estate Index:** The Vanguard Spl Real Estate Index consists of MSCI US REIT Index (USD) (Gross) adjusted to include a 2% cash position (Lipper Money Market Average) through 04/30/2009, MSCI US REIT Index (USD) (Gross) through 01/31/2018, MSCI US IM Real Estate 25/50 Transition Index through 07/24/2018, and MSCI US IM Real Estate 25/50 Index (Gross) thereafter.

PORTLAND

BOISE

CHICAGO

NEW YORK

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Monthly Investment Performance Analysis

City of Jacksonville Employees' Retirement System

Period Ended: November 30, 2022

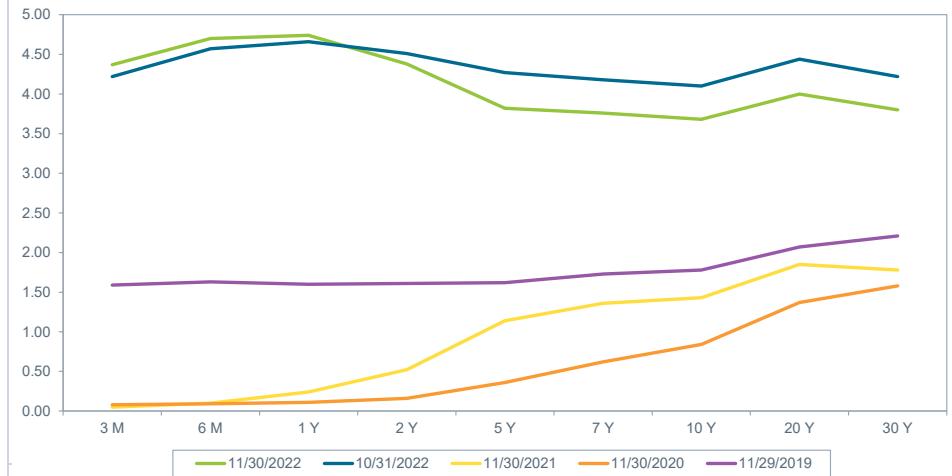


General Market Commentary

- Global equity markets continued to rebound during November. Most major US equity indices posted mid single-digit gains during the month, while most international equity indices posted low double-digit returns, led by emerging market equities which returned nearly 15% during the month.
- Equities rallied on continued strong corporate earnings, investor optimism surrounding future interest rate increases, and lower than expected inflation readings. Year-over-year inflation was 7.7% versus the 7.9% many economists expected for October. Stocks rallied toward the end of the month as Federal Reserve Chairman Powell stated that a “moderating” of rate increases could begin as soon as the December meeting. Investors anticipate a 50 basis point increase in December, a meaningful slowdown versus the 75 basis point increases seen at the four most recent meetings.
- Despite the Fed’s 75 basis point rate increase at the beginning of the month, bond markets experienced their strongest month of 2022, providing mid-to-high single-digit returns as investors expect bond yields to continue to moderate in the coming months.
- Equity markets posted positive returns in November as the S&P 500 (Cap Wtd) Index returned 5.59% and the MSCI EAFE (Net) Index returned 11.26%. Emerging markets returned 14.83%, as measured by the MSCI EM (Net) Index.
- The Bloomberg US Aggregate Bond Index returned 3.68% in November, outperforming the 1.73% return by the Bloomberg US Treasury Intermediate Term Index. International fixed income markets returned 6.05%, as measured by the FTSE Non-US World Gov’t Bond Index.
- Public real estate returned 5.77% in November and 4.73% over the trailing five-year period, as measured by the FTSE NAREIT Eq REITs Index (TR).
- The Cambridge US Private Equity Index returned 8.53% for the trailing one-year period and 17.99% for the trailing five-year period ending June 2022.
- Absolute return strategies returned 0.77% for the month and -5.28% over the trailing one-year period, as measured by the HFRI FOF Comp Index.
- Crude oil’s price fell by 6.91% during the month but has increased by 21.71% YoY.

