

**BOARD OF PENSION TRUSTEES
FOR THE
CITY OF JACKSONVILLE RETIREMENT SYSTEM
Thursday, May 26, 2022 at 2 PM
City Hall Conference Room 3C
AGENDA**

1. CALL TO ORDER

2. PUBLIC COMMENT

3. MINUTES

- a. Copy of April 28, 2022, May 5, 2022, and May 19, 2022 Board of Trustees Minutes;
RECOMMENDED ACTION: APPROVAL

4. NEW BUSINESS

- a. COPP April 2022 Consent; COPAC RECOMMENDED ACTION: APPROVAL, PAC meeting for May 16, 2022 was cancelled
- b. 10/1/2021 Valuation Reports: BOARD ACTION REQUIRED
- c. 2022-412 Part-time Employees, Temporary Employees, and Pension Retirees:
BOARD REVIEW REQUIRED

5. INVESTMENT AND FINANCIAL MATTERS

- a. Abacus Multifamily Partner: BOARD ACTION REQUESTED
- b. 1Q2022 Investment Performance
- c. April 2022 Investment Performance Update
- d. RVK Securitized Fixed Income Memo: BOARD ACTION REQUESTED
- e. Staff Update

6. OLD BUSINESS

- a. Review of COPP Summary Plan Description (SPD); COPAC RECOMMENDED ACTION: APPROVAL

7. ADMINISTRATIVE

- a. Staff Update
- b. Alignment of BOT / PFPF board meetings

8. INFORMATION

- a. Manager Review Meeting with Systematic – US SMID Value Equity scheduled for Thursday, June 2, 2022, at 12:30 PM (meet and greet starts at 12:00)
- b. Next regular BOT meeting scheduled for Thursday, June 23, 2022, at 2 PM

9. PRIVILEGE OF THE FLOOR

10. ADJOURNMENT

**BOARD OF PENSION TRUSTEES
FOR THE
CITY OF JACKSONVILLE RETIREMENT SYSTEM
April 28, 2022**

MINUTES

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

Members Present

Jeffrey Bernardo, Chair
Julie Bessent
Joey Greive
Valerie Gutierrez
David Kilcrease, Secretary
Diane Moser
Richard Wallace
Brian Hughes
John Verwey

Members Not Present

N/A

Staff Present

Randall Barnes, Treasurer
Paul Barrett, Sr. Manager of Debt and Investments (via Zoom)
Brennan Merrell, Manager of Debt and Investments
Yolanda Tillman, Treasury Analyst II (via Zoom)
John Sawyer, OGC
Tom Stadelmaier, Pension Administrator
Andy Robinson, Assistant Pension Administrator

Others Present

Kevin Schmidt, RVK (via Zoom)
Jordan Cipriani, RVK (via Zoom)
Jeff Williams, Segal (via Zoom)
Charnetta Dawston
James Neal

1. CALL TO ORDER

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

2. PUBLIC COMMENT

There was none.

3. MINUTES

Ms. Moser asked Staff to clarify who initiated the motion in the Securities Litigation section from the prior minutes. After review, Staff determined Ms. Bessent initiated the motion that the Plan not become a co-lead or lead plaintiff. Mr. Greive motioned to approve the minutes pending Staff verification. Ms. Moser seconded the motion. The Chair asked for discussion and there was none. The Chair took a vote and the motion passed unanimously.

4. NEW BUSINESS

Consent agenda

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

Charnetta Dawston Appeal

Mr. Stadelmaier provided a summary of the matter to the Board including relevant municipal code. He stated the original request was denied by the Pension Office and subsequently denied by the PAC. He mentioned Ms. Dawston chose to appeal the denial and she asked to address the Board per the appeal process. Mr. Stadelmaier introduced Ms. Dawston and she presented her case. Ms. Dawston provided details on why the Board should reverse the decision of the PAC. She concluded her presentation by thanking the Board for their time and consideration. Mr. Kilcrease asked about procedures regarding pension and retirement overviews that are followed during new employee orientation. Mr. Stadelmaier mentioned, to his understanding, the orientation covered retirement options available to new employees during the period in question but not all eligible employees participated in the training sessions. Chair Bernardo inquired for clarification on the availability of the new hire meetings. Ms. Moser commented the meetings are scheduled, but not everyone attends these voluntary sessions. Additional discussion was presented by Mr. Kilcrease, Chair Bernardo, Ms. Moser, and Ms. Dawston regarding prior year new hire orientation sessions. Ms. Bessent inquired if the Summary Plan Description (SPD) is sent annually to employees. Ms. Moser responded the document is available on the COJ web site. Mr. Hughes mentioned employees have the responsibility to understand compensation and benefits as pertaining to the individual. Mr. Wallace also spoke on this philosophy and Mr. Kilcrease mentioned additional information should be given to employees directly. Chair Bernardo asked if the PAC denial was unanimous. Ms. Gutierrez confirmed the PAC consulted OGC and the Pension Office to understand the policies and rules of the situation and after review, the vote was unanimous for denial. Mr. Greive and Chair Bernardo discussed the PAC decision in more detail. Mr. Hughes motioned to deny the appeal. Mr. Greive seconded the motion. The Chair asked for discussion. Mr. Kilcrease made a motion to table Mr. Hughes' motion until the next meeting to allow Board members additional time to research

the procedures of new hire orientation. Mr. Verwey seconded the motion to table. The Chair asked for discussion on the motion to table Mr. Hughes' motion and hearing none took a vote. The vote was 4-5 with Ms. Gutierrez, Ms. Bessent, Mr. Verwey, and Mr. Kilcrease voting yes. The motion to table did not pass. The Chair asked for new discussion on Mr. Hughes' motion to deny the appeal. Hearing none, a vote was taken. The motion passed 9-0, but Mr. Kilcrease asked for the option to revisit the issue at a later date. The Board thanked Ms. Dawston for attending.

COPP Disability Application

Mr. Robinson provided a summary of the matter to the Board. He mentioned the employee meets the criteria for disability benefits within the Plan and the City's Medical Review Officer (MRO) determined the disability is total and permanent. The COPAC reviewed the case and voted unanimously to approve sending the request to the Board. Mr. Kilcrease motioned to approve the disability benefit. Mr. Greive seconded the motion. The Chair asked for discussion and hearing none, took a vote. The motion passed unanimously.

Preliminary Actuarial Valuation Results

Mr. Stadelmaier gave an update on the previous meeting's question on the difference in the rate of return for the COPP versus the rate of return that was provided for the GEPP. Segal and COJ Staff conducted a review of the data, and it was determined the investment earnings applied to the COPP were lower than expected. A certain amount of investment earnings applied to the GEPP should have been applied to the COPP. Overall, the earnings were a wash and the information the Board received in total did not change. It was agreed the difference was significant enough to re-calculate the valuation to provide for accurate accounting across the Plans. The causing issue has been identified and protocols have been added for future valuations. Mr. Williams of Segal provided an overview on the updated memo. He stated given the new data, the market return for the COPP increased from 9.7% to 27.03% and the market return for the GEPP decreased slightly from 21.09% to 21.03%. He also discussed the City's minimum required contribution for the two plans. The projected contribution increased for GEPP and decreased for COPP by roughly the same amount. He mentioned the full valuation reports will be presented at the May meeting. Mr. Greive commented the surplus of market value of assets compared to actuarial value of assets is a built-in cushion for downturns in the market. He also spoke on the Better Jacksonville Plan (BJP) that began in 2000 as a 30-year improvement plan for the City of Jacksonville and the current process of sunseting the program. Projections show the plan to be fully funded for remaining projects and once satisfied, the pension liability surtax will begin paying to the pension funds including GEPP, COPP, and the Police and Fire Pension Fund (PFPF). Chair Bernardo asked if any budget surpluses allow the Board to increase the required funding amount or if a surplus only allows for the acceleration of projected sales tax revenue. Mr. Greive agreed the time is accelerated and mentioned legislation is being proposed and a presentation will be given to the Board in the future.

COPP Summary Plan Description (SPD)

Mr. Stadelmaier mentioned the COPP SPD has been updated by Staff and has been reviewed by the COPAC and the Office of the General Counsel (OGC) for their comments. The COPAC voted unanimously to approve the document and recommends approval by the Board. Staff asks the Board for their review and adoption of the SPD. Ms. Gutierrez asked if there is a red-line version containing changes compared to the prior version. Mr. Stadelmaier mentioned the new SPD has been mostly re-written, but a copy of the prior version will be made available. Mr. Greive asked if there is a one-page document summarizing the key changes. Mr. Stadelmaier responded there is not due to far-reaching changes that were made. Chair Bernardo asked for a one-month review and the SPD will be discussed at the next meeting.

5. INVESTMENT AND FINANCIAL MATTERS

Mr. Merrell provided a review of the March 2022 flash report which showed the total fund up nineteen basis points and FYTD down approximately -1.5%. He highlighted standout managers during the period. Mr. Schmidt provided the April intra-month performance. The fund is down -2.5% MTD, -6.7% CYTD, and -4.3% FYTD. Mr. Merrell gave an update on upcoming investment due diligence meetings with fund managers. He thanked the Board for their participation in the workshops and the next one will be held May 5, 2022, with Adams Street scheduled to come into town. Mr. Barnes commented this will be the first returns posted from Adams Street since being hired by the Plan. Mr. Merrell mentioned the securitized fixed income finalist presentations are scheduled to take place on May 19, 2022 to discuss alternate fixed income managers. He also mentioned cash flows have been active in private equity and private credit with capital calls by Adams Street and Hamilton Lane. He provided an update on the Hancock Timber sale for 3Q22 and previewed an upcoming real estate opportunity. Ms. Cipriani mentioned the real estate presentation will take place at the next meeting and RVK will be recommending a pacing plan of \$40-\$45 million to non-core real estate capital this year. The main prospect being reviewed is primarily focused on multi-family space and more details will be provided next month. Mr. Merrell stated they are looking for 1-2 real estate opportunities per year for the pacing schedule over the next 3-4 years. Mr. Schmidt previewed the securitized fixed income finalist presentation relating to core-plus to enhance the composite from a risk and return standpoint. He provided an overview of the upcoming discussions. Mr. Merrell concluded his presentation by mentioning provider redemptions regarding UBS Trumbull. Chair Bernardo asked if there have been any recent communications with Franklin Templeton regarding performance. Mr. Merrell responded that performance remains net short and RVK confirmed Franklin Templeton's position is long-term in nature.

Mr. Merrell asked for any other questions and there were none.

6. OLD BUSINESS

There was none.

7. ADMINISTRATIVE

Mr. Stadelmaier mentioned Staff is compiling a list of activities completed by the Pension Office over the first six months of the fiscal year. Volumes continue to be steady and there has been an uptick in online utilization. The IT department is working to enhance functionality within the pension portal to benefit employees and pensioners. Ms. Gutierrez inquired about education for employees regarding the portal. She asked if there is any training or communication regarding its use. Mr. Stadelmaier mentioned the upcoming PAC and COPAC elections that will be held online, and this will be an opportunity to highlight the benefits of the portal to employees. He also mentioned how the portal offers employees options on how retirement information is presented. Mr. Kilcrease asked if any new deductions can be subtracted from pension payments if agreed to by the Board. Mr. Stadelmaier said it is possible through current system functionality, however there can be challenges involved from a pensioner / provider standpoint. Mr. Wallace invited Mr. Stadelmaier to attend the next REA meeting in June and present retirement information to current pensioners pertaining to the health of the Plan. Mr. Stadelmaier welcomed the invitation to interact with the REA and stated it will be a great opportunity to provide more communications to retirees.

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

8. INFORMATION

The Securitized Fixed Income Finalist Presentations meeting will be held Thursday, May 19, 2022 at 1:30 PM.

The next regular BOT meeting is scheduled for Thursday, May 26, 2022, at 2 PM.

Investment due diligence workshop will be held Thursday, June 2, 2022, at 12:30 PM.

9. PRIVILEGE OF THE FLOOR

Chair Bernardo proposed that regular BOT meetings could align with the Police and Fire Pension Fund (PFPF) Board meetings for scheduling efficiency regarding shared outside consultants. A discussion was held by the Board, Staff, and RVK. Mr. Hughes asked Staff to formalize the idea. Mr. Stadelmaier agreed and will return to the Board with a plan for consideration.

10. ADJOURNMENT

The Chair adjourned the meeting at about 3:07 PM.

**BOARD OF PENSION TRUSTEES
FOR THE
CITY OF JACKSONVILLE RETIREMENT SYSTEM
May 5, 2022**

MINUTES

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

Members Present

Julie Bessent
Joey Greive, Acting Chair
David Kilcrease, Secretary
John Verwey
Diane Moser (via Zoom)
Richard Wallace (via Zoom)

Members Not Present

Jeffrey Bernardo, Chair
Brian Hughes
Valerie Gutierrez

Staff Present

Randall Barnes, Treasurer
Brennan Merrell, Manager of Debt and Investments
Yolanda Tillman, Treasury Analyst II (via Zoom)
Tom Stadelmaier, Pension Administrator
Andy Robinson, Assistant Pension Administrator

Others Present

Mike Lucarelli, Partner – Investor Relations, Adams Street Partners
Jeffrey Burgis, Partner – Primary Investments, Adams Street Partners
Kevin Schmidt, RVK (via Zoom)

1. CALL TO ORDER

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

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

2. PUBLIC COMMENT

There was none.

3. INVESTMENT AND FINANCIAL MATTERS

Adams Street Partners – Private Equity

Mr. Merrell introduced Mike Lucarelli and Jeffrey Burgis from Adams Street Partners. Adams Street Partners is a private equity manager with \$51 billion in assets under management as of 9/30/2021. The COJ General Pension Fund has a \$105 million Private Equity mandate. \$28 million has been called and \$77 million remains to be called. Mr. Lucarelli and Mr. Burgis attended in-person and covered the provided material in detail.

Mr. Lucarelli said Adams Street has been investing in private equity for fifty years, has over 250 employees located across eleven global offices, and is completely independent and 100% employee owned. He mentioned more than half of their employees have personal equity in the firm. He also stated, through proper diversification, Adams Street has never lost money for any clients in its 50-year history. Ms. Bessent, Mr. Greive, and Mr. Burgis commented on Mr. Lucarelli's opening remarks.

Mr. Greive inquired about employee turnover within the firm. Mr. Burgis said average tenure is 12-13 years and no senior employees have departed within the past several years.

Mr. Lucarelli highlighted Adams Street's Strategically Integrated Platform. He mentioned the two main areas of focus are concentrated on private equity fund investing and building a secondary investment business. He described in detail the five components that comprise the strategy including primary and secondary investments, growth equity, co-investments, and private credit. Mr. Burgis mentioned current trends in secondary markets and how co-investment deals are determined and created. They both spoke in more detail regarding private credit and growth equity.

Mr. Burgis spoke on sector-focused strategy. Over six hundred funds are reviewed each year and they invest in 7-8% of those prospects. Mr. Lucarelli mentioned Adams Street is overweight in certain sectors going through dislocation, change, and growth. The resulting factors culminate positions in technology, healthcare, consumer preferences, and industrial manufacturing. Mr. Greive and Mr. Merrell inquired about company specifics, ownership status, continuing investment after an IPO, and exit strategy. Mr. Burgis followed up on their questions. He also mentioned Adams Street utilizes the brokerage services of T. Rowe Price to facilitate their secondary market trades.

Ms. Bessent asked about the research process when selecting new opportunities. Mr. Burgis said their approach focuses on team, strategy, and track record. They look for sector expertise, operational capabilities, and company culture. He explained their process of making decisions using committees and robust discussions based on compiled data and knowing when to "get on and off the bus".

Mr. Merrell asked how often Adams Street returns to an investment and if they look at managers in emerging markets. Mr. Burgis said the re-up rate of investing in spinoff funds

tends to be about 75%. Regarding emerging managers, Adams Street does invest in first time funds if the right opportunity arises.

Mr. Greive inquired about the return characteristics for the COJ portfolio. Mr. Lucarelli spoke on target portfolios by strategy, target mix, and cash flow models. Several board members, Staff, Mr. Schmidt, Mr. Burgis, and Mr. Lucarelli commented and discussed the COJ General Pension Fund investment commitment in terms of value and duration. Mr. Burgis continued with the presentation regarding the investment lineup for the portfolio. He provided details on individual holdings and future commitments. Mr. Lucarelli mentioned additional co-investment deals, growth, and secondary market investments.

Mr. Burgis went on to discuss top portfolio companies by total value that are held within the fund. Mr. Greive asked about the difference in cost versus unrealized value and Ms. Bessent inquired about specific fund information. Mr. Lucarelli and Mr. Burgis provided detailed explanations and spoke on realized value of distributions.

Mr. Burgis provided future possible outlooks regarding higher market uncertainty and global economics. He mentioned 2021 was record year for private equity in terms of new deal activity and fund raising. Current year specifics have slowed a bit with inflation, supply chain issues, labor shortages, and world politics. Adams Street continues to emphasize growth-oriented sectors such as technology and healthcare. They also expect current dislocation across sectors will provide investment opportunities for sector-based managers.

Mr. Merrell asked about oversubscribed and in-demand funds regarding available allocations that are being acquired. Mr. Burgis said given the pace of fund raising there are more opportunities for investors to achieve better allocations who have historical relationships with the general partners.

Mr. Stadelmaier asked for any other Board questions. Mr. Greive and Mr. Merrell thanked Mr. Lucarelli and Mr. Burgis for their presentation. Adams Street thanked the Board.

4. OLD BUSINESS

N/A

5. ADMINISTRATIVE

N/A

6. INFORMATION

Specialized Fixed Income Finalist Presentations are scheduled for Thursday, May 19, 2022, at 1:30 PM.

The next regular BOT meeting is scheduled for Thursday, May 26, 2022, at 2 PM.

7. PRIVILEGE OF THE FLOOR

Mr. Merrell reminded the Board the due diligence investment meetings would continue going forward on the first Thursday of the month.

8. ADJOURNMENT

The Chair adjourned the meeting at about 2:04 PM.

**BOARD OF PENSION TRUSTEES
FOR THE
CITY OF JACKSONVILLE RETIREMENT SYSTEM
May 19, 2022**

MINUTES

1:30 PM, held in Person in City Hall Conference Room 3C and via Zoom

Members Present

Jeffrey Bernardo (via Zoom)
Julie Bessent
Joey Greive, Acting Chair
Brian Hughes
Richard Wallace (via Zoom)

Members Not Present

Diane Moser
Valerie Gutierrez
David Kilcrease, Secretary
John Verwey

Staff Present

Randall Barnes, Treasurer
Paul Barrett, Sr. Manager of Debt and Investments (via Zoom)
Brennan Merrell, Manager of Debt and Investments
Yolanda Tillman, Treasury Analyst II (via Zoom)
Tom Stadelmaier, Pension Administrator
Hannah Wells, Pension Coordinator (via Zoom)
Andy Robinson, Assistant Pension Administrator

Others Present

Harrison Choi, Managing Director, TCW
Elizabeth Crawford, Managing Director, TCW
Mark Romano, Managing Director, TCW
Jason Callan, Senior Portfolio Manager, Columbia Threadneedle
Thomas Heuer, Senior Portfolio Manager, Columbia Threadneedle
Paul Heffernan, Senior Institutional Sales Director, Columbia Threadneedle
Michelle Russell-Dowe, Global Head of Securitized Product, Schrodgers
Nicholas Pont, Head of Product Strategy, Schrodgers
Walter Lindsay, Jr., Institutional Sales Director, Schrodgers
Elijah McGowen, RVK
Jordan Cipriani, RVK
Kevin Schmidt, RVK

1. CALL TO ORDER

Acting Chair Greive called the meeting to order at about 1:32 PM.

This is a presentation of Securitized Fixed Income Finalists. No votes will take place at the meeting.

2. PUBLIC COMMENT

There was none.

3. INVESTMENT AND FINANCIAL MATTERS

Mr. Merrell announced that staff and RVK have brought forth three securitized fixed income managers for a finalist presentation. He then introduced Elijah McGowen of RVK to discuss the search process and why securitized fixed income could be beneficial to the portfolio. Mr. McGowen mentioned RVK began its search for a new manager in 3Q2021 and has narrowed down the field to the three finalists. Mr. Schmidt of RVK mentioned that staff and RVK used the same vetting criteria as previously adopted for the SMID Cap Value presentations. He stated that no formal recommendations are being presented at this meeting. Mr. Greive inquired about the target allocation amount for the new manager being considered, if the new firm will replace an existing manager, and about asset allocation. Ms. Cipriani responded about \$100 million is being considered and Mr. Schmidt said it is possible that a replacement may be warranted, but that no hard recommendation is on the table. He also mentioned diversification in asset allocation can reduce volatility. Mr. Merrell provided specifics on the format of the meeting including that each presenting group was allotted thirty minutes for presentation and fifteen minutes for Q&A.

Without any other questions, the floor was turned over to the first presenting group.

The TCW Group

Representing The TCW Group were Mark Romano, Elizabeth Crawford, and Harrison Choi.

Mr. Romano introduced his group and provided background biographies on each. He highlighted the history of TCW, being founded in 1971, and provided information on current global operations, ownership of the firm (44% employee-owned), and AUM of \$243 billion. Their Securitized Opportunities Strategy has been in place for twenty years and Ms. Crawford provided a high-level overview of the strategy description, performance objectives, and risk expectations. Mr. Choi spoke on identifying mis-priced opportunities in four areas of sector weight: Non-Agency MBS, CMBS, ABS, and Agency MBS. He spoke on effective and spread durations, risk profiles, and yields to maturity. Ms. Crawford mentioned examples and opportunities in composite annual returns. They

continued with discussion on drawdowns, performance data, and capturing upside returns.

The floor was opened for questions. Several members of the Board, staff, and RVK posed questions regarding sector-weight ranges, yields, hold times of investments, sub accounts, timeframe of building the portfolio, and capacity. Mr. Romano, Mr. Harrison, and Ms. Crawford responded to the questions. Mr. Greive thanked TCW for their presentation. TCW thanked the Board.

Columbia Threadneedle

Representing Columbia Threadneedle were Paul Heffernan, Jason Callan, and Thomas Heuer.

Mr. Heffernan introduced his group and provided background biographies on each. He spoke on Columbia Threadneedle's presentation objectives including team, philosophy, process, and key differentiators as compared to competition. He provided an overview of the firm including number of employees, global operations, and AUM of \$699.8 billion. Mr. Callan spoke in detail on their strategy and risk/return profile. He mentioned interest rate and credit risks, primary return drivers, opportunities in the marketplace, performance, and a team overview. Mr. Heuer spoke on their top-down process, sector allocation strategy, security selections, and their disciplined approach to risk rating. Mr. Callan mentioned consumer behaviors and utilizing flexibility in changing market cycles.

The floor was opened for questions. Several members of the Board and RVK posed questions regarding team organization, turnovers related to client inflows and outflows, assets, performance in different environments, balancing of core versus securitized, and corporate exposure limits. Mr. Heffernan, Mr. Callan, and Mr. Heuer responded to the questions. Mr. Greive thanked Columbia Threadneedle for their presentation. Mr. Heffernan thanked the Board.

Schroders Investment Management

Representing Schroders Investment Management were Walter Lindsay, Michelle Russell-Dowe, and Nicholas Pont.

Mr. Lindsay introduced his group and provided background biographies on each. He highlighted the history of Schroders including over 200 years of financial experience, their global operations, number of employees, and AUM of \$967.5 billion. Mr. Pont provided information on their uniqueness including experienced team, consistent process, flexibility-diverse tools, and sustainability-innovation. He mentioned their opportunistic securitized portfolio and objectives and benefits. Ms. Russell-Dowe spoke about the approach on risk timing, risk exposure, team organization, and flexibility and safety that Schroders utilizes. She also mentioned their process, philosophy, and research objectives.

The floor was opened for questions. Several members of the Board and RVK posed questions regarding diversification flexibility, breakouts versus public and private caps, portfolio manager risk, liquidity terms, yields, team compensation structures, capacity, and marketplace lending. Ms. Russell-Dowe and Mr. Pont responded to the questions. Mr. Greive thanked Schroders for their presentation. Schroders thanked the Board.

Board Discussion

Following the three presentations, the attending Board members, staff, and RVK discussed what each of the three groups could bring to the COJ General Pension Fund. Included in the discussions were topics on operational costs, fee structures, asset growth, conservative versus risky mindset, inflation, and portfolio fit analysis. Mr. Greive asked staff and RVK to compile information including best and final fees and present their findings to the Board.

Mr. Merrell thanked the Board for their time and participation.

4. OLD BUSINESS

N/A

5. ADMINISTRATIVE

N/A

6. INFORMATION

The next regular BOT meeting is scheduled for Thursday, May 26, 2022, at 2 PM.

7. PRIVILEGE OF THE FLOOR

There was none.

8. ADJOURNMENT

The Chair adjourned the meeting at about 4:15 PM.

CORRECTIONAL OFFICERS PENSION ADVISORY COMMITTEE

April 2022

CONSENT AGENDA FOR RECOMMENDED BENEFITS

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

1. TIME SERVICE RETIREMENTS

None

2. TIME SERVICE CONNECTIONS COMPLETED

None

3. REFUNDS

Brandon M Locke, 9 years and 1 month, \$42,002.04

4. SURVIVOR BENEFITS APPLICATION

None

5. CHILDREN/ORPHAN/GUARDIANSHIP BENEFITS

None

6. VESTED BENEFIT

None

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

None

8. OFFICERS ENTERING DROP April 2022

None

9. Phase II Biweekly Distribution DROP Program

None

10. DROP Payments

Christopher R Scarpinati, 20 years and 7 months, \$129.75

COPAC Secretary Approval

Date

BOT Secretary Approval

Date

Notes and Comments regarding Approval:

City of Jacksonville General Employees Retirement Plan

Actuarial Valuation and Review as of October 1, 2021



This report has been prepared at the request of the Board of Trustees to assist in administering the Plan. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Trustees and may only be provided to other parties in its entirety, unless expressly authorized by Segal. The measurements shown in this actuarial valuation may not be applicable for other purposes.

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Segal



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May 23, 2022

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

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of October 1, 2021. The census information on which our calculations were based was prepared by the Plan and the financial information was provided by the the City's Finance Department. That assistance is gratefully acknowledged.

Statement by Enrolled Actuary: This actuarial valuation 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.

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.

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

Sincerely,
Segal

A handwritten signature in black ink that reads "Jeffrey S. Williams".

Jeffrey S. Williams, FCA, ASA, MAAA, EA
Vice President and Consulting Actuary
Enrolled Actuary No. 20-07009

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Section 1: Actuarial Valuation Summary

Purpose and basis

This report was prepared by Segal to present a valuation of the Plan as of October 1, 2021. 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 measurements shown in this actuarial valuation may not be applicable for other purposes. In particular, the measures herein are not necessarily appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the Plan's benefit obligations. 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; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law.

The contribution requirements presented in this report are based on:

- The benefit provisions of the Pension Plan, as administered by the Board;
- The characteristics of covered active participants, inactive vested participants, and retired participants and beneficiaries as of September 30, 2021, provided by the Retirement System Administrative Office;
- The assets of the Plan as of September 30, 2021, 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, 2021 actuarial valuation is for the plan year beginning October 1, 2022. 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 2023 is \$83,607,476, a decrease of \$89,335 from the amount being contributed in fiscal 2022.
4. Actual contributions made during the fiscal year ending September 30, 2021 were \$77,269,000, 100.57% of the City's minimum required contribution for fiscal 2021. In the prior fiscal year, actual contributions were \$72,194,000, 101.33% of the prior year's minimum required contribution.
5. The funded ratio (the ratio of the actuarial value of assets to actuarial accrued liability) is 60.04%, compared to the prior year funded ratio of 60.26%. 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 65.16%, compared to 59.16% 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.
6. 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 25 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

Section 1: Actuarial Valuation Summary

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.

7. The unfunded actuarial accrued liability is \$1,410,245,182, which is an increase of \$63,320,978 since the prior valuation.
8. The actuarial gain from investment and other experience is \$38,331,971, or 1.11% of actuarial accrued liability.
 - The actuarial gain from investment experience was \$57,797,217, or 1.67% of actuarial accrued liability.
 - The net experience loss from sources other than investment experience was \$19,465,246, or 0.56% of the actuarial accrued liability.
9. The rate of return on the market value of assets was 21.08% for the October 1, 2020 to September 30, 2021 Plan Year. The return on the actuarial value of assets was 9.71% 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 6.80%.
10. The following change in actuarial assumptions is first reflected with this valuation:
 - The discount rate was lowered from 6.80% to 6.625%

As a result of this assumption change, the total normal cost increased by \$1,665,385 (4.27%) and the actuarial accrued liability increased by \$65,604,895 (1.90%). The present value of surtax revenue allocated to GERP increased by \$24,944,399 (3.76%) as a result of the discount rate change. The net impact was an increase in the City's minimum required contribution of \$3,821,321.
11. The following change in plan provisions is first reflected with this valuation:
 - An early retirement window was offered during the period of April 1, 2021 through September 30, 2021 for all non-JEA participants and for the period May 1, 2021 through October 31, 2021 for all JEA participants. During the window periods, normal retirement eligibility was changed from either: 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, to age 60 with five years of credited service or age 55 with 10 years of credited service. Also during the window periods, early retirement eligibility was changed from either: age 50 with 20 years of credited service, or any age with 25 years of service with a 2.0% benefit multiplier, to any age with 20 years of service, with a 2.0% benefit multiplier.

As a result of this plan change, the total normal cost decreased by \$708,037 (1.74%) and the actuarial accrued liability increased by \$3,982,042 (0.11%). The net impact was a decrease in the City's minimum required contribution of \$21,893.

Section 1: Actuarial Valuation Summary

12. The City changed the surtax allocation percentage from the prior valuation to the current valuation. In the 2020 valuation, GERP's allocation percentage was 35.68%; in the 2021 valuation, the allocation percentage has been lowered to 35.50%. 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 increase by \$235,156.
13. 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, 2021 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.
14. The present value of the projected surtax revenue was determined and used in determination of the City's required contribution as follows:
 - a. Actual 2021 surtax revenue was projected to increase by 4.25% each year thereafter through 2060.
 - b. A share of 35.50% 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 6.625% to October 1, 2021.
 - d. The original allocated present value amount of \$332,190,859 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, 2021 allocated to GERP is \$688,126,591.
 - e. After the amortized value amount was adjusted for the timing of contributions and projected to October 1, 2021, 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 2021.
15. 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.
16. 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 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 and employer's financial statements as of September 30, 2021.
17. 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.

Section 1: Actuarial Valuation Summary

18. It is important to note that this actuarial valuation is based on plan assets as of September 30, 2021. Due to the COVID-19 pandemic, market conditions have changed significantly since the onset of the Public Health Emergency. 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. Moreover, this actuarial valuation does not include any possible short-term or long-term impacts on mortality of the covered population that may emerge after September 30, 2021. While it is impossible to determine how the pandemic will affect market conditions and other demographic experience of the Plan in future valuations, Segal is available to prepare projections of potential outcomes 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. This could be important because relatively small changes in investment performance can produce large swings in the unfunded liabilities, retired participants account for most of the Plan's liabilities, leaving limited options for reducing costs in the event of adverse experience, and the Board has not had a detailed risk assessment in several years.
20. 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.

Section 1: Actuarial Valuation Summary

Summary of key valuation results

		2022	2021	2020
Contributions for plan year beginning October 1:	• Florida Chapter 112 determined employer contribution	\$120,695,825	\$115,204,974	\$108,568,188
	• Less amortized value of discounted value of projected surtax revenue	<u>-37,088,349</u>	<u>-31,508,163</u>	<u>-31,735,211</u>
	• City's required minimum contribution*	\$83,607,476	\$83,696,811	\$76,832,977
	• Actual employer contributions	--	--	77,269,000
Actuarial accrued liability for plan year beginning October 1:	• Retired participants and beneficiaries		\$2,424,667,249	\$2,303,896,206
	• Inactive vested participants		24,778,567	22,618,312
	• Active participants		1,079,987,779	1,063,189,484
	• Total actuarial accrued liability		3,529,433,595	3,389,704,002
	• Total normal cost including administrative expenses		41,144,985	41,692,463
Assets for plan year beginning October 1:	• Market value of assets (MVA)		\$2,299,661,000	\$2,005,459,000
	• Actuarial value of assets (AVA)		2,119,188,413	2,042,779,798
	• Actuarial value of assets as a percentage of market value of assets		92.15%	101.86%
Funded status for plan year beginning October 1:	• Unfunded actuarial accrued liability on market value of assets		\$1,229,772,595	\$1,384,245,002
	• Funded percentage on MVA basis		65.16%	59.16%
	• Unfunded actuarial accrued liability on actuarial value of assets		\$1,410,245,182	\$1,346,924,204
	• Funded percentage on AVA basis		60.04%	60.26%
Key assumptions	• Net investment return		6.625%	6.80%
	• Inflation rate		2.50%	2.50%
	• Payroll growth for amortization purposes		1.50%	1.50%
Demographic data for plan year beginning October 1:	• Number of retired participants and beneficiaries		5,342	5,218
	• Number of inactive vested participants		160	156
	• Number of active participants		3,289	3,663
	• Covered payroll		\$233,266,593	\$246,864,141
	• Average payroll		70,923	67,394
	• Projected payroll for next fiscal year		236,765,592	250,567,103

*Pursuant to State Law Chapter 2016-146 and City of Jacksonville Ordinance 2017-257-E and 2017-258-E.

Section 1: Actuarial Valuation Summary

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:

Plan of benefits	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 data	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.
Assets	The valuation is based on the market value of assets as of the valuation date, as provided by the City's Finance Department. The Jacksonville Retirement System uses 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 projects the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This projection requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of each participant for each year. In addition, the benefits projected to be paid for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments. The projected benefits are then discounted to a present value, based on the assumed rate of return that is expected to be achieved on the plan's assets. There is a reasonable range for each assumption used in the projection and the results may vary materially based on which assumptions are selected. It is important for any user of an actuarial valuation to understand this concept. Actuarial assumptions are periodically reviewed to ensure that future valuations reflect emerging plan experience. While future changes in actuarial assumptions may have a significant impact on the reported results that does not mean that the previous assumptions were unreasonable.
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.

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 of the Plan's assets and liabilities at a specific date. Accordingly, except where otherwise noted, Segal did not perform an analysis of the potential range of future financial measures. 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.

Actuarial results in this report are not rounded, but that does not imply precision.

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. Segal's valuation is based on our 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.

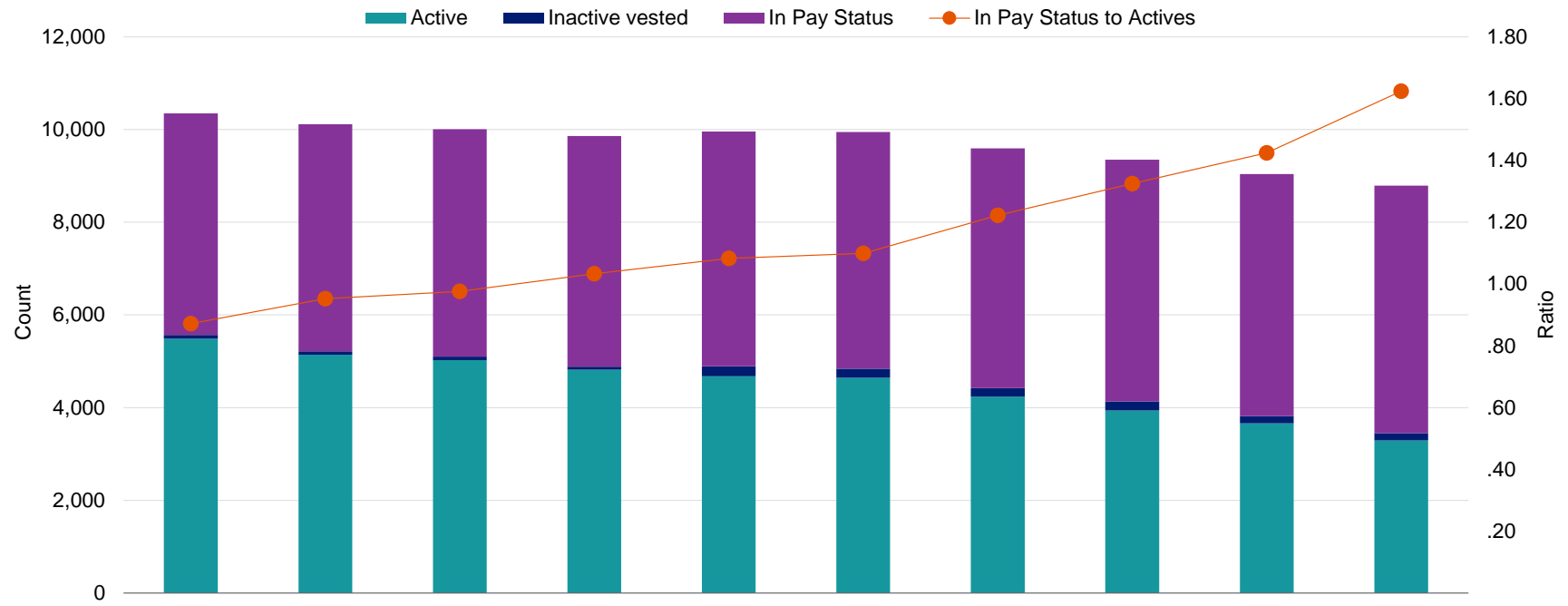
As Segal has no discretionary authority with respect to the management or assets of the Plan, it is not a fiduciary in its capacity as actuaries and consultants with respect to the Plan.

Section 2: Actuarial Valuation Results

Participant data

This section presents a summary of significant statistical data on these participant groups. Since the Plan is closed to new entrants, the ratio of in-pay to active participants will continue to increase.

