#### BOARD OF PENSION TRUSTEES FOR THE CITY OF JACKSONVILLE RETIREMENT SYSTEM Thursday, March 27, 2025, at 2 PM City Hall Conference Room 3C

#### AGENDA

#### 1. CALL TO ORDER

#### 2. PUBLIC COMMENT

#### 3. MINUTES

a. Copy of February 27, 2025, and March 6, 2025, Board of Trustees Minutes; RECOMMENDED ACTION: APPROVAL

#### 4. <u>NEW BUSINESS</u>

- a. GEPP February 2025 Consent; PAC RECOMMENDED ACTION: APPROVAL
- b. COPP February 2025 Consent; COPAC RECOMMENDED ACTION: APPROVAL
- c. GEPP and COPP 10/1/2024 Valuations presentation

#### 5. INVESTMENT AND FINANCIAL MATTERS

- a. February Investment Performance Review
- b. Staff Update
  - Investment Activity Report
  - IPS Refresh Moved to April
- c. SMID Growth Manager Search (30 minutes each)
  - Driehaus
  - Geneva
  - Hood River

#### 6. OLD BUSINESS

None

#### 7. ADMINISTRATIVE

a. Staff Update

#### 8. INFORMATION

- a. Financial Discussion with Eagle Capital Large Cap Core scheduled for Thursday, April 3, 2025, at 12:30 PM (meet and greet starts at 12:00)
- b. Next regular BOT meeting scheduled for Thursday, April 24, 2025, at 2 PM

#### 9. PRIVILEGE OF THE FLOOR

#### 10. ADJOURNMENT

#### BOARD OF PENSION TRUSTEES FOR THE CITY OF JACKSONVILLE RETIREMENT SYSTEM February 27, 2025

#### **MINUTES**

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

#### Members Present

Anna Brosche, Vice Chair (via Zoom) David Kilcrease, Secretary Kelli O'Leary (on behalf of Karen Bowling) Leah Hayes Julie Bessent Sage Sullivan Michelle Fletcher Eric Smith

#### Members Not Present

Jeffrey Bernardo, Chair

#### Staff Present

Chris Cicero, Treasurer Brennan Merrell, Chief Investment Officer John Sawyer, OGC Adina Teodorescu, OGC Eric Jordan, Financial Specialist Hannah Wells, Assistant Pension Administrator (via Zoom) Andy Robinson, Pension Administrator

#### **Others Present**

Jeffrey Williams, Segal Tad Delegal Mike Hogan Richard Rosen, Portfolio Manager, Pinnacle Associates Ltd. Andrew Eras, Director of Institutional Sales & Marketing, Pinnacle Jordan Cipriani, RVK Samia Khan, RVK Jake Gerbner, RVK (via Zoom)

#### 1. CALL TO ORDER

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

#### 2. PUBLIC COMMENT

There was none.

#### 3. MINUTES

Mr. Smith motioned to approve the minutes. Ms. O'Leary seconded the motion. The Chair asked for discussion and there was none. The Chair took a vote, and the motion passed unanimously.

#### 4. <u>NEW BUSINESS</u>

#### a. <u>Consent Agendas</u>

Ms. O'Leary motioned to approve the consent agendas. Ms. Hayes seconded the motion. The Chair asked for discussion. The Chair took a vote, and the motion passed unanimously.

#### b. Discount Rate Comparison and Discussion

Mr. Williams provided a brief overview of the actuarial process and of the preliminary valuation results as of October 1, 2024, for the General Employees Pension Plan and the Corrections Officers Pension Plan. The results included the current Board-approved 6.50% discount rate, and a comparison of rates requested at 6.375% and 6.25%. A discussion was held between the Board, Mr. Williams, RVK, and staff.

Ms. O'Leary mentioned the Board was comfortable with the current rate and that she would continue to support that rate based on the prior year's discussion.

Ms. Bessent inquired if the discussion could be tabled until the March Board meeting so that RVK could provide data in relation to the proposed rates. Ms. Cipriani mentioned the recent presentation of the 2025 capital market assumptions and how returns and yields are expected to be forecast at about 6.33% for the twenty-year long-term horizon for the COJ General Pension Fund. Mr. Merrell and Ms. Cipriani covered the current asset class return and risk assumptions in more detail. Ms. O'Leary and Ms. Brosche touched on the need to move forward with a decision for City budgeting purposes.

Ms. O'Leary motioned to retain the current 6.50% discount rate. Ms. Brosche seconded the motion. The Chair summoned for discussion. Ms. Bessent mentioned the Board's decision should be to adopt the lower rate of 6.375% to be more in line with the data provided by RVK. The Chair asked for further discussion and there was none. The Chair called for a vote and the motion passed by a 5-3 vote.

#### c. <u>GEPP Eligibility Appeal</u>

Mr. Sawyer briefed the Board with an overview of the prior proceedings. The case moved

through the appropriate processes and an evidentiary hearing was held by the Pension Advisory Committee. The PAC denied the eligibility request to join the GEPP and the appeal has now been brought before the Board for review.

Mr. Smith inquired about the amount of time allotted to each party to present their view of the case and Mr. Sawyer provided the timeline for the review as provided by the Board rules. Mr. Sawyer also asked if any Board members had any ex-parte communications with either party before the appeal review. No Board members provided confirmation of having any prior conversations with either party.

Mr. Delegal gave an overview of the case and provided documentation to support the evidence that was presented at the evidentiary hearing. He spoke on the application of the law and how it pertains to his client, Mr. Mike Hogan, on why he should have been permitted to join the GEPP when previously attempted. He mentioned that Mr. Hogan had always been a contributing member of the Florida Retirement System (FRS) and was enrolled in the Deferred Retirement Option Program (DROP) that FRS provided. He argued that Mr. Hogan should have had the option to leave the DROP program and join the GEPP per City of Jacksonville charter. Mr. Delegal spoke on the Board's use of an outside pension attorney to provide guidance on this issue and mentioned the attorney was misinformed on certain parts of the law pertaining to this case. He also provided more clarification on the DROP, Florida statutes, GEPP qualification, employer contributions, unfunded liabilities, and the decisions of the PAC. Mr. Delegal concluded his presentation as to why Mr. Hogan should have had the opportunity to elect participation in the GEPP.

Ms. Teodorescu gave an overview of the City's side of the case. She spoke on the fact that the City has contributing members within FRS and that the City is an FRS employer. She talked about the evidentiary hearing, the rigorous review process that the PAC performed, and the laws and statutes interpreted by the Board's outside legal counsel pertaining to the facts of the case and the gualifications of the outside counsel to accurately interpret those laws. She mentioned that Mr. Hogan was in FRS DROP and would not have been permitted to leave FRS for the GEPP without first resigning his elected position. She spoke on how Mr. Hogan stayed an employee of FRS after the DROP program ended and provided copies of prior FRS enrollment forms. Ms. Teodorescu continued to provide an overview of the presented evidence, including guidance from the outside counsel stating how placing Mr. Hogan within the GEPP would subject the City to harsh penalties brought by the Florida Department of Management Services. She spoke on the City's responsibilities as an FRS employer, the DROP Extended designation, and Social Security obligations. She concluded her presentation by stating that PAC determined Mr. Hogan was not eligible to join the GEPP based on evidence provided and the facts of the case.

Mr. Delegal was permitted a rebuttal and spoke on several points.

Mr. Smith made a motion to extend each party's time by ten minutes. Ms. Fletcher seconded the motion. The Chair called for discussion and there was none. A vote was

held and passed unanimously.

Mr. Delegal continued with his rebuttal and then Ms. Teodorescu was permitted a rebuttal and spoke on several key points as well.

Mr. Kilcrease provided an overview of the procedural rules of the Board and the responsibility of the Board to base its decision on the investigation of facts by the PAC. Ms. O'Leary asked about how the issue was addressed in a timely manner in 2016 and if there was any formal documentation to support the claim. Ms. Sullivan, Chair of the PAC, spoke on that question stating only an informal discussion was held with a prior GEPP Plan Administrator as determined during the evidentiary hearing. The Chair asked for any other questions.

Mr. Smith motioned to approve the granting of the GEPP eligibility request. Ms. Fletcher seconded the motion. The Chair called for discussion. Mr. Smith provided an explanation as to his reasons for supporting eligibility. He spoke about lack of confidence in outside counsel, errors in judgement interpreting the law by the PAC, and that the benefit should be granted. Ms. Sullivan countered and stated that granting the benefit without considering all the facts presented at the evidentiary hearing and evaluated by the PAC could set an undue precedent and strongly advised against granting eligibility. Ms. O'Leary inquired about the outside counsel is retained by the Office of General Counsel and his role is to represent the Board in pension matters. The Chair asked for further discussion and there was none. A vote was called, and the motion was defeated by a 2-6 vote.

Ms. O'Leary motioned to deny the GEPP eligibility request. Ms. Hayes seconded the motion. The Chair called for discussion. Upon no further discussion, a vote was held and the motion passed by a 6-2 vote.

#### 5. INVESTMENT AND FINANCIAL MATTERS

Mr. Merrell provided a high-level overview of the preliminary investment flash report. The fund was up 1.04% MTD and up 0.23% FYTD. He mentioned the numbers reflected were preliminary in nature due to the late closing of the books by the custodian bank. He spoke on the positive performance of Eagle Capital and the Board's prior investment in IPI which has now been acquired by Blue Owl. Mr. Kilcrease inquired if Blue Owl is still presented in the correct comparison regarding the acquisition of IPI. Mr. Merrell stated that nothing has changed from an investment standpoint and that Blue Owl maintains the same strategy in data center holdings. Ms. Cipriani agreed that RVK has no concerns about the acquisition and that the management team, and the benchmark have not changed.

Ms. Cipriani presented the 4Q24 performance results. She spoke on capital markets and mentioned record fourth quarter highs within the S&P 500 which led to a CYTD return of 25.02%. RVK does however expect a slight pullback in long-term expectations for U.S. equity markets. She touched on international equities being down for the

quarter, but still showed a positive return for the year, fixed income being negative for the quarter, but also positive for the year, and the core real estate component being positive for the quarter. Ms. Kahn presented the current watch list that included Eagle Capital. This manager was added to the list over a year ago due to management change and heightened volatility. Ms. Kahn mentioned Eagle Capital has now exceeded current benchmarks and performance has been strong. RVK expects this manager will be removed from the watch list within the next few quarters. Ms. Cipriani commented on the watch list process and Mr. Merrell mentioned the internal management change was not a concern. Ms. Khan moved onto asset allocation and target ranges throughout the asset classes, performance attribution, and total fund performance. The total fund was down -0.69% for the quarter but still positive CYTD.

Mr. Merrell provided details regarding the Investment Activity Report. He spoke on the due diligence workshops, manager meetings, and cash flows. He mentioned total calls of about \$5 million by Hamilton Lane and no other calls in private equity and only a few slight calls in real estate by Ares, and Bell. Mr. Merrell also talked about disbursements and redemptions.

Mr. Merrell introduced Richard Rosen and Andrew Eras from Pinnacle. The Board asked that Pinnacle attend to discuss recent underperformance and volatility in the SMID Growth strategy. Mr. Eras thanked the Board and provided a brief overview of the upcoming presentation. Mr. Rosen spoke on the tenure of Pinnacle's team, the portfolio balance of the COJ General Pension Fund's investment from 2010 to current, and year-by-year performance. He mentioned portfolio challenges such as prolonged global industrial slowdowns, communication services, Al infrastructure volatility, and index anomalies. He spoke on higher interest rates and recessions. Mr. Rosen mentioned the history of Pinnacle's relationship with the COJ General Pension Fund, prior outperformance, and historical investment patterns. He spoke on long-term returns, optimistic outlooks for future performance, catalysts to drive alpha, portfolio construction, and that Pinnacle has confidence in their philosophy and discipline.

Ms. Bessent inquired about underperformance versus the benchmark in relation to interest rates with companies being more capital intensive than the rest of the index. Mr. Rosen replied that dramatic rate increases have impacted companies with secular growth prospects such as industrial automation. Mr. Merrell asked how the current governmental administration could affect the portfolio regarding clean energy and national defense. Mr. Rosen mentioned short-term disruptions, tariffs, increased volatility, and prior outperformance during the administration's first term. Ms. Bessent mentioned that Pinnacle is an active manager but is being judged against the benchmark. She asked about over and under allocations against the benchmark. Mr. Rosen stated that Pinnacle focuses on finding the best growth companies and the benchmark is relatively not considered. He spoke on overweight sectors, short-term losses, and long-term themes that should provide for long-term growth.

Mr. Rosen and Mr. Eras thanked the Board, and the members of Pinnacle left the conversation. Mr. Merrell, the Board, and RVK discussed Pinnacle's presentation and

the future of SMID Growth within the portfolio. The topics discussed were withdrawals, assets under management, and recommendations.

#### 6. OLD BUSINESS

There was none.

#### 7. ADMINISTRATIVE

Mr. Robinson reported that the Pension Office continues to experience increased processing volumes in regard to requested 2025 retirement estimates. He stated that the yearly tax returns were filed with the IRS before the deadline, and that day-to-day operations remain the same.

#### **INFORMATION**

The next regular BOT meeting is scheduled for Thursday, March 27, 2025, at 2 PM.

Investment due diligence workshop will be held Thursday, March 6, 2025, at 12:30 PM.

#### 8. PRIVILEGE OF THE FLOOR

Mr. Kilcrease mentioned that the Board should have an introductory meeting with the outside attorney through the Office of General Counsel. Ms. O'Leary agreed that a meeting would be beneficial to the Board.

#### 9. ADJOURNMENT

The Chair adjourned the meeting at 4:06 PM.

#### BOARD OF PENSION TRUSTEES FOR THE CITY OF JACKSONVILLE RETIREMENT SYSTEM March 6, 2025

#### **MINUTES**

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

#### Members Present

Jeffrey Bernardo, Chair David Kilcrease, Secretary Leah Hayes Kelli O'Leary (on behalf of Karen Bowling) Julie Bessent

#### Members Not Present

Anna Brosche Michelle Fletcher Sage Sullivan Eric Smith

#### **Staff Present**

Brennan Merrell, Chief Investment Officer Eric Jordan, Financial Specialist – Treasury Yolanda Tillman, Treasury Analyst Tracy Flynn, Chief of Risk Management

#### **Others Present**

Scott Cokely, Managing Director, Wellington Management Matt Hand, Portfolio Manager, Wellington Management

#### 1. CALL TO ORDER

Chair Bernardo called the meeting to order at 12:35 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

#### Wellington Management

Mr. Merrell introduced Scott Cokely and Matt Hand from Wellington Management, noting the relationship's inception in 2023 and that Wellington Management currently manages \$156 million in the Wellington Select Equity Income Fund for the Jacksonville Employees' Retirement System.

Mr. Cokely provided an overview of Wellington Management, highlighting its \$1.2 trillion in assets under management, global client base of over 3,000, and balanced portfolio of equity and fixed income. He emphasized the firm's employee ownership structure, which facilitates talent retention and investment strategy continuity. In response to Ms. Bessent's inquiry, Mr. Cokely confirmed the absence of recent major personnel changes. He further elaborated on the firm's history, tracing its origins as a Vanguard fund before its transition to a private partnership in 1979.

Mr. Hand detailed the Wellington Select Equity Income Fund strategy, which prioritizes dividends, company quality, valuation, and downside mitigation. The strategy targets companies within the fourth quintile of dividend yield, known for their historical sustainability. He outlined the investment team's expertise and individual strengths. In response to Chair Bernardo's question, Mr. Hand clarified his role as the sole decision-maker for the Wellington Select Equity Income Fund, while emphasizing the utilization of firm-wide resources.

Mr. Hand explained the investment process, which involves identifying resilient companies with "areas of opportunity" (including misunderstood negative events, depressed returns, management changes, and consolidating industries) through fundamental and financial analysis. He provided case studies illustrating the investment process, and, at Mr. Merrell's request, discussed two instances where the investment thesis proved unsuccessful.

Regarding performance, the portfolio achieved a gross return of 14.2%, slightly below the benchmark's 14.4%. Mr. Hand reviewed the fund's upside and downside capture rates, noting the favorable spread and the upside capture exceeding 100%. Following a brief Q&A session, the presentation concluded.

#### 4. OLD BUSINESS

N/A

#### 5. ADMINISTRATIVE

N/A

#### 6. INFORMATION

The next regular BOT meeting is scheduled for Thursday, March 27, 2024, at 2 PM.

Investment due diligence workshop will be held Thursday, April 3, 2025, at 12:30 PM.

#### 7. PRIVILEGE OF THE FLOOR

None

#### 8. ADJOURNMENT

Chair Bernardo adjourned the meeting at 1:53 PM.

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

#### February 2025

#### **CONSENT AGENDA FOR RECOMMENDED BENEFITS**

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

#### 1. TIME SERVICE RETIREMENTS

Anneka Barnes (JEA), effective September 21, 2024, in the monthly base amount of \$5,209.48 at the rate of 62.50% (25 years)

Tamera L Branam (City), effective January 25, 2025, in the monthly base amount of \$4,025.81 at the rate of 80% (32 years) 12 months BACKDROP \$49,368.28

Kathleen H Brunner (City), effective February 2, 2025, in the monthly base amount of \$2,519.12 at the rate of 52.50% (21 years)

Rogelio A Cenizal (JEA), effective January 25, 2025, in the monthly base amount of \$5,909.15 at the rate of 80% (32 years and 7 months) 15% PLOP \$186,296.13

Philip A Donaldson (JEA), effective January 11, 2025, in the monthly base amount of \$5,383.61 at the rate of 80% (34 years and 5 months) 15% PLOP \$204,221.34

Richard J Foxwell (JEA), effective January 25, 2025, in the monthly base amount of \$3,910.27 at the rate of 45% (18 years)

Anthony L Johnson (JEA), effective January 25, 2025, in the monthly base amount of \$9,917.03 at the rate of 80% (32 years)

Karen D Kay (City), effective February 1, 2025, in the monthly base amount of \$2,422.42 at the rate of 67.71% (27 years and 1 month) 5% PLOP \$20,056.91

Bruce E Lewis (City), effective January 4, 2025, in the monthly base amount of \$3,518.72 at the rate of 56.88% (22 years and 9 months)

Andrew T Motsinger (JEA), effective January 11, 2025, in the monthly base amount of \$8,732.63 at the rate of 67.71% (27 years and 1 month)

Debra A Presgraves (JSO), effective January 11, 2025, in the monthly base amount of \$2,286.39 at the rate of 80% (32 years and 5 months) 60 months BACKDROP \$151,344.54

Elmer G Ratley (JEA), effective January 25, 2025, in the monthly base amount of \$3,647.98 at the rate of 80% (32 years and 3 months) 36 months BACKDROP \$139,741.12

James M Reed (City), effective February 8, 2025, in the monthly base amount of \$4,066.22 at the rate of 68.13% (27 years and 3 months)

Joseph Teague (JEA), effective January 31, 2024, in the monthly base amount of \$2,504.41 at the rate of 35% (14 years)

Shirley A Terrell (JSO), effective January 11, 2025, in the monthly base amount of \$2,702.12 at the rate of 71.25% (28 years and 6 months) 5% PLOP \$27,636.75

Crisencio F Tongol (City), effective January 4, 2025, in the monthly base amount of \$7,568.10 at the rate of 61.88% (24 years and 9 months)

Kai Wang (JEA), effective February 1, 2025, in the monthly base amount of \$5,827.05 at the rate of 50.21% (20 years and 1 month)

Susan D Williamson (City), effective December 14, 2024, in the monthly base amount of \$1,540.33 at the rate of 49.79% (19 years and 11 months)

Phillip D Yeatman (JEA), effective January 4, 2025, in the monthly base amount of \$6,438.79 at the rate of 77.50% (31 years) 60 months BACKDROP \$426,206.95

#### 2. VESTED RETIREMENTS

<u>New Commencements</u> None

New Deferrals

None

#### 3. SURVIVOR BENEFITS

Carol B Bertani, (Albert A Bertani), effective February 3, 2025, in the monthly COLA base amount of \$1,221.68

Robert S Blizzard, (Donna M Blizzard), effective January 11, 2025, in the monthly COLA base amount of \$1,959.34

Alma J Howard, (James E Howard), effective October 1, 2024, in the monthly COLA base amount of \$769.15

Jeanette L Montgomery, (Clifton L Portier), effective April 21, 2024, in the monthly COLA base amount of \$675.83

Wanda Stubbs, (Willie G Stubbs), effective January 19, 2025, in the monthly COLA base amount of \$1,261.76

Edgar Todd, (Peggy J Todd), effective January 26, 2025, in the monthly COLA base amount of \$947.22

Leonora F Ward, (Fred D Ward), effective January 27, 2025, in the monthly COLA base amount of \$5,669.60

#### 4. <u>RESTORATION OF SURVIVOR BENEFITS</u>

None

#### 5. CHILDREN/ORPHAN/GUARDIANSHIP BENEFITS

None

#### 6. <u>TIME SERVICE CONNECTIONS COMPLETED</u>

Eric D Dove, (JEA) 16.53 months completed in the amount of \$20,269.29

Robert C Galvan, (JEA) 8.27 months completed in the amount of \$8,919.30

Natasha C Jackson, (JEA) .13 months completed in the amount of \$118.45

Tammie L Perkins-Watkins, (City) 6.6 months completed in the amount of \$2,692.26

#### 7. <u>TIME SERVICE CONNECTIONS COMPLETED PURSUANT TO</u> ORDINANCE 2000- 624-E (Independent Agency)

None

#### 8. <u>TIME SERVICE CONNECTIONS COMPLETED PURSUANT TO</u> <u>ORDINANCE 2003-573-E (Military)</u>

None

#### 9. <u>REFUNDS</u>

Sarah A Freeman, (City), 16 years and 11 months, \$49,390.40

Daniel R Jackson, (JEA), 17 years and 10 months, \$89,578.63

Laura M Wilcoxen, (City), 6 years and 0 months, \$18,228.84

#### 10. DB TO DC TRANSFER

Paul J Leach, (JEA), 23 years and 1 month in the amount of \$911,401.30

Samuel T Ramirez, (JEA), 8 years and 2 months in the amount of \$244,658.06

Robert E Simmons, (JEA), 35 years and 3 months in the amount of \$1,488,233.86

#### 11. OTHER PAYMENTS AND TIME CONNECTIONS

None

#### 12. <u>RE-RETIREE</u>

None

PAC Secretary Approval

BOT Secretary Approval

Notes and Comments regarding Approval:

	-
Data	
Date	

Date

#### CORRECTIONAL OFFICERS PENSION ADVISORY COMMITTEE

#### February 2025

#### CONSENT AGENDA FOR RECOMMENDED BENEFITS

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

**1. TIME SERVICE RETIREMENTS** 

Lashanda Y Frazier, effective December 28, 2024, in the monthly base amount of \$3,670.42 at the rate of 66.33% (23 years and 2 months)

- 2. TIME SERVICE CONNECTIONS COMPLETED
- 3. REFUND OF CONTRIBUTIONS
- 4. SURVIVOR BENEFITS APPLICATION
- 5. CHILDREN/ORPHAN/GUARDIANSHIP BENEFITS
- 6. VESTED BENEFIT
- 7. TIME SERVICE CONNECTIONS COMPLETED PURSUANT TO **ORDINANCE 2003-573-E (Military)**
- 8. OFFICERS ENTERING DROP JANUARY 2025
- 9. Phase II Biweekly Distribution DROP Program
- 10. DROP Payments Joanne V Joyner, \$22,000.00

**COPAC Secretary Approval** 

BOT Secretary Approval

Notes and Comments regarding Approval:

Date

Date

City of Jacksonville General Employees Retirement Plan

# Summary Valuation Results as of October 1, 2024

### **Board of Trustees Meeting – March 27, 2025**

Jeff Williams, Vice President



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# Summary of October 1, 2024 Actuarial Valuation Results

### **Actuarial Determined Contribution (ADC)**

- The October 1, 2024 actuarial valuation determines the ADC the City of Jacksonville will pay in its fiscal year beginning October 1, 2025
- Florida Chapter 112 determined employer contribution of \$158.53 million
- City's ADC for its fiscal year beginning October 1, 2025 is \$115.43 million (50.71% of projected payroll)
  Increase of \$2.13 million from the prior year

### **Experience Gain/Loss**

- The total actuarial loss was 1.30% of actuarial accrued liability
  - Gain from investments of 0.46%
  - Loss from contributions less than Florida Chapter 112 determined contribution of 1.36%
  - Loss from demographic/other experience of 0.40%; primary source of demographic loss was salary increases greater than expected

### **Surtax Revenue**

- Percentage allocated to GERP currently 35.60%, up from 34.90% in the prior valuation
- Present value of projected surtax revenue as of October 1, 2024 allocated to GERP is \$923.39 million (prior to smoothing)



### - Segal

## Summary of October 1, 2024 Actuarial Valuation Results

### **Funded ratios**

- On an actuarial basis, decreased slightly from 53.92% in 2023 to 53.70% in 2024
- On a market basis, increased from 51.54 % in 2023 to 56.12% in 2024

### **Financial information**

- Actuarial value of assets increased from \$2.03 billion to \$2.05 billion
- Market value of assets increased from \$1.94 billion to \$2.14 billion
- \$92.19 million in unrecognized asset gains, compared to \$89.73 million in unrecognized asset losses in the prior valuation
- Rates of return
  - Assumed return of 6.50% for experience in fiscal 2024, unchanged from prior year
  - Market value of assets return of 17.43%
  - Actuarial value of assets return of 7.40%





# Summary of Key October 1, 2024 Actuarial Valuation Results

Valuation Result	Current	Prior
Contributions for fiscal year beginning	October 1, 2025	October 1, 2024
Florida Chapter 112 determined employer contributions	\$158,526,188	\$153,422,081
Less amortized value of discounted value of projected surtax revenue	-43,095,958	-40,122,169
City's required minimum contribution <sup>1</sup>	\$115,430,230	\$113,299,912
Actuarial accrued liability for plan year beginning	October 1, 2024	October 1, 2023
Retired participants and beneficiaries	\$2,617,068,012	\$2,578,163,782
Inactive vested participants	19,132,024	19,583,436
Active participants	1,184,631,246	1,167,423,032
• Total	\$3,820,831,282	\$3,765,170,250
Normal cost including administrative expenses for plan year beginning October 1	45,710,466	46,755,918
Assets for plan year beginning October 1		
Market value of assets (MVA)	\$2,144,143,000	\$1,940,430,000
Actuarial value of assets (AVA)	2,051,953,320	2,030,156,195
Actuarial value of assets as a percentage of market value of assets	95.70%	104.62%
Funded status for plan year beginning October 1		
Unfunded actuarial accrued liability on market value of assets	\$1,676,688,282	\$1,824,740,250
Funded percentage on MVA basis	56.12%	51.54%
Unfunded actuarial accrued liability on actuarial value of assets	\$1,768,877,962	\$1,735,014,055
Funded percentage on AVA basis	53.70%	53.92%
Effective Amortization period on an AVA basis	22	23



# City's Minimum Required Contribution

The actuarial determined contribution is calculated for the following fiscal year. The contributions shown below have been projected with interest and will be payable in the following fiscal year.

	Contribution	202	5	2024		
		Amount	% of Payroll	Amount	% of Payroll	
1.	Total normal cost	\$44,156,466	19.40%	\$45,390,918	19.38%	
2.	Administrative expenses	1,554,000	0.68%	1,365,000	0.59%	
3.	Expected employee contributions	-20,594,781	-9.05%	-21,219,420	-9.06%	
4.	Employer normal cost: (1) + (2) + (3)	25,115,685	11.03%	\$25,536,498	10.91%	
5.	Actuarial accrued liability	\$3,820,831,282		\$3,765,170,250		
6.	Actuarial value of assets	2,051,953,320		2,030,156,195		
7.	Unfunded actuarial accrued liability: (5) - (6)	\$1,768,877,962		\$1,735,014,055		
8.	Payment on projected unfunded actuarial accrued liability	125,854,736	55.29%	\$120,573,091	51.49%	
9.	Florida Chapter 112 determined employer contribution: (4) + (8) <sup>1</sup>	\$158,526,188	69.65%	\$153,422,081	65.52%	
10.	Discounted and amortized value of projected surtax revenue <sup>1,2</sup>	-43,095,958	-18.93%	-40,122,169	-17.14%	
11.	City's minimum required contribution: $(9) + (10)^2$	\$115,430,230	50.71%	\$113,299,912	48.38%	
12.	Projected payroll	\$227,613,983		\$234,170,408		

<sup>1</sup>Adjusted for timing and projected to next fiscal year; contributions are assumed to be paid at the end of every month. <sup>2</sup>Pursuant to State Law Chapter 2016-146 and City of Jacksonville ordinances 2017-257-E and 2017-258-E



# Participant Population 2015 - 2024

Active

Ratio

1.05

1.13

1.14

1.27

### Participant Population as September 30



1.37

1.47

1.67

1.81



2.12

1.96

# Historical Investment Returns Plan Years Ending September 30, 2008 – 2024



Legend	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Market rate	-15.65%	-0.31%	11.07%	0.66%	18.92%	17.48%	11.51%	-2.18%	9.82%	14.86%	7.35%	0.73%	7.59%	21.08%	-15.68%	13.30%	17.43%
Actuarial rate	1.59%	-0.70%	7.07%	1.39%	1.07%	9.27%	17.48%	7.46%	7.86%	8.46%	7.81%	5.94%	7.41%	9.71%	3.99%	3.56%	7.40%
Assumed rate	8.40%	8.40%	8.40%	8.25%	8.25%	7.75%	7.75%	7.50%	7.50%	7.40%	7.20%	7.00%	6.90%	6.80%	6.63%	6.50%	6.50%

Average Rates of Return	Market Value	Actuarial Value
Most recent five-year average return:	7.87%	6.38%
Most recent ten-year average return:	6.93%	6.91%
Most recent 15-year average return:	8.32%	6.99%



# Schedule of Funding Progress

Actuarial Valuation Date of October 1	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) – (a)	Funded Ratio (a) / (b)	Covered Compensation (c)	UAAL as a Percentage of Covered Compensation [(b) – (a)] / (c)
2015	\$1,811,172,111	\$2,711,408,803	\$900,236,692	66.80%	\$254,034,479	354.38%
2016	1,872,790,100	2,897,287,172	1,024,497,072	64.64%	250,894,295	408.34%
2017	1,952,332,857	3,033,646,298	1,081,313,441	64.36%	257,850,484	419.36%
2018	2,021,545,306	3,196,680,516	1,175,135,210	63.24%	253,982,175	462.68%
2019	2,008,173,331	3,286,313,481	1,278,140,150	61.11%	249,982,877	511.29%
2020	2,042,779,798	3,389,704,002	1,346,924,204	60.26%	246,864,141	545.61%
2021	2,119,188,413	3,529,433,595	1,410,245,182	60.04%	233,266,593	604.56%
2022	2,079,638,181	3,653,156,095	1,573,517,914	56.93%	227,912,274	690.41%
2023	2,030,156,195	3,765,170,250	1,735,014,055	53.92%	230,709,762	752.03%
2024	2,051,953,320	3,820,831,282	1,768,877,962	53.70%	224,250,230	788.80%



# History of Employer Contributions

Fiscal Year Ended September 30	City's Minimum Required	Actual Employer Contribution	Percent Contributed
2017	\$94,526,754	\$94,700,000	100.18%
2018	70,166,221	71,024,000	101.22%
2019	69,247,524	70,338,000	101.57%
2020	71,249,679	72,194,000	101.33%
2021	76,832,977	77,269,000	100.57%
2022	83,696,811	84,353,000	100.78%
2023	83,607,476	83,375,000	99.72%
2024	96,592,629	96,957,000	100.38%
2025	113,299,912		
2026	115,430,230		



# Low-Default-Risk Obligation Measure

- In December 2021, the Actuarial Standards Board issued a revision of Actuarial Standard of Practice No. 4 (ASOP 4) Measuring Pension Obligations and Determining Pension Plan Costs or Contributions. One of the revisions to ASOP 4 requires the disclosure of a Low-Default-Risk Obligation Measure (LDROM) when performing a funding valuation. The LDROM presented in this report is calculated using the same methodology and assumptions used to determine the Actuarial Accrued Liability (AAL) used for funding, except for the discount rate. The LDROM is required to be calculated using "a discount rate...derived from low-default-risk fixed income securities whose cash flows are reasonably consistent with the pattern of benefits expected to be paid in the future."
- The LDROM is a calculation assuming a plan's assets are invested in an all-bond portfolio, generally lowering expected long-term investment returns. The discount rate selected and used for this purpose is the Bond Buyer General Obligation 20-year Municipal Bond Index Rate, published at the end of each week. The last published rate in December of the measurement period, by The Bond Buyer (www.bondbuyer.com), is 3.81% for use effective September 30, 2024. This is the rate used to determine the discount rate for valuing reported public pension plan liabilities in accordance with Governmental Accounting Standards when plan assets are projected to be insufficient to make projected benefit payments, and the 20-year period reasonably approximates the duration of plan liabilities. The LDROM is not used to determine a plan's funded status or Actuarially Determined Contribution. The plan's expected return on assets, currently 6.50%, is used for these calculations.
- As of September 30, 2024, the LDROM for the system is \$5,241,263,659. The difference between the plan's AAL of \$3,820,831,282 and the LDROM can be thought of as the increase in the AAL if the entire portfolio were invested in lowdefault-risk securities. Alternatively, this difference could also be viewed as representing the expected savings from investing in the plan's diversified portfolio compared to investing only in low-default-risk securities.
- ASOP 4 requires commentary to help the intended user understand the significance of the LDROM with respect to the funded status of the plan, plan contributions, and the security of participant benefits. In general, if plan assets were invested exclusively in low-default-risk securities, the funded status would be lower and the Actuarially Determined Contribution would be higher. While investing in a portfolio with low-default-risk securities may be more likely to reduce investment volatility and the volatility of employer contributions, it also may be more likely to result in higher employer contributions or lower benefits.



# Overview of Key Funding Risks

• It is important to consider risks for actual experience different than projected.

Economic Shock RiskInvestment RiskContribution RiskDemographic Risk	External Risk
High inflationary environments calary increasesMarket returns lower than assumedThe risk that actual different than projected contributionsThe risk that participant environmental changes in short- term or long-term employment levelsChange in the long- term funding rateThe risk that actual different than projected contributionsThe risk that participant environmental changesSignificant societal changesChange in the long- term funding rateNot historically an issue for the Plan- Mortality experience different than assumedOutput changesChange in the long- term funding rate- Not historically an issue for the Plan- Mortality experience different than expectedOutput changesChange in the long- term funding rate- Mortality experience different than expectedOutput changesChange in the long- term funding rate- Mortality experience different than expectedOutput changes- More or less active participant turnover than assumed	Legislative, regulatory or financial reporting changes that could impact funding and/or disclosure requirements

## Actuarial Projections through Fiscal 2062

City of Jacksonville General Employees Retirement Plan Actuarial Projections through Fiscal Year Ending September 30, 2062

	<b>A</b> - <b>A</b> - <b>a</b> - <b>a</b> - <b>b</b> -	A	Unfunded							
<b>D</b> I <b>X</b>	Actuarial	Actuarial	Actuarial	E	Contributions for	0	0/ - <b>/</b> - <b>/</b> - <b>/</b> - <b>/</b>	De suiter et Offe	04 - <b>6 T</b> - 4-1	<b>T</b>
Plan Year	Accrued	Value of	Accrued	Funded	Fiscal Year	Surtax	% of I otal	Required City	% of Iotal	Iotal
Beginning	Liability	Assets	Liability	Ratio	Ending	Contribution	Contribution	Contribution	Contribution	Contribution
					2025	\$0	0.0%	\$113,299,912	100.0%	\$113,299,912
2024	\$3,820,831,282	\$2,051,953,320	\$1,768,877,962	53.70%	2026	0	0.0%	115,430,230	100.0%	115,430,230
2025	3,867,681,725	2,100,204,145	1,767,477,580	54.30%	2027	0	0.0%	113,547,412	100.0%	113,547,412
2026	3,907,935,452	2,088,413,274	1,819,522,178	53.44%	2028	0	0.0%	116,470,562	100.0%	116,470,562
2027	3,942,694,967	2,168,722,714	1,773,972,253	55.01%	2029	0	0.0%	111,303,699	100.0%	111,303,699
2028	3,973,220,865	2,223,376,022	1,749,844,843	55.96%	2030	0	0.0%	108,266,501	100.0%	108,266,501
2029	3,998,639,888	2,226,190,857	1,772,449,031	55.67%	2031	47,412,421	30.4%	108,691,217	69.6%	156,103,638
2030	4,017,615,808	2,218,849,867	1,798,765,941	55.23%	2032	65,903,265	37.6%	109,143,232	62.4%	175,046,497
2031	4,029,767,572	2,253,250,025	1,776,517,547	55.92%	2033	68,704,154	38.6%	109,434,853	61.4%	178,139,007
2032	4,034,613,451	2,302,420,359	1,732,193,092	57.07%	2034	71,624,080	39.5%	109,837,371	60.5%	181,461,451
2033	4,032,757,606	2,351,939,647	1,680,817,959	58.32%	2035	74,668,104	40.4%	110,230,842	59.6%	184,898,946
2034	4,021,814,144	2,400,148,065	1,621,666,079	59.68%	2036	77,841,498	41.3%	110,537,559	58.7%	188,379,057
2035	4,002,741,416	2,448,739,841	1,554,001,575	61.18%	2037	81,149,762	42.3%	110,916,263	57.7%	192,066,025
2036	3,976,224,293	2,498,943,789	1,477,280,504	62.85%	2038	84,598,627	43.2%	111,278,461	56.8%	195,877,088
2037	3,941,065,473	2,550,403,958	1,390,661,515	64.71%	2039	88,194,069	44.1%	111,681,197	55.9%	199,875,266
2038	3,898,450,820	2,605,057,726	1,293,393,094	66.82%	2040	91,942,316	45.1%	112,112,591	54.9%	204,054,907
2039	3,847,797,838	2,663,200,729	1,184,597,109	69.21%	2041	95,849,865	46.0%	112,599,310	54.0%	208,449,175
2040	3,789,979,794	2,726,608,188	1,063,371,606	71.94%	2042	99,923,484	46.9%	113,214,643	53.1%	213,138,127
2041	3,723,881,630	2,795,083,890	928,797,740	75.06%	2043	104,170,232	47.8%	113,837,297	52.2%	218,007,529
2042	3,651,288,300	2,871,600,670	779,687,630	78.65%	2044	108,597,467	48.7%	114,554,579	51.3%	223,152,046
2043	3,571,347,659	2,956,362,974	614,984,685	82.78%	2045	113,212,859	49.5%	115,346,360	50.5%	228,559,219
2044	3,484,989,003	3.051.544.424	433,444,579	87.56%	2046	118.024.406	50.4%	116.211.792	49.6%	234,236,198
2045	3,392,567,869	3,158,814,155	233,753,714	93.11%	2047	0	0.0%	117,158,785	100.0%	117,158,785
2046	3.295.282.971	3.280.769.371	14,513,600	99.56%	2048	0	0.0%	48.037.298	100.0%	48.037.298
2047	3,194,723,971	3,293,451,398	(98,727,427)	103.09%	2049	0	0.0%	6.027.819	100.0%	6.027.819
2048	3.089.918.225	3.238.453.976	(148,535,751)	104.81%	2050	0	0.0%	5.528.104	100.0%	5.528.104
2049	2,983,233,122	3.141.962.031	(158,728,909)	105.32%	2051	0	0.0%	5,129,705	100.0%	5,129,705
2050	2.876.027.589	3.045.512.880	(169,485,291)	105.89%	2052	0	0.0%	4,790,791	100.0%	4,790,791
2051	2,765,198,399	2,946,082,618	(180.884.219)	106.54%	2053	0	0.0%	4,439,512	100.0%	4,439,512
2052	2,654,246,690	2.847.288.487	(193.041.797)	107.27%	2054	0	0.0%	4.151.694	100.0%	4,151,694
2053	2,545,748,295	2,751,676,832	(205,928,537)	108.09%	2055	0	0.0%	3,988,100	100.0%	3,988,100
2054	2,437,875,312	2,657,403,362	(219.528.050)	109.00%	2056	0	0.0%	3,850,984	100.0%	3,850,984
2055	2,332,071,610	2,566,059,016	(233,987,406)	110.03%	2057	0	0.0%	3,769,254	100.0%	3,769,254
2056	2,230,129,598	2 479 461 810	(249,332,212)	111.18%	2058	0	0.0%	3,773,154	100.0%	3,773,154
2057	2 129 327 744	2 394 915 835	(265 588 091)	112 47%	2059	0	0.0%	3 771 877	100.0%	3 771 877
2058	2,030,364,166	2 313 272 287	(282 908 121)	113 93%	2060	0	0.0%	3 781 421	100.0%	3 781 421
2059	1 936 082 179	2 237 427 094	(301 344 915)	115 56%	2061	0	0.0%	3 874 562	100.0%	3 874 562
2060	1,844,299,243	2,165,194,483	(320,895,240)	117.40%	2062	0 0	0.0%	3.971.019	100.0%	3,971,019
2061	1 755 093 523	2 096 807 912	(341 714 389)	119 47%	2063	ů 0	0.0%	4 069 873	100.0%	4 069 873
2062	1 668 556 017	2,000,007,012	(363 885 829)	121 81%	2064	0	0.0%	4 171 093	100.0%	4 171 093
LUGE	1,000,000,017	1,002, 111,040	(000,000,020)	.2	2001	č	0.070	1, 11 1,000	100.070	1, 11 1,000
Total:						\$1,391,816,610	34.0%	\$2,702,230,928	66.0%	\$4,094,047,538

\$530,126,968

29.0%

\$1,299,024,900

71.0%

\$1,829,151,868

#### Total Present Value at 6 50%

#### Assumptions

Investment Return Assumption	6.50% per year
Actuarial Value of Assets	5-year smoothed market value
Payroll Growth Assumption	1.50% per year
Pension Liability Surtax Proceeds	35.60%, projected to increase 4.25% annually
Administrative Expenses	Projected to increase 2.5% annually

Projections are not a guarantee of future results. They are intended to serve as estimates of future financial outcomes that are based on assumptions about future experience and the information available at the time the modeling is undertaken and completed. Projected results will change if demographic or economic assumptions, or plan provisions, change in the future, or if the contributing employers make contributions other than expected.



# Questions?

#### Jeffrey S. Williams, FCA, ASA, MAAA, EA Vice President and Actuary iwilliams@segalco.com

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🔆 Segal

# Additional Information

- This presentation is intended for the use of the Board of Trustees for the City of Jacksonville General Employees Retirement Plan and is a supplement to Segal's full valuation report for the Plan as of October 1, 2024.
- Please refer to the full valuation report for a description of assumptions and plan provisions reflected in the results shown in this presentation. The report also includes more comprehensive information regarding the Plan's membership, assets, and experience during the most recent plan year.
- The calculations included in this presentation were completed under the supervision of Jeffrey S. Williams, FCA, ASA, MAAA, EA. Mr. Williams is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.



### City of Jacksonville General Employees Retirement Plan

Actuarial Valuation and Review as of October 1, 2024

This valuation report should only be copied, reproduced, or shared with other parties in its entirety as necessary for the proper administration of the Plan.



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March 21, 2025

Board of Trustees City of Jacksonville General Employees Retirement Plan 117 West Duval Street, Suite 330 Jacksonville, FL 32202

Dear Board of Trustees Members:

We are pleased to submit this Actuarial Valuation and Review as of October 1, 2024. It summarizes the actuarial data used in the valuation, analyzes the preceding year's experience, and establishes the funding requirements to the fiscal year starting October 1, 2025.

This report has been prepared in accordance with generally accepted actuarial principles and practices for the exclusive use and benefit of the Board of Trustees, based upon information provided by the Retirement System Administrative Office and the City's Finance Department. That assistance is gratefully acknowledged.

Statement by Enrolled Actuary: This actuarial valuation and/or cost determination was prepared and completed by me, or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.

Segal does not audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. To the extent we can, however, Segal does review the data for reasonableness and consistency. Based on our review of the data, we have no reason to doubt the substantial accuracy of the information on which we have based this report, and we have no reason to believe there are facts or circumstances that would affect the validity of these results.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience

differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; changes in plan provisions or applicable law.

The actuarial calculations were directed under the supervision of Jeffrey S. Williams. I am a member of the American Academy of Actuaries and I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. In addition, in my opinion, the combined effect of these assumptions is expected to have no significant bias.

Segal makes no representation or warranty as to the future status of the Plan and does not guarantee any particular result. This document does not constitute legal, tax, accounting or investment advice or create or imply a fiduciary relationship. The Board is encouraged to discuss any issues raised in this report with the Plan's legal, tax and other advisors before taking, or refraining from taking, any action.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

Segal

Jeffrey S. Williams, FCA, ASA, MAAA, EA Vice President and Consulting Actuary Enrolled Actuary No. 23-07009

# Table of Contents

Section 1: Actuarial Valuation Summary	6
Purpose and basis	6
Valuation highlights	7
Changes from prior valuation	9
Risk	10
GASB	10
Summary of key valuation results	11
Important information about actuarial valuations	13
Section 2: Actuarial Valuation Results	15
Participant information	15
Actuarial experience	21
Schedule of funding progress through September 30, 2024	
Low-Default-Risk Obligation Measure (LDROM)	
Risk	
GFOA funded liability by type	
Section 3: Supplemental Information	
Exhibit A: Table of plan demographics	
Exhibit B: Participants in active service as of September 30, 2024	
Exhibit C: Reconciliation of participant data	
Exhibit D: Summary statement of income and expenses on a market value basis	40
Exhibit E: Summary statement of plan assets	41
Exhibit F: Development of the fund through September 30, 2024	42



## Table of Contents

Exhibit G: Table of amortization bases	43
Exhibit I: Supplementary state of Florida information Summary of salary changes	46
Exhibit J: Supplementary State of Florida Information Recent History of Recommended and Actual Contribution	s47
Exhibit K: Supplementary state of Florida information	48
Exhibit L: Supplementary state of Florida Information Actuarial Present Value of Accumulated Plan Benefits	50
Exhibit M: Actuarial Projections through Fiscal 2062	51
Section 4: Actuarial Valuation Basis	52
Exhibit 1: Actuarial assumptions, methods and models	52
Exhibit 2: Summary of plan provisions	60
Section 5: GASB Information	64
General information about the pension plan	64
Exhibit 1: Net Pension Liability	65
Exhibit 2: Schedule of changes in Net Pension Liability	68
Exhibit 3: Schedule of employer contributions	70
Exhibit 4: Pension expense	73
Exhibit 5: Determination of proportionate share	80
Exhibit 6: Determination of proportionate share amounts by employer	81





# Section 1: Actuarial Valuation Summary

### **Purpose and basis**

This report has been prepared by Segal to present a valuation of the City of Jacksonville General Employees Retirement Plan as of October 1, 2024. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to provide information for required disclosures under Governmental Accounting Standards Board (GASB) Statements No. 67 and 68.

The contribution requirements presented in this report are based on:

- The benefit provisions of the Plan, as administered by the Board;
- The characteristics of covered active participants, inactive vested participants, and retired participants and beneficiaries as of September 30, 2024, provided by the Board;
- The assets of the Plan as of September 30, 2024, provided by the City's Finance Department;
- Economic assumptions regarding future salary increases and investment earnings;
- Other actuarial assumptions regarding employee terminations, retirement, death, etc. and
- The funding policy adopted by the Board, subject to the requirements of Part VII, Chapter 112, Florida Statutes.



### Section 1: Actuarial Valuation Summary

### Valuation highlights

- 1. Segal strongly recommends an actuarial funding method that targets 100% funding of the actuarial accrued liability. Generally, this implies payments that are ultimately at least enough to cover normal cost, interest on the unfunded actuarial accrued liability and the principal balance.
- 2. The City's minimum required contribution calculated in the October 1, 2024 actuarial valuation is for the plan year beginning October 1, 2025. The "City's minimum required contribution" refers to the cumulative minimum required contribution for all contributing employers.
- 3. The City's minimum required contribution (the amount which will be contributed) for fiscal 2026 is \$115,430,230, an increase of \$2,130,318 from the amount being contributed in fiscal 2025.
- 4. Actual City contributions made during the fiscal year ending September 30, 2024 of \$96,957,000 were 100.38% of the City's minimum required contribution for fiscal 2025. In the prior fiscal year, actual contributions were \$83,375,000, 99.72% of the City's minimum required contribution.
- 5. Actuarial Standard of Practice No. 4, Measuring Pension Obligations and Determining Pension Plan Costs or Contributions, states that an actuary preparing calculations of actuarially determined contributions should assess the material implications of the funding policy. This report includes two distinct contribution amounts, each with different implications.
  - a. The Florida Chapter 112 Determined Employer Contribution is an amount consistent with a funding policy which seeks to stabilize the unfunded actuarial accrued liability (UAAL) as a percentage of total General Employees Retirement Plan (GERP) payroll, including Defined Contribution participants, where UAAL is measured relative to assets currently available to make benefit payments. Under this policy, assuming that all assumptions are met in aggregate, the UAAL is expected to be reduced to zero over a period of 22 years after reflecting an amortization period reset as of October 1, 2016. Over the short term, this contribution policy would be expected to keep the UAAL roughly level over the next few years, primarily making payments on interest, and begin paying down the UAAL after that point.
  - b. The City's required minimum contribution, which is the Chapter 112 contribution adjusted to comply with state law, reduced by amortization of discounted allocated surtax revenue, is an amount consistent with a funding policy which seeks to stabilize the contribution requirement as a percentage of total GERP payroll, including General Employee Defined Contribution Plan participants, relative to an anticipated increase in contribution income set to begin January 1, 2031. Under this policy, assuming that all assumptions are met in aggregate, the UAAL is expected to be reduced to zero by December 31, 2060, after all of the surtax revenue allocated to the plan is collected and contributed. Over the short term, this contribution policy is expected to lead to an increase in the UAAL, prior to the revenue stream commencing and paying it down.

Use of this contribution policy has been authorized by the Florida State Legislature and Jacksonville City Council.


- 6. The actuarial loss from investment and other experience is \$49,498,335, or 1.30% of actuarial accrued liability.
  - > The actuarial gain from investment experience was \$17,643,952, or 0.46% of actuarial accrued liability.
  - The loss due to contributions less than the Florida Chapter 112 determined employer contribution was \$51,795,779 or 1.36% of actuarial accrued liability.
  - The net experience loss from sources other than investment experience was \$15,346,508, or 0.40% of the actuarial accrued liability.

The primary cause of the demographic experience loss was salary increases greater than expected.

- 7. The rate of return on the market value of assets was 17.43% for the October 1, 2023 to September 30, 2024 Plan Year. The return on the actuarial value of assets was 7.40% for the same period due to the recognition of prior years' investment gains and losses. This resulted in an actuarial gain when measured against the assumed rate of return of 6.50%.
- 8. The actuarial value of assets is 95.7% of the market value of assets. The investment experience in the past years has only been partially recognized in the actuarial value of assets. As the deferred net gain is recognized in future years, the cost of the Plan is likely to decrease unless the net loss is offset by future experience. The recognized immediately in the actuarial value of assets, the net deferred gains were recognized immediately in the actuarial value of assets, the City's minimum contribution would decrease from 50.71% to 47.73% of projected payroll.
- 9. There were no changes in plan provisions since the prior valuation.
- 10. There are no changes in actuarial assumptions reflected in this valuation.
- 11. The City changed the surtax allocation percentage from the prior valuation to the current valuation. In the 2023 valuation, GERP's allocation percentage was 34.90%; in the 2024 valuation, the allocation percentage has been raised to 35.60%. This change was directed by the City based on its updated calculation of the General Employees Retirement Plan's share of the City's unfunded liabilities. The change in the surtax allocation percentage caused the City's minimum required contribution to decrease by \$1,299,449.
- 12. The City is solely responsible for the assumption as to what percentage the surtax revenue will grow and Segal relies on the City for this assumption. This rate was set at 4.25% by the City for the projection period January 1, 2024 through December 31, 2060, and will be recalculated by the City every year and adopted by the City Council. Segal will ask the City each year to provide actual surtax revenue for the preceding fiscal year and an assumption as to future growth. The difference in actual and projected surtax revenue each year will be amortized over the period by which each year's gain or loss is being amortized. If surtax revenue grows more slowly or more quickly than expected, contribution requirements will increase or decrease accordingly.



- 13. The present value of the projected surtax revenue was determined and used in determination of the City's required contribution as follows:
  - a. Actual 2024 surtax revenue was projected to increase by 4.25% each year thereafter through 2060.
  - b. A share of 35.60% of the projected revenue for January 1, 2031 through December 31, 2060 was allocated to GERP.
  - c. The revenue allocated to GERP was discounted at the valuation discount rate of 6.50% to October 1, 2024.
  - d. The original allocated present value amount of \$322,190,859 was amortized over a 30-year initial period (Section 3, Exhibit F), with subsequent changes amortized over new periods. The present value of projected surtax revenue as of October 1, 2024 allocated to GERP is \$896,978,621.
  - e. After the amortized value amount was adjusted for the timing of contributions and projected to October 1, 2025, this amount was used as an offset to the Florida Chapter 112 Determined Employer Contribution to determine the City's minimum required contribution for fiscal 2025.
- 14. The present value of projected surtax revenue does not decrease the unfunded actuarial accrued liability. The amortized value of the projected surtax revenue is used as an offset to the Chapter 112 contribution.
- 15. This actuarial report as of October 1, 2024 is based on financial and demographic data as of that date. Changes subsequent to that date are not reflected and will affect future actuarial costs of the plan.
- 16. The financial information received states all results rounded to the nearest thousand. The results in this valuation are shown to the nearest dollar. Therefore, occasionally rounded numbers are combined with unrounded numbers.

# **Changes from prior valuation**

- 17. The funded ratio (the ratio of the actuarial value of assets to actuarial accrued liability) is 53.70%, compared to the prior year funded ratio of 53.92%. This ratio is one measure of funding status, and its history is a measure of funding progress. Using the market value of assets, the funded ratio is 56.12%, compared to 51.54% as of the prior valuation date. These measurements are not necessarily appropriate for assessing the sufficiency of the Plan assets to cover the estimated cost of settling the Plan's benefit obligation or the need for or the amount of future contributions.
- 18. The unfunded actuarial accrued liability is \$1,768,877,962, which is an increase of \$33,863,907 since the prior valuation.



# Risk

- 19. It is important to note that this actuarial valuation is based on plan assets as of September 30, 2024. The Plan's funded status does not reflect short-term fluctuations of the market, but rather is based on the market values on the last day of the plan year. Segal is available to prepare projections of potential outcomes of market conditions and other demographic experience upon request.
- 20. Since the actuarial valuation results are dependent on a given set of assumptions, there is a risk that emerging results may differ significantly as actual experience proves to be different from the assumptions. We have not been engaged to perform a detailed analysis of the potential range of the impact of risk relative to the Plan's future financial condition, but have included a brief discussion of some risks that may affect the Plan in *Section 2*. A more detailed assessment would provide the Board with a better understanding of the inherent risks and could be important for the Plan because:
  - a. Relatively small changes in investment performance can produce large swings in the unfunded liabilities.
  - b. Retired participants account for most of the Plan's liabilities, leaving limited options for reducing costs in the event of adverse experience.
  - c. The Board has not to our knowledge performed a detailed risk assessment.

### GASB

- 21. This report constitutes an actuarial valuation for the purpose of determining the ADC under the Plan's funding policy. The information contained in *Section 5* provides the accounting information for Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68, for inclusion in the Plan's and employer's financial statements as of September 30, 2025. The accounting information utilizes different methodologies from those employed in the funding valuation, as required by the GASB.
- 22. The Net Pension Liability (NPL) is equal to the difference between the Total Pension Liability (TPL) and the Plan's fiduciary net position (equal to the market value of assets). The NPL as of September 30, 2024 is \$1,676,688,282.
- 23. GASB accounting does not permit any recognition of the allocated surtax revenue in determining the Net Pension Liability or Pension Expense. It is Segal's understanding that the City has discussed this issue with their external auditors and does not include any recognition of allocated surtax revenue in its audited financial statements.



### Summary of key valuation results

Valuation Result	Current	Prior
Contributions for fiscal year beginning	October 1, 2025	October 1, 2024
Florida Chapter 112 determined employer contributions	\$158,526,188	\$153,422,081
Less amortized value of discounted value of projected surtax revenue	-43,095,958	-40,122,169
<ul> <li>City's required minimum contribution<sup>1</sup></li> </ul>	\$115,430,230	\$113,299,912
Actuarial accrued liability for plan year beginning	October 1, 2024	October 1, 2023
Retired participants and beneficiaries	\$2,617,068,012	\$2,578,163,782
Inactive vested participants	19,132,024	19,583,436
Active participants	1,184,631,246	1,167,423,032
• Total	\$3,820,831,282	\$3,765,170,250
Normal cost including administrative expenses for plan year beginning October 1	45,710,466	46,755,918
Assets for plan year beginning October 1		
Market value of assets (MVA)	\$2,144,143,000	\$1,940,430,000
Actuarial value of assets (AVA)	2,051,953,320	2,030,156,195
Actuarial value of assets as a percentage of market value of assets	95.70%	104.62%
Funded status for plan year beginning October 1		
Unfunded actuarial accrued liability on market value of assets	\$1,676,688,282	\$1,824,740,250
Funded percentage on MVA basis	56.12%	51.54%
Unfunded actuarial accrued liability on actuarial value of assets	\$1,768,877,962	\$1,735,014,055
Funded percentage on AVA basis	53.70%	53.92%
Effective Amortization period on an AVA basis	22	23

<sup>1</sup> Pursuant to State Law Chapter 2016-146 and City of Jacksonville Ordinances 2017-257-E and 2017-258-E

City of Jacksonville General Employees Retirement Plan Actuarial Valuation as of October 1, 2024



Valuation Result	Current	Prior					
Key assumptions							
Net investment return	6.50%	6.50%					
Inflation rate	2.50%	2.50%					
Across-the-board payroll increase	1.50%	1.50%					
GASB information							
Discount rate	6.50%	6.50%					
Total Pension Liability	\$3,820,831,282	\$3,765,170,250					
Plan Fiduciary Net Position	2,144,143,000	1,940,430,000					
Net Pension Liability	1,676,688,282	1,824,740,250					
Plan Fiduciary Net Position as a percentage of Total Pension Liability	56.12%	51.54%					
Demographic data for plan year beginning October 1							
Number of retired participants and beneficiaries	5,350	5,341					
Number of inactive vested participants	129	134					
Number of active participants	2,587	2,792					
Average compensation	\$86,684	\$82,632					



### Important information about actuarial valuations

An actuarial valuation is a budgeting tool with respect to the financing of future projected obligations of a pension plan. It is an estimated forecast – the actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.

In order to prepare a valuation, Segal relies on a number of input items. These include:

Input Item	Description
Plan provisions	Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits.
Participant information	An actuarial valuation for a plan is based on data provided to the actuary by the Retirement Administrative Office. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
Financial information	Part of the cost of a plan will be paid from existing assets — the balance will need to come from future contributions and investment income. The valuation is based on the asset values as of the valuation date, typically reported by the City's Finance Department. A snapshot as of a single date may not be an appropriate value for determining a single year's contribution requirement, especially in volatile markets. Plan sponsors often use an "actuarial value of assets" that differs from market value to gradually reflect year-to-year changes in the market value of assets in determining the contribution requirements.
Actuarial assumptions	In preparing an actuarial valuation, Segal starts by developing a forecast of the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of participants in each year, as well as forecasts of the plan's benefits for each of those events. In addition, the benefits forecasted for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments. The forecasted benefits are then discounted to a present value, typically based on an estimate of the rate of return that will be achieved on the plan's assets. All of these factors are uncertain and unknowable. Thus, there will be a range of reasonable assumptions, and the results may vary materially based on which assumptions are selected within that range. That is, there is no right answer (except with hindsight). It is important for any user of an actuarial valuation to understand and accept this constraint. The actuarial model may use approximations and estimates that will have an immaterial impact on our results. In addition, the actuarial assumptions may change over time, and while this can have a significant impact on the reported results, it does not mean that the previous assumptions or results were unreasonable or wrong.



The user of Segal's actuarial valuation (or other actuarial calculations) should keep the following in mind:

- The actuarial valuation is prepared at the request of the Board of Trustees. Segal is not responsible for the use or misuse of its report, particularly by any other party.
- An actuarial valuation is a measurement at a specific date it is not a prediction of a plan's future financial condition. Accordingly, Segal did not perform an analysis of the potential range of financial measurements, except where otherwise noted.
- If the Board is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
- Segal does not provide investment, legal, accounting, or tax advice and is not acting as a fiduciary to the Plan. The valuation is based on Segal's understanding of applicable guidance in these areas and of the Plan's provisions, but they may be subject to alternative interpretations. The Board should look to their other advisors for expertise in these areas.
- While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.
- Segal's report shall be deemed to be final and accepted by the Board of Trustees upon delivery and review. Trustees should notify Segal immediately of any questions or concerns about the final content.



# **Participant information**



### Participant Population as September 30

<sup>1</sup> Excluding terminated participants due a refund of employee contributions.

City of Jacksonville General Employees Retirement Plan Actuarial Valuation as of October 1, 2024



# **Active participants**

As of September 30,	2024	2023	Change
Active participants	2,587	2,792	-7.3%
Average age	52.4	52.0	0.4
Average years of service	17.6	16.9	0.7
Average compensation	\$86,684	\$82,632	4.9%

### Distribution of Active Participants as of September 30, 2024

### Actives by Age

Actives by Years of Service





# **Retired participants and beneficiaries**

As of September 30,	2024	2023	Change
Retired participants	4,127	4,129	0.0%
Beneficiaries	1,223	1,212	0.9%
Average age	73.2	73.0	0.2
Average regular benefit amount	\$3,350	\$3,256	2.9%

### Distribution of Retired Participants and Beneficiaries as of September 30, 2024

### By Type and Monthly Amount

By Type and Age





### Actuarial value of assets

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable. The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

#### Determination of Actuarial Value of Assets for Year Ended September 30, 2024

	Step	Original Amount <sup>1</sup>	Percent Deferred <sup>2</sup>	Unrecognized Amount <sup>3</sup>	Amount
1.	Market value of assets, September 30, 2024				\$2,144,143,000
2.	Calculation of unrecognized return				
	a. Year ended September 30, 2024	\$205,392,030	80%	\$164,313,624	
	b. Year ended September 30, 2023	120,038,807	60%	72,023,283	
	c. Year ended September 30, 2022	-499,432,276	40%	-199,772,910	
	d. Year ended September 30, 2021	278,128,416	20%	55,625,683	
	e. Year ended September 30, 2020	13,253,788	0%	0	
	f. Total unrecognized return				\$92,189,680
3.	Preliminary actuarial value: (1) - (2f)				2,051,953,320
4.	Adjustment to be within 20% corridor				0
5.	Final actuarial value of assets as of September 30, 2024: (3) + (4)				\$2,051,953,320
6.	Actuarial value as a percentage of market value: $(5) \div (1)$				95.7%
7.	Amount deferred for future recognition: (1) - (5)				\$92,189,680

<sup>1</sup> Total return minus expected return on a market value basis.

<sup>2</sup> Percent deferred applies to the current valuation year.

<sup>3</sup> Recognition at 20% per year over five years. Deferred return as of September 30, 2024 recognized in each of the next four years:

- a. Amount recognized on September 30, 2025 \$20,825,395
- b. Amount recognized on September 30, 2026 -34,800,288
- c. Amount recognized on September 30, 2027 65,086,167

d. Amount recognized on September 30, 2028 41,078,406



### Asset history for years ended September 30



Legend	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Actuarial value <sup>1</sup>	\$1.81	\$1.87	\$1.95	\$2.02	\$2.01	\$2.04	\$2.12	\$2.08	\$2.03	\$2.05
Market value <sup>1</sup>	1.74	1.83	2.02	2.09	1.97	2.01	2.30	1.83	1.94	2.14
Ratio (AVA/MVA)	1.04	1.02	0.97	0.97	1.02	1.02	0.92	1.14	1.05	0.96

<sup>1</sup> In \$ billions

City of Jacksonville General Employees Retirement Plan Actuarial Valuation as of October 1, 2024

**Segal** 19

### **Historical investment returns**

Market and Actuarial Rates of Return versus Assumed Rate for Years Ended September 30



Legend	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Market rate	-15.65%	-0.31%	11.07%	0.66%	18.92%	17.48%	11.51%	-2.18%	9.82%	14.86%	7.35%	0.73%	7.59%	21.08%	-15.68%	13.30%	17.43%
Actuarial rate	1.59%	-0.70%	7.07%	1.39%	1.07%	9.27%	17.48%	7.46%	7.86%	8.46%	7.81%	5.94%	7.41%	9.71%	3.99%	3.56%	7.40%
Assumed rate	8.40%	8.40%	8.40%	8.25%	8.25%	7.75%	7.75%	7.50%	7.50%	7.40%	7.20%	7.00%	6.90%	6.80%	6.63%	6.50%	6.50%

Average Rates of Return	Market Value	Actuarial Value
Most recent five-year average return:	7.87%	6.38%
Most recent ten-year average return:	6.93%	6.91%
Most recent 15-year average return:	8.32%	6.99%

City of Jacksonville General Employees Retirement Plan Actuarial Valuation as of October 1, 2024



### **Actuarial experience**

Assumptions should consider experience and should be based on reasonable expectations for the future.

Each year actual experience is compared to that projected by the assumptions. Differences are reflected in the actuarial valuation.

Assumptions are not changed if experience is believed to be a short-term development that will not continue over the long term. On the other hand, if experience is expected to continue, assumptions are changed.

### Actuarial Experience for Year Ended September 30, 2024

	Assumption	Amount
1.	Net gain from investments <sup>1</sup>	\$17,643,952
2.	Net loss from administrative expenses	-146,045
3.	Net loss from contributions	-51,795,779
4.	Net loss from other experience	-15,200,463
5.	Net experience loss: 1 + 2 + 3 + 4	-\$49,498,335



<sup>&</sup>lt;sup>1</sup> Details on next page

### Investment experience

Actuarial planning is long term. The obligations of a pension plan are expected to continue for the lifetime of all its participants.

The assumed long-term rate of return of 6.50% considers past experience, the asset allocation policy of the Board and future expectations.

	Investment	YE 2024 Market Value	YE 2024 Actuarial Value
1.	Net investment income	\$327,497,000	\$145,581,125
2.	Average value of assets	1,878,538,000	1,968,264,195
3.	Rate of return: 1 ÷ 2	17.43%	7.40%
4.	Assumed rate of return	6.50%	6.50%
5.	Expected investment income: 2 x 4	\$122,104,970	\$127,937,173
6.	Net investment gain/(loss): 1 – 5	\$205,392,030	\$17,643,952

### Investment Experience *Year Ended September 30, 2024*

City of Jacksonville General Employees Retirement Plan Actuarial Valuation as of October 1, 2024



### Non-investment experience

#### Contributions

Total City and employee contributions for the year ended September 30, 2024 totaled \$122,793,000, compared to the projected amount of \$167,329,009. This resulted in a loss of \$51,795,779 for the year, when adjusted for timing.

#### Administrative expenses

Administrative expenses for the year ended September 30, 2024 totaled \$1,554,000, as compared to the assumption of \$1,365,000. This resulted in an experience loss of \$146,045 for the year, including an adjustment for interest.

#### **Other experience**

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- Mortality experience (more or fewer than expected deaths)
- The extent of turnover among participants
- Retirement experience (earlier or later than projected)
- The number of disability retirements (more or fewer than projected)
- Salary increases (greater or smaller than projected)

The net loss from this other experience for the year ended September 30, 2024 amounted to \$15,200,463, which is 0.4% of the actuarial accrued liability. The primary cause of the new loss from other experience was salary increases greater than expected.



# **Actuarial assumptions**

There are no assumption changes reflected in this report.

# **Plan provisions**

There were no changes in plan provisions since the prior valuation.



# **Unfunded actuarial accrued liability**

### Development of Unfunded Actuarial Accrued Liability for Year Ended September 30, 2024

Un	funded Actuarial Accrued Liability	Amount
1.	Unfunded actuarial accrued liability at beginning of year	\$1,735,014,055
2.	Employer normal cost at beginning of year	25,536,498
3.	Actuarial determined contribution at beginning of year	-151,154,760
4.	Interest on 1, 2 & 3	109,983,834
5.	Expected unfunded actuarial accrued liability	\$1,719,379,627
6.	Changes due to:	
	a. Net experience (gain)/loss	49,498,335
7.	Unfunded actuarial accrued liability at end of year	\$1,768,877,962



### Florida's Chapter 112 Determined Employer Contribution and City's Minimum Required Contribution

The chart below shows the calculations of the Florida Chapter 112 determined employer contribution and the City's minimum required contribution pursuant to State Law Chapter 2016-146 and City of Jacksonville Ordinances 2017-257-E and 2017-258-E.

The contribution requirements as of October 1, 2024 are based on the data previously described, the actuarial assumptions and Plan provisions described in *Section 4*, including all changes affecting future costs adopted at the time of the actuarial valuation, actuarial gains and losses, and changes in the actuarial assumptions. The contribution calculated as of October 1, 2024 is then projected to the following fiscal year and will be paid in the plan year beginning October 1, 2025.