Economic Indicators	Nov-22	Oct-22	Nov-21	10 Yr	20 Yr
Federal Funds Rate (%)	3.83 ▲	3.08	0.07	0.75	1.29
Breakeven Inflation - 5 Year (%)	2.48 ▼	2.66	2.81	1.88	1.92
Breakeven Inflation - 10 Year (%)	2.37 ▼	2.51	2.51	1.98	2.08
Breakeven Inflation - 30 Year (%)	2.42 ▼	2.55	2.32	2.04	2.26
Bloomberg US Agg Bond Index - Yield (%)	4.56 ▼	5.01	1.69	2.38	3.22
Bloomberg US Agg Bond Index - OAS (%)	0.53 ▼	0.65	0.39	0.47	0.59
Bloomberg US Agg Credit Index - OAS (%)	1.24 ▼	1.47	0.94	1.18	1.38
Bloomberg US Corp: HY Index - OAS (%)	4.48 ▼	4.64	3.37	4.29	5.04
Capacity Utilization (%)	79.66 ▼	79.92	78.98	77.21	76.99
Unemployment Rate (%)	3.70 —	3.70	4.20	5.31	6.02
PMI - Manufacturing (%)	49.00 ▼	50.20	60.60	54.57	53.68
Baltic Dry Index - Shipping	1,355 ▼	1,463	3,018	1,345	2,426
Consumer Conf (Conf Board)	100.20 ▼	102.20	111.90	105.14	91.04
CPI YoY (Headline) (%)	7.10 ▼	7.70	6.80	2.44	2.47
CPI YoY (Core) (%)	6.00 ▼	6.30	4.90	2.48	2.19
PPI YoY (%)	10.60 ▼	11.20	13.30	2.65	3.05
M2 YoY (%)	N/A	N/A	1.30	12.50	8.24
US Dollar Total Weighted Index	123.65 ▼	127.81	116.22	109.95	103.30
WTI Crude Oil per Barrel (\$)	81 ▼	87	66	66	68
Gold Spot per Oz (\$)	1,769 ▲	1,634	1,775	1,437	1,154

Treasury Yield Curve (%)



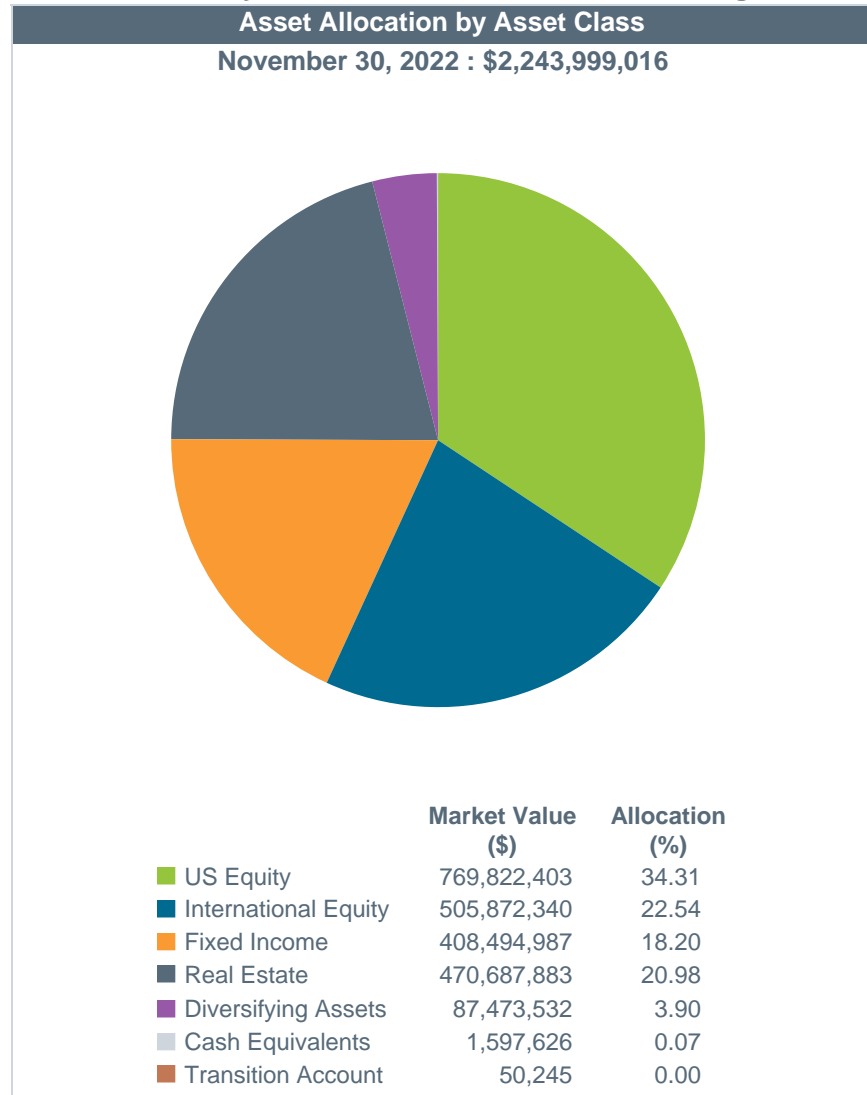
Treasury Yield Curve (%)	Nov-22	Oct-22	Nov-21	Nov-20	Nov-19
3 Month	4.37	4.22	0.05	0.08	1.59
6 Month	4.70	4.57	0.10	0.09	1.63
1 Year	4.74	4.66	0.24	0.11	1.60
2 Year	4.38	4.51	0.52	0.16	1.61
5 Year	3.82	4.27	1.14	0.36	1.62
7 Year	3.76	4.18	1.36	0.62	1.73
10 Year	3.68	4.10	1.43	0.84	1.78
20 Year	4.00	4.44	1.85	1.37	2.07
30 Year	3.80	4.22	1.78	1.58	2.21