Participant Population: 2012 – 2021



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
In Pay Status	4,783	4,896	4,907	4,976	5,065	5,105	5,176	5,215	5,218	5,342
Inactive Vested¹	81	78	76	65	217	195	185	196	156	160
Active	5,485	5,139	5,026	4,817	4,678	4,644	4,234	3,937	3,663	3,289
Ratio	0.87	0.95	0.98	1.03	1.08	1.10	1.22	1.32	1.42	1.62

¹ Excludes terminated participants due a refund of employee contributions

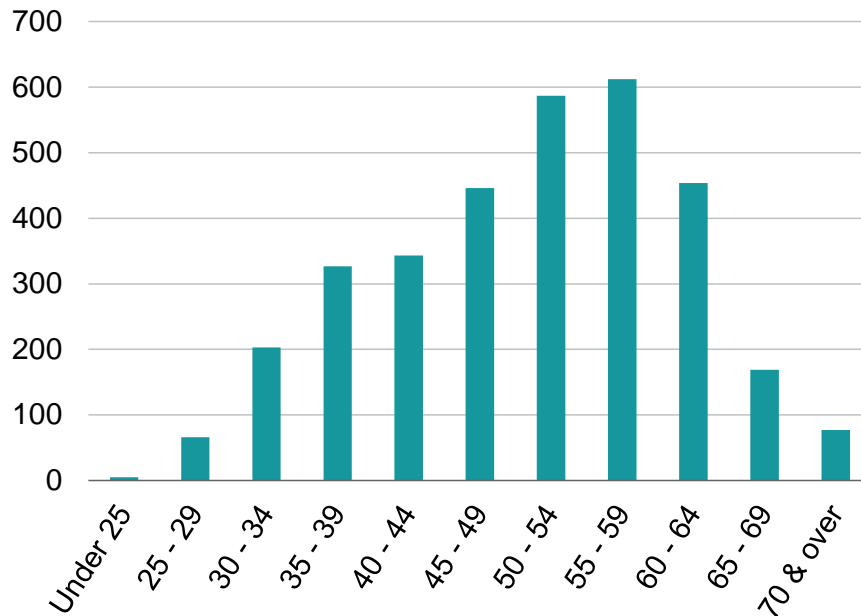
Section 2: Actuarial Valuation Results

Active participants

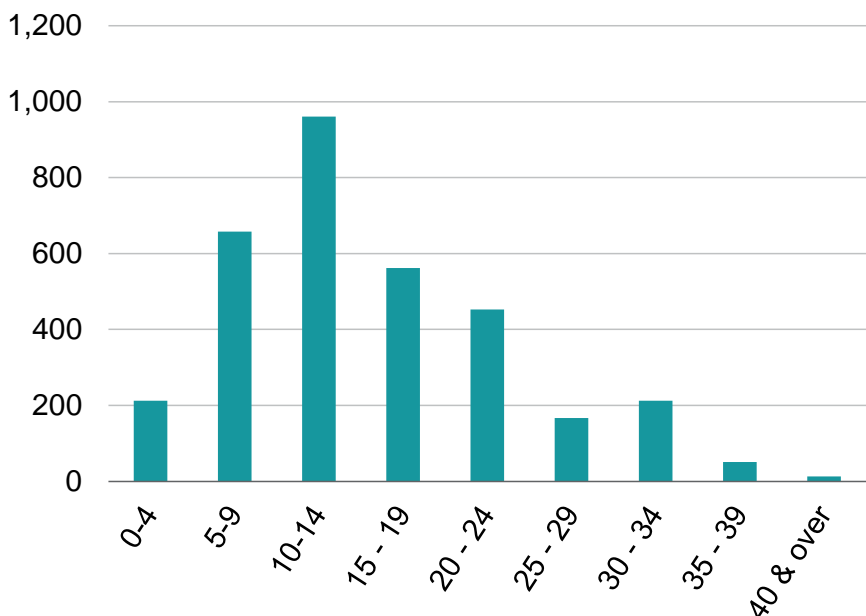
As of September 30,	2021	2020	Change
Active participants	3,289	3,663	-10.2%
Average age	51.1	50.7	0.4
Average years of service	15.5	14.8	0.7
Average compensation	70,923	67,394	5.2%

Distribution of Active Participants as of September 30, 2021

Actives by Age



Actives by Years of Service



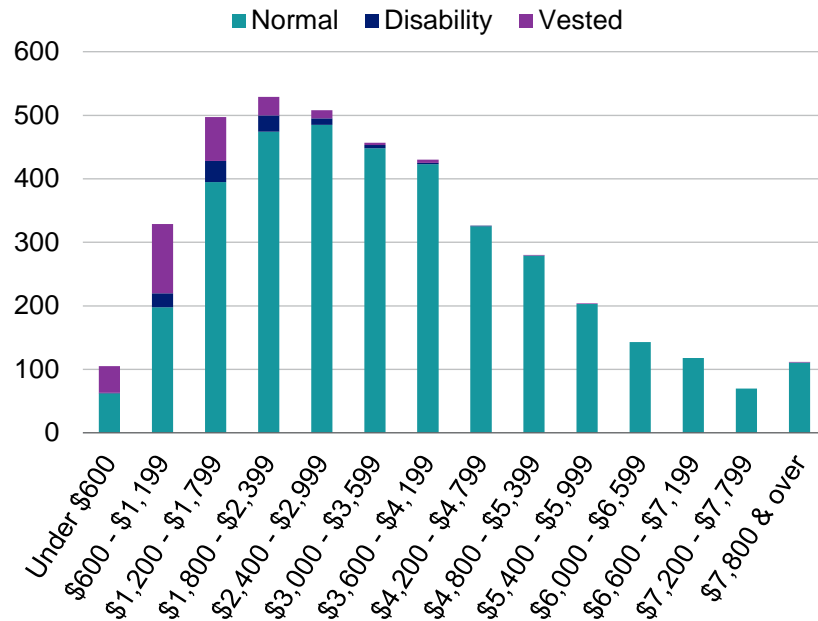
Section 2: Actuarial Valuation Results

Retired participants and beneficiaries

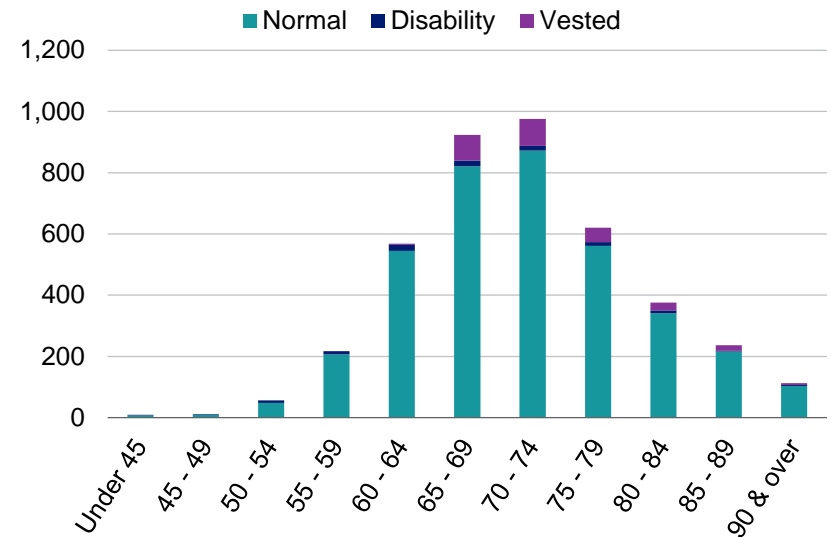
As of September 30,	2021	2020	Change
Retirees	4,108	3,983	3.1%
Beneficiaries	1,234	1,235	-0.1%
Average age	72.5	72.6	-0.1
Average regular benefit amount	\$3,039	\$2,976	2.1%
Average supplemental amount	124	114	8.8%
Total monthly amount	16,889,781	16,125,149	4.7%

Distribution of Retired Participants as of September 30, 2021

Retired Participants by Type and Monthly Amount Including Supplement



Retired Participants by Type and Age



Section 2: Actuarial Valuation Results

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, 2021

1	Market value of assets, September 30, 2021			\$2,299,661,000
2	Calculation of unrecognized return	Original Amount¹	Percent Deferred²	Unrecognized Amount³
	(a) Year ended September 30, 2021	\$278,128,416	80%	\$222,502,733
	(b) Year ended September 30, 2020	13,253,788	60%	7,952,274
	(c) Year ended September 30, 2019	-126,629,625	40%	-50,651,850
	(d) Year ended September 30, 2018	3,347,148	20%	669,430
	(e) Year ended September 30, 2017	133,575,436	0%	0
	(f) Total unrecognized return			\$180,472,587
3	Preliminary actuarial value: (1) - (2f)			2,119,188,413
4	Adjustment to be within 30% corridor			0
5	Final actuarial value of assets as of September 30, 2021: (3) + (4)			<u>2,119,188,413</u>
6	Actuarial value as a percentage of market value: (5) ÷ (1)			92.2%
7	Amount deferred for future recognition: (1) - (5)			\$180,472,587

¹ Total return minus expected return on a market value basis

² Percent deferred applies to the current valuation year

³ Recognition at 20% per year over five years

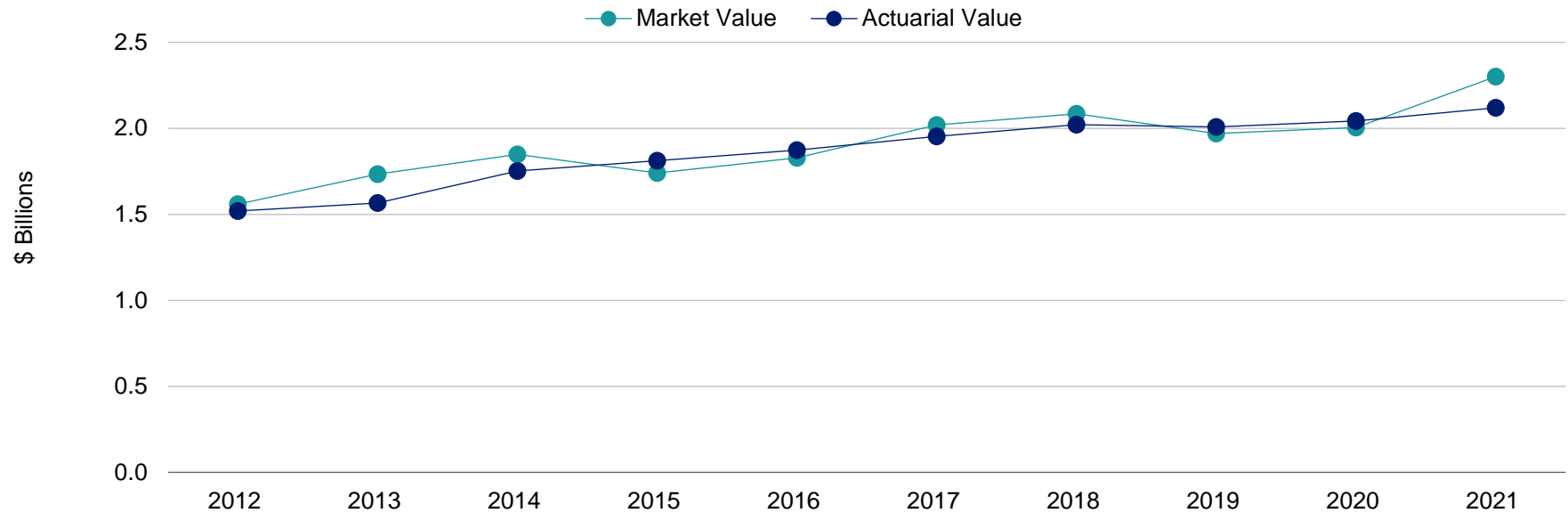
Deferred return as of September 30, 2021 recognized in each of the next four years:

(a) Amount recognized on September 30, 2022	\$33,619,946
(b) Amount recognized on September 30, 2023	32,950,516
(c) Amount recognized on September 30, 2024	58,276,441
(d) Amount recognized on September 30, 2025	55,625,683

Section 2: Actuarial Valuation Results

Both the actuarial value and market value of assets are representations of the Plan's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets. The actuarial asset value is significant because the Plan's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

Market Value of Assets vs. Actuarial Value of Assets



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Market Value ¹	\$1.56	\$1.73	\$1.85	\$1.74	\$1.83	\$2.02	\$2.09	\$1.97	\$2.01	\$2.30
Actuarial Value ¹	1.52	1.57	1.75	1.81	1.87	1.95	2.02	2.01	2.04	2.12

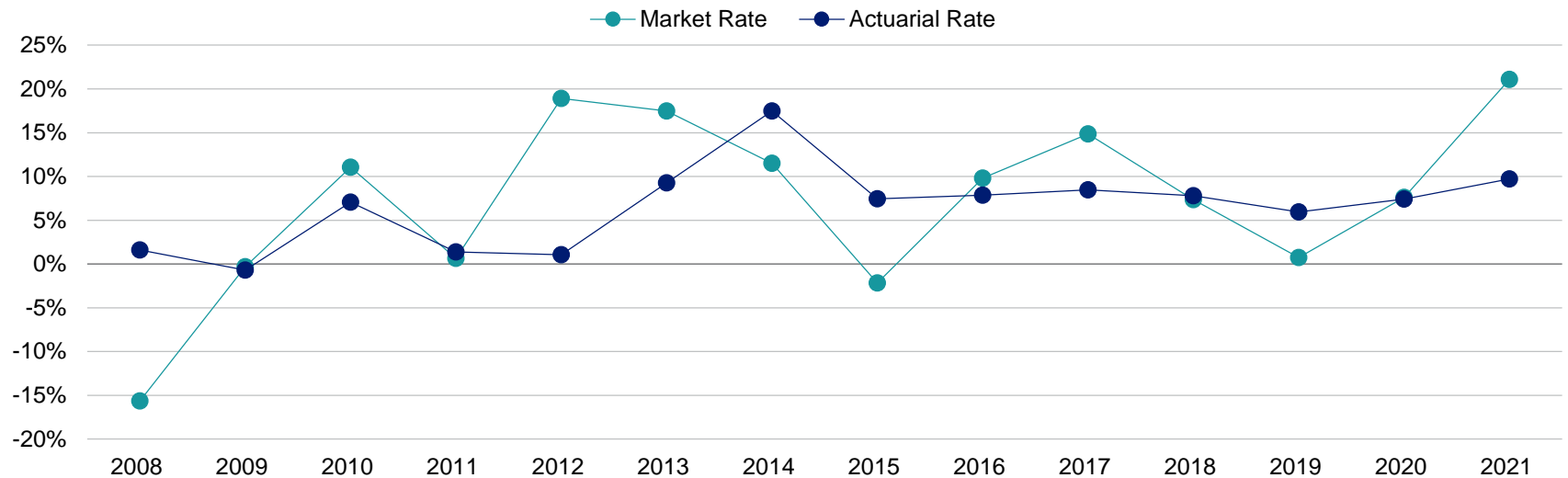
¹In \$ billions

Section 2: Actuarial Valuation Results

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. The chart below shows the rate of return on an actuarial basis compared to the actual market value investment return for the last 14 years, including averages over select time periods.

As described earlier in this section, the actuarial asset valuation method gradually recognizes fluctuations in the market value rate of return. The goal of this is to stabilize the actuarial rate of return and to produce more level pension plan costs.

Market and Actuarial Rates of Return for Years Ended September 30, 2008 - 2021



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
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%
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%
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%

Average Rates of Return	Actuarial Value	Market Value
Most recent five-year average return:	7.86%	10.18%
Most recent ten-year average return:	8.18%	10.29%

Section 2: Actuarial Valuation Results

Actuarial experience

To calculate any actuarially determined contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), any contribution requirement will decrease from the previous year. On the other hand, any contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience. If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

Actuarial Experience for Year Ended September 30, 2021

1	Net gain from investments	\$57,797,217
2	Net loss from administrative expenses	-73,059
3	Net loss from other experience	<u>-19,392,187</u>
4	Net experience gain: 1 + 2 + 3	\$38,331,971

Section 2: Actuarial Valuation Results

Investment experience

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the Plan's investment policy. The rate of return on the market value of assets was 21.08% for the year ended September 30, 2021.

For valuation purposes, the assumed rate of return on the actuarial value of assets was 6.80% for the year ending September 30, 2021. The actual rate of return on an actuarial basis for the 2021 Plan Year was 9.71%. Since the actual return for the year was greater than the assumed return, the Plan experienced an actuarial gain during the year ended September 30, 2021 with regard to its investments.

Investment Experience

		Year Ended September 30, 2021	
		Market Value	Actuarial Value
1	Net investment income	\$410,544,000	\$192,750,615
2	Average value of assets	1,947,288,000	1,984,608,798
3	Rate of return: 1 ÷ 2	21.08%	9.71%
4	Assumed rate of return	6.80%	6.80%
5	Expected investment income: 2 x 4	132,415,584	134,953,398
6	Actuarial gain/(loss): 1 - 5	<u>\$278,128,416</u>	<u>\$57,797,217</u>

Section 2: Actuarial Valuation Results

Non-investment experience

Administrative expenses

- Administrative expenses for the year ended September 30, 2021 totaled \$1,194,000, as compared to the assumption of \$1,084,000. This resulted in a loss of \$73,059, after accounting for timing.

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:

- the extent of turnover among participants,
- retirement experience (earlier or later than projected),
- mortality (more or fewer deaths than projected),
- the number of disability retirements (more or fewer than projected), and
- salary increases (greater or smaller than projected).

The net loss from this other experience for the year ended September 30, 2021 amounted to \$19,392,187, which is 0.56% of the actuarial accrued liability.

Actuarial assumptions

- The discount rate was lowered from 6.80% to 6.625%
- These changes increased the actuarial accrued liability by 1.90% and increased the total normal cost by 4.27%.

Details on actuarial assumptions and methods are in Section 4, Exhibit I.

Section 2: Actuarial Valuation Results

Plan provisions

- An early retirement window was offered during the period of April 1, 2021 through September 30, 2021 for all non-JEA participants and for the period May 1, 2021 through October 31, 2021 for all JEA participants. During the window periods, normal retirement eligibility was changed from either: 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, to age 60 with five years of credited service or age 55 with 10 years of credited service. Also during the window periods, early retirement eligibility was changed from either: age 50 with 20 years of credited service, or any age with 25 years of service with a 2.0% benefit multiplier, to any age with 20 years of service, with a 2.0% benefit multiplier.
- These changes increased the actuarial accrued liability by 0.11% and decreased the total normal cost by 1.74%.

A summary of plan provisions is in *Section 4, Exhibit II*.

Section 2: Actuarial Valuation Results

Development of Unfunded Actuarial Accrued Liability for Year Ended September 30, 2021

1	Unfunded actuarial accrued liability at beginning of year	\$1,346,924,204
2	Normal cost at beginning of year	18,842,491
3	Employer contributions	-77,269,000
4	Interest on 1, 2 & 3	<u>90,492,521</u>
5	Expected unfunded actuarial accrued liability	\$1,378,990,216
6	Changes due to:	
	(a) (Gain)/loss	-38,331,971
	(b) Assumptions	65,604,895
	(c) Early retirement window	<u>3,982,042</u>
	Total changes	\$31,254,966
7	Unfunded actuarial accrued liability at end of year	<u>\$1,410,245,182</u>

Section 2: Actuarial Valuation Results

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, 2021 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.

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

	2022		2021	
	Amount	% of Projected Payroll	Amount	% of Projected Payroll
1. Total normal cost	\$39,950,985	16.87%	\$40,608,463	16.21%
2. Administrative expenses	1,194,000	0.50%	1,084,000	0.43%
3. Expected employee contributions	<u>-21,478,935</u>	<u>-9.07%</u>	<u>-22,849,972</u>	<u>-9.12%</u>
4. Employer normal cost: (1) + (2) + (3)	\$19,666,050	8.31%	\$18,842,491	7.52%
5. Actuarial accrued liability	\$3,529,433,595		\$3,389,704,002	
6. Actuarial value of assets	<u>2,119,188,413</u>		<u>2,042,779,798</u>	
7. Unfunded actuarial accrued liability: (5) - (6)	\$1,410,245,182		\$1,346,924,204	
8. Payment on unfunded actuarial accrued liability	\$95,204,799	40.21%	\$90,706,117	36.20%
9. Florida Chapter 112 determined employer contribution: (4) + (8) ¹	120,695,825	50.98%	115,204,974	45.98%
10. Discounted and amortized value of projected surtax revenue ^{1,2}	-37,088,349	-15.66%	-31,508,163	-12.57%
11. City's minimum required contribution: (9) + (10) ²	<u>\$83,607,476</u>	<u>35.31%</u>	<u>\$83,696,811</u>	<u>33.40%</u>
12. Projected payroll	\$236,765,592		\$250,567,103	

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

²Pursuant to State Law Chapter 2016-146 and City of Jacksonville ordinances 2017-257-E and 2017-258-E

Section 2: Actuarial Valuation Results

Reconciliation of City's minimum required contribution

The chart below details the changes in the City's minimum required contribution from the prior valuation to the current year's valuation.

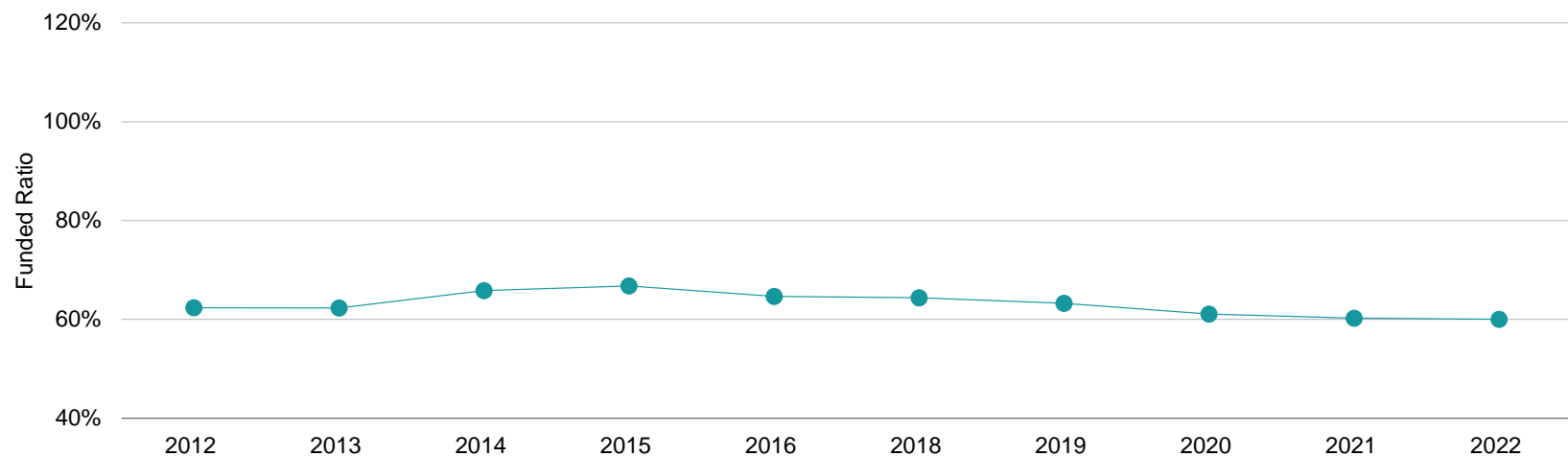
Reconciliation of Actuarially Determined Contribution from October 1, 2021 to October 1, 2022

	Amount
1 City's Minimum Required Contribution as of October 1, 2021	\$83,696,811
2 Effect of early retirement window	-21,893
3 Effect of expected change in amortization payment due to payroll growth	1,430,844
4 Effect of change in other actuarial assumptions	4,736,453
5 Effect of investment gain	-4,110,728
6 Effect of other gains and losses on accrued liability	1,384,432
7 Net effect of other changes, including composition and number of participants	-3,508,443
8 Total change	<u>-\$89,335</u>
9 City's Minimum Required Contribution as of October 1, 2022	\$83,607,476

Section 2: Actuarial Valuation Results

Schedule of funding progress through September 30, 2021

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll* [(b) - (a)] / (c)
10/01/2012	\$1,518,577,926	\$2,434,274,957	\$915,697,031	62.38%	\$283,020,575	323.54%
10/01/2013	1,565,291,310	2,512,635,436	947,344,126	62.30%	265,404,735	356.94%
10/01/2014	1,751,888,510	2,662,187,817	910,299,307	65.81%	262,368,813	346.95%
10/01/2015	1,811,172,111	2,711,408,803	900,236,692	66.80%	254,034,479	354.38%
10/01/2016	1,872,790,100	2,897,287,172	1,024,497,072	64.64%	250,894,295	408.34%
10/01/2017	1,952,332,857	3,033,646,298	1,081,313,441	64.36%	257,850,484	419.36%
10/01/2018	2,021,545,306	3,196,680,516	1,175,135,210	63.24%	253,982,175	462.68%
10/01/2019	2,008,173,331	3,286,313,481	1,278,140,150	61.11%	249,982,877	511.29%
10/01/2020	2,042,779,798	3,389,704,002	1,346,924,204	60.26%	246,864,141	545.61%
10/01/2021	2,119,188,413	3,529,433,595	1,410,245,182	60.04%	233,266,593	604.56%



Section 2: Actuarial Valuation Results

History of employer contributions

A history of the most recent years of contributions is shown below.

History of Employer Contributions: 2014 – 2023

Fiscal Year Ended September 30	City's Minimum Required Contribution	Actual Employer Contribution	Percent Contributed
2014	\$81,351,295	\$71,000,000	87.28%
2015	86,069,361	81,751,000	94.98%
2016	89,058,931	84,898,000	95.33%
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	--	--
2023	83,607,476	--	--

Section 2: Actuarial Valuation Results

Risk

Since the actuarial valuation results are dependent on a given set of assumptions and data as of a specific date, there is a risk that emerging results may differ significantly as actual experience differs from the assumptions.

This report does not contain a detailed analysis of the potential range of future measurements but does include a brief discussion of some risks that may affect the Plan. Upon request, a more detailed assessment of the risk can be provided to enable a better understanding of the risks inherent in the Plan. This assessment may include scenario testing, sensitivity testing, stress testing and stochastic modeling.

- **Investment Risk** (the risk that returns will be different than expected)

The market value rate of return over the last ten years has ranged from a low of -2.18% 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. It is not yet known what long-term impact the COVID-19 pandemic may have on the Plan's mortality experience.

- **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 25 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 25 years. Under the City's current policy of paying the City's required contribution, over the immediate term, the unfunded liability has an expected growth rate of 2.4% and increases at this level can be expected to continue 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 2.4% per year. By comparison, the surtax revenue is assumed to grow 4.25% per year.

If the surtax revenue for fiscal 2021 had been 1% lower, the City's required contribution would increase by \$481,224 or 0.20% of projected payroll. For comparison purposes, the allocated surtax revenue is 29.9% of the market value of assets and 19.5% of the actuarial accrued liability.

Section 2: Actuarial Valuation Results

- **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.

- **Actual Experience** Over the Last Ten years and Implications for the Future

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

- The investment gain/loss on a market basis for a year has ranged from a loss of \$175,540,475 to a gain of \$278,128,416. Over the past ten years, the Plan's market value performance has, on average, exceeded the expected annual return.
- The non-investment gain/loss for a year has ranged from a loss of \$55,702,357 to a gain of \$20,285,622.
- The funded percentage on the actuarial value of assets has ranged from a low of 60.0% to a high of 71.4% since 2012.

- **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 pay status to active participant ratio of 1.62. For the prior year benefits and expenses paid were \$116.3 million more than contributions received. As the Plan matures, more cash will be needed from the investment portfolio to meet benefit payments. Since the Plan is closed to new entrants, the amount of employee contributions is expected to continue to decline each year as the number of active participants decrease.

Section 2: Actuarial Valuation Results

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.

GFOA Funded Liability by Type as of September 30

	2021	2020
Actuarial accrued liability (AAL)		
• Active member contributions	\$202,949,998	\$201,767,643
• Retirees and beneficiaries	2,424,667,249	2,303,896,206
• Active and inactive members (employer-financed)	<u>901,816,348</u>	<u>884,040,153</u>
Total	\$3,529,433,595	\$3,389,704,002
Actuarial value of assets	\$2,119,188,413	\$2,042,779,798
Cumulative portion of AAL covered		
• Active member contributions	100.00%	100.00%
• Retirees and beneficiaries	79.03%	79.91%
• Active and inactive members (employer-financed)	0.00%	0.00%

Section 2: Actuarial Valuation Results

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.

Actuarial Balance Sheet

	Year Ended	
	September 30, 2021	September 30, 2020
Liabilities		
• Present value of benefits for retired participants and beneficiaries	\$2,424,667,249	\$2,303,896,206
• Present value of benefits for inactive vested participants	24,778,567	22,618,312
• Present value of benefits for active participants	<u>1,425,584,338</u>	<u>1,412,653,463</u>
Total liabilities	\$3,875,030,154	\$3,739,167,981
Assets		
• Total valuation value of assets	\$2,119,188,413	\$2,042,779,798
• Present value of future contributions by members	182,504,023	193,309,291
• Present value of future employer contributions for:		
• Entry age cost	163,092,536	156,154,688
• Unfunded actuarial accrued liability	<u>1,410,245,182</u>	<u>1,346,924,204</u>
Total of current and future assets	<u>\$3,875,030,154</u>	<u>\$3,739,167,981</u>

Section 3: Supplemental Information

Exhibit A: Table of Plan Demographics

Category	Year Ended September 30		Change From Prior Year
	2021	2020	
Active participants in valuation:			
• Number	3,289	3,663	-10.2%
• Average age	51.1	50.7	0.4
• Average years of service	15.5	14.8	0.7
• Covered payroll	\$233,266,593	\$246,864,141	-5.5%
• Average payroll	70,923	67,394	5.2%
• Account balances	202,949,998	201,767,643	0.6%
• Total active vested participants	3,077	3,233	-4.8%
Inactive vested participants	160	156	2.6%
Retired participants:			
• Number in pay status	4,008	3,880	3.3%
• Average age	71.4	71.5	-0.1
• Average monthly benefit	\$3,485	\$3,437	1.4%
Disabled participants:			
• Number in pay status	100	103	-2.9%
• Average age	67.3	67.1	0.2
• Average monthly benefit	\$1,796	\$1,719	4.5%
Beneficiaries:			
• Number in pay status	1,234	1,235	-0.1%
• Average age	76.5	76.4	0.1
• Average monthly benefit	\$2,223	\$2,117	5.0%

Section 3: Supplemental Information

Exhibit B: Participants in Active Service as of September 30, 2021 by Age, Years of Service, and Average Payroll

Age	Years of Service									
	Total	0-4	5-9	10-14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 & over
Under 25	5	3	2	--	--	--	--	--	--	--
	\$37,594	\$30,113	\$48,815	--	--	--	--	--	--	--
25 - 29	66	28	38	--	--	--	--	--	--	--
	53,625	48,727	57,235	--	--	--	--	--	--	--
30 - 34	203	34	104	65	--	--	--	--	--	--
	69,192	59,093	68,052	\$76,298	--	--	--	--	--	--
35 - 39	327	37	112	129	49	--	--	--	--	--
	67,685	60,546	62,727	73,811	\$68,281	--	--	--	--	--
40 - 44	343	22	71	152	73	24	1	--	--	--
	74,530	76,282	66,825	74,983	81,223	\$71,933	\$87,922	--	--	--
45 - 49	446	23	97	143	86	77	18	2	--	--
	72,958	55,345	70,869	72,711	74,336	78,764	75,771	\$86,474	--	--
50 - 54	587	28	89	152	103	125	44	46	--	--
	74,232	59,453	67,934	70,784	75,508	79,858	79,367	83,749	--	--
55 - 59	612	22	75	136	113	96	56	88	25	1
	72,498	66,734	69,770	63,420	76,640	70,000	82,446	80,612	\$73,878	\$104,943
60 - 64	454	10	47	116	92	88	30	49	19	3
	69,284	67,640	69,985	63,344	73,400	72,501	63,778	67,648	85,542	51,731
65 - 69	169	2	19	49	29	29	7	21	6	7
	66,392	101,265	62,367	59,251	68,335	76,730	56,397	65,372	70,280	76,185
70 & over	77	3	4	19	17	14	11	6	1	2
	60,242	79,011	53,013	48,459	52,828	69,831	71,431	62,379	97,448	67,810
Total	3,289	212	658	961	562	453	167	212	51	13
	\$70,923	\$60,868	\$66,808	\$69,545	\$74,267	\$75,224	\$75,777	\$76,326	\$78,262	\$71,465

Section 3: Supplemental Information

Exhibit C: Reconciliation of Participant Data

	Active Participants	Inactive Vested Participants	Disableds	Retired Participants	Beneficiaries	Total
Number as of October 1, 2020	3,663	156	103	3,880	1,235	9,037
• New participants	0	N/A	N/A	N/A	N/A	0
• Terminations – with vested rights	-20	20	0	0	0	0
• Terminations – without vested rights	-49	N/A	N/A	N/A	N/A	-49
• Retirements	-261	-6	N/A	267	N/A	0
• New disabilities	-6	0	6	N/A	N/A	0
• Deceased	-17	0	-8	-150	-82	-257
• New beneficiaries	0	0	0	0	90	90
• Lump sum cash-outs	-14	-7	0	0	0	-21
• Rehire	3	-3	N/A	0	N/A	0
• Certain period expired	N/A	N/A	0	0	-1	-1
• Data adjustments	3	0	-1	11	-8	5
• Net transfers (to)/from DC Plan or Corrections	-13	0	0	0	0	-13
Number as of October 1, 2021	3,289	160	100	4,008	1,234	8,791

Section 3: Supplemental Information

Exhibit D: Summary Statement of Income and Expenses on a Market Value Basis

	Year Ended September 30, 2021	Year Ended September 30, 2020
Net assets at market value at the beginning of the year	\$2,005,459,000	\$1,970,206,000
Contribution income:		
• Employer contributions	\$77,269,000	\$72,194,000
• Employee contributions	29,116,000	26,014,000
• Less administrative expenses	<u>-1,194,000</u>	<u>-1,084,000</u>
<i>Net contribution income</i>	<i>\$105,191,000</i>	<i>\$97,124,000</i>
Investment income:		
• Interest, dividends, and other income	\$11,975,000	\$16,442,000
• Realized appreciation	118,409,000	-3,558,000
• Unrealized appreciation	287,983,000	141,290,000
• Less investment fees	<u>-7,823,000</u>	<u>-8,515,000</u>
<i>Net investment income</i>	<i><u>\$410,544,000</u></i>	<i><u>\$145,398,000</u></i>
Total income available for benefits	\$515,735,000	\$242,522,000
Less benefit payments:		
• Benefit payments	-\$197,481,000	-\$192,749,000
• Refunds	-24,052,000	-14,520,000
<i>Net benefit payments</i>	<i>-\$221,533,000</i>	<i>-\$207,269,000</i>
Change in market value of assets	\$294,202,000	\$35,253,000
Net assets at market value at the end of the year	\$2,299,661,000	\$2,005,459,000

Section 3: Supplemental Information

Exhibit E: Summary Statement of Plan Assets

	September 30, 2021	September 30, 2020
Cash equivalents	\$40,642,000	\$34,977,000
Total accounts receivable	\$2,542,000	\$2,425,000
Investments:		
• Equities	\$1,645,692,000	\$1,248,007,000
• Fixed income	441,977,000	478,687,000
• Real estate	414,024,000	385,148,000
• Other assets	59,813,000	102,777,000
• Equity in pooled investments	<u>-297,732,000</u>	<u>-239,671,000</u>
Total investments at market value	\$2,263,774,000	\$1,974,948,000
Total assets	\$2,306,958,000	\$2,012,350,000
Total accounts payable	-7,297,000	-6,891,000
Net assets at market value	\$2,299,661,000	\$2,005,459,000
Net assets at actuarial value	\$2,119,188,413	\$2,042,779,798

Section 3: Supplemental Information

Exhibit F: Development of the Fund through September 30, 2021

Year Ended September 30	Employer Contributions	Employee Contributions	Other Contributions	Net Investment Return ¹	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
2012	\$49,899,000	\$24,098,000	\$1,040,000	\$254,394,000	\$705,000	\$154,308,000	\$1,558,645,000	\$1,518,577,926	97.4%
2013	55,386,000	21,878,000	0	264,541,000	671,000	166,460,000	1,733,319,000	1,565,291,310	90.3%
2014	71,000,000	20,961,000	0	194,864,000	828,000	171,127,000	1,848,189,000	1,751,888,510	94.8%
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%

¹ On a market basis, net of investment fees and administrative expenses

Section 3: Supplemental Information

Exhibit G: Table of Amortization Bases

Florida Chapter 112 Recommended Contribution Amortization Bases

Type	Date Established	Initial Period	Initial Amount	Annual Payment ¹	Years Remaining	Outstanding Balance
Fresh start	10/01/2016	30	\$1,024,497,072	\$69,111,480	25	\$1,018,202,924
Experience gain	10/01/2017	30	-5,594,096	-371,063	26	-5,575,080
Plan change	10/01/2017	30	-3,528,667	-234,061	26	-3,516,672
Change in assumptions	10/01/2017	30	64,164,450	4,256,103	26	63,946,334
Experience gain	10/01/2018	29	-922,806	-61,133	26	-918,506
Change in assumptions	10/01/2018	29	88,449,536	5,859,535	26	88,037,302
Plan change	10/01/2018	29	5,920,390	392,209	26	5,892,797
Experience loss	10/01/2019	28	99,415,197	6,587,262	26	98,971,117
Change in assumptions	10/01/2019	28	4,913,569	325,574	26	4,891,620
Experience loss	10/01/2020	27	35,775,946	2,374,124	26	35,670,314
Change in assumptions	10/01/2020	27	36,145,490	2,398,647	26	36,038,766
Experience gain	10/01/2021	26	-982,671	-65,404	26	-982,671
Change in assumptions	10/01/2021	26	65,604,895	4,366,492	26	65,604,895
Plan change	10/01/2021	26	3,982,042	265,034	26	3,982,042
Total				\$95,204,799		\$1,410,245,182

¹ Level percentage of payroll

Section 3: Supplemental Information

City's Minimum Recommended Contribution Surtax Amortization Bases

Type	Date Established	Initial Period	Initial Amount	Annual Payment ¹	Years Remaining	Outstanding Balance
Discounted surtax revenue applied	10/01/2016	30	-\$322,190,859	-\$22,409,241	25	-\$330,149,995
Surtax offset gain	10/01/2017	30	-7,927,401	-525,834	26	-7,900,454
Allocation change	10/01/2017	30	-10,588,075	-702,319	26	-10,552,084
Discount rate change	10/01/2017	30	-18,720,570	-1,241,757	26	-18,656,934
Surtax offset gain	10/01/2018	29	-8,089,137	-535,886	26	-8,051,486
Allocation change	10/01/2018	29	-20,241,389	-1,340,936	26	-20,147,051
Discount rate change	10/01/2018	29	-21,761,957	-1,441,669	26	-21,660,532
Surtax offset gain	10/01/2019	28	-2,042,344	-135,326	26	-2,033,222
Allocation change	10/01/2019	28	-17,780,689	-1,178,150	26	-17,701,264
Discount rate change	10/01/2019	28	-12,100,053	-801,751	26	-12,046,003
Surtax offset loss	10/01/2020	27	35,288,381	2,341,769	26	35,184,187
Allocation change	10/01/2020	27	-17,315,069	-1,149,044	26	-17,263,944
Discount rate change	10/01/2020	27	-12,334,670	-818,540	26	-12,298,251
Surtax offset gain	10/01/2021	26	-58,945,999	-3,923,293	26	-58,945,999
Allocation change	10/01/2021	26	3,362,614	223,807	26	3,362,614
Discount rate change	10/01/2021	26	-24,944,399	-1,660,235	26	-24,944,399
Total				-\$35,298,405		-\$523,804,818

¹ Level percentage of payroll; per Part VII, Chapter 112.64 (5)(b) of Florida Statutes, outstanding balances were amortized using a 1.50% payroll growth rate for October 1, 2021 valuation.

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Exhibit H: Definition of Pension Terms

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

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 (APV):	<p>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:</p> <p>Adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.)</p> <p>Multiplied by the probability of the occurrence of an event (such as survival, death, disability, withdrawal, etc.) on which the payment is conditioned, and</p> <p>Discounted according to an assumed rate (or rates) of return to reflect the time value of money.</p>

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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 (AVA):	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 (ADC):	The employer's periodic required 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.

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Assumptions or Actuarial Assumptions:	<p>The estimates upon which the cost of the Plan is calculated, including:</p> <p><u>Investment return</u> - the rate of investment yield that the Plan will earn over the long-term future;</p> <p><u>Mortality rates</u> - the rate or probability of death at a given age for employees and retirees;</p> <p><u>Retirement rates</u> - the rate or probability of retirement at a given age or service;</p> <p><u>Disability rates</u> - the rate or probability of disability retirement at a given age;</p> <p><u>Withdrawal rates</u> - the rate or probability at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement;</p> <p><u>Salary increase rates</u> - the rates of salary increase due to inflation, real wage growth and merit and promotion increases.</p>
Closed Amortization Period:	<p>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.</p>
Decrements:	<p>Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or withdrawal.</p>
Defined Benefit Plan:	<p>A retirement plan in which benefits are defined by a formula based on the member's compensation, age and/or years of service.</p>
Defined Contribution Plan:	<p>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.</p>
Employer Normal Cost:	<p>The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.</p>
Experience Study:	<p>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.</p>
Funded Ratio:	<p>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.</p>

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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 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.
Plan Fiduciary Net Position:	Market value of assets.
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.

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Exhibit I: 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 \$230,000 for 2021. 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.

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Exhibit J: 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 ¹	\$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%

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 -2.6% per year. Additional analysis of pay of DC Plan participants was used support a payroll increases assumption of 1.50%.

¹Prior to the inclusion of new participants with greater than one year of employment.