# Florida Chapter 112 Determined Contribution and City's Minimum Required Contribution for Year

	2025		2024		
	Amount	% of Projected Payroll	Amount	% of Projected Payroll	
1. Total normal cost	\$44,156,466	19.40%	\$45,390,918	19.38%	
2. Administrative expenses	1,554,000	0.68%	1,365,000	0.59%	
3. Expected employee contributions	-20,594,781	-9.05%	-21,219,420	-9.06%	
4. Employer normal cost: (1) + (2) + (3)	25,115,685	11.03%	\$25,536,498	10.91%	
5. Actuarial accrued liability	\$3,820,831,282		\$3,765,170,250		
6. Actuarial value of assets	2,051,953,320		2,030,156,195		
7. Unfunded actuarial accrued liability: (5) - (6)	\$1,768,877,962		\$1,735,014,055		
8. Payment on projected unfunded actuarial accrued liability	125,854,736	55.29%	\$120,573,091	51.49%	
9. Florida Chapter 112 determined employer contribution: $(4) + (8)^{1}$	\$158,526,188	69.65%	\$153,422,081	65.52%	
10. Discounted and amortized value of projected surtax revenue <sup>1,2</sup>	-43,095,958	-18.94%	-40,122,169	-17.14%	
11. City's minimum required contribution: (9) + $(10)^2$	\$115,430,230	50.71%	\$113,299,912	48.38%	
12. Projected payroll	\$227,613,983		\$234,170,408		

Beginning October 1

<sup>1</sup>Adjusted for timing and projected to next fiscal year; contributions are assumed to be paid at the end of every month. <sup>2</sup>Pursuant to State Law Chapter 2016-146 and City of Jacksonville ordinances 2017-257-E and 2017-258-E



# **Reconciliation of City's Minimum Required Contribution**

### Reconciliation of City's Minimum Required Contribution from October 1, 2024 to October 1, 2025

		Amount
1.	City's minimum required contribution as of October 1, 2024	\$113,299,912
2.	Effect of expected change in amortization payment due to payroll growth	1,297,280
3.	Effect of change in administrative expense assumption	198,459
4.	Effect of surtax allocation percentage change	-1,299,449
5.	Effect of investment gain	-1,299,945
6.	Effect of other gains and losses on accrued liability	3,874,306
7.	Net effect of other changes, including composition and number of participants	-640,333
8.	Total change	\$2,130,318
9.	City's minimum required contribution as of October 1, 2025	\$115,430,230



# Schedule of funding progress through September 30, 2024

Actuarial Valuation Date of October 1	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) – (a)	Funded Ratio (a) / (b)	Covered Compensation (c)	UAAL as a Percentage of Covered Compensation [(b) – (a)] / (c)
2015	\$1,811,172,111	\$2,711,408,803	\$900,236,692	66.80%	\$254,034,479	354.38%
2016	1,872,790,100	2,897,287,172	1,024,497,072	64.64%	250,894,295	408.34%
2017	1,952,332,857	3,033,646,298	1,081,313,441	64.36%	257,850,484	419.36%
2018	2,021,545,306	3,196,680,516	1,175,135,210	63.24%	253,982,175	462.68%
2019	2,008,173,331	3,286,313,481	1,278,140,150	61.11%	249,982,877	511.29%
2020	2,042,779,798	3,389,704,002	1,346,924,204	60.26%	246,864,141	545.61%
2021	2,119,188,413	3,529,433,595	1,410,245,182	60.04%	233,266,593	604.56%
2022	2,079,638,181	3,653,156,095	1,573,517,914	56.93%	227,912,274	690.41%
2023	2,030,156,195	3,765,170,250	1,735,014,055	53.92%	230,709,762	752.03%
2024	2,051,953,320	3,820,831,282	1,768,877,962	53.70%	224,250,230	788.80%





### **History of employer contributions**

### History of Employer Contributions: 2017 – 2026

Fiscal Year Ended September 30	City's Minimum Required Contribution	Actual Employer Contribution	Percent Contributed
2017	\$94,526,754	\$94,700,000	100.18%
2018	70,166,221	71,024,000	101.22%
2019	69,247,524	70,338,000	101.57%
2020	71,249,679	72,194,000	101.33%
2021	76,832,977	77,269,000	100.57%
2022	83,696,811	84,353,000	100.78%
2023	83,607,476	83,375,000	99.72%
2024	96,592,629	96,957,000	100.38%
2025	113,299,912		
2026	115,430,230		



# Low-Default-Risk Obligation Measure (LDROM)

In December 2021, the Actuarial Standards Board issued a revision of Actuarial Standard of Practice No. 4 (ASOP 4) *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions*. One of the revisions to ASOP 4 requires the disclosure of a Low-Default-Risk Obligation Measure (LDROM) when performing a funding valuation. The LDROM presented in this report is calculated using the same methodology and assumptions used to determine the Actuarial Accrued Liability (AAL) used for funding, except for the discount rate. The LDROM is required to be calculated using "a discount rate...derived from low-default-risk fixed income securities whose cash flows are reasonably consistent with the pattern of benefits expected to be paid in the future."

The LDROM is a calculation assuming a plan's assets are invested in an all-bond portfolio, generally lowering expected long-term investment returns. The discount rate selected and used for this purpose is the Bond Buyer General Obligation 20-year Municipal Bond Index Rate, published at the end of each week. The last published rate in December of the measurement period, by The Bond Buyer (www.bondbuyer.com), is 3.81% for use effective September 30, 2024. This is the rate used to determine the discount rate for valuing reported public pension plan liabilities in accordance with Governmental Accounting Standards when plan assets are projected to be insufficient to make projected benefit payments, and the 20-year period reasonably approximates the duration of plan liabilities. The LDROM is not used to determine a plan's funded status or Actuarially Determined Contribution. The plan's expected return on assets, currently 6.50%, is used for these calculations.

As of September 30, 2024, the LDROM for the system is \$5,241,263,659. The difference between the plan's AAL of \$3,820,831,282 and the LDROM can be thought of as the increase in the AAL if the entire portfolio were invested in low-default-risk securities. Alternatively, this difference could also be viewed as representing the expected savings from investing in the plan's diversified portfolio compared to investing only in low-default-risk securities.

ASOP 4 requires commentary to help the intended user understand the significance of the LDROM with respect to the funded status of the plan, plan contributions, and the security of participant benefits. In general, if plan assets were invested exclusively in low-default-risk securities, the funded status would be lower and the Actuarially Determined Contribution would be higher. While investing in a portfolio with low-default-risk securities may be more likely to reduce investment volatility and the volatility of employer contributions, it also may be more likely to result in higher employer contributions or lower benefits.



# **Risk**

The actuarial valuation results are dependent on a single set of assumptions; however, there is a risk that emerging results may differ significantly as actual experience proves to be different from the current assumptions.

We have not been engaged to perform a detailed analysis of the potential range of the impact of risk relative to the Plan's future financial condition but have included a brief discussion of some risks that may affect the Plan.

- Economic and Other Related Risks. Potential implications for the Plan due to the following economic effects (that were not reflected as of the valuation date) include:
  - Volatile financial markets and investment returns lower than assumed
  - High inflationary environment impacting salary increases and COLAs
- Investment Risk (the risk that returns will be different than expected)

If the actual return on market value for the prior plan year were 1% different (either higher or lower), the unfunded actuarial liability would change by 1.06%, or about \$18,785,380, disregarding the asset smoothing method.

Since the Plan's assets are much larger than contributions, investment performance may create volatility in the actuarially determined contribution requirements. For example, for the prior plan year, if the actual return on market value were 1% different, the actuarially determined contribution would increase or decrease by \$1,318,075, disregarding the effects of the 5-year phase-in of investment gains and losses.

The market value rate of return over the last 17 years has ranged from a low of -15.68% to a high of 21.08%.

• Longevity Risk (the risk that mortality experience will be different than expected)

The actuarial valuation includes an expectation of future improvement in life expectancy. Emerging plan experience that does not match these expectations will result in either an increase or decrease in the actuarially determined contribution.

• Contribution Risk (the risk that actual contributions will be different from actuarially determined contribution)

The Plan's funding policy requires payment of the City's minimum required contribution, which is the Florida Chapter 112 determined contribution reduced for anticipated funding from allocated surtax income. This policy produces a risk that this reduction in immediate funding might be either too large or too small, depending on whether the surtax income grows as quickly as expected.

If the City paid the Florida Chapter 112 determined contribution, the effective amortization period would be 22 years, meaning that the current contribution level, with amortization payments growing 1.5%, would be adequate to be expected to reduce the unfunded liability to zero over 22 years. Under the City's current policy of paying the City's required contribution, over the



immediate term, the unfunded liability is expected to remain relatively stable until the surtax income becomes payable to the Plan's trust. If plan experience is less favorable than anticipated, the unfunded liability will grow. By comparison, the surtax revenue is assumed to grow 4.25% per year.

If the surtax revenue for fiscal 2024 had been 1% lower, the City's required contribution would increase by \$136,065 or 0.06% of projected payroll. For comparison purposes, the allocated surtax revenue is 41.8% of the market value of assets and 23.5% of the actuarial accrued liability.

• Demographic Risk (the risk that participant experience will be different than assumed)

Examples of this risk include:

- Actual retirements occurring earlier or later than assumed. The value of retirement plan benefits is sensitive to the rate of benefit accruals and any early retirement subsidies that apply.
- More or less active participant turnover than assumed.
- Participants' use of plan provisions allowing conversion of benefits from the DB plan to the DC plan.
- There are external factors including legislative or financial reporting changes that could impact the Plan's funding and disclosure requirements. While we do not assume any changes in such external factors, it is important to understand that they could have significant consequences for the Plan.
- Actual Experience Over the Last Ten Years

Past experience can help demonstrate the sensitivity of key results to the Plan's actual experience. Over the past ten years:

- The non-investment gain(loss) for a year has ranged from a loss of \$55,702,357 to a gain of 12,506,125.

Plan Year Ended	Market Value Gain/(Loss)	All Other Gains and (Losses)
2015	-\$175,540,475	-\$2,047,490
2016	39,489,525	-55,702,357
2017	133,575,436	-16,295,664
2018	2,936,856	12,506,125
2019	-126,629,625	-49,001,354
2020	13,253,788	-9,907,379
2021	278,128,416	-19,465,245
2022	-499,432,276	-32,667,321
2023	120,038,807	-40,230,178
2024	205,392,030	-11,348,244



- The funded percentage on the actuarial value of assets has ranged from a low of 53.7% to a high of 66.8% since 2015.

#### Maturity Measures

- As pension plans mature, the cash needed to fulfill benefit obligations will increase over time. Therefore, cash flow projections and analysis should be performed to assure that the Plan's asset allocation is aligned to meet emerging pension liabilities.
- Currently the Plan has a non-active to active participant ratio of 2.12.
- For the prior year, benefits paid were \$123,784,000 more than contributions received. Plans with high levels of negative cash flows may have a need for a larger allocation to income generating assets, which can create a drag on investment return.

#### **Detailed Risk Assessment**

A more detailed assessment of the risks would provide the Board with a better understanding of the risks inherent in the Plan. This assessment may include scenario testing, sensitivity testing, stress testing, and stochastic modeling.

A detailed risk assessment could be important for the Plan because:

- Relatively small changes in investment performance can produce large swings in the unfunded liabilities
- The Plan's asset allocation has potential for a significant amount of investment return volatility.
- Retired participants account for most of the Plan's liabilities, leaving limited options for reducing plan costs in the event of adverse experience.
- The Board has not to our knowledge performed a detailed risk assessment.



# GFOA funded liability by type

The Actuarial Accrued Liability represents the present value of benefits earned, calculated using the Plan's actuarial cost method. The Actuarial Value of Assets reflects the financial resources available to liquidate the liability. The portion of the liability covered by assets reflects the extent to which accumulated plan assets are sufficient to pay future benefits, and is shown for liabilities associated with employee contributions, pensioner liabilities, and other liabilities. The Government Finance Officers Association (GFOA) recommends that the funding policy aim to achieve a funded ratio of 100 percent.

Туре	2024	2023
Actuarial accrued liability (AAL)		
Active member contributions	\$214,686,921	\$176,719,528
Retirees and beneficiaries	2,617,068,012	2,578,163,782
Active and inactive members (employer-financed)	989,076,349	1,010,286,940
Total	\$3,820,831,282	\$3,765,170,250
Actuarial value of assets	2,051,953,320	2,030,156,195
Cumulative portion of AAL covered		
Active member contributions	100.00%	100.00%
Retirees and beneficiaries	70.20%	71.89%
Active and inactive members (employer-financed)	0.00%	0.00%

### GFOA Funded Liability by Type as of September 30



### **Actuarial balance sheet**

An overview of the Plan's funding is given by an Actuarial Balance Sheet. In this approach, first the amount and timing of all future payments that will be made by the Plan for current participants is determined. Then these payments are discounted at the valuation interest rate to the date of the valuation, thereby determining the present value, referred to as the "liability" of the Plan.

Second, this liability is compared to the assets. The "assets" for this purpose include the net amount of assets already accumulated by the Plan, the present value of future member contributions, the present value of future employer normal cost contributions, and the present value of future employer amortization payments for the unfunded actuarial accrued liability.

Description	Year Ended September 30, 2024	Year Ended September 30, 2023
Liabilities		
Present value of benefits for retired participants and beneficiaries	\$2,617,068,012	\$2,578,163,782
Present value of benefits for inactive vested participants	19,132,024	19,583,436
Present value of benefits for active participants	1,567,236,282	1,574,997,668
Total liabilities	\$4,203,436,318	\$4,172,744,886
Current and future assets		
Total valuation value of assets	\$2,051,953,320	\$2,030,156,195
Present value of future contributions by members	173,963,444	184,847,707
Present value of future employer contributions for:		
Entry age cost	208,641,592	222,726,929
Unfunded actuarial accrued liability	1,768,877,962	1,735,014,055
Total of current and future assets	\$4,203,436,318	\$4,172,744,886

#### Actuarial Balance Sheet



# Section 3: Supplemental Information

# Exhibit A: Table of plan demographics

Category	Year Ended September 30, 2024	Year Ended September 30, 2023	Change From Prior Year
Active participants in valuation:			
• Number	2,587	2,792	-7.3%
Average age	52.4	52.0	0.4
Average years of service	17.6	16.9	0.7
Covered payroll	\$224,250,230	\$230,709,762	-2.8%
Average compensation	\$86,684	\$82,632	4.9%
Account balances	214,686,921	176,719,528	21.5%
Total active vested participants	2,574	2,781	-7.4%
Inactive participants	129	134	-3.7%
Retired participants:			
Number in pay status	4,042	4,039	0.1%
Average age	72.5	72.1	0.4
Average monthly benefit <sup>1</sup>	\$3,653	\$3,693	-1.1%
Disabled participants:			
Number in pay status	85	90	-5.6%
Average age	67.8	67.8	0.0
Average monthly benefit <sup>1</sup>	\$1,931	\$1,872	3.2%
<sup>1</sup> September 30, 2024 values do not include supplemental benefit			

amounts



Category	Year Ended September 30, 2024	Year Ended September 30, 2023	Change From Prior Year
Beneficiaries:			
Number in pay status	1,223	1,212	0.9%
Average age	76.1	76.6	-0.5
Average monthly benefit	\$2,445	\$2,435	0.4%



# Exhibit B: Participants in active service as of September 30, 2024 by age, years of service, and average compensation<sup>1</sup>

Age	Total	0-4	5-9	10-14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 & over
25 - 29	13		13	_			_			_
	75,189		75,189	—		—		—		—
30 - 34	103	1	61	40	1		_	_	—	—
	77,731	86,828	73,696	83,453	85,873					—
35 - 39	211	3	66	98	41	3	—	_	—	—
	87,405	92,326	81,403	90,455	90,195	76,725	_		—	—
40 - 44	345	3	74	116	112	38	2	_	—	—
	87,365	77,810	79,523	82,174	98,148	87,763	81,434		_	—
45 - 49	338	1	40	121	82	65	26	3	—	—
	90,564	139,861	76,344	88,582	94,790	93,688	97,498	100,413	—	—
50 - 54	470	3	56	134	103	96	60	13	5	—
	87,166	117,789	77,528	82,163	93,473	89,426	91,519	87,578	84,147	—
55 - 59	475		46	120	89	91	71	36	22	—
	89,824	_	79,868	83,227	89,765	94,933	92,481	109,704	84,626	—
60 - 64	409	1	41	107	68	76	44	33	30	9
	84,041	121,939	81,927	76,113	83,517	90,920	79,064	94,297	93,076	86,204
65 - 69	161		15	45	35	22	21	11	7	5
	83,076	_	92,087	75,469	73,776	103,178	83,322	79,839	78,822	113,209
70 & over	62	1	3	13	14	15	5	3	5	3
	75,650	190,000	100,495	52,872	82,008	82,155	75,004	79,210	63,867	66,352
Total	2,587 \$86,684	13 \$107,877	415 \$79,136	794 \$82,718	545 \$90,964	406 \$91,849	229 \$88,903	99 \$97,139	69 \$86,172	17 \$90,643

#### Years of Service

<sup>1</sup> Compensation is annualized for those hired during the prior plan year

City of Jacksonville General Employees Retirement Plan Actuarial Valuation as of October 1, 2024

**Segal** 38

# **Exhibit C: Reconciliation of participant data**

	Active	Inactive Vested		Retired		
	Participants	Participants	Disableds	Participants	Beneficiaries	Total
Number as of October 1, 2023	2,792	134	90	4,039	1,212	8,267
New participants	0	N/A	N/A	N/A	N/A	0
Terminations — with vested rights	-2	2	0	0	0	0
Terminations — without vested rights	0	N/A	N/A	N/A	N/A	0
Retirements	-132	-7	N/A	139	N/A	0
New disabilities	-2	0	2	N/A	N/A	0
Return to work	0	0	0	0	N/A	0
Deceased	-9	0	-6	-138	-73	-226
New beneficiaries	0	0	0	0	97	97
Lump sum cash-outs	-57	0	0	0	0	-57
Rehire	0	0	N/A	0	N/A	0
Certain period expired	N/A	N/A	0	0	-8	-8
Data adjustments	5	0	-3	2	-5	-1
Active participants no longer accruing benefits	0	0	N/A	N/A	N/A	0
Net transfers (to)/from DC Plan or Corrections	-8	0	2	0	0	-6
Number as of October 1, 2024	2,587	129	85	4,042	1,223	8,066



# Exhibit D: Summary statement of income and expenses on a market value basis

#### Income and Assets as of YE Income and Assets as of YE Item **Expenses** 2024 **Expenses** 2023 Net assets at market value at the beginning of the year \$1,940,430,000 \$1,826,945,000 Contribution and other income: \$96,957,000 Employer contributions \$83,375,000 Employee contributions 25,836,000 25,806,000 \$122,793,000 \$109,181,000 Total contribution income Investment income: \$16,915,000 \$15,904,000 Interest, dividends and other income Realized appreciation 112,953,000 147,765,000 Unrealized appreciation 213,515,000 86,322,000 -15,886,000 -15,145,000 Less investment fees \$327,497,000 \$234,846,000 Net investment income Total income available for benefits \$450,290,000 \$344,027,000 Less benefit payments and administrative expenses: -\$1,554,000 -\$1,365,000 Administrative expenses Benefit payments -218,807,000 -212,880,000 -26,216,000 -16,297,000 Refunds -\$230,542,000 -\$246,577,000 Net benefit payments and administrative expenses Change in market value of assets \$203,713,000 \$113,485,000 \$1,940,430,000 Net assets at market value at the end of the year \$2,144,143,000

### Year Ended September 30, 2024 versus Year Ended September 30, 2023



# Exhibit E: Summary statement of plan assets

#### Year Ended September 30, 2024 versus Year Ended September 30, 2023

Item	Investments	Assets as of YE 2024	Investments	Assets as of YE 2023
Cash and accounts receivable				
Cash equivalents		\$28,677,000		\$39,781,000
Total accounts receivable		2,188,000		2,544,000
Investments:				
• Equities	\$1,397,085,000		\$1,212,882,000	
Fixed income	489,708,000		411,767,000	
Real estate	391,945,000		436,135,000	
Alternatives	177,621,000		119,572,000	
Pooled investments	-343,033,000		-282,176,000	
Total investments at market value		\$2,113,326,000		\$1,898,180,000
Total assets		\$2,144,191,000		\$1,940,505,000
Total accounts payable		-\$48,000		-\$75,000
Net assets at market value		\$2,144,143,000		\$1,940,430,000
Net assets at actuarial value		\$2,051,953,320		\$2,030,156,195



# Exhibit F: Development of the fund through September 30, 2024

ę	Year Ended September 30	Employer Contributions	Employee Contributions	Other Income	Net Investment Return <sup>1</sup>	Admin. Expenses	Benefit Payments	Market Value of Assets at Year-End	Actuarial Value of Assets at Year-End	Actuarial Value as a Percent of Market Value
	2015	\$81,751,000	\$20,893,000	\$0	-\$39,506,000	\$762,000	\$170,674,000	\$1,739,891,000	\$1,811,172,111	104.1%
	2016	84,898,000	21,840,000	0	167,067,000	762,000	183,692,000	1,829,242,000	1,872,790,100	102.4%
	2017	94,700,000	23,037,000	0	266,138,000	787,000	192,662,000	2,019,668,000	1,952,332,857	96.7%
	2018	71,024,000	29,919,000	11,397,000	145,470,000	1,193,000	191,229,000	2,085,056,000	2,021,545,306	97.0%
	2019	70,338,000	28,334,000	0	14,787,000	959,000	227,350,000	1,970,206,000	2,008,173,331	101.9%
	2020	72,194,000	26,014,000	0	145,398,000	1,084,000	207,269,000	2,005,459,000	2,042,779,798	101.9%
	2021	77,269,000	29,116,000	0	410,544,000	1,194,000	221,533,000	2,299,661,000	2,119,188,413	92.2%
	2022	84,353,000	27,713,000	0	-351,108,000	1,832,000	231,842,000	1,826,945,000	2,079,638,181	113.8%
	2023	83,375,000	25,806,000	0	234,846,000	1,365,000	229,177,000	1,940,430,000	2,030,156,195	104.6%
	2024	96,957,000	25,836,000	0	327,497,000	1,554,000	245,023,000	2,144,143,000	2,051,953,320	95.7%

<sup>1</sup> On a market basis, net of investment fees

City of Jacksonville General Employees Retirement Plan Actuarial Valuation as of October 1, 2024



# **Exhibit G: Table of amortization bases**

### Florida Chapter 112 Recommended Contribution Amortization Bases

Туре	Date Established	Initial Period	Initial Amount	Annual Payment <sup>1</sup>	Years Remaining	Outstanding Balance
Fresh start	10/01/2016	30	\$1,024,497,072	\$71,491,055	22	\$994,079,484
Experience gain	10/01/2017	30	-5,594,096	-383,699	23	-5,468,534
Plan change	10/01/2017	30	-3,528,667	-242,031	23	-3,449,464
Change in assumptions	10/01/2017	30	64,164,450	4,401,043	23	62,724,254
Experience gain	10/01/2018	29	-922,806	-63,215	23	-900,953
Change in assumptions	10/01/2018	29	88,449,536	6,059,080	23	86,354,819
Plan change	10/01/2018	29	5,920,390	405,566	23	5,780,181
Experience loss	10/01/2019	28	99,415,197	6,811,589	23	97,079,678
Change in assumptions	10/01/2019	28	4,913,569	336,661	23	4,798,136
Experience loss	10/01/2020	27	35,775,946	2,454,974	23	34,988,619
Change in assumptions	10/01/2020	27	36,145,490	2,480,332	23	35,350,028
Experience gain	10/01/2021	26	-982,671	-67,631	23	-963,891
Change in assumptions	10/01/2021	26	65,604,895	4,515,192	23	64,351,118
Plan change	10/01/2021	26	3,982,042	274,060	23	3,905,942
Experience loss	10/01/2022	25	122,573,882	8,476,005	23	120,801,170
Change in assumptions	10/01/2022	25	48,782,223	3,373,299	23	48,076,715
Experience loss	10/01/2023	24	150,562,588	10,479,381	23	149,353,550
Change in assumptions	10/01/2023	24	22,701,068	1,580,028	23	22,518,775
Experience loss	10/01/2024	23	49,498,335	3,473,047	23	49,498,335
Total				\$125,854,736		\$1,768,877,962

<sup>1</sup> Level percentage of payroll


## Section 2: Actuarial Valuation Results

### City's Minimum Recommended Contribution Surtax Amortization Bases

Туре	Date Established	Initial Period	Initial Amount	Annual Payment <sup>1</sup>	Years Remaining	Outstanding Balance
Discounted surtax revenue applied	10/01/2016	30	-\$322,190,859	-\$23,334,130	22	-\$324,459,895
Surtax offset gain	10/01/2017	30	-7,927,401	-546,503	23	-7,788,837
Allocation change	10/01/2017	30	-10,588,075	-729,926	23	-10,403,005
Discount rate change	10/01/2017	30	-18,720,570	-1,290,568	23	-18,393,350
Surtax offset gain	10/01/2018	29	-8,089,137	-556,951	23	-7,937,736
Allocation change	10/01/2018	29	-20,241,389	-1,393,645	23	-19,862,416
Discount rate change	10/01/2018	29	-21,761,957	-1,498,338	23	-21,354,514
Surtax offset gain	10/01/2019	28	-2,042,344	-140,645	23	-2,004,497
Allocation change	10/01/2019	28	-17,780,689	-1,224,461	23	-17,451,183
Discount rate change	10/01/2019	28	-12,100,053	-833,266	23	-11,875,818
Surtax offset loss	10/01/2020	27	35,288,381	2,433,818	23	34,687,106
Allocation change	10/01/2020	27	-17,315,069	-1,194,210	23	-17,020,041
Discount rate change	10/01/2020	27	-12,334,670	-850,715	23	-12,124,501
Surtax offset gain	10/01/2021	26	-58,945,999	-4,077,510	23	-58,113,215
Allocation change	10/01/2021	26	3,362,614	232,604	23	3,315,106
Discount rate change	10/01/2021	26	-24,944,399	-1,725,495	23	-24,591,987
Surtax offset gain	10/01/2022	25	-35,356,259	-2,444,891	23	-34,844,922
Allocation change	10/01/2022	25	10,831,989	749,034	23	10,675,333
Discount rate change	10/01/2022	25	-19,473,682	-1,346,609	23	-19,192,047
Surtax method change	10/01/2022	25	28,602,830	1,977,891	23	28,189,164
Surtax offset gain	10/01/2023	24	-16,528,589	-1,150,415	23	-16,395,863
Allocation change	10/01/2023	24	2,326,660	161,939	23	2,307,976
Surtax offset gain	10/01/2024	23	-14,556,942	-1,021,387	23	-14,556,942
Allocation change	10/01/2024	23	-17,637,220	-1,237,514	23	-17,637,220
Total				-\$41,041,893		-\$576,833,304

<sup>1</sup> Level percentage of payroll; per Part VII, Chapter 112.64 (5)(b) of Florida Statues, outstanding balances were amortized using a 1.50% payroll growth rate for October 1, 2023 valuation.

K Segal 44

## Section 2: Actuarial Valuation Results

## **Exhibit H: Section 415**

Section 415 of the Internal Revenue Code (IRC) specifies the maximum benefits that may be paid to an individual from a defined benefit plan and the maximum amounts that may be allocated each year to an individual's account in a defined contribution plan.

A qualified pension plan may not pay benefits in excess of the Section 415 limits. The ultimate penalty for non-compliance is disqualification: active participants could be taxed on their vested benefits and the IRS may seek to tax the income earned on the Plan's assets.

In particular, Section 415(b) of the IRC limits the maximum annual benefit payable at the Normal Retirement Age to a dollar limit of \$160,000 indexed for inflation. That limit is \$275,000 for 2024 and \$280,000 for 2025. Normal Retirement Age for these purposes is age 62. These are the limits in simplified terms. They must be adjusted based on each participant's circumstances, for such things as age at retirement, form of benefits chosen and after tax contributions.

Benefits in excess of the limits may be paid through a qualified governmental excess plan that meets the requirements of Section 415(m).

Legal Counsel's review and interpretation of the law and regulations should be sought on any questions in this regard.



## Exhibit I: Supplementary state of Florida information Summary of salary changes

Year Ended September 30	Total Salary	Percent Change in Total Salary	Percent Change in Salary of Employees Remaining Active	Expected Percent Change in Salary of Employees Remaining Active
2010 <sup>1</sup>	\$275,173,962	-0.39%	0.61%	5.36%
2010	322,530,502	17.21%	N/A	N/A
2011	314,054,361	-2.63%	0.94%	5.62%
2012	283,020,575	-9.88%	2.31%	5.83%
2013	265,404,735	-6.22%	1.60%	2.84%
2014	262,368,813	-1.14%	0.04%	2.84%
2015	254,034,479	-3.18%	3.85%	2.48%
2016	250,894,295	-1.24%	2.76%	4.27%
2017	257,850,484	2.77%	4.64%	5.30%
2018	253,982,175	-1.50%	7.33%	5.13%
2019	249,982,877	-1.57%	5.78%	5.03%
2020	246,864,141	-1.25%	5.60%	4.01%
2021	233,266,593	-5.51%	3.78%	3.88%
2022	227,912,274	-2.30%	5.81%	3.77%
2023	230,709,762	1.23%	6.04%	3.65%
2024	224,250,230	-2.80%	3.91%	4.69%

Note: The Plan was closed to new entrants as of October 1, 2017.

The average total payroll growth for the most recent ten years was -1.56% per year. Additional analysis of pay of DC Plan participants was used support a payroll increases assumption of 1.50%.

<sup>1</sup>Prior to the inclusion of new participants with greater than one year of employment.



## Section 2: Actuarial Valuation Results

## Exhibit J: Supplementary State of Florida Information Recent History of Recommended and Actual Contributions

Fiscal Year Ended September 30	Valuation Date October 1	Contribution Rate as Percent of Valuation Payroll	Valuation Payroll	Florida Chapter 112 Recommended Contribution	City's Minimum Required Contribution	Actual Contribution
2012	2010	17.22%	\$333,819,070	\$57,497,706		\$49,899,000
2013	2011	20.51%	325,046,264	66,659,915		55,386,000
2014	2012	27.91%	291,511,192	81,351,295		71,000,000
2015	2013	31.60%	272,358,339	86,069,361		81,751,000
2016	2014	33.20%	268,245,874	89,058,931		84,898,000
2017	2015	36.79%	256,930,472	94,526,764		94,700,000
2018	2016	36.81%	254,657,709	93,743,647	\$70,166,211	71,024,000
2019	2017	36.41%	261,718,241	95,290,428	69,247,529	70,338,000
2020	2018	39.03%	257,791,908	100,620,425	71,249,679	72,194,000
2021	2019	42.79%	253,732,620	108,568,188	76,832,977	77,269,000
2022	2020	45.98%	250,567,103	115,204,974	83,696,811	84,353,000
2023	2021	50.98%	236,765,592	120,695,825	83,607,476	83,375,000
2024	2022	58.31%	231,330,958	134,889,081	96,592,629	96,957,000
2025	2023	65.52%	234,170,408	153,422,081	113,299,912	
2026	2024	69.65%	227,613,983	158,526,188	115,430,230	

The Plan was closed to new entrants as of October 1, 2017; as a result, valuation payroll is expected to continue declining.



## Exhibit K: Supplementary state of Florida information

## **Comparative Summary of Principal Valuation Results**

Item	Year Ended September 30, 2024	Year Ended September 30, 2023
Participant data		
Active members	2,587	2,792
Total annual payroll	\$224,250,230	\$230,709,762
Retired members and beneficiaries	5,350	5,341
Total annualized benefit	\$222,941,835	\$216,434,739
Terminated vested members	129	134
Total annualized benefit	\$2,208,591	\$2,308,236
Actuarial value of assets	\$2,051,953,320	\$2,030,156,195
Present value of all future expected benefit payments:		
Active members:		
Retirement benefits	\$1,289,947,914	\$1,333,653,904
Vesting benefits	18,100,521	18,387,256
Disability benefits	18,040,083	18,783,560
Death benefits	26,460,843	27,453,420
Return of contributions	<u>214,686,921</u>	<u>176,719,528</u>
Total	\$1,567,236,282	\$1,574,997,668
Terminated vested members	19,132,024	19,583,436
Retired members and beneficiaries	2,617,068,012	2,578,163,782
Total	\$4,203,436,318	\$4,172,744,886



# Exhibit K: Supplementary state of Florida information Comparative summary of principal valuation results

Item	Year Ended September 30, 2024	Year Ended September 30, 2023
Unfunded actuarial accrued liability	\$1,768,877,962	\$1,735,014,055
Actuarial present value of accrued benefits		
Vested accrued benefits		
Active members	\$840,476,237	\$814,362,482
Inactive members	19,132,024	19,583,436
Retirees and beneficiaries	2,617,068,012	2,578,163,782
Nonvested active members	24,698,502	22,161,521
Total	\$3,501,374,775	\$3,434,271,221
Pension cost		
Normal cost, including administrative expenses	\$45,710,466	\$46,755,918
Expected employee contributions	-20,594,781	-21,219,420
Level % of payroll payment to amortize unfunded actuarial accrued liability	125,854,736	120,573,091
Discounted and amortized value of allocated surtax revenue	-41,041,893	-38,209,843
Timing adjustment	<u>3,795,837</u>	3,725,783
Total minimum annual cost payable monthly at valuation date	113,724,365	\$111,625,529
Total employer cost projected to budget year	115,430,230	113,299,912
Projected payroll	227,613,983	234,170,408
As % of projected payroll	50.71%	48.38%
Present value of active members' future salaries at attained age	\$1,739,634,438	\$1,848,477,074
Present value of expected future employee contributions	173,963,444	184,847,707



## Section 3: Supplemental Information

# Exhibit L: Supplementary state of Florida Information Actuarial Present Value of Accumulated Plan Benefits

Factors	Change in Actuarial Present Value of Accumulated Plan Benefits
Actuarial present value of accumulated benefits as of October 1, 2023	\$3,434,271,221
Benefits accumulated, net experience gain or loss, changes in data	96,862,172
Benefits paid	-245,023,000
Interest	215,264,382
Changes in assumptions	0
Plan changes	<u>0</u>
Net increase	67,103,554
Actuarial present value of accumulated benefits as of October 1, 2024	\$3,501,374,775



## Section 3: Supplemental Information

## **Exhibit M: Actuarial Projections through Fiscal 2062**

City of Jacksonville General Employees Retirement Plan

Actuarial Projections through Fiscal Year Ending September 30, 2062

			Unfunded							
	Actuarial	Actuarial	Actuarial		Contributions for					
Plan Year	Accrued	Value of	Accrued	Funded	Fiscal Year	Surtax	% of Total	Required City	% of Total	Total
Beginning	Liability	Assets	Liability	Ratio	Ending	Contribution	Contribution	Contribution	Contribution	Contribution
					2025	\$O	0.0%	\$113,299,912	100.0%	\$113,299,912
2024	\$3,820,831,282	\$2,051,953,320	\$1,768,877,962	53.70%	2026	0	0.0%	115,430,230	100.0%	115,430,230
2025	3,867,681,725	2,100,204,145	1,767,477,580	54.30%	2027	0	0.0%	113,547,412	100.0%	113,547,412
2026	3,907,935,452	2,088,413,274	1,819,522,178	53.44%	2028	0	0.0%	116,470,562	100.0%	116,470,562
2027	3,942,694,967	2,168,722,714	1.773.972.253	55.01%	2029	0	0.0%	111.303.699	100.0%	111.303.699
2028	3,973,220,865	2,223,376,022	1,749,844,843	55.96%	2030	0	0.0%	108,266,501	100.0%	108,266,501
2029	3,998,639,888	2,226,190,857	1,772,449,031	55.67%	2031	47,412,421	30.4%	108,691,217	69.6%	156,103,638
2030	4.017.615.808	2,218,849,867	1.798.765.941	55.23%	2032	65,903,265	37.6%	109,143,232	62.4%	175.046.497
2031	4.029.767.572	2,253,250,025	1.776.517.547	55.92%	2033	68,704,154	38.6%	109.434.853	61.4%	178,139,007
2032	4.034.613.451	2,302,420,359	1.732.193.092	57.07%	2034	71.624.080	39.5%	109.837.371	60.5%	181,461,451
2033	4.032.757.606	2.351.939.647	1.680.817.959	58.32%	2035	74.668.104	40.4%	110.230.842	59.6%	184.898.946
2034	4.021.814.144	2,400,148,065	1.621.666.079	59.68%	2036	77.841.498	41.3%	110.537.559	58.7%	188.379.057
2035	4.002.741.416	2,448,739,841	1.554.001.575	61.18%	2037	81,149,762	42.3%	110,916,263	57.7%	192,066,025
2036	3,976,224,293	2,498,943,789	1,477,280,504	62.85%	2038	84.598.627	43.2%	111.278.461	56.8%	195,877,088
2037	3,941,065,473	2,550,403,958	1.390.661.515	64.71%	2039	88,194,069	44.1%	111.681.197	55.9%	199.875.266
2038	3,898,450,820	2,605,057,726	1,293,393,094	66.82%	2040	91,942,316	45.1%	112,112,591	54.9%	204.054.907
2039	3,847,797,838	2,663,200,729	1,184,597,109	69.21%	2041	95,849,865	46.0%	112,599,310	54.0%	208,449,175
2040	3,789,979,794	2,726,608,188	1.063.371.606	71.94%	2042	99,923,484	46.9%	113,214,643	53.1%	213,138,127
2041	3,723,881,630	2,795,083,890	928,797,740	75.06%	2043	104,170,232	47.8%	113,837,297	52.2%	218,007,529
2042	3,651,288,300	2.871.600.670	779.687.630	78.65%	2044	108,597,467	48.7%	114,554,579	51.3%	223,152,046
2043	3.571.347.659	2,956,362,974	614,984,685	82.78%	2045	113,212,859	49.5%	115.346.360	50.5%	228,559,219
2044	3 484 989 003	3 051 544 424	433 444 579	87 56%	2046	118 024 406	50.4%	116 211 792	49.6%	234 236 198
2045	3 392 567 869	3 158 814 155	233 753 714	93 11%	2047	0	0.0%	117 158 785	100.0%	117 158 785
2046	3 295 282 971	3 280 769 371	14 513 600	99.56%	2048	0	0.0%	48 037 298	100.0%	48 037 298
2047	3 194 723 971	3 293 451 398	(98 727 427)	103.09%	2049	0	0.0%	6 027 819	100.0%	6 027 819
2048	3 089 918 225	3 238 453 976	(148 535 751)	104 81%	2050	0	0.0%	5 528 104	100.0%	5 528 104
2049	2 983 233 122	3 141 962 031	(158 728 909)	105.32%	2051	0	0.0%	5 129 705	100.0%	5 129 705
2050	2 876 027 589	3 045 512 880	(169,485,291)	105.89%	2052	0	0.0%	4 790 791	100.0%	4 790 791
2051	2 765 198 399	2 946 082 618	(180,884,219)	106.54%	2053	0	0.0%	4 439 512	100.0%	4 439 512
2052	2 654 246 690	2 847 288 487	(193,041,797)	107 27%	2054	0	0.0%	4 151 694	100.0%	4 151 694
2053	2 545 748 295	2 751 676 832	(205 928 537)	108.09%	2055	0	0.0%	3 988 100	100.0%	3 988 100
2054	2 437 875 312	2 657 403 362	(219 528 050)	109.00%	2056	0	0.0%	3 850 984	100.0%	3 850 984
2055	2 332 071 610	2,566,059,016	(233,987,406)	110.03%	2057	0	0.0%	3 769 254	100.0%	3 769 254
2056	2 230 129 598	2 479 461 810	(249 332 212)	111 18%	2058	0	0.0%	3 773 154	100.0%	3 773 154
2057	2 129 327 744	2 394 915 835	(265 588 091)	112 47%	2059	0	0.0%	3 771 877	100.0%	3 771 877
2058	2,123,327,744	2 313 272 287	(282,908,121)	113 93%	2055	0	0.0%	3 781 421	100.0%	3 781 421
2059	1 936 082 179	2 237 427 094	(301 344 915)	115 56%	2000	0	0.0%	3 874 562	100.0%	3 874 562
2000	1 844 299 243	2 165 194 483	(320 895 240)	117 40%	2062	0	0.0%	3 971 019	100.0%	3 971 019
2000	1 755 093 523	2 096 807 912	(341 714 389)	119 47%	2063	0	0.0%	4 069 873	100.0%	4 069 873
2062	1,668,556,017	2,030,007,912	(363,885,820)	121 81%	2000	0	0.0%	4,003,073	100.0%	4 171 093
2002	1,000,000,017	2,002,771,040	(303,003,023)	121.01/0	2004	0	0.078	-, 17 1,035	100.078	4,171,033
Total:						\$1,391,816,610	34.0%	\$2,702,230,928	66.0%	\$4,094,047,538

\$530,126,968

29.0%

\$1,299,024,900

#### Total Present Value at 6.50%:

#### Assumptions

Investment Return Assumption	6.50% per year
Actuarial Value of Assets	5-year smoothed market value
Payroll Growth Assumption	1.50% per year
Pension Liability Surtax Proceeds	35.60%, projected to increase 4.25% annually
Administrative Expenses	Projected to increase 2.5% annually

Projections are not a guarantee of future results. They are intended to serve as estimates of future financial outcomes that are based on assumptions about future experience and the information available at the time the modeling is undertaken and completed. Projected results will change if demographic or economic assumptions, or plan provisions, change in the future, or if the contributing employers make contributions other than expected.

City of Jacksonville General Employees Retirement Plan Actuarial Valuation as of October 1, 2024



\$1,829,151,868

71.0%

## Exhibit 1: Actuarial assumptions, methods and models

## **Rationale for assumptions**

The information and analysis used in selecting each demographic assumption that has a significant effect on this actuarial valuation is shown in the Experience Study Report for the five-year period ended September 30, 2022.

### Net investment return

6.50%

The net investment return assumption was chosen by the Retirement System's Board of Trustees with input from the actuary. The assumption is a long-term estimate derived from historical data, current and recent market expectations, and professional judgment. As part of the analysis, a building block approach was used that reflects inflation expectations and anticipated risk premiums for each of the portfolio's asset classes as provided by Segal Marco Advisors, as well as the Plan's target asset allocation.

COJ/JH/	A/NFTPO	JEA			
Service	Rate (%)	Service	Rate (%)		
0	10.00	0	10.00		
1-3	7.00	1	9.00		
4-10	5.50	2-4	8.00		
11-24	4.25	5-9	5.75		
25+	3.50	10-18	5.00		
		19-25	4.50		
		26+	3.50		

### **Salary Increases**

### **Inflation Rate**

2.50%



## **Payroll growth**

1.50% used for amortization of unfunded liability amounts, based on the requirement in the Florida Statutes that the assumption for this purpose may not exceed the average annual growth for the preceding ten years. Negotiated pay level increases and pay of DC Plan participants were taken into consideration in setting a payroll growth that is expected to be achieved and maintained on a ten-year average basis. The Fund's long-term payroll growth assumption is equal to the inflation assumption of 2.50%.

## **Cost-of-living adjustments**

On the April 1<sup>st</sup> nearest the fifth anniversary of the initial benefit commencement date, and on each April 1<sup>st</sup> thereafter, the regular benefit is increased by 3%.

### **Mortality rates**

Healthy pre-retirement:	FRS pre-retirement mortality tables for personnel other than special risk and K-12 instructional personnel, set forward 2 years, projected generationally from 2010 with Scale MP2018
Healthy post-retirement:	FRS healthy post-retirement mortality tables for personnel other than special risk and K-12 instructional personnel, set forward 2 years, projected generationally from 2010 with Scale MP2018
Disabled:	FRS disabled mortality tables for personnel other than special risk, with no set forward, projected generationally from 2010 with Scale MP2018
	The FRS tables for personnel other than special risk and K-12 instructional personnel, set forward 2 years, reasonably reflect the healthy annuitant mortality experience of the General Employees Retirement Plan as of the measurement date. The FRS disabled mortality tables for personnel other than special risk reasonably reflect the disabled annuitant mortality experience as of the measurement date.



## Annuitant mortality rates

	Rate (%)				
	He	ealthy	Di	sabled	
Age	Male	lale Female		Female	
55	1.04	0.55	2.53	1.91	
60	1.16	0.61	3.08	2.27	
65	1.45	0.88	3.93	2.83	
70	2.34	1.51	5.08	3.79	
75	3.90	2.62	6.98	5.46	
80	6.63	4.65	10.12	8.31	
85	11.21	8.64	14.68	12.60	
90	18.13	15.47	21.29	17.72	

Mortality rates shown for base table.



## **Termination rates before retirement**

	Rate (%)					
	Mor					
Age	Male	Female	Disability <sup>2</sup>			
20	0.04	0.01	0.01			
25	0.05	0.02	0.01			
30	0.06	0.03	0.02			
35	0.08	0.04	0.03			
40	0.11	0.06	0.04			
45	0.16	0.09	0.06			
50	0.25	0.13	0.10			
55	0.36	0.20	0.16			
60	0.52	0.29	0.25			
65	0.75	0.47	0.00			

<sup>1</sup> Mortality rates shown for base table.

<sup>2</sup> 100% of disabilities are assumed to be non-service incurred.



## **Termination rates before retirement (Continued)**

Withdrawal <sup>1</sup>			
Service	COJ	JEA	
0	16.00	10.00	
1	15.00	3.25	
2	13.00	3.25	
3	10.00	3.25	
4	10.00	3.25	
5	10.00	3.25	
6	10.00	2.75	
7	10.00	2.75	
8	4.00	2.00	
9	4.00	2.00	
10	4.00	2.00	
11	4.00	2.00	
12	4.00	2.00	
13	4.00	2.00	
14	4.00	2.00	
15	4.00	1.00	
16	4.00	1.00	
17	3.00	1.00	
18	3.00	1.00	
19	3.00	1.00	
20+	3.00	0.50	

<sup>1</sup>All withdrawal rates are set to 0% after eligibility for retirement.



### **Retirement rates**

Fewer Than 31 Years of Service	
Age	Rate (%) <sup>1</sup>
45	50
46-47	5
48-49	20
50-53	4
54-58	9
59-62	15
63	10
64-65	25
66	20
67-69	15
70 & Over	100

31 or More Years of Service		
Service	Rate (%) <sup>1</sup>	
31	5	
32-33	15	
34-35	20	
36	25	
37	40	
38	15	
39	5	
40	100	

<sup>1</sup> 100% retirement is assumed at the earlier of age 70 or 40 years of service.

### Interest on BACKDROP Account

4.00%.

### **Refund of Contributions**

95% of participants that are vested and terminate are assumed to take a refund of their employee contributions in lieu of their accrued benefit deferred to age 65

### **Retirement Age for Inactive Vested Participants**

65, or date of retirement as provided in data

### Unknown data for participants

Same as those exhibited by participants with similar known characteristics. If not specified, participants are assumed to be male.

City of Jacksonville General Employees Retirement Plan Actuarial Valuation as of October 1, 2024



### Value of Applicable Tax Revenue

Smoothed revenue of \$127,283,574 for fiscal 2024 is used as the basis of the City's revenue projection. This amount is prior to the application of the allocation percentage. Smoothed revenue is calculated as actual revenue less unrecognized revenue growth. Unrecognized revenue growth is equal to the difference between actual and expected revenue growth, and is recognized over a five-year period, further adjusted, if necessary, to be within 20% of the actual revenue. This method is applied prospectively to revenue growth occurring during fiscal 2022 and later.

Actual revenue for fiscal 2024 was \$131,031,172.

## **Tax Revenue Growth Rate**

4.25%. This assumption is determined by the City. Segal has not reviewed the information used to set this assumption, but Segal previously reviewed the sensitivity of this assumption when it was initially set.

### **Projected Tax Revenue Allocation**

35.60%. This percentage is determined by the City; last year's percentage was 34.90%.

### **Administrative Expenses**

Previous year's actual expenses; \$1,554,000 for October 1, 2024.

## **Family Composition:**

75% of males and 55% of females are assumed to be married. None are assumed to have dependent children. Females are assumed to be three years younger than their spouses.

## Actuarial value of assets

Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual and the expected market return, and is recognized over a five-year period, further adjusted, if necessary, to be within 20% of the market value.

## Actuarial cost method

Entry Age Normal Actuarial Cost Method. Entry Age is the age at the time the participant commenced employment. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis based on each member's benefit accrual rate and are allocated by compensation.

Normal Cost is not included for participants who are assumed to retire with 100% certainty in the upcoming plan year based on the retirement assumptions.

City of Jacksonville General Employees Retirement Plan Actuarial Valuation as of October 1, 2024



## Models

Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Deterministic cost projections are based on a proprietary forecasting model. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.



## **Exhibit 2: Summary of plan provisions**

This exhibit summarizes the major provisions of the Plan included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

### Plan year

October 1 through September 30

### **Plan status**

Closed as of October 1, 2017

### **Normal retirement**

Age Requirement	Age 65 with five years of Credited Service, age 55 with 20 years of Credited Service or any age with 30 years of Credited Service.
Regular Benefit Amount	2.5% of Final Monthly Compensation times years of Credited Service, not more than 80% of Final Monthly Compensation.
Supplemental Benefit Amount	Monthly benefit of \$5 times years of Credited Service, not less than \$25 per month or more than \$150 per month.
Minimum Benefit Amount	\$77.96 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1 <sup>st</sup> .

## **Early retirement**

Age Requirement	Age 50 with 20 years of Credited Service
Regular Benefit Amount	Accrued Service Retirement Regular Benefit Amount reduced by 0.5 percent for each month the benefit commencement precedes age 55.
Supplemental Benefit Amount	Monthly benefit of \$5 times years of Credited Service, not less than \$25 per month or more than \$150 per month.
Minimum Benefit Amount	\$77.96 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1 <sup>st</sup> .
Age Requirement	Any age with 25 years of Credited Service
Regular Benefit Amount	2.0% of Final Monthly Compensation times years of Credited Service



Supplemental Benefit Amount	Monthly benefit of \$5 times years of Credited Service, not less than \$25 per month or more than \$150 per month.
Minimum Benefit Amount	\$77.96 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1 <sup>st</sup> .

## Off the job Disability

Service Requirement	5 years of Credited Service
Regular Benefit Amount	Final Monthly Compensation times 25% plus 2.5% per year of Credited Service in excess of 5, not to exceed 50% of Final Monthly Compensation
Supplemental Benefit Amount	Monthly benefit of \$5 times years of Credited Service, not less than \$25 per month or more than \$150 per month.
Minimum Benefit Amount	\$77.96 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1 <sup>st</sup> .

## On the job Disability

Service Requirement	Immediate eligibility
Regular Benefit Amount	Final Monthly Compensation times 25% plus 2.5% per year of Credited Service in excess of 5, not to exceed 50% of Final Monthly Compensation
Supplemental Benefit Amount	Monthly benefit of \$5 times years of Credited Service, not less than \$25 per month or more than \$150 per month.
Minimum Benefit Amount	\$77.96 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1 <sup>st</sup> .

## Vesting

Age Requirement	None
Service Requirement	5 years of Credited Service
Regular Benefit Amount	Accrued Service Retirement Regular Benefit payable at age 65.
Supplemental Benefit Amount	Monthly benefit of \$5 times years of Credited Service, not less than \$25 per month or more than \$150 per month. Payable at Age 65.
Minimum Benefit Amount	\$77.96 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1st.



## Spouse's pre-retirement death benefit [(applicable only if elected by employee)]

Age Requirement	None
Service Requirement	None
Regular Benefit Amount	If the Member is eligible for retirement, the surviving spouse is entitled to 75% of the member's accrued regular benefit. If the Member is not eligible for retirement, the surviving spouse is entitled to 75% of the pension the Member would have received if the Member had worked to eligibility for a Service Retirement at current salary with the benefit based on a 2% accrual rate.
Supplemental Benefit Amount	Monthly benefit of \$5 times years of Member's Credited Service, not less than \$25 per month or more than \$150 per month.
Minimum Benefit Amount	75% of \$77.96 per whole year of Member's Credited Service, not to exceed 30.

### Member

All full-time JEA, JHA, NFTPO, and City General Employees hired prior to October 1, 2017.

### **Member Contributions**

10.0% of Earnable Compensation

### **Credited Service**

The number of full years and months worked from date of participation to date of termination or retirement, plus any prior service purchased.

### **Final Monthly Compensation**

Average monthly rate of Earnable Compensation during the highest 36 consecutive months (78 pay periods) out of the last ten years of employment.

## **Earnable Compensation**

Base pay for regular hours worked as an employee, plus service raises and excluding bonuses, adjusted compensation, overtime or any extra compensation over and above regularly budgeted salaries.

## Cost of living adjustments (COLAs)

On the April 1<sup>st</sup> nearest the fifth anniversary of the initial benefit commencement date, and on each April 1<sup>st</sup> thereafter, the regular benefit is increased by 3%.

City of Jacksonville General Employees Retirement Plan Actuarial Valuation as of October 1, 2024



## BACKDROP

Members with 30 or more years of service may elect to have their retirement benefits calculated as if the member had retired up to 5 years earlier on or after October 1, 2005. Benefits that would have been payable are accumulated with interest to date of termination and paid or rolled over in a single sum, and payments are made directly to the Member thereafter. The 5-year wait to receive COLA increases starts at termination of employment rather than at the start of BackDROP.

## Partial Lump Sum Option (PLOP)

Members who are eligible for retirement may elect to receive a lump-sum benefit of up to 15% of the benefit value and a reduced life annuity actuarially equivalent to the benefit that would otherwise be payable.

### Changes in plan provisions

There have been no changes in plan provisions since the last valuation.



## General information about the pension plan

## **Plan description**

Plan membership. At September 30, 2024, pension plan membership consisted of the following:

Membership	Amount
Retired participants or beneficiaries currently receiving benefits	5,350
Inactive participants with a vested right to a deferred or immediate benefit	129
Active members	2,587
Total	8,066



## **Exhibit 1: Net Pension Liability**

Components of the Net Pension Liability	Current	Prior
Reporting date for employer under GASB 68	September 30, 2025	September 30, 2024
Measurement date and reporting date for the Plan under GASB 67	September 30, 2024	September 30, 2023
Total Pension Liability	\$3,820,831,282	\$3,765,170,250
Plan Fiduciary Net Position	2,144,143,000	1,940,430,000
Net Pension Liability	1,676,688,282	1,824,740,250
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	56.12%	51.54%

The Net Pension Liability (NPL) for the plan was measured as of September 30, 2024 and 2023. Plan Fiduciary Net Position (plan assets) was valued as of the measurement dates and the Total Pension Liability (TPL) was determined from actuarial valuations as of October 1, 2024 and 2023, respectively.

**Plan provisions**. The plan provisions used in the measurement of the NPL are the same as those used in the GERP actuarial valuations as of October 1, 2024 and October 1, 2023, respectively.

Actuarial assumptions. The Total Pension Liability (TPL) as of September 30, 2024, which was determined based on the results of an actuarial valuation as of October 1, 2024, used the following actuarial assumptions, applied to all periods included in the measurement:

Assumption Type	Assumption
Inflation	2.50%
Salary increases	3.50% - 10.00%, of which 2.50% is the Plan's long-term payroll inflation
Net investment rate of return	6.50%, net of pension plan investment expense, including inflation
Other assumptions	See the October 1, 2024 valuation for a complete description of all actuarial assumptions. These assumptions were developed in the analysis of actuarial experience study for the period October 1, 2017 through September 30, 2022.

Detailed information regarding all actuarial assumptions can be found in Section 4, Exhibit 1.



## Determination of discount rate and investment rates of return

The long-term expected rate of return on pension plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of inflation) are developed for each major asset class. These returns are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage, adding expected inflation. The target allocation (approved by the Board) and projected arithmetic real rates of return for each major asset class, after deducting inflation, but before investment expenses, used in the derivation of the long-term expected investment rate of return assumption are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return <sup>1</sup>
Domestic equity	30.00%	6.10%
International equity	23.00%	6.20%
Fixed income	20.00%	1.90%
Real estate	15.00%	3.50%
Private equity	6.00%	9.65%
Private credit	6.00%	6.10%
Total	100.00%	

**Discount rate.** The discount rate used to measure the Total Pension Liability (TPL) was 6.50% as of September 30, 2024 and September 30, 2023. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the actuarially determined contribution rates. For this purpose, only employer contributions that are intended to fund benefits for current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs for future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on those assumptions, the Plan Fiduciary Net Position (FNP) was projected to be available to make all projected future benefit payments for current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the TPL as of both September 30, 2024 and September 30, 2023.

<sup>1</sup> Based on capital market assumptions provided by Segal Marco Advisors

City of Jacksonville General Employees Retirement Plan Actuarial Valuation as of October 1, 2024



## **Discount rate sensitivity**

**Sensitivity of the Net Pension Liability to changes in the discount rate.** The following presents the Net Pension Liability (NPL) of the GERP as of September 30, 2024, which is allocated to all employers, calculated using the discount rate of 6.50%, as well as what the Plan's NPL would be if it were calculated using a discount rate that is 1-percentage-point lower (5.50%) or 1-percentage-point higher (7.50%) than the current rate.

		Current	
Item	1% Decrease (5.50%)	Discount Rate (6.50%)	1% Increase (7.50%)
Net Pension Liability	\$2,122,662,845	\$1,676,688,282	\$1,303,247,592



## **Exhibit 2: Schedule of changes in Net Pension Liability**

Components of the Net Pension Liability	Current	Prior
Reporting and Measurement Dates		
Reporting date for employer under GASB 68	September 30, 2025	September 30, 2024
Measurement date and reporting date for the Plan under GASB 67	September 30, 2024	September 30, 2023
Total Pension Liability		
Service cost	\$45,390,918	\$40,445,986
Interest	239,723,228	232,635,883
Change of benefit terms	0	0
Differences between expected and actual experience	15,569,886	45,408,218
Changes of assumptions	0	22,701,068
Benefit payments, including refunds of member contributions	-245,023,000	-229,177,000
Net change in Total Pension Liability	\$55,661,032	\$112,014,155
Total Pension Liability — beginning	3,765,170,250	3,653,156,095
Total Pension Liability — ending	\$3,820,831,282	\$3,765,170,250
Plan Fiduciary Net Position		
Contributions — employer	\$96,957,000	\$83,375,000
Contributions — employee	25,836,000	25,806,000
Net investment income	327,497,000	234,846,000
Benefit payments, including refunds of member contributions	-245,023,000	-229,177,000
Administrative expense	-1,554,000	-1,365,000
Other	0	0
Net change in Plan Fiduciary Net Position	\$203,713,000	\$113,485,000
Plan Fiduciary Net Position — beginning	1,940,430,000	1,826,945,000
Plan Fiduciary Net Position — ending	\$2,144,143,000	\$1,940,430,000



Components of the Net Pension Liability	Current	Prior
Net Pension Liability		
Net Pension Liability – ending	\$1,676,688,282	\$1,824,740,250
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	56.12%	51.54%
Covered payroll <sup>1</sup>	\$224,250,230	\$230,709,762
Plan Net Pension Liability as percentage of covered payroll	747.69%	790.92%

#### Notes to Schedule:

• Change of Assumptions: As of September 30, 2023 the rates of withdrawal and retirement were updated, as well as the salary scale.



<sup>&</sup>lt;sup>1</sup> Pensionable payroll as of the measurement date

## **Exhibit 3: Schedule of employer contributions**

Year Ended September 30	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a Percentage of Covered Payroll
2015	\$86,069,361	\$81,751,000	\$4,318,361	\$254,034,479	32.18%
2016	89,058,931	84,898,000	4,160,931	250,894,295	33.84%
2017	94,526,754	94,700,000	-173,246	257,850,484	36.73%
2018	93,743,647	71,024,000	22,719,647	253,982,175	27.96%
2019	95,290,428	70,338,000	24,952,428	249,982,877	28.14%
2020	100,620,425	72,194,000	28,426,425	246,864,141	29.24%
2021	108,568,188	77,269,000	31,299,188	233,266,593	33.12%
2022	115,204,974	84,353,000	30,851,974	227,912,274	37.01%
2023	120,695,825	83,375,000	37,320,825	230,709,762	36.14%
2024	134,889,081	96,957,000	37,932,081	224,250,230	43.24%

See accompanying notes to this schedule on next page.



# Methods and assumptions used to establish "actuarially determined contribution" rates:

### Valuation date

Actuarially determined contribution rates are calculated as of October 1, two years prior to the end of the fiscal year in which contributions are reported

### Actuarial cost method

Entry Age Actuarial Cost Method

## **Amortization method**

Level percent of payroll, using 1.50% annual increases. The Fund's payroll inflation assumption was 2.50% as of October 1, 2022. Per Part VII, Chapter 112.64(5)(a) of Florida Statutes, the payroll growth assumption used for amortization of the unfunded liability is not allowed to exceed the average annual payroll growth for the proceeding ten years. However, pursuant to Chapter 112.64(5)(b), and after adjusting this analysis to account for bargained pay level increases and inclusion of DC plan participants in the total payroll, the assumption was set at 1.50%

## **Remaining amortization period**

As of October 1, 2022 the effective amortization period is 24 years.

## Asset valuation method

The market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between actual and expected returns on a market value basis and is recognized over a five-year period. The deferred return is further adjusted, if necessary, so that the actuarial value of assets will stay within 20% of the market value of assets.

### Investment rate of return

6.50%, net of pension plan investment expense, including inflation.



### Inflation rate

2.50%

## **Projected salary increases**

3.00% - 7.50%, of which 2.50% is the Plan's long-term payroll inflation.

## Cost of living adjustments

Plan provisions contain a 3.00% COLA

## **Other information**

Same as those used in the October 1, 2022 funding actuarial valuation



## **Exhibit 4: Pension expense**

Components of pension expense	Current	Prior
Reporting date for employer under GASB 68	September 30, 2025	September 30, 2025
Measurement date	September 30, 2024	September 30, 2024
Service cost	\$45,390,918	\$40,445,986
Interest	239,723,228	232,635,883
Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	0	0
Current-period benefit changes	0	0
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	5,189,962	15,136,072
Expensed portion of current-period changes of assumptions	0	7,567,022
Member contributions	-25,836,000	-25,806,000
Projected earnings on pension plan investments	-122,104,970	-114,807,193
Expensed portion of current-period differences between actual and projected earnings on pension plan investments	-41,078,406	-24,007,763
Administrative expense	1,554,000	1,365,000
Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	168,536,195	183,379,118
Recognition of beginning of year deferred inflows of resources as pension expense	-79,633,444	-55,625,683
Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	0	0
Pension expense	\$191,741,483	\$260,282,442



### Deferred outflows of resources and deferred inflows of resources

Deferred Outflows and Inflows	Current	Prior
Reporting and measurement dates		
Reporting date for employer under GASB 68	September 30, 2025	September 30, 2025
Measurement date	September 30, 2024	September 30, 2024
Deferred outflows of resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>1</sup>	\$18,446,313	\$12,024,868
Changes of assumptions	19,762,579	55,926,382
Net difference between projected and actual earnings on pension plan investments	0	93,882,469
Difference between expected and actual experience in the Total Pension Liability	35,025,830	55,626,329
Total deferred outflows of resources	\$73,234,722	\$217,460,048
Deferred inflows of resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions <sup>13</sup>	\$18,446,313	\$12,024,868
Changes of assumptions	0	0
Net difference between projected and actual earnings on pension plan investments	92,189,680	0
Difference between expected and actual experience in the Total Pension Liability	0	0
Total deferred inflows of resources	\$110,635,993	\$12,024,868
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting date for employer under GASB 68 year ended September 30:		
2025	N/A	\$88,902,751
2026	\$28,773,052	64,661,496
2027	39,990,250	75,878,694
2028	-65,086,167	-24,007,761
2029	-41,078,406	0
2030	0	0
Thereafter	0	0

<sup>1</sup> Calculated in accordance with Paragraphs 54 and 55 of GASB 68

City of Jacksonville General Employees Retirement Plan Actuarial Valuation as of October 1, 2024



## Schedule of recognition of change in total Net Pension Liability

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences between Expected and Actual Experience on Total Pension Liability

Reporting Date for Employer under GASB 68 Year Ended September 30	Differences between Expected and Actual Experience	Recognition Period (Years)	2024	2025	2026	2027	2028	2029	2030	Thereafter
2021	\$12,192,218	4.00	\$3,048,055	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2022	25,338,067	4.00	6,334,517	6,334,517	0	0	0	0	0	0
2023	38,039,330	4.00	9,509,833	9,509,833	9,509,833	0	0	0	0	0
2024	45,408,218	3.00	15,136,072	15,136,073	15,136,073	0	0	0	0	0
2025	15,569,886	3.00	N/A	5,189,962	5,189,962	5,189,962	0	0	0	0
Total <sup>1</sup>			N/A	\$36,170,385	\$29,835,868	\$5,189,962	\$0	\$0	\$0	\$0



### Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Assumption Changes

Reporting Date for Employer under GASB 68 Year Ended September 30	Assumption Changes	Recognition Period (Years)	2024	2025	2026	2027	2028	2029	2030	Thereafter
2021	\$36,145,490	4.00	\$9,036,373	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2022	65,604,895	4.00	16,401,224	16,401,224	0	0	0	0	0	0
2023	48,782,223	4.00	12,195,556	12,195,556	12,195,556	0	0	0	0	0
2024	22,701,068	3.00	7,567,022	7,567,023	7,567,023	0	0	0	0	0
2025	0	3.00	N/A	0	0	0	0	0	0	0
Total <sup>1</sup>			N/A	\$36,163,803	\$19,762,579	\$0	\$0	\$0	\$0	\$0

<sup>1</sup> Net increase (decrease) in pension expense

City of Jacksonville General Employees Retirement Plan Actuarial Valuation as of October 1, 2024



### Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences between Projected and Actual Earnings on Pension Plan Investments

Reporting Date for Employer under GASB 68 Year Ended September 30	Differences between Projected and Actual Earnings	Recognition Period (Years)	2024	2025	2026	2027	2028	2029	2030	Thereafter
2020	\$127,307,955	5.00	\$25,461,591	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2021	7,527,572	5.00	1,505,514	1,505,514	0	0	0	0	0	0
2022	-278,128,416	5.00	-55,625,683	-55,625,683	-55,625,683	0	0	0	0	0
2023	499,432,276	5.00	99,886,455	99,886,455	99,886,455	99,886,455	0	0	0	0
2024	-120,038,807	5.00	-24,007,763	-24,007,761	-24,007,761	-24,007,761	-24,007,761	0	0	0
2025	-205,392,030	5.00	N/A	-41,078,406	-41,078,406	-41,078,406	-41,078,406	-41,078,406	0	0
Total <sup>1</sup>			N/A	-\$19,319,881	-\$20,825,395	\$34,800,288	-\$65,086,167	-\$41,078,406	\$0	\$0



### Total Increase (Decrease) in Pension Expense

Reporting Date for Employer under GASB 68 Year Ended September	Total Increase (Decrease) in Pension								
30	Expense	2024	2025	2026	2027	2028	2029	2030	Thereafter
2020	\$165,656,133	\$25,461,591	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2021	55,865,280	13,589,942	1,505,514	0	0	0	0	0	0
2022	-187,185,454	-32,889,942	-32,889,942	-55,625,683	0	0	0	0	0
2023	586,253,829	121,591,844	121,591,844	121,591,844	99,886,455	0	0	0	0
2024	-51,929,521	-1,304,669	-1,304,665	-1,304,665	-24,007,761	-24,007,761	0	0	0
2025	-189,822,144	N/A	-35,888,444	-35,888,444	-35,888,444	-41,078,406	-41,078,406	0	0
Total <sup>1</sup>		N/A	\$53,014,307	\$28,773,052	\$39,990,250	-\$65,086,167	-\$41,078,406	\$0	\$0



## Schedule of reconciliation of Net Pension Liability

### Total for all employers

Item	Current	Prior
Reporting and measurement dates		
Reporting date for employer under GASB 68	September 30, 2025	September 30, 2025
Measurement date and reporting date for plan under GASB 67	September 30, 2024	September 30, 2024
Net Pension Liability		
Beginning Net Pension Liability	\$1,824,740,250	\$1,826,211,095
Pension expense	191,741,483	260,282,442
Employer contributions	-96,957,000	-83,375,000
New net deferred inflows/outflows	-153,933,700	-50,624,852
Change in allocation of prior deferred inflows/outflows	0	0
New net deferred inflows/outflows due to change in proportion	0	0
Recognition of prior deferred inflows/outflows	-88,902,751	-127,753,435
Recognition of prior deferred inflows/outflows due to change in proportion	0	0
Ending Net Pension Liability	\$1,676,688,282	\$1,824,740,250


## **Exhibit 5: Determination of proportionate share**

Employer Name	FY 2024 Total Appropriation	Percent of FY 2024 Total Appropriation	Share of NPL as of September 30, 2023	Employer Name	FY 2025 Total Appropriation	Percent of FY 2025 Total Appropriation
City of Jacksonville	\$38,190,000	45.8052%	\$835,825,921	\$45,641,000	47.0734%	\$789,274,182
Jacksonville Electrical Authority	43,970,000	52.7376%	962,324,214	50,036,000	51.6064%	865,278,462
Jacksonville Housing Authority	1,092,000	1.3097%	23,898,623	1,137,000	1.1727%	19,662,523
North Florida Transportation Planning Organization	123,000	0.1475%	2,691,492	143,000	0.1475%	2,473,115
Grand totals:	\$83,375,000	100.0000%	\$1,824,740,250	\$96,957,000	100.0000%	\$1,676,688,282



### Exhibit 6: Determination of proportionate share amounts by employer

#### Net Pension Liability by Employer With Discount Rate Sensitivity

Employer Name	2025 Share of Cost Allocation	Net Pension Liability	Covered Employee Payroll	1% Decrease in Discount Rate (5.50%)	Current Discount Rate (6.50%)	1% Increase in Discount Rate (7.50%)
City of Jacksonville	47.0734%	\$789,274,182	\$88,469,260	\$999,209,572	\$789,274,182	\$613,482,952
Jacksonville Electrical Authority	51.6064%	865,278,462	132,291,019	1,095,429,878	865,278,462	672,559,165
Jacksonville Housing Authority	1.1727%	19,662,523	3,133,319	24,892,467	19,662,523	15,283,185
North Florida Transportation Planning Organization	0.1475%	2,473,115	356,632	3,130,928	2,473,115	1,922,290
Grand totals:	100.0000%	\$1,676,688,282	\$224,250,230	\$2,122,662,845	\$1,676,688,282	\$1,303,247,592



#### Exhibit 6: Determination of proportionate share amounts by employer

#### Schedule of Contributions and Pension Expense by Employer

Employer Name	Statutory Required Contribution	Contributions in Relation to the Statutory Required Contribution	Contribution Deficiency / (Excess)	Contributions as a Percentage of Covered Employee Payroll	Proportionate Share of Plan Pension Expense	Net Amortization of Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Employer Pension Expense
City of Jacksonville	\$63,496,877	\$45,641,000	\$17,855,877	51.59%	\$90,259,235	\$7,427,773	\$97,687,008
Jacksonville Electrical Authority	69,611,399	50,036,000	19,575,399	37.82%	98,950,877	-4,839,908	94,110,969
Jacksonville Housing Authority	1,581,844	1,137,000	444,844	36.29%	2,248,552	-2,689,819	-441,267
North Florida Transportation Planning Organization	198,961	143,000	55,961	40.10%	282,819	101,954	384,773
Grand totals:	\$134,889,081	\$96,957,000	\$37,932,081	43.24%	\$191,741,483	\$0	\$191,741,483



### Exhibit 6: Determination of proportionate share amounts by employer

Deferred Outflows and Inflows of Resources

Employer Name	Differences Between Expected and Actual Experience	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources
City of Jacksonville	\$16,487,849	\$9,302,917	\$14,956,732	\$40,747,499	\$0	\$43,396,817	\$0	\$3,197,271	\$46,594,088
Jacksonville Electrical Authority	18,075,570	10,198,756	3,378,572	31,652,896	0	47,575,775	0	13,025,500	60,601,275
Jacksonville Housing Authority	410,748	231,756	0	642,505	0	1,081,108	0	2,223,534	3,304,642
North Florida Transportation Planning Organization	51,663	29,150	111,009	191,822	0	135,980	0	8	135,988
Grand totals:	\$35,025,830	\$19,762,579	\$18,446,313	\$73,234,722	\$0	\$92,189,680	\$0	\$18,446,313	\$110,635,993

#### Exhibit 6: Determination of proportionate share amounts by employer

#### Deferred Inflows/(Outflows) Recognized In Future Pension Expense (Year Ended September 30)

Employer Name	2026	2027	2028	2029	2030	Thereafter
City of Jacksonville	\$18,458,558	\$25,670,127	-\$30,638,272	-\$19,337,002	\$0	\$0
Jacksonville Electrical Authority	11,307,673	14,531,663	-33,588,628	-21,199,087	0	0
Jacksonville Housing Authority	-1,146,624	-270,522	-763,265	-481,726	0	0
North Florida Transportation Planning Organization	153,445	58,982	-96,002	-60,591	0	0
Grand totals:	\$28,773,052	\$39,990,250	-\$65,086,167	-\$41,078,406	\$0	\$0



The following list defines certain technical terms for the convenience of the reader:

Term	Definition
Actuarial accrued liability for actives	The equivalent of the accumulated normal costs allocated to the years before the valuation date.
Actuarial accrued liability for retirees and beneficiaries	Actuarial Present Value of lifetime benefits to existing retirees and beneficiaries. This sum takes account of life expectancies appropriate to the ages of the annuitants and the interest that the sum is expected to earn before it is entirely paid out in benefits.
Actuarial cost method	A procedure allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability that are used to determine the actuarially determined contribution.
Actuarial gain or loss	A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., assets earn more than projected, salary increases are less than assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results yield actuarial liabilities that are larger than projected.
Actuarially equivalent	Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.
Actuarial present value	The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. Each such amount or series of amounts is: Adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.) Multiplied by the probability of the occurrence of an event (such as survival, death, disability, withdrawal, etc.) on which the payment is conditioned, and
	Discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Term	Definition
Actuarial present value of future benefits	The Actuarial Present Value of benefit amounts expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age, anticipated future compensation, and future service credits. The Actuarial Present Value of Future Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive members entitled to either a refund of member contributions or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.
Actuarial valuation	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan, as well as Actuarially Determined Contributions.
Actuarial value of assets	The value of the Plan's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly plans use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the Actuarially Determined Contribution.
Actuarially determined	Values that have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the Plan.
Actuarially determined contribution	The employer's contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under the Plan's funding policy. The ADC consists of the Employer Normal Cost and the Amortization Payment.
Amortization method	A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the Unfunded Actuarial Accrued Liability. Under the Level Percentage of Pay method, the Amortization Payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the Unfunded Actuarial Accrued Liability. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.
Amortization payment	The portion of the pension plan contribution, or ADC, that is intended to pay off the Unfunded Actuarial Accrued Liability.
Assumptions or actuarial assumptions	The estimates upon which the cost of the Plan is calculated, including: Investment return — the rate of investment yield that the Plan will earn over the long-term future; Mortality rates — the rate or probability of death at a given age for employees and retirees; Retirement rates — the rate or probability of retirement at a given age or service; Disability rates — the rate or probability of disability retirement at a given age; Withdrawal rates — the rate or probability at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement; Salary increase rates — the rates of salary increase due to inflation, real wage growth and merit and promotion increases



Term	Definition
Closed amortization period	A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example, if the amortization period is initially set at 20 years, it is 19 years at the end of one year, 18 years at the end of two years, etc. See Open Amortization Period.
Decrements	Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or withdrawal.
Defined benefit plan	A retirement plan in which benefits are defined by a formula based on the member's compensation, age and/or years of service.
Defined contribution plan	A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.
Employer normal cost	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
Experience study	A periodic review and analysis of the actual experience of the Plan that may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified based on recommendations from the Actuary.
Funded ratio	The ratio of the Actuarial Value of Assets (AVA) to the Actuarial Accrued Liability (AAL). Plans sometimes also calculate a market funded ratio, using the Market Value of Assets (MVA), rather than the AVA.
GASB 67 and GASB 68	Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68. These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 67 sets the rules for the systems themselves.
Investment return	The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.
Net Pension Liability (NPL)	The Net Pension Liability is equal to the Total Pension Liability minus the Plan Fiduciary Net Position.
Normal cost	The portion of the Actuarial Present Value of Future Benefits and expenses, if applicable, allocated to a valuation year by the Actuarial Cost Method. Any payment with respect to an Unfunded Actuarial Accrued Liability is not part of the Normal Cost (see Amortization Payment). For pension plan benefits that are provided in part by employee contributions, Normal Cost refers to the total of member contributions and employer Normal Cost unless otherwise specifically stated.
Open amortization period	An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. If the initial period is set as 30 years, the same 30-year period is used in each future year in determining the Amortization Period.