Market Performance (%)	MTD	QTD	CYTD	1 Yr	3 Yr	5 Yr	7 Yr	10 Yr
S&P 500 (Cap Wtd)	5.59	14.14	-13.10	-9.21	10.91	10.98	12.17	13.34
Russell 2000	2.34	13.60	-14.91	-13.01	6.44	5.45	8.14	10.13
MSCI EAFE (Net)	11.26	17.25	-14.52	-10.14	1.92	1.85	4.31	4.99
MSCI EAFE SC (Net)	9.91	14.56	-22.22	-18.83	0.13	0.27	4.40	6.53
MSCI EM (Net)	14.83	11.27	-18.95	-17.43	0.14	-0.42	5.04	2.07
Bloomberg US Agg Bond	3.68	2.33	-12.62	-12.84	-2.59	0.20	0.91	1.09
ICE BofAML 3 Mo US T-Bill	0.32	0.48	1.09	1.10	0.65	1.21	1.02	0.73
NCREIF ODCE (Gross)	N/A	N/A	13.08	22.09	12.37	10.24	9.85	10.92
FTSE NAREIT Eq REITs Index (TR)	5.77	10.94	-20.27	-13.23	1.46	4.73	5.64	7.49
HFRI FOF Comp Index	0.77	1.27	-5.60	-5.28	4.14	3.13	3.20	3.59
Bloomberg Cmdty Index (TR)	2.74	4.78	19.01	23.20	15.46	7.60	6.39	-1.30

NCREIF performance is reported quarterly; MTD and QTD returns are shown as "N/A" on interim-quarter months and until available. Data shown is as of most recent quarter-end. Treasury data courtesy of the US Department of the Treasury. Economic data courtesy of Bloomberg Professional Service. The previous month's CPI YoY is used as a proxy for the current YoY return until it becomes available.

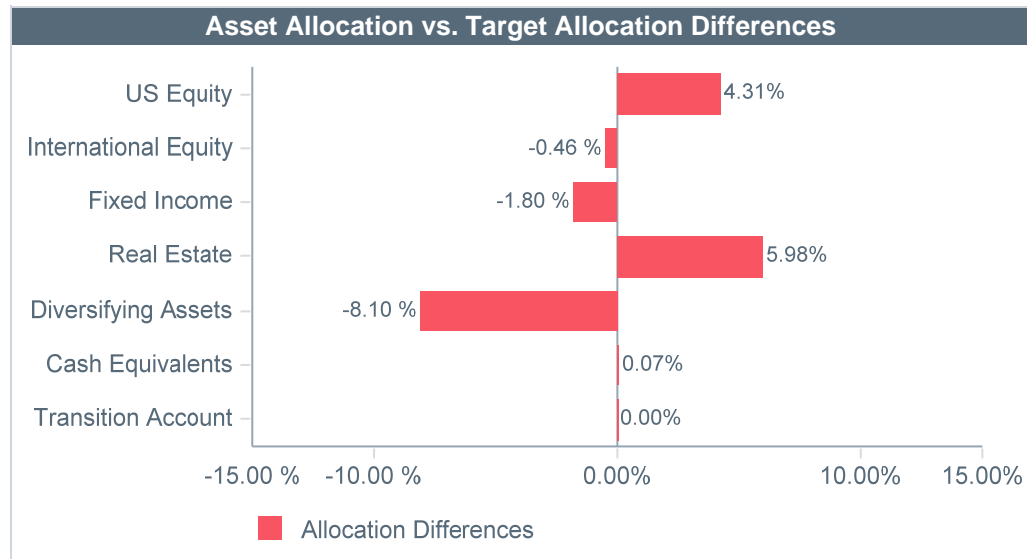


Asset Allocation by Asset Class, Asset Allocation vs. Target, and Schedule of Investable Assets



Asset Allocation vs. Target Allocation

	Market Value (\$)	Allocation (%)	Min (%)	Target (%)	Max (%)
Total Fund	2,243,999,016	100.00	-	100.00	-
US Equity	769,822,403	34.31	20.00	30.00	40.00
International Equity	505,872,340	22.54	13.00	23.00	25.00
Fixed Income	408,494,987	18.20	10.00	20.00	30.00
Real Estate	470,687,883	20.98	0.00	15.00	20.00
Diversifying Assets	87,473,532	3.90	0.00	12.00	20.00
Cash Equivalents	1,597,626	0.07	0.00	0.00	10.00
Transition Account	50,245	0.00	0.00	0.00	0.00