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Exhibit K: 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	--
2023	2021	50.98%	236,765,592	120,695,825	\$83,607,476	--

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

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Exhibit L: Supplementary State of Florida Information

	Year Ended September 30, 2021			Year Ended September 30, 2020
	New Plan New Assumptions	Old Plan New Assumptions	Old Plan Old Assumptions	
Participant data				
• Active members	3,289	3,289	3,289	3,663
• Total annual payroll	\$233,266,593	\$237,834,427	\$237,834,427	\$246,864,141
• Retired members and beneficiaries	5,342	5,342	5,342	5,218
• Total annualized benefit	\$194,808,852	\$194,808,852	\$194,808,852	\$186,347,820
• Terminated vested members	160	160	160	156
• Total annualized benefit	\$2,980,896	\$2,980,896	\$2,980,896	\$2,889,276
Actuarial value of assets	\$2,119,188,413	\$2,119,188,413	\$2,119,188,413	\$2,042,779,798
Present value of all future expected benefit payments:				
• Active members:				
• Retirement benefits	\$1,157,143,757	\$1,183,750,035	\$1,138,899,020	\$1,142,885,833
• Vesting benefits	21,511,444	21,633,771	21,424,074	23,509,863
• Disability benefits	18,280,618	18,569,014	17,972,159	18,419,474
• Death benefits	25,698,521	26,105,502	25,239,695	26,070,650
• Return of contributions	<u>202,949,998</u>	<u>204,454,139</u>	<u>204,454,139</u>	<u>201,767,643</u>
• Total	\$1,425,584,338	\$1,454,512,461	\$1,407,989,087	\$1,412,653,463
• Terminated vested members	24,778,567	24,778,567	24,096,664	22,618,312
• Retired members and beneficiaries	<u>2,424,667,249</u>	<u>2,395,708,918</u>	<u>2,359,113,434</u>	<u>2,303,896,206</u>
Total	\$3,875,030,154	\$3,874,999,946	\$3,791,199,185	\$3,739,167,981

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

	Year Ended September 30, 2021			Year Ended September 30, 2020
	New Plan New Assumptions	Old Plan New Assumptions	Old Plan Old Assumptions	
Unfunded actuarial accrued liability	\$1,410,245,182	\$1,406,263,140	\$1,340,658,245	\$1,346,924,204
Actuarial present value of accrued benefits				
Vested accrued benefits				
Active members	\$774,756,851	\$792,999,541	\$771,533,230	\$747,525,776
Inactive members	24,778,567	24,778,567	24,096,664	22,618,312
Retirees and beneficiaries	2,424,667,249	2,395,708,918	2,359,113,434	2,303,896,206
Nonvested active members	<u>32,316,394</u>	<u>33,019,136</u>	<u>32,217,952</u>	<u>33,707,869</u>
Total	\$3,256,519,061	\$3,246,506,162	\$3,186,961,280	\$3,107,748,163
Pension cost				
Normal cost, including administrative expenses	\$41,144,985	\$41,853,022	\$40,187,637	\$41,692,463
Expected employee contributions	-21,478,935	-21,901,102	-21,901,102	-22,849,972
Level % of payroll payment to amortize unfunded actuarial accrued liability	95,204,799	94,939,765	92,000,249	90,706,117
Discounted and amortized value of allocated surtax revenue	-35,298,405	-35,298,405	-34,397,175	-29,961,166
Total minimum annual cost payable monthly at valuation date	82,371,897	82,393,466	78,628,617	82,459,913
Total employer cost projected to budget year	83,607,476	83,629,368	79,808,047	83,696,811
Projected Payroll	233,266,593	237,834,427	237,834,427	246,864,141
As % of projected payroll	35.31%	34.64%	33.06%	33.40%
Present value of active members' future salaries at attained age	\$1,843,517,477	\$1,867,632,449	\$1,848,954,550	\$1,951,777,311
Present value of expected future employee contributions	236,765,592	236,765,592	241,401,943	250,567,103

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Exhibit M: Supplementary State of Florida Information Actuarial Present Value of Accumulated Plan Benefits

Factors	Change in Actuarial Present Value of Accumulated Plan Benefits
	\$3,107,748,163
Benefits accumulated, net experience gain or loss, changes in data	\$96,951,364
Benefits paid	-221,533,000
Interest	203,794,753
Changes in assumptions	59,544,882
Plan changes	10,012,899
Net increase	\$148,770,898
As % of projected payroll	63.78%
Actuarial present value of accumulated benefits as of October 1, 2021	\$3,256,519,061

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Exhibit N: Actuarial Projections through Fiscal 2062

Plan Year Beginning	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio	Fiscal Year Ending	Surtax Contribution	% of Total Contribution	Required City Contribution	% of Total Contribution	Total Contribution
2021	\$3,529,433,595	\$2,119,188,413	\$1,410,245,182	60.04%	2022	\$0	0.0%	\$83,696,811	100.0%	\$83,696,811
2022	3,573,497,951	2,180,185,287	1,393,312,664	61.01%	2023	0	0.0%	83,607,476	100.0%	83,607,476
2023	3,612,002,861	2,234,603,222	1,377,399,639	61.87%	2024	0	0.0%	80,021,714	100.0%	80,021,714
2024	3,646,724,167	2,306,494,193	1,340,229,974	63.25%	2025	0	0.0%	76,707,388	100.0%	76,707,388
2025	3,676,848,887	2,367,074,899	1,309,773,988	64.38%	2026	0	0.0%	71,387,537	100.0%	71,387,537
2026	3,702,081,709	2,360,741,133	1,341,340,576	63.77%	2027	0	0.0%	66,526,056	100.0%	66,526,056
2027	3,722,463,089	2,343,187,420	1,379,275,669	62.95%	2028	0	0.0%	66,820,433	100.0%	66,820,433
2028	3,738,571,793	2,319,849,445	1,418,722,348	62.05%	2029	0	0.0%	67,175,342	100.0%	67,175,342
2029	3,749,701,880	2,290,016,964	1,459,684,916	61.07%	2030	0	0.0%	67,513,861	100.0%	67,513,861
2030	3,755,873,447	2,298,264,672	1,457,608,775	61.19%	2031	43,278,643	38.9%	67,906,214	61.1%	111,184,857
2031	3,755,433,767	2,318,688,778	1,436,744,989	61.74%	2032	60,157,314	46.9%	68,203,542	53.1%	128,360,856
2032	3,747,925,518	2,337,150,862	1,410,774,656	62.36%	2033	62,714,000	47.8%	68,546,529	52.2%	131,260,529
2033	3,733,203,237	2,354,008,239	1,379,194,998	63.06%	2034	65,379,345	48.7%	68,900,952	51.3%	134,280,297
2034	3,710,722,538	2,369,256,463	1,341,466,075	63.85%	2035	68,157,967	49.6%	69,234,294	50.4%	137,392,261
2035	3,680,659,339	2,383,562,758	1,297,096,581	64.76%	2036	71,054,680	50.5%	69,599,861	49.5%	140,654,541
2036	3,643,207,984	2,397,719,263	1,245,488,721	65.81%	2037	74,074,504	51.4%	69,984,890	48.6%	144,059,394
2037	3,598,839,337	2,412,812,899	1,186,026,438	67.04%	2038	77,222,671	52.3%	70,402,533	47.7%	147,625,204
2038	3,547,667,530	2,429,621,343	1,118,046,187	68.49%	2039	80,504,634	53.2%	70,864,985	46.8%	151,369,619
2039	3,489,609,780	2,448,794,935	1,040,814,845	70.17%	2040	83,926,081	54.0%	71,365,712	46.0%	155,291,793
2040	3,424,958,178	2,471,364,019	953,594,159	72.16%	2041	87,492,940	54.9%	71,945,701	45.1%	159,438,641
2041	3,353,986,818	2,498,480,829	855,505,989	74.49%	2042	91,211,390	55.7%	72,565,038	44.3%	163,776,428
2042	3,275,542,924	2,529,913,206	745,629,718	77.24%	2043	95,087,874	56.5%	73,206,046	43.5%	168,293,920
2043	3,191,249,409	2,568,189,181	623,060,228	80.48%	2044	99,129,108	57.3%	73,930,975	42.7%	173,060,083
2044	3,102,329,843	2,615,583,259	486,746,584	84.31%	2045	103,342,095	58.0%	74,726,509	42.0%	178,068,604
2045	3,007,981,054	2,672,428,315	335,552,739	88.84%	2046	107,734,134	58.8%	75,572,284	41.2%	183,306,418
2046	2,910,150,825	2,741,870,755	168,280,070	94.22%	2047	112,312,835	59.5%	76,468,135	40.5%	188,780,970
2047	2,810,499,764	2,826,813,533	(16,313,769)	100.58%	2048	117,086,131	94.9%	6,257,370	5.1%	123,343,501
2048	2,708,528,390	2,728,504,051	(19,975,661)	100.74%	2049	0	0.0%	3,769,678	100.0%	3,769,678
2049	2,605,509,943	2,627,100,790	(21,590,847)	100.83%	2050	0	0.0%	3,504,530	100.0%	3,504,530
2050	2,502,622,678	2,525,871,036	(23,248,358)	100.93%	2051	0	0.0%	3,307,472	100.0%	3,307,472
2051	2,399,544,524	2,424,530,818	(24,986,294)	101.04%	2052	0	0.0%	3,143,795	100.0%	3,143,795
2052	2,296,058,007	2,322,888,158	(26,830,151)	101.17%	2053	0	0.0%	2,993,787	100.0%	2,993,787
2053	2,195,252,066	2,223,976,227	(28,724,161)	101.31%	2054	0	0.0%	2,916,974	100.0%	2,916,974
2054	2,096,662,368	2,127,373,037	(30,710,669)	101.46%	2055	0	0.0%	2,875,022	100.0%	2,875,022
2055	2,001,398,802	2,034,181,804	(32,783,002)	101.64%	2056	0	0.0%	2,879,550	100.0%	2,879,550
2056	1,909,753,219	1,944,705,946	(34,952,727)	101.83%	2057	0	0.0%	2,924,211	100.0%	2,924,211
2057	1,820,977,614	1,858,229,695	(37,252,081)	102.05%	2058	0	0.0%	2,983,838	100.0%	2,983,838
2058	1,734,985,081	1,774,681,211	(39,696,130)	102.29%	2059	0	0.0%	3,052,067	100.0%	3,052,067
2059	1,651,889,786	1,694,184,966	(42,295,180)	102.56%	2060	0	0.0%	3,128,122	100.0%	3,128,122
2060	1,571,556,906	1,616,622,352	(45,065,446)	102.87%	2061	0	0.0%	3,206,275	100.0%	3,206,275
2062					2062	0	0.0%	3,286,406	100.0%	3,286,406
Total:						\$1,499,866,346	43.8%	\$1,927,109,915	56.2%	\$3,426,976,261
Total Present Value at 6.625%:						\$432,967,151	33.2%	\$870,278,717	66.8%	\$1,303,245,868

Assumptions

Investment Return Assumption	6.625% per year
Actuarial Value of Assets	5-year smoothed market value
Payroll Growth Assumption	1.50% per year
Pension Liability Surtax Proceeds	35.50%, 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.

Section 4: Actuarial Valuation Basis

Exhibit I: Actuarial Assumptions and Actuarial Cost Method

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, 2017.					
Net Investment Return:	6.625% 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 (including inflation):	COJ/JHA/NFTPO				JEA	
	Service	Rate (%)	Service	Rate (%)	Service	Rate (%)
	0	6.5	11	3.9	0-4	7.5
	1	6.1	12	3.8	5	5.1
	2	5.7	13	3.7	6	4.9
	3	5.3	14	3.6	7	4.7
	4	4.9	15	3.5	8	4.5
	5	4.5	16	3.4	9	4.3
	6	4.4	17	3.3	10	4.1
	7	4.3	18	3.2	11	3.9
	8	4.2	19	3.1	12	3.7
	9	4.1	20	3.0	13-24	3.5
10	4.0			25+	3.0	
Inflation Rate:	2.50%					

Section 4: Actuarial Valuation Basis

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%.				
Mortality Rates:	<i>Healthy pre-retirement:</i>	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			
	<i>Healthy post-retirement:</i>	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			
	<i>Disabled:</i>	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 (%)				
		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	
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.				

Section 4: Actuarial Valuation Basis

Termination Rates Before Retirement:

Age	Rate (%)			
	Mortality ¹		Disability	Withdrawal ²
	Male	Female		
20	0.04	0.01	0.01	0.01
25	0.05	0.02	0.01	0.01
30	0.06	0.03	0.02	0.02
35	0.08	0.04	0.03	0.03
40	0.11	0.06	0.04	0.04
45	0.16	0.09	0.06	0.06
50	0.25	0.13	0.10	0.10
55	0.36	0.20	0.16	0.16
60	0.52	0.29	0.25	0.25
65	0.75	0.47	0.00	0.00

¹ Mortality rates shown for base table.

² 100% of disabilities are assumed to be non-service incurred.

Section 4: Actuarial Valuation Basis

Termination Retirement before Retirement (continued)

Service	Withdrawal ¹	
	COJ	JEA
0	16.00	6.00
1	15.00	5.50
2	13.00	4.50
3	10.00	3.50
4	9.50	3.25
5	9.00	3.00
6	8.50	2.75
7	8.00	2.50
8	7.50	2.25
9	7.00	2.00
10	6.50	2.00
11	5.60	2.00
12	4.70	2.00
13	3.80	2.00
14	2.90	2.00
15	2.00	2.00
16	1.80	1.80
17	1.60	1.60
18	1.40	1.40
19	1.20	1.20
20	1.00	1.00
21	0.80	0.80
22	0.60	0.60
23	0.40	0.40
24+	0.20	0.20

¹All withdrawal rates are set to 0% after eligibility for retirement.

Section 4: Actuarial Valuation Basis

Retirement Rates:	Fewer Than 31 Years of Service		31 or More Years of Service	
	Age	Rate (%) ¹	Service	Rate (%) ¹
	45-54	5	31-33	15
	55	15	34-35	30
	56-60	7	36	35
	61-63	10	37	60
	64-65	30	38-39	50
	66-69	20	40	100
	70 & Over	100		

¹ 100% 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.
Value of Applicable Tax Revenue:	Actual revenue of \$107,207,059 for fiscal 2021 is used as the basis of the City's revenue projection. This amount is prior to application of the allocation percentage.
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:	35.50%. This percentage is determined by the City; last year's percentage was 35.68%.
Administrative Expenses:	Previous year's actual expenses; \$1,194,000 for October 1, 2021.
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.

Section 4: Actuarial Valuation Basis

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.
Justification for Change in Actuarial Assumptions and Methods:	Following ongoing board review of discount rate options: <ul style="list-style-type: none">➤ The discount rate was lowered from 6.80% to 6.625%.

Section 4: Actuarial Valuation Basis

Exhibit II: 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:	<i>Age Requirement</i>	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.
	<i>Regular Benefit Amount</i>	2.5% of Final Monthly Compensation times years of Credited Service, not more than 80% of Final Monthly Compensation.
	<i>Supplemental Benefit Amount</i>	Monthly benefit of \$5 times years of Credited Service, not less than \$25 per month or more than \$150 per month.
	<i>Minimum Benefit Amount</i>	\$69.31 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1 st .
Early Retirement:	<i>Age Requirement</i>	Age 50 with 20 years of Credited Service
	<i>Regular Benefit Amount</i>	Accrued Service Retirement Regular Benefit Amount reduced by 0.5 percent for each month the benefit commencement precedes age 55.
	<i>Supplemental Benefit Amount</i>	Monthly benefit of \$5 times years of Credited Service, not less than \$25 per month or more than \$150 per month.
	<i>Minimum Benefit Amount</i>	\$69.31 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1 st .
	<i>Age Requirement</i>	Any age with 25 years of Credited Service
	<i>Regular Benefit Amount</i>	2.0% of Final Monthly Compensation times years of Credited Service
	<i>Supplemental Benefit Amount</i>	Monthly benefit of \$5 times years of Credited Service, not less than \$25 per month or more than \$150 per month.
	<i>Minimum Benefit Amount</i>	\$69.31 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1 st .

Section 4: Actuarial Valuation Basis

Off-the-job Disability:	<i>Service Requirement</i>	5 years of Credited Service
	<i>Regular Benefit Amount</i>	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
	<i>Supplemental Benefit Amount</i>	Monthly benefit of \$5 times years of Credited Service, not less than \$25 per month or more than \$150 per month.
	<i>Minimum Benefit Amount</i>	\$69.31 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1 st .
On-the-job Disability:	<i>Service Requirement</i>	Immediate eligibility
	<i>Regular Benefit Amount</i>	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
	<i>Supplemental Benefit Amount</i>	Monthly benefit of \$5 times years of Credited Service, not less than \$25 per month or more than \$150 per month.
	<i>Minimum Benefit Amount</i>	\$69.31 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1 st .
Vesting:	<i>Age Requirement</i>	None
	<i>Service Requirement</i>	5 years of Credited Service
	<i>Regular Benefit Amount</i>	Accrued Service Retirement Regular Benefit payable at age 65.
	<i>Supplemental Benefit Amount</i>	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.
	<i>Minimum Benefit Amount</i>	\$69.31 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1 st .
Spouse's Pre-Retirement Death Benefit:	<i>Age Requirement</i>	None
	<i>Service Requirement</i>	None
	<i>Regular Benefit Amount</i>	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.
	<i>Supplemental Benefit Amount</i>	Monthly benefit of \$5 times years of Member's Credited Service, not less than \$25 per month or more than \$150 per month.
	<i>Minimum Benefit Amount</i>	75% of \$69.31 per whole year of Member's Credited Service, not to exceed 30.

Section 4: Actuarial Valuation Basis

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 Adjustment:	On the April 1 st nearest the fifth anniversary of the initial benefit commencement date, and on each April 1 st thereafter, the regular benefit is increased by 3%.
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:	<p>The following change in plan provisions are first reflected in this valuation:</p> <ul style="list-style-type: none"> ➤ An early retirement window was offered during the period of April 1, 2021 through September 30, 2021 for all non-JEA participants and for the period May 1, 2021 through October 31, 2021 for all JEA participants. During the window periods, normal retirement eligibility was changed from either: 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, to age 60 with five years of credited service or age 55 with 10 years of credited service. Also during the window periods, early retirement eligibility was changed from either: age 50 with 20 years of credited service, or any age with 25 years of service with a 2.0% benefit multiplier, to any age with 20 years of service, with a 2.0% benefit multiplier.

Section 5: GASB Information

General information about the pension plan

Plan Description

Plan membership. At September 30, 2021, pension plan membership consisted of the following:

Retired members or beneficiaries currently receiving benefits	5,342
Vested terminated members entitled to but not yet receiving benefits	160
Active members	3,289
Total	8,791

Section 5: GASB Information

Net pension liability

Reporting Date for Employer under GASB 68	September 30, 2022	September 30, 2021
Measurement Date	September 30, 2021	September 30, 2020
Components of the Net Pension Liability		
Total Pension Liability	\$3,529,433,595	\$3,389,704,002
Plan Fiduciary Net Position	2,299,661,000	2,005,459,000
Net Pension Liability	1,229,772,595	1,384,245,002
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	65.16%	59.16%

The Net Pension Liability (NPL) for the plan was measured as of September 30, 2021 and 2020. 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, 2021 and 2020, 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, 2021 and October 1, 2020, respectively.

Actuarial assumptions. The TPL as of September 30, 2021 and 2020, that were measured by actuarial valuations as of October 1, 2021 and 2020, respectively, used the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.50%
Salary increases	3.00% - 7.50%, of which 2.50% is the Plan's long-term payroll inflation
Investment rate of return	6.625%, net of pension plan investment expense, including inflation (previously 6.80%)
Other assumptions	See the October 1, 2021 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, 2012 through September 30, 2017.

Section 5: GASB Information

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 and subtracting expected investment expenses and a risk margin. 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 ¹
Domestic equity	30.0%	6.40%
International equity	20.0%	6.80%
Fixed income	20.0%	0.40%
Real estate	15.0%	3.90%
Private equity	7.5%	10.40%
Alternatives	7.5%	2.75%
Total	100.0%	

Discount rate. The discount rates used to measure the Total Pension Liability (TPL) were 6.625% and 6.80% as of September 30, 2021 and September 30, 2020, respectively. 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, 2021 and September 30, 2020.

¹ Based on capital market assumptions provided by Segal Marco Advisors

Section 5: GASB Information

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 Plan as of September 30, 2021, which is allocated to all employers, calculated using the discount rate of 6.625%, as well as what the Plan's NPL would be if it were calculated using a discount rate that is 1-percentage-point lower (5.625%) or 1-percentage-point higher (7.625%) than the current rate.

Net Pension Liability	1% Decrease (5.625%)	Current Discount Rate (6.625%)	1% Increase (7.625%)
City of Jacksonville	\$759,191,249	\$566,670,375	\$405,975,162
Jacksonville Electrical Authority	861,454,449	643,000,979	460,660,089
Jacksonville Housing Authority	24,947,445	18,621,102	13,340,568
North Florida Transportation Planning Organization	<u>1,983,002</u>	<u>1,480,139</u>	<u>1,060,404</u>
Total	\$1,647,576,145	\$ 1,229,772,595	\$ 881,036,223

Section 5: GASB Information

Schedule of changes in Net Pension Liability – Last two fiscal years

Reporting Date for Employer under GASB 68	September 30, 2022	September 30, 2021
Measurement Date	September 30, 2021	September 30, 2020
Total Pension Liability		
Service cost	\$40,608,463	\$39,959,741
Interest	225,729,126	222,362,072
Change of benefit terms	3,982,042	0
Differences between expected and actual experience	25,338,067	12,192,218
Changes of assumptions	65,604,895	36,145,490
Benefit payments, including refunds of member contributions	<u>-221,533,000</u>	<u>-207,269,000</u>
Net change in Total Pension Liability	\$139,729,593	\$103,390,521
Total Pension Liability – beginning	<u>3,389,704,002</u>	<u>3,286,313,481</u>
Total Pension Liability – ending	\$3,529,433,595	\$3,389,704,002
Plan Fiduciary Net Position		
Contributions – employer	\$77,269,000	\$72,194,000
Contributions – employee	29,116,000	26,014,000
Net investment income	410,544,000	125,958,000
Benefit payments, including refunds of member contributions	-221,533,000	-207,269,000
Administrative expense	-1,194,000	-1,084,000
Other	0	0
Net change in Plan Fiduciary Net Position	\$294,202,000	\$15,813,000
Plan Fiduciary Net Position – beginning	<u>2,005,459,000</u>	<u>1,989,646,000</u>
Plan Fiduciary Net Position – ending	\$2,299,661,000	\$2,005,459,000
Net Pension Liability – ending	\$1,229,772,595	\$1,384,245,002
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	65.16%	59.16%
Covered payroll ¹	\$233,266,593	\$246,387,379
Plan Net Pension Liability as percentage of covered payroll	527.20%	561.82%

¹ Pensionable payroll as of the measurement date

Section 5: GASB Information

Notes to Schedule:

Benefit changes:

An early retirement window was offered during the period of April 1, 2021 through September 30, 2021 for all non-JEA participants and for the period May 1, 2021 through October 31, 2021 for all JEA participants. During the window periods, normal retirement eligibility was changed from either: 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, to age 60 with five years of credited service or age 55 with 10 years of credited service. Also during the window periods, early retirement eligibility was changed from either: age 50 with 20 years of credited service, or any age with 25 years of service with a 2.0% benefit multiplier, to any age with 20 years of service, with a 2.0% benefit multiplier.

Assumption changes:

As of September 30, 2020 the assumed investment return was lowered from 6.90% to 6.80%.

As of September 30, 2021 the assumed investment return was lowered from 6.80% to 6.625%.

Section 5: GASB Information

Deferred outflows of resources and deferred inflows of resources – Total for all employers

Reporting Date for Employer under GASB 68 Measurement Date	September 30, 2022 September 30, 2021	September 30, 2021 September 30, 2020
Deferred Outflows of Resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$34,800,351	\$48,195,144
Changes of assumptions or other inputs	68,504,810	62,602,645
Net difference between projected and actual earnings on pension plan investments	0	54,517,000
Difference between expected and actual experience in the Total Pension Liability	<u>33,458,313</u>	<u>29,120,171</u>
Total Deferred Outflows of Resources	\$136,763,474	\$194,434,960
Deferred Inflows of Resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$34,800,351	\$48,195,144
Changes of assumptions or other inputs	0	0
Net difference between projected and actual earnings on pension plan investments	167,650,379	0
Difference between expected and actual experience in the Total Pension Liability	<u>0</u>	<u>1,818,692</u>
Total Deferred Inflows of Resources	\$202,450,730	\$50,013,836
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:		
2022	N/A	55,812,871
2023	15,161,264	48,051,206
2024	6,161,591	39,051,533
2025	-31,384,428	1,505,514
2026	-55,625,683	0
2027	0	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68

Section 5: GASB Information

There are changes in each employer's proportionate share of the total Net Pension Liability (NPL) during the measurement period ended September 30, 2021. The net effect of the change on the employer's proportionate share of the collective NPL and collective deferred outflows of resources and deferred inflows of resources is recognized over the average of the expected remaining service lives of all employees that are provided with pensions through GERP which is four years determined as of September 30, 2020 (the beginning of the measurement period ending September 30, 2021). This is described in Paragraph 33a. of GASB 68.

In addition, the difference between the actual employer contributions and the proportionate share of the employer contributions during the measurement period ended September 30, 2021 is recognized over the same period. This is zero because the proportionate share was determined using the actual employer contributions.

The average of the expected service lives of all employees is determined by:

- Calculating each active employee's expected remaining service life as the present value of \$1 per year of future service at zero percent interest.
- Setting the remaining service life to zero for each nonactive or retired member.
- Dividing the sum of the above amounts by the total number of active employee, nonactive and retired members.

Section 5: GASB Information

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)	2021	2022	2023	2024	2025	2026	2027	Thereafter
2017	\$60,436,838	5.00	\$12,087,368	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2018	16,293,511	5.00	3,258,702	3,258,702	0	0	0	0	0	0
2019	-7,274,767	4.00	-1,818,692	-1,818,692	0	0	0	0	0	0
2020	33,434,609	4.00	8,358,652	8,358,652	8,358,652	0	0	0	0	0
2021	12,192,218	4.00	3,048,053	3,048,055	3,048,055	3,048,055	0	0	0	0
2022	25,338,067	4.00	N/A	<u>6,334,516</u>	<u>6,334,517</u>	<u>6,334,517</u>	<u>6,334,517</u>	<u>0</u>	<u>0</u>	<u>0</u>
Net increase (decrease) in pension expense			N/A	\$19,181,233	\$17,741,224	\$9,382,572	\$6,334,517	\$0	\$0	\$0

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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)	2021	2022	2023	2024	2025	2026	2027	Thereafter
2017	72,969,220	5.00	\$14,593,844	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2018	64,389,844	5.00	12,877,969	12,877,969	0	0	0	0	0	0
2019	80,635,093	4.00	20,158,773	20,158,773	0	0	0	0	0	0
2020	4,913,569	4.00	1,228,392	1,228,392	1,228,392	0	0	0	0	0
2021	36,145,490	4.00	9,036,371	9,036,373	9,036,373	9,036,373	0	0	0	0
2022	65,604,895	4.00	<u>N/A</u>	<u>16,401,223</u>	<u>16,401,224</u>	<u>16,401,224</u>	<u>16,401,224</u>	<u>0</u>	<u>0</u>	<u>0</u>
Net increase (decrease) in pension expense			N/A	\$59,702,730	\$26,665,989	\$25,437,597	\$16,401,224	\$0	\$0	\$0

As described in Exhibit of Deferred Outflows of Resources and Deferred Inflows of Resources, the average of the expected remaining service lives of all employees that are provided with pensions through GERP (active and inactive employees) determined as of September 30, 2020 (the beginning of the measurement period ending September 30, 2021) is four years.

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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)	2021	2022	2023	2024	2025	2026	2027	Thereafter
2017	-39,489,525	5.00	-\$7,897,905	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2018	-133,575,436	5.00	-26,715,087	-26,715,087	0	0	0	0	0	0
2019	-2,936,856	5.00	-587,371	-587,371	-587,371	0	0	0	0	0
2020	127,307,955	5.00	25,461,591	25,461,591	25,461,591	25,461,591	0	0	0	0
2021	7,527,572	5.00	1,505,516	1,505,514	1,505,514	1,505,514	1,505,514	0	0	0
2022	-278,128,416	5.00	N/A	<u>-55,625,684</u>	<u>-55,625,683</u>	<u>-55,625,683</u>	<u>-55,625,683</u>	<u>-55,625,683</u>	<u>0</u>	<u>0</u>
Net increase (decrease) in pension expense			N/A	-\$55,961,037	-\$29,245,949	-\$28,658,578	-\$54,120,169	-\$55,625,683	0	0

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Total Increase (Decrease) in Pension Expense

Reporting Date for Employer under GASB 68 Year Ended September 30	Total Increase (Decrease) in Pension Expense	2021	2022	2023	2024	2025	2026	2027	Thereafter
2017	93,916,533	\$18,783,307	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2018	-52,892,081	-10,578,416	-10,578,416	0	0	0	0	0	0
2019	70,423,470	17,752,710	17,752,710	-587,371	0	0	0	0	0
2020	165,656,133	35,048,635	35,048,635	35,048,635	25,461,591	0	0	0	0
2021	55,865,280	13,589,940	13,589,942	13,589,942	13,589,942	1,505,514	0	0	0
2022	-187,185,454	N/A	<u>-32,889,945</u>	<u>-32,889,942</u>	<u>-32,889,942</u>	<u>-32,889,942</u>	<u>-55,625,683</u>	<u>0</u>	<u>0</u>
Net increase (decrease) in pension expense		N/A	\$22,922,926	\$15,161,264	\$6,161,591	-\$31,384,428	-\$55,625,683	\$0	\$0

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Pension expense – Total for all employers

Reporting Date for Employer under GASB 68 Measurement Date	September 30, 2022 September 30, 2021	September 30, 2021 September 30, 2020
Components of Pension Expense		
Service cost	\$40,608,463	\$39,959,741
Interest on the Total Pension Liability	225,729,126	222,362,072
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	3,982,042	0
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	6,334,516	3,048,053
Expensed portion of current-period changes of assumptions or other inputs	16,401,223	9,036,371
Member contributions	-29,116,000	-26,014,000
Projected earnings on plan investments	-132,415,584	-133,485,572
Expensed portion of current-period differences between actual and projected earnings on plan investments	-55,625,684	1,505,516
Administrative expense	1,194,000	1,084,000
Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	84,934,021	98,025,291
Recognition of beginning of year deferred inflows of resources as pension expense	-29,121,150	-37,019,055
Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	0	0
Pension Expense	\$132,904,973	\$178,502,417

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Schedule of reconciliation of Net Pension Liability –Total for all employers

Reporting Date for Employer under GASB 68	September 30, 2022	September 30, 2021
Measurement Date	September 30, 2021	September 30, 2020
Beginning Net Pension Liability	\$1,384,245,002	\$1,296,667,481
Pension expense	132,904,973	178,502,417
Employer contributions	-77,269,000	-72,194,000
New net deferred inflows/outflows	-154,295,509	42,275,340
New net deferred inflows/outflows due to change in proportion	0	0
Recognition of prior deferred inflows/outflows	<u>-55,812,871</u>	<u>-61,006,236</u>
Ending Net Pension Liability	\$1,229,772,595	\$1,384,245,002

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Schedule of contributions – Last ten fiscal years

Year Ended September 30	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency / (Excess)	Covered Payroll ¹	Contributions as a Percentage of Covered Payroll ²
2012	\$57,497,706	\$49,899,000	\$7,598,706	\$283,020,575	17.63%
2013	66,659,915	55,386,000	11,273,915	265,404,735	20.87%
2014	81,351,295	71,000,000	10,351,295	262,368,813	27.06%
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%
2020	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%

See accompanying notes to this schedule on next page.

¹ Pensionable payroll as of the measurement date.

² 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.

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Notes to Schedule:

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 ¹
Remaining amortization period	As of October 1, 2019 the effective amortization period is 27 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.
Actuarial assumptions:	
Investment rate of return	6.90%, 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 assumptions	Same as those used in the October 1, 2019 funding actuarial valuation.

¹ The Fund’s payroll inflation assumption was 2.50% as of October 1, 2019. 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%.

Results by Employer

Determination of Proportionate Share

Actual Employer Contributions by Employer September 30, 2020 to September 30, 2021

Employer	Contributions	Percentage
City of Jacksonville	\$35,605,000	46.0793%
Jacksonville Electrical Authority	40,401,000	52.2862%
Jacksonville Housing Authority	1,170,000	1.5142%
North Florida Transportation Planning Organization	<u>93,000</u>	<u>0.1204%</u>
Total for all Employers	\$77,269,000	100.0000%

Allocation of September 30, 2021 Net Pension Liability (NPL)

Employer	Net Pension Liability	Percentage
City of Jacksonville	\$566,670,375	46.0793%
Jacksonville Electrical Authority	643,000,979	52.2862%
Jacksonville Housing Authority	18,621,102	1.5142%
North Florida Transportation Planning Organization	<u>1,480,139</u>	<u>0.1204%</u>
Total for all Employers	\$1,229,772,595	100.0000%

Notes:

Based on the September 30, 2020 through September 30, 2021 employer contributions, as provided by the City.

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For purposes of the above results, we have assumed that the reporting date for the employer under GASB 68 is September 30, 2022. The reporting date and measurement date for the plan under GASB 67 are assumed to be September 30, 2021. This means that assets and liabilities are determined as of September 30, 2021 and are not adjusted or “rolled forward” to September 30, 2022. Other results, such as the total deferred inflows and outflows would also be allocated based on the same proportionate shares determined above.

The following items are allocated based on the corresponding proportionate share within each employer:

- Net Pension Liability
- Service cost
- Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability
- Member contributions
- Projected earnings on plan investments
- Expensed portion of current-period differences between actual and projected earnings on plan investments
- Administrative expense
- Recognition of beginning of year deferred outflows of resources as pension expense

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Schedule of Proportionate Share of the Net Pension Liability – Total for all Employers

Reporting Date for Employer under GASB 68 as of September 30	Proportion of the Net Pension Liability	Proportionate Share of Net Pension Liability	Covered Payroll ¹	Proportionate Share of the Net Pension Liability as a Percentage of Its Covered Payroll	Plan Fiduciary Net Position as a Percentage of the Total Pension Liability
2016	100.0%	\$977,320,544	\$254,034,479	384.72%	64.03%
2017	100.0%	1,074,102,013	250,894,295	428.11%	63.00%
2018	100.0%	1,021,052,610	257,850,484	395.99%	66.42%
2019	100.0%	1,111,624,516	253,982,175	437.68%	65.23%
2020	100.0%	1,296,667,481	249,982,877	518.70%	60.54%
2021	100.0%	1,384,245,002	246,387,379	561.82%	59.16%
2022	100.0%	1,229,772,595	233,266,593	527.20%	65.16%

¹ Pensionable payroll as of the measurement date.

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Allocation of Changes in Total Net Pension Liability

In addition to the amounts shown in the preceding tables, there are changes in proportionate share of the total Net Pension Liability (NPL) between the measurement periods ending on September 30, 2021 and September 30, 2020 as a result of change in allocation percentage (the actual contributions made by an employer as a percentage of total contributions). The difference in proportionate share of the total NPL due to change in allocation percentage during the measurement period ending on September 30, 2021 is recognized over the average of the expected remaining service lives of all employees (four years). These amounts are shown below. While these amounts are different for each employer, they sum to zero over all employers.

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for September 30, 2022

Employer	Total Change to be Recognized	Recognition Period (Years)	2021	2022	2023	2024	Thereafter
City of Jacksonville	\$10,054,681	4	\$2,513,671	\$2,513,670	\$2,513,670	\$2,513,670	\$0
Jacksonville Electrical Authority	-5,195,380	4	-1,298,845	-1,298,845	-1,298,845	-1,298,845	0
Jacksonville Housing Authority	-4,823,096	4	-1,205,774	-1,205,774	-1,205,774	-1,205,774	0
North Florida Transportation Planning Organization	<u>-36,205</u>	4	<u>-9,052</u>	<u>-9,051</u>	<u>-9,051</u>	<u>-9,051</u>	<u>0</u>
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0

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Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for September 30, 2021

Employer	Total Change to be Recognized	Recognition Period (Years)	2021	2022	2023	2024	Thereafter
City of Jacksonville	-\$44,906,427	4	-\$11,226,606	-\$11,226,607	-\$11,226,607	-\$11,226,607	\$0
Jacksonville Electrical Authority	43,812,764	4	10,953,191	10,953,191	10,953,191	10,953,191	0
Jacksonville Housing Authority	1,056,496	4	264,124	264,124	264,124	264,124	0
North Florida Transportation Planning Organization	37,167	4	9,291	9,292	9,292	9,292	0
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0

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Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for September 30, 2020

Employer	Total Change to be Recognized	Recognition Period (Years)	2020	2021	2022	2023	Thereafter
City of Jacksonville	\$19,224,508	4	\$4,806,127	\$4,806,127	\$4,806,127	\$4,806,127	\$0
Jacksonville Electrical Authority	-17,895,153	4	-4,473,789	-4,473,788	-4,473,788	-4,473,788	0
Jacksonville Housing Authority	-920,323	4	-230,080	-230,081	-230,081	-230,081	0
North Florida Transportation Planning Organization	-409,032	4	-102,258	-102,258	-102,258	-102,258	0
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0

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Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for September 30, 2019

Employer	Total Change to be Recognized	Recognition Period (Years)	2019	2020	2022	2022	Thereafter
City of Jacksonville	\$9,206,359	4	\$2,301,589	\$2,301,590	\$2,301,590	\$2,301,590	\$0
Jacksonville Electrical Authority	-10,239,726	4	-2,559,930	-2,559,932	-2,559,932	-2,559,932	0
Jacksonville Housing Authority	1,033,367	4	258,341	258,342	258,342	258,342	0
North Florida Transportation Planning Organization	0	4	0	0	0	0	0
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0

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Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for September 30, 2018

Employer	Total Change to be Recognized	Recognition Period (Years)	2018	2019	2020	2021	2022	Thereafter
City of Jacksonville	-\$11,089,655	5	-\$2,217,931	-\$2,217,931	-\$2,217,931	-\$2,217,931	-\$2,217,931	\$0
Jacksonville Electrical Authority	11,715,684	5	2,343,136	2,343,137	2,343,137	2,343,137	2,343,137	0
Jacksonville Housing Authority	-447,163	5	-89,431	-89,433	-89,433	-89,433	-89,433	0
North Florida Transportation Planning Organization	-178,866	5	-35,774	-35,773	-35,773	-35,773	-35,773	0
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0	\$0

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Deferred outflows of resources and deferred inflows of resources – City of Jacksonville

Reporting Date for Employer under GASB 68	September 30, 2022	September 30, 2021
Measurement Date	September 30, 2021	September 30, 2020
Deferred Outflows of Resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$12,347,137	\$11,913,844
Changes of assumptions or other inputs	31,566,524	28,339,156
Net difference between projected and actual earnings on pension plan investments	0	24,678,922
Difference between expected and actual experience in the Total Pension Liability	<u>15,417,350</u>	<u>13,182,207</u>
Total Deferred Outflows of Resources	\$59,331,011	\$78,114,129
Deferred Inflows of Resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$22,453,214	\$35,897,752
Changes of assumptions or other inputs	0	0
Net difference between projected and actual earnings on pension plan investments	77,252,090	0
Difference between expected and actual experience in the Total Pension Liability	<u>0</u>	<u>823,292</u>
Total Deferred Inflows of Resources	\$99,705,304	\$36,721,044
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:		
2022	N/A	\$18,928,717
2022	\$3,079,392	15,331,487
2023	-5,873,720	6,451,360
2024	-11,948,049	681,521
2025	-25,631,915	0
2026	0	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68

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Pension expense – City of Jacksonville

Reporting Date for Employer under GASB 68	September 30, 2022	September 30, 2021
Measurement Date	September 30, 2021	September 30, 2020
Components of Pension Expense		
Service cost	\$18,712,087	\$18,089,097
Interest on the Total Pension Liability	104,014,359	100,659,54
Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	2,513,671	-11,226,606
Current-period benefit changes	1,834,896	0
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	2,918,899	1,379,801
Expensed portion of current-period changes of assumptions or other inputs	7,557,566	4,090,612
Member contributions	-13,416,443	-11,776,096
Projected earnings on plan investments	-61,016,150	-60,426,656
Expensed portion of current-period differences between actual and projected earnings on plan investments	-25,631,916	681,522
Administrative expense	550,187	490,709
Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	39,136,986	44,374,388
Recognition of beginning of year deferred inflows of resources as pension expense	-13,418,816	-16,757,898
Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>-6,336,821</u>	<u>2,934,414</u>
Pension Expense	\$57,418,505	\$72,512,827

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Schedule of reconciliation of Net Pension Liability – City of Jacksonville

Reporting Date for Employer under GASB 68	September 30, 2022	September 30, 2021
Measurement Date	September 30, 2021	September 30, 2020
Beginning Net Pension Liability	\$626,624,248	\$638,349,401
Pension expense	57,418,505	72,512,827
Employer contributions	-35,605,000	-32,681,000
New net deferred inflows/outflows	-71,098,262	19,137,330
Change in allocation of prior deferred inflows/outflows	1,171,223	-6,463,586
New net deferred inflows/outflows due to change in proportion	7,541,010	-33,679,821
Recognition of prior deferred inflows/outflows	-25,718,170	-27,616,489
Recognition of prior deferred inflows/outflows due to change in proportion	<u>6,336,821</u>	<u>-2,934,414</u>
Ending Net Pension Liability	\$566,670,375	\$626,624,248

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Schedule of Proportionate Share of the Net Pension Liability – City of Jacksonville

Reporting Date for Employer under GASB 68 as of September 30	Proportion of the Net Pension Liability	Proportionate Share of Net Pension Liability	Covered Payroll ¹	Proportionate Share of the Net Pension Liability as a Percentage of Its Covered Payroll	Plan Fiduciary Net Position as a Percentage of the Total Pension Liability
2016	48.8%	\$476,736,962	\$121,601,265	392.05%	64.03%
2017	47.6%	511,379,968	118,972,519	429.83%	63.00%
2018	46.4%	473,462,095	118,506,089	399.53%	66.42%
2019	47.3%	526,354,208	113,773,163	462.63%	65.23%
2020	49.2%	638,349,401	110,781,005	576.23%	60.54%
2021	45.3%	626,624,247	108,964,730	575.07%	59.16%
2022	46.1%	566,670,375	98,890,802	573.03%	65.16%

¹ Covered payroll as of the measurement date

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Deferred outflows of resources and deferred inflows of resources – Jacksonville Electrical Authority