Term	Definition
Plan Fiduciary Net Position	Market value of assets.
Service costs	The portions of the actuarial present value of projected benefit payments that are attributed to valuation years.
Total Pension Liability (TPL)	The actuarial accrued liability under the entry age normal cost method and based on the blended discount rate as described in GASB 67 and 68.
Unfunded actuarial accrued liability	The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. This value may be negative, in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus or an Overfunded Actuarial Accrued Liability.
Valuation date or actuarial valuation date	The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Benefits is determined. The expected benefits to be paid in the future are discounted to this date.



City of Jacksonville Corrections Officers Retirement Plan

# Summary Valuation Results as of October 1, 2024

## Board of Trustees Meeting – March 27, 2025

Jeff Williams, Vice President and Actuary



# Summary of October 1, 2024 Actuarial Valuation Results

## **Actuarial Determined Contribution (ADC)**

- The October 1, 2024 actuarial valuation determines the ADC the City of Jacksonville will pay in its fiscal year beginning October 1, 2025
- Florida Chapter 112 determined employer contribution of \$30.33 million
- City's ADC for its fiscal year beginning October 1, 2025 is \$23.02 million (94.44% of projected payroll)
   Increase of \$1.04 million from the prior year

## **Experience Gain/Loss**

- The total actuarial loss was 1.96% of actuarial accrued liability
  - Gain from investments of 0.66%
  - Loss from contributions less than Florida Chapter 112 determined contribution of 1.60%
  - Loss from demographic/other experience of 1.10%; primary source of demographic loss was more participants entering the DROP than expected

## **Surtax Revenue**

- Percentage allocated to CORP unchanged at 6.10%
- Present value of projected surtax revenue as of October 1, 2024 allocated to CORP is \$158.22 million (prior to smoothing)



# Summary of October 1, 2024 Actuarial Valuation Results

## **Funded ratios**

- On an actuarial basis, increased from 47.85% in 2023 to 48.62% in 2024
- On a market basis, increased from 46.43 % in 2023 to 51.48% in 2024

## **Financial information**

- Actuarial value of assets increased from \$273.1 million to \$289.7 million
- Market value of assets increased from \$265.0 million to \$306.7 million
- \$17.02 million in unrecognized asset gains, compared to \$8.12 million in unrecognized asset losses in the prior valuation
- Rates of return
  - Assumed return of 6.50% for experience in fiscal 2024, unchanged from prior year
  - Market value of assets return of 17.76%
  - Actuarial value of assets return of 7.94%





# Summary of Key October 1, 2024 Actuarial Valuation Results

Valuation Result	Current	Prior
Contributions for fiscal year beginning	October 1, 2025	October 1, 2024
Florida Chapter 112 determined employer contribution	\$30,334,566	\$29,019,915
Less amortized value of discounted value of projected surtax revenue	-7,317,761	-7,038,645
City's required minimum contribution <sup>1</sup>	\$23,016,805	\$21,981,270
Actuarial accrued liability for plan year beginning	October 1, 2024	October 1, 2023
Retired participants and beneficiaries	\$432,319,927	\$412,154,218
Inactive vested participants	593,007	439,531
Active participants	162,936,144	158,178,698
• Total	\$595,849,078	\$570,772,447
Normal cost including administrative expenses for plan year beginning October 1	8,979,369	8,833,819
Assets for plan year beginning October 1		
Market value of assets (MVA)	\$306,727,000	\$265,021,000
Actuarial value of assets (AVA)	289,708,491	273,139,317
Actuarial value of assets as a percentage of market value of assets	94.45%	103.06%
Funded status for plan year beginning October 1		
Unfunded actuarial accrued liability on market value of assets	\$289,122,078	\$305,751,447
Funded percentage on MVA basis	51.48%	46.43%
Unfunded actuarial accrued liability on actuarial value of assets	\$306,140,587	\$297,633,130
Funded percentage on AVA basis	48.62%	47.85%
Effective Amortization period on an AVA basis	22	23

4

## City's Minimum Required Contribution

The actuarial determined contribution is calculated for the following fiscal year. The contributions shown below have been projected with interest and will be payable in the following fiscal year.

			2024 Percent of Projected		2023 Percent of Projected
	Contribution	2024 Amount	Payroll	2023 Amount	Payroll
1.	Total normal cost	\$8,841,369	36.28%	\$8,736,819	35.18%
2.	Administrative expenses	138,000	0.57%	97,000	0.40%
3.	Expected employee contributions	-2,271,444	-9.32%	-2,278,533	-9.18%
4.	Employer normal cost: (1) + (2) + (3)	\$6,707,925	27.52%	\$6,555,286	26.40%
5.	Actuarial accrued liability	\$595,849,078		\$570,772,447	
6.	Actuarial value of assets	289,708,491		273,139,317	
7.	Unfunded actuarial accrued liability: (5) - (6)	\$306,140,587		\$297,633,130	
8.	Payment on projected unfunded actuarial accrued liability	22,252,148	91.30%	21,149,704	85.17%
9.	Florida Chapter 112 determined employer contribution: (4) + (8) <sup>1</sup>	\$30,334,566	124.47%	\$29,019,915	116.86%
10	. Amortized value of discounted value of projected surtax revenue <sup>1, 2</sup>	7,317,761	30.03%	7,038,645	28.34%
11	. City's minimum required contribution: (9) - (10) <sup>2</sup>	\$23,016,805	94.44%	\$21,981,270	88.52%
12	. Projected payroll	\$24,371,864		\$24,833,316	
4.					

<sup>1</sup>Adjusted for timing and projected to next fiscal year; contributions are assumed to be paid at the end of every month.

<sup>2</sup>Pursuant to State Law Chapter 2016-146 and City of Jacksonville Ordinances 2017-257-E and 2017-258-E



## Participant Population 2015 - 2024

#### Participant Population as September 30



Legend	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
In Pay Status <sup>1</sup>	328	355	368	369	385	407	446	469	491	505
Inactive Vested <sup>2</sup>	1	4	4	7	9	17	6	3	3	4
Active	651	610	638	587	532	471	423	382	345	319
Ratio	0.51	0.59	0.58	0.64	0.74	0.90	1.07	1.24	1.43	1.60

<sup>1</sup> Includes DROP participants

<sup>2</sup> Excludes terminated participants due a refund of employee contributions.

6

## Historical Investment Returns Plan Years Ending September 30, 2008 – 2024



Legend	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Market rate	-15.61%	1.49%	12.03%	0.79%	18.14%	16.29%	11.66%	-2.54%	7.55%	15.83%	9.76%	1.62%	4.49%	27.03%	-16.18%	13.68%	17.76%
Actuarial rate	2.14%	1.23%	6.33%	2.65%	3.73%	9.82%	19.12%	6.28%	6.02%	7.44%	8.00%	6.60%	7.10%	10.75%	4.97%	4.34%	7.94%
Assumed rate	8.40%	8.40%	8.40%	8.25%	8.25%	7.75%	7.75%	7.50%	7.50%	7.50%	7.20%	7.20%	6.90%	6.80%	6.63%	6.50%	6.50%

Average Rates of Return	Market Value	Actuarial Value
Most recent five-year average return:	8.46%	6.95%
Most recent ten-year average return:	7.62%	6.93%
Most recent 15-year average return:	8.47%	7.30%



# Schedule of Funding Progress

Actuarial Valuation Date of October 1	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) – (a)	Funded Ratio (a) / (b)	Covered Compensation (c)	UAAL as a Percentage of Covered Compensation [(b) – (a)] / (c)
2015	\$159,914,247	\$319,655,728	\$159,741,481	50.03%	\$28,091,083	568.66%
2016	175,333,405	354,234,673	178,901,268	49.50%	26,585,054	672.94%
2017	191,740,583	377,380,082	185,639,499	50.81%	27,548,015	673.88%
2018	207,089,881	416,673,228	209,583,347	49.70%	28,164,021	744.15%
2019	220,334,774	434,176,844	213,842,070	50.75%	28,726,006	744.42%
2020	234,514,215	468,831,017	234,316,802	50.02%	28,268,208	828.91%
2021	255,558,542	503,742,335	248,183,793	50.73%	25,903,031	958.13%
2022	265,245,309	540,178,805	274,933,496	49.10%	25,260,815	1,088.38%
2023	273,139,317	570,772,447	297,633,130	47.85%	24,526,732	1,213.51%
2024	289,708,491	595,849,078	306,140,587	48.62%	24,070,977	1,271.82%



## History of City Contributions

Fiscal Year Ended September 30	City's Minimum Required	Actual Employer Contribution	Percent Contributed
2017	\$19,155,820	\$19,162,000	100.03%
2018	13,973,105	13,973,000	100.00%
2019	14,497,788	14,498,000	100.00%
2020	15,042,623	15,058,000	100.10%
2021	15,044,530	15,061,000	100.11%
2022	17,592,399	17,610,000	100.10%
2023	17,185,973	17,196,000	100.06%
2024	19,385,644	19,386,000	100.00%
2025	21,981,270		
2026	23,016,805		



# Low-Default-Risk Obligation Measure

- In December 2021, the Actuarial Standards Board issued a revision of Actuarial Standard of Practice No. 4 (ASOP 4) Measuring Pension Obligations and Determining Pension Plan Costs or Contributions. One of the revisions to ASOP 4 requires the disclosure of a Low-Default-Risk Obligation Measure (LDROM) when performing a funding valuation. The LDROM presented in this report is calculated using the same methodology and assumptions used to determine the Actuarial Accrued Liability (AAL) used for funding, except for the discount rate. The LDROM is required to be calculated using "a discount rate...derived from low-default-risk fixed income securities whose cash flows are reasonably consistent with the pattern of benefits expected to be paid in the future."
- The LDROM is a calculation assuming a plan's assets are invested in an all-bond portfolio, generally lowering expected long-term investment returns. The discount rate selected and used for this purpose is the Bond Buyer General Obligation 20-year Municipal Bond Index Rate, published at the end of each week. The last published rate in December of the measurement period, by The Bond Buyer (www.bondbuyer.com), is 3.81% for use effective September 30, 2024. This is the rate used to determine the discount rate for valuing reported public pension plan liabilities in accordance with Governmental Accounting Standards when plan assets are projected to be insufficient to make projected benefit payments, and the 20-year period reasonably approximates the duration of plan liabilities. The LDROM is not used to determine a plan's funded status or Actuarially Determined Contribution. The plan's expected return on assets, currently 6.50%, is used for these calculations.
- As of September 30, 2024, the LDROM for the system is \$880,414,536. The difference between the plan's AAL of \$595,849,078 and the LDROM can be thought of as the increase in the AAL if the entire portfolio were invested in low-defaultrisk securities. Alternatively, this difference could also be viewed as representing the expected savings from investing in the plan's diversified portfolio compared to investing only in low-default-risk securities.
- ASOP 4 requires commentary to help the intended user understand the significance of the LDROM with respect to the funded status of the plan, plan contributions, and the security of participant benefits. In general, if plan assets were invested exclusively in low-default-risk securities, the funded status would be lower and the Actuarially Determined Contribution would be higher. While investing in a portfolio with low-default-risk securities may be more likely to reduce investment volatility and the volatility of employer contributions, it also may be more likely to result in higher employer contributions or lower benefits.



## Overview of Key Funding Risks

• It is important to consider risks for actual experience different than projected.

Economic Shock RiskInvestment RiskContribution RiskDemographic Risk	External Risk
High inflationary environments calary increasesMarket returns lower than assumedThe risk that actual different than projected contributionsThe risk that participant environmental changes in short- term or long-term employment levelsChange in the long- term funding rateThe risk that actual different than projected contributionsThe risk that participant environmental changesSignificant societal changesChange in the long- term funding rateNot historically an issue for the Plan- Mortality experience different than assumedOutput changesChange in the long- term funding rate- Not historically an issue for the Plan- Mortality experience different than expectedOutput changesChange in the long- term funding rate- Mortality experience different than expectedOutput changesChange in the long- term funding rate- Mortality experience different than expectedOutput changes- More or less active participant turnover than assumed	Legislative, regulatory or financial reporting changes that could impact funding and/or disclosure requirements

## Actuarial Projections through Fiscal 2062

#### City of Jacksonville Corrections Officers Retirement Plan Actuarial Projections through Fiscal Year Ending September 30, 2062

			Unfunded							
	Actuarial	Actuarial	Actuarial							
Plan Year	Accrued	Value of	Accrued	Funded	Fiscal Year	Surtax	% of Total	Required City	% of Total	Total
Beginning	Liability	Assets	Liability	Ratio	Ending	Contribution	Contribution	Contribution	Contribution	Contribution
2024	0505 0 40 070	0000 700 404	0000 440 507	40.000/	2025	50	0.0%	\$21,981,270	100.0%	\$21,981,270
2024	3595,849,078	\$289,708,491	\$306,140,587	48.62%	2026	0	0.0%	23,016,805	100.0%	23,016,805
2025	614,837,889	310,868,318	303,969,551	50.58%	2027	0	0.0%	22,619,961	100.0%	22,619,951
2028	633,778,008	323,773,427	310,004,581	51.09%	2028	0	0.0%	23,043,654	100.0%	23,043,654
2027	652,265,429	348,612,992	303,652,437	53.45%	2029	0	0.0%	22,131,089	100.0%	22,131,089
2028	669,956,135	369,821,424	300,134,711	55.20%	2030	0	0.0%	21,553,731	100.0%	21,553,731
2029	686,977,256	383,599,228	303,378,028	55.84%	2031	8,124,038	27.4%	21,558,990	72.6%	29,681,028
2030	703,079,785	395,842,700	307,237,085	56.30%	2032	11,292,413	34.5%	21,411,718	65.5%	32,704,131
2031	717,031,854	414,422,529	302,609,325	57.80%	2033	11,772,341	38.2%	20,781,900	63.8%	32,554,241
2032	728,897,561	435,184,697	293,712,864	59.70%	2034	12,272,685	37.4%	20,573,594	62.6%	32,846,259
2033	739,360,869	455,383,916	283,976,953	61.59%	2035	12,794,254	38.5%	20,447,442	61.5%	33,241,696
2034	748,219,257	475,246,614	272,972,643	63.52%	2036	13,338,010	39.8%	20,207,757	60.2%	33,545,787
2035	755,267,997	494,876,497	260,391,500	65.52%	2037	13,904,875	41.0%	19,979,359	59.0%	33,884,234
2036	760,188,354	513,953,980	246,234,374	67.61%	2038	14,495,832	42.5%	19,618,049	57.5%	34,113,881
2037	762,727,381	532,503,250	230,224,131	69.82%	2039	15,111,905	43.9%	19,298,625	56.1%	34,410,530
2038	762,217,985	549,824,930	212,393,055	72.13%	20.40	15,754,161	45.8%	18,666,962	54.2%	34,421,123
2039	759,272,714	587,042,604	192,230,110	74.68%	2041	16,423,713	48.9%	18,606,798	53.1%	35,030,511
2040	754,799,223	584,335,664	170,483,559	77.42%	20.42	17,121,721	47.9%	18,650,056	52.1%	35,771,777
2041	748,900,752	602,426,332	146,474,420	80.44%	20.43	17,849,394	48.8%	18,697,900	51.2%	38,547,294
2042	741,568,050	621,582,084	119,983,986	83.82%	20.44	18,607,993	49.8%	18,750,827	50.2%	37,358,820
2043	732,743,185	641.946.461	90,796,704	87.61%	2045	19.398.833	50.8%	18,789,136	49.2%	38,187,969
2044	722,550,052	663.867.827	58.682.225	91.88%	20.46	20,223,283	51.7%	18,893,655	48.3%	39.116.938
2045	711.068.705	687.571.486	23,497,219	96.70%	2047	0	0.0%	18,993,546	100.0%	18,993,546
2046	698 529 769	713 598 417	(15 068 648)	102 16%	20.48	0	0.0%	8 100 332	100.0%	8 100 332
2047	885 207 591	720 612 768	(35 405 177)	105 17%	20.49	0	0.0%	255.075	100.0%	255.075
2048	871 214 685	717 024 658	(45 809 993)	108 82%	20.50	0	0.0%	261,452	100.0%	261 452
2049	858 809 722	705 394 113	(48 784 391)	107 43%	2050	0	0.0%	267,988	100.0%	267 988
2050	841 455 453	893,407,497	(51 952 044)	108 1096	2057	0	0.0%	274 687	100.0%	274 687
2050	825 9 19 01 2	891 144 525	(55,225,512)	109 94%	20.52	0	0.0%	291 555	100.0%	291 555
2051	800 780 482	880,897,024	(50,020,012)	100.04%	2055	0	0.0%	201,505	100.0%	201,000
2052	609,709,103	000,007,331	(00,010,100)	103.00%	20.54	0	0.0%	200,000	100.0%	200,000
2053	533,370,384	000,120,044	(02,744,200)	110.0/%	2050	0	0.0%	290,808	100.0%	290,808
2054	570,711,004	043,030,022	(00,818,908)	111.58%	2050	0	0.0%	303,203	100.0%	303,203
2055	559,848,004	631,007,023	(71,158,419)	112.71%	2057	0	0.0%	310,784	100.0%	310,784
2058	542,860,074	618,639,926	(75,779,852)	113.96%	2058	0	0.0%	318,554	100.0%	318,564
2057	525,818,068	808,520,249	(80,701,581)	115.35%	2059	0	0.0%	328,518	100.0%	326,518
2058	508,797,518	594,740,640	(85,943,122)	116.89%	2080	0	0.0%	334,681	100.0%	334,681
2059	491,869,192	583,394,456	(91,525,264)	1 18.61%	2061	0	0.0%	343,048	100.0%	343,048
2060	475,103,584	572,573,704	(97,470,140)	120.52%	2062	0	0.0%	351,625	100.0%	351,625
2061	458,568,204	562,369,530	(103,801,326)	122.64%	2063	0	0.0%	360,415	100.0%	360,415
2082	442,327,528	552,871,458	(110,543,930)	124.99%	2064	0	0.0%	369,425	100.0%	369,425
Total:						\$238,485,431	33.1%	\$481,314,537	66.9%	\$719,799,968
Total Present Va	alue at 6.50%:					\$90,836,362	27.3%	\$241,293,332	72.7%	\$332, 129, 694

#### As sumption s

Investment Return Assumption	6.50% per year
Actuarial Value of Assets	5-year smoothed market value
Payroll Growth Assumption	1.25% per year
Pension Liability Surtax Proceeds	6.10%, projected to increase 4.25% annually
Administrative Expenses	Projected to increase 2.5% annually

Projections are not a guarantee of future results. They are intended to serve as estimates of future financial outcomes that are based on assumptions about future experience and the information available at the time the modeling is undertaken and completed. Projected results will change if demographic or economic assumptions, or plan provisions, change in the future, or if the contributing employers make contributions other than expected.



## Questions?

#### Jeffrey S. Williams, FCA, ASA, MAAA, EA Vice President and Actuary iwilliams@segalco.com

jwilliams@segalco.com 678.306.3147

🔆 Segal

## Additional Information

- This presentation is intended for the use of the Board of Trustees for the City of Jacksonville Corrections Officers Retirement Plan and is a supplement to Segal's full valuation report for the Plan as of October 1, 2024.
- Please refer to the full valuation report for a description of assumptions and plan provisions reflected in the results shown in this presentation. The report also includes more comprehensive information regarding the Plan's membership, assets, and experience during the most recent plan year.
- The calculations included in this presentation were completed under the supervision of Jeffrey S. Williams, FCA, ASA, MAAA, EA. Mr. Williams is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.



### City of Jacksonville Corrections Officers Retirement Plan

Actuarial Valuation and Review as of October 1, 2024

This valuation report should only be copied, reproduced, or shared with other parties in its entirety as necessary for the proper administration of the Plan.



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March 21, 2025

Board of Trustees City of Jacksonville Corrections Officers Retirement Plan 117 West Duval Street, Suite 330 Jacksonville, FL 32202

Dear Board of Trustees Members:

We are pleased to submit this Actuarial Valuation and Review as of October 1, 2024. It summarizes the actuarial data used in the valuation, analyzes the preceding year's experience, and establishes the funding requirements to the fiscal year starting October 1, 2025.

This report has been prepared in accordance with generally accepted actuarial principles and practices for the exclusive use and benefit of the Board of Trustees, based upon census information provided by the Retirement System Administrative Office and financial information provided by the City's Finance Department. That assistance is gratefully acknowledged.

Statement by Enrolled Actuary: This actuarial valuation and/or cost determination was prepared and completed by me, or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.

Segal does not audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. To the extent we can, however, Segal does review the data for reasonableness and consistency. Based on our review of the data, we have no reason to doubt the substantial accuracy of the information on which we have based this report, and we have no reason to believe there are facts or circumstances that would affect the validity of these results.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience

differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; changes in plan provisions or applicable law.

The actuarial calculations were directed under the supervision of Jeffrey S. Williams. I am a member of the American Academy of Actuaries and I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. In addition, in my opinion, the combined effect of these assumptions is expected to have no significant bias.

Segal makes no representation or warranty as to the future status of the Plan and does not guarantee any particular result. This document does not constitute legal, tax, accounting or investment advice or create or imply a fiduciary relationship. The Board is encouraged to discuss any issues raised in this report with the Plan's legal, tax and other advisors before taking, or refraining from taking, any action.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

Segal

Jeffrey S. Williams, FCA, ASA, MAAA, EA Vice President and Consulting Actuary Enrolled Actuary No. 23-07009

# Table of Contents

Section 1: Actuarial Valuation Summary	6
Purpose and basis	6
Valuation highlights	7
Changes from prior valuation	9
Risk	9
GASB	10
Summary of key valuation results	11
Important information about actuarial valuations	13
Section 2: Actuarial Valuation Results	15
Participant information	15
Actuarial experience	21
Florida Chapter 112 Determined Employer Contribution and City's Minimum Required Contribution	
Schedule of funding progress through September 30, 2024	
Low-Default-Risk Obligation Measure (LDROM)	30
Risk	31
GFOA funded liability by type	
Section 3: Supplemental Information	
Exhibit A: Table of plan demographics	
Exhibit B: Participants in active service as of September 30, 2024	38
Exhibit C: Reconciliation of participant data	39
Exhibit D: Summary statement of income and expenses on a market value basis	40
Exhibit E: Summary statement of plan assets	41



## Table of Contents

Exhibit F: Development of the fund through September 30, 2024	42
Exhibit G: Table of amortization bases	43
Exhibit H: Section 415	45
Exhibit I: Supplementary state of Florida information Summary of Salary Changes	46
Exhibit J: Supplementary state of Florida information Recent History of Recommended and Actual Contributions	47
Exhibit K: Supplementary State of Florida Information Comparative Summary of Principal Valuation Results	48
Exhibit L: Supplementary state of Florida Information Actuarial Present Value of Accumulated Plan Benefits	50
Exhibit M: Supplementary State of Florida information Reconciliation of DROP accounts	51
Exhibit N: Actuarial Projections through Fiscal 2062	52
Section 4: Actuarial Valuation Basis	53
Exhibit 1: Actuarial assumptions, methods and models	53
Exhibit 2: Summary of plan provisions	58
Section 5: GASB Information	62
General information about the pension plan	62
Exhibit 1: Net Pension Liability	63
Exhibit 2: Schedule of changes in Net Pension Liability	66
Exhibit 3: Schedule of employer contributions	68
Exhibit 4: Pension expense	71
Appendix A: Definition of Pension Terms	78



#### **Purpose and basis**

This report has been prepared by Segal to present a valuation of the City of Jacksonville Corrections Officers Retirement Plan as of October 1, 2024. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to provide information for required disclosures under Governmental Accounting Standards Board (GASB) Statements No. 67 and 68.

The contribution requirements presented in this report are based on:

- The benefit provisions of the Plan, as administered by the Board;
- The characteristics of covered active participants, inactive vested participants, and retired participants and beneficiaries as of September 30, 2024, provided by the Retirement System Administrative Office;
- The assets of the Plan as of September 30, 2024, provided by the City's Finance Department;
- Economic assumptions regarding future salary increases and investment earnings;
- Other actuarial assumptions regarding employee terminations, retirement, death, etc. and
- The funding policy adopted by the Board, subject to the requirements of Part VII, Chapter 112, Florida Statutes.



## Valuation highlights

- 1. Segal strongly recommends an actuarial funding method that targets 100% funding of the actuarial accrued liability. Generally, this implies payments that are ultimately at least enough to cover normal cost, interest on the unfunded actuarial accrued liability and the principal balance.
- 2. The City's minimum required contribution calculated in the October 1, 2024 actuarial valuation is for the plan year beginning October 1, 2025.
- 3. The City's minimum required contribution for fiscal 2026 is \$23,016,805, an increase of \$1,035,535 from the City's minimum required contribution for fiscal 2025.
- 4. Actual City contributions made during the year ending September 30, 2024 of \$19,386,000 were 100.00% of the City's minimum required contribution for fiscal 2024. In the prior fiscal year, actual contributions were \$17,196,000, 100.06% of the prior year's minimum required contribution.
- 5. Actuarial Standard of Practice No. 4, Measuring Pension Obligations and Determining Pension Plan Costs or Contributions, states that an actuary preparing calculations of actuarially determined contributions should assess the material implications of the funding policy. This report includes two distinct contribution amounts, each with different implications.
  - a. The Florida Chapter 112 Determined Employer Contribution is an amount consistent with a funding policy which seeks to stabilize the unfunded actuarial accrued liability (UAAL) as a percentage of total Corrections Officers Retirement Plan (CORP) payroll, including Defined Contribution participants, where UAAL is measured relative to assets currently available to make benefit payments. Under this policy, assuming that all assumptions are met in aggregate, the UAAL is expected to be reduced to zero over a period of 22 years after reflecting an amortization period reset as of October 1, 2016. Over the short term, this contribution policy would be expected to keep the UAAL roughly level over the next few years, primarily making payments on interest, and begin paying down the UAAL after that point.
  - b. The City's required minimum contribution, which is the Chapter 112 contribution adjusted to comply with state law, reduced by amortization of discounted allocated surtax revenue, is an amount consistent with a funding policy which seeks to stabilize the contribution requirement as a percentage of total CORP payroll, including Corrections Officers Defined Contribution Plan participants, relative to an anticipated increase in contribution income set to begin January 1, 2031. Under this policy, assuming that all assumptions are met in aggregate, the UAAL is expected to be reduced to zero by December 31, 2060, after all of the surtax revenue allocated to the plan is collected and contributed. Over the short term, this contribution policy is expected to lead to an increase in the UAAL, prior to the revenue stream commencing and paying it down.

Use of this contribution policy has been authorized by the Florida State Legislature and Jacksonville City Council.



- 6. The actuarial loss from investment and other experience is \$11,685,739, or 1.96% of actuarial accrued liability.
  - > The actuarial gain from investment experience was \$3,904,311, or 0.66% of actuarial accrued liability.
  - > The loss due to total contributions less than expected contributions was \$9,037,418, or 1.60% of actuarial accrued liability.
  - > The net experience loss from all other sources was \$6,552,632, or 1.10% of the actuarial accrued liability. The primary cause of this loss was more participants entering the DROP than expected.
- 7. The rate of return on the market value of assets was 17.76% for the October 1, 2023 to September 30, 2024 plan year. The return on the actuarial value of assets was 7.94% for the same period due to the recognition of prior years' investment gains and losses. This resulted in an actuarial gain when measured against the assumed rate of return of 6.50%.
- 8. The actuarial value of assets is 94.45% of the market value of assets. The investment experience in the past years has only been partially recognized in the actuarial value of assets. As the deferred net gain is recognized in future years, the cost of the Plan is likely to decrease unless the net gain is offset by future experience. The recognition of the market net gains of \$17,018,509 will also have an impact on the future funded ratio. If the net deferred gains were recognized immediately in the actuarial value of assets, the City's minimum contribution would decrease from 94.44% to 89.19% of projected payroll.
- 9. There are no changes in actuarial assumptions reflected in this valuation.
- 10. The surtax allocation percentage is unchanged from the prior valuation (at 6.10%). This allocation percentage is directed by the City based on its calculation of the Corrections Officers Retirement Plan's share of the City's unfunded liabilities.
- 11. The City is solely responsible for the assumption as to what percentage the surtax revenue will grow and Segal relies on the City for this assumption. This rate was set at 4.25% by the City for the projection period January 1, 2024 through December 31, 2060, and will be recalculated by the City every year and adopted by the City Council. Segal will ask the City each year to provide actual surtax revenue for the preceding fiscal year and an assumption as to future growth. The difference in actual and projected surtax revenue each year will be amortized over the period by which each year's gain or loss is being amortized. If surtax revenue grows more slowly or more quickly than expected, contribution requirements will increase or decrease accordingly.
- 12. The present value of the projected surtax revenue was determined and used in determination of the City's required contribution as follows:
  - a. Smoothed 2024 surtax revenue was projected to increase by 4.25% each year thereafter through 2060.
  - b. A share of 6.10% of the projected revenue for January 1, 2031 through December 31, 2060 was allocated to CORP.
  - c. The revenue allocated to CORP was discounted at the valuation discount rate of 6.50% to October 1, 2024.



- d. The original allocated present value amount of \$64,295,005 was amortized over a 30-year initial period (Section 3, Exhibit F), with subsequent charges amortized over new periods. The present value of projected surtax revenue as of October 1, 2024 allocated to CORP is \$158,221,025 prior to smoothing.
- e. After the amortized value amount was adjusted for the timing of contributions and projected to October 1, 2025, this amount was used as an offset to the Florida Chapter 112 Determined Employer Contribution to determine the City's minimum required contribution for fiscal 2025.
- 13. The present value of projected surtax revenue does not decrease the UAAL. The amortized value of the projected surtax revenue is used as an offset to the Chapter 112 contribution.
- 14. This actuarial report as of October 1, 2024 is based on financial and demographic data as of that date. Changes subsequent to that date are not reflected and will affect future actuarial costs of the plan.
- 15. The financial information received states all results rounded to the nearest thousand. The results in this valuation are shown to the nearest dollar. Therefore, occasionally rounded numbers are combined with unrounded ones.

#### **Changes from prior valuation**

- 16. The funded ratio (the ratio of the actuarial value of assets to actuarial accrued liability) is 48.62%, compared to the prior year funded ratio of 47.85%. This ratio is one measure of funding status, and its history is a measure of funding progress. Using the market value of assets, the funded ratio is 51.48%, compared to 46.43% as of the prior valuation date. These measurements are not necessarily appropriate for assessing the sufficiency of the Plan assets to cover the estimated cost of settling the Plan's benefit obligation or the need for or the amount of future contributions.
- 17. The unfunded actuarial accrued liability is \$306,140,587, which is an increase of \$8,507,457 since the prior valuation.

## Risk

- 18. It is important to note that this actuarial valuation is based on plan assets as of September 30, 2024. The Plan's funded status does not reflect short-term fluctuations of the market, but rather is based on the market values on the last day of the plan year. Segal is available to prepare projections of potential outcomes of market conditions and other demographic experience upon request.
- 19. Since the actuarial valuation results are dependent on a given set of assumptions, there is a risk that emerging results may differ significantly as actual experience proves to be different from the assumptions. We have not been engaged to perform a detailed analysis of the potential range of the impact of risk relative to the Plan's future financial condition but have included a brief



discussion of some risks that may affect the Plan in *Section 2*. A more detailed assessment would provide the Board with a better understanding of the inherent risks and could be important for the Plan because:

- a. Relatively small changes in investment performance can produce large swings in the unfunded liabilities
- b. retired participants account for most of the Plan's liabilities, leaving limited options for reducing costs in the event of adverse experience.
- c. The Board has not to our knowledge performed a detailed risk assessment.

### GASB

- 20. This report constitutes an actuarial valuation for the purpose of determining the actuarially determined contribution under the Plan's funding policy and measuring the progress of that funding policy. The Net Pension Liability (NPL) and Pension Expense under Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68, for inclusion in the Plan and employer's financial statements as of September 30, 2024, is included with this report.
- 21. The Net Pension Liability (NPL) is equal to the difference between the Total Pension Liability (TPL) and the Plan's fiduciary net position (equal to the market value of assets). The NPL as of September 30, 2024 is \$289,122,078.
- 22. GASB accounting does not permit any recognition of the allocated surtax revenue in determining the Net Pension Liability or Pension Expense. It is Segal's understanding that the City has discussed this issue with their external auditors and does not include any recognition of allocated surtax revenue in its audited financial statements.



## Summary of key valuation results

Valuation Result	Current	Prior
Contributions for fiscal year beginning	October 1, 2025	October 1, 2024
Florida Chapter 112 determined employer contribution	\$30,334,566	\$29,019,915
Less amortized value of discounted value of projected surtax revenue	-7,317,761	-7,038,645
<ul> <li>City's required minimum contribution<sup>1</sup></li> </ul>	\$23,016,805	\$21,981,270
Actuarial accrued liability for plan year beginning	October 1, 2024	October 1, 2023
Retired participants and beneficiaries	\$432,319,927	\$412,154,218
Inactive vested participants	593,007	439,531
Active participants	162,936,144	158,178,698
• Total	\$595,849,078	\$570,772,447
Normal cost including administrative expenses for plan year beginning October 1	8,979,369	8,833,819
Assets for plan year beginning October 1		
Market value of assets (MVA)	\$306,727,000	\$265,021,000
Actuarial value of assets (AVA)	289,708,491	273,139,317
Actuarial value of assets as a percentage of market value of assets	94.45%	103.06%
Funded status for plan year beginning October 1		
Unfunded actuarial accrued liability on market value of assets	\$289,122,078	\$305,751,447
Funded percentage on MVA basis	51.48%	46.43%
Unfunded actuarial accrued liability on actuarial value of assets	\$306,140,587	\$297,633,130
Funded percentage on AVA basis	48.62%	47.85%
Effective Amortization period on an AVA basis	22	23

<sup>1</sup> Pursuant to State Law Chapter 2016-146 and City of Jacksonville Ordinances 2017-257-E and 2017-258-E

City of Jacksonville Corrections Officers Retirement Plan Actuarial Valuation as of October 1, 2024



Valuation Result	Current	Prior
Key assumptions		
Net investment return	6.50%	6.50%
Inflation rate	2.50%	2.50%
Payroll growth for amortization purposes	1.25%	1.25%
GASB information		
Discount rate	6.50%	6.50%
Total Pension Liability	\$610,927,078	\$584,290,447
Plan Fiduciary Net Position	321,805,000	278,539,000
Net Pension Liability	289,122,078	305,751,447
Plan Fiduciary Net Position as a percentage of Total Pension Liability	52.67%	47.67%
Demographic data for plan year beginning October 1		
Number of retired participants and beneficiaries	505	491
Number of inactive vested participants	4	3
Number of active participants	319	345
Average compensation	\$75,458	\$71,092



#### Important information about actuarial valuations

An actuarial valuation is a budgeting tool with respect to the financing of future projected obligations of a pension plan. It is an estimated forecast – the actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.

In order to prepare a valuation, Segal relies on a number of input items. These include:

Input Item	Description
Plan provisions	Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits.
Participant information	An actuarial valuation for a plan is based on data provided to the actuary by the Retirement Administrative Office. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
Financial information	Part of the cost of a plan will be paid from existing assets — the balance will need to come from future contributions and investment income. The valuation is based on the asset values as of the valuation date, typically reported by the City's Finance Department. A snapshot as of a single date may not be an appropriate value for determining a single year's contribution requirement, especially in volatile markets. Plan sponsors often use an "actuarial value of assets" that differs from market value to gradually reflect year-to-year changes in the market value of assets in determining the contribution requirements.
Actuarial assumptions	In preparing an actuarial valuation, Segal starts by developing a forecast of the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of participants in each year, as well as forecasts of the plan's benefits for each of those events. In addition, the benefits forecasted for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments. The forecasted benefits are then discounted to a present value, typically based on an estimate of the rate of return that will be achieved on the plan's assets. All of these factors are uncertain and unknowable. Thus, there will be a range of reasonable assumptions, and the results may vary materially based on which assumptions are selected within that range. That is, there is no right answer (except with hindsight). It is important for any user of an actuarial valuation to understand and accept this constraint. The actuarial model may use approximations and estimates that will have an immaterial impact on our results. In addition, the actuarial assumptions may change over time, and while this can have a significant impact on the reported results, it does not mean that the previous assumptions or results were unreasonable or wrong.


## Section 1: Actuarial Valuation Summary

The user of Segal's actuarial valuation (or other actuarial calculations) should keep the following in mind:

- The actuarial valuation is prepared at the request of the Board of Trustees. Segal is not responsible for the use or misuse of its report, particularly by any other party.
- An actuarial valuation is a measurement at a specific date it is not a prediction of a plan's future financial condition. Accordingly, Segal did not perform an analysis of the potential range of financial measurements, except where otherwise noted.
- If the Board is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
- Segal does not provide investment, legal, accounting, or tax advice and is not acting as a fiduciary to the Plan. The valuation is based on Segal's understanding of applicable guidance in these areas and of the Plan's provisions, but they may be subject to alternative interpretations. The Board should look to their other advisors for expertise in these areas.
- While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.
- Segal's report shall be deemed to be final and accepted by the Board upon delivery and review. Trustees should notify Segal immediately of any questions or concerns about the final content.



#### **Participant information**



Participant Population as September 30

<sup>1</sup> Includes DROP participants

<sup>2</sup> Excludes terminated participants due a refund of employee contributions.

City of Jacksonville Corrections Officers Retirement Plan Actuarial Valuation as of October 1, 2024



#### **Active participants**

As of September 30,	2024	2023	Change
Active participants	319	345	-7.5%
Average age	43.1	42.3	0.8
Average years of service	14.2	13.3	0.9
Average compensation	\$75,458	\$71,092	6.1%

#### Distribution of Active Participants as of September 30, 2024 Actives by Age Actives by Years of Service



**Segal** 16

#### **Retired participants and beneficiaries**

As of September 30,	2024	2023	Change
Retired participants	470	456	3.1%
Beneficiaries	35	35	0.0%
Average age	61.1	60.3	0.8
Average regular benefit amount	\$4,316	\$4,195	2.9%

#### Distribution of Retired Participants and Beneficiaries as of September 30, 2024

#### By Type and Monthly Amount

By Type and Age





#### Actuarial value of assets

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable. The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

#### Determination of Actuarial Value of Assets for Year Ended September 30, 2024

	Ston		Percent		Amount
	Slep	Amount	Delened	Amount	Amount
1.	Market value of assets, September 30, 2024				\$306,727,000
2.	Calculation of unrecognized return				
	a. Year ended September 30, 2024	\$29,568,827	80%	\$23,655,062	
	b. Year ended September 30, 2023	16,846,955	60%	10,108,173	
	c. Year ended September 30, 2022	-64,741,818	40%	-25,896,728	
	d. Year ended September 30, 2021	45,760,012	20%	9,152,002	
	e. Year ended September 30, 2020	-5,273,967	0%	0	
	f. Total unrecognized return				\$17,018,509
3.	Preliminary actuarial value: (1) - (2f)				289,708,491
4.	Adjustment to be within 20% corridor				0
5.	Final actuarial value of assets as of September 30, 2024: (3) + (4)				\$289,708,491
6.	Actuarial value as a percentage of market value: $(5) \div (1)$				94.5%
7.	Amount deferred for future recognition: (1) - (5)				\$17,018,509

<sup>1</sup> Total return minus expected return on a market value basis.

<sup>2</sup> Percent deferred applies to the current valuation year.

<sup>3</sup> Recognition at 20% per year over five years. Deferred return as of September 30, 2024 recognized in each of the next four years:

- a. Amount recognized on September 30, 2025 \$5,486,795
- b. Amount recognized on September 30, 2026 -3,665,208
- c. Amount recognized on September 30, 2027 9,283,157
- d. Amount recognized on September 30, 2028 5,913,765

City of Jacksonville Corrections Officers Retirement Plan Actuarial Valuation as of October 1, 2024



## Asset history for years ended September 30



Legend	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Actuarial value <sup>1</sup>	\$159.91	\$175.33	\$191.74	\$207.09	\$220.33	\$234.51	\$255.56	\$265.25	\$273.14	\$289.71
Market value <sup>1</sup>	150.22	167.39	197.38	216.67	219.75	228.17	285.35	236.47	265.02	306.73
Ratio (AVA/MVA)	1.06	1.05	0.97	0.96	1.00	1.03	0.90	1.12	1.03	0.95

<sup>1</sup> In \$ millions

City of Jacksonville Corrections Officers Retirement Plan Actuarial Valuation as of October 1, 2024



#### **Historical investment returns**

Market and Actuarial Rates of Return versus Assumed Rate for Years Ended September 30



Legend	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Market rate	-15.61%	1.49%	12.03%	0.79%	18.14%	16.29%	11.66%	-2.54%	7.55%	15.83%	9.76%	1.62%	4.49%	27.03%	-16.18%	13.68%	17.76%
Actuarial rate	2.14%	1.23%	6.33%	2.65%	3.73%	9.82%	19.12%	6.28%	6.02%	7.44%	8.00%	6.60%	7.10%	10.75%	4.97%	4.34%	7.94%
Assumed rate	8.40%	8.40%	8.40%	8.25%	8.25%	7.75%	7.75%	7.50%	7.50%	7.50%	7.20%	7.20%	6.90%	6.80%	6.63%	6.50%	6.50%

Average Rates of Return	Market Value	Actuarial Value
Most recent five-year average return:	8.46%	6.95%
Most recent ten-year average return:	7.62%	6.93%
Most recent 15-year average return:	8.47%	7.30%



#### **Actuarial experience**

Assumptions should consider experience and should be based on reasonable expectations for the future.

Each year actual experience is compared to that projected by the assumptions. Differences are reflected in the actuarial valuation.

Assumptions are not changed if experience is believed to be a short-term development that will not continue over the long term. On the other hand, if experience is expected to continue, assumptions are changed.

#### Actuarial Experience for Year Ended September 30, 2024

	Assumption	Amount
1.	Gain from investments <sup>1</sup>	\$3,904,311
2.	Loss from administrative expenses	-38,760
3.	Loss from contributions	-9,037,418
4.	Loss from other experience	-6,513,872
5.	Net experience gain/(loss): 1 + 2 + 3 + 4	-\$11,685,739

<sup>1</sup> Details on next page



#### **Investment experience**

Actuarial planning is long term. The obligations of a pension plan are expected to continue for the lifetime of all its participants.

The assumed long-term rate of return of 6.50% considers past experience, the asset allocation policy of the Board and future expectations.

	Investment	YE 2024 Market Value	YE 2024 Actuarial Value	
1.	Net investment income	\$46,635,000	\$21,498,174	
2.	Average value of assets	262,556,500	270,674,817	
3.	Rate of return: 1 ÷ 2	17.76%	7.94%	
4.	Assumed rate of return	6.50%	6.50%	
5.	Expected investment income: 2 x 4	\$17,066,173	\$17,593,863	
6.	Net investment gain/(loss): 1 – 5	\$29,568,827	\$3,904,311	

#### Investment Experience Year Ended September 30, 2024



#### Non-investment experience

#### Contributions

Total City and employee contributions for the year ended September 30, 2024 totaled \$22,240,000, compared to the projected total contribution amount of \$29,983,523. This resulted in a loss of \$9,037,418 for the year, when adjusted for timing.

#### Administrative expenses

Administrative expenses for the year ended September 30, 2024 totaled \$138,000, as compared to the assumption of \$97,000. This resulted in an experience loss of \$38,760 for the year, including an adjustment for interest.

#### Other experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- Mortality experience (more or fewer than expected deaths)
- The extent of turnover among participants
- Retirement experience (earlier or later than projected)
- The number of disability retirements (more or fewer than projected)
- Salary increases (greater or smaller than projected)

The net loss from this other experience for the year ended September 30, 2024 amounted to \$6,513,872, which is 1.1% of the actuarial accrued liability. The primary cause of this loss was more participants entering the DROP than expected.



#### **Actuarial assumptions**

There are no assumption changes reflected in this report.

#### **Plan provisions**

There were no changes in plan provisions since the prior valuation.



#### **Unfunded actuarial accrued liability**

#### Development of Unfunded Actuarial Accrued Liability for Year Ended September 30, 2024

Un	Unfunded Actuarial Accrued Liability								
1.	Unfunded actuarial accrued liability at beginning of year	\$297,633,130							
2.	Employer normal cost at beginning of year	6,555,286							
3.	Actuarial determined contribution at beginning of year	-28,661,645							
4.	Interest on 1, 2 & 3	18,928,077							
5.	Expected unfunded actuarial accrued liability	\$294,454,848							
6.	Changes due to:								
	a. Net experience loss	11,685,739							
7.	Unfunded actuarial accrued liability at end of year	\$306,140,587							



# Florida Chapter 112 Determined Employer Contribution and City's Minimum Required Contribution

The chart below shows the calculations of the Florida Chapter 112 determined employer contribution and the City's minimum required contribution pursuant to State Law Chapter 2016-146 and City of Jacksonville Ordinances 2017-257-E and 2017-258-E.

The contribution requirements as of October 1, 2024 are based on the data previously described, the actuarial assumptions and Plan provisions described in *Section 4*, including all changes affecting future costs adopted at the time of the actuarial valuation, actuarial gains and losses, and changes in the actuarial assumptions. The contribution calculated as of October 1, 2024 is then projected to the following fiscal year and will be paid in the plan year beginning October 1, 2025.

#### Florida Chapter 112 Determined Contribution and City's Minimum Required Contribution for Year Beginning October 1

		2025		2024		
		Amount	% of Projected Payroll	Amount	% of Projected Payroll	
1.	Total normal cost	\$8,841,369	36.28%	\$8,736,819	35.18%	
2.	Administrative expenses	138,000	0.56%	97,000	0.40%	
3.	Expected employee contributions	-2,271,444	-9.32%	-2,278,533	-9.18%	
4.	Employer normal cost: (1) + (2) + (3)	\$6,707,925	27.52%	\$6,555,286	26.40%	
5.	Actuarial accrued liability	\$595,849,078		\$570,772,447		
6.	Actuarial value of assets	289,708,491		273,139,317		
7.	Unfunded actuarial accrued liability: (5) - (6)	\$306,140,587		\$297,633,130		
8.	Payment on projected unfunded actuarial accrued liability	22,252,148	91.30%	21,149,704	85.17%	
9.	Florida Chapter 112 determined employer contribution: (4) + (8) <sup>1</sup>	\$30,334,566	124.47%	\$29,019,915	116.86%	
10.	Amortized value of discounted value of projected surtax revenue <sup>1, 2</sup>	7,317,761	30.03%	7,038,645	28.34%	
11.	City's minimum required contribution: (9) - (10) <sup>2</sup>	\$23,016,805	94.44%	\$21,981,270	88.52%	
12.	Projected payroll	\$24,371,864		\$24,833,316		

<sup>1</sup>Adjusted for timing and projected to next fiscal year; contributions are assumed to be paid at the end of every month.

<sup>2</sup>Pursuant to State Law Chapter 2016-146 and City of Jacksonville Ordinances 2017-257-E and 2017-258-E



#### **Reconciliation of City's Minimum Required Contribution**

#### Reconciliation of City's Minimum Required Contribution from October 1, 2024 to October 1, 2025

	Step	Amount
1.	City's minimum required contribution as of October 1, 2024	\$21,981,270
2.	Effect of expected change in amortization payment due to payroll growth	188,936
3.	Effect of change in administrative expense assumption	42,946
4.	Effect of investment gain	-293,297
5.	Effect of other gains and losses on accrued liability	1,171,146
6.	Net effect of other changes, including composition and number of participants	-74,196
7.	Total change	\$1,035,535
8.	City's minimum required contribution as of October 1, 2025	\$23,016,805



### Schedule of funding progress through September 30, 2024

	Actuarial Valuation Date of October 1	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) – (a)	Funded Ratio (a) / (b)	Covered Compensation (c)	UAAL as a Percentage of Covered Compensation [(b) – (a)] / (c)
	2015	\$159,914,247	\$319,655,728	\$159,741,481	50.03%	\$28,091,083	568.66%
	2016	175,333,405	354,234,673	178,901,268	49.50%	26,585,054	672.94%
	2017	191,740,583	377,380,082	185,639,499	50.81%	27,548,015	673.88%
	2018	207,089,881	416,673,228	209,583,347	49.70%	28,164,021	744.15%
	2019	220,334,774	434,176,844	213,842,070	50.75%	28,726,006	744.42%
	2020	234,514,215	468,831,017	234,316,802	50.02%	28,268,208	828.91%
	2021	255,558,542	503,742,335	248,183,793	50.73%	25,903,031	958.13%
	2022	265,245,309	540,178,805	274,933,496	49.10%	25,260,815	1,088.38%
	2023	273,139,317	570,772,447	297,633,130	47.85%	24,526,732	1,213.51%
	2024	289,708,491	595,849,078	306,140,587	48.62%	24,070,977	1,271.82%





#### **History of employer contributions**

#### History of Employer Contributions: 2017 – 2026

Fiscal Year Ended September 30	City's Minimum Required	Actual Employer Contribution	Percent Contributed
2017	\$19,155,820	\$19,162,000	100.03%
2018	13,973,105	13,973,000	100.00%
2019	14,497,788	14,498,000	100.00%
2020	15,042,623	15,058,000	100.10%
2021	15,044,530	15,061,000	100.11%
2022	17,592,399	17,610,000	100.10%
2023	17,185,973	17,196,000	100.06%
2024	19,385,644	19,386,000	100.00%
2025	21,981,270		
2026	23,016,805		



# Low-Default-Risk Obligation Measure (LDROM)

In December 2021, the Actuarial Standards Board issued a revision of Actuarial Standard of Practice No. 4 (ASOP 4) *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions*. One of the revisions to ASOP 4 requires the disclosure of a Low-Default-Risk Obligation Measure (LDROM) when performing a funding valuation. The LDROM presented in this report is calculated using the same methodology and assumptions used to determine the Actuarial Accrued Liability (AAL) used for funding, except for the discount rate. The LDROM is required to be calculated using "a discount rate…derived from low-default-risk fixed income securities whose cash flows are reasonably consistent with the pattern of benefits expected to be paid in the future."

The LDROM is a calculation assuming a plan's assets are invested in an all-bond portfolio, generally lowering expected long-term investment returns. The discount rate selected and used for this purpose is the Bond Buyer General Obligation 20-year Municipal Bond Index Rate, published at the end of each week. The last published rate in December of the measurement period, by The Bond Buyer (www.bondbuyer.com), is 3.81% for use effective September 30, 2024. This is the rate used to determine the discount rate for valuing reported public pension plan liabilities in accordance with Governmental Accounting Standards when plan assets are projected to be insufficient to make projected benefit payments, and the 20-year period reasonably approximates the duration of plan liabilities. The LDROM is not used to determine a plan's funded status or Actuarially Determined Contribution (Florida Chapter 112 determined employer contribution). The plan's expected return on assets, currently 6.50%, is used for these calculations.

As of September 30, 2024, the LDROM for the system is \$880,414,536. The difference between the plan's AAL of \$595,849,078 and the LDROM can be thought of as the increase in the AAL if the entire portfolio were invested in low-default-risk securities. Alternatively, this difference could also be viewed as representing the expected savings from investing in the plan's diversified portfolio compared to investing only in low-default-risk securities.

ASOP 4 requires commentary to help the intended user understand the significance of the LDROM with respect to the funded status of the plan, plan contributions, and the security of participant benefits. In general, if plan assets were invested exclusively in low-default-risk securities, the funded status would be lower and the Actuarially Determined Contribution would be higher. While investing in a portfolio with low-default-risk securities may be more likely to reduce investment volatility and the volatility of employer contributions, it also may be more likely to result in higher employer contributions or lower benefits.



# Risk

The actuarial valuation results are dependent on a single set of assumptions; however, there is a risk that emerging results may differ significantly as actual experience proves to be different from the current assumptions.

We have not been engaged to perform a detailed analysis of the potential range of the impact of risk relative to the Plan's future financial condition but have included a brief discussion of some risks that may affect the Plan.

- Economic and Other Related Risks. Potential implications for the Plan due to the following economic effects (that were not reflected as of the valuation date) include:
  - Volatile financial markets and investment returns lower than assumed
  - High inflationary environment impacting salary increases and COLAs
- Investment Risk (the risk that returns will be different than expected)

If the actual return on market value for the prior plan year were 1% different (either higher or lower), the unfunded actuarial liability would change by 0.86%, or \$2,625,565, disregarding the asset smoothing method.

Since the Plan's assets are much larger than contributions, investment performance may create volatility in the actuarially determined contribution requirements. For example, for the prior plan year, if the actual return on market value were 1% different, the actuarially determined contribution would increase or decrease by \$188,299, disregarding the effects of the 5-year phase-in of investment gains and losses.

The market value rate of return over the last 17 years has ranged from a low of -16.18% to a high of 27.03%.

• Longevity Risk (the risk that mortality experience will be different than expected)

The actuarial valuation includes an expectation of future improvement in life expectancy. Emerging plan experience that does not match these expectations will result in either an increase or decrease in the actuarially determined contribution.

• Contribution Risk (the risk that actual contributions will be different from actuarially determined contribution)

The Plan's funding policy requires payment of the City's minimum required contribution, which is the Florida Chapter 112 determined contribution reduced for anticipated funding from allocated surtax income. This policy produces a risk that this reduction in immediate funding might be either too large or too small, depending on whether the surtax income gross as quickly as expected.

If the City paid the Florida Chapter 112 determined contribution, the effective amortization period would be 22 years, meaning that the current contribution level, with amortization payments growing 1.25%, would be adequate to be expected to reduce the unfunded liability to zero over 22 years. Under the City's current policy of paying the City's required contribution, over the



immediate term, the unfunded liability will remain relatively stable until the surtax income becomes payable to the Plan's trust. If plan experience is less favorable than anticipated, the unfunded liability will grow faster than expected. By comparison, the surtax revenue is assumed to grow 4.25% per year.

• Demographic Risk (the risk that participant experience will be different than assumed)

Examples of this risk include:

- Actual retirements occurring earlier or later than assumed. The value of retirement plan benefits is sensitive to the rate of benefit accruals and any early retirement subsidies that apply.
- More or less active participant turnover than assumed.
- There are external factors including legislative or financial reporting changes that could impact the Plan's funding and disclosure requirements. While we do not assume any changes in such external factors, it is important to understand that they could have significant consequences for the Plan.
- Actual Experience Over the Last Ten Years

Past experience can help demonstrate the sensitivity of key results to the Plan's actual experience. Over the past ten years:

- The non-investment gain(loss) for a year has ranged from a loss of \$10,056,085 to a gain of \$1,978,720.

Plan Year Ended	Market Value Gain/(Loss)	All Other Gains and (Losses)
2015	-\$15,203,738	-\$3,362,440
2016	-2,401,011	529,028
2017	14,071,137	1,978,720
2018	5,056,884	-1,546,971
2019	-12,089,300	-5,808,796
2020	-5,273,967	-10,056,085
2021	45,760,012	-5,207,826
2022	-64,741,818	-9,570,213
2023	16,846,955	-9,563,522
2024	29,568,827	-6,041,210

- The funded percentage on the actuarial value of assets has ranged from a low of 47.9% to a high of 50.8% since 2015.



#### Maturity Measures

- As pension plans mature, the cash needed to fulfill benefit obligations will increase over time. Therefore, cash flow projections and analysis should be performed to assure that the Plan's asset allocation is aligned to meet emerging pension liabilities.
- Currently the Plan has a non-active to active participant ratio of 1.60.
- For the prior year, benefits and administrative expenses paid were \$4,929,000 more than contributions received. Plans with high levels of negative cash flows may have a need for a larger allocation to income generating assets, which can create a drag on investment return.



# GFOA funded liability by type

The Actuarial Accrued Liability represents the present value of benefits earned, calculated using the Plan's actuarial cost method. The Actuarial Value of Assets reflects the financial resources available to liquidate the liability. The portion of the liability covered by assets reflects the extent to which accumulated plan assets are sufficient to pay future benefits, and is shown for liabilities associated with employee contributions, pensioner liabilities, and other liabilities. The Government Finance Officers Association (GFOA) recommends that the funding policy aim to achieve a funded ratio of 100 percent.

Туре	2024	2023
Actuarial accrued liability (AAL)		
Active member contributions	\$20,659,768	\$20,027,503
Retirees and beneficiaries	432,319,927	412,154,218
Active and inactive members (employer-financed)	142,869,383	138,590,726
Total	\$595,849,078	\$570,772,447
Actuarial value of assets	289,708,491	273,139,317
Cumulative portion of AAL covered		
Active member contributions	100.00%	100.00%
Retirees and beneficiaries	62.23%	61.41%
Active and inactive members (employer-financed)	0.00%	0.00%

#### GFOA Funded Liability by Type as of September 30



#### **Actuarial balance sheet**

An overview of the Plan's funding is given by an Actuarial Balance Sheet. In this approach, first the amount and timing of all future payments that will be made by the Plan for current participants is determined. Then these payments are discounted at the valuation interest rate to the date of the valuation, thereby determining the present value, referred to as the "liability" of the Plan.

Second, this liability is compared to the assets. The "assets" for this purpose include the net amount of assets already accumulated by the Plan, the present value of future member contributions, the present value of future employer normal cost contributions, and the present value of future employer amortization payments for the unfunded actuarial accrued liability.

Description	Year Ended September 30, 2024	Year Ended September 30, 2023
Liabilities		
Present value of benefits for retired participants and beneficiaries	\$432,319,927	\$412,154,218
Present value of benefits for inactive vested participants	593,007	439,531
Present value of benefits for active participants	228,986,833	229,675,571
Total liabilities	\$661,899,767	\$642,269,320
Current and future assets		
Total valuation value of assets	\$289,708,491	\$273,139,317
Present value of future contributions by members	16,795,748	18,355,208
Present value of future employer contributions for:		
Entry age cost	49,254,941	53,141,665
Unfunded actuarial accrued liability	306,140,587	297,633,130
Total of current and future assets	\$661,899,767	\$642,269,320

#### Actuarial Balance Sheet



#### **Exhibit A: Table of plan demographics**

Category	Year Ended September 30, 2024	Year Ended September 30, 2023	Change From Prior Year
Active participants in valuation:			
Number	319	345	-7.5%
Average age	43.1	42.3	0.8
Average years of service	14.2	13.3	0.9
Covered payroll	\$24,070,977	\$24,526,732	-1.9%
Average payroll	\$75,458	\$71,092	6.1%
Employee contribution balances	20,659,768	20,027,503	3.2%
Total active vested participants	319	345	-7.5%
Inactive participants	4	3	33.3%
Retired participants:			
Number in pay status	382	372	3.2%
Average age	62.0	61.4	0.6
<ul> <li>Average monthly benefit<sup>1</sup></li> </ul>	\$4,475	\$4,325	3.5%
Disabled participants:			
Number in pay status	16	16	0.0%
Average age	59.1	58.1	1.0
Average monthly benefit <sup>1</sup>	\$2,530	\$2,456	3.0%
DROP participants not yet in pay status:			
Number in pay status	72	68	5.9%
Average age	53.6	52.9	0.7
Average monthly benefit <sup>1</sup>	\$4,291	\$4,294	-0.1%
<sup>1</sup> Does not include supplemental benefit amounts			





Category	Year Ended September 30, 2024	Year Ended September 30, 2023	Change From Prior Year
Beneficiaries:			
Number in pay status	35	35	0.0%
Average age	61.5	63.4	-1.9
Average monthly benefit	\$3,450	\$3,218	7.2%

City of Jacksonville Corrections Officers Retirement Plan Actuarial Valuation as of October 1, 2024



# Exhibit B: Participants in active service as of September 30, 2024 by age, years of service, and average compensation

#### 15 - 19 20 - 24 25 - 29 Age Total 5-9 10-14 17 Under 30 17 \$61,441 \$61,441 \_\_\_\_ \_\_\_\_ 30 - 34 50 32 18 62,432 66,827 \$74,641 \_\_\_\_ \_\_\_\_ 35 - 39 1 17 18 66 30 74,036 63,218 75,987 \$80,949 \$74,976 40 - 44 1 64 7 22 28 6 81,091 65,249 78,471 85,257 88,250 \$90,024 45 - 49 9 41 5 9 16 2 82,801 61,545 74,489 76,140 101,603 142,011 50 - 54 39 17 11 7 3 77,019 62,148 72,467 79,012 85,707 80.192 55 - 59 27 3 3 1 13 7 77,375 61,144 71,399 80,628 84,708 158,979 60 - 64 13 1 5 7 75,399 73,363 62,148 78,746 \_\_\_\_ 65 - 69 2 1 1 \_\_\_\_ 69,024 72,048 70,536 \_\_\_\_ Total 7 319 83 115 88 26 \$62,521 \$91,269 \$110,514 \$75,458 \$74,921 \$80,901

#### Years of Service

#### **Exhibit C: Reconciliation of participant data**

	Active Participants	Inactive Vested Participants	DROP Participants	Disableds	Retired Participants	Beneficiaries	Total
Number as of October 1, 2023	345	3	68	16	372	35	839
New participants	0	N/A	0	N/A	N/A	N/A	0
Terminations — with vested rights	-1	1	0	0	0	0	0
Terminations — without vested rights	0	N/A	0	N/A	N/A	N/A	0
Retirements	-4	0	-10	N/A	14	N/A	0
New DROP participants	-15	0	15	0	0	0	0
New disabilities	0	0	0	0	N/A	N/A	0
Return to work	0	0	0	0	0	N/A	0
Deceased	0	0	0	0	-4	0	-4
New beneficiary	0	0	0	0	0	2	2
Lump sum cash-outs	-8	0	0	0	0	0	-8
Rehire	0	0	0	N/A	0	N/A	0
Certain period expired	N/A	N/A	0	0	0	-2	-2
Data adjustments	2	0	-1	0	0	0	1
Active participants no longer accruing benefits	0	0	0	N/A	N/A	N/A	0
Net transfers (to)/from General	0	0	0	0	0	0	0
Number as of October 1, 2024	319	4	72	16	382	35	828

# Exhibit D: Summary statement of income and expenses on a market value basis

#### Year Ended September 30, 2024 versus Year Ended September 30, 2023

Item	Income and Expenses	Assets as of YE 2024	Income and Expenses	Assets as of YE 2023
Net assets at market value at the beginning of the year		\$265,021,000		\$236,467,000
Contribution and other income:				
Employer contributions	\$19,386,000		\$17,196,000	
Employee contributions	2,854,000		3,333,000	
Total contribution income		\$22,240,000		\$20,529,000
Investment income:				
Interest, dividends and other income	\$2,713,000		\$2,414,000	
Realized appreciation	30,593,000		19,450,000	
Unrealized appreciation	15,388,000		12,205,000	
Less investment fees	-2,059,000		-1,967,000	
Net investment income		\$46,635,000		\$32,102,000
Total income available for benefits		\$68,875,000		\$52,631,000
Less benefit payments and administrative expenses:				
Administrative expenses	-\$138,000		-\$97,000	
Benefit payments	-22,549,000		-21,049,000	
DROP credits	-3,774,000		-3,351,000	
Refunds	-2,922,000		-2,605,000	
DROP withdrawals	2,760,000		2,230,000	
DROP interest/adjustment	-546,000		795,000	
Net benefit payments and administrative expenses		-\$27,169,000		-\$24,077,000
Change in market value of assets		\$41,706,000		\$28,554,000
Net assets at market value at the end of the year		\$306,727,000		\$265,021,000



# **Exhibit E: Summary statement of plan assets**

#### Year Ended September 30, 2024 versus Year Ended September 30, 2023

ltem	Investments	Assets as of YE 2024	Investments	Assets as of YE 2023
Cash and accounts receivable				
Cash equivalents		\$3,415,000		\$4,271,000
Total accounts receivable		73,000		63,000
Investments:				
• Equities	\$181,017,000		\$152,605,000	
Fixed Income	63,500,000		51,800,000	
Real Estate	50,800,000		54,800,000	
Other Assets	23,000,000		15,000,000	
Total investments at market value		\$318,317,000		\$274,205,000
Total assets		\$321,805,000	-	\$278,539,000
Accounts payable				
Total accounts payable		-\$15,078,000		-\$13,518,000
Net assets at market value		\$306,727,000		\$265,021,000
Net assets at actuarial value		\$289,708,491		\$273,139,317



#### Exhibit F: Development of the fund through September 30, 2024

Year Ended September 30	Employer Contributions	Employee Contributions	Net Investment Return <sup>1</sup>	Admin. Expenses	Benefit Payments	Market Value of Assets at Year-End	Actuarial Value of Assets at Year-End	Actuarial Value as a Percent of Market Value
2015	\$17,832,000	\$2,466,000	-\$3,849,000	\$73,000	\$14,874,000	\$150,223,000	\$159,914,247	106.5%
2016	18,864,000	2,410,000	11,548,000	75,000	15,583,000	167,387,000	175,333,405	104.7%
2017	19,162,000	2,500,000	26,747,000	75,000	18,338,000	197,383,000	191,740,583	97.1%
2018	13,973,000	3,151,000	19,269,000	128,000	16,981,000	216,667,000	207,089,881	95.6%
2019	14,498,000	3,225,000	3,496,000	158,000	17,974,000	219,754,000	220,334,774	100.3%
2020	15,058,000	3,401,000	9,840,000	153,000	19,728,000	228,172,000	234,514,215	102.8%
2021	15,061,000	3,341,000	61,141,000	160,000	22,204,000	285,351,000	255,558,542	89.6%
2022	17,610,000	3,153,000	-45,935,000	159,000	23,553,000	236,467,000	265,245,309	112.2%
2023	17,196,000	3,333,000	32,102,000	97,000	23,980,000	265,021,000	273,139,317	103.1%
2024	19,386,000	2,854,000	46,635,000	138,000	27,031,000	306,727,000	289,708,491	94.5%



#### **Exhibit G: Table of amortization bases**

#### Florida Chapter 112 Recommended Contribution Amortization Bases

Туре	Date Established	Initial Period	Initial Amount	Annual Payment <sup>1</sup>	Years Remaining	Outstanding Balance
Fresh start	10/01/2016	30	\$178,901,268	\$12,571,464	22.00	\$171,157,137
Experience loss	10/01/2017	30	-2,816,018	-194,999	23.00	-2,718,984
Change in assumptions	10/01/2017	30	-283,924	-19,661	23.00	-274,141
Plan amendment	10/01/2017	30	9,863,395	683,004	23.00	9,523,521
Experience loss	10/01/2018	29	5,111,441	354,157	23.00	4,938,215
Change in assumptions	10/01/2018	29	19,111,594	1,324,186	23.00	18,463,895
Experience loss	10/01/2019	28	12,171,775	845,047	23.00	11,782,981
Change in assumptions	10/01/2019	28	-7,304,312	-507,115	23.00	-7,070,995
Experience loss	10/01/2020	27	15,277,628	1,064,196	23.00	14,838,709
Change in assumptions	10/01/2020	27	6,108,635	425,510	23.00	5,933,135
Experience loss	10/01/2021	26	3,753,461	262,693	23.00	3,662,889
Change in assumptions	10/01/2021	26	11,440,746	800,703	23.00	11,164,675
Experience loss	10/01/2022	25	19,787,855	1,393,871	23.00	19,435,565
Change in assumptions	10/01/2022	25	8,804,784	620,216	23.00	8,648,029
Experience loss	10/01/2023	24	24,110,512	1,712,367	23.00	23,876,539
Change in assumptions	10/01/2023	24	1,104,396	78,436	23.00	1,093,678
Experience loss	10/01/2024	23	11,685,739	838,073	23.00	11,685,739
Total				\$22,252,148		\$306,140,587



#### City's Minimum Recommended Contribution Surtax Amortization Bases

Туре	Date Established	Initial Period	Initial Amount	Annual Payment <sup>1</sup>	Years Remaining	Outstanding Balance
Discounted surtax revenue applied	10/01/2016	30	-\$64,295,005	-4,518,036	22	-61,511,856
Surtax offset gain	10/01/2017	30	-1,534,336	-106,247	23	-1,481,464
Allocation change	10/01/2017	30	4,705,811	325,860	23	4,543,657
Discount rate change	10/01/2017	30	-3,286,369	-227,569	23	-3,173,126
Surtax offset gain	10/01/2018	29	-1,420,046	-98,391	23	-1,371,921
Allocation change	10/01/2018	29	-1,349,426	-93,498	23	-1,303,694
Discount rate change	10/01/2018	29	-3,713,867	-257,323	23	-3,588,004
Surtax offset gain	10/01/2019	28	-348,544	-24,198	23	-337,411
Allocation change	10/01/2019	28	-7,142,670	-495,892	23	-6,914,517
Discount rate change	10/01/2019	28	-2,159,598	-149,934	23	-2,090,616
Surtax offset loss	10/01/2020	27	6,298,215	438,716	23	6,117,271
Allocation change	10/01/2020	27	3,119,832	217,319	23	3,030,200
Discount rate change	10/01/2020	27	-2,063,845	-143,761	23	-2,004,550
Surtax offset gain	10/01/2021	26	-9,862,882	-690,273	23	-9,624,886
Allocation change	10/01/2021	26	-4,296,673	-300,711	23	-4,192,992
Discount rate change	10/01/2021	26	-4,356,487	-304,897	23	-4,251,362
Surtax offset gain	10/01/2022	25	-6,174,896	-434,964	23	-6,064,962
Allocation change	10/01/2022	25	2,166,398	152,603	23	2,127,828
Discount rate change	10/01/2022	25	-3,393,985	-239,075	23	-3,333,561
Surtax smoothing	10/01/2022	25	4,985,065	351,152	23	4,896,314
Surtax offset gain	10/01/2023	24	-2,880,697	-204,592	23	-2,852,742
Surtax offset gain	10/01/2024	23	-2,544,337	-182,474	23	-2,544,337
Total			· · · · · · · · · · · · · · · · · · ·	-\$6,986,185		-\$95,926,731

<sup>1</sup> Level percentage of payroll; per Part VII, Chapter 112.64(5)(b) of Florida Statutes, outstanding balances were amortized using a 1.25% payroll growth rate for October 1, 2024 valuation.