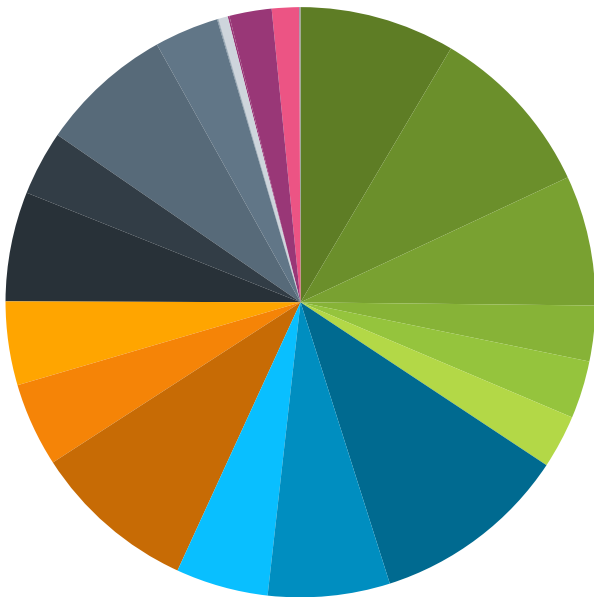
Schedule of Investable Assets

Periods Ending	Beginning Market Value (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)	% Return
CYTD	2,664,636,142	-117,566,378	-303,070,749	2,243,999,016	-11.04

Market values and performance shown are preliminary and subject to change. Performance shown is net of fees. Allocations shown may not sum up to 100% exactly due to rounding.



November 30, 2022 : \$2,243,999,016



	Market Value (\$)	Allocation (%)
Eagle Capital Large Cap Value (SA)	191,199,225	8.52
Mellon Large Cap Core Index (CF)	213,726,116	9.52
Loomis Sayles Large Cap Growth (CF)	159,911,989	7.13
Kayne Anderson US SMID Value (SA)	68,284,095	3.04
Systematic Financial US SMID Value (SA)	70,962,797	3.16
Pinnacle Associates US SMID Cap Growth (SA)	65,738,181	2.93
Silchester International Value (CF)	242,322,951	10.80
Baillie Gifford International Growth (BGEFX)	149,804,202	6.68
Acadian Emerging Markets (CF)	113,745,187	5.07
Baird Core Fixed Income (SA)	202,405,357	9.02
Loomis Sayles Multisector Full Discretion (CF)	103,089,621	4.59
Schroder Flexible Secured Income Fund	103,000,009	4.59
Harrison Street Core Property (CF)	134,571,221	6.00
PGIM Real Estate PRISA II (CF)	79,455,436	3.54
Principal US Property (CF)	164,045,890	7.31
UBS Trumbull Property (CF)	79,208,779	3.53
Vanguard RE Idx;ETF (VNQ)	1,196,472	0.05
Abacus Multi-Family Partners Fund VI (CF)	810,645	0.04
H.I.G. Realty Fund IV	11,399,440	0.51
Hancock Timberland (SA)	2,141,691	0.10
Adams Street Private Equity (SA)	51,961,091	2.32
Hamilton Lane Private Credit (SA)	33,370,750	1.49
Dreyfus Gvt Csh Mgt;Inst (DGCXX)	1,597,626	0.07
Transition Account	50,245	0.00

Market values shown are preliminary and subject to change. Allocations shown may not sum up to 100% exactly due to rounding.

City of Jacksonville Employees' Retirement System
Asset Allocation & Performance (Net of Fees)

As of November 30, 2022

	Allocation		Performance (%)										
	Market Value (\$)	%	MTD	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Total Fund	2,243,999,016	100.00	5.23	8.16	8.16	-11.04	-8.95	4.48	4.49	6.27	7.38	6.03	07/01/1999
Total Fund Policy Index			5.64	9.48	9.48	-9.41	-6.01	5.59	5.49	6.69	7.34	5.77	
Difference			-0.41	-1.32	-1.32	-1.63	-2.94	-1.11	-1.00	-0.42	0.04	0.26	
Total Equity	1,275,694,743	56.85	9.00	14.87	14.87	-17.29	-14.72	5.65	5.57	8.21	9.57	6.11	07/01/1999
US Equity	769,822,403	34.31	5.74	14.13	14.13	-16.68	-13.98	8.06	8.51	9.91	11.84	6.84	07/01/1999
US Equity Index			5.22	13.85	13.85	-14.18	-10.80	10.28	10.33	11.67	12.95	7.07	
Difference			0.52	0.28	0.28	-2.50	-3.18	-2.22	-1.82	-1.76	-1.11	-0.23	
International Equity	505,872,340	22.54	14.35	15.99	15.99	-18.49	-16.15	1.75	0.94	5.48	5.62	5.28	07/01/1999
International Equity Index			11.80	15.15	15.15	-15.37	-11.87	1.75	1.48	4.63	4.23	3.65	
Difference			2.55	0.84	0.84	-3.12	-4.28	0.00	-0.54	0.85	1.39	1.63	
Fixed Income	408,494,987	18.20	2.70	1.79	1.79	-12.82	-12.77	-2.89	-0.71	0.57	0.83	4.18	07/01/1999
Fixed Income Index			3.73	2.59	2.59	-12.70	-12.75	-2.38	0.34	1.00	1.15	3.99	
Difference			-1.03	-0.80	-0.80	-0.12	-0.02	-0.51	-1.05	-0.43	-0.32	0.19	
Real Estate	470,687,883	20.98	-1.02	-0.48	-0.48	13.47	14.40	9.39	8.02	8.02	8.88	6.36	12/01/2005
Real Estate Index			0.00	0.00	0.00	12.37	20.97	11.38	9.27	8.87	9.91	7.01	
Difference			-1.02	-0.48	-0.48	1.10	-6.57	-1.99	-1.25	-0.85	-1.03	-0.65	
Core Real Estate	458,477,798	20.43	-1.04	-0.49	-0.49	13.01	13.94	9.25	7.93	7.96	8.84	6.33	12/01/2005
NCREIF ODCE Index (AWA) (Net)			0.00	0.00	0.00	12.36	20.96	11.38	9.26	8.87	9.91	7.01	
Difference			-1.04	-0.49	-0.49	0.65	-7.02	-2.13	-1.33	-0.91	-1.07	-0.68	
Non-Core Real Estate	12,210,085	0.54	0.00	0.00	0.00	72.24	N/A	N/A	N/A	N/A	N/A	72.24	01/01/2022
NCREIF ODCE Index (AWA) (Net) (Monthly) +2%			0.00	0.00	0.00	14.04	22.97	13.48	11.38	10.99	12.07	14.04	
Difference			0.00	0.00	0.00	58.20	N/A	N/A	N/A	N/A	N/A	58.20	
Diversifying Assets	87,473,532	3.90	0.37	-1.05	-1.05	22.86	37.96	17.15	9.82	8.00	7.53	8.25	03/01/2011
Diversifying Assets Index			5.12	11.27	11.27	-7.90	-4.18	2.59	1.36	1.69	2.45	2.90	
Difference			-4.75	-12.32	-12.32	30.76	42.14	14.56	8.46	6.31	5.08	5.35	