Reporting Date for Employer under GASB 68	September 30, 2022	September 30, 2021
Measurement Date	September 30, 2021	September 30, 2020
Deferred Outflows of Resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$21,906,382	\$35,202,710
Changes of assumptions or other inputs	35,818,541	32,994,856
Net difference between projected and actual earnings on pension plan investments	0	28,733,300
Difference between expected and actual experience in the Total Pension Liability	<u>17,494,070</u>	<u>15,347,848</u>
Total Deferred Outflows of Resources	\$75,218,993	\$112,278,714
Deferred Inflows of Resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$8,370,323	\$11,507,508
Changes of assumptions or other inputs	0	0
Net difference between projected and actual earnings on pension plan investments	87,657,961	0
Difference between expected and actual experience in the Total Pension Liability	<u>0</u>	<u>958,545</u>
Total Deferred Inflows of Resources	\$96,028,284	\$12,466,053
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:		
2022	N/A	\$35,678,901
2023	\$13,107,801	31,804,892
2024	12,876,006	31,535,384
2025	-17,708,560	793,484
2026	-29,084,539	0
2027	0	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68

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Pension expense – Jacksonville Electrical Authority

Reporting Date for Employer under GASB 68	September 30, 2022	September 30, 2021
Measurement Date	September 30, 2021	September 30, 2020
Components of Pension Expense		
Service cost	\$21,232,610	\$21,060,866
Interest on the Total Pension Liability	118,025,113	117,196,399
Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	-1,298,845	10,953,191
Current-period benefit changes	2,082,057	0
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	3,312,076	1,606,483
Expensed portion of current-period changes of assumptions or other inputs	8,575,571	4,762,638
Member contributions	-15,223,641	-13,710,734
Projected earnings on plan investments	-69,235,036	-70,353,852
Expensed portion of current-period differences between actual and projected earnings on plan investments	-29,084,539	793,485
Administrative expense	624,297	571,324
Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	44,408,746	51,664,436
Recognition of beginning of year deferred inflows of resources as pension expense	-15,226,334	-19,510,971
Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>6,262,608</u>	<u>-2,651,648</u>
Pension Expense	\$74,454,683	\$102,381,617

Section 5: GASB Information

Schedule of reconciliation of Net Pension Liability – Jacksonville Electrical Authority

Reporting Date for Employer under GASB 68 Measurement Date	September 30, 2022 September 30, 2021	September 30, 2021 September 30, 2020
Beginning Net Pension Liability	\$729,569,247	\$633,292,398
Pension expense	74,454,683	102,381,617
Employer contributions	-40,401,000	-38,050,000
New net deferred inflows/outflows	-80,675,211	22,281,307
Change in allocation of prior deferred inflows/outflows	-605,186	6,306,169
New net deferred inflows/outflows due to change in proportion	-3,896,535	32,859,573
Recognition of prior deferred inflows/outflows	-29,182,412	-32,153,465
Recognition of prior deferred inflows/outflows due to change in proportion	<u>-6,262,608</u>	<u>2,651,648</u>
Ending Net Pension Liability	\$643,000,978	\$729,569,247

Section 5: GASB Information

Schedule of Proportionate Share of the Net Pension Liability – Jacksonville Electrical Authority

Reporting Date for Employer under GASB 68 as of September 30	Proportion of the Net Pension Liability	Proportionate Share of Net Pension Liability	Covered Payroll ¹	Proportionate Share of the Net Pension Liability as a Percentage of Its Covered Payroll	Plan Fiduciary Net Position as a Percentage of the Total Pension Liability
2016	49.1%	\$480,353,047	\$127,440,243	376.92%	64.03%
2017	50.4%	541,025,184	126,807,590	426.65%	63.00%
2018	51.7%	527,679,989	134,443,316	392.49%	66.42%
2019	50.6%	562,370,843	135,708,572	414.40%	65.23%
2020	48.8%	633,292,398	134,548,830	470.68%	60.54%
2021	52.7%	729,569,248	133,713,681	545.62%	59.16%
2022	52.3%	643,000,979	130,399,899	493.10%	65.16%

¹ Covered payroll as of the measurement date

Section 5: GASB Information

Deferred outflows of resources and deferred inflows of resources – Jacksonville Housing Authority

Reporting Date for Employer under GASB 68	September 30, 2022	September 30, 2021
Measurement Date	September 30, 2021	September 30, 2020
Deferred Outflows of Resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$528,248	\$1,050,714
Changes of assumptions or other inputs	1,037,293	1,191,457
Net difference between projected and actual earnings on pension plan investments	0	1,037,570
Difference between expected and actual experience in the Total Pension Liability	<u>506,623</u>	<u>554,217</u>
Total Deferred Outflows of Resources	\$2,072,164	\$3,833,958
Deferred Inflows of Resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$3,847,403	\$549,595
Changes of assumptions or other inputs	0	0
Net difference between projected and actual earnings on pension plan investments	2,538,546	0
Difference between expected and actual experience in the Total Pension Liability	<u>0</u>	<u>34,613</u>
Total Deferred Inflows of Resources	\$6,385,949	\$584,208
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:		
2022	N/A	\$1,265,186
2023	-\$942,161	948,556
2024	-848,352	1,007,355
2025	-1,680,994	28,653
2026	-842,279	0
2027	0	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68

Section 5: GASB Information

Pension expense – Jacksonville Housing Authority

Reporting Date for Employer under GASB 68	September 30, 2022	September 30, 2021
Measurement Date	September 30, 2021	September 30, 2020
Components of Pension Expense		
Service cost	\$614,890	\$760,516
Interest on the Total Pension Liability	3,417,969	4,232,007
Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	-1,205,774	264,124
Current-period benefit changes	60,296	0
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	95,917	58,011
Expensed portion of current-period changes of assumptions or other inputs	248,346	171,981
Member contributions	-440,872	-495,100
Projected earnings on plan investments	-2,005,024	-2,540,504
Expensed portion of current-period differences between actual and projected earnings on plan investments	-842,279	28,653
Administrative expense	18,079	20,631
Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	1,286,063	1,865,622
Recognition of beginning of year deferred inflows of resources as pension expense	-440,950	-704,549
Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>202,952</u>	<u>-161,447</u>
Pension Expense	\$1,009,613	\$3,499,945

Section 5: GASB Information

Schedule of reconciliation of Net Pension Liability – Jacksonville Housing Authority

Reporting Date for Employer under GASB 68 Measurement Date	September 30, 2022 September 30, 2021	September 30, 2021 September 30, 2020
Beginning Net Pension Liability	\$26,345,024	\$23,469,681
Pension expense	1,009,613	3,499,945
Employer contributions	-1,170,000	-1,374,000
New net deferred inflows/outflows	-2,336,328	804,586
Change in allocation of prior deferred inflows/outflows	-561,819	152,067
New net deferred inflows/outflows due to change in proportion	-3,617,322	792,372
Recognition of prior deferred inflows/outflows	-845,113	-1,161,074
Recognition of prior deferred inflows/outflows due to change in proportion	<u>-202,952</u>	<u>161,447</u>
Ending Net Pension Liability	\$18,621,103	\$26,345,024

Section 5: GASB Information

Schedule of Proportionate Share of the Net Pension Liability – Jacksonville Housing Authority

Reporting Date for Employer under GASB 68 as of September 30	Proportion of the Net Pension Liability	Proportionate Share of Net Pension Liability	Covered Payroll ¹	Proportionate Share of the Net Pension Liability as a Percentage of Its Covered Payroll	Plan Fiduciary Net Position as a Percentage of the Total Pension Liability
2016	1.9%	\$18,569,090	\$4,535,512	409.42%	64.03%
2017	1.8%	19,763,477	4,710,802	419.54%	63.00%
2018	1.8%	18,276,842	4,475,739	408.35%	66.42%
2019	1.9%	21,120,866	4,054,520	520.92%	65.23%
2020	1.8%	23,469,681	4,193,896	559.62%	60.54%
2021	1.9%	26,345,024	3,708,968	710.31%	59.16%
2022	1.5%	18,621,102	3,563,335	522.58%	65.16%

¹ Covered payroll as of the measurement date

Section 5: GASB Information

Deferred outflows of resources and deferred inflows of resources – North Florida Transportation Planning Organization

Reporting Date for Employer under GASB 68	September 30, 2022	September 30, 2021
Measurement Date	September 30, 2021	September 30, 2020
Deferred Outflows of Resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$18,584	\$27,876
Changes of assumptions or other inputs	82,452	77,176
Net difference between projected and actual earnings on pension plan investments	0	67,208
Difference between expected and actual experience in the Total Pension Liability	<u>40,270</u>	<u>35,899</u>
Total Deferred Outflows of Resources	\$141,306	\$208,159
Deferred Inflows of Resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$129,411	\$240,289
Changes of assumptions or other inputs	0	0
Net difference between projected and actual earnings on pension plan investments	201,782	0
Difference between expected and actual experience in the Total Pension Liability	<u>0</u>	<u>2,242</u>
Total Deferred Inflows of Resources	\$331,193	\$242,531
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:		
2022	N/A	-\$59,933
2023	-\$83,768	-33,729
2024	7,657	57,434
2025	-46,825	1,856
2026	-66,950	0
2027	0	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68

Section 5: GASB Information

Pension expense – North Florida Transportation Planning Organization

Reporting Date for Employer under GASB 68	September 30, 2022	September 30, 2021
Measurement Date	September 30, 2021	September 30, 2020
Components of Pension Expense		
Service cost	\$48,876	\$49,262
Interest on the Total Pension Liability	271,685	274,126
Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	-9,052	9,291
Current-period benefit changes	4,793	0
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	7,624	3,758
Expensed portion of current-period changes of assumptions or other inputs	19,740	11,140
Member contributions	-35,044	-32,070
Projected earnings on plan investments	-159,374	-164,560
Expensed portion of current-period differences between actual and projected earnings on plan investments	-66,950	1,856
Administrative expense	1,437	1,336
Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	102,226	120,845
Recognition of beginning of year deferred inflows of resources as pension expense	-35,050	-45,637
Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>-128,739</u>	<u>-121,319</u>
Pension Expense	\$22,172	\$108,028

Section 5: GASB Information

Schedule of reconciliation of Net Pension Liability – North Florida Transportation Planning Organization

Reporting Date for Employer under GASB 68	September 30, 2022	September 30, 2021
Measurement Date	September 30, 2021	September 30, 2020
Beginning Net Pension Liability	\$1,706,483	\$1,556,001
Pension expense	22,172	108,028
Employer contributions	-93,000	-89,000
New net deferred inflows/outflows	-185,708	52,117
Change in allocation of prior deferred inflows/outflows	-4,218	5,350
New net deferred inflows/outflows due to change in proportion	-27,153	27,876
Recognition of prior deferred inflows/outflows	-67,176	-75,208
Recognition of prior deferred inflows/outflows due to change in proportion	<u>128,739</u>	<u>121,319</u>
Ending Net Pension Liability	\$1,480,139	\$1,706,483

Section 5: GASB Information

Schedule of Proportionate Share of the Net Pension Liability – North Florida Transportation Planning Organization

Reporting Date for Employer under GASB 68 as of September 30	Proportion of the Net Pension Liability	Proportionate Share of Net Pension Liability	Covered Payroll ¹	Proportionate Share of the Net Pension Liability as a Percentage of Its Covered Payroll	Plan Fiduciary Net Position as a Percentage of the Total Pension Liability
2016	0.2%	\$1,661,445	\$457,459	363.19%	64.03%
2017	0.2%	1,933,384	403,384	479.29%	63.00%
2018	0.2%	1,633,684	425,340	384.09%	66.42%
2019	0.2%	1,778,599	445,920	398.86%	65.23%
2020	0.1%	1,556,001	459,146	338.89%	60.54%
2021	0.1%	1,706,483	476,762	357.93%	59.16%
2022	0.1%	1,480,139	412,557	358.77%	65.16%

¹ Covered payroll as of the measurement date

City of Jacksonville Corrections Officers Retirement Plan

Actuarial Valuation and Review as of October 1, 2021



This report has been prepared at the request of the Board of Trustees to assist in administering the Plan. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Trustees and may only be provided to other parties in its entirety, unless expressly authorized by Segal. The measurements shown in this actuarial valuation may not be applicable for other purposes.

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May 23, 2022

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

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of October 1, 2021. The census information on which our calculations were based was prepared by the Plan and the financial information was provided by the City's Finance Department. That assistance is gratefully acknowledged.

Statement by Enrolled Actuary: This actuarial valuation 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.

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.

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

Sincerely,
Segal

A handwritten signature in black ink that reads "Jeffrey S. Williams".

Jeffrey S. Williams, FCA, ASA, MAAA, EA
Vice President and Consulting Actuary
Enrolled Actuary No. 20-07009

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Section 1: Actuarial Valuation Summary

Purpose and basis

This report was prepared by Segal to present a valuation of the Plan as of October 1, 2021. 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 measurements shown in this actuarial valuation may not be applicable for other purposes. In particular, the measures herein are not necessarily appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the Plan's benefit obligations. 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; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law.

The contribution requirements presented in this report are based on:

- The benefit provisions of the Pension Plan, as administered by the Board;
- The characteristics of covered active participants, inactive vested participants, and retired participants and beneficiaries as of September 30, 2021, provided by the Retirement System Administrative Office;
- The assets of the Plan as of September 30, 2021, 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, 2021 actuarial valuation is for the plan year beginning October 1, 2022.
3. The City's minimum required contribution for fiscal 2023 is \$17,185,973, a decrease of \$406,426 from the City's minimum required contribution for fiscal 2022.
4. Actual contributions made during the fiscal year ending September 30, 2021 were \$15,061,000, 100.11% of the City's minimum required contribution for fiscal 2021. In the prior fiscal year, actual contributions were \$15,058,000, 100.10% of the prior year's minimum required contribution.
5. The funded ratio (the ratio of the actuarial value of assets to actuarial accrued liability) is 50.73%, compared to the prior year funded ratio of 50.02%. 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 56.65%, compared to 48.67% 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.
6. 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 25 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

Section 1: Actuarial Valuation Summary

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.

7. The unfunded actuarial accrued liability (UAAL) is \$248,183,793, which is an increase of \$13,866,991 since the prior valuation.
8. The actuarial gain from investment and other experience is \$3,986,242, or 0.81% of actuarial accrued liability.
 - The actuarial gain from investment experience was \$9,194,068, or 1.87% of actuarial accrued liability.
 - The net experience loss from sources other than investment experience was \$5,207,826, or 1.06% of the actuarial accrued liability. The primary cause of this loss was retirement experience among the active population.
9. The rate of return on the market value of assets was 27.03% for the October 1, 2020 to September 30, 2021 plan year. The return on the actuarial value of assets was 10.75% 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 6.80%.
10. The following change in actuarial assumptions is first reflected with this valuation:
 - The discount rate was lowered from 6.80% to 6.625%.

As a result of this assumption change, the total normal cost increased by \$332,989 (4.47%) and the actuarial accrued liability increased by \$11,440,746 (2.32%). The present value of surtax revenue allocated to CORP increased by \$4,356,487 as a result of the discount rate change. The net impact was an increase in the City's minimum required contribution of \$665,859 (3.96%).

11. The City changed the surtax allocation percentage from the prior valuation to the current valuation. In the 2020 valuation, CORP's allocation percentage was 5.97%; in the 2021 valuation, the allocation percentage has been increased to 6.20%. This change was directed by the City based on its updated calculation of the Corrections Officers 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 \$307,023.
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, 2021 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.

Section 1: Actuarial Valuation Summary

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 2021 surtax revenue was projected to increase by 4.25% each year thereafter through 2060.
 - b. A share of 6.20% 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 6.625% to October 1, 2021.
 - 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, 2021 allocated to CORP is \$120,179,855.
 - e. After the amortized value amount was adjusted for the timing of contributions and projected to October 1, 2022, 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 2022.
14. 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.
15. 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, 2021, is included with this report.
16. 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.
17. This actuarial report as of October 1, 2021 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.
18. It is important to note that this actuarial valuation is based on plan assets as of September 30, 2021. Due to the COVID-19 pandemic, market conditions have changed significantly since the onset of the Public Health Emergency. 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. Moreover, this actuarial valuation does not include any possible short-term or long-term impacts on mortality of the covered population that may emerge after September 30, 2021. While it is impossible to determine how the pandemic will affect market conditions and other demographic experience of the Plan in future valuations, Segal is available to prepare projections of potential outcomes upon request.

Section 1: Actuarial Valuation Summary

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. This could be important because relatively small changes in investment performance can produce large swings in the unfunded liabilities, retired participants account for most of the Plan's liabilities, leaving limited options for reducing costs in the event of adverse experience, and the Board has not had a detailed risk assessment in several years.
20. 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

Section 1: Actuarial Valuation Summary

Summary of key valuation results

		2022	2021	2020
Contributions for fiscal year beginning October 1:	• Florida Chapter 112 determined employer contribution	\$23,748,105	\$22,851,586	\$20,812,130
	• Less amortized value of discounted value of projected surtax revenue	<u>-6,562,132</u>	<u>-5,259,187</u>	<u>-5,767,600</u>
	• City's required minimum contribution*	\$17,185,973	\$17,592,399	\$15,044,530
	• Actual employer contributions	--	--	15,061,000
Actuarial accrued liability for plan year beginning October 1:	• Retired participants and beneficiaries		\$357,574,892	\$313,289,430
	• Inactive vested participants		2,668,348	12,195,841
	• Active participants		143,499,095	143,345,746
	• Total actuarial accrued liability		503,742,335	468,831,017
	• Normal cost including administrative expenses		7,941,651	8,259,028
Assets for plan year beginning October 1:	• Market value of assets (MVA)		\$285,351,000	\$228,172,000
	• Actuarial value of assets (AVA)		255,558,542	234,514,215
	• Actuarial value of assets as a percentage of market value of assets		89.56%	102.78%
Funded status for plan year beginning October 1:	• Unfunded actuarial accrued liability on market value of assets		\$218,391,335	\$240,659,017
	• Funded percentage on MVA basis		56.65%	48.67%
	• Unfunded actuarial accrued liability on actuarial value of assets		\$248,183,793	\$234,316,802
	• Funded percentage on AVA basis		50.73%	50.02%
Key assumptions	• Net investment return		6.625%	6.80%
	• Inflation rate		2.50%	2.50%
	• Payroll growth for amortization purposes		1.25%	1.25%
Demographic data for plan year beginning October 1:	• Number of retired participants and beneficiaries		446	407
	• Number of inactive vested participants		6	17
	• Number of active participants		423	471
	• Covered payroll		\$25,903,031	\$28,268,208
	• Average payroll		61,236	60,017
	• Projected payroll for next fiscal year		\$26,226,819	\$28,621,561

*Pursuant to State Law Chapter 2016-146 and City of Jacksonville Ordinances 2017-257-E and 2017-258-E

Section 1: Actuarial Valuation Summary

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:

Plan of benefits	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 data	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.
Assets	The valuation is based on the market value of assets as of the valuation date, as provided by the City's Finance Department. The Jacksonville Retirement System uses 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 projects the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This projection requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of each participant for each year. In addition, the benefits projected to be paid for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments. The projected benefits are then discounted to a present value, based on the assumed rate of return that is expected to be achieved on the plan's assets. There is a reasonable range for each assumption used in the projection and the results may vary materially based on which assumptions are selected. It is important for any user of an actuarial valuation to understand this concept. Actuarial assumptions are periodically reviewed to ensure that future valuations reflect emerging plan experience. While future changes in actuarial assumptions may have a significant impact on the reported results that does not mean that the previous assumptions were unreasonable.
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.

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 of the Plan's assets and liabilities at a specific date. Accordingly, except where otherwise noted, Segal did not perform an analysis of the potential range of future financial measures. 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.

Actuarial results in this report are not rounded, but that does not imply precision.

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. Segal's valuation is based on our understanding of applicable guidance in these areas and of the Plan's provisions, but they may be subject to alternative interpretations. The System should look to their other advisors for expertise in these areas.

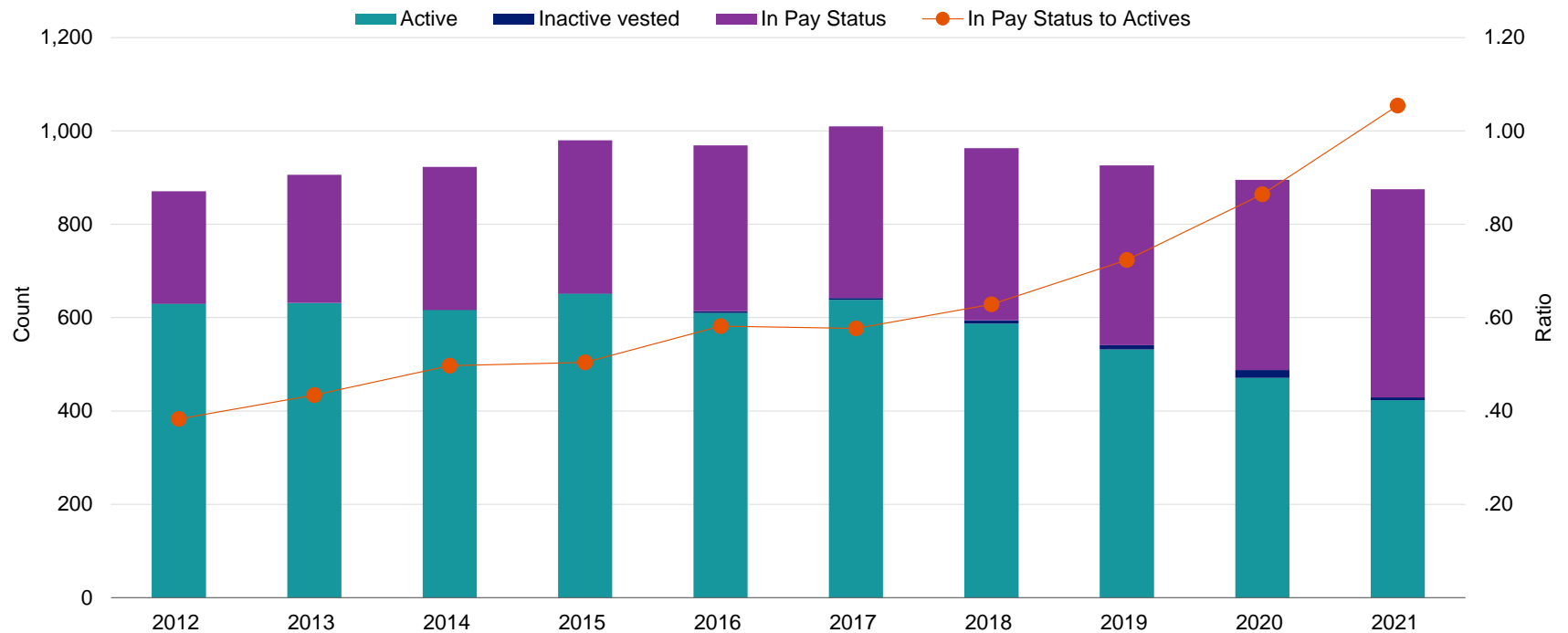
As Segal has no discretionary authority with respect to the management or assets of the Plan, it is not a fiduciary in its capacity as actuaries and consultants with respect to the Plan.

Section 2: Actuarial Valuation Results

Participant data

This section presents a summary of significant statistical data on these participant groups. Since the Plan is closed to new entrants, the ratio of in-pay to active participants will continue to increase.

Participant Population: 2012 – 2021



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
In Pay Status ¹	241	274	306	328	355	368	369	385	407	446
Inactive Vested ²	1	1	1	1	4	4	7	9	17	6
Active	629	631	616	651	610	638	587	532	471	423
Ratio	0.38	0.43	0.50	0.50	0.58	0.58	0.63	0.72	0.86	1.05

¹ Includes DROP participants

² Excludes Inactive participants due a refund of contributions

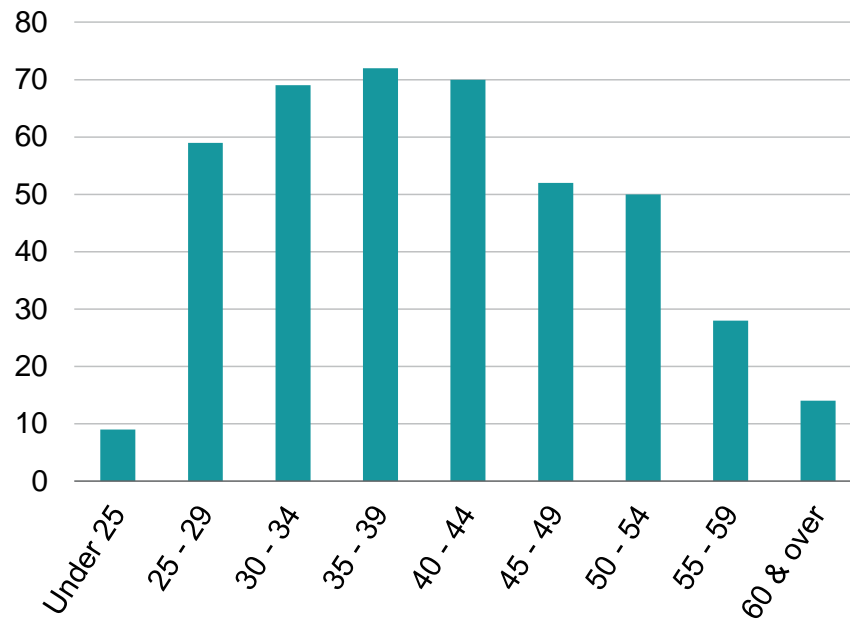
Section 2: Actuarial Valuation Results

Active participants

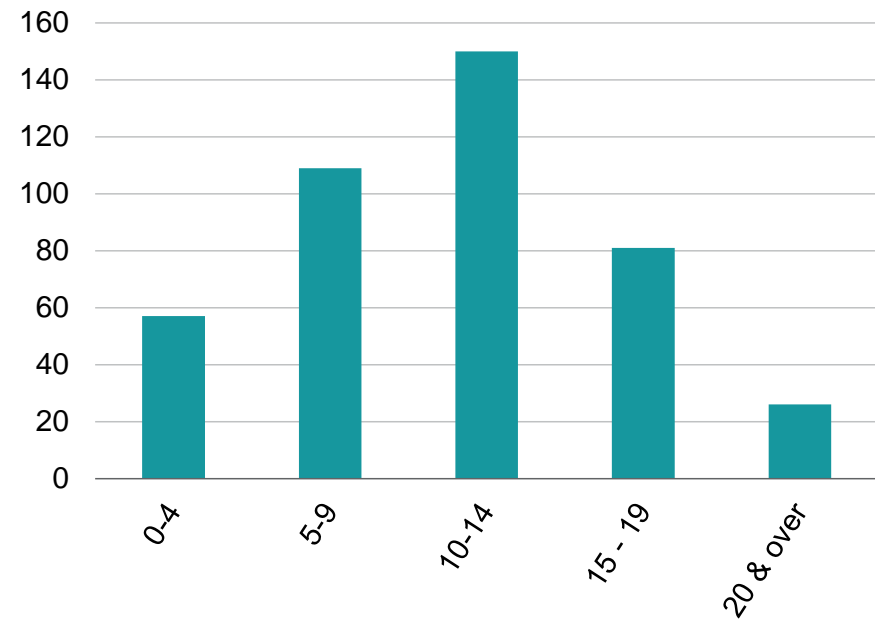
As of September 30,	2021	2020	Change
Active participants	423	471	-10.2%
Average age	40.8	40.0	0.8
Average years of service	11.6	10.9	0.7
Average compensation	\$61,236	\$60,017	2.0%

Distribution of Active Participants as of September 30, 2021

Actives by Age



Actives by Years of Service



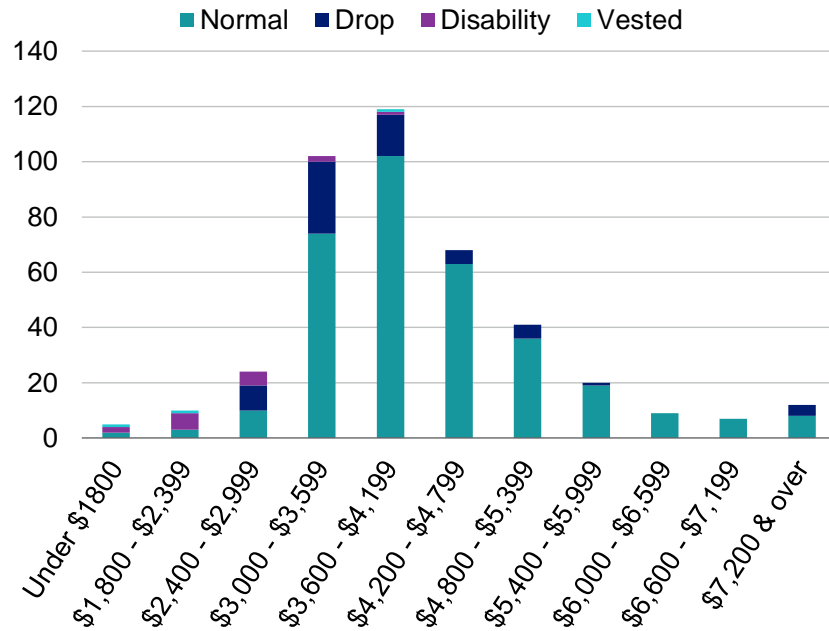
Section 2: Actuarial Valuation Results

Retired participants and beneficiaries

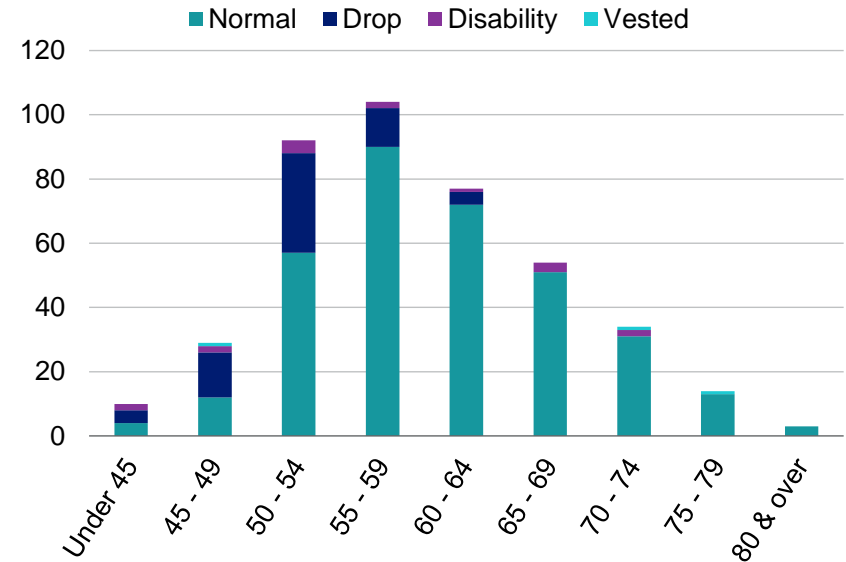
As of September 30,	2021	2020	Change
Retirees	417	385	8.3%
Beneficiaries	29	22	31.8%
Average age	59.4	59.3	0.1
Average regular benefit amount	\$3,970	\$3,881	2.3%
Average supplement amount	117	110	6.4%
Total monthly amount	\$1,822,877	\$1,624,248	12.2%

Distribution of Retired Participants as of September 30, 2021

Retired Participants by Type and Monthly Amount



Retired Participants by Type and Age



Section 2: Actuarial Valuation Results

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, 2021

1	Market value of assets, September 30, 2021				\$285,351,000
2	Calculation of unrecognized return	Original Amount¹	Percent Deferred²	Unrecognized Amount³	
	(a) Year ended September 30, 2021	\$45,760,012	80%	\$36,608,010	
	(b) Year ended September 30, 2020	-5,273,967	60%	-3,164,379	
	(c) Year ended September 30, 2019	-11,656,375	40%	-4,662,550	
	(d) Year ended September 30, 2018	5,056,884	20%	1,011,377	
	(e) Year ended September 30, 2017	14,240,149	0%	0	
	(f) Total unrecognized return				\$29,792,458
3	Preliminary actuarial value: (1) - (2f)				255,558,542
4	Adjustment to be within 30% corridor				0
5	Final actuarial value of assets as of September 30, 2021: (3) + (4)				<u>255,558,542</u>
6	Actuarial value as a percentage of market value: (5) ÷ (1)				89.6%
7	Amount deferred for future recognition: (1) - (5)				\$29,792,458

¹ Total return minus expected return on a market value basis

² Percent deferred applies to the current valuation year

³ Recognition at 20% per year over five years

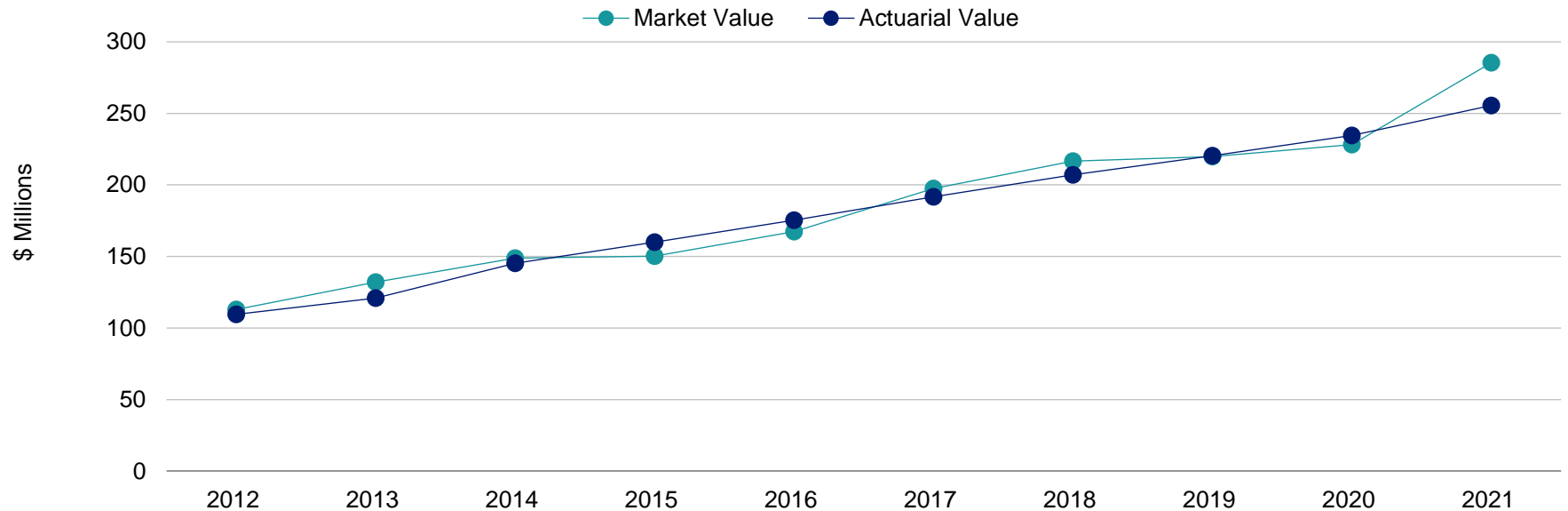
Deferred return as of September 30, 2021 recognized in each of the next four years:

(a) Amount recognized on September 30, 2022	\$6,777,312
(b) Amount recognized on September 30, 2023	5,765,935
(c) Amount recognized on September 30, 2024	8,097,210
(d) Amount recognized on September 30, 2025	9,152,003

Section 2: Actuarial Valuation Results

Both the actuarial value and market value of assets are representations of the Plan's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets. The actuarial asset value is significant because the Plan's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

Market Value of Assets vs. Actuarial Value of Assets



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Market Value ¹	\$113.00	\$132.15	\$148.72	\$150.22	\$167.39	\$197.38	\$216.67	\$219.75	\$228.17	\$285.35
Actuarial Value ¹	109.47	120.95	145.28	159.91	175.33	191.74	207.09	220.33	234.51	255.56

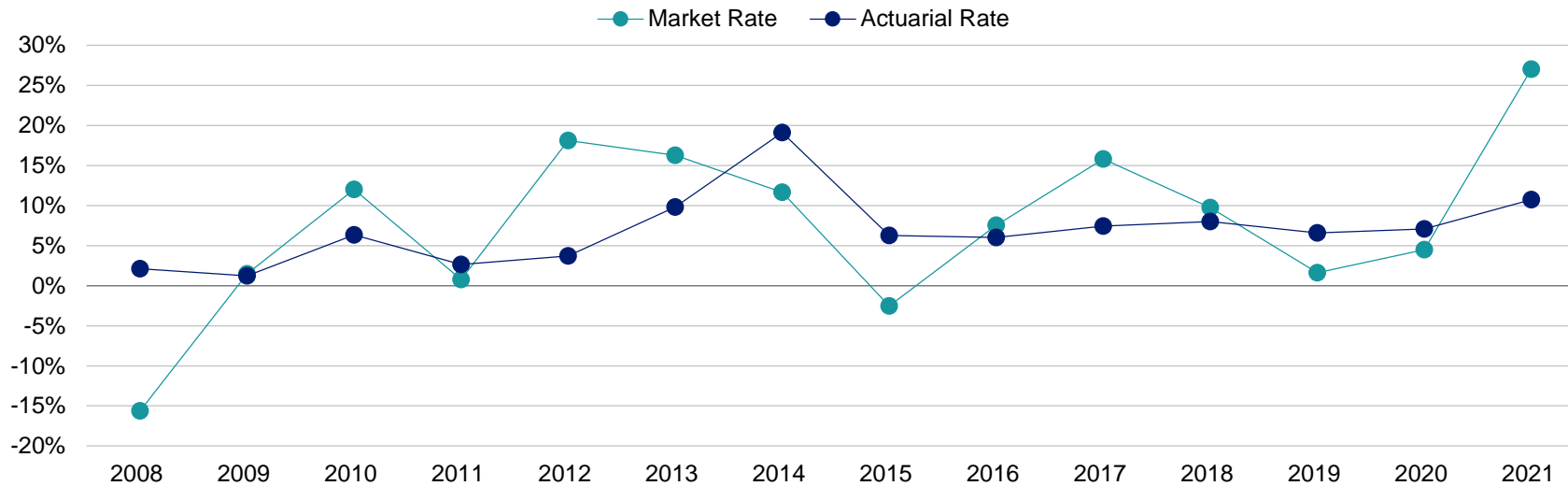
¹In \$ millions

Section 2: Actuarial Valuation Results

Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. The chart below shows the rate of return on an actuarial basis compared to the actual market value investment return for the last 14 years, including averages over select time periods.

As described earlier in this section, the actuarial asset valuation method gradually recognizes fluctuations in the market value rate of return. The goal of this is to stabilize the actuarial rate of return and to produce more level pension plan costs.

Market and Actuarial Rates of Return for Years Ended September 30, 2008 - 2021



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
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%
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%
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%

Average Rates of Return	Actuarial Value	Market Value
Most recent five-year average return:	8.05%	11.72%
Most recent ten-year average return:	8.35%	10.72%

Section 2: Actuarial Valuation Results

Actuarial experience

To calculate any actuarially determined contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), any contribution requirement will decrease from the previous year. On the other hand, any contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience. If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

Actuarial Experience for Year Ended September 30, 2021

1	Net gain from investments ¹	\$9,194,068
2	Net loss from administrative expenses	-1,523
3	Net loss from other experience	<u>-5,206,303</u>
4	Net experience gain: 1 + 2 + 3	\$3,986,242

¹Details on next page

Section 2: Actuarial Valuation Results

Investment experience

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the Plan's investment policy. The rate of return on the market value of assets was 27.03% for the year ended September 30, 2021.

For valuation purposes, the assumed rate of return on the actuarial value of assets is 6.80% for the year ending September 30, 2021. The actual rate of return on an actuarial basis for the 2021 Plan Year was 10.75%. Since the actual return for the year was greater than the assumed return, the Plan experienced an actuarial gain during the year ended September 30, 2021 with regard to its investments.

Investment Experience

	Year Ended September 30, 2021	
	Market Value	Actuarial Value
1 Net investment income	\$61,141,000	\$25,006,327
2 Average value of assets	226,191,000	232,533,215
3 Rate of return: 1 ÷ 2	27.03%	10.75%
4 Assumed rate of return	6.80%	6.80%
5 Expected investment income: 2 x 4	15,380,988	15,812,259
6 Actuarial gain/(loss): 1 - 5	<u>\$45,760,012</u>	<u>\$9,194,068</u>

Section 2: Actuarial Valuation Results

Non-investment experience

Administrative expenses

- Administrative expenses for the year ended September 30, 2021 totaled \$160,000, as compared to the assumption of \$153,000. This resulted in a loss of \$1,523 for the year, after accounting for timing.

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:

- the extent of turnover among participants,
- retirement experience (earlier or later than projected),
- mortality (more or fewer deaths than projected),
- the number of disability retirements (more or fewer than projected), and
- salary increases (greater or smaller than projected).

The net loss from this other experience for the year ended September 30, 2021 amounted to \$5,206,303, which is 1.0% of the actuarial accrued liability. The primary cause of this loss was more retirements than expected among the active population.

Actuarial assumptions

The assumption changes reflected in this report are:

- The discount rate was lowered from 6.90% to 6.80%.
- The change increased the actuarial accrued liability by 2.32% and increased the total normal cost by 4.47%.