🔆 Segal 44

#### **Exhibit H: Section 415**

Section 415 of the Internal Revenue Code (IRC) specifies the maximum benefits that may be paid to an individual from a defined benefit plan and the maximum amounts that may be allocated each year to an individual's account in a defined contribution plan.

A qualified pension plan may not pay benefits in excess of the Section 415 limits. The ultimate penalty for non-compliance is disqualification: active participants could be taxed on their vested benefits and the IRS may seek to tax the income earned on the Plan's assets.

In particular, Section 415(b) of the IRC limits the maximum annual benefit payable at the Normal Retirement Age to a dollar limit of \$160,000 indexed for inflation. That limit is \$275,000 for 2024 and \$280,000 for 2025. Normal Retirement Age for these purposes is age 62. These are the limits in simplified terms. They must be adjusted based on each participant's circumstances, for such things as form of benefits chosen and after tax contributions.

Benefits in excess of the limits may be paid through a qualified governmental excess plan that meets the requirements of Section 415(m).

Legal Counsel's review and interpretation of the law and regulations should be sought on any questions in this regard.



#### Exhibit I: Supplementary state of Florida information Summary of salary Changes

Year Ended September 30	Total Salary	Percent Change in Total Salary	Percent Change in Salary of Employees Remaining Active	Change in Salary of Employees Remaining Active
2010*	\$27,869,052	0.75%	N/A	N/A
2010	32,329,400	16.88%	2.45%	5.28%
2011	31,832,037	-1.54%	3.09%	5.80%
2012	28,944,158	-9.07%	0.78%	6.15%
2013	27,871,010	-3.71%	3.03%	1.72%
2014	27,373,702	-1.78%	3.89%	1.70%
2015	28,091,083	2.62%	3.08%	1.66%
2016	26,585,054	-5.36%	2.63%	4.26%
2017	27,548,015	3.62%	4.03%	8.21%
2018	28,164,021	2.24%	10.21%	8.31%
2019	28,726,006	2.00%	12.46%	8.34%
2020	28,268,208	-1.59%	12.06%	3.98%
2021	25,903,031	-8.37%	3.06%	3.84%
2022	25,260,815	-2.48%	8.64%	3.69%
2023	24,526,732	-2.91%	8.86%	3.51%
2024	24,070,977	-1.86%	6.37%	5.51%

Note: The Plan was closed to new entrants as of October 1, 2017.

The average total payroll growth for the most recent ten years was -1.28% per year. Additional analysis of bargained pay increases applicable for the next year and pay of DC plan participants was used to support a payroll increase assumption of 1.25%.

\*Prior to the inclusion of new participants with greater than one year of employment.



E-manted Demand

#### Exhibit J: Supplementary state of Florida information Recent History of Recommended and Actual Contributions

Fiscal Year Ended September 30	Valuation Date October 1	Contribution Rate as Percent of Valuation Payroll	Valuation Payroll	Florida Chapter 112 Recommended Contribution	City's Minimum Required Contribution	Actual Contribution
2013	2011	39.11%	\$32,946,158	\$12,884,770		\$10,742,000
2014	2012	49.93%	29,812,483	14,884,963		13,522,000
2015	2013	62.81%	28,049,384	17,618,896		17,832,000
2016	2014	68.64%	27,480,459	18,863,935		18,864,000
2017	2015	67.73%	28,282,102	19,155,820		19,162,000
2018	2016	69.26%	26,917,306	18,643,233	\$13,973,105	13,973,000
2019	2017	68.63%	27,892,365	19,141,501	14,497,788	14,498,000
2020	2018	70.53%	28,516,071	20,111,161	15,042,623	15,058,000
2021	2019	71.56%	29,085,081	20,812,130	15,044,530	15,061,000
2022	2020	79.84%	28,621,561	22,851,586	17,592,399	17,610,000
2023	2021	90.55%	26,226,819	23,748,105	17,185,973	17,196,000
2024	2022	102.16%	25,576,575	26,128,351	19,385,644	19,386,000
2025	2023	116.86%	24,833,316	29,019,915	21,981,270	
2026	2024	124.47%	24,371,864	30,334,566	23,016,805	

The Plan was closed to new entrants as of October 1, 2017; as a result, valuation payroll is expected to continue declining.



#### Exhibit K: Supplementary State of Florida Information Comparative Summary of Principal Valuation Results

	Year Ended September 30, 2024	Year Ended September 30, 2023
Participant data		
Active members	319	345
Total annual payroll	\$24,070,977	\$24,526,732
Retired members and beneficiaries	437	423
Total annualized benefit	\$23,055,523	\$21,130,232
Terminated vested members	4	3
Total annualized benefit	\$63,084	\$44,563
DROP participants	72	68
Total annualized benefit	\$3,836,080	\$3,503,954
Actuarial value of assets	\$289,708,491	\$273,139,317
Present value of all future expected benefit payments:		
Active members:		
Retirement benefits	\$201,771,762	\$202,560,907
Vesting benefits	1,347,401	1,530,843
Disability benefits	3,929,173	4,189,909
Death benefits	1,278,729	1,366,409
Return of contributions	20,659,768	<u>20,027,503</u>
Total	\$228,986,833	\$229,675,571
Terminated vested members	593,007	439,531
Retired members and beneficiaries	358,232,406	341,339,414
DROP participants	<u>74,087,521</u>	<u>70,814,803</u>
Total	\$661,899,767	\$642,269,319



#### Exhibit K: Supplementary State of Florida Information Comparative Summary of Principal Valuation Results (Cont'd)

	Year Ended September 30, 2024	Year Ended September 30, 2023
Unfunded actuarial accrued liability	\$306,140,587	\$297,633,130
Actuarial present value of accrued benefits		
Vested accrued benefits		
Active members	\$122,085,397	\$116,602,159
Inactive members	593,007	439,531
Retirees and beneficiaries	358,232,406	341,339,414
DROP participants	74,087,521	70,814,803
Nonvested active members	<u>0</u>	<u>0</u>
Total	\$554,998,331	\$529,195,907
Pension cost		
Normal cost, including administrative expenses	\$8,979,369	\$8,833,819
Expected employee contributions	-2,271,444	-2,278,533
Level % of payroll payment to amortize unfunded actuarial accrued liability	22,252,148	21,149,704
Discounted and amortized value of allocated surtax revenue	-6,986,185	-6,719,716
Timing adjustment	<u>758,759</u>	724,622
Total minimum annual cost payable monthly at valuation date	22,732,647	\$21,709,896
Total employer cost projected to budget year	23,016,805	21,981,270
Projected payroll	24,371,864	24,833,316
As % of projected payroll	94.44%	88.52%
Present value of active members' future salaries at attained age	\$167,957,476	\$183,552,079
Present value of expected future employee contributions	16,795,748	18,355,208


## Section 3: Supplemental Information

# Exhibit L: Supplementary state of Florida Information Actuarial Present Value of Accumulated Plan Benefits

Factors	Present Value of Accumulated Plan Benefits
Actuarial present value of accumulated benefits as of October 1, 2023	\$529,195,907
Benefits accumulated, net experience gain or loss, changes in data	19,314,368
Benefits paid	-27,031,000
Interest	33,519,226
Changes in assumptions	0
Plan changes	<u>0</u>
Net increase	25,802,594
Actuarial present value of accumulated benefits as of October 1, 2024	\$554,998,501



Change in Actuarial

## Section 3: Supplemental Information

# Exhibit M: Supplementary State of Florida information Reconciliation of DROP accounts

Nearest Age	Total Actives*	Eligible for Normal**	Number Retiring	Number Entering DROP
Under 40	140	1	0	0
40	17	1	1	0
41	10	1	0	0
42	13	3	1	0
43	16	6	0	2
44	12	2	0	0
45	13	2	0	0
46	9	3	0	0
47	9	3	0	0
48	8	3	0	0
49	4	3	0	1
50	9	6	0	1
51	8	4	0	2
52	7	2	1	0
53	14	5	0	2
54	9	4	0	2
55	11	2	1	1
56	7	1	0	0
57	2	0	0	0
58	6	3	0	3
59	5	1	0	0
60	4	0	0	0
61	4	0	0	0
62	1	0	0	0
63	4	1	0	1
64	1	0	0	0
65 & over	2	2	0	0
Total	345	59	4	15

\*Number of active participants from prior valuation

\*\*Number of active participants either eligible to retire as of October 1, 2023 or who became eligible during the plan year ended September 30, 2024



## Section 3: Supplemental Information

### **Exhibit N: Actuarial Projections through Fiscal 2062**

Unfunded

City of Jacksonville Corrections Officers Retirement Plan Actuarial Projections through Fiscal Year Ending September 30, 2062

	Actuarial	Actuarial	Actuarial							
Plan Year Boginning	Accrued	Value of	Accrued	Funded	Fiscal Year	Surtax	% of Total	Required City	% of Total	Total
Beginning	Liability	A33613	Liability	Katio	Linding	contribution	contribution	contribution	contribution	contribution
					2025	<b>\$</b> 0	0.0%	\$21,981,270	100.0%	\$21,981,270
2024	\$595,849,078	\$289,708,491	\$306,140,587	48.62%	2026	0	0.0%	23,016,805	100.0%	23,016,805
2025	614,837,869	310,868,318	303,969,551	50.56%	2027	0	0.0%	22,619,951	100.0%	22,619,951
2026	633,778,008	323,773,427	310,004,581	51.09%	2028	0	0.0%	23,043,654	100.0%	23,043,654
2027	652,265,429	348,612,992	303,652,437	53.45%	2029	0	0.0%	22,131,069	100.0%	22,131,069
2028	669,956,135	369,821,424	300,134,711	55.20%	2030	0	0.0%	21,553,731	100.0%	21,553,731
2029	686,977,256	383,599,228	303,378,028	55.84%	2031	8,124,038	27.4%	21,556,990	72.6%	29,681,028
2030	703,079,785	395,842,700	307,237,085	56.30%	2032	11,292,413	34.5%	21,411,718	65.5%	32,704,131
2031	717,031,854	414,422,529	302,609,325	57.80%	2033	11,772,341	36.2%	20,781,900	63.8%	32,554,241
2032	728,897,561	435,184,697	293,712,864	59.70%	2034	12,272,665	37.4%	20,573,594	62.6%	32,846,259
2033	739,360,869	455,383,916	283,976,953	61.59%	2035	12,794,254	38.5%	20,447,442	61.5%	33,241,696
2034	748,219,257	475,246,614	272,972,643	63.52%	2036	13,338,010	39.8%	20,207,757	60.2%	33,545,767
2035	755,267,997	494,876,497	260,391,500	65.52%	2037	13,904,875	41.0%	19,979,359	59.0%	33,884,234
2036	760,188,354	513,953,980	246,234,374	67.61%	2038	14,495,832	42.5%	19,618,049	57.5%	34,113,881
2037	762,727,381	532,503,250	230,224,131	69.82%	2039	15,111,905	43.9%	19,298,625	56.1%	34,410,530
2038	762,217,985	549,824,930	212,393,055	72.13%	2040	15,754,161	45.8%	18,666,962	54.2%	34,421,123
2039	759,272,714	567,042,604	192,230,110	74.68%	2041	16,423,713	46.9%	18,606,798	53.1%	35,030,511
2040	754,799,223	584,335,664	170,463,559	77.42%	2042	17,121,721	47.9%	18,650,056	52.1%	35,771,777
2041	748,900,752	602,426,332	146,474,420	80.44%	2043	17,849,394	48.8%	18,697,900	51.2%	36,547,294
2042	741,566,050	621,582,064	119,983,986	83.82%	2044	18,607,993	49.8%	18,750,827	50.2%	37,358,820
2043	732,743,165	641,946,461	90,796,704	87.61%	2045	19,398,833	50.8%	18,789,136	49.2%	38,187,969
2044	722,550,052	663,867,827	58,682,225	91.88%	2046	20,223,283	51.7%	18,893,655	48.3%	39,116,938
2045	711,068,705	687,571,486	23,497,219	96.70%	2047	0	0.0%	18,993,546	100.0%	18,993,546
2046	698,529,769	713,598,417	(15,068,648)	102.16%	2048	0	0.0%	8,100,332	100.0%	8,100,332
2047	685,207,591	720,612,768	(35,405,177)	105.17%	2049	0	0.0%	255,075	100.0%	255,075
2048	671,214,665	717,024,658	(45,809,993)	106.82%	2050	0	0.0%	261,452	100.0%	261,452
2049	656,609,722	705,394,113	(48,784,391)	107.43%	2051	0	0.0%	267,988	100.0%	267,988
2050	641,455,453	693,407,497	(51,952,044)	108.10%	2052	0	0.0%	274,687	100.0%	274,687
2051	625,819,013	681,144,525	(55,325,512)	108.84%	2053	0	0.0%	281,555	100.0%	281,555
2052	609,769,163	668,687,331	(58,918,168)	109.66%	2054	0	0.0%	288,593	100.0%	288,593
2053	593,376,384	656,120,644	(62,744,260)	110.57%	2055	0	0.0%	295,808	100.0%	295,808
2054	576,711,664	643,530,622	(66,818,958)	111.59%	2056	0	0.0%	303,203	100.0%	303,203
2055	559,848,604	631,007,023	(71,158,419)	112.71%	2057	0	0.0%	310,784	100.0%	310,784
2056	542,860,074	618,639,926	(75,779,852)	113.96%	2058	0	0.0%	318,554	100.0%	318,554
2057	525,818,668	606,520,249	(80,701,581)	115.35%	2059	0	0.0%	326,518	100.0%	326,518
2058	508,797,518	594,740,640	(85,943,122)	116.89%	2060	0	0.0%	334,681	100.0%	334,681
2059	491,869,192	583,394,456	(91,525,264)	118.61%	2061	0	0.0%	343,048	100.0%	343,048
2060	475,103,564	572,573,704	(97,470,140)	120.52%	2062	0	0.0%	351,625	100.0%	351,625
2061	458,568,204	562,369,530	(103,801,326)	122.64%	2063	0	0.0%	360,415	100.0%	360,415
2062	442,327,528	552,871,458	(110,543,930)	124.99%	2064	0	0.0%	369,425	100.0%	369,425
Total:						\$238,485,431	33.1%	\$481,314,537	66.9%	\$719,799,968
Total Present Va	alue at 6.50%:					\$90,836,362	27.3%	\$241,293,332	72.7%	\$332,129,694

#### Total Present Value at 6.50%:

Assum	ntions
Assum	puons

nvestment Return Assumption	6.50% per year
Actuarial Value of Assets	5-year smoothed market value
Payroll Growth Assumption	1.25% per year
Pension Liability Surtax Proceeds	6.10%, projected to increase 4.25% annually
Administrative Expenses	Projected to increase 2.5% annually

Projections are not a guarantee of future results. They are intended to serve as estimates of future financial outcomes that are based on assumptions about future experience and the information available at the time the modeling is undertaken and completed. Projected results will change if demographic or economic assumptions, or plan provisions, change in the future, or if the contributing employers make contributions other than expected.

City of Jacksonville Corrections Officers Retirement Plan Actuarial Valuation as of October 1, 2024



## Exhibit 1: Actuarial assumptions, methods and models

#### **Rationale for assumptions**

The information and analysis used in selecting each demographic assumption that has a significant effect on this actuarial valuation is shown in the Experience Study Report for the five-year period ended September 30, 2022.

#### Net investment return

6.50%. The net investment return assumption was chosen by the Retirement System's Board of Trustees with input from the actuary. The assumption is a long-term estimate derived from historical data, current and recent market expectations, and professional judgment. As part of the analysis, a building block approach was used that reflects inflation expectations and anticipated risk premiums for each of the portfolio's asset classes as provided by Segal Marco Advisors, as well as the Plan's target asset allocation.

#### Salary increases

Salary increases include an assumed inflation rate of 2.50%

Service	Rate (%)
0	10.00
1 – 2	8.00
3 – 10	7.00
11 - 15	6.00
16+	3.50

### **Payroll growth**

1.25% used for amortization of unfunded liability amounts, based on the requirement in the Florida Statutes that the assumption for this purpose may not exceed the average annual growth for the preceding ten years. Negotiated pay level increases and pay of DC Plan participants were taken into consideration in setting a payroll growth that is expected to be achieved and maintained on a tenyear average basis. The Fund's long-term payroll growth assumption is equal to the inflation assumption of 2.50%.

City of Jacksonville Corrections Officers Retirement Plan Actuarial Valuation as of October 1, 2024



#### **Mortality rates**

**Healthy pre-retirement:** FRS pre-retirement mortality tables for special risk personnel, set forward 2 years, projected generationally from 2010 with Scale MP2018

**Healthy post-retirement:** FRS healthy post-retirement mortality tables for special risk personnel, set forward 2 years, projected generationally from 2010 with Scale MP2018

**Disabled**: FRS disabled mortality tables for personnel other than special risk, with no set forward, projected generationally from 2010 with Scale MP2018

The FRS tables for special risk personnel, set forward 2 years, reasonably reflect the healthy annuitant mortality experience of the General Employees Retirement Plan as of the measurement date. The FRS disabled mortality tables for special risk personnel reasonably reflect the disabled annuitant mortality experience as of the measurement date.

#### Annuitant mortality rates

Healthy Disabled Age Male Female Male Female 55 1.04 0.55 2.53 1.91 60 1.16 0.61 3.08 2.27 0.88 3.93 65 1.45 2.83 70 2.34 1.51 5.08 3.79 75 3.90 2.62 6.98 5.46 80 6.63 4.65 10.12 8.31 11.21 85 8.64 14.68 12.60 90 18.13 15.47 21.29 17.72

Mortality rates shown for base table.

City of Jacksonville Corrections Officers Retirement Plan Actuarial Valuation as of October 1, 2024



Rate  $(\%)^*$ 

#### **Termination rates before retirement**

#### Rate (%)

	Rate (%)			
	Mort	ality <sup>1</sup>	Disa	bility <sup>2</sup>
Age	Male	Female	Male	Female
20	0.05	0.04	0.03	0.03
25	0.06	0.05	0.04	0.04
30	0.07	0.05	0.05	0.05
35	0.08	0.06	0.08	0.08
40	0.10	0.08	0.12	0.12
45	0.14	0.11	0.18	0.18
50	0.21	0.17	0.30	0.30
55	0.32	0.25	0.47	0.47
60	0.50	0.40	0.75	0.75
65	0.87	0.69	0.00	0.00

#### **Retirement rates**

Age/Service	Retirement Probability (%)
Under 20	0
20	65
21	35
22	20
23 - 25	15
26 – 27	20
28+	100

100% retirement assumed at age 65 with 5 years of service; for ages less than 65, retirement rate assumptions are based on service



#### **Refund of Contributions**

95% of participants that are vested and terminate are assumed to take a refund of their employee contributions in lieu of their accrued benefit deferred to age 65

#### **Retirement rates for inactive vested participants**

65

#### Unknown data for participants

Same as those exhibited by participants with similar known characteristics. If not specified, participants are assumed to be male.

#### Value of Applicable Tax Revenue

Smoothed revenue of \$127,283,574 for fiscal 2024 is used as the basis of the City's revenue projection. This amount is prior to the application of the allocation percentage. Smoothed revenue is calculated as actual revenue less unrecognized revenue growth. Unrecognized revenue growth is equal to the difference between actual and expected revenue growth, and is recognized over a five-year period, further adjusted, if necessary, to be within 20% of the actual revenue. This method is applied prospectively to revenue growth occurring during fiscal 2022 and later.

Actual revenue for fiscal 2024 was \$131,031,172.

#### **Tax Revenue Growth Rate**

4.25%. This assumption is determined by the City. Segal has not reviewed the information used to set this assumption, but Segal previously reviewed the sensitivity of this assumption when it was initially set.

#### **Projected Tax Revenue Allocation**

6.10%. This percentage is determined by the City; last year's percentage was 6.10%.

#### **Administrative Expenses**

Previous year's actual expenses; \$138,000 for October 1, 2024.



#### **Family Composition**

60% of participants are assumed to be married. None are assumed to have dependent children. Females are assumed to be three years younger than their spouses.

#### Actuarial value of assets

Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual and the expected market return, and is recognized over a five - year period, further adjusted, if necessary, to be within 20% of the market value

#### Actuarial cost method

Entry Age Normal Actuarial Cost Method. Entry Age is the age at the time the participant commenced employment. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis based on each member's benefit accrual rate and are allocated by compensation.

Normal Cost is not included for participants who are assumed to retire with 100% certainty in the upcoming plan year based on the retirement assumptions.



## **Exhibit 2: Summary of plan provisions**

This exhibit summarizes the major provisions of the Plan included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

#### **Plan year**

October 1 through September 30

#### **Plan status**

Closed to new entrants

#### **Normal retirement**

Age Requirement	Age 65 with five years of Credited Service or any age with 20 years of Credited Service.
Regular Benefit Amount	3.0% of Final Monthly Compensation times years of Credited Service for the first 20 years plus 2.0% of Final Monthly Compensation times years of Credited Service for years in excess of 20. However, the benefit may not exceed 80% of Final Monthly Compensation.
Supplemental Benefit Amount	Monthly benefit of \$5 times years of Credited Service, not less than \$25 per month or more than \$150 per month.
Minimum Benefit Amount	\$77.96 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1st.

#### **Early retirement**

None



### **Service-Incurred Disability**

Age Requirement	None
Service Requirement	None
Regular Benefit Amount	50% of the average salary earned in the last three years immediately preceding disability retirement.
Supplemental Benefit Amount	Monthly benefit of \$5 times years of Credited Service, not less than \$25 per month or more than \$150 per month.
Minimum Benefit Amount	\$77.96 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1st.

#### **Non-Service Incurred Disability**

Age Requirement	None
Service Requirement	5 years of Credited Service
Regular Benefit Amount	25% percent of the average salary earned in the last three years immediately preceding disability retirement. For each year of service in excess of 5 years, the benefit shall be increased 2.5%, to a maximum of 50%.
Supplemental Benefit Amount	Monthly benefit of \$5 times years of Credited Service, not less than \$25 per month or more than \$150 per month.
Minimum Benefit Amount	\$77.96 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1st.
Vesting	
Age Requirement	None
Service Requirement	5 years of Credited Service
Regular Benefit Amount	Accrued Normal Retirement Benefit payable at age 65.
Supplemental Benefit Amount	Monthly benefit of \$5 times years of Credited Service, not less than \$25 per month or more than \$150 per month. Payable at Age 65.
Minimum Benefit Amount	\$77.96 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1st.





#### Spouse's pre-retirement death benefit [(applicable only if elected by employee)]

Age Requirement	None
Service Requirement	None
Regular Benefit Amount	If the Member is eligible for retirement, the surviving spouse is entitled to 75% of the member's accrued retirement benefit. If the Member is not eligible for retirement, the surviving spouse is entitled to 75% of the pension the Member would have received if the Member had worked to eligibility for Normal Retirement at current salary, using a 2% annual accrual rate.
Supplemental Benefit Amount	Monthly benefit of \$5 times years of Member's Credited Service, not less than \$25 per month or more than \$150 per month.
Minimum Benefit Amount	75% of \$77.96 per whole year of Member's Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1st.

#### Spouse's post-retirement death benefit(s)

Regular Benefit Amount	Surviving spouse is entitled to 75% of the Member's regular benefit.
Supplemental Benefit Amount	Surviving spouse is entitled to 100% of the Member's supplemental benefit.
Minimum Benefit Amount	75% of the Member's Minimum Benefit Amount at retirement.

#### Member

All City Corrections Officers hired prior to October 1, 2017.

#### **Member Contributions**

10% of Earnable Compensation, additional 2% of Earnable Compensation during DROP participation.

#### **Credited Service**

The number of full years and months worked from date of participation to date of termination or retirement, plus any prior service purchased.



#### **Final Monthly Compensation**

Average monthly rate of Earnable Compensation during the highest 36 consecutive months (78 pay periods) out of the last ten years of employment

#### **Earnable Compensation**

Base pay for regular hours worked as an employee, plus service raises and excluding bonuses, adjusted compensation, overtime or any extra compensation over and above regularly budgeted salaries.

### Cost of living adjustments (COLAs)

On the December 1st after the initial benefit commencement date, and on each December 1st thereafter, the regular benefit is increased by 3%.

### DROP

Members with 20 or more years of service may elect to defer receipt of their retirement benefits while continuing employment with the City for up to 5 years. Upon the effective date of participating in the DROP, a member's years of service and Final Monthly Compensation become frozen for purposes of determining pension benefits. Additional service beyond the date of DROP participation no longer accrues any additional benefits under the Retirement System. Benefits that would have been payable are accumulated at interest to date of termination and paid or rolled over in a single sum, and payments are made directly to the Member thereafter based on the accrued retirement benefit at the DROP start date. COLA increases start at termination of employment rather than at the start of the DROP

### Changes in plan provisions

There have been no changes in plan provisions since the last valuation.



## General information about the pension plan

#### **Plan description**

Plan membership. At September 30, 2024, pension plan membership consisted of the following:

Membership	Amount
Retired participants or beneficiaries currently receiving benefits	505
Inactive participants with a vested right to a deferred or immediate benefit	4
Active members	319
Total	828



### **Exhibit 1: Net Pension Liability**

Components of the Net Pension Liability	Current	Prior
Reporting date for employer under GASB 68	September 30, 2025	September 30, 2024
Measurement date and reporting date for the Plan under GASB 67	September 30, 2024	September 30, 2023
Total Pension Liability	\$610,927,078	\$584,290,447
Plan Fiduciary Net Position	321,805,000	278,539,000
Net Pension Liability	289,122,078	305,751,447
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	52.67%	47.67%

The Net Pension Liability (NPL) for the plan was measured as of September 30, 2024 and 2023. Plan Fiduciary Net Position (plan assets) was valued as of the measurement dates and the Total Pension Liability (TPL) was determined from actuarial valuations as of October 1, 2024 and 2023, respectively.

**Plan provisions**. The plan provisions used in the measurement of the NPL are the same as those used in the GERP actuarial valuations as of October 1, 2024 and October 1, 2023, respectively.

Actuarial assumptions. The Total Pension Liability (TPL) as of September 30, 2024, which was determined based on the results of an actuarial valuation as of October 1, 2024, used the following actuarial assumptions, applied to all periods included in the measurement:

Assumption Type	Assumption
Wage inflation	2.50%
Salary increases	3.50% - 10.00%, of which 2.50% is the Plan's long-term payroll inflation assumption
Net investment rate of return	6.50%, net of pension plan investment expense, including inflation
Other assumptions	See the October 1, 2024 actuarial valuation for a complete description of all actuarial assumptions. These assumptions were developed in the analysis of actuarial experience study for the period October 1, 2017 through September 30, 2022.

Detailed information regarding all actuarial assumptions can be found in Section 4, Exhibit I.



#### Determination of discount rate and investment rates of return

The long-term expected rate of return on pension plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of inflation) are developed for each major asset class. These returns are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage, adding expected inflation. The target allocation (approved by the Board) and projected arithmetic real rates of return for each major asset class, after deducting inflation, but before investment expenses, used in the derivation of the long-term expected investment rate of return assumption are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return <sup>1</sup>
Domestic equity	30.00%	6.10%
International equity	23.00%	6.20%
Fixed income	20.00%	1.90%
Real estate	15.00%	3.50%
Private equity	6.00%	9.65%
Private credit	6.00%	6.10%
Total	100.00%	

**Discount rate.** The discount rate used to measure the Total Pension Liability (TPL) was 6.50% as of September 30, 2024 and September 30, 2023. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the actuarially determined contribution rates. For this purpose, only employer contributions that are intended to fund benefits for current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs for future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on those assumptions, the Plan Fiduciary Net Position (FNP) was projected to be available to make all projected future benefit payments for current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the TPL as of both September 30, 2024 and September 30, 2023.



<sup>&</sup>lt;sup>1</sup> Geometric real rates of return are net of inflation.

#### **Discount rate sensitivity**

Sensitivity of the Net Pension Liability to changes in the discount rate. The following presents the Net Pension Liability (NPL) of the CORP as of September 30, 2024, calculated using the discount rate of 6.50%, as well as what the Plan's NPL would be if it were calculated using a discount rate that is 1-percentage-point lower (5.50%) or 1-percentage-point higher (7.50%) than the current rate.

		Current		
Item	1% Decrease (5.50%)	Discount Rate (6.50%)	1% Increase (7.50%)	
Net Pension Liability	\$375,087,305	\$289,122,078	\$219,591,068	



## **Exhibit 2: Schedule of changes in Net Pension Liability**

Components of the Net Pension Liability	Current	Prior
Reporting and Measurement Dates		
Reporting date for employer under GASB 68	September 30, 2025	September 30, 2024
Measurement date and reporting date for the Plan under GASB 67	September 30, 2024	September 30, 2023
Total Pension Liability		
Service cost	\$8,736,819	\$8,023,179
Interest	37,718,965	35,721,919
Change of benefit terms	0	0
Differences between expected and actual experience	5,651,847	9,723,148
Changes of assumptions	0	1,104,396
Benefit payments, including refunds of member contributions	-25,471,000	-23,654,000
Net change in Total Pension Liability	\$26,636,631	\$30,918,642
Total Pension Liability — beginning	584,290,447	553,371,805
Total Pension Liability — ending	\$610,927,078	\$584,290,447
Plan Fiduciary Net Position		
Contributions — employer	\$19,386,000	\$17,196,000
Contributions — employee	2,854,000	3,333,000
Net investment income	46,635,000	32,101,000
Benefit payments, including refunds of member contributions	-25,471,000	-23,654,000
Administrative expense	-138,000	-97,000
Other	0	0
Net change in Plan Fiduciary Net Position	\$43,266,000	\$28,879,000
Plan Fiduciary Net Position — beginning	278,539,000	249,660,000
Plan Fiduciary Net Position — ending	\$321,805,000	\$278,539,000



Components of the Net Pension Liability	Current	Prior	
Net Pension Liability			
Net Pension Liability – ending	\$289,122,078	\$305,751,447	
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	52.67%	47.67%	
Covered payroll <sup>1</sup>	\$24,070,977	\$24,526,732	
Plan Net Pension Liability as percentage of covered payroll	1,201.12%	1,246.60%	

#### Notes to Schedule:

- Benefit changes: No benefit changes have been reflected in the past two fiscal years.
- Change of Assumptions: As of September 30, 2023, the rates of withdrawal and retirement were updated, as well as the salary scale

<sup>1</sup> Covered payroll represents compensation earnable and pensionable compensation. Only compensation earnable and pensionable compensation that would possibly go into the determination of the retirement benefits are included.

City of Jacksonville Corrections Officers Retirement Plan Actuarial Valuation as of October 1, 2024



### **Exhibit 3: Schedule of employer contributions**

	Year Ended September 30	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll <sup>1</sup>	Contributions as a Percentage of Covered Payroll <sup>2</sup>
	2015	\$17,618,896	\$17,832,000	-\$213,104	\$28,091,083	63.48%
	2016	18,863,935	18,864,000	-65	26,585,054	70.96%
	2017	19,155,820	19,162,000	-6,180	27,548,015	69.56%
	2018	18,643,233	13,973,000	4,670,233	28,164,021	49.61%
	2019	19,141,501	14,498,000	4,643,501	28,726,006	50.47%
	2020	20,111,161	15,058,000	5,053,161	28,268,208	53.27%
	2021	20,812,130	15,061,000	5,751,130	25,903,031	58.14%
	2022	22,727,069	17,610,000	5,117,069	25,260,815	69.71%
	2023	23,748,105	17,196,000	6,552,105	24,526,732	70.11%
	2024	26,128,351	19,386,000	6,742,351	24,070,977	80.54%

#### See accompanying notes to this schedule on next page.

<sup>1</sup> Pensionable payroll as of the measurement date.

<sup>2</sup> The City contributed the percentage of payroll represented by the actuarially determined contribution in the corresponding actuarial valuation for years ending on or before September 30, 2016. Actual dollar contributions may be more or less than the actuarially determined contributions due to actual payroll being different from projected payroll. Effective with the September 30, 2017 fiscal year, the City implemented a policy to ensure that the calculated dollar amount of the actuarially determined contribution was met.

Effective with the September 30, 2018 fiscal year, the City began contributing based on an adjusted state minimum required contribution that reflects an adjustment for an offset for amortization of the discounted value of projected surtax revenue allocated to the plan beginning in 2030.

City of Jacksonville Corrections Officers Retirement Plan Actuarial Valuation as of October 1, 2024



## Methods and assumptions used to establish "actuarially determined contribution" rates:

#### Valuation date

Actuarially determined contribution rates are calculated as of October 1, two years prior to the end of the fiscal year in which contributions are reported

#### Actuarial cost method

Entry Age Actuarial Cost Method

#### **Amortization method**

Level percent of payroll, using 1.25% annual increases. The Fund's payroll inflation assumption was 2.50% as of October 1, 2022. Per Part VII, Chapter 112.64(5)(a) of Florida Statutes, the payroll growth assumption used for amortization of the unfunded liability is not allowed to exceed the average annual payroll growth for the proceeding ten years. However, pursuant to Chapter 112.64(5)(b), and after adjusting this analysis to account for bargained pay level increases and inclusion of DC plan participants in the total payroll, the assumption was set at 1.25%

#### Remaining amortization period.

As of October 1, 2022 the effective amortization period is 24 years.

#### Asset valuation method

The market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between actual and expected returns on a market value basis and is recognized over a five-year period. The deferred return is further adjusted, if necessary, so that the actuarial value of assets will stay within 20% of the market value of assets.

#### Investment rate of return

6.50%, net of pension plan investment expense, including inflation.



#### Inflation rate

2.50%

#### **Projected salary increases**

2.80% - 7.50%, of which 2.50% is the Plan's long-term payroll inflation assumption.

### Cost of living adjustments

Plan provisions contain a 3.00% COLA

#### **Other information**

Same as those used in the October 1, 2022 funding actuarial valuation.



## **Exhibit 4: Pension expense**

Components of pension expense	Current	Prior
Reporting date for employer under GASB 68	September 30, 2025	September 30, 2025
Measurement date	September 30, 2024	September 30, 2024
Service cost	\$8,736,819	\$8,023,179
Interest	37,718,965	35,721,919
Current-period benefit changes	0	0
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	1,883,949	2,430,787
Expensed portion of current-period changes of assumptions	0	276,099
Member contributions	-2,854,000	-3,333,000
Projected earnings on pension plan investments	-17,995,543	-16,433,246
Expensed portion of current-period differences between actual and projected earnings on pension plan investments	-5,727,893	-3,133,550
Administrative expense	138,000	97,000
Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	28,125,817	33,406,138
Recognition of beginning of year deferred inflows of resources as pension expense	-12,121,467	-10,742,277
Pension expense	\$37,904,647	\$46,313,049



#### Deferred outflows of resources and deferred inflows of resources

Deferred Outflows and Inflows	Current	Prior	
Reporting and measurement dates			
Reporting date for employer under GASB 68	September 30, 2025	September 30, 2024	
Measurement date	September 30, 2024	September 30, 2023	
Deferred outflows of resources			
Changes of assumptions	\$5,041,543	\$11,028,714	
Net difference between projected and actual earnings on pension plan investments	0	10,053,331	
Difference between expected and actual experience in the Total Pension Liability	12,009,819	16,046,102	
Total deferred outflows of resources	\$17,051,362	\$37,128,147	
Deferred inflows of resources			
Changes of assumptions	0	0	
Net difference between projected and actual earnings on pension plan investments	15,071,231	0	
Difference between expected and actual experience in the Total Pension Liability	0	0	
Total deferred inflows of resources	\$15,071,231	\$0	
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:			
Reporting date for employer under GASB 68 year ended September 30:			
2025	N/A	\$16,004,350	
2026	\$7,725,620	11,569,562	
2027	8,843,844	12,687,786	
2028	-8,861,442	-3,133,551	
2029	-5,727,891	0	
2030	0	0	
Thereafter	0	0	



#### Schedule of recognition of change in total Net Pension Liability

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences between Expected and Actual Experience on Total Pension Liability

Reporting Date for Employer under GASB 68 Year Ended September 30	Differences between Expected and Actual Experience	Recognition Period (Years)	2024	2025	2026	2027	2028	2029	2030	Thereafter
2018	-\$2,054,491	7.00	-\$293,499	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2019	17,044,608	6.00	2,840,768	0	0	0	0	0	0	0
2020	5,491,767	5.00	1,098,353	0	0	0	0	0	0	0
2021	9,965,234	5.00	1,993,047	1,993,047	0	0	0	0	0	0
2022	5,071,327	5.00	1,014,265	1,014,265	1,014,265	0	0	0	0	0
2023	9,464,327	4.00	2,366,082	2,366,082	2,366,082	0	0	0	0	0
2024	9,723,148	4.00	2,430,787	2,430,787	2,430,787	2,430,787	0	0	0	0
2025	5,651,847	3.00	N/A	1,883,949	1,883,949	1,883,949	0	0	0	0
Total <sup>1</sup>			N/A	\$9,688,130	\$7,695,083	\$4,314,736	\$0	\$0	\$0	\$0

<sup>1</sup> Net increase (decrease) in pension expense

City of Jacksonville Corrections Officers Retirement Plan Actuarial Valuation as of October 1, 2024



#### Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Assumption Changes

Reporting Date for Employer under GASB 68 Year Ended September 30	Assumption Changes	Recognition Period (Years)	2024	2025	2026	2027	2028	2029	2030	Thereafter
2018	\$9,950,689	7.00	\$1,421,527	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2019	718,682	6.00	119,780	0	0	0	0	0	0	0
2020	-7,304,312	5.00	-1,460,862	0	0	0	0	0	0	0
2021	6,108,635	5.00	1,221,727	1,221,727	0	0	0	0	0	0
2022	11,440,746	5.00	2,288,149	2,288,149	2,288,149	0	0	0	0	0
2023	8,804,784	4.00	2,201,196	2,201,196	2,201,196	0	0	0	0	0
2024	1,104,396	4.00	276,099	276,099	276,099	276,099	0	0	0	0
2025	0	3.00	N/A	0	0	0	0	0	0	0
Total <sup>1</sup>			N/A	\$5,987,171	\$4,765,444	\$276,099	\$0	\$0	\$0	\$0



#### Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences between Projected and Actual Earnings on Pension Plan Investments

Reporting Date for Employer under GASB 68 Year Ended September 30	Differences between Projected and Actual Earnings	Recognition Period (Years)	2024	2025	2026	2027	2028	2029	2030	Thereafter
2020	\$12,533,895	5.00	\$2,506,779	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2021	6,100,070	5.00	1,220,014	1,220,014	0	0	0	0	0	0
2022	-44,939,578	5.00	-8,987,916	-8,987,916	-8,987,916	0	0	0	0	0
2023	65,572,256	5.00	13,114,451	13,114,451	13,114,451	13,114,451	0	0	0	0
2024	-15,667,754	5.00	-3,133,550	-3,133,551	-3,133,551	-3,133,551	-3,133,551	0	0	0
2025	-28,639,457	5.00	N/A	-5,727,893	-5,727,891	-5,727,891	-5,727,891	-5,727,891	0	0
Total <sup>1</sup>			N/A	-\$3,514,895	-\$4,734,907	\$4,253,009	-\$8,861,442	-\$5,727,891	\$0	\$0



#### Total Increase (Decrease) in Pension Expense

Reporting Date for Employer under GASB 68 Year Ended September 30	Total Increase (Decrease) in Pension Expense	2024	2025	2026	2027	2028	2029	2030	Thereafter
50	Expense	2024	2023	2020	2021	2020	LULJ	2030	mercanter
2018	-\$5,219,891	\$1,128,028	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2019	13,730,318	2,960,548	0	0	0	0	0	0	0
2020	10,721,350	2,144,270	0	0	0	0	0	0	0
2021	22,173,939	4,434,788	4,434,788	0	0	0	0	0	0
2022	-28,427,505	-5,685,502	-5,685,502	-5,685,502	0	0	0	0	0
2023	83,841,367	17,681,729	17,681,729	17,681,729	13,114,451	0	0	0	0
2024	-4,840,210	-426,664	-426,665	-426,665	-426,665	-3,133,551	0	0	0
2025	-22,987,610	N/A	-3,843,944	-3,843,942	-3,843,942	-5,727,891	-5,727,891	0	0
Total <sup>1</sup>		N/A	\$12,160,406	\$7,725,620	\$8,843,844	-\$8,861,442	-\$5,727,891	\$0	\$0



#### Schedule of reconciliation of Net Pension Liability

Item	Current	Prior
Reporting and measurement dates		
Reporting date for employer under GASB 68	September 30, 2025	September 30, 2024
Measurement date	September 30, 2024	September 30, 2023
Net Pension Liability		
Beginning Net Pension Liability	\$305,751,447	\$303,711,805
Pension expense	37,904,647	46,313,049
Employer contributions	-19,386,000	-17,196,000
New net deferred inflows/outflows	-19,143,666	-4,413,546
Recognition of prior deferred inflows/outflows	-16,004,350	-22,663,861
Ending Net Pension Liability	\$289,122,078	\$305,751,447



The following list defines certain technical terms for the convenience of the reader:

Term	Definition
Actuarial accrued liability for actives	The equivalent of the accumulated normal costs allocated to the years before the valuation date.
Actuarial accrued liability for retirees and beneficiaries	Actuarial Present Value of lifetime benefits to existing retirees and beneficiaries. This sum takes account of life expectancies appropriate to the ages of the annuitants and the interest that the sum is expected to earn before it is entirely paid out in benefits.
Actuarial cost method	A procedure allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability that are used to determine the actuarially determined contribution.
Actuarial gain or loss	A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., assets earn more than projected, salary increases are less than assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results yield actuarial liabilities that are larger than projected.
Actuarially equivalent	Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.
Actuarial present value	The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. Each such amount or series of amounts is: Adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.) Multiplied by the probability of the occurrence of an event (such as survival, death, disability, withdrawal, etc.) on which the payment is conditioned, and
	Discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Term	Definition
Actuarial present value of future benefits	The Actuarial Present Value of benefit amounts expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age, anticipated future compensation, and future service credits. The Actuarial Present Value of Future Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive members entitled to either a refund of member contributions or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.
Actuarial valuation	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan, as well as Actuarially Determined Contributions.
Actuarial value of assets	The value of the Plan's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly plans use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the Actuarially Determined Contribution.
Actuarially determined	Values that have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the Plan.
Actuarially determined contribution	The employer's contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under the Plan's funding policy. The ADC consists of the Employer Normal Cost and the Amortization Payment.
Amortization method	A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the Unfunded Actuarial Accrued Liability. Under the Level Percentage of Pay method, the Amortization Payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the Unfunded Actuarial Accrued Liability. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.
Amortization payment	The portion of the pension plan contribution, or ADC, that is intended to pay off the Unfunded Actuarial Accrued Liability.
Assumptions or actuarial assumptions	The estimates upon which the cost of the Plan is calculated, including: Investment return — the rate of investment yield that the Plan will earn over the long-term future; Mortality rates — the rate or probability of death at a given age for employees and retirees; Retirement rates — the rate or probability of retirement at a given age or service; Disability rates — the rate or probability of disability retirement at a given age; Withdrawal rates — the rate or probability at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement; Salary increase rates — the rates of salary increase due to inflation, real wage growth and merit and promotion increases



Term	Definition
Closed amortization period	A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example, if the amortization period is initially set at 20 years, it is 19 years at the end of one year, 18 years at the end of two years, etc. See Open Amortization Period.
Decrements	Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or withdrawal.
Defined benefit plan	A retirement plan in which benefits are defined by a formula based on the member's compensation, age and/or years of service.
Defined contribution plan	A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.
Employer normal cost	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
Experience study	A periodic review and analysis of the actual experience of the Plan that may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified based on recommendations from the Actuary.
Funded ratio	The ratio of the Actuarial Value of Assets (AVA) to the Actuarial Accrued Liability (AAL). Plans sometimes also calculate a market funded ratio, using the Market Value of Assets (MVA), rather than the AVA.
GASB 67 and GASB 68	Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68. These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 67 sets the rules for the systems themselves.
Investment return	The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.
Net Pension Liability (NPL)	The Net Pension Liability is equal to the Total Pension Liability minus the Plan Fiduciary Net Position.
Normal cost	The portion of the Actuarial Present Value of Future Benefits and expenses, if applicable, allocated to a valuation year by the Actuarial Cost Method. Any payment with respect to an Unfunded Actuarial Accrued Liability is not part of the Normal Cost (see Amortization Payment). For pension plan benefits that are provided in part by employee contributions, Normal Cost refers to the total of member contributions and employer Normal Cost unless otherwise specifically stated.
Open amortization period	An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. If the initial period is set as 30 years, the same 30-year period is used in each future year in determining the Amortization Period.



Term	Definition
Plan Fiduciary Net Position	Market value of assets.
Service costs	The portions of the actuarial present value of projected benefit payments that are attributed to valuation years.
Total Pension Liability (TPL)	The actuarial accrued liability under the entry age normal cost method and based on the blended discount rate as described in GASB 67 and 68.
Unfunded actuarial accrued liability	The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. This value may be negative, in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus or an Overfunded Actuarial Accrued Liability.
Valuation date or actuarial valuation date	The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Benefits is determined. The expected benefits to be paid in the future are discounted to this date.



# RVK

## Monthly Performance Report City of Jacksonville Employees' Retirement System

As of February 28, 2025

PORTLAND BOISE CHICAGO NEW YORK

#### **Capital Markets Review**



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. Performance for HFRI FOF Comp Index is currently unavailable.



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



Schedule of Investable Assets						
Periods Ending	Beginning Market Value (\$)	Net Cash Flows (\$)	Gain/Loss (\$)	Ending Market Value (\$)	% Return	
CYTD	2,456,544,289	495,429	47,805,765	2,504,845,483	1.95	
FYTD	2,475,947,332	1,118,048	27,780,102	2,504,845,483	1.12	

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. Fiscal year for the COJ ends 09/30.



February 28, 2025 : \$2,504,845,483		Market Value (\$)	Allocation (%)
	Eagle Capital Large Cap Value (SA)	173,204,018	6.91
	Wellington Select Equity Income Fund (SA)	159,054,649	6.35
	BNYM DB Lg Cap Stock Idx NL (CF)	124,893,249	4.99
	Loomis, Sayles & Co Lg Cap Grth (CF)	151,573,665	6.05
	Kayne Anderson US SMID Value (SA)	71,334,717	2.85
	Systematic Financial US SMID Value (SA)	71,058,740	2.84
	Pinnacle Associates US SMID Cap Growth (SA)	68,736,788	2.74
	Silchester Intl Val Equity (CF)	260,886,503	10.42
	Bail Giff Intl Gro;4 (BGEFX)	188,663,847	7.53
	Acadian Emg Mkts Eq II (CF)	158,803,684	6.34
	Baird Core Fixed Income (SA)	124,963,109	4.99
	Loomis Sayles Multisector Full Discretion (CF)	185,684,100	7.41
	Schroder Flexible Secured Income LP (CF)	188,936,872	7.54
	Harrison Street Core Property LP	113,882,039	4.55
	PGIM Real Estate PRISA II LP	44,866,491	1.79
	Principal US Property (CF)	103,654,560	4.14
	UBS Trumbull Property LP	50,445,365	2.01
	Vanguard RE Idx;ETF (VNQ)	1,402,633	0.06
	Abacus Multi-Family Partners VI LP	8,389,059	0.33
	H.I.G. Realty Partners IV (Onshore) LP	27,831,974	1.11
	Bell Value-Add Fund VII (CF)	7,224,363	0.29
	Hammes Partners IV LP	1,636,904	0.07
	Blue Owl Digital Infrastructure Fund III-A LP	7,017,499	0.28
	Ares US Real Estate Opportunity IV LP	2,032,947	0.08
	Adams Street Private Equity (SA)	94,858,966	3.79
	Hamilton Lane Private Credit (SA)	90,855,989	3.63
	Dreyfus Gvt CM;Inst (DGCXX)	22,905,673	0.91
	Transition Account	47,081	0.00

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


	Allocatio	Allocation				Performance (%)							
	Market	0/.	MTD	ОТП	CVTD	EVTD	1	3	5	7	10	Since	Inception
	Value (\$)	/0		QID	CIID	FIID	Year	Years	Years	Years	Years	Incep.	Date
Total Fund	2,504,845,483	100.00	-0.59	1.95	1.95	1.12	9.12	4.79	7.68	5.99	6.36	6.35	07/01/1999
Total Fund Policy Index			0.16	2.43	2.43	1.19	10.42	5.81	8.58	6.92	6.72	6.14	
Difference			-0.75	-0.48	-0.48	-0.07	-1.29	-1.02	-0.90	-0.93	-0.37	0.21	
Actual Allocation Index			0.00	2.42	2.42	0.61	9.35	4.14	7.24	N/A	N/A	N/A	
Difference			-0.59	-0.47	-0.47	0.51	-0.23	0.65	0.44	N/A	N/A	N/A	
Actual Allocation Index (Net of Alts)			0.00	2.41	2.41	0.77	9.16	4.15	7.37	N/A	N/A	N/A	
Difference			-0.59	-0.46	-0.46	0.35	-0.04	0.63	0.31	N/A	N/A	N/A	
Total Equity	1,428,209,860	57.02	-1.21	2.57	2.57	0.61	12.49	8.24	12.07	8.70	9.14	6.99	07/01/1999
US Equity	819,855,827	32.73	-2.57	1.20	1.20	3.57	15.04	10.93	14.91	11.97	11.31	7.91	07/01/1999
US Equity Index			-1.92	1.18	1.18	3.84	17.53	11.59	16.12	13.13	12.36	8.08	
Difference			-0.66	0.02	0.02	-0.27	-2.49	-0.65	-1.21	-1.16	-1.06	-0.18	
International Equity	608.354.034	24.29	0.68	4.47	4.47	-3.12	9.28	4.53	7.96	3.88	5.79	5.92	07/01/1999
International Equity Index			1.39	5.47	5.47	-2.54	9.65	4.62	7.55	4.23	4.83	4.31	
Difference			-0.70	-1.01	-1.01	-0.58	-0.37	-0.08	0.41	-0.35	0.96	1.61	
Fixed Income	499.584.080	19.94	0.56	1.77	1.77	1.21	7.82	1.24	0.64	1.71	1.73	4.40	07/01/1999
Fixed Income Index	,,		2 07	2 68	2.68	-0.12	6.30	0.11	-0.07	1 94	1 72	4 05	
Difference			-1.51	-0.92	-0.92	1.33	1.52	1.13	0.71	-0.23	0.01	0.35	
Real Estate	368,383,833	14.71	-0.01	0.75	0.75	1.34	-0.50	-1.98	2.28	3.19	4.88	4.80	12/01/2005
Real Estate Index			0.02	0.05	0.05	1.07	-2.06	-3.03	2.06	3.13	4.98	5.02	
Difference			-0.03	0.70	0.70	0.27	1.56	1.05	0.22	0.06	-0.10	-0.22	
Core Real Estate	314,251,087	12.55	-0.01	0.87	0.87	1.38	-0.84	-2.46	1.99	2.98	4.73	4.72	12/01/2005
NCREIF ODCE Index (AWA) (Net)			0.00	0.00	0.00	0.96	-2.27	-3.14	1.99	3.08	4.94	5.00	
Difference			-0.01	0.87	0.87	0.42	1.43	0.68	0.00	-0.10	-0.21	-0.28	
Non-Core Real Estate	54,132,746	2.16	0.00	0.03	0.03	1.20	2.58	22.01	N/A	N/A	N/A	20.74	01/01/2022
NCREIF ODCE Index (AWA) (Net) +2%			0.17	0.33	0.33	1.80	-0.31	-1.20	4.03	5.14	7.04	-1.04	
Difference			-0.16	-0.30	-0.30	-0.60	2.89	23.22	N/A	N/A	N/A	21.78	
Diversifying Assets	185,714,955	7.41	-0.08	0.26	0.26	4.53	8.07	10.46	15.11	9.60	5.39	8.24	03/01/2011
Diversifying Assets Index			-0.02	2.22	2.22	3.57	16.95	12.67	11.45	6.56	3.47	5.30	
Difference			-0.06	-1.96	-1.96	0.97	-8.88	-2.21	3.67	3.04	1.93	2.94	
Cash Equivalents	22,905,673	0.91	0.35	0.73	0.73	1.89	5.06	4.31	1.80	N/A	N/A	1.85	09/01/2018
FTSE 3 Mo T-Bill Index			0.34	0.73	0.73	1.96	5.26	4.30	2.64	2.48	1.86	2.53	
Difference			0.01	0.00	0.00	-0 07	-0.20	0.01	-0 84	N/A	N/A	-0 68	



	Allocation				Performance (%)								
	Market Value (\$)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
US Equity													
Eagle Capital Large Cap Value (SA)	173,204,018	6.91	-2.42	3.13	3.13	5.15	18.02	13.53	16.10	12.83	12.60	11.58	03/01/2007
Russell 1000 Val Index			0.41	5.05	5.05	2.97	15.75	8.65	12.51	9.35	8.95	7.50	
Difference			-2.83	-1.93	-1.93	2.18	2.27	4.88	3.59	3.48	3.64	4.08	
Russell 1000 Index			-1.75	1.38	1.38	4.16	18.11	12.07	16.54	13.54	12.71	10.42	
Difference			-0.67	1.75	1.75	0.98	-0.09	1.47	-0.44	-0.72	-0.11	1.16	
Wellington Select Equity Income Fund (SA)	159,054,649	6.35	1.43	4.79	4.79	3.55	18.99	N/A	N/A	N/A	N/A	19.10	06/01/2023
Russell 1000 Val Index			0.41	5.05	5.05	2.97	15.75	8.65	12.51	9.35	8.95	19.14	
Difference			1.02	-0.26	-0.26	0.58	3.24	N/A	N/A	N/A	N/A	-0.04	
BNYM DB Lg Cap Stock Idx NL (CF)	124,893,249	4.99	-1.76	1.37	1.37	4.15	18.15	12.49	16.77	N/A	N/A	14.57	05/01/2019
Russell 1000 Index			-1.75	1.38	1.38	4.16	18.11	12.07	16.54	13.54	12.71	14.38	
Difference			-0.01	-0.01	-0.01	-0.02	0.04	0.42	0.23	N/A	N/A	0.19	
Loomis, Sayles & Co Lg Cap Grth (CF)	151,573,665	6.05	-4.77	-0.89	-0.89	8.55	20.63	17.76	19.15	16.12	N/A	17.00	08/01/2017
Russell 1000 Grth Index			-3.59	-1.69	-1.69	5.27	19.75	14.84	19.71	17.09	16.01	17.97	
Difference			-1.17	0.80	0.80	3.29	0.88	2.92	-0.56	-0.97	N/A	-0.97	
Kayne Anderson US SMID Value (SA)	71,334,717	2.85	-2.92	-0.07	-0.07	-0.83	4.83	5.20	N/A	N/A	N/A	5.20	03/01/2022
Russell 2500 Val Index			-3.70	-0.42	-0.42	-0.68	9.33	4.92	11.39	7.69	7.55	4.92	
Difference			0.78	0.35	0.35	-0.15	-4.50	0.28	N/A	N/A	N/A	0.28	
Systematic Financial US SMID Value (SA)	71,058,740	2.84	-4.89	-2.32	-2.32	-2.37	7.29	6.52	N/A	N/A	N/A	6.52	03/01/2022
Russell 2500 Val Index			-3.70	-0.42	-0.42	-0.68	9.33	4.92	11.39	7.69	7.55	4.92	
Difference			-1.19	-1.90	-1.90	-1.68	-2.04	1.60	N/A	N/A	N/A	1.60	
Pinnacle Associates US SMID Cap Growth (SA)	68,736,788	2.74	-5.47	-2.01	-2.01	-0.34	2.28	-0.97	8.38	7.37	7.90	11.24	03/01/2010
Russell 2500 Grth Index			-6.66	-3.09	-3.09	-0.73	4.47	3.62	8.90	8.12	8.51	11.71	
Difference			1.18	1.08	1.08	0.40	-2.19	-4.59	-0.52	-0.76	-0.61	-0.47	



	Allocatio	n					Р	Performance (%)					
	Market Value (\$)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
International Equity													
Silchester Intl Val Equity (CF)	260,886,503	10.42	0.69	3.94	3.94	-5.33	5.85	5.60	8.81	4.11	5.68	8.52	06/01/2009
MSCI EAFE Val Index (USD) (Net)			3.73	9.02	9.02	1.26	15.09	9.09	9.87	4.68	4.61	6.00	
Difference			-3.04	-5.08	-5.08	-6.59	-9.23	-3.49	-1.06	-0.56	1.07	2.53	
Bail Giff Intl Gro;4 (BGEFX)	188,663,847	7.53	1.06	7.89	7.89	1.66	12.88	2.26	6.55	4.73	7.14	9.08	06/01/2009
Baillie Gifford Index			0.08	4.33	4.33	-3.89	6.40	2.48	6.11	4.26	5.08	6.95	
Difference			0.98	3.56	3.56	5.56	6.48	-0.22	0.43	0.47	2.06	2.13	
Baillie Gifford Spliced Index			1.39	5.47	5.47	-2.54	9.65	4.62	7.55	4.57	4.89	6.52	
Difference			-0.33	2.42	2.42	4.20	3.23	-2.36	-1.00	0.16	2.25	2.57	
Acadian Emg Mkts Eq II (CF)	158,803,684	6.34	0.23	1.48	1.48	-4.80	10.86	4.87	8.72	3.09	4.92	4.00	02/01/2011
MSCI Emg Mkts Index (USD) (Net)			0.48	2.28	2.28	-5.91	10.07	0.46	4.26	1.23	3.49	2.32	
Difference			-0.25	-0.80	-0.80	1.11	0.78	4.41	4.46	1.86	1.42	1.68	
Fixed Income													
Baird Core Fixed Income (SA)	124,963,109	4.99	2.28	2.85	2.85	-0.13	6.63	0.10	N/A	N/A	N/A	-0.54	03/01/2021
Bloomberg US Agg Bond Index			2.20	2.74	2.74	-0.40	5.81	-0.44	-0.52	1.66	1.51	-0.99	
Difference			0.08	0.11	0.11	0.28	0.82	0.54	N/A	N/A	N/A	0.45	
Loomis Sayles Multisector Full Discretion (CF)	185,684,100	7.41	0.00	0.88	0.88	-0.20	7.11	1.69	2.36	3.51	3.48	5.45	11/01/2007
Bloomberg Gbl Agg Bond Index			1.43	2.01	2.01	-3.20	2.98	-2.83	-1.95	-0.40	0.45	1.72	
Difference			-1.43	-1.12	-1.12	3.00	4.13	4.53	4.31	3.91	3.03	3.73	
Schroder Flexible Secured Income LP (CF)	188,936,872	7.54	0.00	1.93	1.93	3.55	8.73	N/A	N/A	N/A	N/A	8.62	10/01/2022
SOFR+1.75%			0.51	1.02	1.02	2.65	6.95	6.07	4.35	N/A	N/A	6.83	
Difference			-0.51	0.92	0.92	0.90	1.78	N/A	N/A	N/A	N/A	1.79	
SOFR+5%			0.77	1.55	1.55	4.00	10.36	9.46	7.69	N/A	N/A	10.24	
Difference			-0.77	0.38	0.38	-0.45	-1.63	N/A	N/A	N/A	N/A	-1.62	



	Allocation				Performance (%)								
	Market Value (\$)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Core Real Estate													
Harrison Street Core Property LP	113,882,039	4.55	0.00	0.88	0.88	1.03	0.44	1.42	3.61	4.55	N/A	5.55	11/01/2015
NCREIF ODCE Index (AWA) (Net)			0.00	0.00	0.00	0.96	-2.27	-3.14	1.99	3.08	4.94	4.18	
Difference			0.00	0.88	0.88	0.07	2.71	4.56	1.62	1.47	N/A	1.36	
PGIM Real Estate PRISA II LP	44,866,491	1.79	0.00	1.95	1.95	3.05	-2.49	-3.76	1.63	3.20	5.33	5.24	01/01/2015
NCREIF ODCE Index (AWA) (Net)			0.00	0.00	0.00	0.96	-2.27	-3.14	1.99	3.08	4.94	4.86	
Difference			0.00	1.95	1.95	2.09	-0.22	-0.62	-0.36	0.12	0.38	0.37	
Principal US Property (CF)	103.654.560	4.14	-0.07	0.37	0.37	1.45	-0.75	-4.17	2.38	3.64	5.59	6.29	01/01/2014
NCREIF ODCE Index (AWA) (Net)			0.00	0.00	0.00	0.96	-2.27	-3.14	1.99	3.08	4.94	5.44	
Difference			-0.07	0.37	0.37	0.49	1.51	-1.03	0.39	0.55	0.64	0.86	
UBS Trumbull Property LP	50.445.365	2.01	0.00	0.81	0.81	0.64	-2.29	-4.54	-0.81	-0.16	2.12	3.55	01/01/2006
NCREIF ODCE Index (AWA) (Net)	,,		0.00	0.00	0.00	0.96	-2.27	-3.14	1.99	3.08	4.94	4.77	
Difference			0.00	0.81	0.81	-0.32	-0.02	-1.40	-2.80	-3.24	-2.82	-1.22	
Vanguard RE Idy:ETE (VNO)	1 402 633	0.06	3 69	5 40	5 40	-2.68	14 09	1 00	5 33	7 61	5 24	10.86	12/01/2008
Custom REITs Index	1,702,000	0.00	3.62	5 35	5.35	-2.67	14 14	1 15	5.40	7.06	5 56	11 52	12/01/2000
Difference			0.08	0.06	0.06	-0.01	-0.05	-0.15	-0.16	-0.36	-0.33	-0.65	

	Allocation				Performance (%)								
	Market Value (\$)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Non-Core Real Estate													
Abacus Multi-Family Partners VI LP	8,389,059	0.33	0.00	0.00	0.00	1.22	-39.39	N/A	N/A	N/A	N/A	-40.71	10/01/2022
NCREIF ODCE Index (AWA) (Net) +2%			0.17	0.33	0.33	1.80	-0.31	-1.20	4.03	5.14	7.04	-6.57	
Difference			-0.17	-0.33	-0.33	-0.58	-39.08	N/A	N/A	N/A	N/A	-34.14	
H.I.G. Realty Partners IV (Onshore) LP	27.831.974	1.11	0.00	0.00	0.00	0.92	6.37	26.89	N/A	N/A	N/A	N/A	01/01/2022
NCREIF ODCE Index (AWA) (Net) +2%			0.17	0.33	0.33	1.80	-0.31	-1.20	4.03	5.14	7.04	-1.04	
Difference			-0.17	-0.33	-0.33	-0.88	6.68	28.09	N/A	N/A	N/A	N/A	
Bell Value-Add Fund VII (CF)	7 224 363	0 29	0.00	0.23	0.23	0.23	-5.03	N/A	N/A	N/A	N/A	-12 20	04/01/2023
NCREIF ODCE Index (AWA) (Net) +2%	1,224,000	0.20	0.17	0.33	0.33	1.80	-0.31	-1 20	4 03	5 14	7 04	-4 43	04/01/2020
Difference			-0.17	-0.10	-0.10	-1.56	-4.71	N/A	N/A	N/A	N/A	-7.77	
Hammes Partners IV LP	1,636,904	0.07	0.00	0.00	0.00	3.19	-50.81	N/A	N/A	N/A	N/A	-57.09	10/01/2023
NCREIF ODCE Index (AWA) (Net) +2%			0.17	0.33	0.33	1.80	-0.31	-1.20	4.03	5.14	7.04	-3.21	
Difference			-0.17	-0.33	-0.33	1.40	-50.49	N/A	N/A	N/A	N/A	-53.88	
Blue Owl Digital Infrastructure Fund III-A LP	7,017,499	0.28	0.01	0.03	0.03	2.29	N/A	N/A	N/A	N/A	N/A	28.00	04/01/2024
NCREIF ODCE Index (AWA) (Net) +2%			0.17	0.33	0.33	1.80	-0.31	-1.20	4.03	5.14	7.04	2.16	
Difference			-0.16	-0.30	-0.30	0.50	N/A	N/A	N/A	N/A	N/A	25.84	
Ares US Real Estate Opportunity IV I P	2 032 9/17	0.08	0.00	0.00	0.00	N/A	N/A	NI/A	N/A	N/A	N/A	0.00	11/01/2024
NCREIE ODCE Index (AWA) (Net) +2%	2,002,041	0.00	0.17	0.33	0.33	1.80	-0.31	-1 20	4.03	5 14	7 04	1.63	11/01/2024
Difference			-0.17	-0.33	-0.33	N/A	N/A	N/A	N/A	N/A	N/A	-1.63	
Diversifying Assets													
Adams Street Private Equity (SA)	94,858,966	3.79	0.00	0.00	0.00	4.59	4.49	7.81	N/A	N/A	N/A	18.53	11/01/2020
S&P 500 Index+3%			-1.06	1.94	1.94	5.17	21.96	15.93	20.36	17.19	16.37	20.09	
Difference			1.06	-1.94	-1.94	-0.59	-17.47	-8.12	N/A	N/A	N/A	-1.56	
Hamilton Lane Private Credit (SA)	90,855,989	3.63	-0.16	0.54	0.54	4.48	12.24	8.93	N/A	N/A	N/A	4.18	04/01/2021
ICE BofAML Gbl Hi Yld Index +2%			1.06	2.48	2.48	1.82	11.52	6.36	5.80	5.89	6.60	4.42	
Difference			-1.23	-1.95	-1.95	2.66	0.72	2.56	N/A	N/A	N/A	-0.23	
Cash Equivalents													
Dreyfus Gvt CM;Inst (DGCXX)	22,905,673	0.91	0.35	0.73	0.73	1.89	5.06	4.14	2.60	2.45	1.86	1.67	05/01/2001
FTSE 3 Mo T-Bill Index			0.34	0.73	0.73	1.96	5.26	4.30	2.64	2.48	1.86	1.66	
Difference			0.01	0.00	0.00	-0.07	-0.20	-0.16	-0.03	-0.03	0.00	0.01	

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



## City of Jacksonville Employees' Retirement System Addendum

#### 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 JXP Transition, BNYM Transition, Loop Cap Transition, and 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.
- Actual Allocation Index: The Actual Allocation Index is calculated monthly, using beginning of month weights of each investment applied to its corresponding primary benchmark return. The Actual Allocation Index's Inception date is 01/2019 and prior performance is listed as "N/A".
- Actual Allocation Index (Net of Alts): The Actual Allocation Index (Net of Alts) is calculated monthly, using beginning of month weights of each investment applied to its corresponding primary benchmark return, with the exception of funds in the Core Real Estate, Non-Core Real Estate, and Diversifying Assets composites, which are represented by actual monthly composite returns. The Actual Allocation Index's Inception date is 01/2019 and prior performance is listed as "N/A".
- 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 Diversifying Assets Index is calculated monthly and consists of 50% S&P MLP Index (TR)/50% NCREIF Timberland Index through 10/2017, 67% S&P MLP Index (TR)/33% NCREIF Timberland Index through 09/2020, and calculated monthly using beginning of month investment weights applied to each corresponding primary benchmark return thereafter.