Market values and performance shown are preliminary and subject to change. Performance shown is net of fees and is annualized for periods greater than one year. Allocations may not sum up to 100% due to the exclusion of managers in liquidation. Please see the addendum for custom benchmark definitions. Fiscal year for the COJ ends 09/30. Performance for Harrison Street Core Property, LP, H.I.G Realty Fund IV (CF), PGIM Real Estate PRISA II LP (CF), UBS Trumbull Property (CF), NCREIF ODCE Index (AWA) (Net), NCREIF Timberland Index, Adams Street, LP, and Abacus Multi-Family Partners Fund VI (CF) is available quarterly; interim months assume a 0.00% return. Asset Valuations for Real Estate and Diversifying Assets are lagged/unlagged as reported by the System's book of record, BNY Mellon.



City of Jacksonville Employees' Retirement System
Asset Allocation & Performance (Net of Fees)

As of November 30, 2022

	Allocation		Performance (%)											
	Market Value (\$)	%	MTD	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date	
US Equity														
Eagle Capital Large Cap Value (SA)	191,199,225	8.52	7.10	15.25	15.25	-20.41	-18.04	5.98	7.94	9.97	12.04	9.64	02/01/2007	
Russell 1000 Val Index			6.25	17.14	17.14	-3.65	2.42	8.40	7.86	9.42	10.97	6.76		
Difference			0.85	-1.89	-1.89	-16.76	-20.46	-2.42	0.08	0.55	1.07	2.88		
Mellon Large Cap Core Index (CF)	213,726,116	9.52	5.40	13.86	13.86	-14.15	-10.67	10.50	N/A	N/A	N/A	10.99	05/01/2019	
Russell 1000 Index			5.41	13.86	13.86	-14.13	-10.66	10.56	10.69	11.93	13.17	11.04		
Difference			-0.01	0.00	0.00	-0.02	-0.01	-0.06	N/A	N/A	N/A	-0.05		
Loomis Sayles Large Cap Growth (CF)	159,911,989	7.13	7.35	13.86	13.86	-22.28	-20.37	7.99	9.58	N/A	N/A	11.05	08/01/2017	
Russell 1000 Grth Index			4.56	10.67	10.67	-23.26	-21.64	11.79	12.92	14.00	15.01	14.16		
Difference			2.79	3.19	3.19	0.98	1.27	-3.80	-3.34	N/A	N/A	-3.11		
Kayne Anderson US SMID Value (SA)	68,284,095	3.04	3.68	13.23	13.23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-3.82	03/01/2022
Russell 2500 Val Index			5.02	16.11	16.11	-7.59	-2.78	8.46	6.13	8.48	9.94	-4.21		
Difference			-1.34	-2.88	-2.88	N/A	N/A	N/A	N/A	N/A	N/A	0.39		
Systematic Financial US SMID Value (SA)	70,962,797	3.16	4.80	17.69	17.69	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-3.64	03/01/2022
Russell 2500 Val Index			5.02	16.11	16.11	-7.59	-2.78	8.46	6.13	8.48	9.94	-4.21		
Difference			-0.22	1.58	1.58	N/A	N/A	N/A	N/A	N/A	N/A	0.57		
Pinnacle Associates US SMID Cap Growth (SA)	65,738,181	2.93	2.38	10.11	10.11	-19.97	-17.88	7.55	8.07	9.60	11.62	12.32	03/01/2010	