Details on actuarial assumptions and methods are in *Section 4, Exhibit I*.

Plan provisions

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

A summary of plan provisions is in *Section 4, Exhibit II*.

Section 2: Actuarial Valuation Results

Development of Unfunded Actuarial Accrued Liability for Year Ended September 30, 2021

1	Unfunded actuarial accrued liability at beginning of year	\$234,316,802
2	Employer normal cost at beginning of year	5,621,508
3	Employer contributions	-15,061,000
4	Interest on 1, 2 & 3	<u>15,224,959</u>
5	Expected unfunded actuarial accrued liability	\$240,102,269
6	Changes due to:	
	(a) (Gain)/loss	-\$3,359,222
	(b) Assumptions	<u>11,440,746</u>
	Total changes	<u>\$8,081,524</u>
7	Unfunded actuarial accrued liability at end of year	<u>\$248,183,793</u>

Section 2: Actuarial Valuation Results

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, 2021 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.

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

	2022		2021	
	Amount	% of Projected Payroll	Amount	% of Projected Payroll
1. Total normal cost	\$7,781,651	29.67%	\$8,106,028	28.32%
2. Administrative expenses	160,000	0.61%	153,000	0.53%
3. Expected employee contributions	<u>-2,432,853</u>	<u>-9.28%</u>	<u>-2,637,520</u>	<u>-9.22%</u>
4. Employer normal cost: (1) + (2) + (3)	\$5,508,798	21.00%	\$5,621,508	19.64%
5. Actuarial accrued liability	\$503,742,335		\$468,831,017	
6. Actuarial value of assets	<u>255,558,542</u>		<u>234,514,215</u>	
7. Unfunded actuarial accrued liability: (5) - (6)	\$248,183,793		\$234,316,802	
8. Payment on unfunded actuarial accrued liability	\$17,148,992	65.39%	\$16,161,758	56.47%
9. Florida Chapter 112 determined employer contribution: (4) + (8) ¹	23,748,105	90.55%	22,851,586	79.84%
10. Amortized value of discounted value of projected surtax revenue ^{1,2}	6,562,132	25.02%	5,259,187	18.37%
11. City's minimum required contribution: (9) - (10) ²	<u>\$17,185,973</u>	65.53%	<u>\$17,592,399</u>	<u>61.47%</u>
12. Projected payroll	\$26,226,819		\$28,621,561	

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

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

Section 2: Actuarial Valuation Results

Reconciliation of City's minimum required contribution

The chart below details the changes in the City's minimum required contribution from the prior valuation to the current year's valuation.

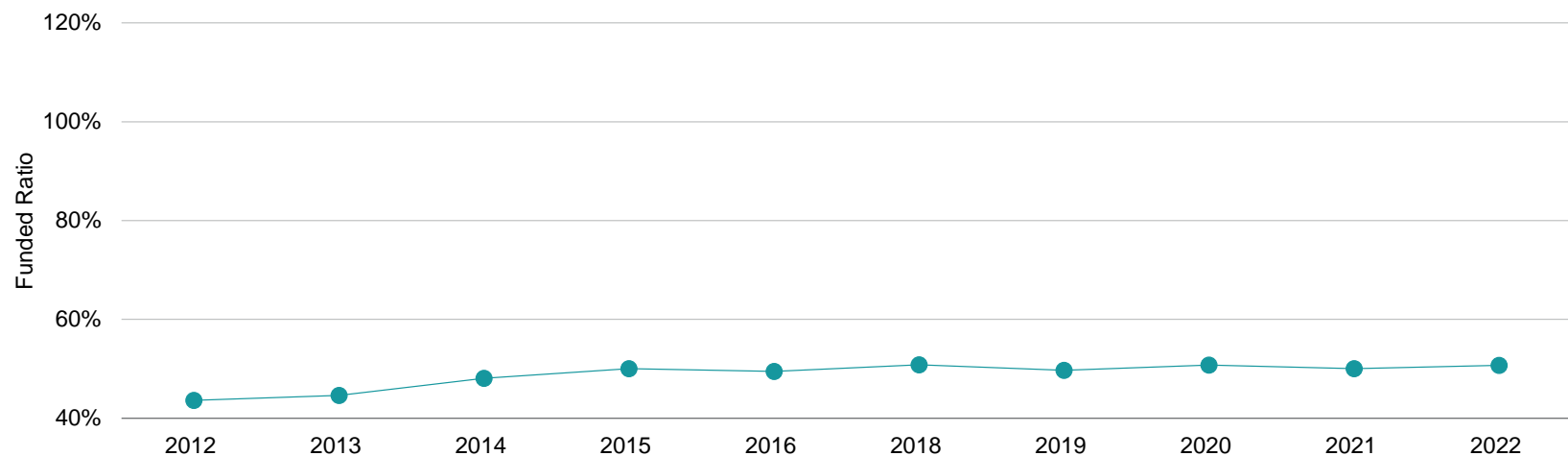
Reconciliation of City's Minimum Required Contribution from October 1, 2021 to October 1, 2022

	Amount
1 City's Minimum Required Contribution as of October 1, 2021	\$17,592,399
2 Effect of expected change in amortization payment due to payroll growth	211,930
3 Effect of change in other actuarial assumptions	879,429
4 Effect of investment (gain)/loss	-668,017
5 Effect of other gains and losses on accrued liability	378,387
6 Net effect of other changes, including composition and number of participants	-1,208,155
7 Total change	<u>-\$406,426</u>
8 City's Minimum Required Contribution as of October 1, 2022	\$17,185,973

Section 2: Actuarial Valuation Results

Schedule of funding progress through September 30, 2021

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll* [(b) - (a)] / (c)
10/01/2012	\$109,473,919	\$251,035,516	\$141,561,597	43.61%	\$28,944,158	489.09%
10/01/2013	120,947,042	271,073,724	150,126,682	44.62%	27,871,010	538.65%
10/01/2014	145,276,644	302,122,370	156,845,726	48.09%	27,373,702	572.98%
10/01/2015	159,914,247	319,655,728	159,741,481	50.03%	28,091,083	568.66%
10/01/2016	175,333,405	354,234,673	178,901,268	49.50%	26,585,054	672.94%
10/01/2017	191,740,583	377,380,082	185,639,499	50.81%	27,548,015	673.88%
10/01/2018	207,089,881	416,673,228	209,583,347	49.70%	28,164,021	744.15%
10/01/2019	220,334,774	434,176,844	213,842,070	50.75%	28,726,006	744.42%
10/01/2020	234,514,215	468,831,017	234,316,802	50.02%	28,268,208	828.91%
10/01/2021	255,558,542	503,742,335	248,183,793	50.73%	25,903,031	958.13%



Section 2: Actuarial Valuation Results

History of employer contributions

A history of the most recent years of contributions is shown below.

History of Employer Contributions: 2014 – 2023

Fiscal Year Ended September 30	City's Minimum Required	Actual Employer Contribution	Percent Contributed
2014	\$14,884,963	\$13,522,000	90.84%
2015	17,618,896	17,832,000	101.21%
2016	18,863,935	18,864,000	100.00%
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	--	--
2023	17,185,973	--	--

Section 2: Actuarial Valuation Results

Risk

Since the actuarial valuation results are dependent on a given set of assumptions and data as of a specific date, there is a risk that emerging results may differ significantly as actual experience differs from the assumptions.

This report does not contain a detailed analysis of the potential range of future measurements but does include a brief discussion of some risks that may affect the Plan. Upon request, a more detailed assessment of the risks can be provided to enable a better understanding of the risks specific to your Plan. This assessment may include scenario testing, sensitivity testing, stress testing and stochastic modeling.

- **Investment Risk** (the risk that returns will be different than expected)

The market value rate of return over the last ten years has ranged from a low of -2.54% 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. It is not yet known what long-term impact the COVID-19 pandemic may have on the Plan's mortality experience.

- **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 25 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 25 years. Under the City's current policy of paying the City's required contribution, over the immediate term, the unfunded liability has an expected growth rate of 2.7% and increases at this level can be expected to continue 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 2.7% per year. By comparison, the surtax revenue is assumed to grow 4.25% per year.

If the surtax revenue for fiscal 2021 had been 1% lower, the City's required contribution would increase by \$85,876 or 0.33% of projected payroll. For comparison purposes, the allocated surtax revenue is 42.1% of the market value of assets and 23.9% of the actuarial accrued liability.

Section 2: Actuarial Valuation Results

- **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.

- **Actual Experience Over the Last Ten years and Implications for the Future**

- 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 \$15,203,738 to a gain of \$14,240,149. Over the past ten years, the Plan's market value performance has, on average, exceeded the expected annual return.
- The funded percentage on the actuarial value of assets has ranged from a low of 43.6% to a high of 50.8% since 2009.

- **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 pay status to active participant ratio of 1.05. For the prior year benefits and expenses paid were \$3,962,000 more than contributions received. As the Plan matures, more cash will be needed from the investment portfolio to meet benefit payments. Since the Plan is closed to new entrants, the amount of employee contributions is expected to continue to decline each year as the number of active participants decrease.

Section 2: Actuarial Valuation Results

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.

GFOA Funded Liability by Type as of September 30

	2021	2020
Actuarial accrued liability (AAL)		
• Active member contributions	\$19,147,162	\$19,159,438
• Retirees and beneficiaries	357,574,892	313,289,430
• Active and inactive members (employer-financed)	<u>127,020,281</u>	<u>136,382,149</u>
Total	\$503,742,335	\$468,831,017
Actuarial value of assets	\$255,558,542	\$234,514,215
Cumulative portion of AAL covered		
• Active member contributions	100.00%	100.00%
• Retirees and beneficiaries	66.12%	68.74%
• Active and inactive members (employer-financed)	0.00%	0.00%

Section 2: Actuarial Valuation Results

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.

Actuarial Balance Sheet

	Year Ended	
	September 30, 2021	September 30, 2020
Liabilities		
• Present value of benefits for retired participants and beneficiaries	\$357,574,892	\$313,289,430
• Present value of benefits for inactive vested participants	2,668,348	12,195,841
• Present value of benefits for active participants	<u>200,954,564</u>	<u>204,012,968</u>
Total liabilities	\$561,197,804	\$529,498,239
Assets		
• Total valuation value of assets	\$255,558,542	\$234,514,215
• Present value of future contributions by members	17,987,210	19,795,330
• Present value of future employer contributions for:		
• Entry age cost	39,468,259	40,871,892
• Unfunded actuarial accrued liability	<u>248,183,793</u>	<u>234,316,802</u>
Total of current and future assets	<u>\$561,197,804</u>	<u>\$529,498,239</u>

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Exhibit A: Table of Plan Demographics

Category	Year Ended September 30		Change From Prior Year
	2021	2020	
Active participants in valuation:			
• Number	423	471	-10.2%
• Average age	40.8	40.0	0.8
• Average years of service	11.6	10.9	0.7
• Covered payroll	\$25,903,031	\$28,268,208	-8.4%
• Average payroll	61,236	60,017	2.0%
• Employee contribution balances	19,147,162	19,159,438	-0.1%
• Total active vested participants	366	382	-4.2%
Inactive vested participants	6	17	-64.7%
Retired participants:			
• Number in pay status	336	311	8.0%
• Average age	60.7	60.4	0.3
• Average monthly benefit ¹	\$4,152	\$4,089	1.5%
Disabled participants:			
• Number in pay status	16	16	0.0%
• Average age	56.3	55.3	1.0
• Average monthly benefit ¹	\$2,343	\$2,275	3.0%
Beneficiaries:			
• Number in pay status	29	22	31.8%
• Average age	64.0	63.6	0.4
• Average monthly benefit ¹	\$2,940	\$2,816	4.4%
DROP participants not yet in pay status:			
• Number	65	58	12.1%
• Average age	51.9	53.0	-1.1
• Average monthly benefit ¹	\$3,891	\$3,614	7.7%

¹Does not include supplemental benefit amounts

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Exhibit B: Participants in Active Service as of September 30, 2021 by Age, Years of Service, and Average Payroll

Age	Total	Years of Service					
		0-4	5-9	10-14	15 - 19	20 - 24	25 - 29
Under 25	9	8	1	--	--	--	--
	\$48,765	\$48,732	\$49,032	--	--	--	--
25 - 29	59	30	29	--	--	--	--
	50,957	49,312	52,660	--	--	--	--
30 - 34	69	8	38	23	--	--	--
	55,170	48,732	52,998	\$60,996	--	--	--
35 - 39	72	4	15	36	17	--	--
	62,681	52,917	55,871	63,147	\$69,999	--	--
40 - 44	70	2	11	26	25	6	--
	64,605	53,862	53,372	62,409	69,651	\$77,272	--
45 - 49	52	2	2	21	14	9	4
	71,140	53,268	51,492	64,691	69,075	89,157	\$90,444
50 - 54	50	2	8	26	11	1	2
	64,199	48,732	52,630	63,976	72,331	65,388	83,514
55 - 59	28	1	2	12	9	3	1
	65,515	48,732	52,800	63,484	67,728	81,012	65,688
60 - 64	11	--	1	5	5	--	--
	63,980	--	51,492	60,456	70,001	--	--
65 - 69	3	--	2	1	--	--	--
	56,076	--	51,570	65,088	--	--	--
Total	423	57	109	150	81	19	7
	\$61,236	\$49,670	\$53,206	\$62,999	\$69,796	\$82,867	\$84,927

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Exhibit C: Reconciliation of Participant Data

	Active Participants	Inactive Vested Participants	DROP Participants	Disableds	Retired Participants	Beneficiaries	Total
Number as of October 1, 2020	471	17	58	16	311	22	895
• New participants	0	N/A	0	N/A	N/A	N/A	0
• Terminations – with vested rights	-3	3	0	0	0	0	0
• Terminations – without vested rights	-15	N/A	0	N/A	N/A	N/A	-15
• Retirements	-6	-13	-13	N/A	32	N/A	0
• New DROP participants	-20	0	20	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	-1	0	0	0	-7	0	-8
• New beneficiaries	0	0	0	0	0	7	7
• Lump sum cash-outs	0	-1	0	0	0	0	-1
• Rehire	0	0	0	N/A	0	N/A	0
• Certain period expired	N/A	N/A	0	0	0	0	0
• Data adjustments	0	0	0	0	0	0	0
• Net transfers (to)/from General and DC	-3	0	0	0	0	0	-3
Number as of October 1, 2021	423	6	65	16	336	29	875

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Exhibit D: Summary Statement of Income and Expenses on a Market Value Basis

	Year Ended September 30, 2021	Year Ended September 30, 2020
Net assets at market value at the beginning of the year	\$228,172,000	\$219,754,000
Contribution income:		
• Employer contributions	\$15,061,000	\$15,058,000
• Employee contributions	3,341,000	3,401,000
• Less administrative expenses	<u>-160,000</u>	<u>-153,000</u>
<i>Net contribution income</i>	<i>\$18,242,000</i>	<i>\$18,306,000</i>
Investment income:		
• Investment, dividends, and other income	\$2,894,000	\$3,833,000
• Realized appreciation	17,430,000	69,000
• Unrealized appreciation	42,434,000	6,487,000
• Less investment fees	<u>-1,617,000</u>	<u>-549,000</u>
<i>Net investment income</i>	<i><u>\$61,141,000</u></i>	<i><u>\$9,840,000</u></i>
Total income available for benefits	\$79,383,000	\$28,146,000
Less benefit payments:		
• Benefit payments	-\$18,166,000	-\$16,350,000
• DROP credits	-2,630,000	-2,590,000
• Refunds	-3,787,000	-3,974,000
• DROP withdrawals	3,756,000	3,461,000
• DROP interest/adjustment	<u>-1,377,000</u>	<u>-275,000</u>
<i>Net benefit payments</i>	<i>-\$22,204,000</i>	<i>-\$19,728,000</i>
Change in market value of assets	\$57,179,000	\$8,418,000
Net assets at market value at the end of the year	\$285,351,000	\$228,172,000

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Exhibit E: Development of the Fund through September 30, 2021

Year Ended September 30	Employer Contributions	Employee Contributions	Other Contributions	Net Investment Return ¹	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
2012	\$9,066,000	\$2,621,000	\$472,000	\$17,166,000	\$55,000	\$9,675,000	\$113,004,000	\$109,473,919	96.9%
2013	10,742,000	2,525,000	392,000	18,466,000	50,000	12,925,000	132,154,000	120,947,042	91.5%
2014	13,522,000	2,253,000	0	15,468,000	65,000	14,611,000	148,721,000	145,276,644	97.7%
2015	17,832,000	2,466,000	0	-3,849,000	73,000	14,874,000	150,223,000	159,914,247	106.5%
2016	18,864,000	2,410,000	0	11,548,000	75,000	15,583,000	167,387,000	175,333,405	104.7%
2017	19,162,000	2,500,000	0	26,747,000	75,000	18,338,000	197,383,000	191,740,583	97.1%
2018	13,973,000	3,151,000	0	19,269,000	128,000	16,981,000	216,667,000	207,089,881	95.6%
2019	14,498,000	3,225,000	0	3,496,000	158,000	17,974,000	219,754,000	220,334,774	100.3%
2020	15,058,000	3,401,000	0	9,840,000	153,000	19,728,000	228,172,000	234,514,215	102.8%
2021	15,061,000	3,341,000	0	61,141,000	160,000	22,204,000	285,351,000	255,558,542	89.6%

¹ On a market basis, net of investment fees and administrative expenses

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Exhibit F: Table of Amortization Bases

Florida Chapter 112 Recommended Contribution Amortization Bases

Type	Date Established	Initial Period	Initial Amount	Annual Payment ¹	Years Remaining	Outstanding Balance
Fresh start	10/01/2016	30	\$178,901,268	\$12,241,687	25	\$176,202,964
Experience loss	10/01/2017	30	-2,816,018	-189,951	26	-2,786,217
Change in assumptions	10/01/2017	30	-283,924	-19,152	26	-280,919
Plan Amendment	10/01/2017	30	9,863,395	665,322	26	9,759,009
Experience loss	10/01/2018	29	5,111,441	344,988	26	5,060,322
Change in Assumptions	10/01/2018	29	19,111,594	1,289,906	26	18,920,456
Experience loss	10/01/2019	28	12,171,775	823,170	26	12,074,340
Change in Assumptions	10/01/2019	28	-7,304,312	-493,987	26	-7,245,841
Experience loss	10/01/2020	27	15,277,628	1,036,646	26	15,205,627
Change in Assumptions	10/01/2020	27	6,108,635	414,495	26	6,079,845
Experience loss	10/01/2021	26	3,753,461	255,893	26	3,753,461
Change in Assumptions	10/01/2021	26	11,440,746	779,975	26	11,440,746
Total				\$17,148,992		\$248,183,793

¹ Level percentage of payroll

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City's Minimum Recommended Contribution Surtax Amortization Bases

Type	Date Established	Initial Period	Initial Amount	Annual Payment ¹	Years Remaining	Outstanding Balance
Discounted surtax revenue applied	10/01/2016	30	-\$64,295,005	-\$4,399,518	25	-\$63,325,266
Surtax offset gain	10/01/2017	30	-1,534,336	-103,496	26	-1,518,096
Allocation change	10/01/2017	30	4,705,811	317,424	26	4,656,009
Discount rate change	10/01/2017	30	-3,286,369	-221,678	26	-3,251,588
Surtax offset gain	10/01/2018	29	-1,420,046	-95,844	26	-1,405,844
Allocation change	10/01/2018	29	-1,349,426	-91,077	26	-1,335,931
Discount rate change	10/01/2018	29	-3,713,867	-250,661	26	-3,676,724
Surtax offset gain	10/01/2019	28	-348,544	-23,572	26	-345,754
Allocation change	10/01/2019	28	-7,142,670	-483,055	26	-7,085,493
Discount rate change	10/01/2019	28	-2,159,598	-146,052	26	-2,142,311
Surtax offset loss	10/01/2020	27	6,298,215	427,358	26	6,268,532
Allocation change	10/01/2020	27	3,119,832	211,693	26	3,105,129
Discount rate change	10/01/2020	27	-2,063,845	-140,040	26	-2,054,118
Surtax offset loss	10/01/2021	26	-9,862,882	-672,404	26	-9,862,882
Allocation change	10/01/2021	26	-4,296,673	-292,927	26	-4,296,673
Discount rate change	10/01/2021	26	-4,356,487	-297,004	26	-4,356,487
Total				-\$6,260,853		-\$90,627,497

¹ 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, 2021 valuation.

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Exhibit G: Definition of Pension Terms

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

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 (APV):	<p>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:</p> <p>Adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.)</p> <p>Multiplied by the probability of the occurrence of an event (such as survival, death, disability, withdrawal, etc.) on which the payment is conditioned, and</p> <p>Discounted according to an assumed rate (or rates) of return to reflect the time value of money.</p>

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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 (AVA):	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 (ADC):	The employer's periodic required 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.

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Assumptions or Actuarial Assumptions:	<p>The estimates upon which the cost of the Plan is calculated, including:</p> <p><u>Investment return</u> - the rate of investment yield that the Plan will earn over the long-term future;</p> <p><u>Mortality rates</u> - the rate or probability of death at a given age for employees and retirees;</p> <p><u>Retirement rates</u> - the rate or probability of retirement at a given age or service;</p> <p><u>Disability rates</u> - the rate or probability of disability retirement at a given age;</p> <p><u>Withdrawal rates</u> - the rate or probability at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement;</p> <p><u>Salary increase rates</u> - the rates of salary increase due to inflation, real wage growth and merit and promotion increases.</p>
Closed Amortization Period:	<p>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.</p>
Decrements:	<p>Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or withdrawal.</p>
Defined Benefit Plan:	<p>A retirement plan in which benefits are defined by a formula based on the member's compensation, age and/or years of service.</p>
Defined Contribution Plan:	<p>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.</p>
Employer Normal Cost:	<p>The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.</p>
Experience Study:	<p>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.</p>
Funded Ratio:	<p>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.</p>
GASB 67 and GASB 68:	<p>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.</p>

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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 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.
Plan Fiduciary Net Position:	Market value of assets.
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.

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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 \$230,000 for 2021. 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.

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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*	\$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%

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 -0.71% 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.

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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	--
2023	2021	90.55%	26,226,819	23,748,105	17,185,973	--

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

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

	Year Ended September 30, 2021		Year Ended September 30, 2020
	New Assumptions	Old Assumptions	
Participant data			
• Active members	423	423	471
• Total annual payroll	\$25,903,031	\$25,903,031	\$28,268,208
• Retired members and beneficiaries	381	381	349
• Total annualized benefit	\$18,749,038	\$18,749,038	\$16,896,738
• Terminated vested members	6	6	17
• Total annualized benefit	\$164,544	\$164,544	\$695,328
• DROP participants	65	65	58
• Total annualized benefit	\$3,125,488	\$3,125,488	\$2,594,481
Actuarial value of assets	\$255,558,542	\$255,558,542	\$234,514,215
Present value of all future expected benefit payments:			
• Active members:			
• Retirement benefits	\$174,421,536	\$167,374,817	\$177,041,071
• Vesting benefits	2,252,665	2,231,895	2,531,158
• Disability benefits	3,885,015	3,759,857	3,976,479
• Death benefits	1,248,186	1,206,425	1,304,822
• Return of contributions	19,147,162	19,147,162	19,159,438
• Total	\$200,954,564	\$193,720,156	\$204,012,968
• Terminated vested members	2,668,348	2,604,363	12,195,841
• Retired members and beneficiaries	296,489,108	290,872,328	264,851,184
• DROP participants	61,085,784	59,662,574	48,438,246
Total	\$561,197,804	\$546,859,421	\$529,498,239

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

	Year Ended September 30, 2021		Year Ended September 30, 2020
	New Assumptions	Old Assumptions	
Unfunded actuarial accrued liability	\$248,183,793	\$236,743,047	\$234,316,802
Actuarial present value of accrued benefits			
Vested accrued benefits			
Active members	\$106,946,992	\$103,551,485	\$101,274,690
Inactive members	2,668,348	2,604,363	12,195,841
Retirees and beneficiaries	296,489,108	290,872,328	264,851,184
DROP participants	61,085,784	59,662,574	48,438,246
Nonvested active members	<u>845,691</u>	<u>764,175</u>	<u>828,822</u>
Total	\$468,035,923	\$457,454,925	\$427,588,783
Pension cost			
Normal cost, including administrative expenses	\$7,941,651	\$7,608,662	\$8,259,028
Expected employee contributions	-2,432,853	-2,432,853	-2,637,520
Level % of payroll payment to amortize unfunded actuarial accrued liability	17,148,992	16,623,747	16,161,758
Discounted and amortized value of allocated surtax revenue	<u>-6,260,853</u>	<u>-6,358,417</u>	<u>-5,013,318</u>
Total minimum annual cost payable monthly at valuation date	\$16,973,801	\$16,619,394	\$17,375,208
Total employer cost projected to budget year	17,185,973	16,827,137	17,592,399
Projected payroll	26,226,819	26,226,819	28,621,561
As % of projected payroll	65.53%	64.16%	61.47%
Present value of active members' future salaries at attained age	\$179,872,098	\$178,470,390	\$197,953,298
Present value of expected future employee contributions	17,987,210	17,847,039	19,795,330

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
	\$427,588,783
Benefits accumulated, net experience gain or loss, changes in data	\$23,749,041
Benefits paid	-22,204,000
Interest	28,321,101
Changes in assumptions	10,580,998
Plan changes	0
Net increase	\$40,447,140
As % of projected payroll	154.22%
Actuarial present value of accumulated benefits as of October 1, 2021	\$468,035,923

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	235	0	0	0
40	21	3	0	1
41	15	2	1	0
42	14	2	0	2
43	10	2	0	0
44	11	1	0	0
45	9	2	0	0
46	10	3	0	0
47	17	8	0	3
48	13	4	0	2
49	15	3	1	0
50	17	2	0	2
51	18	7	1	5
52	9	3	0	2
53	8	2	1	1
54	8	3	0	1
55	10	0	0	0
56	5	0	0	0
57	4	2	1	0
58	5	0	0	0
59	6	1	0	1
60	2	0	0	0
61	2	0	0	0
62	2	0	0	0
63	0	0	0	0
64	3	0	1	0
65 & over	2	0	0	0
Total	471	50	6	20

*Number of active participants from prior valuation

**Number of active participants either eligible to retire as of October 1, 2020 or who became eligible during the plan year ended September 30, 2021.

Section 3: Supplemental Information

Exhibit N: Actuarial Projections through Fiscal 2062

Plan Year Beginning	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio	Fiscal Year Ending	Surtax Contribution	% of Total Contribution	Required City Contribution	% of Total Contribution	Total Contribution
2021	\$503,742,335	\$255,558,542	\$248,183,793	50.73%	2022	\$0	0.00%	\$17,592,399	100.00%	\$17,592,399
2022	521,240,072	277,585,452	243,654,620	53.25%	2023	0	0.00%	17,185,973	100.00%	17,185,973
2023	538,379,636	297,877,105	240,502,531	55.33%	2024	0	0.00%	16,418,382	100.00%	16,418,382
2024	554,588,533	318,938,887	235,649,646	57.51%	2025	0	0.00%	15,633,029	100.00%	15,633,029
2025	570,273,535	339,716,670	230,556,865	59.57%	2026	0	0.00%	14,794,251	100.00%	14,794,251
2026	585,609,707	350,002,860	235,606,847	59.77%	2027	0	0.00%	13,961,664	100.00%	13,961,664
2027	600,205,701	358,593,745	241,611,956	59.75%	2028	0	0.00%	13,879,385	100.00%	13,879,385
2028	613,979,128	366,120,003	247,859,125	59.63%	2029	0	0.00%	13,797,838	100.00%	13,797,838
2029	627,154,568	372,715,292	254,439,276	59.43%	2030	0	0.00%	13,791,512	100.00%	13,791,512
2030	639,369,615	385,965,115	253,404,500	60.37%	2031	7,558,524	35.50%	13,706,307	64.50%	21,264,831
2031	648,789,658	400,152,941	248,636,717	61.68%	2032	10,506,348	44.40%	13,178,613	55.60%	23,684,961
2032	656,223,488	413,028,592	243,194,896	62.94%	2033	10,952,868	45.90%	12,909,731	54.10%	23,862,599
2033	662,105,030	425,228,371	236,876,659	64.22%	2034	11,418,364	47.20%	12,768,145	52.80%	24,186,509
2034	666,366,750	436,894,569	229,472,181	65.56%	2035	11,903,645	48.50%	12,628,761	51.50%	24,532,406
2035	668,951,518	448,063,915	220,887,603	66.98%	2036	12,409,550	49.80%	12,493,057	50.20%	24,902,607
2036	669,474,694	458,538,411	210,936,283	68.49%	2037	12,936,956	51.30%	12,279,511	48.70%	25,216,467
2037	668,151,772	468,486,247	199,665,525	70.12%	2038	13,486,776	52.60%	12,146,179	47.40%	25,632,955
2038	664,265,799	477,554,816	186,710,983	71.89%	2039	14,059,964	54.30%	11,850,262	45.70%	25,910,226
2039	658,590,962	486,252,539	172,338,423	73.83%	2040	14,657,513	55.40%	11,783,810	44.60%	26,441,323
2040	651,467,603	495,179,959	156,287,644	76.01%	2041	15,280,457	56.40%	11,813,603	43.60%	27,094,060
2041	643,124,549	504,743,143	138,381,406	78.48%	2042	15,929,876	57.20%	11,904,461	42.80%	27,834,337
2042	633,706,599	515,266,512	118,440,087	81.31%	2043	16,606,896	58.00%	12,031,384	42.00%	28,638,280
2043	623,339,059	527,050,888	96,288,171	84.55%	2044	17,312,689	58.70%	12,186,056	41.30%	29,498,745
2044	612,120,447	540,381,935	71,738,512	88.28%	2045	18,048,479	59.40%	12,361,395	40.60%	30,409,874
2045	600,129,578	555,542,910	44,586,668	92.57%	2046	18,815,539	60.00%	12,546,872	40.00%	31,362,411
2046	587,437,850	572,815,250	14,622,600	97.51%	2047	19,615,199	60.60%	12,741,003	39.40%	32,356,202
2047	574,110,647	571,365,107	2,745,540	99.52%	2048	0	0.00%	1,727,746	100.00%	1,727,746
2048	560,202,706	558,735,078	1,467,628	99.74%	2049	0	0.00%	318,682	100.00%	318,682
2049	545,773,447	544,204,525	1,568,922	99.71%	2050	0	0.00%	326,649	100.00%	326,649
2050	530,885,569	529,208,540	1,677,029	99.68%	2051	0	0.00%	334,815	100.00%	334,815
2051	515,605,938	513,813,536	1,792,402	99.65%	2052	0	0.00%	343,185	100.00%	343,185
2052	500,003,099	498,087,573	1,915,526	99.62%	2053	0	0.00%	351,765	100.00%	351,765
2053	484,146,301	482,099,384	2,046,917	99.58%	2054	0	0.00%	360,559	100.00%	360,559
2054	468,103,162	465,916,039	2,187,123	99.53%	2055	0	0.00%	369,573	100.00%	369,573
2055	451,944,918	449,608,185	2,336,733	99.48%	2056	0	0.00%	378,812	100.00%	378,812
2056	435,739,267	433,242,892	2,496,375	99.43%	2057	0	0.00%	388,283	100.00%	388,283
2057	419,551,994	416,885,282	2,666,712	99.36%	2058	0	0.00%	397,989	100.00%	397,989
2058	403,447,087	400,598,629	2,848,458	99.29%	2059	0	0.00%	407,939	100.00%	407,939
2059	387,487,333	384,444,963	3,042,370	99.21%	2060	0	0.00%	418,137	100.00%	418,137
2060	371,729,863	368,480,602	3,249,261	99.13%	2061	0	0.00%	428,591	100.00%	428,591
					2062	0	0.00%	439,306	100.00%	439,306
Total:						\$241,499,643	40.5%	\$355,375,614	59.5%	\$596,875,257
Total Present Value at 6.625%:						\$76,890,435	31.4%	\$168,286,738	68.6%	\$245,177,173

Assumptions

Investment Return Assumption	6.625% per year
Actuarial Value of Assets	5-year smoothed market value
Payroll Growth Assumption	1.25% per year
Pension Liability Surtax Proceeds	6.20%, 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.

Section 4: Actuarial Valuation Basis

Exhibit I: Actuarial Assumptions and Actuarial Cost Method

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, 2017.	
Investment Return:	6.80%. 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 (including inflation):	Service	Rate (%)
	0	7.50
	1	6.50
	2	6.00
	3	5.50
	4	5.25
	5	5.00
	6	4.50
	7 - 10	4.00
	11 - 14	3.75
	15+	2.80
Inflation Rate:	2.50%	
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 ten-year average basis. The Fund's long-term payroll growth assumption is equal to the inflation assumption of 2.50%.	

Section 4: Actuarial Valuation Basis

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:

Age	Rate (%) ¹			
	Healthy		Disabled	
	Male	Female	Male	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

¹ Mortality rates shown for base table.

Section 4: Actuarial Valuation Basis

Termination Rates before Retirement:	Rate (%)				
	Age	Mortality ¹		Disability ²	
		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

¹Mortality rates shown for base table
²100% of disabilities are assumed to be non-service incurred.

Retirement Rates:	100% retirement assumed at age 65 with 5 years of service; for ages less than 65, retirement rate assumptions are based on service as follows:	
	Service	Rate (%)
	Under 20	0%
	20	50
	21 – 24	40
	25 – 27	50
	28 & Over	100

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.

Section 4: Actuarial Valuation Basis

Value of Applicable Tax Revenue:	Actual revenue of \$107,207,059 for fiscal 2021 is used as the basis of the City's revenue projection. This amount is prior to application of the allocation percentage.
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:	6.20%. This percentage is determined by the City; last year's percentage was 5.97%.
Administrative Expenses:	Previous year's actual expenses; \$160,000 for October 1, 2021.
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:	<p>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.</p> <p>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.</p>
Justification for Change in Actuarial Assumptions and Methods:	<p>Following ongoing board review of discount rate options:</p> <ul style="list-style-type: none"> ➤ The discount rate was lowered from 6.80% to 6.625%.

Section 4: Actuarial Valuation Basis

Exhibit II: 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:	\$292,919,327	
Normal Retirement:	<i>Age Requirement</i>	Age 65 with five years of Credited Service or any age with 20 years of Credited Service.
	<i>Regular Benefit Amount</i>	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.
	<i>Supplemental Benefit Amount</i>	Monthly benefit of \$5 times years of Credited Service, not less than \$25 per month or more than \$150 per month.
	<i>Minimum Benefit Amount</i>	\$69.31 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1 st .
Early Retirement:	None	
Service-Incurred Disability:	<i>Age Requirement</i>	None
	<i>Service Requirement</i>	None
	<i>Regular Benefit Amount</i>	50% of the average salary earned in the last three years immediately preceding disability retirement.
	<i>Supplemental Benefit Amount</i>	Monthly benefit of \$5 times years of Credited Service, not less than \$25 per month or more than \$150 per month.
<i>Minimum Benefit Amount</i>	\$69.31 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1 st .	

Section 4: Actuarial Valuation Basis

Non-service Incurred Disability:	<i>Age Requirement</i>	None
	<i>Service Requirement</i>	5 years of Credited Service
	<i>Regular Benefit Amount</i>	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%.
	<i>Supplemental Benefit Amount</i>	Monthly benefit of \$5 times years of Credited Service, not less than \$25 per month or more than \$150 per month.
	<i>Minimum Benefit Amount</i>	\$69.31 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1 st .
Vesting:	<i>Age Requirement</i>	None
	<i>Service Requirement</i>	5 years of Credited Service
	<i>Regular Benefit Amount</i>	Accrued Normal Retirement Benefit payable at age 65.
	<i>Supplemental Benefit Amount</i>	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.
	<i>Minimum Benefit Amount</i>	\$69.31 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1 st .
Spouse's Pre-Retirement Death Benefit:	<i>Age Requirement</i>	None
	<i>Service Requirement</i>	None
	<i>Regular Benefit Amount</i>	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.
	<i>Supplemental Benefit Amount</i>	Monthly benefit of \$5 times years of Member's Credited Service, not less than \$25 per month or more than \$150 per month.
	<i>Minimum Benefit Amount</i>	75% of \$69.31 per whole year of Member's Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1 st .
Spouse's Post-Retirement Death Benefit:	<i>Regular Benefit Amount</i>	Surviving spouse is entitled to 75% of the Member's regular benefit.
	<i>Supplemental Benefit Amount</i>	Surviving spouse is entitled to 100% of the Member's supplemental benefit.
	<i>Minimum Benefit Amount</i>	75% of the Member's Minimum Benefit Amount at retirement.

Section 4: Actuarial Valuation Basis

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 Adjustment:	On the December 1 st after the initial benefit commencement date, and on each December 1 st 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.

Section 5: GASB Information

General information about the pension plan

Plan Description

Plan membership. At September 30, 2021, pension plan membership consisted of the following:

Retired members or beneficiaries currently receiving benefits	446
Vested terminated members entitled to but not yet receiving benefits	6
Active members	423
Total	875

Section 5: GASB Information

Net pension liability

Reporting Date for Employer under GASB 68	September 30, 2022	September 30, 2021
Measurement Date	September 30, 2021	September 30, 2020
Components of the Net Pension Liability		
Total Pension Liability	\$515,650,335	\$480,506,017
Plan Fiduciary Net Position	297,259,000	239,847,000
Net Pension Liability	218,391,335	240,659,017
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	57.65%	49.92%

The Net Pension Liability (NPL) for the plan was measured as of September 30, 2021 and 2020. 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 September 30, 2021 and 2020, respectively.

Actuarial assumptions. The TPL as of September 30, 2021 and 2020, that were measured by actuarial valuations as of September 30, 2021 and 2020, respectively, used the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.50%
Salary increases	2.80% - 7.50%, of which 2.50% is the Plan's long-term payroll inflation assumption.
Investment rate of return	6.625%, net of pension plan investment expense, including inflation (previously 6.80%)
Other assumptions	See the October 1, 2021 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, 2012 through September 30, 2017.

Section 5: GASB Information

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 and subtracting expected investment expenses and a risk margin. 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
Domestic equity	30.0%	6.40%
International equity	20.0%	6.80%
Fixed income	20.0%	0.40%
Real estate	15.0%	3.90%
Private equity	7.5%	10.40%
Alternatives	7.5%	2.75%
Total	100.0%	

Discount rate. The discount rates used to measure the Total Pension Liability (TPL) were 6.625% and 6.80% as of September 30, 2021 and September 30, 2020, respectively. 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, 2021 and September 30, 2020.

Section 5: GASB Information

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 Plan as of September 30, 2021, calculated using the discount rate of 6.625%, as well as what the Plan's NPL would be if it were calculated using a discount rate that is 1-percentage-point lower (5.625%) or 1-percentage-point higher (7.625%) than the current rate.

	1% Decrease (5.625%)	Current Discount Rate (6.625%)	1% Increase (7.625%)
Net Pension Liability	\$292,919,327	\$218,391,335	\$158,351,540

Section 5: GASB Information

Schedule of changes in Net Pension Liability – Last two fiscal years

Reporting Date for Employer under GASB 68 Measurement Date	September 30, 2022 September 30, 2021	September 30, 2021 September 30, 2020
Total Pension Liability		
Service cost	\$8,106,028	\$7,675,038
Interest	32,479,217	30,633,266
Change of benefit terms	0	0
Differences between expected and actual experience	5,071,327	9,965,234
Changes of assumptions	11,440,746	6,108,635
Benefit payments, including refunds of member contributions	<u>-21,953,000</u>	<u>-20,323,000</u>
Net change in Total Pension Liability	\$35,144,318	\$34,059,173
Total Pension Liability – beginning	<u>480,506,017</u>	<u>446,446,844</u>
Total Pension Liability – ending	\$515,650,335	\$480,506,017
Plan Fiduciary Net Position		
Contributions – employer	\$15,061,000	\$15,058,000
Contributions – employee	3,341,000	3,401,000
Net investment income	61,123,000	9,840,000
Benefit payments, including refunds of member contributions	-21,953,000	-20,323,000
Administrative expense	-160,000	-153,000
Other	<u>0</u>	<u>0</u>
Net change in Plan Fiduciary Net Position	\$57,412,000	\$7,823,000
Plan Fiduciary Net Position – beginning	<u>239,847,000</u>	<u>232,024,000</u>
Plan Fiduciary Net Position – ending	\$297,259,000	\$239,847,000
Net Pension Liability – ending	\$218,391,335	\$240,659,017
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	57.65%	49.92%
Covered payroll ¹	\$25,903,031	\$28,268,208
Plan Net Pension Liability as percentage of covered payroll	843.11%	851.34%

¹ Pensionable payroll as of the measurement date

Section 5: GASB Information

Notes to Schedule:

Benefit changes: No benefit changes have been reflected in the past two fiscal years.