#### 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.



# RVK

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## City of Jacksonville Employees' Retirement System

## **INVESTMENT ACTIVITY REPORT: March 2025**

## **Events**

**Board Due Diligence Meetings** 1<sup>st</sup> Thursday Each Month Presentation: 12:30-2 PM City Hall Conference Room 3C

**April 3, 2025** Eagle Capital- Large Cap Core

May 1, 2025 Kayne Anderson- SMID Core

June 5, 2025 Systematic- SMID Value

**July 3, 2025** Happy 4<sup>th</sup> of July No meeting

August 7, 2025 Adams Street- PE

**September 4, 2025** TBD

**October 2, 2025** Loomis Sayles- LCG

**November 6, 2025** Payden & Rygel – Jeffrey Cleveland- Economist

**December 4, 2025** TBD Contract Status Update N/A

### Other

\*Real Estate: Harrison Street: \$30 million PGIM PRISA II: \$20 million Principal: \$40 million UBS Trumbull: Full Liquidation ~\$60 million Total: \$150 million \*redemption limitations

## **Staff Update**

**Current Manager Meetings** *Pinnacle- SMID Growth Wellington- Large Cap Value* 

**Potential Manager Meetings** 

Brandes- Equity LSV- Equity TD Epoch- General Macquarie- General Strategic Global Advisors- Equity

SMID Growth: Allspring Driehaus Geneva Hood River

## **Cash Flows**

Hamilton Lane-Private Credit Ares Special Opp II: \$0.8 M Atlantic Park: \$0.7 M Carlyle Credit Opp II: \$1.1 M Hamilton Lane Strat Op VIII:\$2M Total Called: ~\$4.6 million

### **Adams Street- Private Equity**

Tranche I: \$0 M Total Called: ~\$73 million Tranche II: \$0.5 M Total Called: ~\$6.5 million

Real Estate N/A **Provider Disbursements** N/A Total Fees: ~\$0.0 million

Provider Income + Redemptions N/A Total: \$0





#### **MICHAEL BUCK**

#### Portfolio Manager

(312) 587-3800 mbuck@driehaus.com

### DAVID MCELROY

Managing Director

(312) 587-3837 dmcelroy@driehaus.com

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## **PRESENTER BIOS**

### Michael Buck Portfolio Manager, Senior Analyst

*Tenure at Driehaus: 2002 B.A. and B.M., Northwestern University* 

Michael Buck is a portfolio manager and a senior analyst on the Driehaus US Growth Equities Team with a focus on the consumer discretionary, consumer staples and financials sectors. His in-depth fundamental research, idea generation and buy/sell recommendations are leveraged across the Driehaus Micro Cap Growth, Small Cap Growth and Small/Mid Cap Growth strategies. As portfolio manager for these three strategies, he is also responsible for providing depth of leadership to the investment team.

Mr. Buck began his career at Deloitte Consulting, LLC as a business analyst until he joined Driehaus Capital Management LLC in 2002. He received his B.A. and B.M. in economics and cello performance from Northwestern University in 2000.

### David McElroy Managing Director

Tenure at Firm: 2018 B.A., Emory University M.B.A., Georgia State University

David McElroy is responsible for marketing and selling the firm's institutional separate accounts, commingled funds and mutual funds. Mr. McElroy covers the Southeastern United States region. He has over 30 years of experience in the financial services industry.

Prior to joining Driehaus Capital Management LLC in 2018, Mr. McElroy led institutional sales and consultant relations in the south at Virtus Investment Partners/Ridgeworth Capital Management. Previously, he was the Head of Sales at Cornerstone Investment Partners, where he directed all aspects of sales and marketing infrastructure. Mr. McElroy spent a decade at Invesco, rising from Inside Sales Coordinator to Senior Director of Consultant Relations. He began his career at the Teachers and Employees Retirement System of Georgia as a Junior Analyst.

Mr. McElroy received a B.A. from Emory University and an M.B.A. from Georgia State University, Atlanta, GA. He holds the Series 6, 7, 24, 63 and 65 licenses.

## FIRM OVERVIEW

### Driehaus is an independent investment adviser managing active investment strategies on behalf of professional investors.

### **FIRM FACTS**

- Founded in 1982
- · Headquartered in Chicago
- \$19.7 billion AUM
- 87 total employees
- Registered with the SEC since 1983
- Structured as a boutique sharing common business services



### **STRENGTHS**

- Independent boutique structure
- Focus on persistent market inefficiencies
- Proven investment philosophy with differentiated sources of alpha
- Well resourced, experienced investment talent
- Strong alignment of interests with investors
- Robust business infrastructure

### **INVESTMENT STRATEGIES**

#### **US GROWTH EQUITIES**

Micro Cap Growth Small Cap Growth Small/Mid Cap Growth

#### LIFE SCIENCES

Life Sciences

#### INTERNATIONAL GROWTH EQUITIES

International Small Cap Growth International Developed Equity

#### **EMERGING MARKETS**

Emerging Markets Growth Emerging Markets Small Cap Equity

### GLOBAL

Global

LIQUID ALTERNATIVES

Event Driven

## **US EQUITIES OVERVIEW**

## The Driehaus US Growth Equities Team is responsible for four strategies.

Strategy	PM Inception	AUM	Capitalization Range
Micro Cap Growth (closed to investors)	January 1998 <sup>1</sup>	\$2,267 M	\$100 million to \$2 billion
Small Cap Growth (soft closed)	January 2006 <sup>1</sup>	\$4,910 M	\$500 million to \$7 billion
Small/Mid Cap Growth	February 2012	\$2,305 M	\$1 billion to \$20 billion
Life Sciences	February 2019	\$402 M	All Cap

- The team focuses on investing in **US-traded stocks** of companies **experiencing positive fundamental change** with market capitalizations of between \$100 million and \$20 billion.
- Investments are **allocated to the strategies based on market capitalization or sector** and may be held in one or more strategy.

<sup>1</sup>Represents dates Jeff James became Lead Portfolio Manager. Predecessor team(s) managed Micro Cap Growth from January 1996 to December 1997 and Small Cap Growth from January 1980 to December 2005.

12/31/24

## DRIEHAUS SMALL/MID CAP GROWTH STRATEGY RANKINGS

## The Driehaus Small/Mid Cap Growth strategy has produced superior results compared to most peers

	Since Inception (2/1/12) - 9/30/24 <sup>1</sup>				
	Annualized Return	Peer Ranking			
Driehaus Small/Mid Cap Growth Composite (Gross)	15.83%	1 <sup>st</sup> of 103 Peer Composites			
Driehaus Small/Mid Cap Growth Composite (Net)	15.17%	3 <sup>rd</sup> of 103 Peer Composites			

### eVestment US Small-Mid Cap Equity Universe (growth/core/value)

<sup>1</sup>Jeff James has been Lead Portfolio Manager of the Driehaus Small Mid Cap Growth strategy since inception. The performance data shown above represents past performance and does not guarantee future results. Source: eVestment Alliance

## **COMPETITIVE EDGE**

### Team

**Experience:** Lead portfolio manager inception date 2012.

Stability: No team departures in over 15 years.

## **Alignment and Incentivization**

**Skin in the game:** Portfolio Management Team has majority of their liquid net worth invested in the strategies.

**Revenue share:** Team is highly incentivized to outperform with its own P&L.

### **Differentiated Approach**

**Market anomaly:** A differentiated philosophy that identifies and capitalizes on persistent market inefficiencies.

**Biotech:** Industry typically excluded by active managers. Our deep domain expertise and proven investment framework is a differentiator.

## **Investment Process**

**Market cycles:** Robust process has been time tested and proved consistently repeatable across multiple market cycles.

**Growth profiles:** Strategy is diversified across different stages and types of growth.

## STRATEGY OVERVIEW

## Portfolio Management Team



JEFF JAMES Lead Portfolio Manager Tenure with Firm: 1997



MICHAEL BUCK Portfolio Manager Tenure with Firm: 2002

**Investment Vehicles** 



**PRAKASH VIJAYAN, CFA** Assistant Portfolio Manager Tenure with Firm: 2010

## What to Expect

- Market Capitalizations
   <\$20bn at time of purchase</li>
- Companies undergoing positive change
- Focus on rate of change of earnings
- Diversification via different growth profiles
- Unconstrained, benchmark aware portfolio
- Active trading
- ESG aware portfolio

### Investment Style

Growth equity investment approach

## Investment Objective

Seeks to outperform the Russell 2500 Growth Index over a full market cycle

## **OUR TEAM**

### Experienced portfolio managers and analysts with specific areas of expertise and coverage responsibilities.

#### **Portfolio Management**

Jeff James Lead Portfolio Manager Tenure with Firm: 1997

**Michael Buck** Portfolio Manager / Senior Analyst Consumer Discretionary/Staples/Financials Tenure with Firm: 2002

#### Assistant Portfolio Management / Analysts

Prakash Vijayan, CFA Assistant Portfolio Manager / Senior Analyst Information Technology/Communication Services Tenure with Firm: 2010

**Ben Olien**, CFA Senior Analyst Materials/Energy/Industrials Tenure with Firm: 2005

#### **Risk Coverage**

Maximilian Heitner<sup>1</sup> **Director of Research and Risk Management** Tenure with Firm: 2010

#### Traders

Jason Vedder **Director of Trading and Operations** Tenure with Firm: 2000

Michael Caldwell<sup>2</sup> Senior Analyst Health Care/Biotechnology Tenure with Firm: 2007

**Manuel Rocha** Analyst Health Care/Biotechnology Tenure with Firm: 2021

**Ryan Lowery**<sup>1</sup> **Senior Analyst** Materials/Energy/Industrials Tenure with Firm: 2014

**Felicity Huang Associate Analyst** Generalist Tenure with Firm: 2024 Alex Munns<sup>2</sup>

**Senior Analyst** Health Care/Biotechnology Tenure with Firm: 2015

Michael So<sup>1</sup> Senior Risk Analyst Tenure with Firm: 2015

**Troy Frederick** 

Tenure with Firm: 2000

Senior Trader

Abby Schlehuber<sup>1</sup>

**Environmental, Social and Governance Analyst** Tenure with Firm: 2024

Samuel Borrelli, CMT Senior Trader Tenure with Firm: 2011

**Jim Pelletier** Senior Trader Tenure with Firm: 2022

<sup>1</sup>Also serves on the firm's ESG committee. <sup>2</sup>Also has assistant portfolio manager responsibilities within the firm's research structure.

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## EQUITY INVESTMENT PHILOSOPHY

### We Believe

## Stock prices are driven by earnings growth and earnings revisions over the long-term

• Companies with superior business models, growth potential and quality management teams generate superior long-term shareholder returns

### Markets tend to misprice companies undergoing positive growth inflections

- These inefficiencies exist and persist due to investors' cognitive biases
- These inefficiencies follow predictable and investable patterns
- We capitalize on these inefficiencies by combining behavioral, macro, and fundamental analyses
- · We believe many parts of the global investment universe are informationally efficient, but behaviorally inefficient

## **INVESTMENT PHILOSOPHY**

## Our philosophy capitalizes on a persistent market inefficiency. Inefficiencies follow predictable and investable patterns.

### The Dynamics of Growth: How markets misprice securities following growth inflections



## OUR EDGE

The integration of fundamental and macro research to capitalize on the behavioral dynamics of the markets provides us a definable and repeatable edge.



Reconcile our fundamental and macro expectations with our behavioral views

## **INVESTMENT PROCESS OVERVIEW**

## A structured, repeatable process, that leads to a portfolio of mispriced securities.



#### **Investment Process**

## **BUY AND SELL DISCIPLINE**

## Turnover is a byproduct of new idea generation and risk management. We avoid complacency through our unbiased sell discipline.

<b>BUY/HOLD RATIONALE</b>	SELL REASONS
<ul> <li>High conviction that future earnings will exceed expectations</li> <li>Valuations are attractive relative to peers and stock's history</li> <li>Attractive asymmetric return potential exists (security still likely mispriced)</li> </ul>	<ul> <li>Changes to the fundamental investment thesis</li> <li>Valuation and risk/reward less favorable</li> <li>Industry or sector weakness</li> <li>Make room for higher conviction and more timely investments</li> </ul>
• Technicals confirm fundamental investment thesis	Relative strength deterioration

## FUNDAMENTAL ANALYSIS

## Develop company-specific investment theses with a defined research focus for specific growth profiles.



## **BIOTECH/PHARMA INVESTMENT FRAMEWORK**

Checking many of these boxes meaningfully improves probability of success. This framework is fully aligned with core investment philosophy.



## **BIOTECH/PHARMA CAPABILITIES**

Proven ability to generate alpha in these industries. Our outperformance driven by bottom-up security selection.

🔲 Driehaus Small/Mid Cap Growth Strategy 🛛 📟 Russell 2500® Growth Index

**Biotech/Pharma Contribution** 10% 8% 6% 4% 2% 0% -2% -4% 2015 2016 2017 2024 2018 2019 2020 2021 2022 2023

Biotech/Pharma Average Weight



Source: Driehaus Capital Management, FactSet Research Systems LLC Gross of Fee. GICS Sub-Industry Group classifications.

## PORTFOLIO CONSTRUCTION

### Our bottom-up, conviction driven process allows us to understand the risks we are taking.

- Position sizing is based on conviction
- Broad portfolio guidelines (see below) provide sensible diversification parameters
- Understand individual and aggregate risk factor exposure

Characteristic	Parameter	Rationale
Cash	Fully invested	Market timing conflicts with investment objective
Position size	Maximum ~ 3.0%	Express conviction while minimizing concentration risks
Number of holdings	~ 100	Sufficiently robust universe
Sector	Maximum 20% overweight	Manage sector concentration risks
Market capitalization	<\$20 billion at time of Investment	Allow winners to run
Off benchmark holdings / ADRs	No limit / ≤10%	Optimizes universe
Growth Profiles	Maintain exposure to Dynamic/Cyclical/Recovery/ Consistent/Biotech	Enhances end market and risk factor diversification without sacrificing conviction
Volatility	No tracking error restrictions	Avoid closet indexing
Key Risk Management Considerations	Decompose expected tracking error Understand exposures/sensitivities Technical overlay	Understand systematic risks and accentuate idiosyncratic exposures Minimize negative surprises Minimize biases

## **RISK MANAGEMENT**

### Comprehensive and robust risk management.

#### **Understand Exposures**

Monitor Exposures

- At the sector and security levelsStyle factors such as:
  - Momentum
  - Volatility
  - Valuation
- Analyze exposures on a relative, absolute and beta-adjusted basis
- Ensure appropriate portfolio diversification
- ESG factors

### **Understand Sensitivities**

Monitor Sensitivities

Intra-portfolio correlations

At the sector and security levels

• Correlations, betas, volatilities

#### Conduct / Analyze:

- Scenario analysis
- Stress tests

### RISK MANAGEMENT IS INTEGRATED INTO EVERY STEP OF THE INVESTMENT PROCESS

**Idea Generation** Ensure liquidity

**Analysis** Validate investment theses

### **Portfolio Construction** Optimize intended exposures

**Trading** Best execution

### Investment Policy Committee Multi-departmental oversight

### Compliance

Adherence to firm policies and obligations



## **PORTFOLIO CHARACTERISTICS**

**Active Share<sup>1</sup>** 100% 80% 60% 40% 20% 0% Dec Dec Dec Dec Dec '14 '15 '16 '17 '18 Dec '21 Dec Dec '23 '24 Dec Dec Dec Dec Dec Dec Dec Dec Dec '10 '11 '12 '13 '19 20 '22 '08 '09 Source: Factset Research Systems, Inc.



Driehaus Small/Mid Cap Growth Strategy

Russell 2500<sup>®</sup> Growth Index





<sup>1</sup>Active Share measures the degree of active management by a portfolio manager. <sup>2</sup>Est 3-5 Yr EPS Growth: Displays the estimated 3-5 year EPS growth rate as of the report date. <sup>3</sup>These are the scores of both the portfolio and benchmark (weighted average) of our internal Revision Model. <sup>4</sup>Medium-Term Momentum (12M return – 1M return). Exposure; Axioma World Wide Linked Fundamental Medium Horizon Risk Model. This is expressed for both the portfolio and benchmark in standard deviations. Exposures are a by-product of the investment approach and subject to change based on the market environment. Data from 12/31/10 - 12/31/24.

## PORTFOLIO REVIEW

Portfolio Characteristics		
	Strategy	Benchmark
Number of Holdings	108	1,292
Weighted Avg. Market Cap (M)	\$14,696	\$7,127
Median Market Cap (M)	\$10,594	\$1,520
Active Share	82.68	n/a
Active Share (3-year avg.) <sup>1</sup>	84.77	n/a
AU	М	
Composite: \$2,305m		

	Sector Weights (%)			
		Strategy	Benchmark	Active Weights
	Comm Services	2.1	1.8	0.3
	Consumer Discretionary	13.5	14.1	-0.6
	Consumer Staples	4.2	3.0	1.2
	Energy	4.2	3.8	0.5
	Financials	9.6	9.9	-0.3
	Health Care	20.4	20.6	-0.2
	Industrials	23.3	20.7	2.6
	Information Technology	20.3	21.0	-0.6
	Materials	1.0	3.4	-2.4
	Real Estate	0.0	1.2	-1.2
	Utilities	0.0	0.6	-0.6
	Cash	1.4	0.0	1.4

Performance Statistics <sup>2</sup> (Annualized 5 Years)							
	Strategy	Benchmark					
Information Ratio	0.93	n/a					
Beta	0.94	1.00					
Standard Deviation	23.50	23.65					
Tracking Error	7.49	n/a					
R-squared	0.90	1.00					

Top 5 Holdings <sup>3</sup>		
Company	Sector	% of Strategy
Crinetics Pharmaceuticals Inc	Health Care	2.4
Axon Enterprise Inc	Industrials	2.3
Natera, Inc.	Health Care	2.1
FTAI Aviation Ltd.	Industrials	2.1
Carvana Co. Class A	Consumer Discretionary	1.9

Sources: FactSet Research Systems Inc., Morgan Stanley Capital International and Standard & Poor's Global Industry Classification Standard methodology to identify sector classifications

<sup>1</sup>Data is calculated monthly.<sup>2</sup>Performance statistics represent the strategy's composite. <sup>3</sup>Holdings as of 11/30/24. Holdings subject to change.

Performance numbers are estimates as of the date indicated and represent the strategy's composite of small/mid cap growth accounts managed by Driehaus Capital Management. Please see the notes at the end of this presentation for additional information.

## PERFORMANCE REVIEW

Month-end Performance (%) as o	of 12/31/24 Annualized								
	MTH	QTR	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception (2/1/12)	
Driehaus Small/Mid Cap Growth (Gross)	-8.59	3.41	28.50	28.50	2.50	15.54	15.48	15.83	
Driehaus Small/Mid Cap Growth (Net)	-8.61	3.33	28.11	28.11	2.18	15.03	14.86	15.17	
Russell 2500 <sup>®</sup> Growth Index <sup>1</sup>	-8.23	2.43	13.90	13.90	-0.02	8.08	9.45	11.34	

### Annualized Calendar Year-end Performance (%)

	2012*	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Driehaus Small/Mid Cap Growth (Gross)	7.62	46.80	0.10	4.17	6.60	31.14	0.91	39.39	62.06	18.02	-31.18	21.77	28.50
Driehaus Small/Mid Cap Growth (Net)	7.08	45.79	-0.62	3.44	5.85	30.27	0.30	38.65	60.98	17.28	-31.40	21.40	28.11
Russell 2500 <sup>®</sup> Growth Index <sup>1</sup>	7.82	40.65	7.05	-0.19	9.73	24.46	-7.47	32.65	40.47	5.04	-26.21	18.93	13.90

#### \*2/1/2012 - 12/31/2012

The performance data represents the strategy's composite of small/mid cap growth accounts managed by Driehaus Capital Management LLC (DCM) (the composite). These returns are estimated for the period as the underlying accounts' data is yet to be reconciled to the custodian bank. Net of fee returns reflect the payment of advisory fees and in some instances, other fees and expenses such as administrative and custodian fees while the gross of fee returns do not. Both are net of brokerage commissions charged to the accounts and reflect the reinvestment of income and other earnings. The performance data shown above represents past performance and does not guarantee future results. Current performance may be lower or higher than the performance data quoted. Please see the notes section for additional information.

<sup>1</sup>The Russell 2500<sup>®</sup> Growth Index measures the performance of those Russell 2500<sup>®</sup> Index companies with higher price to book ratios and higher forecasted growth values. The performance data includes reinvested dividends.

## **KEY ALPHA GENERATION FEATURES**

Growth Inflection Investing	Captures a persistent market inefficiency
~100 Positions	<ul> <li>Optimizes the investment style</li> <li>Fully captures the opportunity set</li> <li>Improves the strategy's risk profile</li> </ul>
Trading	<ul> <li>Captures the sweet spot of stocks' outperformance</li> <li>Ensures stocks benefit from a positive trend</li> <li>Component of strategy's risk management</li> </ul>
Technical Integration	<ul> <li>Complements the team's deep fundamental research</li> <li>Enhances both the buy and sell discipline</li> </ul>

## APPENDIX

## THE CASE FOR US SMALL/MID CAP STOCKS

## A less-efficient asset class that has provided investors lower volatility than small cap equities and lower correlation than mid cap equities



<b>Correlation Matrix</b> Since Inception of Russell Indices: (1/29/1988 - 12/31/2024)									
	Correlation	Annualized Sample Standard Deviation							
Russell 2000 - Total Return	0.99	18.51							
Russell 2500 - Total Return	1.00	19.86							
Russell Midcap - Total Return	0.98	17.02							
S&P 500 - Gross Return	0.88	15.15							

## THE CASE FOR SMALL/MID CAP STOCKS

## $Top-performing\ stocks\ generally\ start\ as\ small/mid\ caps$

### A majority of the top 30 performing stocks over the past 10 years began with a market cap between \$1b and \$20b

Company Name	Compound Total Return	10 years ago Mkt Value (MM)	Current Mkt Value (MM)	Company Name	Compound Total Return	10 years ago Mkt Value (MM)	Current Mkt Value (MM)
Broadcom Inc.	2,882	25,684	1,086,717	Monolithic Power Systems, Inc.	1,202	1,927	28,863
Fair Isaac Corporation	2,659	2,321	48,475	Ubiquiti Inc.	1,094	2,619	20,072
Tesla, Inc.	2,624	27,886	1,296,351	Apollo Global Management Inc	1,061	3,845	93,450
Axon Enterprise Inc	2,144	1,391	45,320	Progressive Corporation	1,038	15,865	140,366
HubSpot, Inc.	1,973	1,055	35,970	Quanta Services, Inc.	1,033	6,032	46,653
Netflix, Inc.	1,726	20,639	381,002	Synopsys, Inc.	1,017	6,655	75,026
MicroStrategy Incorporated Class A	1,683	1,486	65,494	KLA Corporation	997	11,566	84,285
Ares Management Corporation	1,493	1,383	35,121	EMCOR Group, Inc.	970	2,881	20,880
Cadence Design Systems, Inc.	1,484	5,553	82,405	Microsoft Corporation	957	382,881	3,133,802
ServiceNow, Inc.	1,462	10,062	218,385	Cintas Corporation	934	9,176	73,727
Amazon.com, Inc.	1,314	143,694	2,306,888	Apple Inc.	919	647,361	3,785,304
MSCI Inc. Class A	1,310	5,315	47,024	TransDigm Group Incorporated	862	10,300	71,260
Eli Lilly and Company	1,254	76,816	732,872	XPO, Inc.	828	3,165	15,266
MercadoLibre, Inc.	1,245	5,637	86,208	Trane Technologies plc	793	16,828	83,113
Deckers Outdoor Corporation	1,238	3,153	30,854	Palo Alto Networks, Inc.	791	9,873	119,402

## THE CASE FOR SMALL/MID CAP STOCKS

## Top-performing stocks generally start as small/mid caps

### An average of 90% of the top performing<sup>1</sup> stocks over rolling 10-year periods began the period with a market cap between \$1b and \$20b

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Average
Number of Stocks	20	18	17	26	90	111	114	195	97	72	105	79
Starting Market Cap \$1 - \$20 Billion	20	17	17	25	80	97	96	172	81	59	87	68
Starting Market Cap > \$20 Billion	0	1	0	1	10	14	18	23	16	13	18	10
% Starting Market Cap \$1 -\$20 Billion	100%	94%	100%	96%	89%	87%	84%	88%	84%	82%	83%	90%

Source: FactSet Research Systems LLC

<sup>1</sup>Top performing stocks defined as any US-listed stocks with (1) cumulative returns between 500% and 20,000% over a 10-year period ending at 12/31, (2) a share price at the beginning of the period and at the end of the period greater than \$2, and (3) a market cap at the beginning of the period and at the end of the period greater than \$1 Billion.

### **Gross Performance and Volatility Analysis, Rolling 1-Year Periods**

Representative Portfolio vs. "Buy & Hold" Portfolio<sup>1</sup> - 3/1/2012 - 12/31/2024

	Representative Portfolio
Relative Performance: Average	+3.01% pts
Relative Standard Deviation: Average	-0.54% pts
Total Rolling Periods	4,323
Positive Periods	3,055 (71% of periods)
Negative Periods	1,268 (29% of periods)



**Returns and Volatility** 

Source: Driehaus Capital Management and FactSet Research Systems, LLC ("FactSet")

The table above provides insight into the value added from the turnover within the Driehaus Small/Mid Cap Growth strategy. To quantify the benefit, the strategy's actual performance is compared to a hypothetical portfolio where no trading takes place, which is called the "Buy & Hold Portfolio." The table provides outcomes for 4,231 rolling one-year periods. For these calculations, the periods are rolled each day. This means that each day, the Buy & Hold Portfolio (the static, untraded portfolio) is reset and then performance for that one-year period is determined. The next day, the process is repeated. Each of these periods is then compared to the performance of the strategy for the same period. The difference between the actual strategy performance and the Buy & Hold Portfolio performance reflects the added value of trading.

#### Construction Methodology of Buy & Hold Periods

The Buy & Hold Portfolio, which is a static untraded hypothetical portfolio, represents one-year performance, rolled every day, from March 1, 2012 through the period ended December 31, 2024. (The first one-year period started March 1, 2012 and ended February 28, 2013. The next one-year period started March 1, 2013, etc.)

Performance is gross of fees and net of transaction costs. Performance is estimated and has not been reconciled for the referenced periods. The buy & hold portfolio is gross of fees and has no transaction costs as it has no transactions.<sup>1</sup>The representative portfolio performance and volatility figures are generated by Driehaus Capital Management and represent the performance and volatility of the representative portfolio for the Driehaus Small/Mid Cap Growth strategy over rolling 12-month periods. The "buy & hold" portfolio performance and volatility are generated by FactSet Research Systems LLC and represent the performance of a static (untraded) Driehaus Small/Mid Cap Growth representative portfolio over 12-month periods.
### Net Performance and Volatility Analysis, Rolling 1-Year Periods

Representative Portfolio vs. "Buy & Hold" Portfolio<sup>1</sup> - 3/1/2012 - 12/31/2024

	Representative Portfolio
Relative Performance: Average	+3.01% pts
Relative Standard Deviation: Average	-0.54% pts
Total Rolling Periods	4,323
Positive Periods	3,055 (71% of periods)
Negative Periods	1,268 (29% of periods)



**Returns and Volatility** 

Source: Driehaus Capital Management and FactSet Research Systems, LLC ("FactSet")

The table above provides insight into the value added from the turnover within the Driehaus Small/Mid Cap Growth strategy. To quantify the benefit, the strategy's actual performance is compared to a hypothetical portfolio where no trading takes place, which is called the "Buy & Hold Portfolio." The table provides outcomes for 4,231 rolling one-year periods. For these calculations, the periods are rolled each day. This means that each day, the Buy & Hold Portfolio (the static, untraded portfolio) is reset and then performance for that one-year period is determined. The next day, the process is repeated. Each of these periods is then compared to the performance of the strategy for the same period. The difference between the actual strategy performance and the Buy & Hold Portfolio performance reflects the added value of trading.

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The Buy & Hold Portfolio, which is a static untraded hypothetical portfolio, represents one-year performance, rolled every day, from March 1, 2012 through the period ended December 31, 2024. (The first one-year period started March 1, 2012 and ended February 28, 2013. The next one-year period started March 1, 2013, etc.)

Performance is net of fees and transaction costs. Performance is estimated and has not been reconciled for the referenced periods. The buy & hold portfolio is gross of fees and has no transaction costs as it has no transactions.<sup>1</sup>The representative portfolio performance and volatility figures are generated by Driehaus Capital Management and represent the performance and volatility of the representative portfolio for the Driehaus Small/Mid Cap Growth strategy over rolling 12-month periods. The "buy & hold" portfolio performance and volatility are generated by FactSet Research Systems LLC and represent the performance of a static (untraded) Driehaus Small/Mid Cap Growth representative portfolio over 12-month periods.



Jeffrey James is the lead portfolio manager for the Micro Cap Growth, Small Cap Growth and Small/Mid Cap Growth strategies. In his role as portfolio manager, he has final responsibility for the strategies' portfolio construction, risk management and buy/sell decisions. Additionally, he is responsible for implementation of the investment philosophy, idea generation as well as the evaluation of macro-level trends and the market environment.

Mr. James began his career with Lehman Brothers in 1990. From 1991 to 1997, he worked at the Federal Reserve Bank of Chicago as an analyst and joined Driehaus Capital Management in 1997 as a sector analyst covering the information technology and energy sectors for the firm's Small Cap Growth and Mid Cap Growth strategies. In 1998, he began managing the Driehaus Micro Cap Growth strategy. From 2001 to 2005, he also served as portfolio manager for the firm's long/short hedge fund. He was named portfolio manager of the Driehaus Small Cap Growth strategy in 2006 and the portfolio manager of the Driehaus Small/Mid Cap Growth strategy in 2012. Mr. James received his B.S. in finance from Indiana University in 1990 and his M.B.A. from DePaul University in 1995.



Michael Buck is a portfolio manager and a senior analyst on the US Growth Equities Team with a focus on the consumer discretionary, consumer staples and financials sectors. His in-depth fundamental research, idea generation and buy/ sell recommendations are leveraged across the Micro Cap Growth, Small Cap Growth and Small/ Mid Cap Growth strategies. As portfolio manager for these three strategies, he is also responsible for providing depth of leadership to the team.

Mr. Buck began his career at Deloitte Consulting, LLC as a business analyst until he joined Driehaus Capital Management in 2002. He received his B.A. and B.M. in economics and cello performance from Northwestern University in 2000.



**Prakash Vijayan, CFA,** is an assistant portfolio manager and senior analyst on the US Growth Equities Team with a focus on the information technology and communication services sectors. His in-depth fundamental research, idea generation and buy/sell recommendations are leveraged across the Micro Cap Growth, Small Cap Growth and Small/Mid Cap Growth strategies.

Mr. Vijayan began his career as an equity research analyst for Beekman Capital Management in 2005 covering the technology, media and telecommunications sectors prior to joining Driehaus Capital Management in 2010. He received his Bachelors of Technology degree in mechanical engineering from Indian Institute of Technology in 2003 and a Masters of Science in mechanical engineering from Arizona State University in 2005. Mr. Vijayan is a CFA charterholder.



Michael Caldwell is a senior analyst and a portfolio manager on the US Growth Equities Team with a focus on the health care sector. His in-depth fundamental research, idea generation and buy/sell recommendations are leveraged across all four of the strategies managed by the Driehaus US Growth Equities Team. Additionally, specific to the Driehaus Life Sciences and Driehaus Event Driven strategies, Mr. Caldwell acts as a portfolio manager and is also responsible for security selection, portfolio construction and risk management.

Mr. Caldwell has been investing in healthcare equities for more than a decade and has analyzed, followed, and interacted with management of most small cap healthcare companies in the Russell 3000. Prior to joining Driehaus in 2007, Mr. Caldwell worked as a graduate research associate for the Department of Biomedical Engineering at Yale University.

Mr. Caldwell received his B.S. in biomedical engineering from Yale University.



**Ryan Lowery** is a senior analyst on the US Growth Equities Team with a focus on industrials. His in-depth fundamental research, idea generation and buy/sell recommendations are leveraged across the Driehaus Micro Cap Growth, Small Cap Growth and Small/Mid Cap Growth strategies managed by the Driehaus US Growth Equities Team. Additionally, he serves on the firm's ESG committee.

Prior to joining Driehaus Capital Management as a research intern in 2013, Mr. Lowery played professional hockey in the AHL and ECHL. He received his B.A. in mathematical economics from Colorado College in 2011.



Alex Munns is a senior analyst and an assistant portfolio manager on the US Growth Equities Team with a focus on the health care sector. His in-depth fundamental research, idea generation and buy/sell recommendations are leveraged across all four of the strategies managed by the Driehaus US Growth Equities Team. Additionally, specific to the Driehaus Life Sciences strategy, Mr. Munns acts as an assistant portfolio manager and is also responsible for security selection, portfolio construction, and risk management.

Mr. Munns has been working with or investing in health care companies since 2011. Before joining Driehaus Capital Management in 2015, Mr. Munns worked in oncology commercialization and business development with Baxalta where he performed due diligence on assets across oncology and hematology. Prior to that, he worked in business development for Terumo Cardiovascular Systems, managing contracts between the company, its suppliers, and due diligence. Mr. Munns has also taught for Teach for America in Chicago.

Mr. Munns received a B.A. from Yale University and an M.B.A. from the University of Michigan Ross School of Business.



**Ben Olien, CFA,** is a senior analyst on the US Growth Equities Team with a focus on the materials, energy, industrials and utilities sectors. His in-depth fundamental research, idea generation and buy/sell recommendations are leveraged across the Micro Cap Growth, Small Cap Growth and Small/Mid Cap Growth strategies.

Mr. Olien began his career with the International Trade Group as a futures trader until he joined Driehaus Capital Management in 2005. He received his B.B.A. in accounting and finance from the University of Wisconsin-Madison in 2003. Mr. Olien is a CFA charterholder.



**Manuel Rocha** is an analyst on the US Growth Equities Team with a focus on the health care sector. His in-depth fundamental research, idea generation and buy/sell recommendations are leveraged across all four of the strategies managed by the Driehaus US Growth Equities Team.

Mr. Rocha has been investing in life science companies since 2019. Prior to joining Driehaus, Mr. Rocha worked as a graduate research associate in the Committee on Development, Regeneration, and Stem Cell Biology at the University of Chicago. There, he was an associate with the Innovation Fund, where he performed due diligence on technology-based ventures coming out of the University.

Mr. Rocha received a B.S. in biological sciences and an M.S. in global health from the University of Notre Dame. He received his Ph.D in development, regeneration, and stem cell biology from the University of Chicago.



Felicity Huang is an associate analyst on the US Growth Equities Team. Ms. Huang's in-depth fundamental research, idea generation and buy/ sell recommendations are leveraged across the Driehaus Micro Cap Growth, Small Cap Growth and Small/Mid Cap Growth strategies managed by the Driehaus US Growth Equities Team.

Prior to joining Driehaus Capital Management in 2024, Ms. Huang was a venture capital intern. She received her B.S. in journalism with a minor in data science from Northwestern University in 2024.



Maximilian Heitner is the director of research and risk management. He is responsible for developing and recommending risk strategies to achieve the firm's investment goals as well as assisting in the analysis of investment ideas which meet investment objectives and portfolio requirements. Mr. Heitner also works with portfolio managers and analysts to monitor and analyze risk exposure, discuss new investment ideas and review the fundamental developments of stocks, industries, and/or geographic segments to enhance investment decision-making across strategies. Additionally, he serves on the firm's business management, executive and ESG committees.

Mr. Heitner joined Driehaus Capital Management in 2010. Prior to that, Mr. Heitner worked at PEAK6 Asset Management L.L.C. as a senior analyst covering large cap stocks. He also worked at Magnetar Investment Management as a quantitative analyst. Before that role, Mr. Heitner held positions at William Blair & Company LLC, Tucker Anthony, and Brokerage Consultants LLC.

Mr. Heitner received a B.A. from Brandeis University and an M.B.A. in finance and marketing from Loyola University.



Michael J. So, CPA is a senior risk analyst for the firm. He is responsible for facilitating the firm's overall risk infrastructure and functions, which includes new and existing risk platforms, various quantitative tools and processes, and other initiatives that achieve the firm's investment goals. Additionally, he serves on the firm's ESG committee.

Previously, Mr. So was the credit fund accounting manager, where he was responsible for reconciliation and ensuring accuracy in profit and loss, performance, and attribution reporting. Before joining Driehaus in 2015, he was the second vice president at Northern Trust Hedge Fund Services, supporting the largest client on the platform. Prior to Northern Trust's acquisition of Omnium, Mr. So supported a wide range of hedge fund clients at Omnium, the fund administration arm of Citadel. He has also served within the Advanced Strategies group at Mesirow Financial.

Mr. So received a BS from the University of Illinois at Urbana-Champaign. He is a certified public accountant.



Abby Schlehuber is an Environmental, Social, and Governance analyst on the Risk Management Team. As a generalist with a focus on ESG, her idea generation, interpretation of major company developments, and identifying ESG issues and data analysis are leveraged across the firm's ESG initiative efforts.

Before joining Driehaus Capital Management in 2024, Ms. Schlehuber worked as a risk and advisory services experienced associate - ESG & sustainability for BDO USA, LLP. Prior to that she worked as an ESG consultant for Conservice ESG.

Ms. Schlehuber received a B.A. in economics from the University of Notre Dame.



Jason Vedder is the director of trading and operations. He is responsible for directing the firm's domestic and international trading function, which includes supervising all traders. Additionally, he serves on the firm's business management committee. Mr. Vedder joined the firm in 2000 and has held positions of increasing responsibility prior to assuming his current role in 2010.

From 1992 to 1998 Mr. Vedder was a floor specialist and position trader on the Chicago Stock Exchange, as well as a market maker on the NASDAQ. During this time, he was also a member of the Equity Capital Formation Task Force for the US Department of the Treasury. From 1998 to 2000 he worked as a founding partner of Smart Bandwidth, LLC.

He remains an active participant in global equity market structure issues, including guest speaking at industry conferences and meeting with appointed SEC commissioners and elected government officials.

Mr. Vedder received his B.A. in economics from Albion College in 1992 and his M.B.A. from DePaul University in 2003. Mr. Vedder has passed all 3 levels of the Chartered Market Technician program (CMT).

# NOTES

#### NOTES TO PRESENTATION

#### FIRM DEFINITION

Driehaus Capital Management LLC (DCM) is a registered investment adviser with the United States Securities and Exchange Commission (SEC). DCM provides investment advisory services using growth equity and credit strategies to individuals, organizations, and institutions. The firm consists of all accounts managed by DCM (the Company).

DCM claims compliance with the Global Investment Performance Standards (GIPS®).

#### COMPOSITE DESCRIPTION

The Small/Mid Cap Growth Composite was created in February 2012. An account is considered to be a small/mid cap growth account if it primarily invests in U.S equity securities of high growth companies with market capitalization ranges at the time of purchase as those included in the Russell 2500® Growth Index between \$1 billion and \$20 billion. However, there is no requirement to be exclusively invested in small cap and mid cap stocks, and the accounts have invested, to a lesser extent, in stocks with a smaller or larger capitalization from time to time.

#### PERFORMANCE RESULTS

Net of fee returns reflect the payment of advisory fees and in some instances, other fees and expenses such as administrative and custodian fees while the gross of fee returns do not. Both are net of brokerage commissions charged to the accounts and reflect the reinvestment of income and other earnings.

Valuations and returns are computed and stated in U.S. dollars. Returns are presented on a pretax basis.

Past performance is not indicative of future results. All investments have risks and you could lose money.

Additional information regarding policies for valuing investments, calculating performance and preparing GIPS Reports are available upon request. A list of composite descriptions and a list of broad distribution pooled funds are available upon request. Please contact our sales, marketing and relationship management department at 312-932-8621.

#### RISKS

All investments have risks. At times, a significant portion of an account's return may be attributable to investments in initial public offerings (IPOs) or concentrations in certain strong performing sectors, such as technology. Returns from IPOs or sector concentrations may not be repeated or consistently achieved in the future. In addition, participating in IPOs and other investments during favorable market conditions may

enhance the performance of a strategy with a smaller asset base, and the strategy may not experience similar performance results as its assets grow. The securities of micro-cap companies may be more volatile in price, have wider spreads between their bid and ask prices, and have significantly lower trading volumes than the securities of larger capitalization companies. As a result, the purchase and sale of more than a limited number of shares of the securities of a smaller company may affect its market price. Growth stocks may involve special risks and their prices may be more volatile than the overall market. It is anticipated that the strategy will experience high rates of portfolio turnover.

#### INDICES

The Russell 2500<sup>®</sup> Growth Index measures the performance of the small to midcap growth segment of the U.S equity universe. It measures the performance of those Russell 2500<sup>®</sup> Index companies with higher growth earning potential as defined by FTSE Russell's leading style methodology. Data includes reinvested dividends.

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#### TERMS

Active share represents the share of portfolio holdings that differ from the benchmark index holdings. Beta is a measure of a portfolio's volatility. A beta of 1.00 implies perfect historical correlation of movement with the market. A higher beta manager will rise and fall slower. Information Ratio (IR) measures a portfolio manager's ability to generate excess returns relative to a benchmark, but also attempts to identify the consistency of the investor. This ratio will identify if a manager has beaten the benchmark by a lot in a few months or a little every month. The higher the IR the more consistent a manager is and consistency is an ideal trait. R-Squared is a statistical measure that represents the percentage of a fund or security's movements that can be explained by movements in a benchmark index. For fixed-income securities, the benchmark is the T-bill. For equities, the benchmark is the S&P 500. **Standard Deviation** is a measure of the average deviations of a return series from its mean; often used as a measure of portfolio volatility. A large standard deviation implies that there have been large swings or volatility in the manager's return series. **Tracking Error** is a divergence between the price behavior of a position or a portfolio and the price behavior of a benchmark. This is often in the context of a hedge or mutual fund that did not work as effectively as intended, creating an unexpected profit or loss instead.

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### For more information about Driehaus Capital Management LLC, please contact us at 312.932.8621.

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### Driehaus Small/Mid Cap Growth Fund (Unaudited)

Security Portfolio for 1/31/2025

	Quantity ID	Security Description	Market Value
BERMUDA			509,742.84
	10,068 <b>VIK</b>	VIKING HOLDINGS LTD	509,742.84
CANADA			1,947,598.08
	18,944 <b>CCJ</b>	CAMECO CORP	936,591.36
	57,141 <b>NXE</b>	NEXGEN ENERGY LTD	374,844.96
	15,912 <b>XENE</b>	XENON PHARMACEUTICALS INC	636,161.76
DENMARK			210,754.58
	1,613 <b>ASND</b>	ASCENDIS PHARMA A/S - ADR	210,754.58
GREAT BRITAIN			1,002,508.01
	8,629 <b>BIRK</b>	BIRKENSTOCK HOLDING PLC	510,319.06
	16,379 <b>FTI</b>	TECHNIPFMC PLC	492,188.95
ISRAEL			2,140,000.65
	4,054 <b>CYBR</b>	CYBERARK SOFTWARE LTD/ISRAEL	1,503,952.92
	858 MNDY	MONDAY.COM LTD	219,184.68
	1,745 <b>WIX</b>	WIX.COM LTD	416,863.05
NETHERLANDS			826,118.93
	1,261 <b>ARGX</b>	ARGENX SE - ADR	826,118.93
UNITED STATES			56,236,748.41
	2,646 <b>AAON</b>	AAON INC	307,941.48
	1,376 <b>AYI</b>	ACUITY BRANDS INC	457,368.64
	12,884 <b>AFRM</b>	AFFIRM HOLDINGS INC	786,825.88
	5,121 <b>ALK</b>	ALASKA AIR GROUP INC	375,113.25
	3,826 <b>ALSN</b>	ALLISON TRANSMISSION HOLDING	449,708.04
	892 ALNY	ALNYLAM PHARMACEUTICALS INC	242,008.52
	22,804 <b>AR</b>	ANTERO RESOURCES CORP	851,045.28
	10,039 <b>APGE</b>	APOGEE THERAPEUTICS INC	415,213.04
	7,509 <b>ALAB</b>	ASTERA LABS INC	761,562.78
	9,087 <b>RNA</b>	AVIDITY BIOSCIENCES INC	299,234.91
	2,195 <b>AXON</b>	AXON ENTERPRISE INC	1,431,535.10
	10,188 <b>BRBR</b>	BELLRING BRANDS INC-CLASS A	788,041.80
	1,955 <b>BILL</b>	BILL.COM HOLDINGS INC	189,185.35
	3,050 <b>BOOT</b>	BOOT BARN HOLDINGS INC	490,592.50
	2,514 <b>BURL</b>	BURLINGTON STORES INC	713,800.02
	4,824 <b>BWXT</b>	BWX TECHNOLOGIES INC	544,774.32
	3,293 <b>CRS</b>	CARPENTER TECHNOLOGY	635,746.58
	5,066 <b>CVNA</b>	CARVANA CO	1,253,733.68
	6,595 <b>CAVA</b>	CAVA GROUP INC	890,654.75
	2,612 <b>CF</b>	CF INDUSTRIES HOLDINGS INC	240,852.52
	2,314 <b>GTLS</b>	CHART INDUSTRIES INC	489,619.26
	7,923 <b>CHWY</b>	CHEWY INC - CLASS A	308,838.54
	2,009 <b>CLH</b>	CLEAN HARBORS INC	468,097.00
	17,899 <b>CWAN</b>	CLEARWATER ANALYTICS HDS-A	504,035.84
	10,374 <b>COHR</b>	COHERENT INC	938,743.26

1,478	FIX	COMFORT SYSTEMS USA INC	645,516.50
3,495	CVLT	COMMVAULT SYSTEMS INC	556,613.70
9,977	CNM	CORE & MAIN INC-CLASS A	563,101.88
27,771	CORZ	CORE SCIENTIFIC INC	340,750.17
3,771	CR	CRANE CO	642,276.72
5,118	CRDO	CREDO TECHNOLOGY GROUP HOLDI	358,362.36
28,332	CRNX	CRINETICS PHARMACEUTICALS IN	1,141,779.60
2,603	CW	CURTISS-WRIGHT CORP	903,084.82
3,253	DECK	DECKERS OUTDOOR CORP	576,952.08
7,381	DOCU	DOCUSIGN INC	713,964.13
10,400	BROS	DUTCH BROS INC-CLASS A	650,208.00
5,668	ESTC	ELASTIC NV	638,103.44
1,287	EME	EMCOR GROUP INC	576,653.22
2,794	EVR	EVERCORE INC - A	813,808.38
9,240	EXEL	EXELIXIS INC	306,306.00
214	FICO	FAIR ISAAC CORP	400,941.84
15,177	FLS	FLOWSERVE CORP	950,383.74
6,960	FRPT	FRESHPET INC	1,113,252.00
5,933	FTAI	FTAI AVIATION LTD	596,444.49
5,380	GTLB	GITLAB INC-CL A	391,448.80
6,242	GKOS	GLAUKOS CORP	976,498.48
6,055	GMED	GLOBUS MEDICAL INC - A	561,419.60
6,221	GH	GUARDANT HEALTH INC	292,262.58
2,939	GWRE	GUIDEWIRE SOFTWARE INC	620,922.53
5,271	HXL	HEXCEL CORP	343,669.20
3,525	HWM	HOWMET AEROSPACE INC	446,194.50
2,319	ILMN	ILLUMINA INC	307,824.06
2,569	INSM	INSMED INC	196,734.02
3,249	PODD	INSULET CORP	904,456.62
2,709	ITGR	INTEGER HOLDINGS CORP	385,273.98
6,344	JANX	JANUX THERAPEUTICS INC	275,837.12
6,943	KMPR	KEMPER CORP	466,430.74
9,593	KYMR	KYMERA THERAPEUTICS INC	379,786.87
3,210	LNTH	LANTHEUS HOLDINGS INC	296,957.10
528	LII	LENNOX INTERNATIONAL INC	312,797.76
22,417	DRS	LEONARDO DRS INC	787,957.55
23,020	LTH	LIFE TIME GROUP HOLDINGS INC	667,349.80
754	LAD	LITHIA MOTORS INC-CL A	283,579.40
3,138	MMSI	MERIT MEDICAL SYSTEMS INC	341,665.44
6,294	MOD	MODINE MANUFACTURING CO	638,526.30
8,688	NTRA	NATERA INC	1,537,080.96
2,743	NBIX	NEUROCRINE BIOSCIENCES INC	416,442.26
24,856	NCLH	NORWEGIAN CRUISE LINE HOLDINGS	704,667.60
8,803	NTNX	NUTANIX INC - A	605,338.35
845	PEN	PENUMBRA INC	225,589.65
4,347	PLNT	PLANET FITNESS INC - CL A	470,171.52
7,567	РТСТ	PTC THERAPEUTICS INC	347,173.96

2,747	PWR	QUANTA SERVICES INC	845,004.67
4,641	RDDT	REDDIT INC-CL A	926,111.55
23,152	HOOD	ROBINHOOD MARKETS INC - A	,202,746.40
11,398	RKLB	ROCKET LAB USA INC	331,111.90
2,327	RGLD	ROYAL GOLD INC	325,361.14
675	SAIA	SAIA INC	324,074.25
11,067	SMTC	SEMTECH CORP	741,046.32
4,697	SHAK	SHAKE SHACK INC - CLASS A	554,856.61
6,348	SN	SHARKNINJA INC	709,769.88
7,066	SFM	SPROUTS FARMERS MARKET INC 1	,118,830.44
11,079	SYRE	SPYRE THERAPEUTICS INC	254,706.21
2,068	STRL	STERLING INFRASTRUCTURE INC	294,524.56
10,587	SG	SWEETGREEN INC - CLASS A	348,524.04
2,612	ттwo	TAKE-TWO INTERACTIVE SOFTWRE	484,552.12
1,231	TDY	TELEDYNE TECHNOLOGIES INC	629,447.23
155	TPL	TEXAS PACIFIC LAND TRUST	201,061.35
3,660	ТКО	TKO GROUP HOLDINGS INC	568,068.60
17,411	TOST	TOAST INC-CLASS A	712,458.12
4,755	тw	TRADEWEB MARKETS INC-CLASS A	603,409.50
4,295	TMDX	TRANSMEDICS GROUP INC	290,127.25
4,255	TWLO	TWILIO INC - A	623,697.90
1,231	VMI	VALMONT INDUSTRIES	408,396.56
5,881	VRNS	VARONIS SYSTEMS INC	266,762.16
7,903	PCVX	VAXCYTE INC	697,992.96
9,096	VERX	VERTEX INC - CLASS A	525,294.00
4,927	WAL	WESTERN ALLIANCE BANCORP	432,935.49
2,312	ХРО	XPO Inc	309,045.04

Stock Total:	62,873,471.50
Cash:	54,346.96
Portfolio Total:	62,927,818.46

#### Source: Driehaus Capital Management LLC

The portfolio represents holdings for the Driehaus Small/Mid Cap Growth Fund (the "Fund") as of the specified date. The Fund assumes no obligation to update or supplement the holdings to reflect subsequent changes. The holdings posted may not represent current or future portfolio composition or holdings and are subject to change without notice. Information on particular holdings may be withheld if it is in the Fund's best interest to do so. The holdings are unaudited and are provided for general information on the Fund. For more information please contact us at 800-560-6111.

For information regarding the Fund's policy for valuation of investments and other significant accounting policies, please refer to the Fund's recent Semi-Annual or Annual financial statements.

# 🕅 Geneva

# City of Jacksonville Employees Retirement System Geneva Capital Management US SMID Cap Growth

March 27, 2025

W. Scott Priebe
Managing Principal, Portfolio Manager
Matthew Pistorio, CFA
Principal, Client Portfolio Manager

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## Who is Geneva Capital Management?

### **Firm profile**

Independent, Majority Employee-Owned Firm

Founded in 1987 & Based in Milwaukee, WI

Specialized and Focused on High-Quality Growth Portfolios

- Small Cap Growth
- Smid Cap Growth
- Mid Cap Growth

One experienced team with one time-tested philosophy & process

Personal alignment of incentives with clients



### **Diversity statistics**

47% of Geneva's employee equity ownership is held by minorities and/or women

52% of Geneva's staff are minorities and/or women

60% of Geneva's Board of Directors are minorities

Our minority partner, Estancia Capital Management, is a qualified MBE organization

## Who is Geneva Capital Management?

### **One Team, One Process**

- A team-based approach that fosters collaboration and idea sharing
- Diversity of perspectives and backgrounds strengthens investment decision making
- Regular team interaction including: daily investment meetings, weekly bench review and continuous dialogue among members

### **Geneva Investment Team**

W. Scott Priebe – Managing Principal, Portfolio Manager 21 years' industry experience, 21 years at Geneva

José Muñoz, CFA – Managing Principal, Portfolio Manager 14 years' industry experience, 14 years at Geneva

Ashley Adam – Principal, Senior Research Analyst 16 years' industry experience, 12 years at Geneva

Sam Beres, CFA – Principal, Senior Research Analyst 12 years' industry experience, 8 years at Geneva

**Danny Muench, CFA – Principal, Research Analyst** 10 years' industry experience, 8 years at Geneva

Arjun Vellayappan, CFA – Research Analyst 8 years' industry experience, 5 years at Geneva

Courtney Jentz – Research Analyst <1 years' industry experience, <1 years at Geneva

Andy Irwin, CFA, CMT – Principal, Head of Trading 23 years' industry experience, 14 years at Geneva

Matthew Pistorio, CFA – Principal, Client Portfolio Manager 19 years' industry experience, 11 years at Geneva

## Market cycle performance

Annualized returns (%) as of December 31, 2024

### **US SMID Cap Growth**



\*US SMID Cap Growth composite inception date 7/31/2017

Past performance is not a guarantee of future results. This information is supplemental to the US SMID Cap Growth composite GIPS Report found in the Appendix of this document, including information on net returns. Returns for periods greater than one year are annualized. One cannot invest directly in an index.

# **Consistent outperformance**

## The Geneva SMID Cap Growth Composite has outperformed the Russell 2500<sup>™</sup> Growth Index in:

- All full calendar years since inception\*
- 100% of annualized rolling three year periods



Since Inception\* Annualized Rolling Three Year Performance

Geneva SMID Cap Growth Composite outperformed the Russell 2500<sup>™</sup> Growth Index in 54 of 54 periods, or 100% of the time (gross of fees; 53 of 54 periods or 98% of the time net of fees).

\*US SMID Cap Growth composite inception date 7/31/2017

Source: eVestment Alliance database. Geneva pays eVestment Alliance a subscription fee to obtain and use the information in its database. Excess returns data is calculated using monthly composite returns against the Russell 2500<sup>™</sup> Growth Index

Past performance is not a guarantee of future results. This information is supplemental to the US SMID Cap Growth composite GIPS Report found in the Appendix of this document, including information on net returns. Returns for periods greater than one year are annualized. One cannot invest directly in an index.

Geneva Capital Management | US SMID Cap Growth

## **Investment philosophy**

Geneva engages in fundamental analysis to identify high quality companies with impressive management teams, low leverage and a consistent, sustainable record of growth.

We believe investing in such proven, high quality companies leads to competitive returns with below average risk over the market cycle.



\*Denotes estimated time allocation of research process

## **Idea generation & process**



\*Investible universe figures include both small cap and mid cap universes.

Geneva Capital Management | US SMID Cap Growth

# **Top 10 holdings & industry weightings**

As of December 31, 2024

## **US SMID Cap Growth**

Top 10 holdings	Industry	% weight	Stra	tegy and Index Ind	ustry Weightings
Axon Enterprise Inc	Industrials	5.85	Industrials		
ExlService Holdings Inc	Industrials	5.00	Technology		
AAON Inc	Industrials	4.17	Consumer Discretionary		-
Copart Inc	Consumer Discretionary	4.09	Health Care		_
Tyler Technologies Inc	Technology	4.03	Financials		
Fair Isaac Corp	Industrials	3.95	Basic Materials		
Exponent Inc	Industrials	3.61	Consumer Staples	_	
RBC Bearings Inc	Basic Materials	3.53	Real Estate	-	
Watsco Inc	Industrials	3.37	Energy	-	
Burlington Stores Inc	Consumer Discretionary	3.24	Telecommunications		<ul> <li>US SMID Cap Growth</li> <li>Russell 2500TM Growth Index</li> </ul>
			Utilities		

Industry allocations and weightings are based on the Industry Classification Benchmark structure. Holdings may change and may not represent current portfolio. **Past performance is not a guarantee of future results.** This information is supplemental to the US SMID Cap Growth composite GIPS Report found in the Appendix of this document. One cannot invest directly in an index.

10%

20%

0%

30%

40%

# Why Geneva Capital Management?

### Market return transparency

- Strong, predictable and consistent relative performance
- Historically superior down-side protection

### **Quality growth focused**

• We invest in profitable, durable businesses with strong management teams, financial flexibility and consistent growth characteristics

### **Repeatable, rigorous and disciplined bottom-up research process**

- Long-term focused, average holding period of 7 years
- Portfolio construction leverages Geneva Quality Conviction Rankings





Appendix

# **Portfolio characteristics**

Strategy guidelines

Investment Characteristics	US SMID Cap Growth
Investment style	Growth
Process	Bottom-up, fundamental
Number of stocks	30-40
Sector/Industry weights	2x ICB industry weight
Typical position size	1.5-5%
Absolute stock limit	8%

# **Portfolio characteristics**

As of December 31, 2024

## **US SMID Cap Growth**

Characteristics	US SMID Cap Growth	Russell 2500™ Growth	Risk analysis*	US SMID Cap Growth
Historical EPS growth – 5 yr.	15.3%	18.4%	Standard deviation	22.03
Forecast EPS growth – 5 yr.	14.3%	14.7%	Alpha	4.68
ROE	20.4%	12.5%	Beta	0.87
Debt to capital	36.5%	43.4%	Sharpe ratio	0.43
Forecast P/E – TMF	36.9x	21.6x	Tracking error	8.14
PEG ratio – forecast 5 yr.	2.6x	1.5x	Information ratio	0.49
Turnover – 1 yr.	14.2%	n/a	R-squared	0.88
Number of issues	34	1,292		
Wtd. average market cap (\$B)	\$18.33	\$7.30		
Median market cap (\$B)	\$10.31	\$1.55		

\*eVestment Alliance, 12/31/24. Based on 5 year US SMID Cap Growth composite monthly gross of fee returns. Geneva pays eVestment Alliance a subscription fee to obtain and use the information in its database. Note: **Past performance is not a guarantee of future results.** This information is supplemental to the US SMID Cap Growth composite GIPS Report found in the Appendix of this document. One cannot invest directly in an index. Frank Russell Company is the source and owner of the Russell Index data contained or reflected in this material and all trademarks and copyrights related thereto. This is a presentation of Geneva Capital Management. The presentation may contain confidential information and unauthorized use, disclosure, copying, dissemination or redistribution is strictly prohibited. Frank Russell Company is not responsible for the formatting or configuration of this material or for any inaccuracy in Geneva Capital Management's presentation thereof.

Trim	Sell
Valuation	Long-term change in industry or company fundamentals
Technical extension	Market capitalization
Subsector weighting	Buyout
Position size	

## **Buys and sells**

December 31, 2023 – December 31, 2024

### **US SMID Cap Growth**

	Buys		
Name	Ticker	Buy date	
Rollins Inc	ROL	7/2024	
Onto Innovation Inc	ONTO	7/2024	
Vertex Inc	VERX	6/2024	
DoubleVerify Holdings Inc	DV	1/2024	

	Sells	
Name	Ticker	Sell date
13 Verticals Inc	IIIV	7/2024
DoubleVerify Holdings Inc	DV	6/2024
Fox Factory Holding Corp	FOXF	1/2024

The list above reflects all new stocks purchased and sold completely by Geneva Capital Management in the US SMID Cap Growth strategy from December 31, 2023 to December 31, 2024. A full list of SMID Cap representative holdings as of the most recent quarter end is included in the Appendix. It should not be assumed that recommendations made in the future will be profitable or will equal the performance of the securities in this list.

## **Strong downside protection**

As of December 31, 2024



Source: eVestment Alliance database. Universe: eVestment US Small-Mid Cap Growth Equity. As of 1/21/25, 92.0% of SMID cap growth managers had updated their 4Q 2024 returns and are included in the US Small-Mid Cap Growth Equity Universe. Geneva pays eVestment Alliance a subscription fee to obtain and use the information in its database.

Max drawdown is the maximum of the peak-to-trough declines during a specific period. Data is calculated using monthly composite gross of fee returns.

Past performance is not a guarantee of future results. This information is supplemental to the US SMID Cap Growth composite GIPS Report found in the Appendix of this document, including information on net returns. Returns for periods greater than one year are annualized. One cannot invest directly in an index.

# **Universe comparison**

### As of December 31, 2024



Source: eVestment Alliance database. As of 1/21/25, 92.0% of SMID cap growth managers had updated their 4Q 2024 returns and are included in the US Small-Mid Cap Growth Equity Universe. Geneva pays eVestment Alliance a subscription fee to obtain and use the information in its database. Returns is calculated using monthly composite gross of fee returns. Past performance is not a guarantee of future results. This information is supplemental to the US SMID Cap Growth composite GIPS Report found in the Appendix of this document, including information on net returns. Returns for periods greater than one year are annualized. One cannot invest directly in an index.

43

49

-9.06

79

2.05

-0.02

4.35

80

15.74

13.90

75<sup>th</sup> percentile

95<sup>th</sup> percentile # of observations

US SMID Cap Growth Composite

Russell 2500<sup>™</sup> Growth Index

25

49

6.27

72

12.05

8.08

25

73

10.18

8.11

63

13.93

9.87

16

82

# **Universe comparison**

As of December 31, 2024

Universe: eVestment US Small-Mid Cap Growth Equity

Data calculated using monthly composite gross of fee returns



Source: eVestment Alliance database. Note: US equity products that primarily invest in small-mid capitalization stocks that are expected to have an above-average capital appreciation rate relative to the market. Common benchmarks for this universe include the Russell 2500 Growth. Managers in this category will typically indicate a "Primary Capitalization Emphasis" equal to Small –Mid Cap and a "Primary Style Emphasis" equal to Growth. Geneva pays eVestment Alliance a subscription fee to obtain and use the information in its database.

Past performance is not a guarantee of future results. This information is supplemental to the US SMID Cap Growth composite GIPS Report found in the Appendix of this document, including information on net returns. Returns for periods greater than one year are annualized. One cannot invest directly in an index.

## **Investment professionals**



### W. Scott Priebe, Managing Principal, Portfolio Manager

- Joined the firm in 2004
- Before joining the firm, Mr. Priebe worked for Eli Lilly & Company
- MBA University of Chicago, BA DePauw University
- Mr. Scott Priebe is part of the Investment Strategy group and is responsible for research on all Geneva equity products. Mr.
   Priebe is responsible for portfolio management of all Geneva equity products.



### José Muñoz, CFA, Managing Principal, Portfolio Manager

- Joined the firm in 2011
- MBA University of Chicago, BA Marquette University
- Mr. Muñoz is part of the Investment Strategy group and is responsible for research on all Geneva equity products. Mr. Munoz is responsible for portfolio management of the US Small Cap Growth, US Mid Cap Growth and US SMID Cap Growth products.

## **Investment professionals**



### Ashley Adam, Principal, Senior Research Analyst

- Joined the firm in 2013
- Before joining the firm, Ms. Adam worked for Morgan Stanley
- MBA University of Wisconsin, BS Florida State University
- Ms. Adam is part of the Investment Strategy group and responsible for research on all Geneva growth equity products.



### Sam Beres, CFA, Principal, Senior Research Analyst

- Joined the firm in 2017
- Before joining the firm, Mr.
   Beres worked for Robert W.
   Baird
- BA University of Notre Dame
- Mr. Beres is part of the Investment Strategy group and responsible for research on all Geneva growth equity products.



### Danny Muench, CFA, Principal, Research Analyst

- Joined the firm in 2017
- Before joining the firm, Mr. Muench worked for William Blair & Company
- BA Marquette University
- Mr. Muench is part of the Investment Strategy group and responsible for research on all Geneva growth equity products.



### Arjun Vellayappan, CFA, Research Analyst

- Joined the firm in 2020
- Before joining the firm, Mr. Vellayappan worked for PwC
- MBA University of Chicago, BA Northwestern University
- Mr. Vellayappan is part of the Investment Strategy group and responsible for research on all Geneva growth equity products.

## **Investment professionals**



### Courtney Jentz, Research Analyst

- Joined the firm in 2024
- Before joining the firm, Ms. Jentz was a full-time student with internships in the financial industry, including an internship at Geneva during the summer of 2023
- MBA University of Wisconsin-Madison, BBA University of Wisconsin-Whitewater
- Ms. Jentz is part of the Investment Strategy group and responsible for research on all Geneva growth equity products.



### Andy Irwin, CFA, CMT, Principal, Head of Trading

- Joined the firm in 2011
- Before joining the firm, Mr. Irwin worked for Robert W. Baird
- BA DePauw University
- Mr. Irwin is part of the Investment Strategy group and responsible for trading of all Geneva growth equity products.



### Matthew Pistorio, CFA, Principal, Client Portfolio Manager

- Joined the firm in 2014
- Before joining the firm, Mr.
   Pistorio worked for Henderson
   Global Investors
- BBA Loyola University Chicago
- Mr. Pistorio is part of the Investment Strategy group and provides investment management support. Mr.
   Pistorio is responsible for client communications for Geneva's US growth equity products.

# **US SMID Cap Growth strategy holdings**

As of December 31, 2024

Security	Ticker	% of assets
Aaon Inc COM	AAON	4.17
Advanced Drainage System Inc	WMS	2.25
Alarm.com Holdings Inc.	ALRM	1.37
Axon Enterprise Inc	AXON	5.85
Balchem Corp	BCPC	3.07
Bio-Techne Corp	TECH	2.27
Burlington Stores Inc.	BURL	3.24
Certara Inc	CERT	1.31
Church & Dwight Co Inc.	CHD	2.83
Copart Inc	CPRT	4.09
Costar Group Inc	CSGP	2.65
Descartes Systems Group Inc.	DSGX	3.00
EPAM Systems Inc.	EPAM	1.53
ExlService Holdings Inc.	EXLS	5.00
Exponent Inc	EXPO	3.61
Fair Isaac Corporation	FICO	3.95
Globus Med Inc CL A	GMED	2.65
J&J Snack Foods Corp	JJSF	1.59
Keysight Technologies, Inc.	KEYS	2.95
Kinsale Capital Group Inc	KNSI	2.91

Security	Ticker	% of assets
MarketAxess Holdings Inc.	MKTX	1.22
Monolithic Power Systems Inc.	MPWR	2.55
Novanta Inc	NOVT	2.06
Ollies Bargain Outlet Holdings Inc.	OLLI	2.51
Onto Innovation Inc.	ONTO	1.69
Pool Corporation	POOL	2.68
RBC Bearings Inc	RBC	3.53
Repligen Corporation	RGEN	2.68
Rollins Inc	ROL	2.66
Ryan Specialty Holdings Inc CL A	RYAN	3.09
Trex Company, Inc.	TREX	2.11
Tyler Technologies Inc.	TYL	4.03
Vertex Inc CL A	VERX	2.33
Watsco Inc	WSO	3.37
		96.82

Cash and Equivalents	3.18
TOTAL PORTFOLIO	100.00

Note: This information is shown as supplemental information to the US SMID Cap Growth composite GIPS Report in the Appendix. Past performance is not indicative of future results. One cannot invest directly in an index.

# **GIPS Report**

**US SMID Cap Growth** 

Annual Performance Results							3 Year Ex-Pos	t Standard Deviation	
Year End	Total Firm Assets USD (millions)	Composite Assets USD (millions)	Number of Accounts	Composite Gross	Composite Net	Russell 2500™ Growth	Composite Dispersion	Composite	Russell 2500™ Growth
2023	5,842	54	9	21.09%	20.48%	18.93%	0.1%	21.24%	20.95%
2022	5,027	43	9	-24.19%	-24.55%	-26.21%	0.2%	23.44%	25.18%
2021	6,998	31	7	18.03%	17.47%	5.04%	N.A.*	18.02%	21.97%
2020	6,679	13	Five or Fewer	40.80%	40.14%	40.47%	N.A.*	19.86%	23.93%
2019	5,274	3	Five or Fewer	32.93%	31.93%	32.65%	N.A.*	N.A.**	
2018	4,577	1	Five or Fewer	3.12%	1.92%	-7.47%	N.A.*	N.A.**	
2017***	5,202	1	Five or Fewer	8.65%	8.47%	11.02%	N.A.*		N.A.**

\* N.A. - Information is not statistically meaningful due to an insufficient number of portfolios in the composite for the entire year.

\*\* The three-year annualized ex-post standard deviation of the composite and/or benchmark is not presented because 36 month returns are not available.

\*\*\*Results shown for the year 2017 represent partial period performance from July 31, 2017 through December 31, 2017.

#### **Compliance Statement**

Geneva Capital Management claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS® standards. Geneva Capital Management has been independently verified for the periods January 1, 1993 through December 31, 2023.

A firm that claims compliance with the GIPS standards must establish policies and procedures for complying with all the applicable requirements of the GIPS standards. Verification provides assurance on whether the firm's policies and procedures related to composite and pooled fund maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS standards and have been implemented on a firm-wide basis. The US SMID Cap Growth composite has had a performance examination for the periods August 1, 2017, through December 31, 2023. The verification and performance examination reports are available upon request.

#### The Firm

Geneva Capital Management LLC is a registered investment adviser. On October 1, 2014 Henderson Global Investors Inc. acquired Geneva Capital Management LLC, and subsequently merged with Janus Capital Group Inc. on May 30, 2017 to form Janus Henderson Group plc. After this merger, Geneva Capital Management was a wholly owned subsidiary of Janus Henderson Group plc. On March 17, 2020 certain members of Geneva's management team, along with a minority partner, Estancia Capital Management, LLC, acquired Geneva from Janus Henderson Group plc, making Geneva Capital Management an independent entity.

#### **Composite Description**

The US SMID Cap Growth composite contains fully discretionary equity accounts invested in approximately 30-40 small to mid capitalization growth securities whose market capitalization generally fall within the market capitalization range represented in the Russell Midcap<sup>®</sup> Index at the time of purchase. Securities are selected using a "bottom-up" fundamental analysis of the company and supplemented by "top-down" considerations of economic conditions. There is no minimum account size for this composite.

## GIPS Report US SMID Cap Growth

#### **Fee Information**

The annual fee schedule is 100 bps (1.00%) on the first \$50 million, 90 bps (0.90%) on \$50 to \$100 million, and 80 bps (0.80%) on the balance over \$100 million. Fees are billed or charged to the account in arrears, at one quarter of the annual rate, on a quarterly basis - or as applicable based on the average month-end values for each of the three months comprising a quarter. Actual investment advisory fees incurred by clients will vary.

#### **Basis of Returns**

Results are based on fully discretionary accounts under management, including those accounts no longer with the firm. Composite returns are net of transaction costs and reflect the reinvestment of dividends and other earnings. Gross composite returns do not reflect the deduction of investment advisory fees. Net composite returns reflect the deduction of actual investment advisory fees. Actual advisory fees vary among clients invested in the strategy. Actual performance results may differ from composite returns depending on the size of the account, investment guidelines and/or restrictions, fee schedules and other factors. Past performance is not indicative of future results.