Russell 2500 Grth Index			2.98	11.34	11.34	-21.54	-21.16	5.33	7.34	9.37	11.51	12.05		
Difference			-0.60	-1.23	-1.23	1.57	3.28	2.22	0.73	0.23	0.11	0.27		
International Equity														
Silchester International Value (CF)	242,322,951	10.80	11.69	15.72	15.72	-8.09	-3.64	2.01	0.88	4.90	6.62	7.92	06/01/2009	
MSCI EAFE Val Index (USD) (Net)			10.99	18.15	18.15	-6.76	-1.21	1.43	0.22	3.19	3.79	4.46		
Difference			0.70	-2.43	-2.43	-1.33	-2.43	0.58	0.66	1.71	2.83	3.46		
Baillie Gifford International Growth (BGEFX)	149,804,202	6.68	18.78	19.70	19.70	-30.52	-31.52	2.82	3.31	7.60	7.64	8.80	06/01/2009	
Baillie Gifford Index			12.43	14.64	14.64	-21.86	-19.51	1.48	2.24	4.50	5.52	6.51		
Difference			6.35	5.06	5.06	-8.66	-12.01	1.34	1.07	3.10	2.12	2.29		
Baillie Gifford Spliced Index			11.80	15.15	15.15	-15.37	-11.87	1.75	1.75	4.24	4.94	5.71		
Difference			6.98	4.55	4.55	-15.15	-19.65	1.07	1.56	3.36	2.70	3.09		
Acadian Emerging Markets (CF)	113,745,187	5.07	14.56	11.98	11.98	-19.53	-14.52	1.65	-0.60	5.00	2.11	1.86	02/01/2011	
MSCI Emg Mkts Index (USD) (Net)			14.83	11.27	11.27	-18.95	-17.43	0.14	-0.42	5.04	2.07	1.26		
Difference			-0.27	0.71	0.71	-0.58	2.91	1.51	-0.18	-0.04	0.04	0.60		

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City of Jacksonville Employees' Retirement System
 Asset Allocation & Performance (Net of Fees)

As of November 30, 2022

	Allocation		Performance (%)										
	Market Value (\$)	%	MTD	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Fixed Income													
Baird Core Fixed Income (SA)	202,405,357	9.02	3.84	2.22	2.22	-13.07	-13.41	N/A	N/A	N/A	N/A	-7.21	03/01/2021
Bloomberg US Agg Bond Index			3.68	2.33	2.33	-12.62	-12.84	-2.59	0.20	0.91	1.09	-7.09	
Difference			0.16	-0.11	-0.11	-0.45	-0.57	N/A	N/A	N/A	N/A	-0.12	
Loomis Sayles Multisector Full Discretion (CF)	103,089,621	4.59	3.27	2.76	2.76	-12.23	-11.50	0.43	2.00	3.56	3.50	5.32	10/01/2007
Bloomberg Gbl Agg Bond Index			4.71	3.99	3.99	-16.70	-16.82	-4.47	-1.69	0.12	-0.53	1.65	
Difference			-1.44	-1.23	-1.23	4.47	5.32	4.90	3.69	3.44	4.03	3.67	
Schroder Flexible Secured Income Fund	103,000,009	4.59	0.00	-0.01	-0.01	N/A	N/A	N/A	N/A	N/A	N/A	-0.01	10/01/2022
SOFR+1.75%			0.46	0.86	0.86	2.92	3.07	2.37	N/A	N/A	N/A	0.86	
Difference			-0.46	-0.87	-0.87	N/A	N/A	N/A	N/A	N/A	N/A	-0.87	
SOFR+5%			0.72	1.39	1.39	5.93	6.36	5.64	N/A	N/A	N/A	1.39	
Difference			-0.72	-1.40	-1.40	N/A	N/A	N/A	N/A	N/A	N/A	-1.40	

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City of Jacksonville Employees' Retirement System
Asset Allocation & Performance (Net of Fees)