Assumption changes: As of September 30, 2020 the assumed investment return was lowered from 6.90% to 6.80%.
As of September 30, 2021 the assumed investment return was lowered from 6.80% to 6.625%.

Section 5: GASB Information

Deferred outflows of resources and deferred inflows of resources

Reporting Date for Employer under GASB 68 Measurement Date	September 30, 2022 September 30, 2021	September 30, 2021 September 30, 2020
Deferred Outflows of Resources		
Changes of assumptions or other inputs	18,231,880	14,173,807
Net difference between projected and actual earnings on pension plan investments	0	8,163,987
Difference between expected and actual experience in the Total Pension Liability	<u>17,914,443</u>	<u>20,032,287</u>
Total Deferred Outflows of Resources	\$36,146,323	\$42,370,081
Deferred Inflows of Resources		
Changes of assumptions or other inputs	2,921,724	4,560,158
Net difference between projected and actual earnings on pension plan investments	28,084,658	0
Difference between expected and actual experience in the Total Pension Liability	<u>789,582</u>	<u>1,285,665</u>
Total Deferred Inflows of Resources	\$31,795,964	\$5,845,823
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:		
2022	N/A	\$9,431,891
2023	\$6,304,443	11,989,945
2024	4,982,132	10,667,634
2025	-1,250,714	4,434,788
2026	-5,685,502	0
2027	0	0
Thereafter	0	0

Section 5: GASB Information

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)	2021	2022	2023	2024	2025	2026	2027	Thereafter
2015	5,963,454	7.00	\$851,922	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2016	1,699,155	7.00	242,736	242,736	0	0	0	0	0	0
2017	-1,418,089	7.00	-202,584	-202,584	-202,584	0	0	0	0	0
2018	-2,054,491	7.00	-293,499	-293,499	-293,499	-293,499	0	0	0	0
2019	17,044,608	6.00	2,840,768	2,840,768	2,840,768	2,840,768	0	0	0	0
2020	5,491,767	5.00	1,098,353	1,098,353	1,098,353	1,098,353	0	0	0	0
2021	9,965,234	5.00	1,993,046	1,993,047	1,993,047	1,993,047	1,993,047	0	0	0
2022	5,071,327	5.00	N/A	<u>1,014,267</u>	<u>1,014,265</u>	<u>1,014,265</u>	<u>1,014,265</u>	<u>1,014,265</u>	<u>0</u>	<u>0</u>
Net increase (decrease) in pension expense			N/A	\$6,693,088	\$6,450,350	\$6,652,934	\$3,007,312	\$1,014,265	\$0	\$0

Section 5: GASB Information

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)	2021	2022	2023	2024	2025	2026	2027	Thereafter
2015	10,764,915	7.00	\$1,537,845	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2016	-1,243,005	7.00	-177,572	-177,572	0	0	0	0	0	0
2017	16,320,426	7.00	2,331,489	2,331,489	2,331,489	0	0	0	0	0
2018	9,950,689	7.00	1,421,527	1,421,527	1,421,527	1,421,527	0	0	0	0
2019	718,682	6.00	119,780	119,780	119,780	119,780	0	0	0	0
2020	-7,304,312	5.00	-1,460,862	-1,460,862	-1,460,862	-1,460,862	0	0	0	0
2021	6,108,635	5.00	1,221,727	1,221,727	1,221,727	1,221,727	1,221,727	0	0	0
2022	11,440,746	5.00	N/A	<u>2,288,150</u>	<u>2,288,149</u>	<u>2,288,149</u>	<u>2,288,149</u>	<u>2,288,149</u>	<u>0</u>	<u>0</u>
Net increase (decrease) in pension expense			N/A	\$5,744,239	\$5,921,810	\$3,590,321	\$3,509,876	\$2,288,149	\$0	\$0

The average of the expected remaining service lives of all employees that are provided with pensions through the Plan's (active and inactive employees) determined as of September 30, 2021 is five years.

Section 5: GASB Information

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)	2021	2022	2023	2024	2025	2026	2027	Thereafter
2017	1,106,188	5.00	\$221,238	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2018	-13,116,089	5.00	-2,623,218	-2,623,218	0	0	0	0	0	0
2019	-4,032,972	5.00	-806,594	-806,594	-806,594	0	0	0	0	0
2020	12,533,895	5.00	2,506,779	2,506,779	2,506,779	2,506,779	0	0	0	0
2021	6,100,070	5.00	1,220,014	1,220,014	1,220,014	1,220,014	1,220,014	0	0	0
2022	-44,939,578	5.00	N/A	<u>-8,987,914</u>	<u>-8,987,916</u>	<u>-8,987,916</u>	<u>-8,987,916</u>	<u>-8,987,916</u>	<u>0</u>	<u>0</u>
Net increase (decrease) in pension expense			N/A	-\$8,690,933	-\$6,067,717	-\$5,261,123	-\$7,767,902	-\$8,987,916	\$0	\$0

Section 5: GASB Information

Total Increase (Decrease) in Pension Expense

Reporting Date for Employer under GASB 68 Year Ended September 30	Total Increase (Decrease) in Pension Expense	Recognition Period (Years)	2021	2022	2023	2024	2025	2026	2027	Thereafter
2015	12,698,323		\$2,389,767	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2016	16,840,875		65,164	65,164	0	0	0	0	0	0
2017	16,008,525		2,350,143	2,128,905	2,128,905	0	0	0	0	0
2018	-5,219,891		-1,495,190	-1,495,190	1,128,028	1,128,028	0	0	0	0
2019	13,730,318		2,153,954	2,153,954	2,153,954	2,960,548	0	0	0	0
2020	10,721,350		2,144,270	2,144,270	2,144,270	2,144,270	0	0	0	0
2021	22,173,939		4,434,787	4,434,788	4,434,788	4,434,788	4,434,788	0	0	0
2022	-28,427,505		N/A	<u>-5,685,497</u>	<u>-5,685,502</u>	<u>-5,685,502</u>	<u>-5,685,502</u>	<u>-5,685,502</u>	<u>0</u>	<u>0</u>
Net increase (decrease) in pension expense			N/A	\$3,746,394	\$6,304,443	\$4,982,132	-\$1,250,714	-\$5,685,502	\$0	\$0

Section 5: GASB Information

Pension expense

Reporting Date for Employer under GASB 68 Measurement Date	September 30, 2022 September 30, 2021	September 30, 2021 September 30, 2020
Components of Pension Expense		
Service cost	\$8,106,028	\$7,675,038
Interest on the Total Pension Liability	32,479,217	30,633,266
Current-period benefit changes	0	0
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	1,014,267	1,993,046
Expensed portion of current-period changes of assumptions or other inputs	2,288,150	1,221,727
Member contributions	-3,341,000	-3,401,000
Projected earnings on plan investments	-16,183,422	-15,940,070
Expensed portion of current-period differences between actual and projected earnings on plan investments	-8,987,914	1,220,014
Administrative expense	160,000	153,000
Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	14,996,220	13,172,437
Recognition of beginning of year deferred inflows of resources as pension expense	<u>-5,564,329</u>	<u>-5,564,329</u>
Pension Expense	\$24,967,217	\$31,163,129

Section 5: GASB Information

Schedule of reconciliation of Net Pension Liability

Reporting Date for Employer under GASB 68	September 30, 2022	September 30, 2021
Measurement Date	September 30, 2021	September 30, 2020
Beginning Net Pension Liability	\$240,659,017	\$214,422,844
Pension expense	24,967,217	31,163,129
Employer contributions	-15,061,000	-15,058,000
New net deferred inflows/outflows	-22,742,008	17,739,152
Recognition of prior deferred inflows/outflows	<u>-9,431,891</u>	<u>-7,608,108</u>
Ending Net Pension Liability	\$218,391,335	\$240,659,017

Section 5: GASB Information

Schedule of contributions – Last ten fiscal years

Year Ended September 30	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency / (Excess)	Covered Payroll ¹	Contributions as a Percentage of Covered Payroll ²
2012	\$11,860,912	\$9,066,000	\$2,794,912	\$28,944,158	31.32%
2013	12,884,770	10,742,000	2,142,770	27,871,010	38.54%
2014	14,884,963	13,522,000	1,362,963	27,373,702	49.40%
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%

See accompanying notes to this schedule on next page.

¹ Pensionable payroll as of the measurement date.

² 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.

Section 5: GASB Information

Notes to Schedule:

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 ¹
Remaining amortization period	As of October 1, 2019 the effective amortization period is 27 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.
Actuarial assumptions:	
Investment rate of return	6.90%, 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 assumptions	Same as those used in the October 1, 2019 funding actuarial valuation.

¹ The Fund’s payroll inflation assumption was 2.50% as of October 1, 2019. 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%

1 Introduced by the Council Member White:
2
3

4 **ORDINANCE 2022-412**

5 AN ORDINANCE REGARDING MAXIMUM HOURS WORKED BY
6 PART TIME AND/OR TEMPORARY EMPLOYEES WORKING
7 DURING AN ELECTION CYCLE OF THE SUPERVISOR OF
8 ELECTIONS; AMENDING CHAPTER 116 (EMPLOYEES AND
9 EMPLOYEE BENEFITS), PART 15 (FULL TIME AND
10 TEMPORARY EMPLOYMENT), SECTION 116.1502
11 (LIMITATIONS ON EMPLOYMENT AND USE OF
12 "TEMPORARY" EMPLOYEES), *ORDINANCE CODE*, AND
13 CHAPTER 120 (GENERAL EMPLOYEES AND CORRECTIONS
14 OFFICE PENSION PLANS AND ALL EMPLOYEES DEFINED
15 CONTRIBUTION RETIREMENT PLANS), PART II (THE
16 GENERAL EMPLOYEES RETIREMENT PLAN), SECTION
17 120.209 (VESTING, TERMINATION, RE-EMPLOYMENT),
18 *ORDINANCE CODE*, TO ALLOW ADDITIONAL HOURS TO BE
19 WORKED BY TEMPORARY AND/OR PART TIME EMPLOYEES
20 OF THE SUPERVISOR OF ELECTIONS DURING ELECTION
21 CYCLES; REQUESTING ONE CYCLE EMERGENCY PASSAGE;
22 PROVIDING AN EFFECTIVE DATE.
23

24 **BE IT ORDAINED** by the Council of the City of Jacksonville:

25 **Section 1. Amending Chapter 116 (Employees and Employee**
26 **Benefits), Part 15 (Full Time and Temporary Employment), Section**
27 **116.1502 (Limitations on Employment and Use of "Temporary"**
28 **Employees), Ordinance Code.** Chapter 116 (Employees and Employee
29 Benefits), Part 15 (Full Time and Temporary Employment), Section
30 116.1502 (Limitations on Employment and Use of "Temporary"
31 Employees), *Ordinance Code*, is hereby amended to read as follows:

1 **CHAPTER 116 - EMPLOYEES AND EMPLOYEE BENEFITS**

2 *** * ***

3 **PART 15. - FULL TIME AND TEMPORARY EMPLOYMENT**

4 *** * ***

5 **Sec. 116.1502. - Limitations on Employment and Use of "Temporary"**
6 **Employees.**

7 Effective October 1, 2005, unless exempted ~~by subsection (d)~~
8 below, no employee shall be hired in a temporary status except under
9 one of the circumstances described below:

10 (a) Temporary Full-time Status: An employee may be hired to
11 work 40 hours per week for a maximum of six months. Such
12 employees will be automatically terminated from service at
13 the conclusion of six months full-time employment. For
14 those temporary employees hired prior to enactment of this
15 ordinance, the six months will commence as of October 1,
16 2005. Any temporary full-time employee who knowingly and
17 voluntarily requests, in writing, to remain on Temporary
18 Full-time Status after six months, may do so with
19 concurrence of the Department, upon completion of a form
20 created for City-wide use by the Employee Services
21 Department, backed up by supporting documentation, which
22 demonstrates that the employee has acted on his or her own
23 initiative, voluntarily, without coercion, and that there
24 exists a tangible economic benefit to the employee by
25 remaining on temporary status.

26 (b) Regular Part-time Status: An employee may be hired to work
27 up to 50 hours per pay period (an average of 25 hours per
28 week) for an indefinite period.

29 (c) Seasonal Status: An employee may be hired on a full-time
30 or part-time basis for a limited time not to exceed six-
31 months, for seasonal work limited to certain periods of

1 the year.

2 (d) Exemption: ~~Any temporary employee who knowingly and~~
3 ~~voluntarily requests, in writing, to remain on Temporary~~
4 ~~Full-time Status after six months, may do so with~~
5 ~~concurrence of the Department, upon completion of a form~~
6 ~~created for City-wide use by City Human Resources, backed~~
7 ~~up by supporting documentation, which demonstrates that~~
8 ~~the employee has acted on his or her own initiative,~~
9 ~~voluntarily, without coercion, and that there exists a~~
10 ~~tangible economic benefit to the employee by remaining on~~
11 ~~temporary status. Nor shall t~~ The provisions of this Part
12 Section, including the hours per week cap identified in
13 Section 116.1502 (a) and (b), shall not apply to:

14 (i) Any temporary full-time employee who is a retired
15 pensioner of the City authorized by Chapters 120 or
16 121 to continue to receive pension payments upon
17 reemployment by the City; ~~or~~

18 (ii) Civilian bailiffs in the Office of the Sheriff;

19 (iii) Any employees of Cecil Aquatic Center or any future
20 indoor aquatic center created by the City; ~~or~~

21 (iv) Any full or part-time students working for the Clerk
22 of Court; or

23 (v) Any temporary and/or part time employee working for
24 the Supervisor of Elections, for work performed
25 during the period beginning eight weeks before and
26 ending two weeks after an election conducted by the
27 Supervisor of Elections.

28 **Section 2. Amending Chapter 120 (General Employees and**
29 **Corrections Office Pension Plans and All Employees Defined**
30 **Contribution Retirement Plans), Part II (The General Employees**
31 **Retirement Plan), Section 120.209 (Vesting, Termination, Re-**

1 **Employment), Ordinance Code.** Chapter 120 (General Employees and
2 Corrections Office Pension Plans and All Employees Defined
3 Contribution Retirement Plans), Part II (The General Employees
4 Retirement Plan), Section 120.209 (Vesting, Termination, Re-
5 Employment), *Ordinance Code*, is hereby amended as follows:

6 **CHAPTER 120 - GENERAL EMPLOYEES AND CORRECTIONS OFFICE PENSION**
7 **PLANS AND ALL EMPLOYEES DEFINED CONTRIBUTION RETIREMENT PLANS**

8 * * *

9 **PART II. - THE GENERAL EMPLOYEES RETIREMENT PLAN**

10 * * *

11 **Sec. 120.209. - Vesting, Termination, Re-Employment.**

12 * * *

13 (c) If a retiree or separated vested member re-enters City
14 service in a position covered by this Plan, benefit
15 payments shall cease and the retiree or separated vested
16 member shall again become an active member of the Plan.
17 Upon subsequent retirement, the new pension benefit shall
18 be computed in accordance with the provisions of Section
19 120.206, but based on a final monthly compensation computed
20 as if there were no gap in time between the original
21 retirement date and the reemployment date, provided that
22 the period of re-employment exceeds one year. This Section
23 shall not apply to retired members re-hired as poll
24 workers, part-time workers or temporary workers.

25 (d) Notwithstanding the provisions of subparagraph (c) ~~to~~
26 ~~Section 120.209, Ordinance Code~~ above, or any other City
27 ordinance to the contrary, any time service retiree of the
28 City of Jacksonville General Employees Retirement Plan,
29 who otherwise qualifies, may be re-employed by the City on
30 a regular part-time or temporary full-time basis (as
31 provided in Section 116.1502, Ordinance Code) without the

1 cessation of retirement benefits payable to such retiree
2 pursuant to Chapter 120, Ordinance Code, because of, and
3 during, such re-employment. ~~For purposes of this~~
4 ~~subparagraph (d), the term "part-time" shall mean a~~
5 ~~position routinely requiring fewer than 25 hours of work~~
6 ~~per week (50 hours per pay period) on a regular and~~
7 ~~recurring basis, and the term "temporary" shall mean a~~
8 ~~full-time temporary position required for less than six~~
9 ~~months on a special assignment or to replace an employee~~
10 ~~on leave.~~ In no event shall any time service retiree of
11 the City of Jacksonville General Employees Retirement Plan
12 acquire time service credit or any other benefit under
13 Chapter 120, Ordinance Code, during, or in connection with,
14 such re-employment, nor shall any amendment to the Plan
15 not otherwise applicable to retired members apply to any
16 re-employed retired member.

17 * * *

18 **Section 2. Requesting One Cycle Emergency Passage Pursuant to**
19 **Council Rule 4.901 Emergency.** One cycle emergency passage of this
20 legislation is requested. The nature of the emergency is that there
21 is a primary election scheduled for August 23, 2022; however, the
22 Supervisor of Elections' employees affected by this legislation are
23 required to certify petitions, qualify candidates, plan for and train
24 poll workers, and prepare early voting and polling locations months
25 in advance of the August 2022 primary election.

26 **Section 3. Effective Date.** This Ordinance shall become
27 effective upon signature by the Mayor or upon becoming effective
28 without the Mayor's signature.

1 Form Approved:

2

3 /s/ Ariel P. Cook

4 Office of General Counsel

5 Legislation prepared by: Ariel P. Cook

6 GC-#1499703-v2-SOE_Draft_Legislation_re_Code_Change.DOCX

May 2022

Non-Core Real Estate Recommendation: Abacus Capital Group Multi-Family Partners Fund VI

City of Jacksonville Employees' Retirement System



Non-Core Real Estate Recommendation Summary

- In 2019, the Board approved new asset allocation targets to several private market asset classes, including a **5% target to Non-Core Real Estate**.
- In order to achieve the target allocation by 2026, our recent pacing analysis suggests the City should target **approximately \$40 million in annual commitments** to the asset class, **across one to two investment options a year over the next several years**.
- The purpose of the presentation today is to bring forward RVK's first 2022 non-core real estate fund recommendation to the City, **Abacus Multi-Family Partners Fund VI**, a multi-family value add real estate fund and an RVK top idea in the space. Specifically, RVK recommends the City commit **\$20M to Abacus Multi-Family Partners Fund VI**.
- A commitment of \$20M to Abacus Multi-Family Partners Fund VI will leave approximately \$20M remaining of the City's 2022 target commitment goal, with RVK and Staff planning to bring forth an additional opportunity for the Board's consideration later this year to round out the 2022 commitment schedule.
- Details on Abacus Capital Group, the organization, its real estate team, and this specific fund (Fund VI), can be found on subsequent slides.

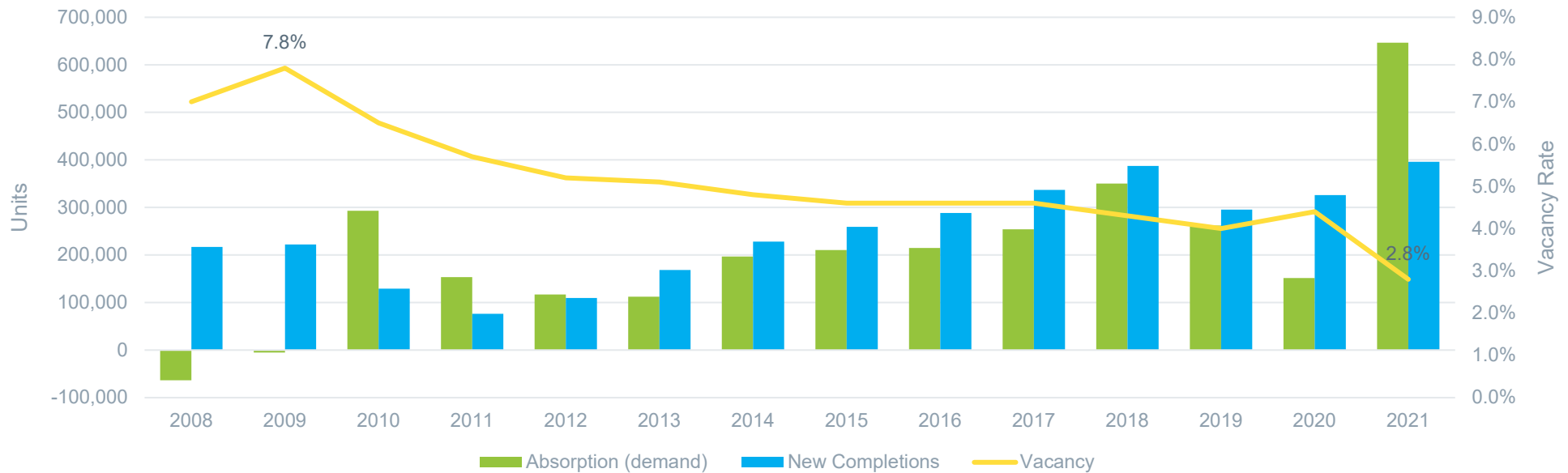
Abacus Multi-Family Partners Fund VI

Key Question & Answers

- **What's the Role of Abacus Multi-Family Partners Fund VI?:** Serves as an attractive, complementary investment for the City's Non-Core Real Estate program. It helps to address the Plan's non-core underweight to multifamily, a sector with favorable economic and demographic tailwinds, via a dedicated multifamily fund. This strategy will seek to benefit from strong rental demand dynamics driven by population and job growth, robust rental household formation, housing starts below long-term averages, and homeownership rates challenged by low homeowner vacancy.
- **Why Abacus Multi-Family Partners Fund VI?:** Multifamily is a sector RVK views favorably and is seeking to increase the Plan's allocation to. Further, the strategy is managed by a seasoned investment team with a long and proven track record of success investing through market cycles. The Abacus platform, to date, has exhibited strong performance, with many of the funds achieving top-quartile status within the broader value add peer group. We believe this success is due to the Firm's investment process, strong senior leadership team, direct investor model, strong sourcing abilities, and non-vertical integration model.
- **How does the City Benefit?:** An investment in Abacus Multi-Family Partners Fund VI will contribute towards the City's build-out of its Non-Core Real Estate allocation and help better align the Plan with its long-term policy targets. Our goal with non-core real estate, in general, is to offer the Plan the ability to generate attractive long-term risk-adjusted returns, with low correlations to traditional asset classes.
- **What is the Expected Time Horizon?:** We expect the life of the Fund to run approximately 8 years, with the possibility for two one-year extensions. Abacus will begin to call committed capital from investors following its final close in 2022 and continue to call and invest capital over the course of the following 3 years. After which a period of asset "harvesting" will follow over the subsequent 4 to 5 years, where the Abacus team will focus on maximizing asset value, exiting its investments, and realizing profits, which will be returned to investors over time.
- **How Will Capital Calls be Funded?:** Capital calls will be sourced via current overweight investments in equities, which are highly liquid. RVK and Staff will use existing targets to guide the rebalancing process over time.

Multi-Family Opportunity Set

Multifamily: Supply, Demand, & Vacancy



Source: Whitten Advisors

Supply

- **Supply and demand imbalance:** New supply has remained in check with absorption, resulting in record-low vacancies nationally and higher-than-average rental rate increases for many markets.
- **Drop in new construction:** Nationally, new construction starts dipped in 2020 relative to 2019 with developers putting projects on hold due to COVID-19 and pandemic restrictions.
- **New supply concentration:** During the recovery from the GFC, most new multifamily development has been concentrated in class-A products in urban markets. However, prime suburban infill markets have seen a limited new supply relative to these markets.

Demand

- **Lifestyle preferences and financial constraints:** The 20 to 34-year-old age cohort has historically been the largest contributor to multifamily demand given higher relative propensities to rent. Due to lifestyle preferences and financial constraints, it is expected that a greater proportion of Millennials will remain renters.
- **Homeownership trends:** Homeownership has been on a downward trend across all age groups since the GFC, creating additional rental housing demand.
- **Increased headship formation:** As the pandemic unwinds, headship formation (defined by the number of households divided by population) has increased. This trend should benefit rental housing demand.

Abacus Multi-Family Partners VI:

Snapshot

Target Size	\$1.25 billion	Fund Sponsor	Abacus Capital Group LLC
Final Close	3Q 2022	Structure	Closed-End Limited Partnership
Term	8 Years	Investment Style	Value Add Real Estate

- **Firm:** Abacus is a non-vertically integrated real estate investment management company that focuses exclusively on US multifamily investments. They are headquartered in New York City with regional investment offices in Los Angeles, Denver, Dallas, and Miami. Since the Firm's formation in 2004, it has invested \$1.7 billion of equity across 114 transactions to acquire approximately \$4.8 billion of assets totaling over 31,000 apartment units.
- **Investment Strategy:** The Fund will focus on select markets in the US to acquire, redevelop, develop, reposition, manage, and dispose of multifamily properties. The Fund will seek to achieve a minimum investment-level IRR of 14-16% and a stabilized yield of 6%-8% on investments over a five-year underwritten investment hold period.
- **Value-Add Approach:** The Fund will seek to achieve favorable stabilized yields through value-add business plans. Abacus will seek to actively manage assets for revenue growth and operational efficiencies to maximize cash flow. Value creation tactics include physical property improvements, operational improvements, and development opportunities. Compared to many peers, Abacus has a differentiated value creation process that they have been successfully implementing and refining over the years. Abacus is highly selective where they spend capital expenditures, with an eye toward achieving the greatest return on cost.
- **Leverage:** Limited to 70%.
- **Development:** Limited to 30%.

Fund	Vintage	Size (\$M)	Multiple (Net)	Multiple Quartile Rank	IRR (Net)	IRR Quartile Rank
Fund I	2007	105	1.4x	2	6%	2
Fund II	2011	150	1.7x	2	23%	2
Fund III	2015	324	1.6x	2	26%	1
Fund IV	2017	457	1.7x	1	31%	1
Fund V	2020	795	1.2x	1	132%	--

Abacus Multi-Family Partners Fund VI

Strengths and Merits

Compelling Strategy

- Abacus has a unique and well-positioned strategy within their physical improvement strategy.
- Abacus has been playing into the current multifamily environment by taking on limited capital improvements and focusing these improvements firstly on areas that impact the greatest level of tenants, such as common areas and amenities. Upon completing these improvements, Abacus looks to potentially dispose of an asset before their initial 5-year business plan.
- This dynamic has resulted in Abacus realizing investments well before their 5-year target hold because buyers in the current environment are paying up for “proof-of concept,” where capital improvement work is still to be done on an asset in exchange for rent premiums.

Strong Track Record

- The platform has exhibited strong performance, with many of the funds achieving top-quartile status within the broader value add peer group.
- Fund I, a 2007 vintage, was fully invested pre-GFC and managed to produce a 1.4x net multiple during a period where many real estate investments lost value.

Non-Vertically Integrated Model

- This model and process provide additional flexibility, lower overall fee load, and increased nimbleness to capitalize on market conditions and trends.
- Like a vertically integrated operator, Abacus authors its property-level business plans and controls the day-to-day execution of those business plans. Like an allocator, Abacus remains market-agnostic and bypasses the challenges of maintaining subsidiary company infrastructure. This hybrid structure focuses Abacus on the best investment opportunities in markets that exhibit the most attractive underlying fundamentals.

Experienced Senior Leadership Team

- The Abacus senior team has vast industry experience. Additionally, the majority of them have worked together for a substantial period.
- The team has experience investing through all phases of the real estate cycle.

Abacus Multi-Family Partners Fund VI

Issues to Consider

Increase in Fund Size

- Fund VI has a target raise of \$1.25 billion, with a hard cap of \$1.45 billion, which we expect Abacus will achieve.
- While this is an increase in fund size relative to the prior vintage, Abacus has invested in their acquisitions team and added four professionals to the team over the last five years, providing additional support in deploying capital. Furthermore, based on our quantitative analysis, we found that Abacus' value add strategy is scalable and that the team has achieved success in larger assets, not just smaller ones.
- While we view the increase in team size and early evidence that their strategy is likely to achieve success on larger deals as positives, we are cognizant of the fact that they aim to raise and deploy more capital than they ever have.

Low General Partner Commitment

- Abacus will commit up to \$10 million as the General Partner alongside the Fund's Limited Partners. This represents less than the standard 1% co-investment we traditionally see and thus potentially creates a weaker alignment of interests.
- While this level of commitment is below market on a percentage basis, it appears that these are meaningful check sizes to the individuals writing them, especially given the frequency of fundraising and the number of accounts with sponsor co-investment. Ultimately, we would prefer to see the team increase their commitment to at least 1% to strengthen the alignment of interests, which RVK will address as Abacus looks to raise follow on funds.

Inflation and Rising Rates

- If the Fed proceeds with rate hikes that are seen as too aggressive, it could put a damper on economic growth prospects, which could have an adverse impact on property values.
- Capitalization rates could also face upward pressure given increased borrowing costs, which will also render leverage less accretive.
- Given the short-term nature of their leases, multifamily is uniquely positioned to re-price rents during inflationary periods to partially or wholly offset higher interest rates. Nevertheless, one significant consideration is rent growth and what level of rent growth is sustainable, the resulting impact of potentially slowing economic growth and its impact on wages, and the resulting ability to increase rents further.

Appendix



Non-Core Real Estate Pacing Recommendation Summary

Refresher

1 Current Plan Statistics (as of June 30, 2021)

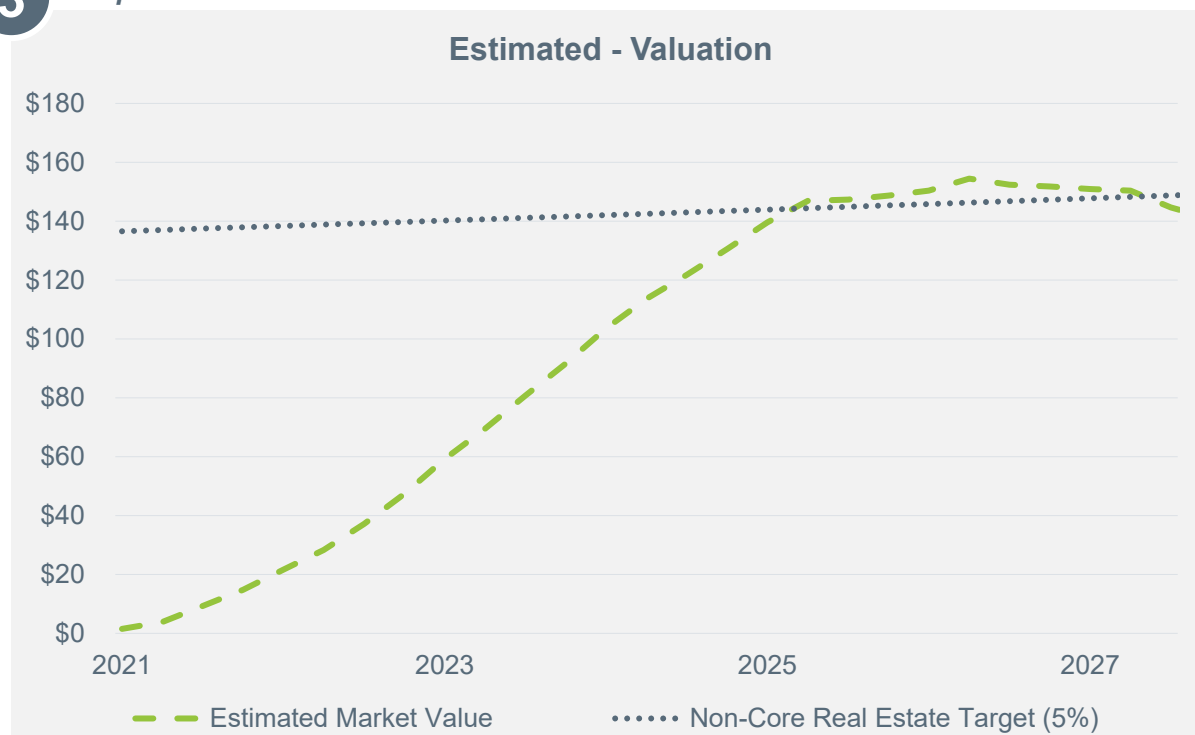
Total plan size	\$2.7 billion
Current real estate non-core target	5.0%
Current real estate non-core allocation	0.0%
Expected growth rate	Approximately 1.32% (Net)

2 Recommendation

Year	Commitments
2021	\$40 million
2022	\$40 million
2023	\$40 million
2024	\$40 million
2025	\$40 million

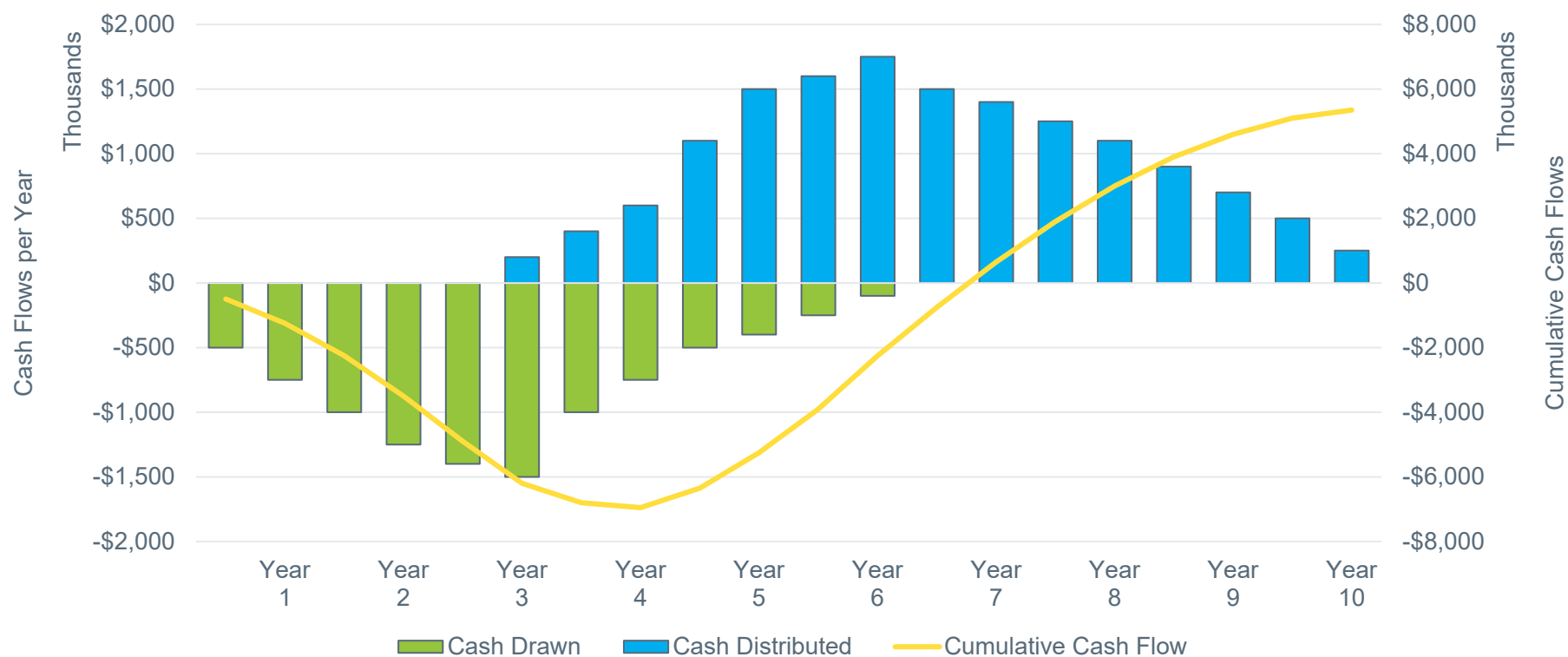
RVK recommends annual commitments of \$40 million, across 1-2 direct funds per year, to achieve the target allocation by 2026.

3 Expected Results



Non-Core Fund Lifecycle

- Non-core funds typically have a fixed term with two possible one-year extensions
- The fund's investment period is generally around three to four years.
 - This is the time when a fund actively seeks out and invests in new opportunities.
- Most of the capital will be drawn and most of the management fees and expenses will also be paid during the investment period.