#### **Composite Dispersion**

The annual composite dispersion presented is an asset-weighted standard deviation calculated for the accounts in the composite the entire year. Composite Dispersion is based on gross of fees performance.

#### 3-Year Ex-Post Standard Deviation

The three year annualized standard deviation measures the variability of the composite gross return and the benchmark return over the preceding 36-month period.

#### **GIPS Policies and Procedures**

The Firm maintains a complete list of composite descriptions, which is available upon request. Policies for valuing investments, calculating performance, and preparing GIPS Reports are available upon request.

#### **Composite Creation Date**

The US SMID Cap Growth composite creation date is August 1, 2017.

#### **Composite Inception Date**

The US SMID Cap Growth composite inception date is July 31, 2017.

#### **Composite Currency**

The U.S. Dollar is the currency used to express performance.

#### **GIPS Registered Trademark**

GIPS® is a registered trademark of CFA Institute. CFA Institute does not endorse or promote this organization, nor does it warrant the accuracy or quality of the content contained herein.

#### Important Information

All investments involve risk, including possible loss of principal. Past performance is no guarantee of future results. The value of an investment and the income from it can fall as well as rise and you may not get back the amount originally invested. Nothing in this document is intended to or should be construed as advice. This document is not a recommendation to sell or purchase any investment.

## Geneva Capital Management

US SMID Cap Strategy Model

As of Date: 01/31/2025

Quantity	Security	Security Symbol	Cusip	Price	Market Value	Pct Assets
	CK					
927	Aaon Inc COM	AAON	000360206	116.38	107.884	3.93%
510	Advanced Drainage System Inc	WMS	00790R104	120.91	61.664	2.25%
592	Alarm.com Holdings Inc.	ALRM	011642105	60.67	35.917	1.31%
258	Axon Enterprise Inc	AXON	05464C101	652.18	168.262	6.13%
493	Balchem Corp	BCPC	057665200	159.96	78.860	2.87%
824	Bio-Techne Corp	TECH	09073M104	73.55	60.605	2.21%
298	Burlington Stores Inc.	BURL	122017106	283.93	84.611	3.08%
3.229	Certara Inc	CERT	15687V109	14.23	45.949	1.67%
709	Church & Dwight Co Inc.	CHD	171340102	105.52	74.814	2.72%
1.868	Copart Inc	CPRT	217204106	57.93	108.213	3.94%
970	Costar Group Inc	CSGP	22160N109	76.60	74.302	2.71%
692	Descartes Systems Group Inc.	DSGX	249906108	115.83	80.154	2.92%
215	EPAM Systems Inc.	EPAM	29414B104	253.96	54,601	1.99%
2.953	ExlService Holdings Inc.	EXLS	302081104	50.26	148.418	5.41%
1.131	Exponent Inc	EXPO	30214U102	91.67	103.679	3.78%
52	Fair Isaac Corporation	FICO	303250104	1,873.56	97,425	3.55%
840	Globus Med Inc CL A	GMED	379577208	92.72	77.885	2.84%
269	J&J Snack Foods Corp	JJSF	466032109	137.23	36.915	1.34%
527	Keysight Technologies, Inc.	KEYS	49338L103	178.35	93,990	3.42%
164	Kinsale Capital Group Inc	KNSL	49714P108	441.94	72,478	2.64%
141	MarketAxess Holdings Inc.	ΜΚΤΧ	57060D108	220.63	31,109	1.13%
113	Monolithic Power Systems Inc.	MPWR	609839105	637.37	72,023	2.62%
404	Novanta Inc	NOVT	67000B104	149.66	60,463	2.20%
599	Ollies Bargain Outlet Holdings Inc.	OLLI	681116109	111.51	66,794	2.43%
265	Onto Innovation Inc.	ONTO	683344105	204.76	54.261	1.98%
206	Pool Corporation	POOL	73278L105	344.25	70.916	2.58%
309	RBC Bearings Inc	RBC	75524B104	348.75	107,764	3.92%
487	Repligen Corporation	RGEN	759916109	166.21	80.944	2.95%
1.725	Rollins Inc	ROL	775711104	49.50	85.388	3.11%
1.261	Rvan Specialty Holdings Inc CL A	RYAN	78351F107	66.58	83.957	3.06%
802	Trex Company, Inc.	TREX	89531P105	72.83	58.410	2.13%
183	Tyler Technologies Inc.	TYL	902252105	601.64	110.100	4.01%
1.145	Vertex Inc CL A	VERX	92538J106	57.75	66.124	2.41%
186	Watsco Inc	WSO	942622200	478.59	89.018	3.24%
					2,703,897	98.47%
CASH AND EQU	IVALENTS					
	US Dollar			1.00	41,927 <b>41,927</b>	1.53% <b>1.53%</b>

TOTAL PORTFOLIO

2,745,824 100.00%

### Rollins, Inc. (ROL) – Mkt Cap \$20.9B – Price \$42.49

- 1. Investment thesis (p. 1)
- 2. Company description (p. 1-2)
- 3. Industry, competition, and ROL's competitive advantages (p. 2-8)
- 4. Revenue, margin, and earnings dynamics and drivers (p. 8-12)
- 5. Balance sheet, cash flow, and capital deployment (p. 12)
- 6. Ownership (p. 13)
- 7. Management (p. 13-15)
- 8. Valuation (p. 15-17)
- 9. Risks (p. 17)

#### **INVESTMENT THESIS**

Rollins, Inc. (ROL) is a leading global pest control company. ROL has an enviable track record of healthy and consistent results revenue/earnings growth, driven by what I believe is a strong positioning within a pest control industry that is resilient and growing at a GDP+ rate, as well as its own internal operating discipline that is highly focused on its employees and customers. I believe that this latter point remains the unequivocal focus of ROL's newer management team, and thus I am confident that the company is poised to sustain +HSD% annual revenue growth (organic +MSD%, M&A +LSD%) and continued margin expansion (maybe some upside here behind the newer CFO). This financial profile comes with strong cash generation and returns on capital that support the stock's premium valuation (and which I do not think out-of-whack vs. options in the most relevant area comparison of Consumer Staples). All-in, I think ROL is a high-quality company that should provide consistent and defensive growth

#### **COMPANY DESCRIPTION**

Rollins, Inc. (ROL) is a leading global pest control companies, providing customers protection and remediation against insect, rodent, and termite damage. Russell classifies ROL under Consumer Discretionary/Consumer Services: Misc. and is a 0.26% position in the Russell Midcap Growth Index and a 0.01% position in the Russell Midcap Value Index.

The history of ROL's pest control business began with Otto Orkin selling a special brand of rat poison door-to-door in 1901 and subsequently expanding this business over the next 60+ years. Brothers Wayne and John Rollins owned a company called Rollins Broadcasting, which acquired Orkin in 1964 for \$62M in what many consider the first leveraged buyout in U.S. history. The company later changed its name to Rollins, Inc. with Wayne largely in charge, and his sons Randall and Gary took on leading roles over time. The company began trading on the NYSE in 1968. ROL was involved in other businesses (communications, energy services), but over time these were spun off and the pest control business has been the sole focus of ROL for decades now. Wayne Rollins passed away in 1991, but the company has remained under the control of the Rollins family (still slightly >50% ownership; continue to hold the Chairman role, with Randall holding it from 1991 until his death in 2020, and Gary since) and until 2023 a Rollins family member was in the CEO role (when Gary transitioned from CEO to Executive Chairman).

ROL operates the global/national Orkin brand (I have heard Orkin alone has 2M+ customers), as well as 15+ other brands that typically are more regional in nature across pest control (Waltham Pest Services in New England, Western Pest Control in the Northeast, McCall in the Southeast, Northwest Exterminating in the South, and Clark Pest Control and Crane Pest Control in the West), slightly different offerings within pest control (HomeTeam Pest Defense has an offering called Taexx tubes that are installed inside the walls of a home and provide a differentiated method in terms of ongoing pest control administration), and wildlife control (Critter Control and Trutech are the #1 and #2 brands here). The vast majority of small acquisitions that ROL does just get tucked into the Orkin brand, but it has successfully maintained many of these regional brands that are long-tenured and well-respected within their specific markets (e.g., most of the regional brands listed above were founded in the 1950s or earlier). ROL operates



both the Orkin and regional brands in these areas, believing the brands can coexist given they offer slightly different "propositions" to customers in that some customers prefer national brands like Orkin while others prefer more "local" brands (often not knowing that these regional brands are owned by the same parent company as Orkin).

ROL operates in ~70 countries with 17,500+ employees via its >800 company and franchised locations. It has ~137 franchise agreements in total, which in exchange for initial franchise fees and ongoing royalty fees ROL provides franchisees with branding for the Orkin/Critter Control brands and related business support. ROL has viewed its franchise strategy as providing lower-risk exposure to more international markets (~2/3 of franchise agreements are international) and lower-density U.S. markets, while also better addressing the wildlife control market. Franchise revenue accounts for <1% of total revenue though, so company-owned operations are ROL's real financial driver.

ROL reports its business in 1 overall segment, but the business can be analyzed through its 3 key end markets: residential pest control, commercial pest control, and termite. The prior 5 years' revenue mix for the overall business is shown below. Residential speaks for itself. Commercial is highly focused on healthcare, travel & hospitality, and logistics as key verticals given they carry health/safety requirements related to pests, and ROL services small

businesses up to large national accounts. Within termite, ~25% is from completions ("initial" treatments), ~50% from renewals, and ~25% from related home services (e.g., insulation, encapsulation).

The U.S. has represented 92-93% of total revenue in each of the past 5 years. ROL is in essentially all major markets in the U.S. International revenue primarily is driven by company-owned operations in Canada, the U.K., Australia, and Singapore.

End Market	% of Total Revenue					
	2018	2019	2020	2021	2022	
Residential	42%	43%	45%	46%	45%	
Commercial	39%	38%	35%	34%	34%	
Termite	18%	18%	19%	19%	20%	
Franchise/Other	<1%	<1%	<1%	<1%	<1%	

Geographic	% of Total Revenue					
Market	2018	2019	2020	2021	2022	
U.S.	92%	92%	93%	92%	93%	
International	8%	8%	7%	8%	7%	

ROL has no customer concentration risk, as even within commercial the top 20 customers are <3% of this end market's revenue. A beauty of the pest control business model is that >80% of revenue is recurring via customer contracts that carry solid retention rates year-after-year. For perspective, residential pest control customers typically sign 1-year contracts with automatic renewals, commercial pest control customers typically sign 2-5 year contracts, and termite customers typically sign a 1-year contract with 5-year renewal service.

#### **INDUSTRY, COMPETITION, & ROL'S COMPETITIVE ADVANTAGES**

#### **Industry Perspective**

The global pest control's current market size is estimated as \$18B+, comprised of the U.S. >\$10B and international ~\$8B. The U.S. market is estimated as ~40% residential (i.e., \$4B+), ~40% commercial (i.e., \$4B+), and ~20% termite (i.e., \$2B+); interestingly, this is quite similar to ROL's end market mix. I have not seen perfect estimates on the DIY vs. DIFM market breakdown, but the DIY market definitely applies more to residential and some sources I have seen have pointed to ~60% of the residential market being third parties and ~40% DIY, with DIY feasibility being dependent on type of pest, magnitude of the issue, etc. To this point, ROL's HomeTeam business did a survey of households in Mar. 2022, and it suggested that ~37% of homeowners attempt to resolve pest issues themselves, but that <40% of them are successful in fully resolving the issue. To be clear, this market commentary is all related to current pest control spending, as the true TAM obviously is significantly higher than this given theoretical penetration gain opportunities (particularly in residential). The wildlife control business has a stated TAM of ~\$500M, which I think is separate from all of this.

As shown in the chart below, the pest control industry has been a pretty consistent GDP+ growth industry, particularly since the GFC, or what I would frame up as generally 4%+ growth annually. This is due to its non-discretionary nature (at least in situations where pest control is "needed") and various secular tailwinds.


- Resiliency and arguably non-discretionary nature of pest control: A famous quote from Gary Rollins is that "rats and roaches don't read the Wall Street Journal"; i.e., pests will be around in all economic environments. For the commercial market specifically, there are local/state/federal regulations regarding pest control and any building with food-/consumption-related product officially passing through it must be pest-free to operate (e.g., the #1 fine from the FDA supposedly is pest related); i.e., all of these businesses need pest control and thus many rely on third parties for it. Termite prevention/control also should be non-discretionary, as termites cause >\$5B of damage annually in the U.S. and this damage typically is not covered by homeowner's insurance. The chart above highlights the industry's resilience, as the U.S. pest control industry averaged -3% growth in 2008-2009 (worst year was 2009 -4%), with the weakness supposedly driven in large part by residential softness amid housing/consumer issues (i.e., commercial was stronger than the overall trend), and reflecting some volume weakness as pricing in this industry is very stable and rational. Part of the resiliency also is due to the contract-based nature of the industry and solid customer retention rates.
- Increased pest activity: Pests obviously are not going away, and in fact scientific studies show that pests have gotten worse as urbanization has increased, usage of harmful chemicals for pests has been reduced, and the world's temperature has risen modestly in recent years. Higher temperatures matter because insects' gestational periods decrease as temperatures rise and higher temperatures create more conducive environments for pests to live. E.g., due to the aforementioned factors, academic studies estimate that the number of mosquitos in the U.S. has grown 2-4X since ~1970. Simply put, more pests mean more opportunity for pest control companies.
- <u>Increasing "cost" of commercial pests</u>: Commercial regulations for health/safety as it relates to pest control are moving to more stringent vs. less stringent. Additionally, in today's digital age (i.e., social media), the ramifications of a business having pest-related issues has been significantly raised. Therefore, pest control is something that commercial businesses increasingly cannot afford to get wrong.
- <u>Demographic tailwinds</u>: There are 3 primary demographic tailwinds in the U.S. specifically: 1) people moving to warmer regions where these is more pest activity; 2) younger generations being more DIFM focused; 3) older generations aging in place and needing more DIFM help.

In terms of market penetration, the chart on the next page shows, how estimated penetration fell modestly from 2005-2010 (likely GFC-related) to slightly <10% of U.S. single-family homes, but then has been on a fairly steady march higher since then, with 2021 tracking at ~12.5%. The penetration increases seemingly reflect some of the secular tailwinds mentioned, although recent penetration gains also were helped by COVID-19 tailwinds as well. Overall, I think the punchline is that modest market penetration increases have helped to drive GDP+ growth for the residential (and overall) pest control market, and that there appears to be pretty significant runway for further penetration increases over time if some of these secular tailwinds can play out.



#### Competition

The pest control industry attracts participants because of relatively low barriers to entry on a localized basis (need certification, but otherwise anyone can start a pest control company), growth consistency and defensibility, and a recurring revenue mix that drives strong overall financial characteristics (including for good local players). The industry really is local in many respects, and this has

Diavar(c)	Est. U.S. Market Share					
Player(S)	2016	2020	2021			
ROL	19%	21%	21%			
тмх	18%	19%	18%			
RTO	7%	12%	12%			
Combined RTO/TMX	25%	30%	30%			
ECL	5%	6%	6%			
Top 4 (or now 3)	49%	57%	57%			
Тор 10	61%	72%	85%			
Тор 50	76%	87%	91%			
Тор 100	81%	92%	96%			

	Est. Global
Player(s)	Market Share
	2021
ROL	13%
тмх	11%
RTO	15%
Combined RTO/TMX	27%
ECL	3%

translated into a significant number of companies in the industry, with estimates saying there are ~20k pest control companies in the U.S. and ~18k internationally. Despite the fragmentation in terms of number of players, market share is dominated by a relatively small number of players. The tables above highlight how the top 4 players (or now top 3 after the RTO/TMX merger; RTO is Rentokil Initial, TMX is Terminix) currently control ~57% of the U.S. market and >40% of the global market, while >90% of the U.S. market is comprised of the top 50 and 100 pest control companies. Another datapoint is that there are only ~75 U.S. pest control companies that have >\$10M of annual revenue and <15 have >\$100M of annual revenue. You can see that ROL is now the 2<sup>nd</sup>-largest company by market share in the U.S. and globally, only behind the combined RTO/TMX entity. I included some 2016 data to show that not only have the few largest players gained market share in the U.S. over the past 5 years, there also has been even more consolidation in the rest of the top 100, some of which are PE-backed as PE's interest in the industry has picked up in recent years. There still is a very significant tail of very small, local players though, and the largest players actively acquire companies in this cohort, as well as top 100 companies. I also would point out that while global market shares for the top 3 players are a bit lower than in the U.S., it can vary pretty significantly based on the specific international market; e.g., ROL is the largest player in Canada with ~40% share.

Again, competition (particularly on the residential side, but also for a lot of commercial) is localized and based on geography, business line, etc. There are local and large competitors in probably every single market that ROL competes in. At the end of the day, the pest control industry really is all about a provider's employees delivering solid customer satisfaction, which then leads to customer retention and consistency in financials. Simplistically, it is about executing well on being top of mind for customers to contact with potential work, getting employees on site quickly, taking care of the customers' needs, and doing it all at a price consistent with the value proposition. Price therefore is one consideration within customer satisfaction, but it sounds like it oftentimes is lower down the list of decision factors, although less sensitive/severe pest issues probably are more price competitive pieces of work.

When thinking about ROL's largest competitors, I think it makes sense to start with what their end market exposures

are. To the right, you can see that compared to ROL, TMX has a heavier weighting towards termite and residential, while RTO and ECL both have a heavier weighting towards commercial (in fact, this is the only place where ECL plays); the combined RTO/TMX entity is slightly more termite and commercial weighted vs. ROL. ROL does not

Player(s)	Estimated U.S. End Market Exposures							
1 layer (5)	Pest Control	Termite	Residential	Commercial				
ROL	80%	20%	65%	35%				
ТМХ	63%	32%	73%	27%				
RTO	80%	10%	40%	60%				
Combined RTO/TMX	70%	23%	60%	40%				
ECL	100%	0%	0%	100%				

talk about win rates vs. competition, I think in part because of the number of players in the industry and the fact that markets are so localized. It is appropriate to say that ROL faces a lot of good competition from both large and small players. In terms of how ROL generally stacks up vs. large players on the broader competitive set, I would characterize it at a high level as follows (with more ROL-specific perspective in the next section).

- <u>Vs. TMX</u>: I will provide more perspective next, but TMX historically has been a share donor as it has had some issues from a quality/service perspective for both pest control and termite.
- <u>Vs. RTO</u>: RTO sounds like a good competitor that historically has been more international focused (it is based in the U.K.), but clearly is placing a lot more emphasis on the U.S. market even prior to its TMX acquisition. They broadly have been more focused on the commercial space internationally and in the U.S., so are a stronger competitor there vs. residential and termite.
- <u>Vs. ECL</u>: ECL supposedly wins in the commercial space when customers want to bundle other cleaning, disinfection, and safety offerings with pest control, with particular emphasis/success in national accounts. Pest control is a secondary focus for ECL though, and it sounds like it shows in their pest control offering.
- <u>Vs. small/local players</u>: Broadly speaking, it sounds like a strong small/local competitor can be just as good of a competitor as a larger player. The areas where small/local players are at a disadvantage are in scale-related areas (e.g., general resources throughout the business, technology and digital, inability to service larger commercial accounts) and oftentimes in termite (where liability stakes can be higher).

#### Additional Perspective on the Recent Combination of RTO (Rentokil) and TMX (Terminix)

Terminix was long part of ServiceMaster, which was acquired by PE firm CD&R in 2007, went public in 2014, and subsequently went through a wide range of corporate actions (spinoff of FTDR, sold its ServiceMaster brands in Oct. 2020) to eventually become publicly-traded TMX. CD&R's strategy was focused on margins, and they increased margins towards the mid-20% EBITDA margin by the early/mid-2010's. The issue was that they did this by raising technician productivity, which translated to worse customer service, satisfaction, and retention, and thus translated to more variable and below-average organic growth (albeit still positive). Then since the mid-2010's, TMX was on a journey to improve its overall business, but progress was iffy as they went through 5+ different leaders, eventually had to take EBITDA margins down to the high-teens%, and as organic growth consistently underperformed ROL by 1-4ppt on organic growth for years, and delivered +2%, +1%, and +2% in 2019-2021 vs. ROL's +5%, +4%, and +9.5%). To this point, TMX has the worst broader Google reviews out of the large players and has had >5X the magnitude of termite claims vs. ROL (specifically driven by issues TMX had in the Mobile, AL market).

RTO and TMX announced their transaction in Dec. 2021 and closed it in Oct. 2022. The deal was ~80% stock/~20% cash and the announced valuation was ~19X TTM EBITDA (ended up being ~14X given stock moves). The deal created the largest pest control company in the U.S./world, and RTO basically is going to attempt what the past 5+ leaders of TMX have tried to do: turn TMX more into ROL by improving customer service/retention. TMX's CEO will be leading the broader North America business for RTO; he did not have pest control industry experience prior to TMX, as he used to be CEO of MNRO.

There is no doubt that the TMX/RTO combination could be a 1+1=>2 situation as RTO sounds like it historically has been a well-run business that could drive improvements at TMX. TMX also provides RTO with more U.S. scale and a better positioning in the residential and termite service lines. A stronger TMX could be a bit of a dampening factor on ROL's organic growth trends vs. history, although the question is if a stronger TMX dampens trends for ROL or other players (i.e., smaller/local players). The integration process for RTO/TMX sounds very large and RTO does not

have experience integrating something of this scale. A lot of commentary (including via industry contacts) has pointed to a lot of heavy lifting in the integration, creating risks, let alone risks related to RTO still having to improve the underlying TMX business itself. This could create opportunities for ROL to actually gain market share in the NT amid this noise, particularly since ROL proactively leaned into expanding its commercial sales team in late 2020 and 2021. Additionally, with RTO and TMX focused on integration, it seems very likely that they are less active in the M&A market in the NT-MT; obviously this will change over time, but I learned from industry contacts that traffic in pest industry M&A are seeing TMX at the M&A table for only ~50% of the time that they normally would have expected pre-deal. Finally, you could make the point how a combined RTO/TMX actually is good for industry pricing and structure over the LT, relative to having an even more fragmented industry. All-in, the TMX/RTO combination definitely is a risk to monitor as we look out over the MT-LT, but the general view I have heard and that I have is that ROL should be able to continue its historical growth trajectory despite this change in the industry.

#### **ROL's Competitive Advantages**

Competition in various respects represents the most likely challenge to the durability of ROL's business given the attractive underlying aspects of the pest control industry itself. ROL has successfully navigated this competitive industry over time, but there always will be risk here from the standpoints of pricing, labor retention, service offering, and service quality. I gain confidence in ROL's ability to compete based on their disciplined approach across their business, in which they have proactively focused on their culture and employees, and which then trickles down to the customer. This is important because differentiation in the industry is about the customer experience, and all indications I have seen (from industry sources) are that ROL is among or the best-in-class as it broadly relates to employee and customer service. I think the quality of the business and its ability to compete well within the industry is reflected in its remarkably consistent organic growth over time.

The place to start for ROL's competitive advantages, or maybe better framed up as kind of their "secret sauce," is with their culture and employee focus. The Rollins family has long been clear that the company's top priority is its employees (field technicians specifically), as they realized early on that better employee quality, engagement, and performance leads to better financial results (including customer retention); current President/CEO Jerry Gahlhoff has resoundingly echoed this as well. It all starts with pay/benefits for attracting/retaining blue-collar technicians. ROL's goal has always been to create jobs that employees can build a family around. Their technician pay is known as the highest in the industry (~\$60-65k vs. industry avg. ~\$50-55k) and they are known for strong benefits (continue to lean into this, as they reinvested ~80% of the Trump tax cuts into tenure-based equity grants, an increased 401k match, and increased scholarship programs for employees' children). Their investments go beyond pay/benefits though, as they are known to be industry-leading in their technician training, which directly impacts the quality of their operations. Every new technician receives ~160 hours of proprietary training in their first year. This includes training via digital content (ROL has their own production studio) and/or in-person training at ROL's 27k sq. ft. training center in Atlanta that is unique within the industry (and not replicable by small competitors) and has mock restaurant, grocery store, commercial kitchen, hotel room, hospital room, warehouse, and pharmacy setups (among others; was fully opened in 2013), as well as a full house and pavilion that helps train for termites (opened in 2005; I believe they have let parts of the house have a termite problem). ROL also provides specialized training by locality, such as for carpenter ants in the Midwest. That said, the technician position still is a higher-turnover position, with ROL having a reference in Q4-20 to 75% overall employee annual retention (and likely lower for technicians) and, above its historical retention rate near 65-70%. FWIW, it sounds like 70% is considered a gold standard in the industry, so ROL is basically at this best-in-class level vs. many competitors that are in the 50-65% range. Technician churn mostly is driven by departures in the first 8-9 months of employment, which thankfully does not have much direct customer impact (as these technicians are not really on their own and do not have strong customer relationships), but it obviously makes life more difficult for ROL. So, management is focused on continuing to get better with onboarding and staying connected with technician hires. ROL also has a significant focus on internal talent development, with structured programs as it relates to identifying and training future leaders, including via a Regional Manager Development Program. It is very easy to go on LinkedIn and find branch managers, regional managers, etc. that have been at ROL for 15-30+ years. Overall, management will tell you that leadership across the organization (at corporate and in the field), and their significant industry/ROL experience, is a key competitive advantage for the company. This sentiment has been corroborated by industry contacts and I really think that leadership and the culture they maintain is the core of what makes ROL special.

The next area to highlight is how ROL operates the business. First, they are clear that there is no compromise on culture, training, and customer focus across branches; these are required to be handled the ROL way. To this point, all Orkin technicians, branch managers, and up to the CEO are compensated on customer retention. Technicians also have productivity ties for compensation (sounds like \$ productivity, not necessarily # of stops), and the easiest way to drive better productivity is to retain existing customers and then benefit from increasing density as new customers are added along existing routes. ROL also is increasingly incorporating things like safe driving metrics into compensation for branch employees. In terms of true operations, ROL appears to be a bit of a mix of standardization and autonomy. It requires the aforementioned culture/training/customer focus areas and it obviously has standardized operating processes/procedures to drive consistency and reduce risk across the business (it has very clear "knock outs" in the termite process that help it to avoid risky jobs, increasingly is standardizing on proprietary technology platforms), however it does sound like ROL provides some autonomy to local branches. The Orkin business definitely is more structured as this is important to service larger commercial customers and customers broadly looking for this "big brand" experience, but on the other end of the spectrum the regional brands are given more autonomy for things like technician scheduling, day-to-day operations, and customer interactions. For the extra bit of autonomy, ROL expects its regional brands to grow faster than Orkin (if they do not outgrow Orkin over a 3-year period, they supposedly are at risk of then being folded into Orkin) and to be "test kitchens" for the broader business (e.g., some of ROL's "green" pest control products have started in regionals). There is opportunity to drive some increased standardization across the business, particularly on the underlying systems and back-office side of things, as well as getting continually better at things like benchmarking across locations, but ROL has always tried to toe the fine line between getting more efficient and not negatively impacting the employee/customer experiences.

So, if I had to boil it down to why ROL wins and drives consistent results within this industry, I think it pretty simply comes down to: 1) the cultural and operational focus and discipline within the company; 2) the quality and breadth of operations and service that ROL provides; 3) various other benefits that scale provides from ROL's standing as one of the largest players in the industry. I already covered point #1. On point #2, ROL just point-blank is broadly good at servicing customers in terms of the time it takes to respond to an inquiry, schedule a visit, and perform the visit. Add in the fact that ROL's brands offer some of the widest breadth of service offerings in the industry and it is not surprising that ROL, and its Orkin brand specifically, is regarded/reviewed as one of the best, if not the best, large pest control company across things like overall Google Reviews, Consumer Affairs, and some other recommendationrelated services (all on avg., as specific online reviews can be iffy/spotty for ROL and others). Point #3 and the benefits of ROL's scale can be linked back to some of the aspects of points #2 (i.e., why ROL can respond quickly, why it has a large breadth of offerings), but there are other aspects where scale provides advantages too. First, Orkin is one of the most well-known pest control brands out there, and ROL's regional brands are well known in their respective markets too, so being top of mind for customers to call when pest control is needed is a significant advantage, particularly in this digital age where scale matters for things like Google search algorithms. Second, ROL's scale makes it easier to stay on the leading edge within the industry in terms of employee benefits, training, and new products (it has an internal R&D team that works with large manufacturers and universities). Third, while it sounds like ROL might be lagging some other larger peers a bit in terms of smart technology on the commercial side (e.g., "smart" pest traps), I am confident that ROL is well ahead of smaller players in the technology area and that in general its proprietary underlying technology systems provide advantages. To start, ROL has now rolled out its proprietary branch operating software system (BOSS) and smart routing system to Orkin U.S./Canada and Western Pest Services, with further regional brand rollouts going on currently. It also has a range of other technology tools, including HomeSuite (tablet-based solution that helps automate termite proposals), BizSuite (used for commercial sales and quoting), and InsideHawkins (commercial customer reporting technology), among others.

All of this is important because quality service translates to customer retention, which fuels the entire attractiveness of the pest control industry and ROL's business model in terms of consistency and to some extent profitability. To start, ROL's annual customer retention rates by end market include residential 74-85% (I have heard the higher end as much more likely; vs. 2018 76-85% and 2011 77%), commercial 86-90% (vs. 2018 88-90% and 2011 89%), and termite 86-88% (vs. 2018 85% and 2011 85%). As such, I think that ROL has roughly maintained or modestly improved retention levels over time. For perspective, I have heard it framed up as everyone in the pest control industry aiming for 85-90%+ retention on a broader basis, which would truly be the gold standard in the industry; thus, ROL is in or close to that best-in-class type of range across its business. As a comparison, TMX stopped providing customer

retention years ago, but it historically tracked in the mid-to-high 70%'s across its business. For the residential end market specifically, the customer retention rate (and thus churn) for the industry and ROL not surprisingly follow a trend towards decreasing churn over time. I have heard that residential customer churn is ~40% in year 1 for the industry (ROL likely better than this), ~20% in year 2 (ROL maybe more like 10-15%), and then <5-10% in years 3 and beyond, thus averaging out to the broader residential retention rate. Therefore, the key is providing a good customer experience in years 1-2 and increasing the probability of retaining customers in the early years to really boost the LTV of those customers. In terms of residential churn, ROL says the #1 reason is the customer moving (Industry contacts believe this explains 40%+ of residential churn) and while the company is working hard to get better at retaining customers at their new homes or retaining new customers at the prior home, there is work to do here. Beyond that, there are multiple other reasons for residential churn, in order of magnitude as: 1) poor service (i.e., not showing up on time) – a customer probably goes to a competitor in this scenario; 2) poor efficacy of treatment (i.e., did not get rid of the pests) - a customer probably goes DIY for a while in this scenario, then likely back to a competitor or they just live with pests; 3) price, which matters but is down on the list - a customer could go to a competitor, DIY, or exit the market in this scenario. There is no doubt that ROL is heavily focused on customer retention and hopefully increases it over time, although I do not necessarily think it has been a huge needle-mover for growth in recent years based on disclosures. I think there could be some natural uplift to retention rates over time given a generally aging customer base and ROL's company-specific initiatives, but I would not anticipate a major step-change increase. FWIW, there are some examples of commercial services companies with higher retention rates (Cintas 95%+, ECL >90%), maybe suggesting upside to parts of ROL's business, although the residential-related businesses will probably always be slightly lower than the commercial side.

Overall, I feel quite confident based on the workings of ROL's underlying business and operations that it can continue to drive solid and consistent results within this industry.

#### **REVENUE, MARGIN, AND EARNINGS DYNAMICS AND DRIVERS**

The resiliency of the model is illustrated by ROL growing revenue every year since 1996 and delivering remarkably consistent organic revenue growth over the LT. For perspective, organic growth has tracked 3%+ every year since at least 2007, other than 2009 (when it was +1%), and prior to the more recent elevated trend (helped by higher pricing and some pandemic-related tailwinds) organic growth tracked within a tight range of roughly +4-5.5% every year in the 2010-2020 period (again, I think highlighting the quality of the business). Revenue growth has been solid across all end markets over the past 5 years (historically have not provided specific end market organic growth...), other than commercial pest control dipping during the pandemic. Adding in M&A (more details later, but contribution has

accelerated a bit in the past ~5 years), revenue growth has tracked 5%+ every year since 2007, with CAGRs including +10% over the past 3 years, +10% over the past 5 years, +8% over the past 10 years, and +8% over the past 15 years.

#### ROL has turned healthy top-line

Vear	Resid	ential	Comm	nercial	Termite/Ancillary		
real	Total Growth	Org. Growth	Total Growth	Org. Growth	Total Growth	Org. Growth	
2018	9.7%		6.1%		12.7%		
2019	11.3%		8.9%		11.6%		
2020	13.4%		-2.3%		9.6%		
2021	12.9%	10.0%	10.2%	7.4%	14.3%	11.9%	
2022	9.9%	5.7%	10.3%	8.6%	15.4%	10.9%	
Q1-23	9.4%	7.1%	12.0%	10.0%	14.1%	11.6%	

growth into margin expansion, with adj. EBITDA margin of 22.0% in 2022 comparing to 17.9% in 2012. The >400 bp of margin expansion over this 10-year period was driven by a healthy combination of GM expansion (+250 bp over 10 years to 51.5%) and SG&A leverage (-230 bp over 10 years to 29.8%). This translated to adj. EBITDA CAGRs of +14% over the past 3 years, +11% over the past 5 years, +11% over the past 10 years, and +11% over the past 15 years. Additionally, adj. EPS has grown at +13-17% CAGR's over the various aforementioned periods, while FCF has compounded at +13-16% CAGR's over these periods as FCF margin has increased from 10% to 16%. Once again, the consistency of ROL turning healthy top-line growth into faster profit growth is impressive.

Going forward, my base case is that ROL can sustain +MSD% organic revenue growth annually, and more like HSD%+ overall revenue growth when you add in +LSD% annual contribution from M&A (on avg.). Combined with

opportunity for continued adj. EBITDA margin expansion (call it ~50 bp annually, on avg.) through a combination of GM expansion and SG&A leverage, this would imply a base case earnings growth outlook of roughly +9-11% annually. With ROL's FCF conversion increasing a bit in recent years, I see potential for FCF growth modestly faster than this too. Obviously certain factors, particularly organic growth and M&A, could have potential to track slightly higher than my base case scenario, as seen in recent years, but I think it is most appropriate to view ROL through the lens of this base case framework. This admittedly is more of a Consumer Staples type growth and financial profile, but I think it can be attractive given my confidence in the level and consistency of growth.

Voor	Revenue	YoY	Organic	CM %	5C 8 A 9/	Adj.	YoY	Adj.	YoY	Adj.	ΥοΥ	FCF	ΥοΥ	FCF
Tear	(\$ mil)	Change	Growth	GIVI /0	30&A /0	(\$ mil)	Change	Margin %	in Bp	EPS	Change	(\$ mil)	Change	Margin
2008	\$1,021	14%	3.0%	47.6%	33.2%	\$147.2	13%	14.4%	(7)	\$0.14	8%	\$75.9	5%	7.4%
2009	\$1,074	5%	1.1%	48.7%	33.1%	\$167.4	14%	15.6%	116	\$0.17	22%	\$95.1	25%	8.9%
2010	\$1,137	6%	4.9%	48.7%	32.8%	\$180.5	8%	15.9%	29	\$0.18	8%	\$111.1	17%	9.8%
2011	\$1,205	6%	4.3%	48.8%	32.3%	\$199.1	10%	16.5%	64	\$0.20	13%	\$135.9	22%	11.3%
2012	\$1,271	5%	5.5%	49.0%	32.1%	\$216.3	9%	17.0%	50	\$0.23	11%	\$122.9	-10%	9.7%
2013	\$1,337	5%	5.2%	49.3%	32.0%	\$230.8	7%	17.3%	24	\$0.25	11%	\$144.1	17%	10.8%
2014	\$1,412	6%	3.9%	49.9%	31.3%	\$262.7	14%	18.6%	136	\$0.28	12%	\$165.4	15%	11.7%
2015	\$1,485	5%	4.2%	50.4%	31.2%	\$287.5	9%	19.4%	75	\$0.31	11%	\$156.9	-5%	10.6%
2016	\$1,574	6%	5.2%	50.9%	31.2%	\$311.4	8%	19.8%	43	\$0.34	10%	\$193.4	23%	12.3%
2017	\$1,674	6%	5.2%	51.0%	30.1%	\$350.8	13%	21.0%	117	\$0.37	7%	\$210.7	9%	12.6%
2018	\$1,822	9%	5.3%	50.9%	30.2%	\$377.3	8%	20.7%	(24)	\$0.48	32%	\$259.1	23%	14.2%
2019	\$2,016	11%	4.8%	50.7%	30.9%	\$399.1	6%	19.8%	(91)	\$0.47	-3%	\$282.1	9%	14.0%
2020	\$2,161	7%	3.8%	51.5%	30.4%	\$454.8	14%	21.0%	124	\$0.54	15%	\$412.6	46%	19.1%
2021	\$2,424	12%	9.5%	52.0%	30.0%	\$546.4	20%	22.5%	149	\$0.69	28%	\$374.6	-9%	15.5%
2022	\$2,696	11%	7.8%	51.5%	29.8%	\$592.9	9%	22.0%	(54)	\$0.75	9%	\$435.3	16%	16.1%
2023E	\$2,982	11%		51.8%		\$682.6	15%	22.9%	90	\$0.86	15%	\$491.4	13%	16.5%
2024E	\$3,209	8%		51.9%		\$757.3	11%	23.6%	71	\$0.96	12%	\$543.8	11%	16.9%

Source: Company Documents, Bloomberg - consensus for 2023-2024E excludes 1 outlier estimate

#### **Revenue Growth Drivers**

#### General Market Growth and ROL's Ability to Get Its Fair Share (or More) Through Strong Execution

I already spent quite a bit of time on the industry and ROL's approach to execution. I am confident that pest control can be a resilient, GDP+ growth type of market, which then heavily underpins ROL's +MSD% organic growth track record and outlook. Said differently, I think that ROL can drive organic growth at or slightly above the industry growth rate due to its operating philosophy and discipline, although others things also help like its purposeful increase in the size of its commercial salesforce in the past couple of years (characterized as a key driver of recent commercial end market strength) and the fact that its staffing levels broadly have improved to the best levels since COVID-19 hit. Any increases in customer retention rates would further enhance visibility to this as well.

#### Pricing

ROL historically has taken +1-2% pricing annually, and it generally is considered a price leader given its scale, despite it also being a premium-priced player. That said, price increases have been higher recently due to inflation, with pricing tracking more like +3-4% in 2022 and 2023 more like +4% (regional brands are taking more pricing vs. Orkin). ROL historically took contractual pricing mid-year, but has moved this to earlier in the year in 2022-2023, and it continues to adjust its rate card prices more frequently. Encouragingly, ROL has talked about seeing little resistance to above-average price increases, and they think that smaller localized players have been more aggressive in taking price. I think pricing could remain a bit elevated in the NT-MT given inflationary dynamics, but over time my base case would be that it reverts back towards the +1-2% level when framing up ROL's LT growth outlook; i.e., anything above the +1-2% pricing level could present upside to LT organic growth expectations, in my opinion.

#### Cross-Selling of Adjacent/Ancillary Services to Core Pest Control

ROL's focus always is on core pest control, but there are very near adjacencies that ROL thinks it can attack well. To start, core pest control and termite are adjacencies in many respects because they have different processes/models, and there still appears to be a pretty long runway to better cross-sell these. Then you can go down the list of ROL's

other more ancillary offerings such as bed bugs, mosquitos, and wildlife control, among others. Stifel thinks that ROL might only be ~20% of the way into this broader cross-selling journey, and while the company has not provided specific details, they do say that the % of customers with 2+ services still is low. With more experienced technicians doing better in terms of helping to attach ancillary services, this is yet again another way in which ROL's operations and culture can impact financials. It provides me with increased confidence in their ability to deliver on the growth anticipated. E.g., disclosures have been spotty, but bed bugs went from ~\$15M of revenue in 2009 to ~\$80M in 2016 (+27% CAGR) and mosquitos went from ~\$10M of revenue in 2015 to ~\$40M in 2020 (+32% CAGR).

#### <u>M&A</u>

ROL uses M&A to build scale and density, as consolidating the fragmented industry is a way for ROL to grow faster than the industry in a relatively lower-risk way because they do not always need to build new routes from scratch, but rather can acquire players who already have successfully built routes or larger books of business. ROL's

management is highly focused on the people aspect when it comes to M&A, saying they only acquire like-minded companies that are focused on customers/employees. They say that the priorities of acquisitions' sellers are: 1) their employees, 2) their customers, and 3) the price being paid by the acquirer. That said, ROL has stated financial criteria for M&A that includes accretive to growth/margins, accretive to cost of capital by year 3, and not more capital intensive than the existing business. They appear to be quite disciplined on M&A, noting that they diligence 4X+ the number of acquisitions they close annually; I would assume that they get a look at every single pest control company that goes up for sale in the U.S.

ROL historically talked about M&A multiples of 1.25-1.75X revenue (with the vast majority of revenue being recurring), but since COVID-19 it looks like their M&A multiples have been more like 2X+ revenue. This 2X+ is still

any band	. Toutes	or larger			5
Overall Year Revenue Growth		Organic Revenue Growth	M&A Contribution	Number of Acquisitions	Cash \$ mil's Spent on Acquisitions
2006	7.0%	4.6%	2.4%	Not quantified	\$10
2007	4.2%	4.2%	0.0%	Not quantified	\$7
2008	14.0%	3.0%	11.0%	Not quantified	\$152
2009	5.2%	1.1%	4.1%	Not quantified	\$11
2010	5.9%	4.9%	1.0%	Not quantified	\$35
2011	6.0%	4.3%	1.7%	Not quantified	\$11
2012	5.5%	5.5%	0.0%	Not quantified	\$25
2013	5.2%	5.2%	0.0%	Not quantified	\$13
2014	5.5%	3.9%	1.6%	21	\$33
2015	5.2%	4.2%	1.0%	12	\$46
2016	5.9%	5.2%	0.7%	34	\$130
2017	6.4%	5.2%	1.2%	23	\$77
2018	8.8%	5.3%	3.5%	38	\$77
2019	10.6%	4.8%	5.8%	30	\$431
2020	7.2%	3.8%	3.4%	31	\$148
2021	12.2%	9.5%	2.7%	39	\$146
2022	11.2%	7.8%	3.4%	31	\$116
YTD 2023	11.4%	9.2%	2.2%	7	\$333

well below the recent industry average multiples of 3X+ revenue, which is consistent with the idea that ROL historically has been able to pay a bit below average on multiples because of its reputation for treating acquired employees so well (this is a key reason why they win deals). EBITDA valuation multiples for acquisitions were <10X pre-synergies pre-pandemic, but these also have probably increased to LDD+ recently (note that ROL seemingly can pretty quickly drive some margin expansion at acquisitions due to its scale/operations advantages). The increase in valuation multiples more recently is at least due in part to the fact that PE has become more active in the space, at the same time that larger strategic players have remained quite active (despite RTO/TMX cooling off a bit) and as some international pest control companies have become more active in the U.S. as well (e.g., Anticimex); this is all something to watch. Regardless, there is significant valuation arbitrage opportunity in M&A for ROL vs. its own multiple, but management does not do M&A for this specific reason.

ROL has talked about its current M&A pipeline being robust, seemingly comprised of a lot of the traditional small deals, as well as some potentially larger deals. Management is focused on both types of acquisitions and has noted in the past that it would love more regional brand exposures, particularly in an area like the Midwest. While international is an M&A opportunity (e.g., ROL has done 10 acquisitions in the U.K. since 2016, including a couple of "larger" ones in 2022 to get more scale), the U.S. still is the largest, fastest-growing opportunity and it has plenty of ongoing consolidation opportunities, so it will remain the primary focus going forward. The chart above shows ROL's M&A history, with a couple of interesting points being the large number of acquisitions they do annually (30+ each of the past 5 years) and the increasing YoY revenue contribution from M&A in recent years (averaged 3.8% annually in 2018-2022 vs. 0.8% in 2012-2017). This is due to more deals, but also greater mix of some larger deals that have been more meaningful to the top-line (e.g., Northwest Pest Control acquired in 2017 was the 17<sup>th</sup> largest pest control company in the U.S. and Clark Pest Control acquired in 2019 was the 8<sup>th</sup> largest). Another example of a larger M&A deal was the acquisition of Fox Pest Control just announced in early Apr. 2023. ROL is buying Fox for \$350M (including

\$32M contingent on growth/profitability trends), which translates to ~2.6X revenue ex-contingent payments given Fox delivered >\$120M of revenue and ~20% EBITDA margin in 2022. Fox appears to be a strong asset that was the 13<sup>th</sup> largest pest control company in the U.S. with 30 locations across 13 states, and delivering 20-30%+ annual revenue growth in 2021-2022. It sounds like the cultures between the 2 companies were very similar (ROL has known 1 of the co-founders for nearly 20 years; ROL worked on this deal for 18 months, so heavy cultural diligence), and although Fox has a bit of different GTM model in that it has had a lot of success from door-to-door selling, ROL is excited about this acquisition that is 4-5% accretive to ROL's overall revenue base and provides good NT visibility to M&A contribution. Overall, ROL has a strong M&A track record and my personal view is that as one of the acquirers of choice in the industry they can maintain a ~LSD% annual revenue contribution from M&A over time, although I acknowledge that we need to watch competitive dynamics and that M&A activity can be a bit lumpy year-to-year.

#### Margin

As shown earlier in the table on p. 9, ROL has a history of consistent margin expansion through GM improvement and SG&A leverage. Margin in 2022 was hampered by higher costs for fuel and vehicle repair (due to vehicle supply chain challenges), although excluding an increase in casualty reserves and medical costs increases, margin actually expanded YoY in 2022. All that said, price/cost has recently flipped positive on an overall basis and ROL has delivered YoY margin expansion in each of the past 3 quarters.

As it relates to cost of sales drivers (in total nearly 50% of revenue), it sounds like labor is >20% of revenue, supervisory/sales ~5%, materials ~HSD%, and fleet ~MSD%. Advertising costs have been ~4% of revenue, which in absolute terms means a slightly >\$100M annual budget and is meaningful when considering that <15 pest control companies in the U.S. have >\$100M of revenue. ROL's newer CFO has been clear that the company should be delivering higher adj. EBITDA margin based on its GM being >50%, and while they have no specific LT margin target, they are targeting 30-40% incremental margins (on avg., as there could be some quarters below, like Q2-23 where they are leaning more into customer acquisition spending), suggesting a long runway for overall margin expansion. For perspective, hitting 30-40% incremental margins translates to ~50 bp of annual margin expansion going forward.

I see a few key drivers of future margin expansion. 1) ROL has a leverageable structure to some degree, in that driving greater productivity out of its existing assets (i.e., technicians) should drive higher incremental margins. 2) Ongoing technology innovation and implementation are continued tailwinds. ROL might be through some of the biggest tailwinds given that Orkin U.S./Canada and Western Pest Service are successfully through the BOSS and routing implementations, but it currently is rolling out routing/scheduling technology at Clark Pest Control (done in Q1-23) and HomeTeam (done in Q2-23), and it already is talking about better on-time delivery and reduced mileage, which lower labor/fuel costs and increase customer satisfaction. FWIW, it was originally said that implementation of the BOSS system was driving 200-300+ bp of branch-level margin improvement. 3) Management more recently has been clear that while keeping some of the acquired businesses more separate has value, there is opportunity more on the back-office side as it relates to non-customer facing areas like managing payroll, fleet, etc. They also are broadly taking a fresh look at call center, customer support function, and corporate support center costs too. ROL needs to be careful to not drive too much standardization/margin to the point of negatively impacting customer service, but we could hear some incremental color on some of these areas as 2023 progresses. I do not think this last area of focus alone will provide a significant boost to ROL's margin, but I could definitely envision it driving 100+ bp of margin expansion over time and/or just increasing my confidence level in ROL hitting their incremental margin target.

#### Perspective on the Macro and NT Outlook

I will acknowledge that the residential business for ROL and the pest control industry benefited from COVID-19 given many consumers spent more time at home and noticed more pest problems. Some believe that gains from this period will unwind as people continue to return to work and social activity, but we have not seen it yet in any meaningful way, and thus I think it is more of a higher base for the industry to hopefully grow from. Additionally, there is no doubt that the residential business is more susceptible to broader economic trends (i.e., recessions). While DIFM pest control skews higher-income in terms of its customer base, there is some subset of customers that would cancel/churn in a weaker economy and new customer acquisition can get more difficult too; we saw this in the residential part of the market underperforming during the GFC. I also would note that pest control is not really a new home phenomenon in that new home construction does not really drive trends. The one part of ROL's business

that skews a bit more towards new homes is HomeTeam and their Taexx tubes offering that typically is installed during construction (as of 2020 they provided service to 22 out of the top 25 U.S. homebuilders), but even this business is now in >1M structures and thus has a strong base of recurring revenue (and/or opportunity for it).

ROL continues to talk about a healthy demand environment (including into Apr. 2023), as evidenced by solid organic growth trends across end markets and commentary that growth has been strong across their brands. While the residential business has been tracking the "softest" in terms of organic growth, it still has been healthy (including +7.1% in Q1-23 and +4.8% in 2H22) and they have talked about underlying metrics/demand holding up well. Overall, while ROL is not entirely immune to a softening economy, I think that general downside from a weaker economic environment is relatively limited in the grand scheme of things, with my view being that a moderate recession could translate to downward estimate revisions of LSD-MSD% for revenue and MSD-HSD% for adj. EBITDA.

#### BALANCE SHEET, CASH FLOW, AND CAPITAL DEPLOYMENT

ROL ended Q1-23 with cash of \$113M and debt of \$62M. As such, ROL's current gross leverage ratio is 0.1X, net leverage ratio is -0.1X, and debt/capital ratio is 5%. ROL's debt is drawn under a \$1.0B revolving credit facility that matures in Feb. 2028, and which recently carried a floating interest rate slightly >5%. ROL's gross leverage ratio has never been >1X in at least the past 15 years and it has mostly carried net cash over this period; that said, it technically has ability to go up to 3.5-4.0X leverage under its credit facility. With the recent Fox Pest Control acquisition for ~\$318M of upfront cash, I would estimate that, all else equal, ROL's gross/net leverage ratio will go to ~0.5X. I.e., still a very reasonable leverage profile given the consistency and profitability/FCF characteristics of the business, and ROL historically has paid down debt after larger acquisitions anyways.

ROL operates a capex-light model, with capex historically tracking 1-2% of revenue (including the low end of this range in recent years). I also would note that ROL operates with negative working capital. Capital allocation therefore is primarily focused on M&A and dividends. On dividends, ROL used to pay some special dividends in addition to its regular quarterly dividend, but now is focused on the regular quarterly dividend that currently is \$0.13/share and carries an annualized yield of 1.2%. ROL has done some share repurchases in the past, but none since 2016. The company's FCF conversion as a % of adj. net income has tracked >100% every year since at least 2006 (with all but 1 year tracking 110%+), while as a % of adj. EBITDA it historically has tracked in the 60-80% range. All-in, ROL has seen a steadily increasing FCF margin profile in recent years (absent a spike seen during COVID-19), with 2022 FCF margin tracking ~16% (with absolute FCF \$'s of \$435M) vs. 2017 ~13% (\$'s \$211M) and 2012 ~10% (\$'s \$123M).



This has enabled ROL to maintain strong ROIC and ROA over the LT, with 2022's ROIC ~28% and ROA ~18%. There can be a little volatility in these returns numbers when larger acquisitions occur, but I am encouraged by the sustainability of these strong return profiles. The charts above could be considered some of the most important aspects of the ROL's story, and I think are some of the key reasons why the stock garners its premium valuation.

Position Size #	Shareholder	% Ownership
1	Rollins Family (Mostly LOR Inc. Family Trust)	50.5%
2	Vanguard Group Inc/The	5.8%
3	BlackRock Inc	5.6%
4	APG Asset Management NV	3.7%
5	Select Equity Group LP	2.6%
6	State Street Corp	2.3%
7	Kayne Anderson Rudnick Investment	1.4%
8	Geode Capital Management LLC	1.1%
9	Invesco Ltd	0.8%
10	GAMCO Investors Inc	0.8%
11	Riverbridge Partners LLC	0.7%
12	Morgan Stanley	0.7%
13	13 Neuberger Berman Group LLC	
14	Northern Trust Corp	0.6%
15	Millennium Management II C/NY	0.6%

OWNERSHIP

An ownership table is shown to the right. The top 15 shareholders own ~78% of total shares outstanding, with the Rollins family owning ~50.5% across their various entities and the top 14 non-insider shareholders owning ~27%. ROL's non-insider ownership base currently is broken down as ~33% blend, ~33% ETF, and ~15% growth.

In terms of the Rollins family ownership, the vast majority (or ~44% of ROL's total shares outstanding) is in a multi-generational family trust named LOR, Inc., with the remainder spread across individual holders, other family entities, and some family-controlled

charitable entities. LOR was run by Gary and Randall Rollins, but I believe Gary is fully in charge now after Randall's passing in 2020. It is a bit of a black box, but my understanding is that this truly is a multi-generational family trust and thus after Gary's passing it is not like shares will be distributed/sold any time in the NT. FWIW, the shares that LOR owns get >\$110M in annual dividend payments at the current dividend rate, so they get strong income contribution from continued ownership without selling shares. LOR historically has not been a seller of stock, but it did sell ~12.5M shares in 2H22 (4.8M in Aug. 2022, 7.75M in Nov. 2022). I have heard that estate planning (i.e., tax purposes) was the driver of the stock sales (maybe due to the passing of Randall in 2020?) and that this is not some type of broader strategy to sell down the family's stake in the company. I would note that further selling of stock likely would take the Rollins family below the 50% ownership level, which obviously has not been done by them before and I wonder if it is a level they are not willing to breach given theoretical control implications. Overall, the actions of the Rollins family in terms of level of ownership and selling shares certainly is a risk to the stock, and I would note that in both instances the reports of these family sales led to some NT weakness in the stock. Again, I have no indications that the Rollins family will be sellers (or maybe more importantly, consistent sellers) of stock going forward, but this is an unknown risk.

I also should note that the Rollins family has had some well-publicized family issues over the years, specifically related to various family members' access to the family's assets, including ROL stock. The high-level version is that Gary/Randall's father Wayne did not want their family fortune squandered and thus as Gary/Randall basically were in full control of the family's assets they put increasing stipulations for subsequent generations to get payouts from the family asset base (including being engaged in "meaningful pursuits" in life and eventually allowing for the ability to drug test them, have private investigators watch them, etc.). As a result of these increasing stipulations, Gary's 4 children sued in 2010 (one of his sons, Glen, was COO of ROL at the time and was subsequently fired), while Randall's 5 children did not sue. The case was litigated for years and then a confidential settlement was reached in 2019, with Gary supposedly at least partly making up with his children at that time. There has not been any noise since the confidential settlement, so we do seem to be past these issues, but you technically never know.

#### MANAGEMENT (SB has seen them over the years and held a virtual team meeting with the CEO/CFO in Mar. 2023)

**Gary Rollins** (78 years old) started working at ROL in 1966, serving as President/COO from 1978-2001 and CEO from 2001-2022. Starting in 2023, he moved to the role of Executive Chairman. Gary obviously has played an integral role in the long-term success of ROL and his significant ownership stake/control was highlighted in the prior section.

Jerry Gahlhoff (51 years old) has served as ROL's President/CEO since the start of 2023. He has been connected to the pest control industry his entire life, as his dad was an Orkin employee while Jerry was growing up (mostly a

branch manager) and then Gahlhoff received bachelor's and master's degrees in entomology from the University of Florida. After graduation he worked for Wilson Pest Control in NC from 1999-2004 (including as technical director) and then HomeTeam Pest Defense from starting in 2005. He joined ROL via its acquisition of HomeTeam in 2008, and eventually served as President of HomeTeam from 2011-2016. He then moved to President – Specialty Brands at ROL from 2016-2020, where he led all of ROL's non-Orkin brands. During this time, he also was ROL's VP of Human Resources where he led the company's HR efforts. He then stepped into the President/COO role from 2020-2022. Gahlhoff beneficially owns ~\$10M of stock.

**Ken Krause** (48 years old) has served as ROL's EVP, CFO & Treasurer since Sept. 2022. He previously worked at MSA Safety (ticker: MSA) from 2006-2022, ultimately serving as CFO, Chief Strategy Officer, & Treasurer from 2016-2022. Prior to MSA he worked at KPMG from 2004-2006.

Management is compensated via base salary, cash bonuses, and equity grants. The annual cash bonus is targeted at 150% of the President/CEO's salary and 100% for the CFO, and is based on a 40%/60% weighting between targets for revenue growth and pre-tax profit. For perspective, the 2022 revenue growth target was +8.2%. There is a sliding scale for the cash bonus payout, to where the payout is 0% for <95% of the plan and then it increases on a sliding scale up to 125% payout for >105% of the plan. Jerry Gahlhoff also had 10% of his salary as a potential bonus in 2022 based on pest control cancellation performance. Executives also participate in an equity grant program, historically consisting of RSUs that vest over 4-6 years. For 2023, 75% of the equity grant will be RSUs, but 25% will now be PSUs. The PSUs will cover the 3-year performance period of 2023-2025 and are 50% based on the 3-year revenue CAGR (target for 100% payout is +7.0-7.9% CAGR, with 0% payout at <+5% CAGR and 200% payout for >+10% CAGR) and 50% based on the 3-year avg. adj. EBITDA margin (target for 100% payout is 21.0-21.9% vs. 2022's 22.0%, with 0% payout at <19% and 200% payout for >24%), along with a kicker that is targeted to be worth 50% of the PSU grant and is based on ROL's TSR vs. the S&P 500 (target is 65-74.9<sup>th</sup> percentile for performance, but 0% payout is at <50<sup>th</sup> percentile and 200% payout is >75% percentile). Overall, 20-25% of targeted pay for executives is salary and thus 75-80% of target is performance-/time-based; these %'s have played out in actuality in recent years, with most key executives taking home \$1-4M in total compensation, other than Gary Rollins who has been in the \$5-8M range.

The Board is comprised of 10 directors (staggered across 3-year terms), including Gary Rollins, Vice Chairman John Wilson (started at ROL in 1996 and served as President, Orkin in 2009-2013, President/COO of ROL in 2013-2020; joined the Board in 2013 and became Vice Chairman in 2020), President/CEO Jerry Gahlhoff, and Pamela Rollins (a daughter of Randall Rollins), as well as 6 independent directors. 7 of the directors have been on the Board for 3 or less years (so quite refreshed). The Board's experience appears decent as it relates to financial proficiency in particular (have some former audit partners and a public company CFO; also large company experience in terms of CIO and General Counsel), but I admittedly think the Board could be strengthened over time as it does seem to be quite Atlanta- and arguably Rollins family-focused in terms of where the members are coming from (e.g., some directors also are on some other Rollins-related entity boards).

#### Thoughts on the Quality of ROL's Management

It is completely valid to wonder about whether or not the transition of Gary Rollins out of the CEO role will cause ROL to lose some of its luster and/or consistency in terms of culture and financial performance. Overall, I agree that this is a risk to monitor, but my conclusion after doing my own digging and speaking with the several industry contacts is that I personally am comfortable with the transition, for the rationale/perspective outlined below. That is not to say that we cannot also use something like valuation/entry point to somewhat manage this risk from a stock perspective, but on a fundamental basis I feel comfortable with the setup.

First, it has been framed up to me that Gary/Randall Rollins, at least in more "recent" periods, were more focused on the strategic/cultural aspects of the company relative to day-to-day operations. This meant that current Vice Chairman John Wilson largely ran the day-to-day for a long time, with President/CEO Gahlhoff then running the dayto-day in recent years. I point this out because I am not sure that much within ROL will change on a day-to-day basis with the move of Gary Rollins from CEO to Executive Chairman. The question therefore might be more related to strategy/culture, and here Gahlhoff has been clear that he is fully aligned with Gary Rollins on what makes ROL special and what drives the business; i.e., employees and service quality, which translates to customer satisfaction/retention. Gahlhoff clearly was groomed for the CEO role for years, and thus I have to believe that Gary Rollins would not have put him in this role if they were not completely aligned on these most important things. Also, I get more comfort that Gary Rollins and John Wilson are still around and involved.

Second, Gahlhoff clearly has been a high performer within the pest control industry for years (e.g., Pest Control Technology named him to their "Forty Under Forty" list all the way back in 2003 when he worked at Wilson Pest Control) and I do not think that it should be overlooked that he has literally spent his entire life around the industry. It sounds like Gahlhoff really earned his stripes at ROL too, going from running the HomeTeam brand, to running all the specialty brands (and seemingly doing so successfully, which means faster growth than Orkin), to running the day-to-day for the entire company. I honestly have only seen positive feedback as it relates to him being an operator, and while anecdotal, the only specific reference I saw to Gahlhoff was from a former Regional Director at ROL that was very flattering of Gahlhoff as a person and operator. I think there probably is somewhat of a balancing act for Gahlhoff in terms of keeping intact what makes ROL, while also innovating and enhancing it around the edges to drive more value (the company's new CFO could be an example of this). All-in, it is something to monitor, but I feel comfortable that Gahlhoff "knows his stuff" and that he has the ability to drive a well-run pest control company.



Finally, as it relates to newer CFO Ken Krause, it sounds like the CFO role historically has been a weakness for ROL, and therefore Krause represents a strong upgrade. For perspective, ROL's last permanent CFO got the company caught up in the EPS rounding scandal by using improper accounting to round reported EPS up by \$0.01 in the Q1-16 and Q2-17 quarters, which led to his firing and ROL having to pay an \$8M fine to the SEC in early 2022. It also led to ROL undertaking actions such as hiring Krause, using a third-party consultant to evaluate/strengthen financial reporting functions, hiring additional experienced accounting personnel (including a new Chief Accounting Officer), and adding 2 former EY partners to its Board and audit committee. I have been impressed by Krause in presentations at MSA and ROL, and I think he appears to have a pretty good handle on the ROL business despite only being there for ~7 months. His ability to provide fresh perspective and profitability discipline could be a real positive.

#### VALUATION

Current NTM EV/EBITDA is 27.9X on current consensus estimates, compared to its 1-year avg. of 28.2X, 2-year avg. of 29.2X, and 5-year avg. 30.5X. That said, excluding 1 outlier sell-side estimate, it is trading at ~30X NTM EBITDA. It has mostly traded within the 25-35X range over the past 5 years, other than immediately after COVID-19 hit. It is interesting in that in the prior 5-year period of early 2013-2018, ROL's NTM EV/EBITDA multiple averaged ~19X and consistently rose from ~15X at the start of the period to its current range by the end of the period. It is hard to pinpoint an exact driver of the valuation re-rating higher and I am sure that the continued consistent underlying results for the company were a big part of it. That said, by the end of this prior 5-year period, ROL had accelerated its growth contribution from M&A (as shown in p. 10's table), and over the past 5 years it has sustained this higher level of M&A contribution. This should not be overlooked in terms of a valuation driver vs. historical levels, as it has meant that ROL has compounded revenue/profits/FCF at a slightly faster rate in recent years.



Current NTM P/E is 49.2X, compared to its 1-year avg. of 45.7X, 2-year avg. of 47.0X, and 5-year avg. 50.3X. The NTM P/E multiple is and always has been steep, but I think it actually is not the most appropriate multiple for ROL because of its strong FCF conversion relative to net income. To this point, ROL's current NTM EV/FCF is 41.6X, compared to its 1-year avg. of 39.1X, 2-year avg. of 41.0X, and 5-year avg. 41.9X (mostly trading in the 30-50X range).



While ROL is classified as Consumer Discretionary, I think it is best viewed in many respects in the Consumer Staples type of bucket given the growth and margin profile, as well as consistency of the business. The table below compares ROL to a few high-quality Consumer Staples (MKC, CHD, HSY) in the upper end of the Mid Cap to Large Cap range, and which also have a heavier shareholder weighting to growth investors. I also compared ROL to a few other more professional services-oriented companies that have high levels of revenue retention (CTAS, ECL, RTO). Overall, ROL has a stronger 3-year historical growth profile vs. these companies, in line EBITDA margin, stronger FCF margin, lower leverage, and stronger ROIC; as such, I think that it compares quite well on an all-in basis. While ROL's NTM P/E valuation definitely is more expensive, its valuation premium is a bit smaller on an EV/EBITDA basis and pretty modest on a FCF basis. I think this is interesting because while acknowledging that ROL is expensive on an absolute basis, I do not think that its valuation is out-of-whack vs. similar-ish alternatives (view on the entire group aside).

Ticker	Company	Market Cap (\$B)	2020-2022 Rev. CAGR	2023-2024E Rev. CAGR	2020-2022 EBITDA CAGR	2023-2024E EBITDA CAGR	2023E EBITDA Margin	2023E FCF Margin	Net Leverage Ratio	2022 ROIC	NTM P/E	NTM EV/EBITDA	NTM FCF
МКС	McCormick	\$23.5	6%	5%	1%	7%	18%	9%	4.5	7%	32.1	21.9	39.7
CHD	Church & Dwight	\$23.8	7%	5%	6%	5%	23%	12%	1.8	13%	30.6	19.4	35.0
HSY	Hershey	\$55.2	9%	6%	12%	7%	27%	13%	1.7	23%	27.8	19.0	37.1
	Average	\$34.2	7%	5%	6%	6%	23%	12%	2.7	14%	30.2	20.1	37.3
CTAS	Cintas	\$46.5	4%	9%	10%	8%	25%	15%	1.4	21%	32.2	20.8	32.5
ECL	Ecolab	\$47.7	4%	6%	-1%	9%	20%	9%	3.4	7%	32.0	18.1	38.8
<b>RTO-LN</b>	Rentokil Initial plc	\$19.9	12%	24%	15%	33%	23%	7%	5.7	4%	26.2	14.8	47.4
	Average	\$38.0	7%	13%	8%	17%	23%	10%	3.5	11%	30.1	17.9	39.6
ROL	Rollins	\$20.9	10%	9%	14%	13%	23%	16%	-0.1	28%	49.2	27.9	41.6

Given where valuation is, I think to own ROL you need to have confidence in the LT sustainability of its growth and its ability to convert growth into increased earnings/cash...basically a DCF is key to understanding valuation. In a 10year DCF, I get to an intrinsic value of \$ \_\_\_\_\_\_/share (or ~ \_\_\_\_\_% below the current price) when assuming: a \_\_\_\_% revenue CAGR, an \_\_\_% adj. EBITDA CAGR (ending at close to \_\_\_\_% adj. EBITDA margin in 10 years, or \_\_\_\_\_bp of annual expansion and therefore a low-\_\_\_\_%'s incremental margin), an \_\_\_% FCF CAGR (ending at \_\_\_% FCF margin in 10 years), an \_\_\_% discount rate (my raw calculations actually would point you to \_\_\_% amid ROL's historical beta of \_\_\_\_\_, but I wanted to be a bit more conservative), and a \_\_\_\_\_ terminal FCF multiple (translates to a \_\_\_\_\_\_ adj. EBITDA multiple). FWIW, sensitivities include ~\$1/share for every 1 turn change in the terminal FCF multiple, ~\$1.50/share for every 0.5% change in the discount rate, and ~\$3/share for every 1% change in the FCF CAGR. There obviously are pitfalls in the puts/takes of a DCF, but I think this exercise goes to show the importance of ROL's strong returns on capital and the value this creates over the LT, and thus how you can justify ROL's premium valuation.

While at face value the stock typically carries a high valuation multiple, when peeling back the layers I think a premium valuation definitely is justified. I have a high degree of confidence in ROL compounding healthy levels of growth through a combination of organic growth, M&A, and margin expansion. I also am comfortable saying that fundamental risk to numbers is relatively limited in weak economic scenarios. The Rollins family and their ownership will always be a bit of a potential risk to the stock and its valuation (if they would become meaningful sellers then the valuation definitely would take a hit), but I feel comfortable with this dynamic in the NT too.

#### **RISKS**

- <u>Competition</u>: The pest control industry is dominated by some large players, but the industry also is localized and has low barriers to entry, as evidenced by the significant number of players in the U.S. and internationally. Therefore, competition from an offering, pricing, and quality standpoint must be monitored.
- <u>Residential trends</u>: While pest control is considered very recession resilient, the one end market that could be considered more discretionary is the residential segment, and particularly related to any newer home customers or any potential normalization of demand post-COVID-19 tailwinds.
- <u>M&A</u>: The M&A environment is competitive and there are no guarantees that ROL is able to source, execute, and successfully integrate a material amount of acquisitions on a go-forward basis.
- <u>Management</u>: As highlighted, I think that current management is well-equipped to drive consistent and sustainable growth at ROL while also preserving the company's culture, but we would have to monitor how they execute given the risk related to Gary Rollins stepping back a bit.
- Rollins family ownership: I already covered this, but the Rollins family significant ownership stake is a risk.

Presented to:





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# Small/Mid-Cap Growth

IDENTIFYING AND CAPITALIZING ON THE INEFFICIENCIES IN SMALL/MID-CAP

Brian Smoluch, CFA Portfolio Manager Jon R Foust Director of Marketing & Client Service



March 27, 2025

## **Firm Overview**



Strategy Inception - 2015



Proactive, Proprietary, Fundamental Research



8 Investment Professionals







100% Employee Owned



Palm Beach Gardens, FL



Assets Under Management - \$6.9 billion (as of 12/31/24)



## **Our Thesis**

#### LONG TERM

Stocks are valued based on future cash flows

SHORT TERM

Earnings estimates are used to approximate future cash flows



## Wall Street is III-Equipped to Assess Small Companies



Source: Bloomberg. As of December 2024

Research and investment banking are no longer intertwined

Lower commissions on smaller stocks hurt Wall Street analyst compensation

Small-cap stock coverage is frequently assigned to junior Wall Street analysts

Higher probability of errors in sell-side models

Management teams may be accessible, but are underfollowed



## **Stocks Move With Earnings**

1-DAY EXCESS RETURN OF STOCKS IN RUSSELL 2500® INDEX, 2001-2024



This information has been gathered from sources considered to be reliable, however its accuracy cannot be guaranteed. Data as of 12/31/2024. Returns are relative to the average Russell 2500® Index stock return. Source: Furey Research



5

## **Competitive Advantage**

HOOD RIVER ESTIMATE VS. WALL STREET ESTIMATE



6



Time

Forecast statements do not necessarily translate to individual security or strategy performance and makes no guarantees of future results. Above figure does not represent a specific security and/or historical time period and is for illustrative purposes only.