As of November 30, 2022

	Allocation		Performance (%)										
	Market Value (\$)	%	MTD	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Real Estate													
Harrison Street Core Property (CF)	134,571,221	6.00	0.00	2.16	2.16	14.02	14.02	9.16	8.27	8.44	N/A	8.34	11/01/2015
NCREIF ODCE Index (AWA) (Net)			0.00	0.00	0.00	12.36	20.96	11.38	9.26	8.87	9.91	8.76	
Difference			0.00	2.16	2.16	1.66	-6.94	-2.22	-0.99	-0.43	N/A	-0.42	
PGIM Real Estate PRISA II (CF)	79,455,436	3.54	0.00	0.95	0.95	20.42	20.42	11.90	10.09	9.67	N/A	10.03	01/01/2015
NCREIF ODCE Index (AWA) (Net)			0.00	0.00	0.00	12.36	20.96	11.38	9.26	8.87	9.91	9.17	
Difference			0.00	0.95	0.95	8.06	-0.54	0.52	0.83	0.80	N/A	0.86	
Principal US Property (CF)	164,045,890	7.31	-2.90	-3.44	-3.44	7.29	9.68	9.99	8.89	8.98	N/A	9.87	01/01/2014
NCREIF ODCE Index (AWA) (Net)			0.00	0.00	0.00	12.36	20.96	11.38	9.26	8.87	9.91	9.43	
Difference			-2.90	-3.44	-3.44	-5.07	-11.28	-1.39	-0.37	0.11	N/A	0.44	
UBS Trumbull Property (CF)	79,208,779	3.53	0.00	-0.17	-0.17	17.28	17.28	7.11	5.31	5.49	6.87	5.54	12/01/2005
NCREIF ODCE Index (AWA) (Net)			0.00	0.00	0.00	12.36	20.96	11.38	9.26	8.87	9.91	7.01	
Difference			0.00	-0.17	-0.17	4.92	-3.68	-4.27	-3.95	-3.38	-3.04	-1.47	
Vanguard RE Idx;ETF (VNQ)	1,196,472	0.05	6.14	9.85	9.85	-22.31	-14.80	1.59	4.69	5.50	7.20	11.44	12/01/2008
Custom REITs Index			6.21	9.93	9.93	-22.17	-14.60	1.73	5.11	5.90	7.62	12.18	
Difference			-0.07	-0.08	-0.08	-0.14	-0.20	-0.14	-0.42	-0.40	-0.42	-0.74	
Abacus Multi-Family Partners Fund VI (CF)	810,645	0.04	0.00	0.00	0.00	N/A	N/A	N/A	N/A	N/A	N/A	0.00	10/01/2022
NCREIF ODCE Index (AWA) (Net) (Monthly) +2%			0.00	0.00	0.00	14.04	22.97	13.48	11.38	10.99	12.07	0.00	
Difference			0.00	0.00	0.00	N/A	N/A	N/A	N/A	N/A	N/A	0.00	
H.I.G. Realty Fund IV	11,399,440	0.51	0.00	0.00	0.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	01/01/2022
NCREIF ODCE Index (AWA) (Net) (Monthly) +2%			0.00	0.00	0.00	14.04	22.97	13.48	11.38	10.99	12.07	14.04	
Difference			0.00	0.00	0.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

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City of Jacksonville Employees' Retirement System
Asset Allocation & Performance (Net of Fees)

As of November 30, 2022

	Allocation		Performance (%)										
	Market Value (\$)	%	MTD	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Diversifying Assets													
Hancock Timberland (SA)	2,141,691	0.10	0.00	0.00	0.00	61.46	61.46	28.46	18.57	15.51	13.32	7.72	10/01/2006
NCREIF Timberland Index			0.00	0.00	0.00	7.64	12.54	5.80	4.69	4.28	5.90	5.59	
Difference			0.00	0.00	0.00	53.82	48.92	22.66	13.88	11.23	7.42	2.13	
Adams Street Private Equity (SA)	51,961,091	2.32	0.00	-2.22	-2.22	25.14	54.70	N/A	N/A	N/A	N/A	32.54	11/01/2020
S&P 500 Index+3%			5.85	14.70	14.70	-10.72	-6.49	14.23	14.31	15.54	16.74	16.33	
Difference			-5.85	-16.92	-16.92	35.86	61.19	N/A	N/A	N/A	N/A	16.21	
Hamilton Lane Private Credit (SA)	33,370,750	1.49	0.97	0.80	0.80	4.10	6.11	N/A	N/A	N/A	N/A	-2.90	04/01/2021
ICE BofAML Gbl Hi Yld Index +2%			4.32	6.67	6.67	-12.23	-10.59	0.76	2.83	5.71	5.37	-5.90	
Difference			-3.35	-5.87	-5.87	16.33	16.70	N/A	N/A	N/A	N/A	3.00	
Dreyfus Gvt Csh Mgt;Inst (DGCXX)	1,597,626	0.07	0.28	0.53	0.53	1.15	1.25	0.71	1.25	1.05	0.76	1.33	04/01/2001
FTSE 3 Mo T-Bill Index			0.29	0.54	0.54	1.16	1.16	0.64	1.20	1.00	0.71	1.31	
Difference			-0.01	-0.01	-0.01	-0.01	0.09	0.07	0.05	0.05	0.05	0.02	

Private equity funds tend to underperform in the early stages of their maturity; returns tend to improve as funds mature.

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Performance Related Comments:

- Performance is annualized for periods greater than one year.
- Performance and market values shown are preliminary and subject to change.
- The inception date shown indicates the first full month of performance following initial funding.
- The market value shown for the Transition Account includes residual assets from terminated managers.
- RVK began monitoring the assets of the City of Jacksonville Retirement System on 01/01/2019. Prior historical data was provided by the custodian and previous consultant.