PORTLAND

BOISE

CHICAGO

NEW YORK

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Abacus Capital Group LLC

City of Jacksonville Retirement System

Board of Trustees Meeting

May 26, 2022



*Mosaic at Miramar Town Center
Miramar, Florida
Miami MSA*

EXECUTIVE SUMMARY

\$5.6B
Acquisition Volume

34,000+
Units Acquired

30+ years
Avg. Founding Member
Experience

Abacus Capital Group

- Stable platform formed in 2004
- Dedicated focus on US multifamily investing
- Integrates best practices of operator and allocator platforms

Market Opportunity

- Multifamily real estate is experiencing high levels of rent growth supported by favorable fundamentals
- Vacancy below 5% nationally and expected to remain at these low levels as supply remains unaligned with renter demand
- Demand from “renter by necessity” cohort continues as household balance sheets are unable to support rising cost of home ownership
- Demand from “renter by choice” cohort continues as consumers trend toward subscription-based consumption and prefer flexibility of rental housing for lifestyle and career reasons
- Homeownership rate remains well below long-term trend

Abacus Multi-Family Partners VI

- Abacus’s value-add track record dates to firm inception in 2004
- Focusing on middle-market assets in Abacus screened markets where a supply-demand imbalance exists
- Targeting 14-16% gross IRR (12-14% net IRR)

PLATFORM

2004

Founding Year

\$2.1B

Equity Invested

\$2.0B

Realized Proceeds



Stable Management Team

- Led by Benjamin Friedman and Kyle Ellis, who have 30+ years of average investment experience and have worked together for the past 20 years
- Abacus has experienced very low corporate turnover
- New partnership with Affiliated Managers Group strengthens the Abacus platform to best serve our investors over the long-term



Significant Multifamily Experience

- Acquired over 34,000 units and \$5.6 billion of multifamily investments since inception
- \$2.1 billion equity invested since inception including five commingled funds
- Favorable performance throughout economic cycle – focused on capital preservation and principal protection

HYBRID STRUCTURE

Transparency

Alignment of
Interests

Truer Risk-
Adjusted
Returns

	Traditional Allocator	ABACUS	Traditional Operator
Market Selection	Market Agnostic – Follows Opportunities	Follows Opportunities Based On Research	Often dependent on corporate infrastructure
Promote Structure	Double Promote	Single Promote – Truer Risk-Adjusted Returns	Single Promote
Control of Business Execution	Reliant on Local Operating Partners	Full Control	Full Control
Vertical Corporate Infrastructure	No Local Infrastructure to Maintain	No Local Infrastructure to Maintain	Extensive Infrastructure Requirements
Conflicts of Interest	No Subsidiary Income	No Subsidiary Income	Subsidiary Income Sources May Impact Hold/Sell Decisions
Sourcing Efforts	Delegated	In-House / Direct Investments	In-House / Direct Investments

TEAM

3

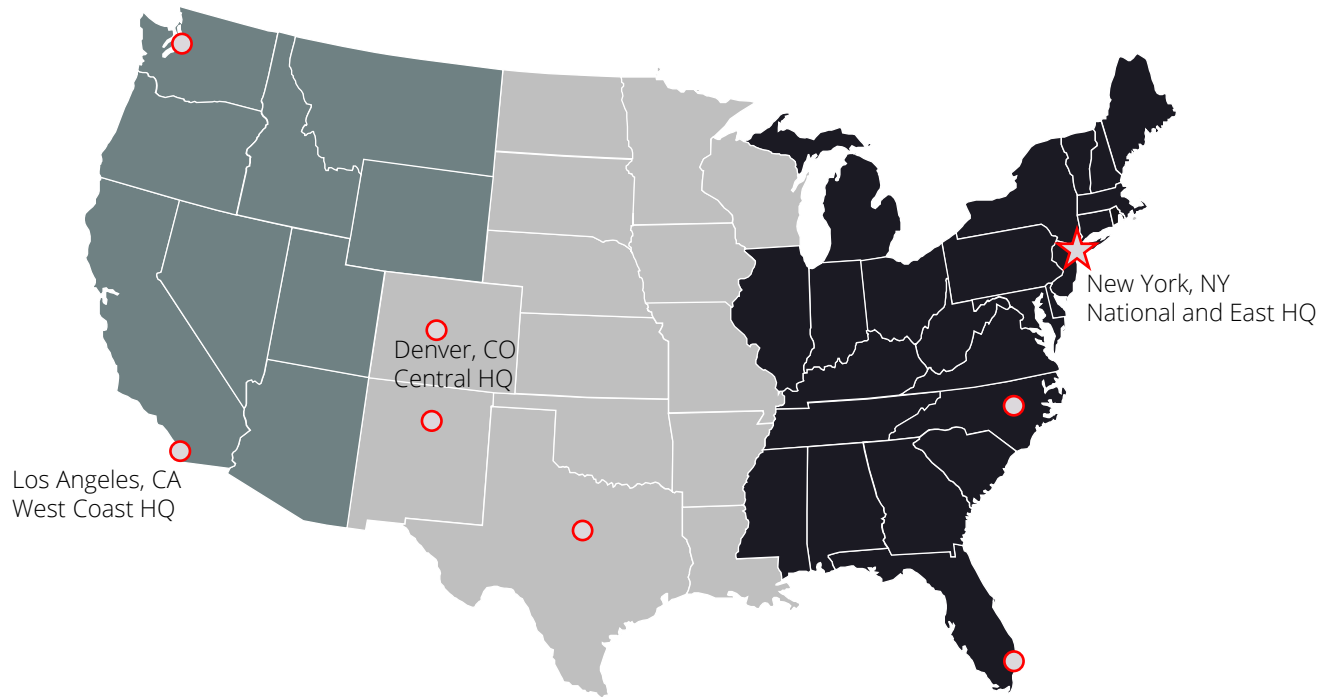
Expansion in All 3 Regions

2

New Regional Investment Offices: Dallas & Miami

17

Avg. Years Experience



West Region	RE Exp	Yrs w Abacus
Jeff Remillard*	21	9
Ben Mayberry	21	6
Brian Chong	9	4
Robbie Rodriguez	7	2
Ian Hyland	7	1
Cheyenne Wallace	31	1
Ben Stackel	2	1

Central Region	RE Exp	Yrs w Abacus
Michael Sarno*	20	13
Bob Bryant	37	7
Evan Austin	11	4
Christi Gotti	23	4
Mary Ann Klingler	33	1
Brandtley Wilson	2	1
Lauren Apsokardu	10	1
Jennifer Cosgrove	10	1
Russell Flournoy	1	1

East Region	RE Exp	Yrs w Abacus
Benjamin Friedman, President and CEO*	31	18
Kyle Ellis*	31	18
Michael Aidekman	20	15
Autumn Sorrow Stout*	17	15
Jim LePorte	15	9
Mitch York	2	2
Brian Woods	11	1
Jonathan McClintock	11	1

KEY

Acquisitions	Asset Management	Development & Construction	Finance & Accounting	IR & PM
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* Denotes member of Investment Committee

PERFORMANCE HIGHLIGHTS

34,000+
Units Purchased

21,000+
Units Realized

29.2%
AMFP III Gross IRR

32.0%
AMFP IV Gross IRR

INCEPTION TO DATE									
	Investment Count	Units	Acquisition Price (A)	Invested Equity to Date (B)	Gross Realized Proceeds (D)	Gross Unrealized Proceeds (E)	Total Gross Realized & Unrealized Proceeds (K)	Gross/Net Leveraged IRR (C)(G)	Gross/Net Equity Multiple (F)(H)
Project Finance									
Realized	10	2,859	300,910	99,313	180,569	36	180,605	13.5%	1.82
Unrealized	-	-	-	-	-	-	-	-	-
Pre-Fund I Total	10	2,859	300,910	99,313	180,569	36	180,605	13.5% / 11.6%	1.82x / 1.71x
Abacus Multi-Family Partners I (2007)									
Realized	10	2,576	256,973	99,365	169,316	-	169,316	9.9%	1.70
Unrealized	-	-	-	-	-	-	-	-	-
AMFP I Total	10	2,576	256,973	99,365	169,316	-	169,316	9.9% / 6.3%	1.70x / 1.44x
Abacus Multi-Family Partners II (2011)									
Realized	16	5,359	500,555	167,266	319,036	-	319,036	32.1%	1.91
Unrealized	-	-	-	-	-	-	-	-	-
AMFP II Total	16	5,359	500,555	167,266	319,036	-	319,036	32.1% / 23.4%	1.91x / 1.69x
Abacus Core Income Fund I (2013)									
Realized	3	774	144,200	68,973	159,895	138	160,033	16.1%	2.32
Unrealized	5	976	306,950	141,532	14,556	145,379	159,935	7.0%	1.13
ACIF I Total	8	1,750	451,150	210,505	174,451	145,517	319,968	13.3% / 11.8%	1.52x / 1.49x
Abacus Multi-Family Partners III LP (2015)									
Realized	22	6,164	883,730	307,689	583,206	(556)	582,650	31.0%	1.89
Unrealized	1	200	29,004	4,433	248	3,168	3,416	-4.1%	0.77
AMFP III Total	23	6,364	912,734	312,121	583,454	2,611	586,065	29.2% / 26.0%	1.88x / 1.64x
Abacus Multi-Family Partners IV LP (2017)									
Realized	17	4,182	561,076	207,806	545,675	5,414	551,089	40.5%	2.65
Unrealized	14	3,099	588,907	234,227	10,817	340,452	351,269	18.6%	1.50
AMFP IV Total	31	7,281	1,149,983	442,032	556,492	345,866	902,358	32.0% / 27.3%	2.04x / 1.67x
Abacus Multi-Family Partners V LP (2020)									
Realized	-	-	-	-	-	-	-	0.0%	-
Unrealized	27	7,337	1,622,692	577,814	14,753	734,703	749,456	27.6%	1.30
AMFP V Total	27	7,337	1,622,692	577,814	14,753	734,703	749,456	27.6% / 49.7%	1.30x / 1.21x
Oregon Abacus Multi-Family Associates LP (2020)									
Realized	-	-	-	-	-	-	-	0.0%	-
Unrealized	3	1,281	440,500	224,497	7,737	294,285	302,023	32.2%	1.35
OAMA	3	1,281	440,500	224,497	7,737	294,285	302,023	32.2% / 39.7%	1.35x / 1.35x
All Totals									
All Properties									
Realized	78	21,914	2,647,444	950,411	1,957,698	5,032	1,962,729	19.2%	2.07
Unrealized	50	12,893	2,988,053	1,182,502	48,112	1,517,987	1,566,098	21.2%	1.32
All Properties Total	128	34,807	5,635,497	2,132,913	2,005,809	1,523,018	3,528,828	19.1% / 18.1%	1.65x / 1.65x

As of March 31, 2022; Dollars in thousands

Please note this presentation contains important disclosure in the "Endnotes to Abacus Value Add Track Record", as well as in "Disclosure", which should be read in conjunction with the materials herein. All investment track record figures as of March 31, 2022, unless otherwise noted. Past performance is not indicative of future results. This is for illustrative purposes only. The Fund will focus on multifamily investments with a more conservative risk profile than most of those previously acquired by Abacus, and accordingly, the Fund will likely not achieve comparable results to Abacus' prior investments on an aggregate basis. The targeted distributable annual yield to investors is the yield that Abacus believes is currently achievable with respect to investments suitable for the Fund. There can be no assurance that such targeted yields for the Fund will be met.

Company Overview > Performance
PERFORMANCE HIGHLIGHTS

29.2%
 AMFP III Projected Gross IRR

32.7%
 AMFP IV Projected Gross IRR

25.3
 AMFP V Projected Gross IRR

PROJECTED								
	Investment Count	Units	Total Invested Equity (B)	Gross Realized Proceeds (D)	Gross Unrealized Proceeds (E)	Total Gross Realized & Unrealized Proceeds	Gross/Net Leveraged IRR (C)(G)	Gross/Net Equity Multiple (F)(H)
Project Finance								
Realized	10	2,859	99,313	180,569	-	180,569	13.5%	1.82
Unrealized	-	-	-	-	-	-	-	-
Pre-Fund I Total	10	2,859	99,313	180,569	-	180,569	13.5% / 11.6%	1.82x / 1.71x
Abacus Muti-Family Partners I (2007)								
Realized	10	2,576	99,365	169,316	-	169,316	9.9%	1.70
Unrealized	-	-	-	-	-	-	-	-
AMFP I Total	10	2,576	99,365	169,316	-	169,316	9.9% / 6.3%	1.70x / 1.44x
Abacus Muti-Family Partners II (2011)								
Realized	16	5,359	167,266	319,036	-	319,036	32.1%	1.91
Unrealized	-	-	-	-	-	-	-	-
AMFP II Total	16	5,359	167,266	319,036	-	319,036	32.1% / 23.4%	1.91x / 1.69x
Abacus Core Income Fund I (2013)								
Realized	3	774	68,973	159,895	316	160,211	16.1%	2.32
Unrealized	5	976	281,127	334,346	243,697	578,043	9.7%	2.06
ACIF I Total	8	1,750	350,101	494,241	244,013	738,254	12.6% / 10.0%	2.11x / 1.88x
Abacus Multi-Family Partners III LP (2015)								
Realized	22	6,164	307,689	583,206	-	583,206	31.0%	1.90
Unrealized	1	200	4,433	248	1,250	1,498	-16.1%	0.34
AMFP III Total	23	6,364	312,121	583,454	1,250	584,704	29.2% / 25.8%	1.87x / 1.75x
Abacus Multi-Family Partners IV LP (2017)								
Realized	17	4,182	207,806	545,675	5,476	551,151	40.4%	2.65
Unrealized	14	3,099	248,076	10,817	487,101	497,919	23.8%	2.01
AMFP IV Total	31	7,281	455,882	556,492	492,578	1,049,070	32.7% / 25.2%	2.30x / 1.87x
Abacus Multi-Family Partners V LP (2020)								
Realized	-	-	-	-	-	-	0.0%	-
Unrealized	27	7,337	673,726	14,753	1,224,633	1,239,387	25.3%	1.84
AMFP V Total	27	7,337	673,726	14,753	1,224,633	1,239,387	25.3% / 17.1%	1.84x / 1.45x
Oregon Abacus Multi-Family Associates LP (2020)								
Realized	-	-	-	-	-	-	0.0%	-
Unrealized	3	1,281	238,321	7,737	613,009	620,747	13.2%	2.60
OAMA	3	1,281	238,321	7,737	613,009	620,747	13.2% / 11.2%	2.60x / 2.34x
All Totals								
All Properties								
Realized	78	21,914	950,411	1,957,698	5,792	1,963,490	19.2%	2.07
Unrealized	50	12,893	1,445,684	367,902	2,569,691	2,937,593	19.4%	2.03
All Properties Total	128	34,807	2,396,095	2,325,600	2,575,483	4,901,083	19.0% / 17.9%	2.05x / 1.76x

As of March 31, 2022; Dollars in thousands`

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RESEARCH BASED APPROACH

8

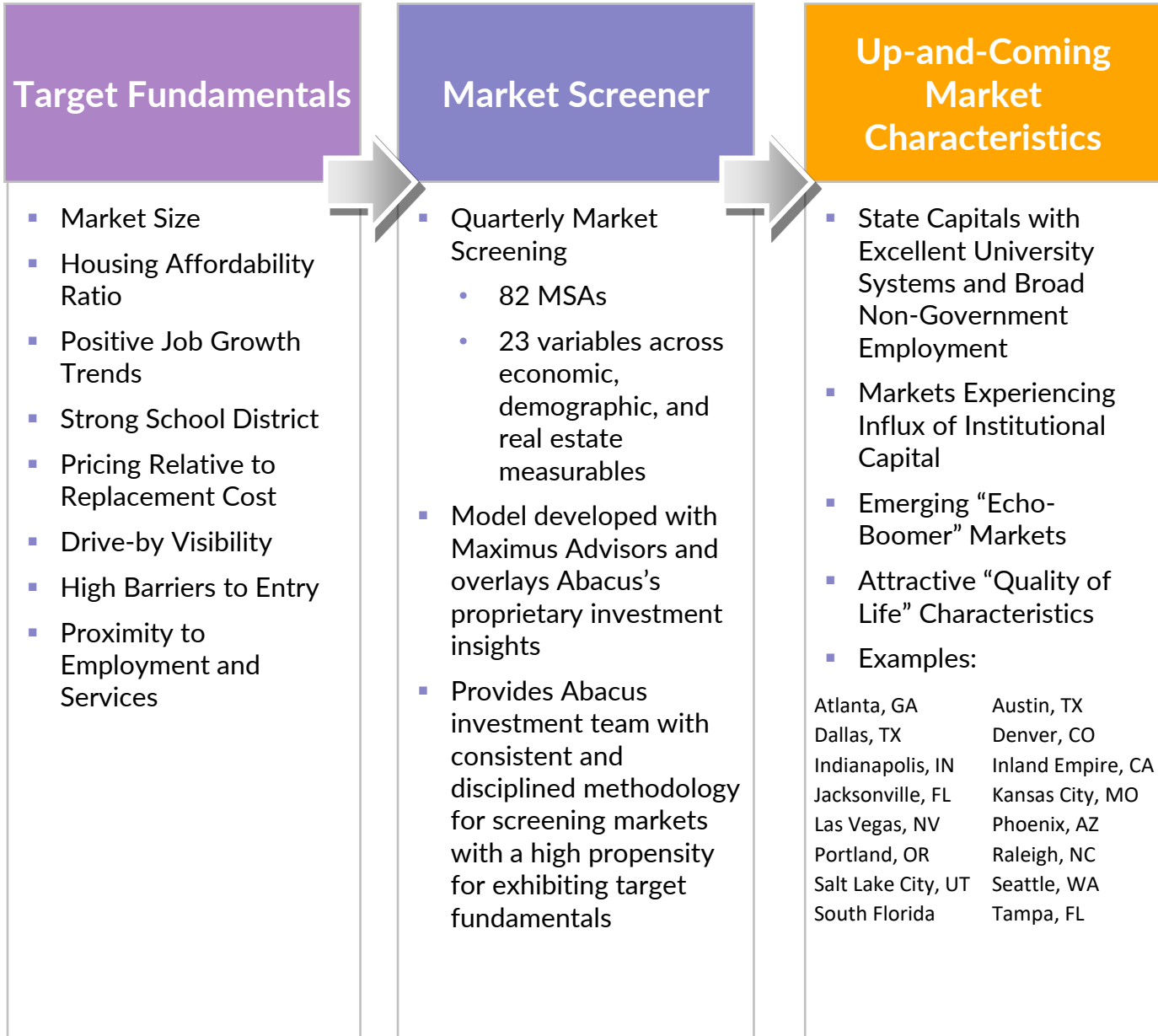
Target Fundamentals

23

Variable Model

82

Markets



RESEARCH BASED APPROACH

82
MSAs screened

3-5
Target Markets Per Region

Quarterly
Data Updates

Abacus Market Screener 2.0

Maximus Valuation Forecasts

Screening Criteria Panel Refresh

Total Weights: 100%

Distribution Criteria

Check/Uncheck All Threshold Weight

MAXIMUS VALUATION FORECASTS

- Cap Rate (2013) Low 4.4% High 8.2% Overall 5.8% 0%
- Spread vs. Historical (bps) Low -114 High 124 Built >= 2000 -114 0%
- Valuation Growth Low -29.0% High 1.9% 2013-2017 -29.0% 0%
- Proj. NOI Growth Low 3.3% High 18.9% 2013-2017 3.2% 30%

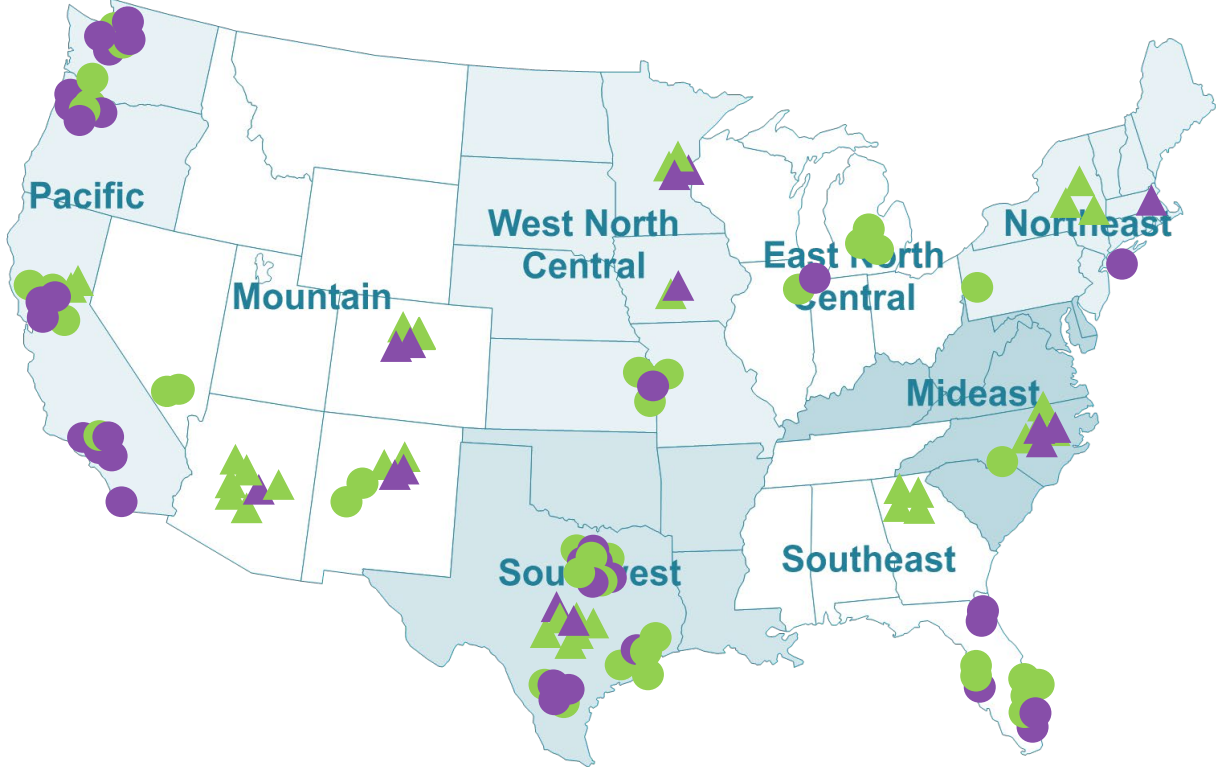
MAXIMUS ECONOMY & DEMOGRAPHICS

- Market Rating Best 1 Poor 6 1 0%
- Long-term Growth Score Best 1 Poor 6 1 0%
- Overall Quality of Life (Rank) Best 1 Poor 51 1 0%
- Economic Volatility Score Stable 1 Volatile 6 1 0%
- Annualized Job Growth Low 0.4% High 3.8% 0.4% 15%
- Household Formation Low -1.4% High 11.1% 2009-2012 -1.4% 0%

Metro Economy & Demographics							Market Volume		
Market Rating	Long-term Growth Score	Overall Quality of Life Rank	Economic Volatility Score	Annualized Job Growth (2013-2017)	Household Formation	# of Sales Transactions	Total Sales Volume (\$MM)	LTM Transaction Volume (\$MM)	
1 ↑	2	31	4	3.8%	5.4%	125	\$3,296	\$849	
2 ↑	3	8	5	2.9%	3.1%	29	\$1,097	\$130	
1 →	2	22	5	3.7%	3.7%	62	\$1,980	\$536	
1 →	2	33	3	3.0%	2.0%	150	\$4,712	\$1,374	
2 ↓	3	51	4	3.7%	4.8%	203	\$6,364	\$1,909	
1 →	2	30	3	3.0%	5.1%	65	\$2,044	\$619	
2 →	4	13	3	2.2%	2.6%	31	\$730	\$94	
2 ↑	4	43	3	2.1%	3.2%	50	\$1,243	\$179	
2 ↓	1	25	2	3.6%	6.8%	41	\$1,090	\$433	
2 ↑	1	1	4	2.7%	4.8%	80	\$3,385	\$963	
2 →	5	11	3	1.4%	3.2%	3	\$288	\$69	
2 →	5	46	2	1.8%	0.8%	71	\$3,359	\$918	
2 →	5	47	2	1.6%	3.0%	14	\$629	\$205	
3 ↓	1	6	3	3.5%	3.1%	8	\$132	\$37	
3 →	1	21	4	3.7%	5.9%	203	\$6,220	\$1,952	
3 →	4	37	3	3.4%	0.7%	41	\$886	\$174	
3 ↓	3	2	4	2.9%	2.9%	55	\$1,399	\$173	
3 →	2	22	3	3.1%	0.0%	69	\$1,794	\$640	
2 ↓	3	48	5	2.8%	3.6%	49	\$1,315	\$292	
4 →	1	9	4	3.6%	8.3%	118	\$3,900	\$1,072	
2 →	6	26	6	1.0%	-0.2%	13	\$158	\$16	
2 ↑	6	39	2	1.5%	3.2%	4	\$28	\$6	
3 ↓	3	34	1	3.4%	3.1%	33	\$838	\$181	
2 →	6	37	2	1.4%	-0.3%	8	\$114	\$61	
2 ↑	3	20	1	1.7%	3.7%	17	\$284	\$60	
3 →	2	4	1	2.5%	3.0%	26	\$517	\$183	
3 →	5	48	2	1.4%	2.4%	19	\$703	\$351	
3 →	2	28	3	3.0%	1.9%	27	\$914	\$101	
3 →	3	40	1	2.0%	2.2%	13	\$220	\$32	
3 ↓	3	19	2	1.7%	1.4%	21	\$499	\$145	
4 ↓	1	3	2	2.9%	7.0%	89	\$3,023	\$832	
3 ↓	3	31	2	1.5%	1.1%	16	\$283	\$67	
5 ↓	4	24	2	1.5%	4.6%	34	\$2,049	\$563	
3 →	6	29	3	0.4%	0.2%	10	\$186	\$61	

PORTFOLIO DIVERSIFICATION

8
NCREIF Regions



- Unrealized Investments
- Realized Investments
- △ Represents a State Capital

• • • abacus

APPENDICES

SUMMARY OF KEY TERMS

Partnership:	Abacus Multi-Family Partners VI LP
Strategy:	Value-add US multifamily
Fund Size:	\$1.25 billion target
Target Return:	14-16% gross IRR and 6-8% stabilized distributable yield
Leverage (LTV):	55-65% expected, 70% maximum
Commitment Period:	3 Years from final close
Term:	8 Years from final close
GP Commitment:	\$10 million or 1% of aggregate commitments
Management Fee:	1.5% on committed capital; 1.5% on invested equity after the end of the commitment period
Distributions:	<p>First, 100% to the Partners until they have received an 8% compounded annual preferred return on their cumulative capital contributions</p> <p>Second, 100% to the Partners until they have received a return of their cumulative capital contributions</p> <p>Third, 80% to the Partners and 20% to the General Partner until the aggregate cumulative distributions received by the Partners are equal to a cumulative net return of 12.5% per annum, compounded annually</p> <p>Fourth, 40% to the Partners and 60% to the General Partner until the aggregate cumulative incentive allocation distributions made to the General Partner are equal to 20% of the cumulative profit distributions made to all Partners</p> <p>Thereafter, 80% to the Partners and 20% to the General Partner</p>



MERCURY ON MILL

Abacus Multi-Family Partners IV

Units: 167
Location: Tempe, AZ
Built: 1972
Purchased: Feb 2020
Price: \$25.6M (\$153K/unit)



ADVANTAGEOUS ACQUISITION

- Sourced in a failed marketing process
- Well-located property in Tempe



PERFORMANCE IMPROVEMENTS

- Re-Branding to Mercury on Mill
- Replacement of Chiller System to Individual HVAC System
- Common area renovations and improved property aesthetics
- NOI Growth of 40%



REALIZATION

- May 2022
- Sale Price: \$56.5M (\$338K/unit)
- Gross Return: 111.6% IRR / 4.5x Multiple

Appendix

VALUE-ADD BEFORE & AFTER SAMPLE PHOTOS

Pool & Common Area Renovations

Sherwood Forest - Coral Gables, FL

Abacus Multi-Family Partners III

Before



Appendix

VALUE-ADD BEFORE & AFTER SAMPLE PHOTOS

Pool & Common Area Renovations

Sherwood Forest - Coral Gables, FL
Abacus Multi-Family Partners III

After



Appendix
**VALUE-ADD
BEFORE & AFTER
SAMPLE PHOTOS**

Hallway Renovation
Mosiatic at Miramar - Miramar, FL
Abacus Multi-Family Partners IV

Before



After



Appendix

VALUE-ADD BEFORE & AFTER SAMPLE PHOTOS

Unit Upgrade

Alden – Tualatin, OR
Abacus Multi-Family Partners IV

Before



After



Benjamin Friedman, President and CEO

Ben Friedman is President, CEO and co-founder of Abacus Capital Group, LLC, a New York based real estate Investment Management firm focused on multi-family investments across the United States. Since its formation in 2004, Mr. Friedman has had overall responsibility for company strategy, capital formation and serves as a member of the Investment Committee and Management Committee. Prior to forming Abacus, Mr. Friedman was President of Greystar Real Estate Advisors, LLC (“GREA”) where he provided strategic direction and oversight of Greystar’s Investment Management operations from 2001-2004.

Prior to joining GREA, Mr. Friedman was a Managing Director and Principal of DRA Advisors, Inc., a New York based pension advisory firm from 1993-2001.

Mr. Friedman earned a Bachelor of Science Degree in Economics from the University of Pennsylvania/Wharton School and an MBA degree from Columbia Business School with honors.

Kyle Ellis, Head of Asset Management & Chief Operating Officer

Mr. Ellis is Head of Asset Management, Chief Operating Officer, and co-founder of Abacus Capital Group LLC, responsible for overseeing all asset management activities, and is a member of the firm's Management Committee and Investment Committee.

Prior to co-founding Abacus, Mr. Ellis served as the Director of Greystar Manhattan Management and as a Director of GREA from 2001-2004. While at GREA, Mr. Ellis built a team and implemented the leasing, asset management and renovation strategy for GREA's portfolio. Prior to joining GREA, Mr. Ellis served as the Vice President of Asset Management for Walden Residential in Dallas, Texas from 1997 - 2001. At Walden Residential, Mr. Ellis managed a team overseeing a portfolio of 20,000 apartment units in the southeast, Arizona and California. Mr. Ellis was responsible for developing and implementing individual asset strategies, budgeting, reporting, asset repositioning and dispositions. In 1997, Walden Residential acquired Drever Partners, where Mr. Ellis was a construction manager and asset manager from 1990 - 1997. Mr. Ellis's responsibilities included asset repositioning, strategy implementation, performance monitoring and fund reporting.

Mr. Ellis earned a Bachelor of Science Degree in Business Administration from Miami University of Ohio.

Jeffrey Remillard, Chief Investment Officer

Mr. Remillard is Chief Investment Officer at Abacus Capital Group LLC where he is responsible for overseeing acquisitions and dispositions across the country and is a member of the firm's Management Committee and Investment Committee. Since joining Abacus in 2012, Mr. Remillard has been involved in the acquisition and disposition of over 27,000 units totaling over \$5 billion in transaction volume.

Prior to joining Abacus, Mr. Remillard was involved in over \$2 billion of development projects while working for companies such as Fisher Brothers, The Clarett Group and Wood Partners on both the East and West Coast. The majority of Mr. Remillard's development experience entailed large-scale multifamily condo and rental projects in New York and Los Angeles. Mr. Remillard is a member of the Urban Land Institute (ULI), serving on the Multifamily Platinum Product Council.

Mr. Remillard earned an A.B. in Economics from Dartmouth College and an MBA in Finance and Real Estate from Columbia Business School.

Michael Sarno, Managing Director, Development

Mr. Sarno is a Managing Director at Abacus Capital Group LC and oversees all ground-up development initiatives for the Firm and is a member of the firm's Management Committee and Investment Committee.

Mr. Sarno joined Abacus after working as a Project Manager for Toll Brothers City Living from 2005–2008. While with Toll Brothers, Mr. Sarno managed a 525-unit condominium conversion overseeing all interior design and construction activities and all sales and marketing initiatives. Following the successful management of the condominium conversion, Mr. Sarno accepted a new position within Toll Brothers to manage a 225-unit luxury high-rise condominium project with a budget of approximately \$130 million. Mr. Sarno defined the project program including unit mix, interior layouts, façade design and amenity package and managed all design professionals from schematic plans to construction documents while guiding the project through the city and state entitlement process.

Mr. Sarno obtained a Bachelor of Science degree in Civil Engineering and a Bachelor of Arts degree in Architecture from Lehigh University and a Master of Science degree in Real Estate Finance from New York University.

Autumn Sorrow Stout, Managing Director, Asset Management

Ms. Sorrow is a Managing Director of Asset Management at Abacus Capital Group LLC with a focus on brand management, asset repositioning, and strategy implementation in Eastern US markets and is a member of the firm's Management Committee and Investment Committee.

Prior to joining Abacus, Ms. Sorrow was a Marketing Specialist for a leading condominium conversion company, Montecito Property Company, LLC where she was charged with marketing condominium projects across the United States.

Ms. Sorrow earned a Bachelor of Science Degree in Marketing from Clemson University.

Michael Aidekman, Chief Financial Officer

Mr. Aidekman is the Chief Financial Officer of Abacus Capital Group LLC and is a member of the firm's Management Committee. He is responsible for overseeing the company's financial reporting and has been instrumental in capital raising (debt and equity) for over \$2.7 billion of property acquisitions.

He joined Abacus in 2006 after five years with Prime Realty Services, an owner/manager of multi-family apartments in New York City. While at Prime, Mr. Aidekman served as the Director of Accounting for a portfolio of 1,500 apartments and its vertically integrated subsidiary companies.

Mr. Aidekman earned a Bachelor of Arts Degree in Philosophy, Politics, and Economics from the University of Pennsylvania and an MBA in Finance from NYU's Stern School of Business.

Brian Woods, Managing Director, Investor Relations & PM

Brian Woods is a Managing Director at Abacus Capital Group LLC where he is responsible for leading the firm's capital formation, investor relations, and portfolio management activities.

Mr. Woods joined Abacus following over 10 years with The Townsend Group, a leading global real estate investment advisor, where he was a Senior Vice President and Portfolio Manager. At Townsend, he managed and advised on real estate portfolios for institutional investors totaling over \$4.0 billion of equity. During his tenure he also contributed to the firm's due diligence, research, investment, and client management efforts. He began his career in finance at a Fortune 500 building materials company.

Mr. Woods holds a BSB in Finance from the Farmer School of Business at Miami University and is a CFA Charterholder.

Abacus Capital Group
**ENDNOTES TO
TRACK
RECORD**

The track record performance of Abacus Capital Group LLC (“Abacus” or the “Manager”) included herein is since its formation in 2004. It is important to note that these investments generally had substantially different investment objectives and risks than those of the Abacus Core Income Fund I LP (the “Fund”), including, but not limited to, target returns, hold periods, leverage, asset management strategies, and current income vs. appreciation, and would generally be characterized as “value-add” investments. Accordingly, the past investments made by Abacus and/or its affiliates would generally not be suitable for the Fund, and these investments are not indicative of the Fund’s future portfolio composition. The following data are provided for informational purposes only. It reflects returns as of March 31, 2022 and accordingly, may be outdated. Gross returns and multiples are prior to deduction of the incentive allocation and expenses charged directly to the respective investment entities, including, but not limited to, management fees, unconsummated transaction fees, professional fees, organizational fees and interest. Projections for unrealized investments are based on various valuations, assumptions and cash flow calculations which have been determined in good faith by Abacus, however, there can be no assurance that such valuations, assumptions, and calculations will prove to be accurate. The data have not been audited or otherwise verified by any outside party and should not be construed as representative of the returns that may be experienced by investors in the Fund. Past performance is not an indication of future results and no representation or warranty is made as to the returns that may be experienced by investors in the Fund.

A. “Acquisition Price” is the total purchase price of the asset (including costs spent to unwind seller debt obligations, if necessary) for operating assets, and the total development cost for new developments.

B. “Invested Equity to Date” represents actual cash contributions through March 31, 2022 plus Abacus’s estimate of cash contributions committed to upgrade programs and new developments that are under construction as of March 31, 2022. Of the total \$73 million of Invested Equity to Date in Pre-AMFP I investments, \$6 million represents cash contributions from financial partners where Abacus had full discretion over the origination, structuring, financing, and asset management of the transactions, and \$67 million represents cash contributions from financial partners in non-discretionary joint ventures, where Abacus was responsible for the origination, structuring, financing, and asset management of the transactions.

C. “Gross Leveraged IRR” represents the IRR presented on a gross basis, before deductions for fund or entity level management fees, performance fees, subscription credit facility debt service or similar fund or entity level expenses and fees not directly related to the investment. All IRR calculations reflect the actual leverage employed. IRRs are based on the actual portfolio cash flows from acquisition through March 31, 2022 and the projected portfolio cash flows after March 31, 2022 through the projected liquidation. For realized investments, the IRRs are based on actual portfolio cash flows from acquisition through the disposition date. Projections and estimates are forward-looking and are based upon certain assumptions currently deemed reasonable by Abacus. Different assumptions may also be reasonable and would yield different results. In addition, other events which were not taken into account may occur and may significantly affect returns and performance.

D. “Gross Realized Proceeds” represents undiscounted portfolio cash flows and net disposition proceeds from inception of the investment through March 31, 2022, before deductions for fund or entity level management fees, performance fees, subscription credit facility debt service or similar fund or entity level expenses and fees not directly related to the investment.

E. “Gross Unrealized Proceeds” represents the undiscounted projected portfolio cash flows and net disposition proceeds after March 31, 2022, through the projected disposition date of an investment, before deductions for fund or entity level management fees, performance fees, subscription credit facility debt service or similar fund or entity level expenses and fees not directly related to the investment. For inception to date, Gross Unrealized Proceeds is based on current net asset value. For projected, Gross Unrealized Proceeds is based on forward-looking estimates based on certain assumptions currently deemed reasonable by Abacus.

“Gross Equity Multiple” is equal to Total Gross Proceeds divided by Invested Equity to Date. Projections and estimates are forward-looking and are based upon certain assumptions currently deemed reasonable by Abacus. Different assumptions may also be reasonable and would yield different results. In addition, other events which were not taken into account may occur and may significantly affect returns and performance.

G. “Net Leveraged IRR” represents the IRR to the investors in the fund or entity presented on a net basis, after deductions for fund or entity level management fees, performance fees, subscription credit facility debt service or similar fund or entity level expenses and fees. All net IRR calculations reflect the actual leverage employed. IRRs are based on (a) the actual capital funded by, or distributed to, investors through March 31, 2022, and (b) the projected capital to be funded by, or distributed to, investors after March 31, 2022 through projected liquidation. Projections and estimates are forward-looking and are based upon certain assumptions currently deemed reasonable by Abacus. Different assumptions may also be reasonable and would yield different results. In addition, other events which were not taken into account may occur and may significantly affect returns and performance.

H. “Net Equity Multiple” is equal to (a) the actual distributions made to investors through March 31, 2022, plus projected distributions to be made to investors through projected liquidation, after deductions for fund or entity level management fees, performance fees, subscription credit facility debt service or similar fund or entity level expenses and fees, divided by (b) the actual capital funded by investors through March 31, 2022 plus the projected capital to be funded by investors after March 31, 2022 through projected liquidation. Projections and estimates are forward-looking and are based upon certain assumptions currently deemed reasonable by Abacus. Different assumptions may also be reasonable and would yield different results. In addition, other events which were taken into account may occur and may significantly affect returns and performance.

Under no circumstances is this presentation to be used or considered as an offer to sell, or a solicitation of any offer to buy, any security. Any such offering may be made only by an offering memorandum that would be furnished to prospective investors who express an interest in an investment program of the type being considered, and that would describe the risks associated with an investment in the investment program. The information contained herein is in summary form for convenience of presentation. It is not complete and it should not be relied upon as such. The information in this presentation is provided to you as of the dates indicated and Abacus Capital Group LLC (the "Manager") does not intend to update the information after its distribution, even in the event that the information becomes materially inaccurate. The information contained herein is confidential and may not be reproduced in whole or in part nor disclosed by the recipient to any other party without our prior written consent. Certain information contained in this presentation includes calculations or figures that have been prepared internally and have not been audited or verified by a third party. Use of different methods for preparing, calculating or presenting information may lead to different results and such differences may be material. This material outlines certain characteristics of a proposed investment program. It is presented solely for purposes of discussion, to determine preliminary interest in investing in an investment program with the general characteristics described herein. There may be material changes to the structure and terms prior to the interests in an investment program being offered.

An investment in the Fund is speculative and involves significant risks, including loss of the entire investment. There can be no assurances that the Fund's investment objective will be achieved or that its investment program will be successful. Interests in the Fund will be illiquid as there will be no secondary market for such interests and none is expected to develop. There will be restrictions on transferring interests in the Fund. The Fund's investments may be leveraged and its investment performance may be volatile. A recipient who has preliminary interest in the Fund should understand these risks and have the financial ability and willingness to accept them for an extended period of time before considering making an investment in the Fund.

In considering any performance data contained herein, each recipient should bear in mind that past performance is not indicative of future results, and there can be no assurance that an investment program will achieve comparable results. The Fund's target return stated herein is an aggregate, annual, compound, gross internal rate of return after the effects of debt financing (at either the Fund or property/asset level) and any fees at the property/asset level are taken into consideration. The targeted gross leveraged IRR for the Fund is based on a significant number of assumptions, including Abacus's assumption that investing conditions will not deteriorate significantly over the life of the Fund. Additionally, the targeted gross leveraged IRR is calculated using assumptions and estimates regarding the Fund's size, leverage, rate of investment and income. Actual investment pace, purchase and sale prices, and current income and other returns received on investments, investment hold periods, default and recovery rates of investments, and other factors may differ significantly from the assumptions and estimates used to calculate gross return. The gross internal rates of return presented do not reflect any management fees, carried interest, taxes and Fund expenses, which in the aggregate may be substantial. Nothing contained herein should be deemed to be a prediction or projection of future performance of the Fund.

This presentation contains forward-looking information including forward looking statements within the meaning of the U.S. Securities Act of 1933 and the U.S. Securities Exchange Act of 1934, as amended. The words "expected," "will," "seeking," "project," "may," "might," "would," "should," "could," "contemplate," "potentially," "anticipate," "target," "intend," "plan," "believe," "continue," "focus," "exceed," "increased" and other expressions which are predictions of or indicate future events, trends or prospects and which do not relate to historical matters, constitute forward-looking statements. Although Abacus believes that the anticipated future results, performance or achievements for an investment program expressed or implied by the forward-looking statements and information are based upon reasonable assumptions and expectations, the reader should not place undue reliance on forward-looking statements and information because they involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the investment program to differ materially from anticipated future results, performance or achievement expressed or implied by such forward-looking statements and information. Factors that could cause actual results to differ materially from those set forward in the forward-looking statements or information include but are not limited to: general economic conditions; changes in interest and exchange rates; availability of equity and debt financing and risks particular to underlying portfolio company investments.

Nothing contained herein should be construed as legal, business or tax advice. Each prospective investor should consult its own attorney, business advisor and tax advisor as to legal, business, tax and related matters concerning the information contained herein. Unless otherwise noted, all references to "\$" or "Dollars" are to U.S. Dollars. All time-sensitive materials are made as of March 31, 2022 unless otherwise expressly indicated.

The NCREIF Index is a quarterly time series composite total rate of return measure of the investment performance of a very large pool of individual commercial real estate properties acquired in the private market for investment purposes only. The index performance indicated herein is not illustrative of the fund's performance. Indexes are unmanaged and have no fees or expenses. An investment cannot be made directly in an index. The Funds consist of securities which may vary significantly from those in the NCREIF Index and performance calculation methods may not be entirely comparably. Accordingly, comparing results shown to those of the NCREIF Index may be of limited use.



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Abacus Capital Group, LLC



Quarterly Investment Performance Analysis

City of Jacksonville Employees' Retirement System

Period Ended: March 31, 2022



2021 Greenwich Quality Leader Award

RVK is 1 of 3 firms among large US consultants to receive the *Coalition Greenwich Quality Leader* award.¹ We are proud to be the only firm among large consultants to receive this recognition for a 5th consecutive year.



***We are deeply grateful for your continued confidence and support.
From all of us here at RVK, thank you for the opportunity to serve you!***

Award Criteria

- Understanding of Client Goals and Objectives
- Advice on Long-term Asset Allocation and Liability Issues
- Advice on DC Plan Structure and Design
- Communication of Philosophy and Investment Beliefs
- Proactive Advice and Innovative Ideas
- Client Satisfaction with Manager Recommendations
- Usefulness of Written Investment Reviews
- Sufficient Professional Resources
- Credibility with Investment Committee or Trustees
- Capability of Consultants Assigned to Clients
- Responsiveness and Prompt Follow-up on Client Requests
- Timeliness in Providing Written Reports
- Usefulness of Personal Meetings
- Reasonable Fees Relative to Value Delivered

¹Between July and October 2021, Coalition Greenwich conducted phone interviews with 811 individuals at 661 of the largest tax-exempt funds in the US—including corporate and union funds, public funds, and endowments/foundations with either pension or investment pool assets greater than \$150 million. Study participants were asked to provide quantitative and qualitative evaluations of their asset managers and investment consultants, including qualitative assessments of those firms soliciting their business and detailed information on important market trends. RVK is one of three firms recognized in the large investment consultant category. The ratings may not be representative of any one client's experience with RVK; rather they are representative of those clients that chose to participate in the survey. The results are not indicative of RVK's future performance.