OUTCOMES

### **Better Returns with Lower Risk**

COMPOSITE PERFORMANCE AS OF 12/31/24



	1 Year	3 Years	5 Years	Inception*			
	ANNUALIZED						
HIGHER RETURNS							
Small/Mid-Cap Growth (gross)	43.2%	10.1%	21.1%	16.8%			
Small/Mid-Cap Growth (net)	42.4%	9.4%	20.2%	15.9%			
Russell 2500 <sup>®</sup> Growth Index	13.9%	0.0%	8.1%	9.5%			
Excess Return (gross)	29.3%	10.1%	13.0%	7.3%			
LOWER RISK							
Beta	1.0	1.05	1.02	1.01			
Down Mkt Capture	29.4	84.8	84.9	89.0			
Risk-Adjusted Return (Alpha)	26.21	10.44	12.20	7.04			
PERFORMANCE ATTRIBUTION							
Stock Selection	28.1%	19.7%	134.1%	N/A			
Group Weight	0.1%	-0.4%	13.3%	N/A			

\*Inception date: 12/31/2014

7

Performance is annualized for periods over 1 year. Past performance is no guarantee of future results. Gross performance is net of all transaction costs and net performance is net of transaction costs, the maximum performance–based fees if applicable, and actual management fees, but before any custodial fees. Benchmark returns are provided for informational purposes only and are not calculated or verified by ACA Compliance Group or Hood River. This information is being provided as supplemental to the Small/Mid-Cap Growth GIPS® Composite Report found on page 19. Performance referenced is not representative of the Hood River Small/Mid Cap Growth CIT and should not be interpreted as indicative of future performance of the Fund. Source: FactSet, eVestment, 1/3/25.



**ROLLING 3 YEAR RETURNS:** 

### **Consistent and Persistent Outcomes**

HOOD RIVER SMALL/MID-CAP GROWTH VS AVERAGE SMALL/MID-CAP GROWTH MANAGER AND RUSSELL 2500® GROWTH INDEX



COMPOSITE PERFORMANCE - 1Q 2015 TO 4Q 2024 - (29 rolling periods)

#### \*Inception date: 12/01/15

Performance is annualized for periods over 1 year. Past performance is no guarantee of future results. Gross performance is net of all transaction costs and net performance is net of transaction costs, the maximum performance–based fees if applicable, and actual management fees, but before any custodial fees. Information provided for the periods prior to 1/1/13 represents the performance of accounts managed by the Small-Cap Growth team while employed by Roxbury Capital Management, LLC. Benchmark returns are being provided for informational purposes only and are not calculated or verified by ACA Compliance Group or Hood River. This information is being provided as supplemental to the Small-Cap Growth GIPS® Composite Report found on page 19. Source: eVestment. 1/13/25.



8

TEAM APPROACH

## **Pursuing Optimal Outcomes**





## **Portfolio Managers & Principals**



Brian P. Smoluch, CFA PRINCIPAL, PORTFOLIO MANAGER

- Investment experience: 28 years
- MBA, Harvard University
- BS with distinction, University of Virginia
- Previously: Roxbury Capital; Columbia Management
- Enjoys swimming, fantasy basketball and losing at foosball to his two sons



David G. Swank, CFA PRINCIPAL, PORTFOLIO MANAGER

- Investment experience: 28 years
- MBA, Tuck School of Business at Dartmouth College
- BS with distinction, University of Virginia
- Previously: Roxbury Capital; Morgan Stanley
- Enjoys fishing, skiing and chauffeuring his five children on weekends



#### Lance R. Cannon, CFA PARTNER, RESEARCH ANALYST

- Joined team in 2018
- Investment experience: 16 years
- MBA, Anderson School of Business at UCLA
- BS, Brigham Young University
- Previously: USDR Investment Management; TCW; Kayne Anderson Rudnick; GPS Capital Markets, Inc.
- Is still trying to convince his three kids that being pulled behind a boat is quality family fun



Rohan B. Kumar PARTNER, RESEARCH ANALYST

- Joined team in 2015
- Investment experience: 14 years
- IMBA, The Wharton School, University of Pennsylvania
- Masters, Harvard's Kennedy School
- BT, Indian Institute of Technology at Kharagpur
- Previously: Hawkeye Capital Management; Reliance Capital; Intel
- If you are trying to reach him and phone calls go unanswered, try the neighborhood dog park



**TEAM APPROACH** 

### **Research Analysts**



Brennan J. Long PARTNER, RESEARCH ANALYST

- Joined in 2018
- Investment experience: 10 years
- MA, Columbia University
- BA, Middlebury College
- Previously: Bloomberg Intelligence; Janney Montgomery Scott; Major Assets Management
- Enjoys surfing and exploring the coastal regions of Florida



Roushi Qi research analyst

- Joined in 2023
- Investment experience: 8 years
- MBA, Harvard University
- Masters, Washington University, Olin Business School
- BS, Nanjing University, China
- Previously: Marshall Wace; Advent International; Goldman Sachs
- Enjoys skiing in the winter and diving during summer time



#### Jackson Allen RESEARCH ASSOCIATE

- Joined in 2022
- Investment experience: 2 years
- Masters, University of Minnesota, Carlson School of Management
- Masters, University of Virginia, McIntire School of Commerce
- BS, University of Minnesota
- Previously: UVIMCO
- Enjoys spending time with family/friends and watching sports



#### Dylan Smoluch RESEARCH ASSOCIATE

- Joined in 2024
- Investment experience: 1 year
- BS, University of Virginia
- Previously: Graham Partners
- President & Founder UVA Investment Club
- Currently writing a science fiction/fantasy novel





Traders 6

Marketing Professionals

- Compliance Professional
- 2 Operations Professionals



PROCESS

## **Hood River Investment Process**

<b>P</b> FIND THE BEST BUSINESS	TALK TO PEOPLE	COMPARE & CONTRAST	PAY THE RIGHT PRICE
<ul> <li>Typically growing at 15%+</li> <li>&lt; \$10B market cap</li> <li>Strong cash flow</li> <li>Superior products</li> <li>Increasing market share</li> <li>Growing industry</li> <li>Excellent management</li> </ul>	<ul> <li>Talk to management, customers, suppliers, competitors, industry experts, buy-side analysts</li> <li>Make thousands of calls/year to corroborate our forecasts</li> </ul>	<ul> <li>Do the math</li> <li>Forecast earnings</li> <li>Financial strength</li> <li>Management execution</li> <li>Industry dynamics</li> <li>Our view vs. Street</li> </ul>	<ul> <li>Evaluate price vs history, industry, market</li> <li>Min appreciation &gt;15% over 12 months</li> <li>High valuations increase risk and may indicate the market knows a lot of what we know</li> </ul>



Larg to b

Larger estimate gaps lead to bigger position sizes

Conviction

Identify catalysts Ti

Timing can be important



## **Hood River Investment Process**

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#### PORTFOLIO CONSTRUCTION

- Balance risk and return
- Position sizes reflect magnitude of information gap
- Generalist approach
- Max. position = 8%
- Sector weights +/- 15 percentage points of index
- Cash is a residual

### 1

#### SELL DISCIPLINE

- If we think the company will miss our earnings target
- If we are wrong and fundamentals
   decline
- If access to company management is reduced
- If stock reaches our price target
- If stock appears on our sell criteria list

## ß

#### UP TO 100 STOCKS

- Relative to the index, we seek:
- Higher growth rates
- Higher probability of exceeding EPS estimates
- Higher percentage of companies with positive earnings
- Lower valuation
- Lower beta
- Higher returns with lower risk = ALPHA



## **Top Ten Holdings- Representative Account**

AS OF DECEMBER 31, 2024

Company	Sector	Description
ACI Worldwide	Technology	Develops e-payment and electronic funds transfer software for companies around the world
Axon Enterprise	Industrials	Develops, manufactures, and sells conducted energy devices (CEDs) under the TASER brand in the U.S. and internationally
Dave, Inc.	Financials	Provides a suite of financial products and services through its financial services platform
FTAI Aviation	Industrials	Owns and acquires infrastructure and related equipment for the transportation of goods and people worldwide
GFL Environmental	Industrials	A diversified environmental services company offering non-hazardous solid waste management, infrastructure and soil remediation, and liquid waste management services
Marvell Technology	Technology	A leading supplier of data infrastructure semiconductor solutions, spanning the data center core to the network edge
MasTec, Inc.	Industrials	Provides infrastructure construction to telecom, wireless, cable, energy and utility companies
New Fortress Energy	Energy	Operates as an integrated gas-to-power energy infrastructure company that provides energy and development services to end-users worldwide
Semtech Corporation	Technology	Designs, develops, manufactures, and markets analog and mixed-signal semiconductor and advanced algorithms
Western Alliance Bancorp	Financials	Operates nearly 50 branches providing standard consumer and business deposit and loan products

Top ten holdings listed are as of date shown above in an account of a client that Hood River believes to be representative of the Small-Mid Cap Growth accounts Hood River manages. Clients of Hood River managed with different investment objectives may have different holdings than those listed. Holdings are subject to change at any time. The securities listed should not be considered a recommendation to purchase or sell a particular security. The holdings do not represent all of the securities purchased, sold or recommended for advisory clients. The reader should not assume that an investment in the securities identified was or will be profitable. This information is being provided as supplemental to the Hood River Small/Mid-Cap Growth GIPS® Composite Report found on page 19.



PORTFOLIO

### **Sector Exposure & Attribution**

Historic Relative Sector Weights (%)

12/31/23 - 12/31/24 vs. Russell 2500® Growth Index 12/31/19 - 12/31/24 vs. Russell 2500® Growth Index 4024 HRCM Security Total Index Effect Avg Weight Avg Weight Selection **Communication Services** 2.3% 1.8% 0.98 1.12 3.0% 4.0% 1.01 0.96 Energy 27.7% 20.1% 15.94 16.32 Industrials 25.0% 20.9% 1.95 **Information Technology** 2.25 Utilities 0.6% 0.9% 0.14 -0.02 **Health Care** 20.7% 21.1% 2.24 2.47 Materials 3.2% 3.7% 0.78 1.00 **Consumer Discretionary** 9.5% 13.7% 2.78 2.62 **Real Estate** 0.1% 1.3% 0.02 0.04 **Consumer Staples** 1.0% 3.5% 0.98 1.12 Financials 6.1% 9.0% 1.23 0.43 -5 0 5 10 28.06 -15 -10 15 28.14 Total

15

Historic relative sector weightings listed are for the quarter-end periods from 12/31/19-12/31/24, current sector weights are as of 12/31/24, and attribution data is for the period 12/31/23-12/31/24 in an account of a client that Hood River believes to be representative of the Small-Mid Cap Growth accounts Hood River manages. Past performance does not guarantee future results. This information is being provided as supplemental to the Small-Cap Growth GIPS® Composite Report found on page 19. Source: FactSet



Performance Attribution

### **Calendar Year Performance**

COMPOSITE PERFORMANCE SINCE INCEPTION



Inception 12/31/14.

Past performance is no guarantee of future results. Gross performance is net of all transaction costs and net performance is net of transaction costs, the maximum performance–based fees if applicable, and actual management fees, but before any custodial fees. Benchmark returns are provided for informational purposes only and are not calculated or verified by ACA Compliance Group or Hood River. This information is being provided as supplemental to the Small/Mid-Cap Growth GIPS © Composite Report found on page 19. Performance referenced is not representative of the Hood River Small/Mid Cap Growth CIT and should not be interpreted as indicative of future performance of the Fund.



16



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## Why Hood River Capital Management

TEAM CULTURE	Highly experienced, generalist approach maximizes the probability of realizing an information advantage; 100% ownership aligns portfolio managers with clients
PERSONAL INSIGHT	Extensive conversations with management, customers, suppliers and industry experts
INFORMATION GAP	Lack of coverage by the Street for small-cap equities
AGGRESSIVE FUNDAMENTAL REASERCH	Determines our variant perception; confirms our conviction
RISK CONTROL	Manages risk, protects capital and minimizes losses; adherence to sell discipline
OUTCOMES	Historically, generated strong risk-adjusted results



### Small/Mid-Cap Growth Composite Description

Period Ending	# of Portfolios	3-Yr Gross Ex-Post Std. Dev. vs. R2000G	Total Composite Assets End of Period (\$ millions)	Total Firm Assets (\$ millions)*	% Non-Fee Paying Assets
2024	7	24.5 vs. 22.8	953.7	6,858.4	0.0
2023	3	22.3 vs. 21.0	267.6	3,702.3	0.0
2022	2	26.9 vs. 25.2	106.2	2,780.7	0.0
2021	2	22.3 vs. 22.0	142.7	3,401.4	0.0
2020	1	25.3 vs. 23.9	83.2	3,113.8	0.0
2019	1	18.7 vs. 15.9	63.5	2,355.6	0.0
2018	1	18.6 vs. 15.3	48.8	1,749.5	0.0
2017	3	15.5 vs. 13.0	1.1	1,754.4	100.0
2016	2	-	0.6	1,236.8	100.0
2015	2	-	0.4	810.8	100.0

#### EXPLANATION OF PERFORMANCE DATA



### Small/Mid-Cap Growth Composite Description

Hood River Capital Management LLC, a Delaware limited liability company, offers investment advisory services to individuals, pension and profit-sharing plans, trusts, estates, corporations, as well as other institutional clients. Hood River has an arms-length service level agreement with Mar Vista Investment Partners, a registered investment adviser, to provide back and middle office services. For purposes of compliance with GIPS®, Hood River has defined itself to not include bundled/WRAP fee accounts in the Firm's assets. Hood River maintains a complete list and description of Firm composites and a list of broadly distributed pooled funds, which is available upon request.

On 01/01/13, Brian Smoluch, Robert Marvin and David Swank formed Hood River to manage a small-cap growth strategy. Brian Smoluch, Robert Marvin and David Swank were dual employees until 05/31/13 when all of the assets under their management at Roxbury Capital Management, LLC transitioned to Hood River through a sub-advisory arrangement. On 1/20/15, Hood River finalized an agreement that put 100% of its equity in the hands of Hood River's three Principals, divided equally among them. All assets under management are managed by Hood River. Information provided for the period from June 2002 through December 2012 represents the performance of portfolios managed by Mr. Smoluch, Mr. Marvin and Mr. Swank while employed by Roxbury. Hood River claims compliance with the Global investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS® standards. Hood River has been independently verified for the periods 01/01/13 through 12/31/23. A firm that claims compliance with the GIPS® standards must establish policies and procedures for complying with all the applicable requirements of the GIPS® standards. Verification provides assurance on whether the firm's policies and procedures related to composite and pooled fund maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS® standards and have been implemented on a firm-wide basis. The Small/Mid-Cap Growth composite has had a performance examination for the periods 01/01/15 through 12/31/23. The verification and performance examination reports are available upon request. GIPS® is a registered trademark of CFA Institute. CFA Institute does not endorse or promote this organization, nor does it warrant the accuracy or quality of the content contained herein. Benchmark returns are not covered by the report of independent verifiers.

The Small/Mid-Cap Growth composite was created in 2014 with an inception date of 12/31/14. All returns are based in U.S. dollars and are computed using a time-weighted total rate of return. The composite is defined to include all fully discretionary, taxable and tax-exempt portfolios with no minimum or maximum account value managed in accordance with Hood River's Small/Mid-Cap Growth strategy and that paid for execution on a transaction basis. The Small/Mid-Cap Growth strategy seeks long-term capital appreciation by investing in a portfolio of 50-100 stocks, generally new stock purchases are within the range of market capitalization for stocks in the index, exhibiting strong growth characteristics and attractive valuation relative to underlying profitability. The results in the column marked net of fees for the periods 01/01/15 through 9/30/18, include a standard management fee applied to any non-fee-paying portfolio for performance calculation purposes.

The benchmark is the Russell 2500<sup>®</sup> Growth Index, defined as a broad index featuring 2500 stocks that cover the small and mid-cap market capitalizations. The index has a market cap weighted index that includes the smallest 2,500 companies covered in the Russell 3000 universe of United States-based listed equities. The Russell 2500<sup>®</sup> Growth Index is designed to measure the performance of those Russell 2500 companies with higher price-to-book ratios and higher forecasted growth values.

The dispersion in gross-of-fee composite returns shown herein was measured using an asset-weighted standard deviation formula.

Performance results presented reflect the reinvestment of dividends and other earnings. Gross performance is net of all transaction costs. Net performance is net of transaction costs, the maximum performance-based fees if applicable and actual management fees, but before any custodial fees. All returns are calculated net of withholding taxes on dividends and interest. Actual results may differ from composite results depending upon the size of the portfolio, investment objectives and restrictions, the amount of transaction and related costs, the inception date of the portfolio and other factors. Policies for valuing investments, calculating performance, and preparing GIPS® composite reports are available upon request. Past performance is no guarantee of future results. Not FDIC insured, no bank guarantee, may lose value.

The Firm's Small/Mid-Cap Growth fee schedule is as follows: First \$50 million – 0.90%; Next \$50 million - 0.80%; Over \$100 million - 0.70%. Special circumstances may cause fees to vary from this schedule and Hood River reserves the right to negotiate fees with clients. Fees are payable quarterly in arrears or advance based on 1/4th of the annual rate and are adjusted for capital additions and withdrawals.



#### TIMELINE

#### 2013

HOOD RIVER CAPITAL MANAGEMENT

On 1/2/2013, Hood River spun out of Roxbury; fund ownership became 65% Hood River/35% Roxbury. Entire investment team, all accounts and track

record transfers to Hood River: Investment

process unchanged

2020

ROB MARVIN

Retired, April 2020

#### 2003

MUTUAL FUND LAUNCHED

January 3, 2003

#### 2002

ROXBURY/HOOD RIVER FOUNDED

Portfolio managers Brian Smoluch, Robert Marvin, Steven Marshman join Roxbury Capital Management and begin managing the Small-Cap Growth strategy

#### 2009

DAVID SWANK

Joined team as portfolio manager

STEVE MARSHMAN

Retired, later appointed Trustee of Fund Board

#### 2015

100% OWNERSHIP

Hood River principals bought out Roxbury' interest, now own 100% of Hood River

#### 2021

MOVED TO PALM BEACH GARDENS FLORIDA



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# Small/Mid-Cap Growth

IDENTIFYING AND CAPITALIZING ON THE INEFFICIENCIES IN SMALL/MID-CAP

hoodrivercapital.com | 561.484.5699

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This presentation is intended for one-on-one purposes only.
1231/2024   000059   1   3,085,598,66   13,085,598,67   13,085,598,67   13,085,598,76   13,085,598,76   13,085,598,76   13,085,598,76   13,085,598,76   13,085,598,76   13,085,598,77   0,388,762,20   23,18     1231/2024   AFYE   AUDIOREY INC   Common Stocks   04091010   14,487   15,71   13,76,840,77   0,448     1231/2024   AFYE   AUDIOREY INC   Common Stocks   7331115   13,223   6,68   7,77,40113   0,448     1231/2024   AFD   APRIED DISTIN COPP   Common Stocks   038159207   26,810   7,764   13,795,730   1,785,730   1,785,730   1,785,730   1,785,736   1,785,736   1,785,733   1,785,736   1,785,736   1,785,736   1,775,733   0,776   1,785,736   0,776   1,785,736   0,776   1,785,736   0,776   1,785,736   0,776   1,785,736   0,776   1,785,736   0,776   1,785,736   0,776   1,785,736   0,776   1,775,736   0,776   1,775,736   0,776   1,775,757   0,706   1,775,	As of	Security ID	Description	Туре	CUSIP	Shares/Par	Price	Market	Hldg %																																																																																																																																		
1232/2024   ACIW   ACIUMOLUNIDE INC   Common Stocks   004983:01   10.2,860   5.1.91   5.3.94,62.00   2.3.1%     1231/2024   ACX   AGCM   Common Stocks   003/101/101   18,497   15.2.1   889,732.37   0.3%     1231/2024   AGX   AGCM   Common Stocks   003/2010   16.82.2   6.66   778.04.11   0.3%     1231/2024   AHP   ABER(CMONE & ITCLC OL CL   Common Stocks   02396207   7.20.1   149.47   1.370,333.47   0.4%     1231/2024   AHP   ABER(CMONE & ITCLC OU CL A   Common Stocks   03416000   7.977   3.05.6   3.073,745.2   1.4%     1231/2024   AHR   ANICE ADDR'SCOCCOM   Common Stocks   0345000   9.977   3.05.6   3.055,148   1.2%7,763   0.7%     1231/2024   AKM   ANOM TERPRETINC TO   Common Stocks   0434701   2.038   8.6.1   1.7%7,763   0.7%     1231/2024   BNF   BIOMARDRETINCS INC   Common Stocks   022287103   4.25,129   3.78   3.73,124.100	12/31/2024	000009	PRINCIPAL CASH 0% Due 12/31/2099	Cash	000009		1	3,085,939.86	1.34%																																																																																																																																		
L2312020   APY   AUDORY INC   Common Stocks   09734201   58,497   15.21   88,878.37   0.33%     L2312024   AGX   AGX   AGX   Common Stocks   73931109   11.68.23   6.66   77.80,41.18   0.34%     L2312024   AFP   ABRICKOMBE & HICH CO CL   Common Stocks   03193207   7.201   140.47   120.32,82.02   1.48%     L2312024   AFP   ABRICKOMBE & HICH CO CL   Common Stocks   03193207   4.43,105   7.64   3.42,52.2   1.45%     L2312024   AFR   AFR   AMR SPORTS NOP   Common Stocks   004961200   4.2,31.0   2.2,35%   1.53,73.4.83   1.37%   2.33%     L2312024   AFR   AFR   Common Stocks   004961200   4.2,31.0   2.35%   1.17,35,25.2   2.37%   1.37%   2.33%   2.33%   2.35%   2.35%   2.35%   2.35%   2.35%   2.35%   2.35%   2.35%   2.35%   2.35%   2.35%   2.35%   2.35%   2.35%   2.35%   2.35%   2.35%	12/31/2024	ACIW	ACI WORLDWIDE INC	Common Stocks	004498101	102,860	51.91	5,339,462.60	2.31%																																																																																																																																		
1231/2024   AGX   AGX   ICC   Common Stocks   0410E109   7,493   13.7.04   11,026,840.72   0.44%     1231/2024   ANF   ABERCOMMER & HICH COLA   Common Stocks   032912007   7,201   149.47   10/76333.47   0.47%     1231/2024   ANF   ABERCOMMER & HICH COLA   Common Stocks   034744056   7,637   35.05   2,753,893.35   1.10%     1231/2024   AR   ANTERD RESOURCES CDP   Common Stocks   02474405   7,637   35.05   2,753,893.35   1.10%     1231/2024   AR   ANTERD RESOURCES CDP   Common Stocks   02444010   9,106   354.12   5,507,143.92   2,284     1231/2024   BR   BLACKERPHUTS INC   Common Stocks   0245103   423,129   1.76   1,509,987.52   0,79%     1231/2024   BNK   BLACKERPHUTS INC   Common Stocks   02237103   436,05   1,231,120   430,62   1,233,120   430,62   1,231,232   0,39%   1,231,232   0,39%   1,231,232   0,39%   1,231,232   0,39% <td>12/31/2024</td> <td>AEYE</td> <td>AUDIOEYE INC</td> <td>Common Stocks</td> <td>050734201</td> <td>58,497</td> <td>15.21</td> <td>889,739.37</td> <td>0.39%</td>	12/31/2024	AEYE	AUDIOEYE INC	Common Stocks	050734201	58,497	15.21	889,739.37	0.39%																																																																																																																																		
12)11/2024   AIOT   POMERITET INC   Common Stocks   73831109   116,823   6.66   778,041.18   0.34%     12)31/2024   API   APPERCIONER & ITCH CO LA   Common Stocks   0.38869207   7.20   14.94   1.47,533.47   0.47%     12)31/2024   AR   APIERO RESULGES CORP   Common Stocks   0.38169207   4.21.80   2.736   1.179.352.80   0.51%     12)31/2024   AS   AMER SPORTS INC   Common Stocks   0.9404(-101   9.305   3.04.6   2.05%, 1.748   1.22%     12)31/2024   ASM   AXX0ME THEMAULTICS INC   Common Stocks   0.5444(-101   9.306   3.05, 1.179,352.80   0.07%     12)31/2024   AXX0ME THEMAULTICS INC   Common Stocks   0.3444(-101   9.306   3.93,311.25   0.07%     12)31/2024   BUINW   800MAUNDER INCG   Common Stocks   0.975,161   2.20,01   3.93,311.25   0.37%   1.333,311.25   0.37%   1.33,311.25   0.37%   1.33,311.25   0.37%   1.33,311.21   0.37%   1.33,311.21   1.37,323,311.21   0.37%	12/31/2024	AGX	ARGAN INC	Common Stocks	04010E109	7,493	137.04	1,026,840.72	0.44%																																																																																																																																		
1233/2024   ANF   ABSERGOMBLE & RTICH CO LA   Common Stocks   002895027   7.201   1.49.47   1.076.333.47   0.47%     1233/12024   AR   ANTED RESOURCES CORP   Common Stocks   03674X106   75.287   35.05   2.673.889.35   1.16%     1233/12024   AS   ANTES NORCES CORP   Common Stocks   04674X106   75.287   35.05   2.673.889.35   1.16%     1233/12024   AS   ANTES NORCE   Common Stocks   04647C10   9.06   59.42   5.33.071.92   2.33%     1233/12024   AXSM   AXXON ENTERPRISE INC   Common Stocks   054647104   2.0893   84.61   1.767.756.73   0.773     1233/12024   BB   BURACERERY ITD   Common Stocks   05467103   2.2.129   3.78   1.166.467.073   0.066   37.53   97.12.241.0   0.428.     1233/12024   BPAC   BURANDERIN INCENSCORP   Common Stocks   03775161   2.2.071   4.3.052   97.12.2   1.073.47.2   2.770,748.38   0.89.771.13   0.48.77.2   1.073.77.2   4.064.72	12/31/2024	AIOT	POWERFLEET INC	Common Stocks	73931J109	116,823	6.66	778,041.18	0.34%																																																																																																																																		
12/31/2024   APLD   APPLED IDIGITAL COBP   common Stocks   038/89207   448,105   7.64   3,423,522.00   1.48%     12/31/2024   AR   AMTERD MISCURES CORP   common Stocks   0674005   7.623   35.05   1.678,352.35   1.18%     12/31/2024   AS   AMTERD MISCURES CORP   common Stocks   06740714   2.098   36.41   1.176,752.3   0.51%     12/31/2024   AXON   AXON MITTARRES INC   Common Stocks   054467.101   2.098   86.4   1.476,752.3   0.77%     12/31/2024   BB   BLACKERRY ITD   Common Stocks   052271.03   423,129   1.78   1.065,927.57.10   0.97%     12/31/2024   BB   BLACKERRY ITD   Common Stocks   052771.00   20.09   97.2   27.77   27.37.27.23   0.07%     12/31/2024   BDMA   BLADMANINEATIDICS INC   Common Stocks   169.079   7.07   3.327.27.37.10   0.18%     12/31/2024   CPA   CORMANINEATIDICS INC   Common Stocks   127397408   5.02.2   4.07.35%   1.057.	12/31/2024	ANF	ABERCROMBIE & FITCH CO CL A	Common Stocks	002896207	7,201	149.47	1,076,333.47	0.47%																																																																																																																																		
12/31/2024   AR   ANTER DESOLVICES CORP   Common Stocks   03/27/4106   76,287   35.05   2,673,389.35   1.168     12/31/2024   AS   AMMER SPORTS INC   Common Stocks   04968/2079   99,973   30.55   3.055,174.88   1.328     12/31/2024   AXON   AXONE METREMESTINC   Common Stocks   05464/101   2.0,893   84.61   1,767,756.73   0.778     12/31/2024   AXON   AXONE METREMESTINC   Common Stocks   05464/101   2.0,893   84.61   1,767,756.73   0.776     12/31/2024   BB   BUACKERERV TD   Common Stocks   0512/8110   42.512   3.78   11,666,087.62   0.709     12/31/2024   BHW   BUHAVENT INC   Common Stocks   11,016107   26,009   87.22   2,270,443.8   0.987     12/31/2024   CAN   CAMAMA INC   COMMON Stocks   13,373   13,322,371.34   1.484     12/31/2024   CAN   CAMAMA INC   COMMON Stocks   13,323,731.34   1.347.97   3.03.55   1,322,373.34   1.348.73   0.656 <td>12/31/2024</td> <td>APLD</td> <td>APPLIED DIGITAL CORP</td> <td>Common Stocks</td> <td>038169207</td> <td>448,105</td> <td>7.64</td> <td>3,423,522.20</td> <td>1.48%</td>	12/31/2024	APLD	APPLIED DIGITAL CORP	Common Stocks	038169207	448,105	7.64	3,423,522.20	1.48%																																																																																																																																		
12/31/2024   AS   AMES PORTS INC   Common Stocks   6926/209   99/37   30.56   5.05,174.88   0.511     12/31/2024   AXON   AXONE MENTERPRISE INC   Common Stocks   05564-101   9,306   99.432   5.530,714.92   2.39%     12/31/2024   AXSM   AXSMERTERPRISE INC   Common Stocks   05564-101   9,306   99.42   5,530,714.92   2.39%     12/31/2024   BB B   BACKBERNY LID   Common Stocks   0564-101   2.606   37.35   971,324.10   0.42%     12/31/2024   BHW   BIOMBARDIR INC-8   Common Stocks   06777109   2.6,005   37.35   971,324.10   0.42%     12/31/2024   CAN   CANAUNIXCTEONS HOLDINGS INC   Common Stocks   127478703   2.05   425,379.10   0.18%     12/31/2024   CCOI   COGENT COMMUNICATIONS HOLDINGS INC   Common Stocks   127477303   1.591   84.81   1.444,306.77   0.62   3.03,129.75   1.449   0.672   1.231/2024   CLIN   COBN   0.62%   1.231/21/224   0.61%   1.23	12/31/2024	AR	ANTERO RESOURCES CORP	Common Stocks	03674X106	76,287	35.05	2,673,859.35	1.16%																																																																																																																																		
12/31/2024   ATRC   ATRC   ATRC   Common Stock   05463C200   99.973   30.56   3.055,17.482   12.34     12/31/2024   AXON   AXONE THERAPEUTCS INC   Common Stock   05564T104   20.893   84.61   1.767.756.73   0.77M     12/31/2024   BB8   BLACKERRY TU TO   Common Stock   05228T103   42.512   3.78   1.606.987.62   0.77M     12/31/2024   BDNA   BIOMAYEN TU TO   Common Stock   010110107   25.029   87.32   2.73.24.03   0.42%     12/31/2024   BYNW   BUGMAYEN TU TO   Common Stock   10110107   25.029   87.22   2.72.02.49.8   0.98%     12/31/2024   CON   COAN   CANAN INC CO   ANS   13/44102   2.05   4.37.67   0.737   3.73.77.37.34   1.408     12/31/2024   CON   CAPANE CORFIS SYSTEM   Common Stock   12/377.83   1.53.17   3.04.6   1.666.042.42   0.72%     12/31/2024   CH   CLEAN HARBORS INC   Common Stock   12/37.270.4   7.77.5	12/31/2024	AS	AMER SPORTS INC	Common Stocks	G0260P102	42,180	27.96	1,179,352.80	0.51%																																																																																																																																		
12/31/2024   AXON   AXON ENTERRISE INC   Common Stocks   056441104   20,083   34,61   1,767,756,73   0.77%     12/31/2024   B8   BLACKGERRY LTD   Common Stocks   052/85103   425,129   3,78   1,660,697,62   0.77%     12/31/2024   BVM   BIOMARDICKIN C4   F-Shares   097751861   32,911   68,005   2,238,112.5   0.97%     12/31/2024   BVM   BIULPERINT MEDICINIS CORP   Common Stocks   056271109   26,005   37,35   377,334.1.0   0.42%     12/31/2024   CAN   CAMAAN INC   CORET COMMUNICATIONS HOLDINGS INC   Common Stocks   127397030   15,912   30,761   3,762,73   10,44   16,90,40,42   0.75%     12/31/2024   CCN   CORENE COESIGNS SYSTEMS   Common Stocks   127397030   15,912   3,46,81   1,433,305,72   0,64   1,433,305,72   0,76%     12/31/2024   CHN   CERNA COREN   Common Stocks   127477030   15,912   1,313   1,307,906,46   0,51%     12/31/2024   CHN   CE	12/31/2024	ATRC	ATRICURE INC	Common Stocks	04963C209	99,973	30.56	3,055,174.88	1.32%																																																																																																																																		
12/31/2024   AXM   AXSONE THERAPEUTCISINC   Common Stocks   05/467104   20,893   84,61   1,767,756,73   0.77%     12/31/2024   BBR   BUAKCRESHY ITD   Common Stocks   0572518-13   425,129   3.78   1.606,587.02   0.79%     12/31/2024   BHVN   BUHAYEN TD   Common Stocks   056271109   26,005   3.73.5   771,324.10   0.42%     12/31/2024   BHVN   BUHAYEN TDEDICHISC SORP   Common Stocks   1324745102   20,50   27,27   2,37.37.34   1.46%     12/31/2024   CCN   COENT COMMUNICATIONS HICLINIS TWC   Common Stocks   132479103   43,762   77.07   3,372,37.34   1.46%     12/31/2024   CCN   COENT COMMUNICATIONS HICLINIS TWC   Common Stocks   13247910   43,762   70.07   3,372,37.34   1.48%     12/31/2024   CH   CLEAN HARRORS INC   Common Stocks   132445107   2,73,42   34,43   4,03,31,29,75   1.33   1.383,295,74   0.73%     12/31/2024   CH   CLEAN MAREANALYTICAS IN   Common Stocks	12/31/2024	AXON	AXON ENTERPRISE INC	Common Stocks	05464C101	9,306	594.32	5,530,741.92	2.39%																																																																																																																																		
12/33/2024   BB   BLACKRERRY LTD   Common Stocks   09/228/103   42,2,129   3.78   1.666,687.62   0.704     12/33/2024   BVN   BODMARDIR IN-C=   F-Shares   09775,1861   32,911   66.005   2.238,112.55   0.97%     12/33/2024   BHWC   BLUEPRINT MEDICINES CORP   Common Stocks   06927/109   26,023   8.7.2   2.27,043.8   0.98%     12/31/2024   CAN   CANAAN INC   COMMON STOCK   13239/930.2   43,762   7.107   3.37,773.4   1.46%     12/31/2024   CIN   COGENT COMMUNICATIONS HOLDINGS INC   Common Stocks   1239/930.2   43,762   7.007   3.37,773.4   1.46%     12/31/2024   CIN   CIEN   CIEN ARBORS INC   Common Stocks   1249/1017   7.966   2.201.4   1.433,295.24   0.72%     12/31/2024   CIN   CIEN NARBORS INC   Common Stocks   1234/0107   7.926   2.21.4   1.33.295.7   1.33   1.37.5   1.37.3   1.78%     12/31/2024   CIN   COHR   COMMENTINC   Co	12/31/2024	AXSM	AXSOME THERAPEUTICS INC	Common Stocks	05464T104	20,893	84.61	1,767,756.73	0.77%																																																																																																																																		
12/31/2024   BDR   BDMAARDER INC-8   F-Shares   097751861   32,911   66.005   2,238,112.55   0.978     12/31/2024   BHWN   BIDHAVEN TD   Common Stocks   09627/109   26,003   37.25   971,324.10   0.428     12/31/2024   CAN   CANAAN INC   ADFs   134748102   207,502   2.05   425,373.10   0.188     12/31/2024   CON   COMMUNICATIONS HOLDINGS INC   Common Stocks   127387/08   5.527   300.46   1.660.42.2   0.728     12/31/2024   CIN   CIENA CORP   Common Stocks   127387/08   5.527   300.46   1.663.22   0.623.1     12/31/2024   CIN   CIENA CORP   Common Stocks   127387/07   2.35.1   1.333.295.2   0.77.8     12/31/2024   COHR   COHRENT INC   Common Stocks   223046100   34,455   4.86.8   1.677.264.0   0.378     12/31/2024   COHR   CABRENT ER ANALTICS INS-A   Common Stocks   3232046100   34,455   4.86.8   1.677.264.0   0.378	12/31/2024	BB	BLACKBERRY LTD	Common Stocks	09228F103	425,129	3.78	1,606,987.62	0.70%																																																																																																																																		
12/31/2024   BHVN   BIUARVEN LTD   Common Stocks   G110/7   26,005   37.35   97.1,24.10   0.4,28     12/31/2024   CAN   CANAAN INC   ADRs   134748102   207.502   2.05   425.372.10   0.188     12/31/2024   CCOI   COGENT COMMUNICATIONS HOLDING SINC   Common Stocks   1273890   20.750   2.05   425.372.10   0.188     12/31/2024   CEN   COENCI COMMUNICATIONS HOLDING SINC   Common Stocks   12738739   15.912   0.481   1,449,306.72   0.278     12/31/2024   CHN   CLEAN LARBORS INC   Common Stocks   127475107   7.35   9.47.3   4.033,129.7   1.75%     12/31/2024   CHN   COENERS FANCO   Common Stocks   127476107   7.364   7.35   4.033,129.7   1.75%     12/31/2024   CHN   CLERAWIRER ANALYTICS HOS-A   Common Stocks   1285/2106   3.5527   3.00.46   1.567.268.40   0.37%     12/31/2024   CHN   CLERAWIRER ANALYTICS HOS-A   Common Stocks   1285/2106   3.55.7   3.03.75	12/31/2024	BDRBF	BOMBARDIER INC-B	F-Shares	097751861	32,911	68.005	2,238,112.55	0.97%																																																																																																																																		
12/31/2024   BPMC   BLUEPRINT MEDICINES CORP   Common Stock   962/11/93   26.029   87.22   2.72/0243   0.98%     12/31/2024   CO1   CODENT COMMUNICATIONS HOLDINGS INC   Common Stock   12/39/108   5.527   30.04   1.660.64.2.4   0.72%     12/31/2024   CDN   CADENCE DESIGNS SYSTEMS   Common Stock   12/39/108   5.527   30.04   1.660.64.2.4   0.72%     12/31/2024   CEN   CLEAN CORP   Common Stock   12/379.399   1.6.912   84.81   1.443.306.72   0.75%     12/31/2024   CHN   CLEAN HARRONS INC   Common Stock   12/347.6107   7.956   23.01   1.833.255.44   0.67%     12/31/2024   CNN   CILRENVERS BANCO   Common Stock   22604107   27.342   51.13   1.977.269.40   0.37%     12/31/2024   CWN   CLEARWARE NOFINARE LID/ISRAEL   Common Stock   1362/L10   9.982.1   21.08   2.41/22.66.8   0.47%     12/31/2024   CWN   CLEARWARE NOFINARE LID/ISRAEL   Common Stock   238/42/10   9.98.2	12/31/2024	BHVN	BIOHAVEN LTD	Common Stocks	G1110E107	26,006	37.35	971,324.10	0.42%																																																																																																																																		
12/31/2024   CAN   CANAAN INC   APR   13/41/2024   207/502   2.05   423.57/201   0.18%     12/31/2024   CCOI   COENT   COMMUNICATIONS HOLDINGS INC   Common Stocks   12/33/1024   S.527   300.46   1.660.67.24   0.72%     12/31/2024   CIEN   CIEN COPP   Common Stocks   12/31/2024   S.527   300.46   1.660.67.24   0.62%     12/31/2024   CIHR   CIEN INCORP   Common Stocks   18/496107   7.966   230.14   1.833.295.24   0.79%     12/31/2024   CURI   CIENT INC   Common Stocks   226654107   27.342   51.13   1.397.996.4   0.61%     12/31/2024   CURI   CUSTOMERE BANCO   Common Stocks   1385123105   30.550   27.52   340.736.00   0.36%     12/31/2024   CVH   CAMPING WORID HOLDINGS INC.A   Common Stocks   135123105   31.51   31.55   1.57.5   0.61%     12/31/2024   CVH   COMMUNITY HEATH SYSTEMS INC   Common Stocks   23824010   70.400   8.63   6	12/31/2024	BPMC	BLUEPRINT MEDICINES CORP	Common Stocks	09627Y109	26,029	87.22	2,270,249.38	0.98%																																																																																																																																		
12/31/2024   COR   CORGENT COMMUNICATIONS HOLINGS INC   Common Stocks   12/38/7024   43,762   77.07   3,372,37.34   1.46%     12/31/2024   CINS   CADENCE DESIGNS SYSTEMS   Common Stocks   12/317934   1.69.12   84.81   1.434,306.72   0.62%     12/31/2024   CIH   CLEAN HARBORS INC   Common Stocks   12/317074   42,575   94.73   4.033,129.75   1.73%     12/31/2024   CNK   CONIENT SPARMACEUTICALS IN   Common Stocks   12/347601   27,342   51.13   1.393.996.46   0.61%     12/31/2024   CWA   CLEARWARTER NANACEUTICALS IN   Common Stocks   232046100   34.455   48.88   1.677.256   0.37%     12/31/2024   CWA   CLEARWATER ANALYTICS HARMACEUTICALS IN   Common Stocks   13/362K109   9.921   2.108   2.104.226.68   0.91%     12/31/2024   CWH   CAMPINER MORTUNARE LTD//SRAEL   Common Stocks   2.30421   1.083   .996.68   0.91%     12/31/2024   CVF   COMMUNITY HEALTH SYSTEMS INC   Common Stocks   2.3042   47	12/31/2024	CAN	CANAAN INC	ADRs	134748102	207,502	2.05	425,379.10	0.18%																																																																																																																																		
12/31/2024   CDNS   CADENCE DESIGNE SYSTEMS   Common Stocks   12/38/204   5,527   300.46   1,660,642.42   0.728     12/31/204   CIEN   CEMA CORP   Common Stocks   17/17/3904   16,912   84.81   1,443.3095.24   0.67%     12/31/2024   COHR   CLEAN HARBORS INC   Common Stocks   12/34/2024   51.31   1,333.199.54   0.67%     12/31/2024   COHR   COHRENT TINC   Common Stocks   22664K07   27,342   51.13   1,339.996.46   0.61%     12/31/2024   CUBI   CUSTOMERS BANCO   Common Stocks   22664K07   27,342   51.13   1,397.996.46   0.61%     12/31/2024   CWH   CLARAWATER ANALYTICS HOS-A   Common Stocks   138123106   0.950   27.52   840.736.00   0.36%     12/31/2024   CVH   CMMUNITY HALTH SYSTEMS INC   Common Stocks   2384201   70.40   1,863.001.19   0.02%     12/31/2024   CVH   COMMUNITY HALTH SYSTEMS INC   Common Stocks   2384201   70.40   86.92   6.119.168.00   2.45% <td>12/31/2024</td> <td>CCOI</td> <td>COGENT COMMUNICATIONS HOLDINGS INC</td> <td>Common Stocks</td> <td>19239V302</td> <td>43,762</td> <td>77.07</td> <td>3,372,737.34</td> <td>1.46%</td>	12/31/2024	CCOI	COGENT COMMUNICATIONS HOLDINGS INC	Common Stocks	19239V302	43,762	77.07	3,372,737.34	1.46%																																																																																																																																		
12/31/2024   CIEN   CIENA CORP   Common Stocks   17/3779309   16,912   84.81   1,434,306.72   0.62%     12/31/2024   CIH   CLEAN HARBORS INCO   Common Stocks   12476107   7,966   230.14   1.833,299.75   1.75%     12/31/2024   CNIX   CHIRENCS PHARMACEUTICALS IN   Common Stocks   232046300   34,455   46.061   1.677.269.40   0.73%     12/31/2024   CWAN   CLEARWATER ANALYTICS HDS-A   Common Stocks   13428/1016   30,550   27.52   840,736.00   0.36%     12/31/2024   CWAN   CLEARWATER ANALYTICS HDS-A   Common Stocks   134628/108   5.921   33.15   1.972,581.15   0.85%     12/31/2024   CWR   CMERARK SOFTWARE LTD/ISRAEL   Common Stocks   23842010   70,400   86.92   6.119,168.00   0.47%     12/31/2024   DAVE   DAVEINON THEALTS YNEMS INC   Common Stocks   23842010   70,400   86.92   6.119,168.00   0.47%     12/31/2024   DAVE   DUPONT DE NEMOURS INC   Common Stocks   23642010   28.654	12/31/2024	CDNS	CADENCE DESIGNS SYSTEMS	Common Stocks	127387108	5,527	300.46	1,660,642.42	0.72%																																																																																																																																		
12/31/2024   CHH   CLEAN HARBORS INC   Common Stocks   1944/96107   7.966   230.14   1.833.295.24   0.79%     12/31/2024   COHR   COHRENT INC   Common Stocks   12/34/201   4.2,575   94.73   4.033.129.75   1.75%     12/31/2024   CUBI   CUSTOMERS BANCO   Common Stocks   232046100   34.455   48.68   1.677.269.40   0.73%     12/31/2024   CWH   CLARWATER ANALYTICS INS-A   Common Stocks   13402X109   99.821   21.08   2.104,22.668   0.91%     12/31/2024   CVH   CAMPING WORLD HOLDINGS INC-   Common Stocks   3462X109   99.821   21.08   2.104,22.668   0.91%     12/31/2024   CVH   COMMUNITY HEALTH SYSTEMS INC   Common Stocks   23068108   154,181   2.99   461,001.19   0.20%     12/31/2024   CVTK   CYTOK INECTIS INC   Common Stocks   23024/2010   28,654   34,07   76,261.78   0.42%     12/31/2024   DOC   DUPONT DE INMOURS INC   Common Stocks   23042/210   28,654   34,07<	12/31/2024	CIEN	CIENA CORP	Common Stocks	171779309	16,912	84.81	1,434,306.72	0.62%																																																																																																																																		
12/31/2024   COHR   COHRERNT INC   Common Stocks   12/24/107   42,575   94,73   4,033,129,75   1,78     12/31/2024   CRNX   CRINETICS PHARMACEUTICALS IN   Common Stocks   22663K107   27,342   51.13   1,397,996.46   0.61%     12/31/2024   CWA   CLEARWATER ANALYTICS HDS-A   Common Stocks   232063(200   34,455   48.68   1,677,269.40   0.37%     12/31/2024   CWH   CAMPING WORL PHOLINGS INC-A   Common Stocks   1342K109   99,821   21.08   2,10.02.26.68   0.91%     12/31/2024   CYH   COMMUNITY HEALTH SYSTEMS INC   Common Stocks   230668108   15.4,181   2.99   461,001.19   0.20%     12/31/2024   CYH   COMMUNITY HEALTH SYSTEMS INC   Common Stocks   2304201   7,040   85.92   6,119,168.00   2.5%     12/31/2024   DAVE INC   Common Stocks   23834/201   7,040   85.92   1,533,375   0.26%     12/31/2024   DD   DUPONT DE NEMOURS INC   Common Stocks   300426103   9,085   6,5.75	12/31/2024	CLH	CLEAN HARBORS INC	Common Stocks	184496107	7,966	230.14	1,833,295.24	0.79%																																																																																																																																		
12/31/2024   CRINX   CRINETICS PHARMACEUTICALSIN   Common Stocks   22663K107   27, 242   51.13   1,397.966.46   0.61%     12/31/2024   CUBI   CUSTOMERS BANCO   Common Stocks   232046100   34,455   48.68   1,677,269.40   0.73%     12/31/2024   CWH   CAMPING WORLD HOLDINGS INC-A   Common Stocks   13462K109   99,821   21.08   2,104,226.68   0.91%     12/31/2024   CVH   CAMPING WORLD HOLDINGS INC-A   Common Stocks   13462K109   99,821   21.08   2,104,226.68   0.91%     12/31/2024   CVH   COMMUNITY HEALTH SYSTEMS INC   Common Stocks   23282W055   23,042   47.04   1,083,895.68   0.47%     12/31/2024   DAVE   DAVE   DAVE INC   Common Stocks   2384/201   70,400   86.92   6,119,168.00   2.65%     12/31/2024   DAVE   DAVE INC   Common Stocks   2384/201   70,400   86.92   6,575   597,338.75   0.26%     12/31/2024   ECG   VERUS CONSTRUCTION GROUP   Common Stocks   2940	12/31/2024	COHR	COHERENT INC	Common Stocks	19247G107	42,575	94.73	4,033,129.75	1.75%																																																																																																																																		
12/31/2024   CUBI   CUSTOMERS BANCO   Common Stocks   322046100   34,455   48.68   1,677,269.40   0.73%     12/31/2024   CWAN   CLEARWATER ANALTEICS HDS-AL   Common Stocks   185123106   30,550   27.52   840,736.00   0.36%     12/31/2024   CWH   CAMPING WORLD HOLDINGS INC-A   Common Stocks   1851421(10)   99,821   21.08   2.104,226.68   0.91%     12/31/2024   CYH   COMMUNITY HEALT SYSTEMS INC   Common Stocks   23668108   154,181   2.99   461,001.01   0.25%     12/31/2024   DAVE   DAVE   CYTOKINETICS INC   Common Stocks   23834/201   70,400   86.92   6,119,168.00   2.55%     12/31/2024   DAV   DAVE INC   Common Stocks   25402102   28,654   34.07   97,6241.78   0.42%     12/31/2024   EGG   EVENS CONSTRUCTION GROUP   Common Stocks   194014502   21,884   43.88   960,269.92   0.42%     12/31/2024   ENG   ENTEGRIS INC   Common Stocks   194014502   21,884	12/31/2024	CRNX	CRINETICS PHARMACEUTICALS IN	Common Stocks	22663K107	27,342	51.13	1,397,996.46	0.61%																																																																																																																																		
12/31/2024   CWAN   CLEARWATER ANALYTICS INS-A   Common Stocks   185123106   30,550   27.52   840,736.00   0.36%     12/31/2024   CWH   CAMPING WORLD HOLDINGS INC-A   Common Stocks   13462K109   99,821   21.08   2,104,226.68   0.31%     12/31/2024   CVB   CYBERARK SOFTWARE LTD/SRAEL   Common Stocks   23668108   154,181   2.99   461,001.19   0.20%     12/31/2024   CYTK   COMMUNITY HEALTH SYSTEMS INC   Common Stocks   236420102   23,042   47.04   1.083,895.68   0.47%     12/31/2024   DAVE   DAVE INC   Common Stocks   23642102   20,087   76.25   1,531,633.75   0.66%     12/31/2024   DCO   DUPONT DE NEMOURS INC   Common Stocks   250420102   28,654   34.07   976,241.78   0.42%     12/31/2024   ECG   EVERUS CONSTRUCTION GROUP   Common Stocks   30426103   9,085   65.75   597,338.75   0.26%     12/31/2024   ENOV   ENOVIS CORP   Common Stocks   3024210102   8,184	12/31/2024	CUBI	CUSTOMERS BANCO	Common Stocks	23204G100	34,455	48.68	1,677,269.40	0.73%																																																																																																																																		
12/31/2024   CWH   CAMPING WORLD HOLDINGS INC-A   Common Stocks   13462K109   99,821   21.08   2,104,226.68   0.91%     12/31/2024   CYBR   CYBRERARK SOFTWARE LTD/ISRAEL   Common Stocks   3268/21/08   5,921   333.15   1,972,581.15   0.85%     12/31/2024   CYH   COMMUNITY HEALTH SYSTEMS INC   Common Stocks   23282W605   23,042   47.04   1,083,895.68   0.47%     12/31/2024   DAV   DVE INC   Common Stocks   23834/201   70,400   85.92   1,531,633.75   0.66%     12/31/2024   DD   DUPONT DE NEMOURS INC   Common Stocks   254021012   28,654   34.07   976,241.78   0.42%     12/31/2024   ECG   EVENUS CONSTRUCTION GROUP   Common Stocks   29042102   28,654   34.07   976,241.78   0.26%     12/31/2024   ECG   ENOVIS CORP   Common Stocks   29362U104   8.942   99.06   885,794.52   0.38%     12/31/2024   ENTG   ENTGRIS INC   Common Stocks   29362U104   8,942   9.906	12/31/2024	CWAN	CLEARWATER ANALYTICS HDS-A	Common Stocks	185123106	30,550	27.52	840,736.00	0.36%																																																																																																																																		
12/31/2024   CYBR   CYBERARK SOFTWARE LTD/ISRAEL   Common Stocks   M2682V108   5,921   333.15   1,972,581.15   0.85%     12/31/2024   CYH   COMMUNITY HEALTH SYSTEMS INC   Common Stocks   203668108   154,181   2.99   461,001.19   0.20%     12/31/2024   OYK   CYTOKINETICS INC   Common Stocks   23824/065   23.042   47.04   1,083.895.68   0.47%     12/31/2024   DAVE   DAVE INC   Common Stocks   23824/01   70,400   86.92   6,119,168.00   2.65%     12/31/2024   DOCN   DIGITALOCEAN HOLDINGS INC   Common Stocks   26614N102   20,087   76.25   1,531,633.75   0.26%     12/31/2024   ENG   EVERUS CONSTRUCTION GROUP   Common Stocks   304042103   9,085   65.75   597,338.75   0.26%     12/31/2024   ENG   ENTEGRIS INC   Common Stocks   194014502   21,884   43.88   960,269.92   0.42%     12/31/2024   EXE   EXPAND ENERGY CORP   Common Stocks   194014502   21,884   43.88	12/31/2024	CWH	CAMPING WORLD HOLDINGS INC-A	Common Stocks	13462K109	99,821	21.08	2,104,226.68	0.91%																																																																																																																																		
12/31/2024 CYH COMMUNITY HEALTH SYSTEMS INC Common Stocks 203668108 154,181 2.99 461,001.19 0.20%   12/31/2024 CYTK CYTOKINETICS INC Common Stocks 23282/W605 23,042 47.04 1,083,895.68 0.47%   12/31/2024 DAVE DAVE DUPONT DE NEMOURS INC Common Stocks 23834/201 70,400 8.69 6,139,168.00 2.65%   12/31/2024 DO DUPONT DE NEMOURS INC Common Stocks 25402D102 28,654 34.07 976,251 1,531,633.75 0.66%   12/31/2024 EKG EVENUS CONSTRUCTION GROUP Common Stocks 300426103 9,085 6,57 579,7335.7 0.26%   12/31/2024 ENG ENTEGRIS INC Common Stocks 194014502 21,884 43.88 960,269.92 0.42%   12/31/2024 ENTG ENTEGRIS INC Common Stocks 302021104 8,942 99.06 885,794.52 0.38%   12/31/2024 EXL EXLSERVICE HOLDINGS INC Common Stocks 302081104 38,664 44.38 1,715,908.32 0.7%   12/31/2024	12/31/2024	CYBR	CYBERARK SOFTWARE LTD/ISRAEL	Common Stocks	M2682V108	5,921	333.15	1,972,581.15	0.85%																																																																																																																																		
12/31/2024 CYTK CYTKINETICS INC Common Stocks 23282W605 23,042 47.04 1,083,895.68 0.47%   12/31/2024 DAVE DAVE INC Common Stocks 28384/201 70,400 86.92 6,119,168.00 2.65%   12/31/2024 DC DIGTALOCEAN HOLDINGS INC Common Stocks 26402D102 28,654 34.07 976,241.78 0.42%   12/31/2024 ECG EVERUS CONSTRUCTION GROUP Common Stocks 29402D102 28,654 34.07 976,241.78 0.42%   12/31/2024 ENO DIGTALOCEAN HOLDINGS INC Common Stocks 194014502 21,884 43.88 960,260.92 0.42%   12/31/2024 ENTG ENTEGRIS INC Common Stocks 29362U104 8,942 99.05 1,204,953.20 0.52%   12/31/2024 EXE EXESENCH CHOLDINGS INC Common Stocks 302081104 38,664 44.38 1,745,908.22 0.74%   12/31/2024 FIX CMMORT SYSTEMS USA INC Common Stocks 199908104 8,515 424.06 3,610,870.90 1.56%   12/31/2024 FIX FLOW CORP	12/31/2024	СҮН	COMMUNITY HEALTH SYSTEMS INC	Common Stocks	203668108	154,181	2.99	461,001.19	0.20%																																																																																																																																		
12/31/2024   DAVE   DAVE INC   Common Stocks   23834/201   70,400   86.92   6,119,168.00   2.65%     12/31/2024   DD   DUPONT DE NEMOURS INC   Common Stocks   26614N102   20,087   76.25   1,531,633.75   0.66%     12/31/2024   ECG   EVERUS CONSTRUCTION GROUP   Common Stocks   300426103   9,085   65.75   597,338.75   0.26%     12/31/2024   ENOV   ENOVIS CORP   Common Stocks   194014502   21,884   43.88   960,269.92   0.42%     12/31/2024   ENTE GRIS INC   Common Stocks   165167735   12,104   99.05   8,579.52   0.38%     12/31/2024   EXE   EXPAND ENERGY CORP   Common Stocks   165167735   12,104   99.05   1,204,953.20   0.52%     12/31/2024   EXE   EXSERVICE HOLDINGS INC   Common Stocks   302081104   38,664   44.38   1,715,908.32   0.74%     12/31/2024   FIX   COMFORT SYSTEMS USA INC   Common Stocks   302081104   8,515   424.06   36.06,370.90   1	12/31/2024	СҮТК	CYTOKINETICS INC	Common Stocks	23282W605	23,042	47.04	1,083,895.68	0.47%																																																																																																																																		
12/31/2024 DD DUPONT DE NEMOURS INC Common Stocks 26614N102 20,087 76.25 1,531,633.75 0.66%   12/31/2024 DOCN DIGTALOCEAN HOLDINGS INC Common Stocks 25402D102 28,654 34.07 976,241.78 0.42%   12/31/2024 ECG EVERUS CONSTRUCTION GROUP Common Stocks 300426103 9,085 65.75 597,338.75 0.26%   12/31/2024 ENOV ENOVIS CORP Common Stocks 194014502 21,884 43.88 960,269.92 0.42%   12/31/2024 ENTG ENTEGRIS INC Common Stocks 29362/104 8,942 99.06 885,794.52 0.38%   12/31/2024 EXE EXPAND ENERGY CORP Common Stocks 302081104 8,942 99.06 885,794.52 0.74%   12/31/2024 EXE EXPAND ENERGY CORP Common Stocks 302081104 8,515 424.06 3,610.870.90 1.56%   12/31/2024 FIX COMFORT SYSTEMS USA INC Common Stocks 43452102 62,243 49.32 3,069,824.76 1.58%   12/31/2024 FIX FLOWCROP <t< td=""><td>12/31/2024</td><td>DAVE</td><td>DAVE INC</td><td>Common Stocks</td><td>23834J201</td><td>70,400</td><td>86.92</td><td>6,119,168.00</td><td>2.65%</td></t<>	12/31/2024	DAVE	DAVE INC	Common Stocks	23834J201	70,400	86.92	6,119,168.00	2.65%																																																																																																																																		
12/31/2024   DOCN   DIGITALOCEAN HOLDINGS INC   Common Stocks   25402D102   28,654   34.07   976,241.78   0.42%     12/31/2024   ECG   EVERUS CONSTRUCTION GROUP   Common Stocks   300426103   9,085   65.75   597,338.75   0.26%     12/31/2024   ENOV   ENOVIS CORP   Common Stocks   194014502   21,884   43.88   960,269.92   0.42%     12/31/2024   ENTG   ENTEGRIS INC   Common Stocks   29362U104   8,942   99.06   885,794.52   0.38%     12/31/2024   EXE   EXPAND ENERGY CORP   Common Stocks   165167735   12,104   99.55   1,204,953.20   0.52%     12/31/2024   EXP   EAGLE MATERIALS INC   Common Stocks   26969P108   6,273   246.76   1,547,925.48   0.67%     12/31/2024   FIX   COMFORT SYSTEMS USA INC   Common Stocks   343412102   62,243   49.32   3,609,824.76   1.33%     12/31/2024   FLA   FLOWSERVE CORP   Common Stocks   343412102   62,243   49.32   3,6	12/31/2024	DD	DUPONT DE NEMOURS INC	Common Stocks	26614N102	20,087	76.25	1,531,633.75	0.66%																																																																																																																																		
12/31/2024 ECG EVERUS CONSTRUCTION GROUP Common Stocks 300426103 9,085 65.75 597,338.75 0.26%   12/31/2024 ENOV ENOVIS CORP Common Stocks 194014502 21,884 43.88 960,269.92 0.42%   12/31/2024 ENTG ENTGRIS INC Common Stocks 29362U104 8,942 99.06 885,794.52 0.38%   12/31/2024 EXE EXPAND ENERGY CORP Common Stocks 165167735 12,104 99.55 1,204,953.20 0.52%   12/31/2024 EXLS EXLSERVICE HOLDINGS INC Common Stocks 300281104 38,664 44.38 1,715,908.32 0.74%   12/31/2024 EXP EAGLE MATERIALS INC Common Stocks 199908104 8,515 424.06 3,610,870.90 1.56%   12/31/2024 FLR FLUOR CORP Common Stocks 34342102 62,243 49.32 3,069,824.76 1.33%   12/31/2024 FLS FLOWSERVE CORP Common Stocks 34342102 62,243 49.32 3,69,832.24 3,628   12/31/2024 FTAI FTAI AVIATION ITD Commo	12/31/2024	DOCN	DIGITALOCEAN HOLDINGS INC	Common Stocks	25402D102	28,654	34.07	976,241.78	0.42%																																																																																																																																		
12/31/2024 ENOV ENOVIS CORP Common Stocks 194014502 21,884 43.88 960,269.92 0.42%   12/31/2024 ENTG ENTEGRIS INC Common Stocks 29362U104 8,942 99.06 885,794.52 0.38%   12/31/2024 EXE EXPAND ENERGY CORP Common Stocks 165167735 12,104 99.05 1,204,9503.20 0.52%   12/31/2024 EXE EXLSERVICE HOLDINGS INC Common Stocks 30281104 38,664 44.38 1,715,908.32 0.74%   12/31/2024 EXP EAGLE MATERIALS INC Common Stocks 199908104 8,515 424.06 3,610,870.90 1.56%   12/31/2024 FLR FLUOR CORP Common Stocks 343412102 62,243 49.32 3,069,824.76 1.33%   12/31/2024 FLR FLOW CORP Common Stocks 33370105 58,031 144.04 8,358,785.24 3.62%   12/31/2024 GEN GENI GENINDESPORTS LTD Common Stocks 363454P105 18,672 57.52 1,074,013.44 0.62%   12/31/2024 GEN GENINDESPORTS LTD	12/31/2024	ECG	EVERUS CONSTRUCTION GROUP	Common Stocks	300426103	9,085	65.75	597,338.75	0.26%																																																																																																																																		
12/31/2024 ENTG ENTGG ENTEGRIS INC Common Stocks 29362U104 8,942 99.06 885,794.52 0.38%   12/31/2024 EXE EXPAND ENERGY CORP Common Stocks 165167735 12,104 99.55 1,204,953.20 0.52%   12/31/2024 EXLS EXLSERVICE HOLDINGS INC Common Stocks 302081104 38,664 44.38 1,715,908.32 0.74%   12/31/2024 EXP EAGLE MATERIALS INC Common Stocks 6969P108 6,273 246.76 1,547,925.48 0.67%   12/31/2024 FLX COMFORT SYSTEMS USA INC Common Stocks 343412102 62,243 49.32 3,069,824.76 1.33%   12/31/2024 FLR FLUOR CORP Common Stocks 343412102 62,243 49.32 3,069,824.76 1.33%   12/31/2024 FLA FLUNG NORENTE CORP Common Stocks 63730V105 58,031 144.04 8,358,785.24 3.62%   12/31/2024 FLA GENIUS SPORTS LTD Common Stocks 63730V105 58,031 144.04 8,358,785.24 3.62%   12/31/2024 GFL G	12/31/2024	ENOV	ENOVIS CORP	Common Stocks	194014502	21,884	43.88	960,269.92	0.42%																																																																																																																																		
12/31/2024 EXE EXPAND ENERGY CORP Common Stocks 165167735 12,104 99.55 1,204,953.20 0.52%   12/31/2024 EXLS EXLSERVICE HOLDINGS INC Common Stocks 302081104 38,664 44.38 1,715,908.32 0.74%   12/31/2024 EXP EAGLE MATERIALS INC Common Stocks 26969P108 6,273 246.76 1,547,925.48 0.67%   12/31/2024 FLR COMFORT SYSTEMS USA INC Common Stocks 199908104 8,515 424.06 3,610,870.90 1.56%   12/31/2024 FLR FLUOR CORP Common Stocks 343412102 62,243 49.32 3,069,824.76 1.33%   12/31/2024 FLS FLOWSERVE CORP Common Stocks 34342102 62,243 49.32 3,069,824.76 1.33%   12/31/2024 FLA FLAI AVIATION LTD Common Stocks 63730V105 58,031 144.04 8,358,785.24 3.62%   12/31/2024 GENI GENIUS SPORTS LTD Common Stocks 63934V109 304,197 8.65 2,631,304.05 1.14%   12/31/2024 GH GUAPANT HEALTH INC </td <td>12/31/2024</td> <td>ENTG</td> <td>ENTEGRIS INC</td> <td>Common Stocks</td> <td>29362U104</td> <td>8,942</td> <td>99.06</td> <td>885,794.52</td> <td>0.38%</td>	12/31/2024	ENTG	ENTEGRIS INC	Common Stocks	29362U104	8,942	99.06	885,794.52	0.38%																																																																																																																																		
12/31/2024 EXLS EXLSERVICE HOLDINGS INC Common Stocks 302081104 38,664 44.38 1,715,908.32 0.74%   12/31/2024 EXP EAGLE MATERIALS INC Common Stocks 26969P108 6,273 246.76 1,547,925.48 0.67%   12/31/2024 FIX COMFORT SYSTEMS USA INC Common Stocks 199908104 8,515 424.06 3,610,870.90 1.56%   12/31/2024 FLR FLUOR CORP Common Stocks 343412102 62,243 49.32 3,069,824.76 1.33%   12/31/2024 FLS FLOWSERVE CORP Common Stocks 34354P105 18,672 57.52 1,074,013.44 0.46%   12/31/2024 FTAI FTAI AVIATION LDD Common Stocks G3730V105 58,031 144.04 8,358,785.24 3,62%   12/31/2024 GENI GFL ENVIRONMENTAL INC-SUB VT Common Stocks G3334V109 304,197 8.65 2,631,304.05 1.14%   12/31/2024 GFL GLUBALE ONLINE LTD Common Stocks 40131M109 47,840 30.55 1,461,512.00 0.63%   12/31/2024 GLBE GLOBA	12/31/2024	EXE	EXPAND ENERGY CORP	Common Stocks	165167735	12,104	99.55	1,204,953.20	0.52%																																																																																																																																		
12/31/2024EXPEAGLE MATERIALS INCCommon Stocks26969P1086,273246.761,547,925.480.67%12/31/2024FIXCOMFORT SYSTEMS USA INCCommon Stocks1999081048,515424.063,610,870.901.56%12/31/2024FLRFLUOR CORPCommon Stocks34341210262,24349.323,069,824.761.33%12/31/2024FLSFLOWSERVE CORPCommon Stocks34354P10518,67257.521,074,013.440.46%12/31/2024FTAIFTAI AVIATION LTDCommon StocksG3730V10558,031144.048,358,785.243.62%12/31/2024GENIU SSPORTS LTDCommon StocksG3730V10558,031144.048,358,785.243.62%12/31/2024GFLGFL ENVIRONMENTAL INC-SUB VTCommon StocksG3934V109304,1978.652,631,304.051.14%12/31/2024GFLGUARDANT HEALTH INCCommon Stocks361680104102,71344.544,574,837.021.98%12/31/2024GLBGLOBAL-E ONLINE LTDCommon Stocks40131M10947,84030.551,461,512.000.63%12/31/2024GLWCORNING INCCommon Stocks21935010532,76347.521,556,897.760.67%12/31/2024HUBBHUBBELL INCCommon Stocks435160074,814418.892,016,536.460.87%12/31/2024IMVTIMMUNOVANT INCCommon Stocks45258110237,77824.77935,616.060.41% <trr></trr>	12/31/2024	EXLS	EXLSERVICE HOLDINGS INC	Common Stocks	302081104	38,664	44.38	1,715,908.32	0.74%																																																																																																																																		
12/31/2024FIXCOMFORT SYSTEMS USA INCCommon Stocks1999081048,515424.063,610,870.901.56%12/31/2024FLRFLUOR CORPCommon Stocks34341210262,24349.323,069,824.761.33%12/31/2024FLSFLOWSERVE CORPCommon Stocks34354P10518,67257.521,074,013.440.46%12/31/2024FTAIFTAI AVIATION LTDCommon StocksG3730V10558,031144.048,358,785.243.62%12/31/2024GENIGENIUS SPORTS LTDCommon StocksG3934V109304,1978.652,631,304.051.14%12/31/2024GFLGFL ENVIRONMENTAL INC-SUB VTCommon Stocks361680104102,71344.544,574,837.021.98%12/31/2024GHGUARDANT HEALTH INCCommon Stocks40131M10947,84030.551,461,512.000.63%12/31/2024GLBEGLOBAL-E ONLINE LTDCommon StocksM5216V10642,74254.532,330,721.261.01%12/31/2024GLWCORNING INCCommon Stocks21935010532,76347.521,556,897.760.67%12/31/2024HUBBHUBBELL INCCommon Stocks435106074,814418.892,016,536.460.87%12/31/2024INVTIMMUNOVANT INCCommon Stocks45258110237,77824.77935,761.060.41%12/31/2024INSMINSMED INCCommon Stocks45766930742,59569.042,940,758.801.27% <tr t<="" td=""><td>12/31/2024</td><td>EXP</td><td>EAGLE MATERIALS INC</td><td>Common Stocks</td><td>26969P108</td><td>6,273</td><td>246.76</td><td>1,547,925.48</td><td>0.67%</td></tr> <tr><td>12/31/2024FLRFLUOR CORPCommon Stocks34341210262,24349.323,069,824.761.33%12/31/2024FLSFLOWSERVE CORPCommon Stocks34354P10518,67257.521,074,013.440.46%12/31/2024FTAIFTAI AVIATION LTDCommon StocksG3730V10558,031144.048,358,785.243.62%12/31/2024GENIGENIUS SPORTS LTDCommon StocksG3934V109304,1978.652,631,304.051.14%12/31/2024GFLGFL ENVIRONMENTAL INC-SUB VTCommon Stocks36168Q104102,71344.544,574,837.021.98%12/31/2024GHGUARDANT HEALTH INCCommon Stocks40131M10947,84030.551,461,512.000.63%12/31/2024GLBEGLOBAL-E ONLINE LTDCommon Stocks21935010532,76347.521,556,897.760.67%12/31/2024HUBBHUBBELL INCCommon Stocks21935010532,76347.521,556,897.760.67%12/31/2024IMVTIMMUNOVANT INCCommon Stocks45258110237,77824.77935,761.060.41%12/31/2024INSMINSMED INCCommon Stocks45766930742,59569.02,940,758.801.27%12/31/2024IOVAIOVANCE BIOTHERAPEUTICS INCCommon Stocks45766930732,0237.42.220.170.200.96%</td><td>12/31/2024</td><td>FIX</td><td>COMFORT SYSTEMS USA INC</td><td>Common Stocks</td><td>199908104</td><td>8,515</td><td>424.06</td><td>3,610,870.90</td><td>1.56%</td></tr> <tr><td>12/31/2024FLSFLOWSERVE CORPCommon Stocks34354P10518,67257.521,074,013.440.46%12/31/2024FTAIFTAI AVIATION LTDCommon StocksG3730V10558,031144.048,358,785.243.62%12/31/2024GENIGENIUS SPORTS LTDCommon StocksG3934V109304,1978.652,631,304.051.14%12/31/2024GFLGFL ENVIRONMENTAL INC-SUB VTCommon Stocks36168Q104102,71344.544,574,837.021.98%12/31/2024GHGUARDANT HEALTH INCCommon Stocks40131M10947,84030.551,461,512.000.63%12/31/2024GLBGLOBAL-E ONLINE LTDCommon StocksM5216V10642,74254.532,330,721.261.01%12/31/2024HUBBHUBBELL INCCommon Stocks21935010532,76347.521,556,897.760.67%12/31/2024IMVTIMMUNOVANT INCCommon Stocks45258110237,77824.77935,761.060.41%12/31/2024INSMINSMED INCCommon Stocks45766930742,59569.042,940,758.801.27%12/31/2024INSMINSMED INCCommon Stocks45260100300,0237.42.220.170.200.96%</td><td>12/31/2024</td><td>FLR</td><td>FLUOR CORP</td><td>Common Stocks</td><td>343412102</td><td>62,243</td><td>49.32</td><td>3,069,824.76</td><td>1.33%</td></tr> <tr><td>12/31/2024FTAIFTAI AVIATION LTDCommon StocksG3730V10558,031144.048,358,785.243.62%12/31/2024GENIGENIUS SPORTS LTDCommon StocksG3934V109304,1978.652,631,304.051.14%12/31/2024GFLGFL ENVIRONMENTAL INC-SUB VTCommon Stocks36168Q104102,71344.544,574,837.021.98%12/31/2024GHGUARDANT HEALTH INCCommon Stocks40131M10947,84030.551,461,512.000.63%12/31/2024GLBEGLOBAL-E ONLINE LTDCommon StocksM5216V10642,74254.532,330,721.261.01%12/31/2024GLWCORNING INCCommon Stocks21935010532,76347.521,556,897.760.67%12/31/2024HUBBHUBBELL INCCommon Stocks4455106074,814418.892,016,536.460.87%12/31/2024IMVTIMMUNOVANT INCCommon Stocks45258110237,77824.77935,761.060.41%12/31/2024INSMINSMED INCCommon Stocks45766930742,59569.042,940,758.801.27%12/31/2024IOVAIOVANCE BIOTHERAPEUTICS INCCommon Stocks45260100300,0237.42.220.170.200.96%</td><td>12/31/2024</td><td>FLS</td><td>FLOWSERVE CORP</td><td>Common Stocks</td><td>34354P105</td><td>18,672</td><td>57.52</td><td>1,074,013.44</td><td>0.46%</td></tr> <tr><td>12/31/2024 GENI GENIUS SPORTS LTD Common Stocks G3934V109 304,197 8.65 2,631,304.05 1.14%   12/31/2024 GFL GFL ENVIRONMENTAL INC-SUB VT Common Stocks 36168Q104 102,713 44.54 4,574,837.02 1.98%   12/31/2024 GH GUARDANT HEALTH INC Common Stocks 40131M109 47,840 30.55 1,461,512.00 0.63%   12/31/2024 GLBE GLOBAL-E ONLINE LTD Common Stocks M5216V106 42,742 54.53 2,330,721.26 1.01%   12/31/2024 GLW CORNING INC Common Stocks 219350105 32,763 47.52 1,556,897.76 0.67%   12/31/2024 HUBB HUBBELL INC Common Stocks 445510607 4,814 418.89 2,016,536.46 0.87%   12/31/2024 IMVT IMMUNOVANT INC Common Stocks 452581102 37,778 24.77 935,761.06 0.41%   12/31/2024 INSM INSMED INC Common Stocks 457669307 42,595 69.04 2,940,758.80 1.27%   12/31/2024 IOVA IOVANCE BIOTHERAPEUTICS INC<!--</td--><td>12/31/2024</td><td>FTAI</td><td>FTAI AVIATION LTD</td><td>Common Stocks</td><td>G3730V105</td><td>58,031</td><td>144.04</td><td>8,358,785.24</td><td>3.62%</td></td></tr> <tr><td>12/31/2024 GFL GFL ENVIRONMENTAL INC-SUB VT Common Stocks 361680104 102,713 44.54 4,574,837.02 1.98%   12/31/2024 GH GUARDANT HEALTH INC Common Stocks 40131M109 47,840 30.55 1,461,512.00 0.63%   12/31/2024 GLBE GLOBAL-E ONLINE LTD Common Stocks M5216V106 42,742 54.53 2,330,721.26 1.01%   12/31/2024 GLW CORNING INC Common Stocks 219350105 32,763 47.52 1,556,897.76 0.67%   12/31/2024 HUBB HUBBELL INC Common Stocks 44510607 4,814 418.89 2,016,536.46 0.87%   12/31/2024 IMVT IMMUNOVANT INC Common Stocks 452581102 37,778 24.77 935,761.06 0.41%   12/31/2024 INSM INSMED INC Common Stocks 457669307 42,595 69.04 2,940,758.80 1.27%   12/31/2024 IOVA IOVANCE BIOTHERAPEUTICS INC Common Stocks 462260100 300,023 7.4 2.220.170.20 0.96%</td><td>12/31/2024</td><td>GENI</td><td>GENIUS SPORTS LTD</td><td>Common Stocks</td><td>G3934V109</td><td>304,197</td><td>8.65</td><td>2,631,304.05</td><td>1.14%</td></tr> <tr><td>12/31/2024 GH GUARDANT HEALTH INC Common Stocks 40131M109 47,840 30.55 1,461,512.00 0.63%   12/31/2024 GLBE GLOBAL-E ONLINE LTD Common Stocks M5216V106 42,742 54.53 2,330,721.26 1.01%   12/31/2024 GLW CORNING INC Common Stocks 219350105 32,763 47.52 1,556,897.76 0.67%   12/31/2024 HUBB HUBBELL INC Common Stocks 443510607 4,814 418.89 2,016,536.46 0.87%   12/31/2024 IMVT IMMUNOVANT INC Common Stocks 452581102 37,778 24.77 935,761.06 0.41%   12/31/2024 INSM INSMED INC Common Stocks 457669307 42,595 69.04 2,940,758.80 1.27%   12/31/2024 IOVA IOVANCE BIOTHERAPEUTICS INC Common Stocks 462260100 300,023 7.4 2.220.170.20 0.96%</td><td>12/31/2024</td><td>GFL</td><td>GFL ENVIRONMENTAL INC-SUB VT</td><td>Common Stocks</td><td>36168Q104</td><td>102,713</td><td>44.54</td><td>4,574,837.02</td><td>1.98%</td></tr> <tr><td>12/31/2024   GLBE   GLOBAL-E ONLINE LTD   Common Stocks   M5216V106   42,742   54.53   2,330,721.26   1.01%     12/31/2024   GLW   CORNING INC   Common Stocks   219350105   32,763   47.52   1,556,897.76   0.67%     12/31/2024   HUBB   HUBBELL INC   Common Stocks   443510607   4,814   418.89   2,016,536.46   0.87%     12/31/2024   IMVT   IMMUNOVANT INC   Common Stocks   452581102   37,778   24.77   935,761.06   0.41%     12/31/2024   INSM   INSMED INC   Common Stocks   457669307   42,595   69.04   2,940,758.80   1.27%     12/31/2024   IOVA   IOVANCE BIOTHERAPEUTICS INC   Common Stocks   462260100   300,023   7.4   2.220.170.20   0.96%</td><td>12/31/2024</td><td>GH</td><td>GUARDANT HEALTH INC</td><td>Common Stocks</td><td>40131M109</td><td>47,840</td><td>30.55</td><td>1,461,512.00</td><td>0.63%</td></tr> <tr><td>12/31/2024 GLW CORNING INC Common Stocks 219350105 32,763 47.52 1,556,897.76 0.67%   12/31/2024 HUBB HUBBELL INC Common Stocks 443510607 4,814 418.89 2,016,536.46 0.87%   12/31/2024 IMVT IMMUNOVANT INC Common Stocks 452581102 37,778 24.77 935,761.06 0.41%   12/31/2024 INSM INSMED INC Common Stocks 457669307 42,595 69.04 2,940,758.80 1.27%   12/31/2024 IOVA IOVANCE BIOTHERAPEUTICS INC Common Stocks 462260100 300,023 7.4 2.201,70.20 0.96%</td><td>12/31/2024</td><td>GLBE</td><td>GLOBAL-E ONLINE LTD</td><td>Common Stocks</td><td>M5216V106</td><td>42,742</td><td>54.53</td><td>2,330,721.26</td><td>1.01%</td></tr> <tr><td>12/31/2024   HUBB   HUBBELL INC   Common Stocks   443510607   4,814   418.89   2,016,536.46   0.87%     12/31/2024   IMVT   IMMUNOVANT INC   Common Stocks   452581102   37,778   24.77   935,761.06   0.41%     12/31/2024   INSM   INSMED INC   Common Stocks   457669307   42,595   69.04   2,940,758.80   1.27%     12/31/2024   IOVA   IOVANCE BIOTHERAPEUTICS INC   Common Stocks   462260100   300,023   7.4   2.220.170.20   0.96%</td><td>12/31/2024</td><td>GLW</td><td>CORNING INC</td><td>Common Stocks</td><td>219350105</td><td>32,763</td><td>47.52</td><td>1,556,897.76</td><td>0.67%</td></tr> <tr><td>12/31/2024   IMVT   IMMUNOVANT INC   Common Stocks   452581102   37,778   24.77   935,761.06   0.41%     12/31/2024   INSM   INSMED INC   Common Stocks   457669307   42,595   69.04   2,940,758.80   1.27%     12/31/2024   IOVA   IOVANCE BIOTHERAPEUTICS INC   Common Stocks   462260100   300,023   7.4   2.220.170.20   0.96%</td><td>12/31/2024</td><td>HUBB</td><td>HUBBELL INC</td><td>Common Stocks</td><td>443510607</td><td>4,814</td><td>418.89</td><td>2,016,536.46</td><td>0.87%</td></tr> <tr><td>12/31/2024   INSM   INSMED INC   Common Stocks   457669307   42,595   69.04   2,940,758.80   1.27%     12/31/2024   IOVA   IOVANCE BIOTHERAPEUTICS INC   Common Stocks   462260100   300,023   7.4   2.220.170.20   0.96%</td><td>12/31/2024</td><td>IMVT</td><td>IMMUNOVANT INC</td><td>Common Stocks</td><td>45258J102</td><td>37,778</td><td>24.77</td><td>935,761.06</td><td>0.41%</td></tr> <tr><td>12/31/2024 IOVA IOVANCE BIOTHERAPEUTICS INC Common Stocks 462260100 300,023 7.4 2.220.170.20 0.96%</td><td>12/31/2024</td><td>INSM</td><td>INSMED INC</td><td>Common Stocks</td><td>457669307</td><td>42,595</td><td>69.04</td><td>2,940,758.80</td><td>1.27%</td></tr> <tr><td>· · · · · · · · · · · · · · · · · · ·</td><td>12/31/2024</td><td>IOVA</td><td>IOVANCE BIOTHERAPEUTICS INC</td><td>Common Stocks</td><td>462260100</td><td>300,023</td><td>7.4</td><td>2,220,170.20</td><td>0.96%</td></tr>	12/31/2024	EXP	EAGLE MATERIALS INC	Common Stocks	26969P108	6,273	246.76	1,547,925.48	0.67%	12/31/2024FLRFLUOR CORPCommon Stocks34341210262,24349.323,069,824.761.33%12/31/2024FLSFLOWSERVE CORPCommon Stocks34354P10518,67257.521,074,013.440.46%12/31/2024FTAIFTAI AVIATION LTDCommon StocksG3730V10558,031144.048,358,785.243.62%12/31/2024GENIGENIUS SPORTS LTDCommon StocksG3934V109304,1978.652,631,304.051.14%12/31/2024GFLGFL ENVIRONMENTAL INC-SUB VTCommon Stocks36168Q104102,71344.544,574,837.021.98%12/31/2024GHGUARDANT HEALTH INCCommon Stocks40131M10947,84030.551,461,512.000.63%12/31/2024GLBEGLOBAL-E ONLINE LTDCommon Stocks21935010532,76347.521,556,897.760.67%12/31/2024HUBBHUBBELL INCCommon Stocks21935010532,76347.521,556,897.760.67%12/31/2024IMVTIMMUNOVANT INCCommon Stocks45258110237,77824.77935,761.060.41%12/31/2024INSMINSMED INCCommon Stocks45766930742,59569.02,940,758.801.27%12/31/2024IOVAIOVANCE BIOTHERAPEUTICS INCCommon Stocks45766930732,0237.42.220.170.200.96%	12/31/2024	FIX	COMFORT SYSTEMS USA INC	Common Stocks	199908104	8,515	424.06	3,610,870.90	1.56%	12/31/2024FLSFLOWSERVE CORPCommon Stocks34354P10518,67257.521,074,013.440.46%12/31/2024FTAIFTAI AVIATION LTDCommon StocksG3730V10558,031144.048,358,785.243.62%12/31/2024GENIGENIUS SPORTS LTDCommon StocksG3934V109304,1978.652,631,304.051.14%12/31/2024GFLGFL ENVIRONMENTAL INC-SUB VTCommon Stocks36168Q104102,71344.544,574,837.021.98%12/31/2024GHGUARDANT HEALTH INCCommon Stocks40131M10947,84030.551,461,512.000.63%12/31/2024GLBGLOBAL-E ONLINE LTDCommon StocksM5216V10642,74254.532,330,721.261.01%12/31/2024HUBBHUBBELL INCCommon Stocks21935010532,76347.521,556,897.760.67%12/31/2024IMVTIMMUNOVANT INCCommon Stocks45258110237,77824.77935,761.060.41%12/31/2024INSMINSMED INCCommon Stocks45766930742,59569.042,940,758.801.27%12/31/2024INSMINSMED INCCommon Stocks45260100300,0237.42.220.170.200.96%	12/31/2024	FLR	FLUOR CORP	Common Stocks	343412102	62,243	49.32	3,069,824.76	1.33%	12/31/2024FTAIFTAI AVIATION LTDCommon StocksG3730V10558,031144.048,358,785.243.62%12/31/2024GENIGENIUS SPORTS LTDCommon StocksG3934V109304,1978.652,631,304.051.14%12/31/2024GFLGFL ENVIRONMENTAL INC-SUB VTCommon Stocks36168Q104102,71344.544,574,837.021.98%12/31/2024GHGUARDANT HEALTH INCCommon Stocks40131M10947,84030.551,461,512.000.63%12/31/2024GLBEGLOBAL-E ONLINE LTDCommon StocksM5216V10642,74254.532,330,721.261.01%12/31/2024GLWCORNING INCCommon Stocks21935010532,76347.521,556,897.760.67%12/31/2024HUBBHUBBELL INCCommon Stocks4455106074,814418.892,016,536.460.87%12/31/2024IMVTIMMUNOVANT INCCommon Stocks45258110237,77824.77935,761.060.41%12/31/2024INSMINSMED INCCommon Stocks45766930742,59569.042,940,758.801.27%12/31/2024IOVAIOVANCE BIOTHERAPEUTICS INCCommon Stocks45260100300,0237.42.220.170.200.96%	12/31/2024	FLS	FLOWSERVE CORP	Common Stocks	34354P105	18,672	57.52	1,074,013.44	0.46%	12/31/2024 GENI GENIUS SPORTS LTD Common Stocks G3934V109 304,197 8.65 2,631,304.05 1.14%   12/31/2024 GFL GFL ENVIRONMENTAL INC-SUB VT Common Stocks 36168Q104 102,713 44.54 4,574,837.02 1.98%   12/31/2024 GH GUARDANT HEALTH INC Common Stocks 40131M109 47,840 30.55 1,461,512.00 0.63%   12/31/2024 GLBE GLOBAL-E ONLINE LTD Common Stocks M5216V106 42,742 54.53 2,330,721.26 1.01%   12/31/2024 GLW CORNING INC Common Stocks 219350105 32,763 47.52 1,556,897.76 0.67%   12/31/2024 HUBB HUBBELL INC Common Stocks 445510607 4,814 418.89 2,016,536.46 0.87%   12/31/2024 IMVT IMMUNOVANT INC Common Stocks 452581102 37,778 24.77 935,761.06 0.41%   12/31/2024 INSM INSMED INC Common Stocks 457669307 42,595 69.04 2,940,758.80 1.27%   12/31/2024 IOVA IOVANCE BIOTHERAPEUTICS INC </td <td>12/31/2024</td> <td>FTAI</td> <td>FTAI AVIATION LTD</td> <td>Common Stocks</td> <td>G3730V105</td> <td>58,031</td> <td>144.04</td> <td>8,358,785.24</td> <td>3.62%</td>	12/31/2024	FTAI	FTAI AVIATION LTD	Common Stocks	G3730V105	58,031	144.04	8,358,785.24	3.62%	12/31/2024 GFL GFL ENVIRONMENTAL INC-SUB VT Common Stocks 361680104 102,713 44.54 4,574,837.02 1.98%   12/31/2024 GH GUARDANT HEALTH INC Common Stocks 40131M109 47,840 30.55 1,461,512.00 0.63%   12/31/2024 GLBE GLOBAL-E ONLINE LTD Common Stocks M5216V106 42,742 54.53 2,330,721.26 1.01%   12/31/2024 GLW CORNING INC Common Stocks 219350105 32,763 47.52 1,556,897.76 0.67%   12/31/2024 HUBB HUBBELL INC Common Stocks 44510607 4,814 418.89 2,016,536.46 0.87%   12/31/2024 IMVT IMMUNOVANT INC Common Stocks 452581102 37,778 24.77 935,761.06 0.41%   12/31/2024 INSM INSMED INC Common Stocks 457669307 42,595 69.04 2,940,758.80 1.27%   12/31/2024 IOVA IOVANCE BIOTHERAPEUTICS INC Common Stocks 462260100 300,023 7.4 2.220.170.20 0.96%	12/31/2024	GENI	GENIUS SPORTS LTD	Common Stocks	G3934V109	304,197	8.65	2,631,304.05	1.14%	12/31/2024 GH GUARDANT HEALTH INC Common Stocks 40131M109 47,840 30.55 1,461,512.00 0.63%   12/31/2024 GLBE GLOBAL-E ONLINE LTD Common Stocks M5216V106 42,742 54.53 2,330,721.26 1.01%   12/31/2024 GLW CORNING INC Common Stocks 219350105 32,763 47.52 1,556,897.76 0.67%   12/31/2024 HUBB HUBBELL INC Common Stocks 443510607 4,814 418.89 2,016,536.46 0.87%   12/31/2024 IMVT IMMUNOVANT INC Common Stocks 452581102 37,778 24.77 935,761.06 0.41%   12/31/2024 INSM INSMED INC Common Stocks 457669307 42,595 69.04 2,940,758.80 1.27%   12/31/2024 IOVA IOVANCE BIOTHERAPEUTICS INC Common Stocks 462260100 300,023 7.4 2.220.170.20 0.96%	12/31/2024	GFL	GFL ENVIRONMENTAL INC-SUB VT	Common Stocks	36168Q104	102,713	44.54	4,574,837.02	1.98%	12/31/2024   GLBE   GLOBAL-E ONLINE LTD   Common Stocks   M5216V106   42,742   54.53   2,330,721.26   1.01%     12/31/2024   GLW   CORNING INC   Common Stocks   219350105   32,763   47.52   1,556,897.76   0.67%     12/31/2024   HUBB   HUBBELL INC   Common Stocks   443510607   4,814   418.89   2,016,536.46   0.87%     12/31/2024   IMVT   IMMUNOVANT INC   Common Stocks   452581102   37,778   24.77   935,761.06   0.41%     12/31/2024   INSM   INSMED INC   Common Stocks   457669307   42,595   69.04   2,940,758.80   1.27%     12/31/2024   IOVA   IOVANCE BIOTHERAPEUTICS INC   Common Stocks   462260100   300,023   7.4   2.220.170.20   0.96%	12/31/2024	GH	GUARDANT HEALTH INC	Common Stocks	40131M109	47,840	30.55	1,461,512.00	0.63%	12/31/2024 GLW CORNING INC Common Stocks 219350105 32,763 47.52 1,556,897.76 0.67%   12/31/2024 HUBB HUBBELL INC Common Stocks 443510607 4,814 418.89 2,016,536.46 0.87%   12/31/2024 IMVT IMMUNOVANT INC Common Stocks 452581102 37,778 24.77 935,761.06 0.41%   12/31/2024 INSM INSMED INC Common Stocks 457669307 42,595 69.04 2,940,758.80 1.27%   12/31/2024 IOVA IOVANCE BIOTHERAPEUTICS INC Common Stocks 462260100 300,023 7.4 2.201,70.20 0.96%	12/31/2024	GLBE	GLOBAL-E ONLINE LTD	Common Stocks	M5216V106	42,742	54.53	2,330,721.26	1.01%	12/31/2024   HUBB   HUBBELL INC   Common Stocks   443510607   4,814   418.89   2,016,536.46   0.87%     12/31/2024   IMVT   IMMUNOVANT INC   Common Stocks   452581102   37,778   24.77   935,761.06   0.41%     12/31/2024   INSM   INSMED INC   Common Stocks   457669307   42,595   69.04   2,940,758.80   1.27%     12/31/2024   IOVA   IOVANCE BIOTHERAPEUTICS INC   Common Stocks   462260100   300,023   7.4   2.220.170.20   0.96%	12/31/2024	GLW	CORNING INC	Common Stocks	219350105	32,763	47.52	1,556,897.76	0.67%	12/31/2024   IMVT   IMMUNOVANT INC   Common Stocks   452581102   37,778   24.77   935,761.06   0.41%     12/31/2024   INSM   INSMED INC   Common Stocks   457669307   42,595   69.04   2,940,758.80   1.27%     12/31/2024   IOVA   IOVANCE BIOTHERAPEUTICS INC   Common Stocks   462260100   300,023   7.4   2.220.170.20   0.96%	12/31/2024	HUBB	HUBBELL INC	Common Stocks	443510607	4,814	418.89	2,016,536.46	0.87%	12/31/2024   INSM   INSMED INC   Common Stocks   457669307   42,595   69.04   2,940,758.80   1.27%     12/31/2024   IOVA   IOVANCE BIOTHERAPEUTICS INC   Common Stocks   462260100   300,023   7.4   2.220.170.20   0.96%	12/31/2024	IMVT	IMMUNOVANT INC	Common Stocks	45258J102	37,778	24.77	935,761.06	0.41%	12/31/2024 IOVA IOVANCE BIOTHERAPEUTICS INC Common Stocks 462260100 300,023 7.4 2.220.170.20 0.96%	12/31/2024	INSM	INSMED INC	Common Stocks	457669307	42,595	69.04	2,940,758.80	1.27%	· · · · · · · · · · · · · · · · · · ·	12/31/2024	IOVA	IOVANCE BIOTHERAPEUTICS INC	Common Stocks	462260100	300,023	7.4	2,220,170.20	0.96%
12/31/2024	EXP	EAGLE MATERIALS INC	Common Stocks	26969P108	6,273	246.76	1,547,925.48	0.67%																																																																																																																																			
12/31/2024FLRFLUOR CORPCommon Stocks34341210262,24349.323,069,824.761.33%12/31/2024FLSFLOWSERVE CORPCommon Stocks34354P10518,67257.521,074,013.440.46%12/31/2024FTAIFTAI AVIATION LTDCommon StocksG3730V10558,031144.048,358,785.243.62%12/31/2024GENIGENIUS SPORTS LTDCommon StocksG3934V109304,1978.652,631,304.051.14%12/31/2024GFLGFL ENVIRONMENTAL INC-SUB VTCommon Stocks36168Q104102,71344.544,574,837.021.98%12/31/2024GHGUARDANT HEALTH INCCommon Stocks40131M10947,84030.551,461,512.000.63%12/31/2024GLBEGLOBAL-E ONLINE LTDCommon Stocks21935010532,76347.521,556,897.760.67%12/31/2024HUBBHUBBELL INCCommon Stocks21935010532,76347.521,556,897.760.67%12/31/2024IMVTIMMUNOVANT INCCommon Stocks45258110237,77824.77935,761.060.41%12/31/2024INSMINSMED INCCommon Stocks45766930742,59569.02,940,758.801.27%12/31/2024IOVAIOVANCE BIOTHERAPEUTICS INCCommon Stocks45766930732,0237.42.220.170.200.96%	12/31/2024	FIX	COMFORT SYSTEMS USA INC	Common Stocks	199908104	8,515	424.06	3,610,870.90	1.56%																																																																																																																																		
12/31/2024FLSFLOWSERVE CORPCommon Stocks34354P10518,67257.521,074,013.440.46%12/31/2024FTAIFTAI AVIATION LTDCommon StocksG3730V10558,031144.048,358,785.243.62%12/31/2024GENIGENIUS SPORTS LTDCommon StocksG3934V109304,1978.652,631,304.051.14%12/31/2024GFLGFL ENVIRONMENTAL INC-SUB VTCommon Stocks36168Q104102,71344.544,574,837.021.98%12/31/2024GHGUARDANT HEALTH INCCommon Stocks40131M10947,84030.551,461,512.000.63%12/31/2024GLBGLOBAL-E ONLINE LTDCommon StocksM5216V10642,74254.532,330,721.261.01%12/31/2024HUBBHUBBELL INCCommon Stocks21935010532,76347.521,556,897.760.67%12/31/2024IMVTIMMUNOVANT INCCommon Stocks45258110237,77824.77935,761.060.41%12/31/2024INSMINSMED INCCommon Stocks45766930742,59569.042,940,758.801.27%12/31/2024INSMINSMED INCCommon Stocks45260100300,0237.42.220.170.200.96%	12/31/2024	FLR	FLUOR CORP	Common Stocks	343412102	62,243	49.32	3,069,824.76	1.33%																																																																																																																																		
12/31/2024FTAIFTAI AVIATION LTDCommon StocksG3730V10558,031144.048,358,785.243.62%12/31/2024GENIGENIUS SPORTS LTDCommon StocksG3934V109304,1978.652,631,304.051.14%12/31/2024GFLGFL ENVIRONMENTAL INC-SUB VTCommon Stocks36168Q104102,71344.544,574,837.021.98%12/31/2024GHGUARDANT HEALTH INCCommon Stocks40131M10947,84030.551,461,512.000.63%12/31/2024GLBEGLOBAL-E ONLINE LTDCommon StocksM5216V10642,74254.532,330,721.261.01%12/31/2024GLWCORNING INCCommon Stocks21935010532,76347.521,556,897.760.67%12/31/2024HUBBHUBBELL INCCommon Stocks4455106074,814418.892,016,536.460.87%12/31/2024IMVTIMMUNOVANT INCCommon Stocks45258110237,77824.77935,761.060.41%12/31/2024INSMINSMED INCCommon Stocks45766930742,59569.042,940,758.801.27%12/31/2024IOVAIOVANCE BIOTHERAPEUTICS INCCommon Stocks45260100300,0237.42.220.170.200.96%	12/31/2024	FLS	FLOWSERVE CORP	Common Stocks	34354P105	18,672	57.52	1,074,013.44	0.46%																																																																																																																																		
12/31/2024 GENI GENIUS SPORTS LTD Common Stocks G3934V109 304,197 8.65 2,631,304.05 1.14%   12/31/2024 GFL GFL ENVIRONMENTAL INC-SUB VT Common Stocks 36168Q104 102,713 44.54 4,574,837.02 1.98%   12/31/2024 GH GUARDANT HEALTH INC Common Stocks 40131M109 47,840 30.55 1,461,512.00 0.63%   12/31/2024 GLBE GLOBAL-E ONLINE LTD Common Stocks M5216V106 42,742 54.53 2,330,721.26 1.01%   12/31/2024 GLW CORNING INC Common Stocks 219350105 32,763 47.52 1,556,897.76 0.67%   12/31/2024 HUBB HUBBELL INC Common Stocks 445510607 4,814 418.89 2,016,536.46 0.87%   12/31/2024 IMVT IMMUNOVANT INC Common Stocks 452581102 37,778 24.77 935,761.06 0.41%   12/31/2024 INSM INSMED INC Common Stocks 457669307 42,595 69.04 2,940,758.80 1.27%   12/31/2024 IOVA IOVANCE BIOTHERAPEUTICS INC </td <td>12/31/2024</td> <td>FTAI</td> <td>FTAI AVIATION LTD</td> <td>Common Stocks</td> <td>G3730V105</td> <td>58,031</td> <td>144.04</td> <td>8,358,785.24</td> <td>3.62%</td>	12/31/2024	FTAI	FTAI AVIATION LTD	Common Stocks	G3730V105	58,031	144.04	8,358,785.24	3.62%																																																																																																																																		
12/31/2024 GFL GFL ENVIRONMENTAL INC-SUB VT Common Stocks 361680104 102,713 44.54 4,574,837.02 1.98%   12/31/2024 GH GUARDANT HEALTH INC Common Stocks 40131M109 47,840 30.55 1,461,512.00 0.63%   12/31/2024 GLBE GLOBAL-E ONLINE LTD Common Stocks M5216V106 42,742 54.53 2,330,721.26 1.01%   12/31/2024 GLW CORNING INC Common Stocks 219350105 32,763 47.52 1,556,897.76 0.67%   12/31/2024 HUBB HUBBELL INC Common Stocks 44510607 4,814 418.89 2,016,536.46 0.87%   12/31/2024 IMVT IMMUNOVANT INC Common Stocks 452581102 37,778 24.77 935,761.06 0.41%   12/31/2024 INSM INSMED INC Common Stocks 457669307 42,595 69.04 2,940,758.80 1.27%   12/31/2024 IOVA IOVANCE BIOTHERAPEUTICS INC Common Stocks 462260100 300,023 7.4 2.220.170.20 0.96%	12/31/2024	GENI	GENIUS SPORTS LTD	Common Stocks	G3934V109	304,197	8.65	2,631,304.05	1.14%																																																																																																																																		
12/31/2024 GH GUARDANT HEALTH INC Common Stocks 40131M109 47,840 30.55 1,461,512.00 0.63%   12/31/2024 GLBE GLOBAL-E ONLINE LTD Common Stocks M5216V106 42,742 54.53 2,330,721.26 1.01%   12/31/2024 GLW CORNING INC Common Stocks 219350105 32,763 47.52 1,556,897.76 0.67%   12/31/2024 HUBB HUBBELL INC Common Stocks 443510607 4,814 418.89 2,016,536.46 0.87%   12/31/2024 IMVT IMMUNOVANT INC Common Stocks 452581102 37,778 24.77 935,761.06 0.41%   12/31/2024 INSM INSMED INC Common Stocks 457669307 42,595 69.04 2,940,758.80 1.27%   12/31/2024 IOVA IOVANCE BIOTHERAPEUTICS INC Common Stocks 462260100 300,023 7.4 2.220.170.20 0.96%	12/31/2024	GFL	GFL ENVIRONMENTAL INC-SUB VT	Common Stocks	36168Q104	102,713	44.54	4,574,837.02	1.98%																																																																																																																																		
12/31/2024   GLBE   GLOBAL-E ONLINE LTD   Common Stocks   M5216V106   42,742   54.53   2,330,721.26   1.01%     12/31/2024   GLW   CORNING INC   Common Stocks   219350105   32,763   47.52   1,556,897.76   0.67%     12/31/2024   HUBB   HUBBELL INC   Common Stocks   443510607   4,814   418.89   2,016,536.46   0.87%     12/31/2024   IMVT   IMMUNOVANT INC   Common Stocks   452581102   37,778   24.77   935,761.06   0.41%     12/31/2024   INSM   INSMED INC   Common Stocks   457669307   42,595   69.04   2,940,758.80   1.27%     12/31/2024   IOVA   IOVANCE BIOTHERAPEUTICS INC   Common Stocks   462260100   300,023   7.4   2.220.170.20   0.96%	12/31/2024	GH	GUARDANT HEALTH INC	Common Stocks	40131M109	47,840	30.55	1,461,512.00	0.63%																																																																																																																																		
12/31/2024 GLW CORNING INC Common Stocks 219350105 32,763 47.52 1,556,897.76 0.67%   12/31/2024 HUBB HUBBELL INC Common Stocks 443510607 4,814 418.89 2,016,536.46 0.87%   12/31/2024 IMVT IMMUNOVANT INC Common Stocks 452581102 37,778 24.77 935,761.06 0.41%   12/31/2024 INSM INSMED INC Common Stocks 457669307 42,595 69.04 2,940,758.80 1.27%   12/31/2024 IOVA IOVANCE BIOTHERAPEUTICS INC Common Stocks 462260100 300,023 7.4 2.201,70.20 0.96%	12/31/2024	GLBE	GLOBAL-E ONLINE LTD	Common Stocks	M5216V106	42,742	54.53	2,330,721.26	1.01%																																																																																																																																		
12/31/2024   HUBB   HUBBELL INC   Common Stocks   443510607   4,814   418.89   2,016,536.46   0.87%     12/31/2024   IMVT   IMMUNOVANT INC   Common Stocks   452581102   37,778   24.77   935,761.06   0.41%     12/31/2024   INSM   INSMED INC   Common Stocks   457669307   42,595   69.04   2,940,758.80   1.27%     12/31/2024   IOVA   IOVANCE BIOTHERAPEUTICS INC   Common Stocks   462260100   300,023   7.4   2.220.170.20   0.96%	12/31/2024	GLW	CORNING INC	Common Stocks	219350105	32,763	47.52	1,556,897.76	0.67%																																																																																																																																		
12/31/2024   IMVT   IMMUNOVANT INC   Common Stocks   452581102   37,778   24.77   935,761.06   0.41%     12/31/2024   INSM   INSMED INC   Common Stocks   457669307   42,595   69.04   2,940,758.80   1.27%     12/31/2024   IOVA   IOVANCE BIOTHERAPEUTICS INC   Common Stocks   462260100   300,023   7.4   2.220.170.20   0.96%	12/31/2024	HUBB	HUBBELL INC	Common Stocks	443510607	4,814	418.89	2,016,536.46	0.87%																																																																																																																																		
12/31/2024   INSM   INSMED INC   Common Stocks   457669307   42,595   69.04   2,940,758.80   1.27%     12/31/2024   IOVA   IOVANCE BIOTHERAPEUTICS INC   Common Stocks   462260100   300,023   7.4   2.220.170.20   0.96%	12/31/2024	IMVT	IMMUNOVANT INC	Common Stocks	45258J102	37,778	24.77	935,761.06	0.41%																																																																																																																																		
12/31/2024 IOVA IOVANCE BIOTHERAPEUTICS INC Common Stocks 462260100 300,023 7.4 2.220.170.20 0.96%	12/31/2024	INSM	INSMED INC	Common Stocks	457669307	42,595	69.04	2,940,758.80	1.27%																																																																																																																																		
· · · · · · · · · · · · · · · · · · ·	12/31/2024	IOVA	IOVANCE BIOTHERAPEUTICS INC	Common Stocks	462260100	300,023	7.4	2,220,170.20	0.96%																																																																																																																																		