Custom Composite Benchmark Comments:

- **Total Fund Policy Index:** The passive Total Fund Policy Index is calculated monthly and currently consists of 30% Russell 3000 Index, 23% MSCI ACW Ex US Index (USD) (Net), 20% Fixed Income Index, 15% Real Estate Index, and 12% Diversifying Assets Index.
- **US Equity Index:** The passive US Equity Index consists of 100% DJ US TSM Index through 06/2009 and 100% Russell 3000 Index thereafter.
- **International Equity Index:** The passive International Equity Index consists of 100% MSCI EAFE Index (USD) (Gross) through 01/2011 and 100% MSCI ACW Ex US Index (USD) (Net) thereafter.
- **Fixed Income Index:** The passive Fixed Income Index consists of 100% Bloomberg US Agg Bond Index through 10/2017 and 100% Bloomberg US Universal Bond Index thereafter.
- **Real Estate Index:** The active Real Estate Index is calculated monthly using beginning of month investment weights applied to each corresponding primary benchmark return.
- **Diversifying Assets Index:** The active Diversifying Assets Index is calculated monthly using beginning of month investment weights applied to each corresponding primary benchmark return. Prior to 10/01/2020, the Diversifying Assets Index consists of 67% S&P MLP Index (TR)/33% NCREIF Timberland Index. Prior to 11/01/2017, the Diversifying Assets Index consists 50% S&P MLP Index (TR)/50% NCREIF Timberland Index.

Custom Manager Benchmark Comments:

- **Baillie Gifford Index:** The passive Baillie Gifford Index consists of 100% MSCI EAFE Grth Index (USD) (Net) through 10/2017 and 100% MSCI ACW Ex US Grth Index (USD) (Net) thereafter.
- **Baillie Gifford Spliced Index:** The passive Baillie Gifford Spliced Index consists of 100% MSCI EAFE Index (USD) (Net) through 11/2019 and 100% MSCI ACW Ex US Index (USD) (Net) thereafter.
- **Custom REITs Index:** The passive Custom REITs Index consists of 100% MSCI US REIT Index (USD) (Gross) through 01/2019 and 100% Vanguard Spl Real Estate Index thereafter.
- **Vanguard Spliced Real Estate Index:** The Vanguard Spl Real Estate Index consists of MSCI US REIT Index (USD) (Gross) adjusted to include a 2% cash position (Lipper Money Market Average) through 04/30/2009, MSCI US REIT Index (USD) (Gross) through 01/31/2018, MSCI US IM Real Estate 25/50 Transition Index through 07/24/2018, and MSCI US IM Real Estate 25/50 Index (Gross) thereafter.

PORTLAND

BOISE

CHICAGO

NEW YORK

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City of Jacksonville Employees' Retirement System

INVESTMENT ACTIVITY REPORT: January 2023

Events

Special US Large Cap Value Finalist Meeting

February 16, 2023

Presentation: 1:00-5 PM
City Hall Conference Room 3

Board Due Diligence Meetings

1st Thursday Each Month

Presentation: 12:30-2 PM
City Hall Conference Room 3C

February 2, 2023

PGIM - Real Estate

March 2, 2023

Drew Matus,
Chief Market Strategist
MetLife Investment Management

April 6, 2023

Mike Sheldon & Jake Remley
Senior Portfolio Managers
Economy & Fundamentals Chat
Income Research & Management

May 4, 2023

Systematic- SMID Value

June 1, 2023

Adams Street- Private Equity

July 6, 2023

Pinnacle- SMID Growth

August 3, 2023

Eagle Capital- LCV Equity

September 7, 2023

Loomis Sayles- LCG Equity

October 5, 202

Kayne Anderson- SMID Value

November 2, 2023

Baillie Gifford- International
Equity

Staff Update

Contract Status

N/A

Other

N/A

Meeting Current Managers

Principal - RE

Meeting Prospect Managers

Silver Point Capital - PC
Voya Financial

Large Cap Value

Brandes
JP. Morgan
LSV Asset Management
T. Rowe Price
Wellington

Cash Flows

Hamilton Lane-Private Credit

Total Monthly Called:
Castlelake VI L.P. \$1.1 M
Hamilton Lane Strat Opps VII:
\$0.42 M
Total Net Called: \$1.5 million

Adams Street- Private Equity

Capital Call: N/A
Total Called: ~\$41.2 million

Real Estate

HIG Capital : Net \$3.4 million
Total HIG Called: ~\$16.2 million

Provider Disbursements

12/30/2022 & 1/31/2023
Principal RE: \$335,000
Silchester: \$118,000 (monthly)
Total Fees: ~\$0.45 million

Provider Income + Redemptions

BNY Mellon LCC: \$5 million
Hancock Timber: \$1.1 million
UBS Income: \$0.46 million
Total: \$6.5 million