12/31/2024	ITCI	INTRA-CELLULAR THERAPIES INC	Common Stocks	46116X101	18,617	83.52	1,554,891.84	0.67%
12/31/2024	KEX	KIRBY CORP	Common Stocks	497266106	5,688	105.8	601,790.40	0.26%
12/31/2024	KNF	KNIFE RIVER CORP	Common Stocks	498894104	31,439	101.64	3,195,459.96	1.38%
12/31/2024	KRUS	KURA SUSHI USA INC CLASS A	Common Stocks	501270102	48,943	90.58	4,433,256.94	1.92%
12/31/2024	KRYS	KRYSTAL BIOTECH INC	Common Stocks	501147102	15,450	156.66	2,420,397.00	1.05%
12/31/2024	KTOS	KRATOS DEFENSE & SECURITY	Common Stocks	50077B207	74,862	26.38	1,974,859.56	0.85%
12/31/2024	LITE	LUMENTUM HOLDINGS INC	Common Stocks	55024U109	12,897	83.95	1,082,703.15	0.47%
12/31/2024	LNTH	LANTHEUS HOLDINGS INC	Common Stocks	516544103	17,815	89.46	1,593,729.90	0.69%
12/31/2024	LSCC	LATTICE SEMICONDUCTOR CORP	Common Stocks	518415104	25,568	56.65	1,448,427.20	0.63%
12/31/2024	LSEA	LANDSEA HOMES CORP	Common Stocks	51509P103	52,352	8.49	444,468.48	0.19%
12/31/2024	LTH	LIFE TIME GROUP HOLDINGS INC	Common Stocks	53190C102	46,088	22.12	1,019,466.56	0.44%
12/31/2024	MDB	MONGODB INC	Common Stocks	60937P106	3,987	232.81	928,213.47	0.40%
12/31/2024	MDGL	MADRIGAL PHARMACEUTICALS INC	Common Stocks	558868105	2,540	308.57	783,767.80	0.34%
12/31/2024	MDU	MDU RESOURCES GROUP INC	Common Stocks	552690109	36,349	18.02	655,008.98	0.28%
12/31/2024	MKSI	MKS INSTRUMENTS INC	Common Stocks	55306N104	7,850	104.39	819,461.50	0.35%
12/31/2024	MLTX	MOONLAKE IMMUNOTHERAPEUTICS	Common Stocks	61559X104	21,166	54.15	1,146,138.90	0.50%
12/31/2024	MRVL	MARVELL TECHNOLOGY GROUP LTD	Common Stocks	573874104	41,653	110.45	4,600,573.85	1.99%
12/31/2024	MTZ	MASTEC INC	Common Stocks	576323109	45,961	136.14	6,257,130.54	2.71%
12/31/2024	NBIX	NEUROCRINE BIOSCIENCES INC	Common Stocks	64125C109	20.846	136.5	2.845.479.00	1.23%
12/31/2024	NFE	NEW FORTRESS ENERGY INC	Common Stocks	644393100	350.011	15.12	5.292.166.32	2.29%
12/31/2024	NHC	NATIONAL HEALTHCARE CORP	Common Stocks	635906100	8.947	107.56	962.339.32	0.42%
12/31/2024	NOG	NORTHERN OIL AND GAS INC	Common Stocks	665531307	32.134	37.16	1.194.099.44	0.52%
12/31/2024	NRG	NRG ENERGY INC	Common Stocks	629377508	21.679	90.22	1.955.879.38	0.85%
12/31/2024	NTRA	NATERA INC	Common Stocks	632307104	9.915	158.3	1.569.544.50	0.68%
12/31/2024	NXE	NEXGEN ENERGY LTD	Common Stocks	65340P106	267.845	6.6	1.767.777.00	0.77%
12/31/2024	OLLI	OLLIE'S BARGAIN OUTLET HLDG INC	Common Stocks	681116109	33,749	109.73	3,703,277,77	1.60%
12/31/2024	OS	ONESTREAM INC	Common Stocks	68278B107	21.207	28.52	604.823.64	0.26%
12/31/2024	PCVX	VAXCYTE INC	Common Stocks	92243G108	11.270	81.86	922.562.20	0.40%
12/31/2024	ONST	OUINSTREET INC	Common Stocks	748740100	80,965	23.07	1 867 862 55	0.81%
12/31/2024	OTWO		Common Stocks	747361109	25.818	100.65	2,598,581,70	1.12%
12/31/2024	RDDT	REDDIT INC-CL A	Common Stocks	75734B100	19 547	163.44	3,194,761,68	1.38%
12/31/2024	RDNT	RADNET INC	Common Stocks	750491102	42 813	69.84	2,990,059,92	1.29%
12/31/2024	RSI	RUSH STREET INTERACTIVE INC	Common Stocks	782011100	139 406	13 72	1 912 650 32	0.83%
12/31/2024	RVMD	REVOLUTION MEDICINES INC	Common Stocks	76155X100	50 083	43 74	2 190 630 42	0.05%
12/31/2024	RYTM	RHYTHM PHARMACEUTICALS INC	Common Stocks	762431105	20 484	55.98	1 146 694 32	0.50%
12/31/2024	s	SENTINELONE INC -CLASS A	Common Stocks	81730H109	62 710	22.20	1 392 162 00	0.50%
12/31/2024	SEM	SELECT MEDICAL HOLDINGS CORP	Common Stocks	816190105	48 449	18.85	913 263 65	0.00%
12/31/2024	SEM	SPROUTS FARMERS MARKET INC	Common Stocks	85208M102	22 540	127.07	2 864 157 80	1 74%
12/31/2024	SMTC	SEMTECH CORP	Common Stocks	816850101	109 170	61.85	6 752 164 50	2 92%
12/31/2024	SNITC	SHARKNINIA INC	Common Stocks	G8068I 108	38 776	97.36	3 775 231 36	1 63%
12/31/2024	SRAD	SPORTRADAR GROUP AG-A	Common Stocks	H8088I 103	90.863	17 34	1 575 564 42	0.68%
12/31/2024	SRRK		Common Stocks	80706P103	58 930	43.22	2 546 954 60	1 10%
12/31/2024	SYM	SYMBOTIC INC	Common Stocks	87151X101	58 335	23 71	1 383 122 85	0.60%
12/31/2024		TANDEM DIABETES CARE INC	Common Stocks	875372203	43 400	36.02	1,563,122.05	0.68%
12/31/2024	TDP		Common Stocks	876030107	18 875	65.32	1,303,208.00	0.53%
12/31/2024	TWLO		Common Stocks	90138F102	16,875	108.08	1,233,103.75	0.33%
12/31/2024	VIK		Common Stocks	603454101	56 127	108.08	2 472 206 22	1 07%
12/31/2024	VIK		Common Stocks	035454101	10,408	44.00	2,473,330.22 A10 017 02	0.19%
12/31/2024	VRNA			925050106	10,400	40.24	7 765 951 01	0.10%
12/31/2024			Common Stocks	923030100	40,/JI 58 //7	40.44	2,203,034.04	0.56%
12/31/2024			Common Stocks	957639100	56 057	92 E1	2,330,000.21 1 682 001 70	2 020/
12/21/2024			Common Stocks	916171201	120,027	03.34 12.24	4,005,001.76	2.03%
12/31/2024	VV I I K	SELECT WATER SOLUTIONS INC	COMMON SLOCKS	0101/1201	130,734	15.24	1,/20,910.10	0.75%

12/31/2024	XMTR	XOMETRY INC-A	Common Stocks	98423F109	64,620	42.66	2,756,689.20	1.19%
12/31/2024	XPO	XPO INC	Common Stocks	983793100	26,137	131.15	3,427,867.55	1.48%
12/31/2024	ZI	ZOOMINFO TECHNOLOGIES INC-A	Common Stocks	98980F104	156,527	10.51	1,645,098.77	0.71%

## RVK

## Monthly Performance Report City of Jacksonville Employees' Retirement System

As of January 31, 2025

PORTLAND BOISE CHICAGO NEW YORK

#### General Market Commentary

- During January, both domestic and international equity markets broadly traded higher, posting low to mid-single digit gains. Federal policy updates dominated headlines during the month as investors evaluated numerous policies, such as increased tariffs, which if implemented could have a notable impact on global markets and economies.
- While stocks generally posted positive returns during the month, toward the end of January many tech-oriented and Alrelated stocks fell on news that a Chinese company, DeepSeek, developed an Al model for a fraction of the cost of its USbased competitors. In addition to taking less capital investment to develop, it is reported that DeepSeek also utilizes significantly less computing power than its competitors, which caused microchip developers and manufacturers in particular to trade lower toward the end of the month.
- The Federal Reserve held interest rates steady at their January 2025 meeting following three consecutive interest rate cuts, citing a stabilizing labor market but noted a continued focus on inflation, which remained somewhat elevated. Inflation, as measured by CPI, rose by 2.9% during 2024.
- Equity markets posted positive returns in January as the S&P 500 (Cap Wtd) Index returned 2.78% and the MSCI EAFE (Net) Index returned 5.26%. Emerging markets returned 1.79%, as measured by the MSCI EM (Net) Index.
- The Bloomberg US Aggregate Bond Index returned 0.53% in January, underperforming the 0.54% return by the Bloomberg US Treasury Intermediate Term Index. International fixed income markets returned 0.44%, as measured by the FTSE Non-US World Gov't Bond Index.
- Public real estate returned 1.04% in January and 4.24% over the trailing five-year period, as measured by the FTSE NAREIT Eq REITs Index (TR).
- The Cambridge US Private Equity Index returned 9.18% for the trailing one-year period and 15.33% for the trailing five-year period ending September 2024.
- Absolute return strategies returned 1.24% for the month and 9.70% over the trailing one-year period, as measured by the HFRI FOF Comp Index.
- The price of crude oil increased by 1.34% during the month but has decreased by 4.38% YoY.

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Economic Indicators	Jan-25		Dec-24	Jan-24	10 Yr	20 Yr
Federal Funds Rate (%)	4.33	_	4.33	5.33	1.80	1.69
Breakeven Inflation - 5 Year (%)	2.54	<b>A</b>	2.37	2.28	1.96	1.93
Breakeven Inflation - 10 Year (%)	2.39	<b></b>	2.33	2.26	2.00	2.09
Breakeven Inflation - 30 Year (%)	2.37	<b>A</b>	2.32	2.26	2.04	2.22
Bloomberg US Agg Bond Index - Yield (%)	4.86	•	4.91	4.59	2.93	3.28
Bloomberg US Agg Bond Index - OAS (%)	0.30	•	0.34	0.40	0.46	0.59
Bloomberg US Agg Credit Index - OAS (%)	0.75	•	0.77	0.90	1.15	1.38
Bloomberg US Corp: HY Index - OAS (%)	2.61	V	2.87	3.44	4.15	4.90
Capacity Utilization (%)	77.77	<b></b>	77.63	78.53	77.36	77.15
Unemployment Rate (%)	4.00	•	4.10	3.70	4.65	5.79
PMI - Manufacturing (%)	50.90	<b>A</b>	49.20	49.10	53.10	52.84
Baltic Dry Index - Shipping	735	▼	997	1,398	1,434	2,211
Consumer Conf (Conf Board)	104.10	V	104.70	110.90	110.38	92.88
CPI YoY (Headline) (%)	3.00	<b></b>	2.90	3.10	2.94	2.61
CPI YoY (Core) (%)	3.30	<b>A</b>	3.20	3.90	3.01	2.46
PPI YoY (%)	3.50	<b>A</b>	3.30	1.00	2.77	N/A
M2 YoY (%)	N/A	N/A	3.90	-2.00	6.60	6.39
US Dollar Total Weighted Index	128.67	V	129.49	120.77	115.49	104.54
WTI Crude Oil per Barrel (\$)	73		72	76	62	72
Gold Spot per Oz (\$)	2.800		2.612	2.037	1.610	1.344



Treasury Yield Curve (%)	Jan-25		Dec-24		Jan-24		Jan-23		Jan-22
3 Month	4.31		4.37		5.42		4.70		0.22
6 Month	4.28		4.24		5.18		4.80		0.49
1 Year	4.17		4.16		4.73		4.68		0.78
2 Year	4.22		4.25		4.27		4.21		1.18
5 Year	4.36		4.38		3.91		3.63		1.62
7 Year	4.47		4.48		3.95		3.59		1.75
10 Year	4.58		4.58		3.99		3.52		1.79
20 Year	4.88		4.86		4.34		3.78		2.17
30 Year	4.83		4.78		4.22		3.65		2.11
Market Performance (%)		MTD	QTD	CYTD	1 Yr	3 Yr	5 Yr	7 Yr	10 Yr
S&P 500 (Cap Wtd)		2.78	2.78	2.78	26.38	11.91	15.17	13.38	13.76
Russell 2000		2.62	2.62	2.62	19.09	5.62	8.67	6.91	8.45
MSCI EAFE (Net)		5.26	5.26	5.26	8.65	5.12	6.25	4.14	5.69
MSCI EAFE SC (Net)		3.45	3.45	3.45	7.09	0.36	3.60	1.78	5.87
MSCI EM (Net)		1.79	1.79	1.79	14.75	-0.71	3.04	0.48	3.76
Bloomberg US Agg Bond		0.53	0.53	0.53	2.07	-1.52	-0.60	1.21	1.19
ICE BofAML 3 Mo US T-Bill		0.37	0.37	0.37	5.19	4.02	2.51	2.39	1.80
NCREIF ODCE (Gross)		N/A	N/A	N/A	-1.43	-2.32	2.87	3.99	5.88
FTSE NAREIT Eq REITs Index	(TR)	1.04	1.04	1.04	14.62	0.48	4.24	6.58	5.15
HFRI FOF Comp Index		1.24	1.24	1.24	9.70	4.43	5.43	4.14	3.90
Bloomberg Cmdty Index (TR)		3.95	3.95	3.95	9.11	2.49	9.25	4.40	2.02

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.





### Schedule of Investable Assets

Periods Ending	Beginning Market Value (\$)	Net Cash Flows (\$)	Gain/Loss (\$)	Ending Market Value (\$)	% Return
CYTD	2,456,544,289	331,480	62,657,962	2,519,533,731	2.55
FYTD	2,475,947,332	954,099	42,632,299	2,519,533,731	1.72

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. Fiscal year for the COJ ends 09/30.



January 31, 2025 : \$2,519,533,731		Market Value (\$)	Allocation (%)
	Eagle Capital Large Cap Value (SA)	177,511,076	7.05
	Wellington Select Equity Income Fund (SA)	156,813,247	6.22
	BNYM DB Lg Cap Stock Idx NL (CF)	127,124,905	5.05
	Loomis, Sayles & Co Lg Cap Grth (CF)	159,160,751	6.32
	Kayne Anderson US SMID Value (SA)	73,478,785	2.92
	Systematic Financial US SMID Value (SA)	74,713,936	2.97
	Pinnacle Associates US SMID Cap Growth (SA)	72,715,548	2.89
	Silchester Intl Val Equity (CF)	259,101,475	10.28
	Bail Giff Intl Gro;4 (BGEFX)	186,691,295	7.41
	Acadian Emg Mkts Eq II (CF)	158,432,577	6.29
	Baird Core Fixed Income (SA)	122,177,025	4.85
	Loomis Sayles Multisector Full Discretion (CF)	185,684,100	7.37
	Schroder Flexible Secured Income LP (CF)	188,936,872	7.50
	Harrison Street Core Property LP	120,046,635	4.76
	PGIM Real Estate PRISA II LP	44,866,491	1.78
	Principal US Property (CF)	103,728,832	4.12
	UBS Trumbull Property LP	50,847,599	2.02
	Vanguard RE Idx;ETF (VNQ)	1,352,658	0.05
	Abacus Multi-Family Partners VI LP	8,389,059	0.33
	H.I.G. Realty Partners IV (Onshore) LP	27,831,974	1.10
	Bell Value-Add Fund VII (CF)	7,224,358	0.29
	Hammes Partners IV LP	1,636,904	0.06
	Blue Owl Digital Infrastructure Fund III-A LP	7,017,149	0.28
	Ares US Real Estate Opportunity IV LP	1,490,828	0.06
	Adams Street Private Equity (SA)	94,858,966	3.76
	Hamilton Lane Private Credit (SA)	90,430,964	3.59
	Dreyfus Gvt CM;Inst (DGCXX)	17,222,638	0.68
	Transition Account	47,086	0.00

Market values shown are preliminary and subject to change. Allocations shown may not sum up to 100% exactly due to rounding. During 01/2025, IPI Partners was aquired by Blue Owl, the fund naming has been updated to match new ownership.



	Allocatio	on			Performance (%)								
	Market	0/.	MTD	ΟΤΟ	CVTD	EVTD	1	3	5	7	10	Since	Inception
	Value (\$)	70		QID	OTID		Year	Years	Years	Years	Years	Incep.	Date
Total Fund	2,519,533,731	100.00	2.55	2.55	2.55	1.72	12.21	4.40	6.84	5.68	6.80	6.39	07/01/1999
Total Fund Policy Index			2.27	2.27	2.27	1.03	12.85	5.14	7.43	6.40	7.03	6.15	
Difference			0.28	0.28	0.28	0.69	-0.64	-0.74	-0.59	-0.72	-0.23	0.24	
Actual Allocation Index			2.41	2.41	2.41	0.61	11.76	3.65	6.16	N/A	N/A	N/A	
Difference			0.14	0.14	0.14	1.12	0.45	0.75	0.68	N/A	N/A	N/A	
Actual Allocation Index (Net of Alts)			2.41	2.41	2.41	0.77	11.31	3.75	6.33	N/A	N/A	N/A	
Difference			0.14	0.14	0.14	0.95	0.90	0.66	0.52	N/A	N/A	N/A	
Total Equity	1,445,743,594	57.38	3.82	3.82	3.82	1.85	18.69	7.72	10.65	8.34	9.88	7.06	07/01/1999
US Equity	841.518.247	33.40	3.87	3.87	3.87	6.31	24.06	10.93	13.69	11.81	12.27	8.05	07/01/1999
US Equity Index			3.16	3.16	3.16	5.87	26.32	11.36	14.60	12.83	13.21	8.19	
Difference			0.72	0.72	0.72	0.44	-2.26	-0.43	-0.91	-1.02	-0.95	-0.15	
International Equilar	CO4 005 040	00.00	0.70	0.70	0.70	0.70	44.07	0.05	0.00	2.00	0.04	5.04	07/04/4000
	604,225,348	23.98	3.76	3.76	3.76	-3.78	11.97	3.35	6.30	3.28	6.24	5.91	07/01/1999
Difference			4.03	4.03	4.03	-3.88	10.89	3.45	5.50	3.31	5.23	4.27	
Difference			-0.27	-0.27	-0.27	0.09	1.08	-0.10	0.79	-0.03	1.01	1.64	
Fixed Income	496,797,997	19.72	1.20	1.20	1.20	0.64	6.27	0.63	0.69	1.52	1.68	4.39	07/01/1999
Fixed Income Index			0.60	0.60	0.60	-2.15	2.90	-1.03	-0.18	1.51	1.41	3.98	
Difference			0.60	0.60	0.60	2.79	3.37	1.65	0.86	0.01	0.27	0.41	
Real Estate	374,432,487	14.86	0.75	0.75	0.75	1.35	-0.77	-1.62	2.30	3.26	4.89	4.82	12/01/2005
Real Estate Index			0.02	0.02	0.02	1.05	-2.07	-3.03	2.06	3.13	4.98	5.04	
Difference			0.73	0.73	0.73	0.30	1.30	1.42	0.25	0.13	-0.09	-0.22	
Core Real Estate	320,842,214	12.73	0.87	0.87	0.87	1.38	-1.13	-2.10	2.01	3.05	4.74	4.74	12/01/2005
NCREIF ODCE Index (AWA) (Net)			0.00	0.00	0.00	0.96	-2.27	-3.14	1.99	3.08	4.94	5.02	
Difference			0.87	0.87	0.87	0.42	1.14	1.04	0.02	-0.03	-0.20	-0.28	
Non-Core Peal Estate	53 590 273	2 1 2	0.03	0.03	0.03	1 20	2 58	22.01	N/A	N/A	NI/A	21 36	01/01/2022
NCREIE ODCE Index (AWA) (Net) +2%	55,550,275	2.10	0.03	0.03	0.03	1.63	_0.31	-1.20	4.03	5 1/	7.04	_1.12	01/01/2022
Difference			-0.13	-0.13	-0.13	-0.43	2.80	-1.20	4.05 N/A	0.14 N/A	N/A	22/18	
Difference			-0.15	-0.15	-0.15	-0.43	2.03	20.21	11/7	11/7	11/7	22.40	
Diversifying Assets	185,289,930	7.35	0.34	0.34	0.34	4.62	8.14	10.49	13.58	8.55	5.65	8.30	03/01/2011
Diversifying Assets Index			2.24	2.24	2.24	3.59	20.81	11.92	9.45	5.53	3.62	5.33	
Difference			-1.90	-1.90	-1.90	1.03	-12.67	-1.43	4.12	3.02	2.03	2.97	
Cash Equivalents	17,222,638	0.68	0.38	0.38	0.38	1.53	5.19	4.20	1.75	N/A	N/A	1.81	09/01/2018
FTSE 3 Mo T-Bill Index			0.38	0.38	0.38	1.62	5.36	4.18	2.59	2.44	1.83	2.51	
Difference			-0.01	-0.01	-0.01	-0.08	-0.17	0.01	-0.84	N/A	N/A	-0.69	



	Allocation	า			Performance (%)								
	Market Value (\$)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
US Equity													
Eagle Capital Large Cap Value (SA)	177,511,076	7.05	5.69	5.69	5.69	7.76	26.97	12.92	14.76	12.61	13.65	11.79	03/01/2007
Russell 1000 Val Index			4.63	4.63	4.63	2.56	19.54	8.08	10.15	8.53	9.42	7.52	
Difference			1.06	1.06	1.06	5.20	7.43	4.84	4.61	4.08	4.22	4.28	
Russell 1000 Index			3.18	3.18	3.18	6.02	26.71	11.69	14.97	13.22	13.54	10.58	
Difference			2.51	2.51	2.51	1.74	0.26	1.24	-0.21	-0.62	0.11	1.21	
Wellington Select Equity Income Fund (SA)	156,813,247	6.22	3.32	3.32	3.32	2.09	19.96	N/A	N/A	N/A	N/A	19.13	06/01/2023
Russell 1000 Val Index			4.63	4.63	4.63	2.56	19.54	8.08	10.15	8.53	9.42	19.89	
Difference			-1.31	-1.31	-1.31	-0.47	0.43	N/A	N/A	N/A	N/A	-0.77	
BNYM DB Lg Cap Stock Idx NL (CF)	127,124,905	5.05	3.18	3.18	3.18	6.01	26.75	12.11	15.20	N/A	N/A	15.15	05/01/2019
Russell 1000 Index			3.18	3.18	3.18	6.02	26.71	11.69	14.97	13.22	13.54	14.95	
Difference			0.00	0.00	0.00	-0.01	0.04	0.42	0.23	N/A	N/A	0.19	
Loomis, Sayles & Co Lq Cap Grth (CF)	159,160,751	6.32	4.07	4.07	4.07	13.99	35.72	17.82	19.09	16.27	N/A	17.97	08/01/2017
Russell 1000 Grth Index			1.98	1.98	1.98	9.19	32.68	14.57	18.90	17.26	17.18	18.76	
Difference			2.09	2.09	2.09	4.80	3.03	3.25	0.19	-0.99	N/A	-0.79	
Kayne Anderson US SMID Value (SA)	73,478,785	2.92	2.94	2.94	2.94	2.15	15.51	N/A	N/A	N/A	N/A	6.43	03/01/2022
Russell 2500 Val Index			3.40	3.40	3.40	3.13	18.07	6.82	9.98	7.49	8.44	6.43	
Difference			-0.47	-0.47	-0.47	-0.98	-2.56	N/A	N/A	N/A	N/A	0.00	
Systematic Financial US SMID Value (SA)	74,713,936	2.97	2.71	2.71	2.71	2.66	18.94	N/A	N/A	N/A	N/A	8.56	03/01/2022
Russell 2500 Val Index			3.40	3.40	3.40	3.13	18.07	6.82	9.98	7.49	8.44	6.43	
Difference			-0.70	-0.70	-0.70	-0.48	0.87	N/A	N/A	N/A	N/A	2.13	
Pinnacle Associates US SMID Cap Growth (SA)	72,715,548	2.89	3.67	3.67	3.67	5.43	12.28	1.47	7.90	7.76	9.09	11.73	03/01/2010
Russell 2500 Grth Index			3.82	3.82	3.82	6.34	20.99	6.13	8.87	8.68	10.04	12.30	
Difference			-0.16	-0.16	-0.16	-0.91	-8.71	-4.66	-0.97	-0.92	-0.94	-0.57	



	Allocatio	n			Performance (%)								
	Market Value (\$)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
International Equity													
Silchester Intl Val Equity (CF)	259,101,475	10.28	3.23	3.23	3.23	-5.98	5.08	5.49	6.56	3.51	6.25	8.52	06/01/2009
MSCI EAFE Val Index (USD) (Net)			5.10	5.10	5.10	-2.38	11.15	7.28	6.92	3.41	4.86	5.78	
Difference			-1.87	-1.87	-1.87	-3.60	-6.07	-1.79	-0.36	0.10	1.39	2.74	
Bail Giff Intl Gro;4 (BGEFX)	186,691,295	7.41	6.77	6.77	6.77	0.60	19.51	-0.86	5.65	4.12	7.72	9.06	06/01/2009
Baillie Gifford Index			4.25	4.25	4.25	-3.97	10.38	1.49	4.50	3.57	5.66	6.99	
Difference			2.52	2.52	2.52	4.57	9.13	-2.35	1.15	0.55	2.06	2.07	
Baillie Gifford Spliced Index			4.03	4.03	4.03	-3.88	10.89	3.45	5.50	3.68	5.36	6.46	
Difference			2.74	2.74	2.74	4.48	8.63	-4.30	0.15	0.44	2.36	2.60	
Acadian Emg Mkts Eq II (CF)	158,432,577	6.29	1.25	1.25	1.25	-5.03	16.99	4.29	7.36	2.52	5.03	4.00	02/01/2011
MSCI Emg Mkts Index (USD) (Net)			1.79	1.79	1.79	-6.36	14.75	-0.71	3.04	0.48	3.76	2.30	
Difference			-0.54	-0.54	-0.54	1.34	2.23	5.00	4.32	2.04	1.27	1.71	
Fixed Income													
Baird Core Fixed Income (SA)	122,177,025	4.85	0.56	0.56	0.56	-2.35	2.85	-1.08	N/A	N/A	N/A	-1.12	03/01/2021
Bloomberg US Agg Bond Index			0.53	0.53	0.53	-2.55	2.07	-1.52	-0.60	1.21	1.19	-1.56	
Difference			0.03	0.03	0.03	0.19	0.78	0.44	N/A	N/A	N/A	0.44	
Loomis Sayles Multisector Full Discretion (CF)	185,684,100	7.37	0.88	0.88	0.88	-0.20	6.12	1.23	2.60	3.37	3.59	5.47	11/01/2007
Bloomberg Gbl Agg Bond Index			0.57	0.57	0.57	-4.56	0.25	-3.68	-2.10	-0.73	0.22	1.64	
Difference			0.31	0.31	0.31	4.37	5.87	4.90	4.70	4.10	3.37	3.83	
Schroder Flexible Secured Income LP (CF)	188,936,872	7.50	1.93	1.93	1.93	3.55	8.73	N/A	N/A	N/A	N/A	8.94	10/01/2022
SOFR+1.75%			0.51	0.51	0.51	2.13	7.03	5.95	4.30	N/A	N/A	6.85	
Difference			1.43	1.43	1.43	1.42	1.70	N/A	N/A	N/A	N/A	2.09	
SOFR+5%			0.77	0.77	0.77	3.20	10.45	9.33	7.64	N/A	N/A	10.26	
Difference			1.16	1.16	1.16	0.34	-1.72	N/A	N/A	N/A	N/A	-1.32	



	Allocation				Performance (%)								
	Market Value (\$)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Core Real Estate													
Harrison Street Core Property LP	120,046,635	4.76	0.87	0.87	0.87	1.03	0.44	1.42	3.61	4.55	N/A	5.60	11/01/2015
NCREIF ODCE Index (AWA) (Net)			0.00	0.00	0.00	0.96	-2.27	-3.14	1.99	3.08	4.94	4.22	
Difference			0.87	0.87	0.87	0.07	2.71	4.56	1.62	1.47	N/A	1.37	
PGIM Real Estate PRISA II LP	44,866,491	1.78	1.95	1.95	1.95	3.05	-2.49	-3.76	1.63	3.53	5.33	5.28	01/01/2015
NCREIF ODCE Index (AWA) (Net)			0.00	0.00	0.00	0.96	-2.27	-3.14	1.99	3.08	4.94	4.90	
Difference			1.95	1.95	1.95	2.09	-0.22	-0.62	-0.36	0.45	0.38	0.38	
Principal US Property (CF)	103,728,832	4.12	0.44	0.44	0.44	1.52	-1.52	-3.16	2.49	3.73	5.73	6.35	01/01/2014
NCREIF ODCE Index (AWA) (Net)			0.00	0.00	0.00	0.96	-2.27	-3.14	1.99	3.08	4.94	5.48	
Difference			0.44	0.44	0.44	0.56	0.75	-0.02	0.50	0.65	0.78	0.87	
UBS Trumbull Property LP	50,847,599	2.02	0.80	0.80	0.80	0.64	-2.29	-4.54	-0.81	-0.16	2.12	3.56	01/01/2006
NCREIF ODCE Index (AWA) (Net)			0.00	0.00	0.00	0.96	-2.27	-3.14	1.99	3.08	4.94	4.79	
Difference			0.80	0.80	0.80	-0.32	-0.02	-1.41	-2.80	-3.24	-2.82	-1.22	
Vanguard RE Idx:ETF (VNQ)	1.352.658	0.05	1.65	1.65	1.65	-6.15	12.20	-1.38	3.06	5.84	4.47	10.67	12/01/2008
Custom REITs Index	.,,		1.67	1.67	1.67	-6.07	12.35	-1.28	3.21	6.20	4.81	11.33	
Difference			-0.02	-0.02	-0.02	-0.08	-0.15	-0.10	-0.16	-0.36	-0.34	-0.66	



	Allocation Performance (%)												
	Market Value (\$)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Non-Core Real Estate													
Abacus Multi-Family Partners VI LP	8,389,059	0.33	0.00	0.00	0.00	1.22	-39.39	N/A	N/A	N/A	N/A	-41.81	10/01/2022
NCREIF ODCE Index (AWA) (Net) +2%			0.17	0.17	0.17	1.63	-0.31	-1.20	4.03	5.14	7.04	-6.87	
Difference			-0.17	-0.17	-0.17	-0.41	-39.08	N/A	N/A	N/A	N/A	-34.95	
H.I.G. Realty Partners IV (Onshore) LP	27,831,974	1.10	0.00	0.00	0.00	0.92	6.37	26.89	N/A	N/A	N/A	N/A	01/01/2022
NCREIF ODCE Index (AWA) (Net) +2%	, ,		0.17	0.17	0.17	1.63	-0.31	-1.20	4.03	5.14	7.04	-1.12	
Difference			-0.17	-0.17	-0.17	-0.71	6.68	28.09	N/A	N/A	N/A	N/A	
Bell Value-Add Fund VII (CF)	7.224.358	0.29	0.23	0.23	0.23	0.23	-5.03	N/A	N/A	N/A	N/A	-12.71	04/01/2023
NCREIF ODCE Index (AWA) (Net) +2%	- ,,		0.17	0.17	0.17	1.63	-0.31	-1.20	4.03	5.14	7.04	-4.71	
Difference			0.07	0.07	0.07	-1.40	-4.71	N/A	N/A	N/A	N/A	-8.01	
Hammos Partnors IV I P	1 636 904	0.06	0.00	0.00	0.00	3 10	-50.81	N/A	N/A	N/A	N/A	-59 30	10/01/2023
NCREIE ODCE Index (AWA) (Net) +2%	1,030,304	0.00	0.17	0.00	0.00	1.63	-0.31	-1 20	4 03	5 14	7 04	-3.52	10/01/2023
Difference			-0.16	-0.16	-0.16	1.56	-50.49	N/A	N/A	N/A	N/A	-55.78	
Blue Owl Digital Infrastructure Fund III-A LP	7,017,149	0.28	0.03	0.03	0.03	2.29	N/A	N/A	N/A	N/A	N/A	27.99	04/01/2024
NCREIF ODCE Index (AWA) (Net) +2%			0.17	0.17	0.17	1.63	-0.31	-1.20	4.03	5.14	7.04	1.99	
Difference			-0.14	-0.14	-0.14	0.66	N/A	N/A	N/A	N/A	N/A	26.00	
Ares US Real Estate Opportunity IV LP	1,490,828	0.06	0.00	0.00	0.00	N/A	N/A	N/A	N/A	N/A	N/A	0.00	11/01/2024
NCREIF ODCE Index (AWA) (Net) +2%			0.17	0.17	0.17	1.63	-0.31	-1.20	4.03	5.14	7.04	1.46	
Difference			-0.17	-0.17	-0.17	N/A	N/A	N/A	N/A	N/A	N/A	-1.46	
Diversifying Assets													
Adams Street Private Equity (SA)	94,858,966	3.76	0.00	0.00	0.00	4.59	4.49	7.81	N/A	N/A	N/A	18.93	11/01/2020
S&P 500 Index+3%			3.04	3.04	3.04	6.30	30.17	15.26	18.62	16.78	17.17	20.82	
Difference			-3.04	-3.04	-3.04	-1.72	-25.68	-7.45	N/A	N/A	N/A	-1.90	
Hamilton Lane Private Credit (SA)	90,430,964	3.59	0.70	0.70	0.70	4.65	12.39	8.97	N/A	N/A	N/A	4.32	04/01/2021
ICE BofAML Gbl Hi Yld Index +2%			1.40	1.40	1.40	0.74	10.92	5.32	5.27	5.56	6.76	4.23	
Difference			-0.70	-0.70	-0.70	3.90	1.47	3.66	N/A	N/A	N/A	0.09	
Cash Equivalents													
Dreyfus Gvt CM;Inst (DGCXX)	17,222,638	0.68	0.38	0.38	0.38	1.53	5.19	4.03	2.55	2.41	1.83	1.66	05/01/2001
FTSE 3 Mo T-Bill Index			0.38	0.38	0.38	1.62	5.36	4.18	2.59	2.44	1.83	1.65	
Difference			-0.01	-0.01	-0.01	-0.08	-0.17	-0.15	-0.04	-0.03	0.00	0.01	

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



### City of Jacksonville Employees' Retirement System Addendum

#### 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 JXP Transition, BNYM Transition, Loop Cap Transition, and 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.
- Actual Allocation Index: The Actual Allocation Index is calculated monthly, using beginning of month weights of each investment applied to its corresponding primary benchmark return. The Actual Allocation Index's Inception date is 01/2019 and prior performance is listed as "N/A".
- Actual Allocation Index (Net of Alts): The Actual Allocation Index (Net of Alts) is calculated monthly, using beginning of month weights of each investment applied to its corresponding primary benchmark return, with the exception of funds in the Core Real Estate, Non-Core Real Estate, and Diversifying Assets composites, which are represented by actual monthly composite returns. The Actual Allocation Index's Inception date is 01/2019 and prior performance is listed as "N/A".
- 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 Diversifying Assets Index is calculated monthly and consists of 50% S&P MLP Index (TR)/50% NCREIF Timberland Index through 10/2017, 67% S&P MLP Index (TR)/33% NCREIF Timberland Index through 09/2020, and calculated monthly using beginning of month investment weights applied to each corresponding primary benchmark return thereafter.

#### 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.



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