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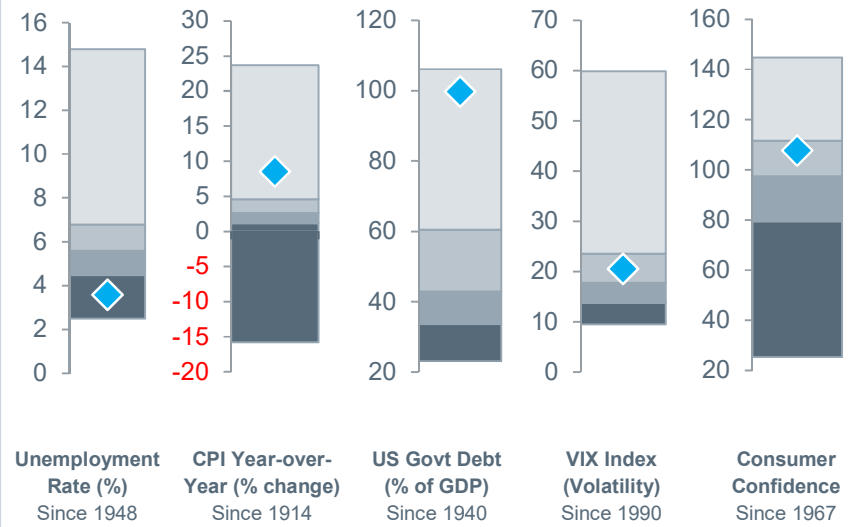
Capital Markets Review



First Quarter Economic Environment

During Q1, investors were left with few options for capital preservation as public equity and fixed income markets fell sharply amid increasing volatility, declining global economic growth forecasts, and rising interest rates. Global capital markets faced existing and emerging headwinds, including the Russian invasion of Ukraine, which was met with condemnation from much of the international community. Existing factors—such as persistent inflation, supply chain disruption, and other issues stemming from the ongoing pandemic—were exacerbated by soaring energy costs and commodity shortages caused by the war. US labor market conditions continued to improve as unemployment fell to 3.6% in Q1 from its level above 14% early in the pandemic. Inflationary pressures have led most major central banks to tighten their monetary policies, including action by the Federal Open Market Committee (FOMC), which raised interest rates to a range between 0.25% to 0.50% during its March meeting in addition to its announced tapering of its bond purchasing program. The FOMC also suggested it will raise interest rates 11 times with a forecasted Fed funds rate of 2.75% by 2023. Even as monetary policies shift, there are factors driving inflation higher that are beyond central bank control, which limits their ability to achieve reduced inflation, including component shortages, transportation disruption, and the inflationary pressures stemming from the war in Ukraine.

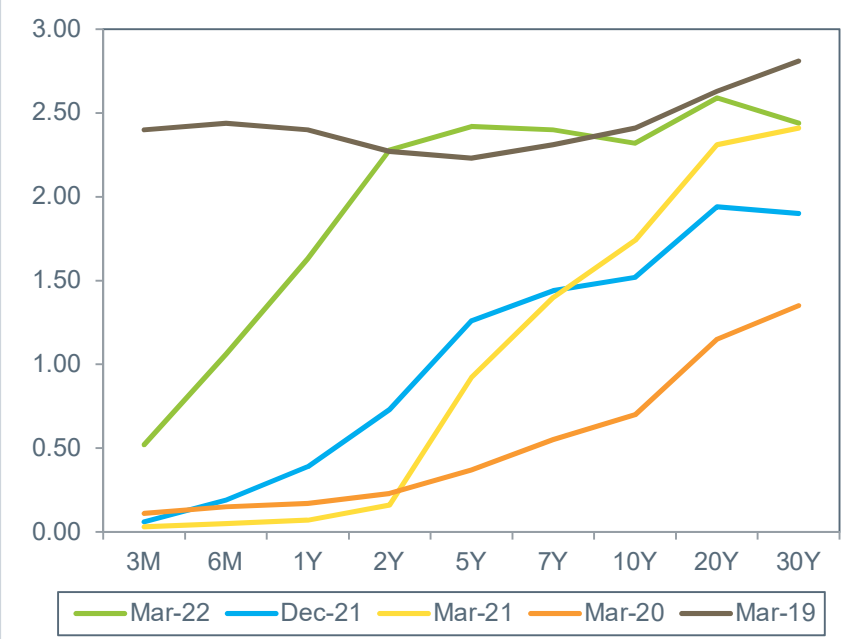
Key Economic Indicators

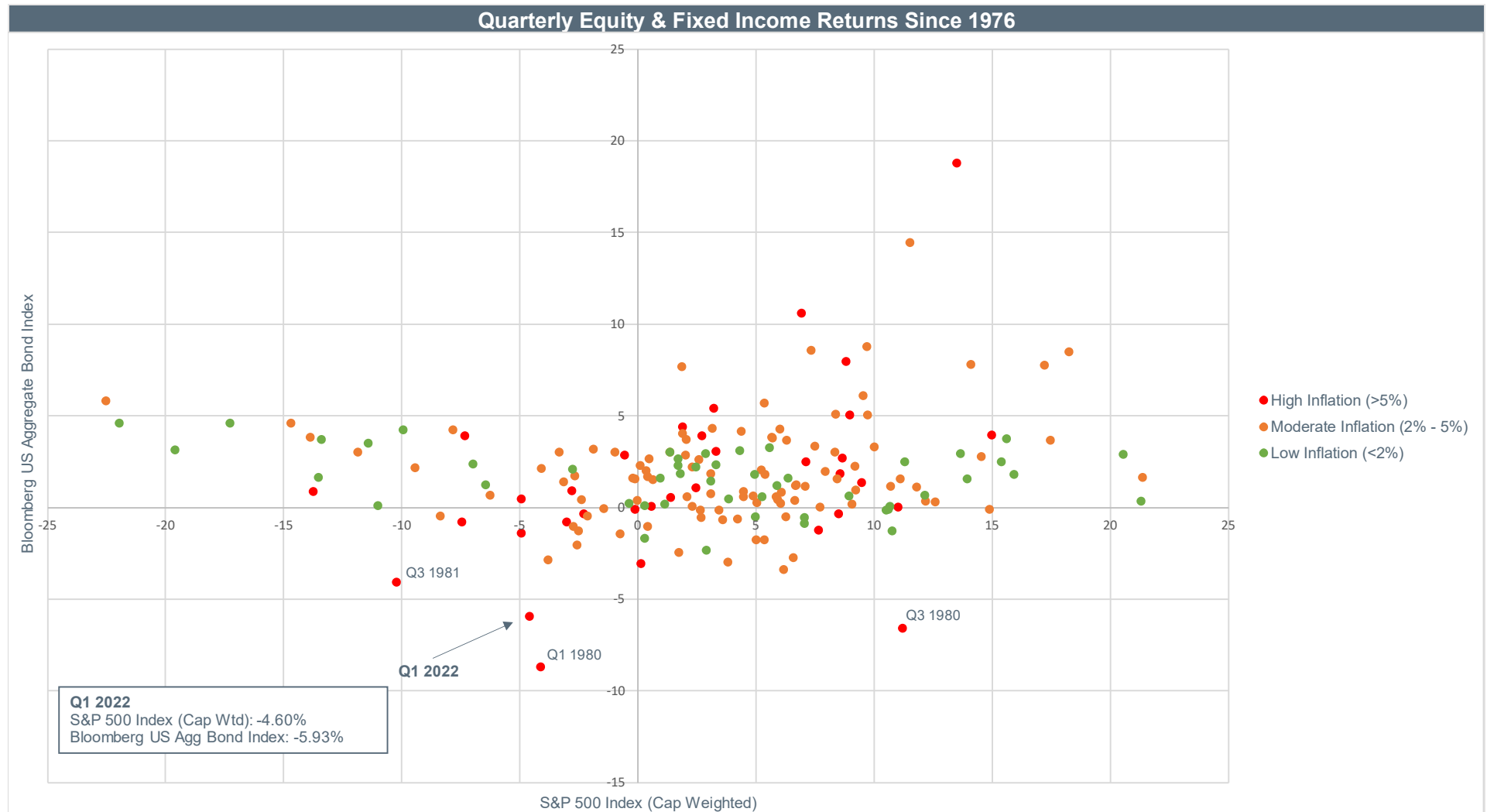


Economic Indicators	Mar-22	Dec-21	Mar-21	Mar-19	20 Yr
Federal Funds Rate (%)	0.33 ▲	0.07	0.06	2.43	1.30
Breakeven Infl. - 5 Yr (%)	3.43 ▲	2.91	2.60	1.79	1.86
Breakeven Infl. - 10 Yr (%)	2.83 ▲	2.59	2.37	1.87	2.04
CPI YoY (Headline) (%)	8.5 ▲	7.0	2.6	1.9	2.2
Unemployment Rate (%)	3.6 ▼	3.9	6.0	3.8	6.1
Real GDP YoY (%)	3.6 ▼	5.5	0.5	2.2	1.9
PMI - Manufacturing	57.1 ▼	58.8	63.7	54.9	53.5
USD Total Wtd Idx	115.35 ▲	115.32	113.86	115.13	103.10
WTI Crude Oil per Barrel (\$)	100.3 ▲	75.2	59.2	60.1	64.4
Gold Spot per Oz (\$)	1,937 ▲	1,829	1,708	1,292	1,086

Market Performance (%)	QTD	CYTD	1 Yr	5 Yr	10 Yr
S&P 500 (Cap Wtd)	-4.60	-4.60	15.65	15.99	14.64
Russell 2000	-7.53	-7.53	-5.79	9.74	11.04
MSCI EAFE (Net)	-5.91	-5.91	1.16	6.72	6.27
MSCI EAFE SC (Net)	-8.53	-8.53	-3.63	7.42	8.30
MSCI Emg Mkts (Net)	-6.97	-6.97	-11.37	5.98	3.36
Bloomberg US Agg Bond	-5.93	-5.93	-4.15	2.14	2.24
ICE BofAML 3 Mo US T-Bill	0.04	0.04	0.06	1.13	0.63
NCREIF ODCE (Gross)	7.36	7.36	28.45	9.88	10.93
FTSE NAREIT Eq REIT (TR)	-3.89	-3.89	26.45	9.62	9.81
HFRI FOF Comp	-2.72	-2.72	1.24	4.63	3.92
Bloomberg Cmdty (TR)	25.55	25.55	49.25	9.00	-0.70

Treasury Yield Curve (%)



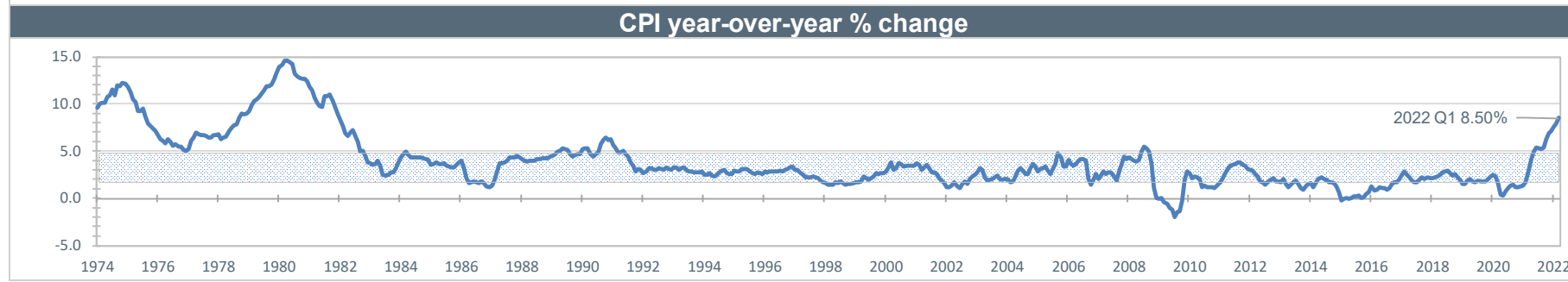
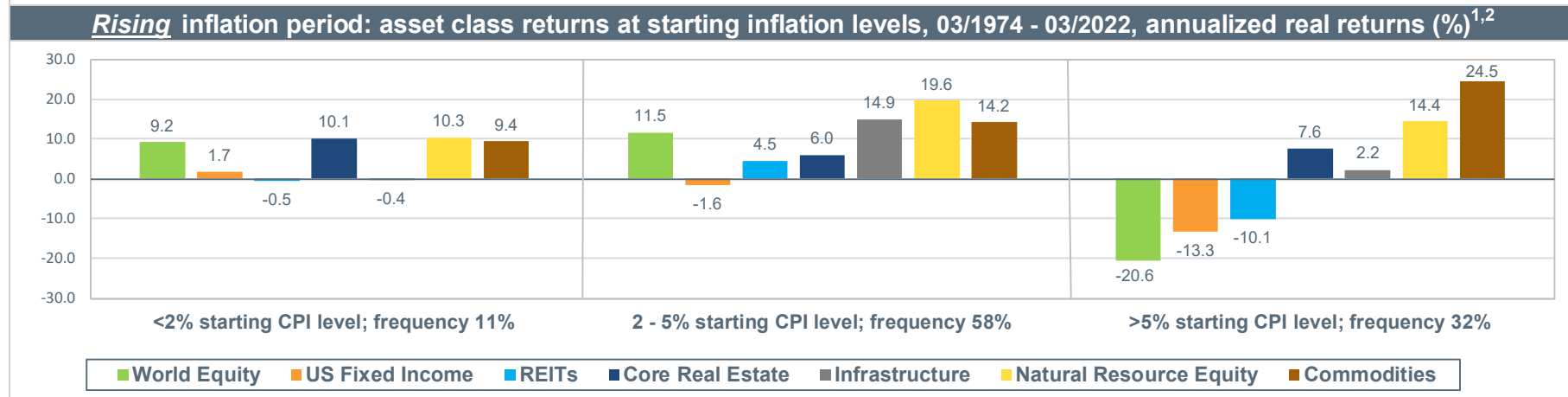
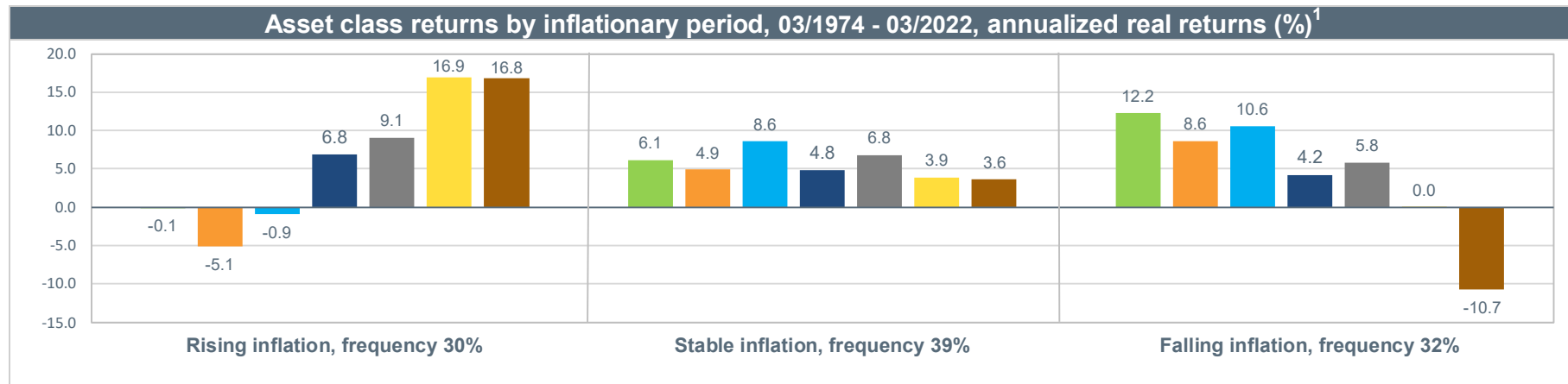


Bloomberg US Aggregate Bond Index: Worst Quarters and Subsequent Performance

Quarter Ended	Quarter Return	YTW at Quarter End	Subsequent Quarter Return	Subsequent Year Return	Subsequent 3 Year Return Annualized
Mar-1980	-8.71%	14.10	18.79%	13.05%	17.88%
Sep-1980	-6.60%	12.43	1.36%	-2.58%	15.05%
Mar-2022	-5.93%	2.92	?	?	?
Sep-1981	-4.07%	16.50	10.58%	35.22%	19.35%
Mar-2021	-3.38%	1.61	1.83%	-4.15%	?
Dec-1979	-3.08%	11.19	-8.71%	2.67%	13.12%

Inflation data provided by the Federal Reserve Economic Database.
 Yield to Worst data provided by Barclays Live.





¹ Real returns are based on US CPI and are calculated using quarterly periodicity. A rising inflation period is defined as any quarter when Y/Y US CPI rose by 0.3% or more; a falling inflation period when Y/Y CPI fell by -0.3% or more in a quarter; the remaining periods are classified as stable inflation. Starting date for Core Real Estate is March 1978. ² Starting CPI level is based on Y/Y US CPI in a given quarter; rising inflation period is defined in Footnote 1.
 Data: World Equity: MSCI World Index (net). US Fixed Income: BB US Gov Bond Index through 12/31/1975, and BB US Agg Index thereafter. Core Real Estate: NCREIF ODCE AWA (gross), 2022Q1 figures are preliminary and subject to change. REIT: FTSE NAREIT Equity REITs Index through 12/31/1995, and MSCI World/Real Estate GR USD Index thereafter. Infrastructure: 50/50 Blend of Datastream World Pipelines and Datastream World Gas, Water & Multi-Utilities through 12/31/2001, and S&P Global Infrastructure thereafter. Natural Resource Equity: 50/50 Datastream World Oil & Gas and Datastream World Basic Materials through 11/30/2002, and S&P Global Natural Resources thereafter. Commodity: S&P GSCI through 12/31/1991, and BB Commodity Index thereafter.



First Quarter Review

Broad Market

US equity markets declined in Q1, with each respective market cap and style index generating negative returns. The prospect of entering a rising rate environment for the first time since 2018, with multiple rate hikes expected by the end of the year, caused investors to revisit the elevated valuations within the equity market, especially among higher-growth companies.

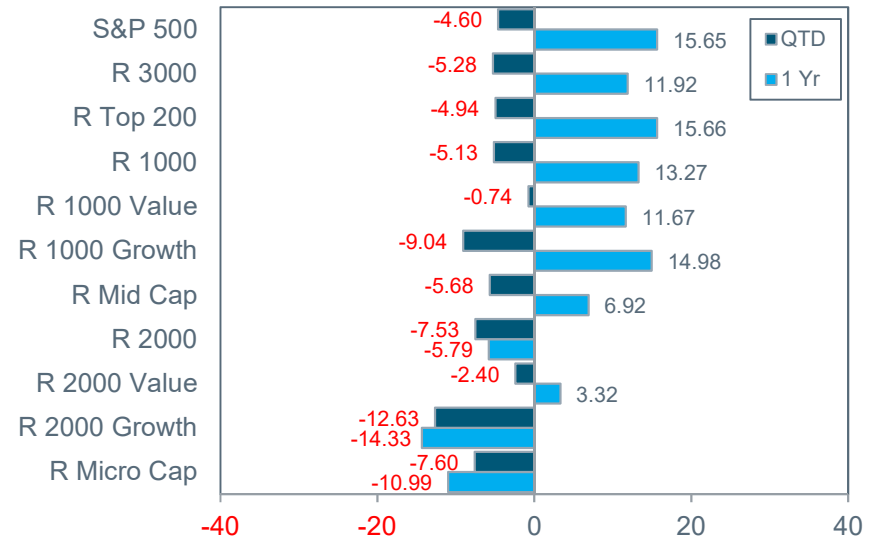
Market Cap

The disparity between value and growth was heightened in small- and mid-cap stocks with the Russell 2000 Value and Russell Mid-Cap Value outperforming their growth counterparts by 10.2% and 10.8%, respectively.

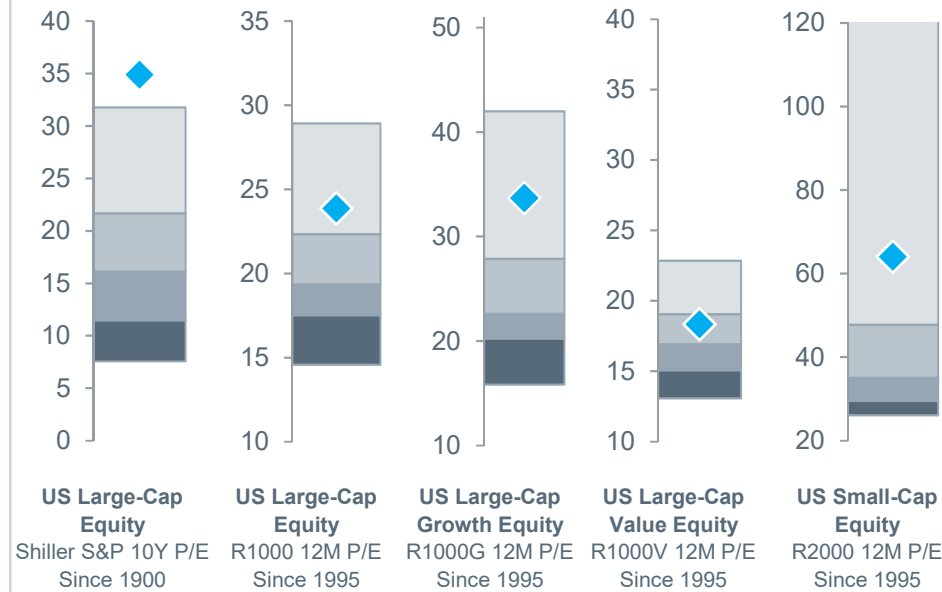
Style and Sector

Growth managers struggled with the performance of top performing stocks in previous years reversing sharply during the quarter. While value managers generally performed well, many small-cap value managers underperformed due to missing the rally among commodity-linked and energy companies that benefited from rising prices.

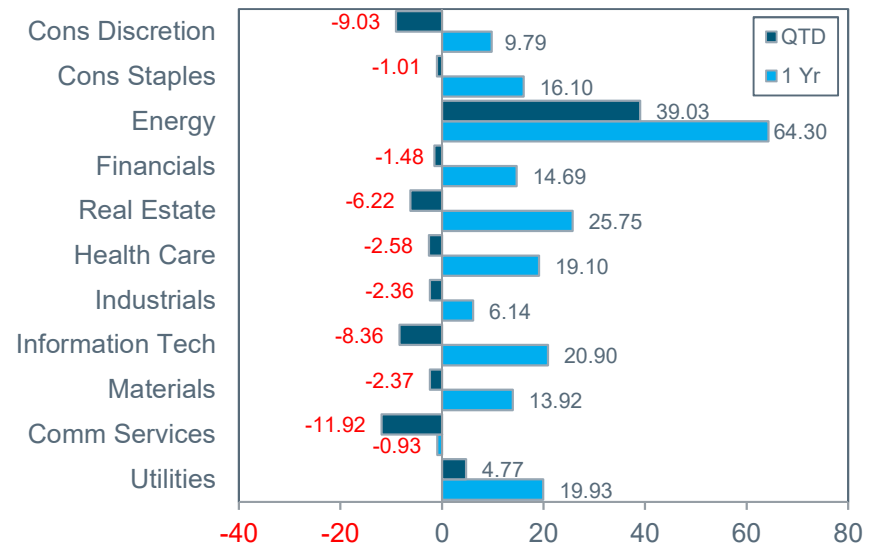
Style and Capitalization Market Performance (%)



Valuations



S&P 500 Index Sector Performance (%)



Valuation data courtesy of Bloomberg Professional Service and Robert J. Shiller, Irrational Exuberance, Second Edition. P/E metrics shown represent the 5th through 95th percentiles to minimize the effect of outliers.



First Quarter Review

Developed Markets

Developed international markets experienced negative absolute performance for the quarter, relatively in line with domestic markets. Value stocks were slightly positive for the quarter, significantly outperforming growth stocks, which saw double-digit negative returns. Small-cap stocks underperformed large-cap stocks due to the risk-off atmosphere. Given the inflationary environment, cyclical sectors performed best in Q1, with energy, materials, and financials positive and all other sectors negative.

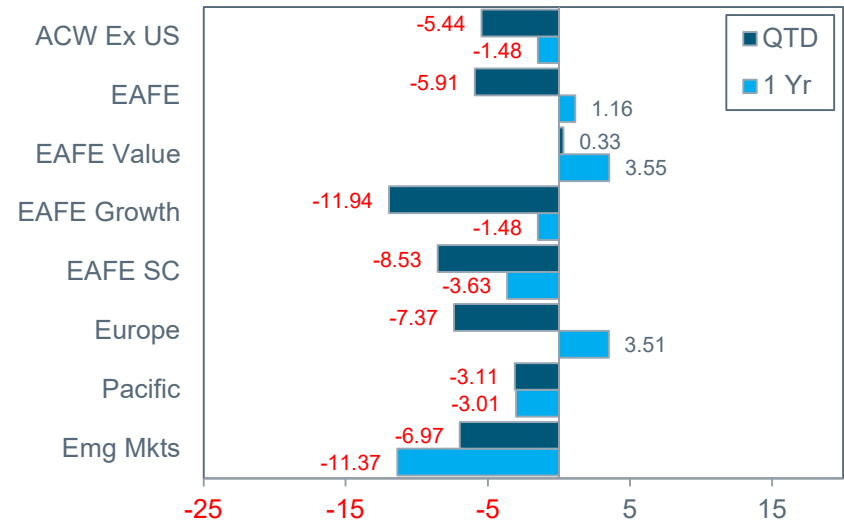
Emerging Markets

Emerging markets underperformed developed markets during the quarter, with the invasion of Ukraine serving as a significant negative catalyst, as investors soured on the highest growth stocks within emerging markets.

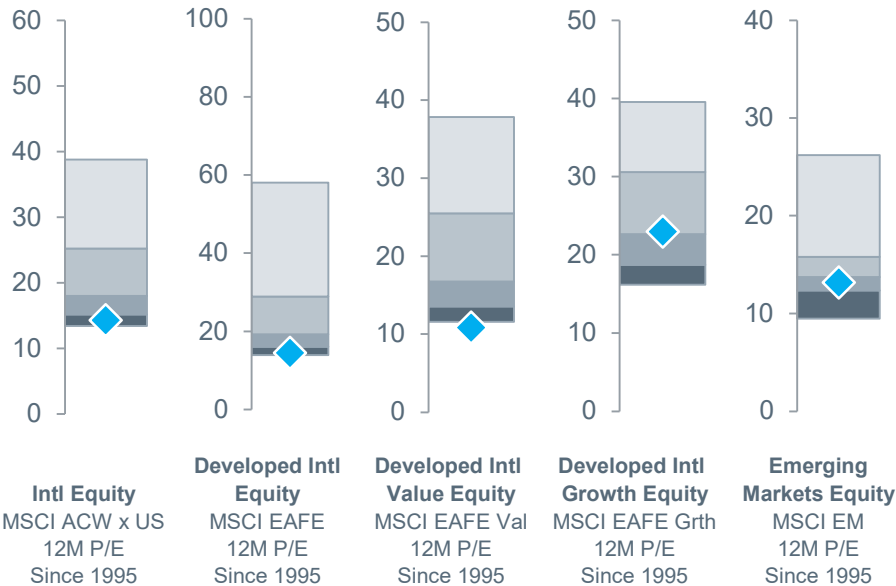
Market Cap & Style

In international markets, value stocks outperformed growth, while large-cap stocks outperformed small-cap. In emerging markets, value stocks outperformed growth, while small-cap stocks outperformed large-cap.

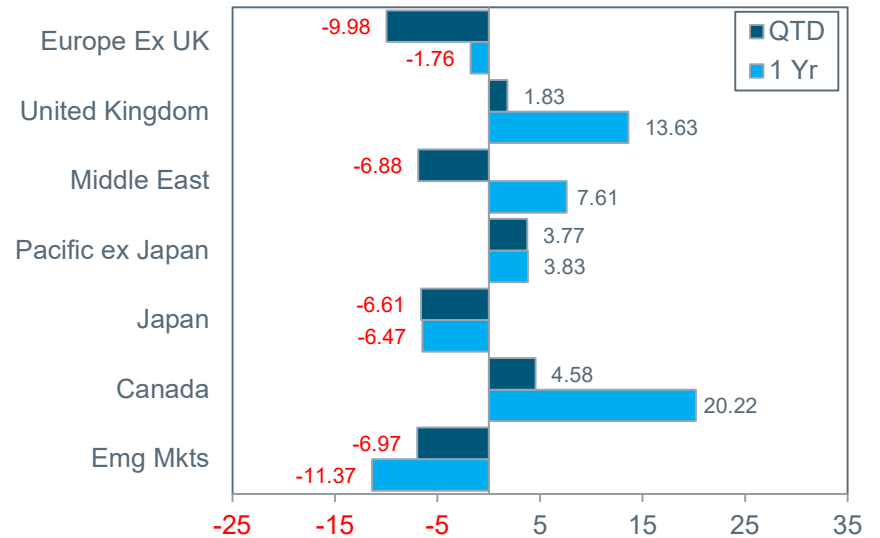
MSCI Style and Capitalization Market Performance (%)



Valuations



MSCI Region Performance (%)



Valuation data courtesy of Bloomberg Professional Service.

P/E metrics shown represent the 5th through 95th percentiles to minimize the effect of outliers. All returns are shown net of foreign taxes on dividends.



First Quarter Review

Broad Market

During Q1, Treasury yields rose from 1.52% to 2.32% as measured by the 10-year US Treasury yield—an 80-basis point rise over a single quarter. In response to the changing economic conditions, the Federal Reserve increased the Federal Funds Rate by 25 basis points—the first of an anticipated series of rate hikes.

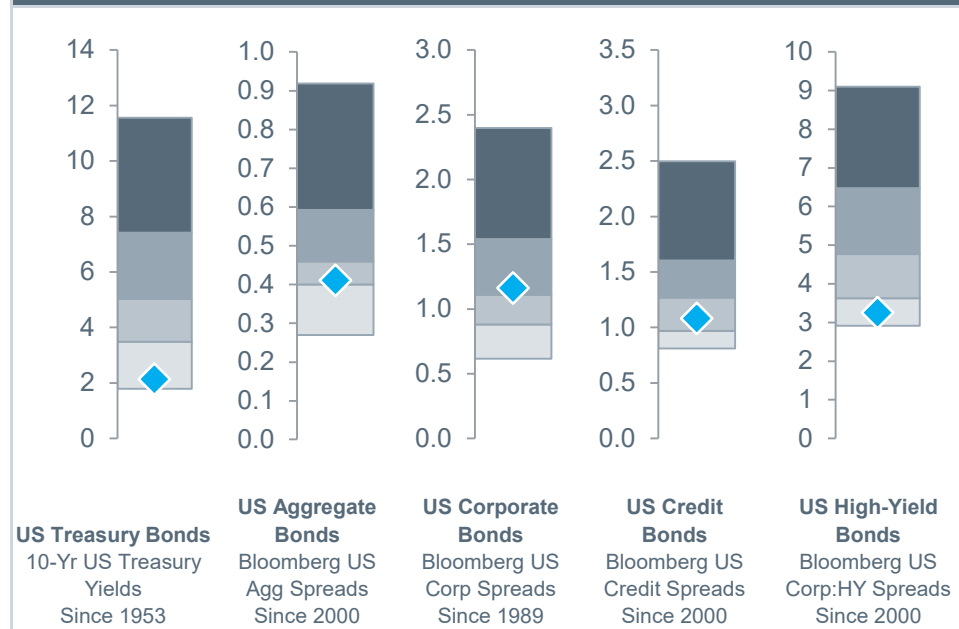
Credit Market

The Bloomberg US Aggregate returned -5.9% for the quarter. US Investment Grade Credit declined -7.4% in Q1, while US High Yield lost -4.8%, as measured by the Bloomberg US Credit Index and Bloomberg US High Yield Index, respectively.

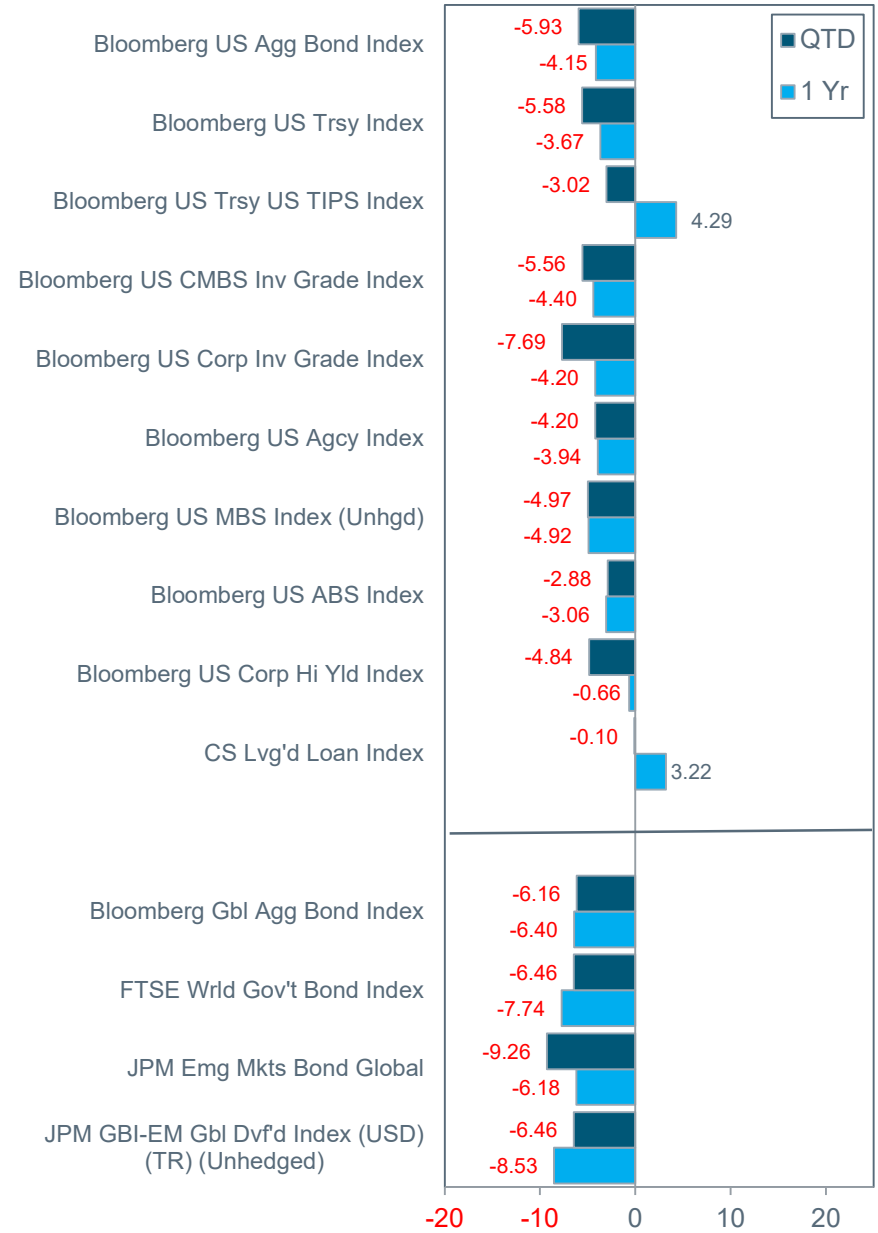
Emerging Market Debt

The war in Ukraine and humanitarian crisis prompted a multitude of economic sanctions against Russia, which precipitated an elevated risk-off sentiment among emerging market debt investors. As a result, the JPM EMBI Global Diversified Index declined -10.0% during the quarter.

Valuations



Fixed Income Performance (%)



Valuation data courtesy of Bloomberg Professional Service. Valuations shown represent the 5th through 95th percentiles to minimize the effect of outliers.



First Quarter Review - Absolute Return

General Market - Hedge Funds

Hedge fund strategies exhibited significant return dispersion in Q1 depending on a strategy’s level of equity beta. Hedged Equity managers produced returns of -4.3% during the quarter, significantly underperforming global equity benchmarks on a beta-adjusted basis. Underperformance generally resulted from long exposures underperforming relative to indexes, particularly within the healthcare, technology, and consumer sectors, while shorts tended to add value. The best-performing firms during Q1 generally had quantitative macro strategies.

General Market - Global Tactical Asset Allocation (GTAA)

Global Tactical Asset Allocation strategies that RVK follows closely generated disparate performance in Q1. The top-performing long-biased GTAA strategies tended to emphasize measures of relative undervaluation in their asset allocation processes, while strategies that underperformed peers tended to hold larger allocations to developed market equity, particularly within cyclical sectors, such as technology, and smaller market capitalization equities.

First Quarter Review - Real Assets

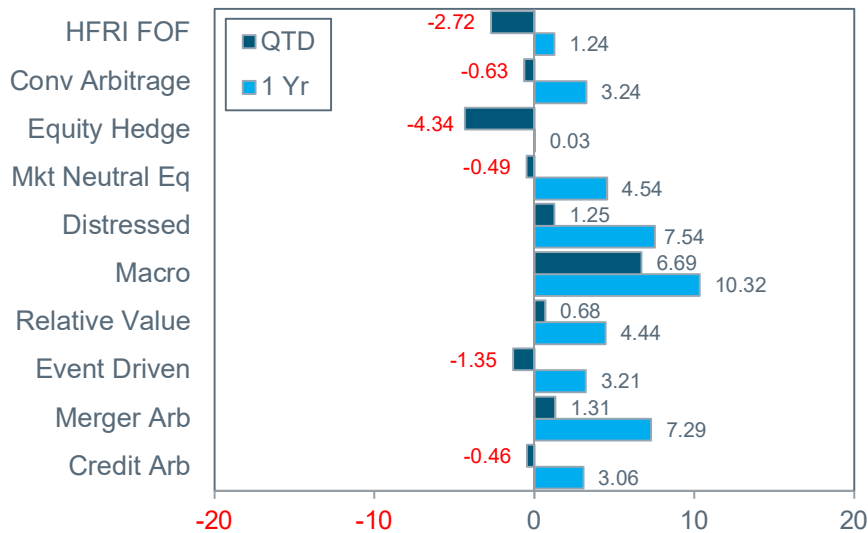
General Market - Diversified Inflation Strategies (DIS)

Diversified Inflation Strategies that RVK follows closely responded to high inflation and generated positive absolute performance, ranging from mid-single digits to low double-digits. Managers with larger equity and commodity exposures to natural resources posted the strongest absolute returns during the quarter, while managers with larger exposures to global listed infrastructure, REITs, and TIPS underperformed peers. While headline and core inflation continued to climb, market-based measures of future inflation expectations remain around a more moderate 2.8%.

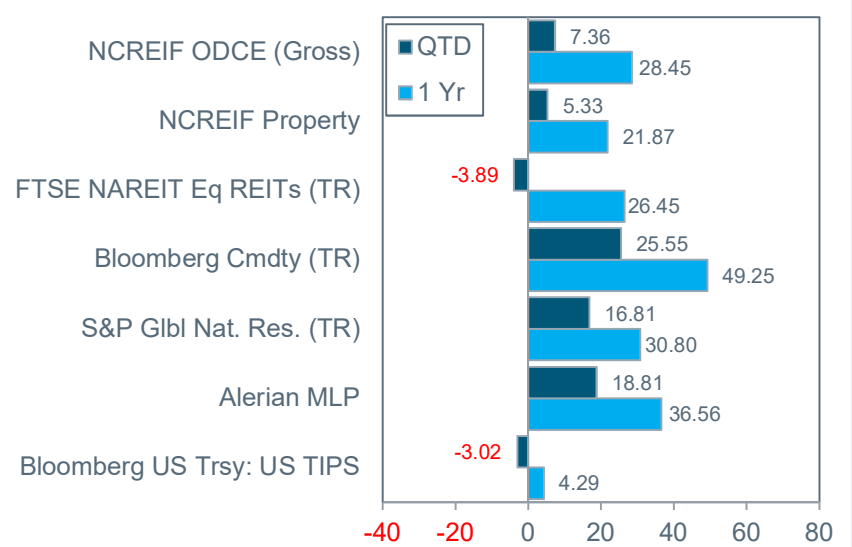
General Market - Real Estate

Core private real estate generated a positive 7.4% return in Q1, as reported by the NFI-ODCE Index, with the total return comprising 0.9% income and 6.4% price appreciation. While the income return is trending at the lower end of historical levels, the price appreciation return remains elevated. Investors in publicly traded real estate significantly underperformed their private market counterparts.

HFRI Hedge Fund Performance (%)



Real Asset Performance (%)



Annual Asset Class Performance

As of March 31, 2022

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD
Best	8.44	78.51	27.94	22.49	20.00	38.82	30.14	15.02	21.31	37.28	8.35	31.49	19.96	43.24	25.55
	5.24	58.21	26.85	15.99	18.23	32.39	19.31	9.59	17.13	33.01	1.87	26.00	18.40	28.71	7.36
	2.06	46.78	22.04	13.56	18.06	29.30	13.69	3.20	11.96	25.03	0.01	25.53	18.31	27.11	0.04
	-2.35	31.78	18.88	8.29	17.32	22.78	12.50	1.38	11.77	21.83	-1.26	24.96	16.12	22.17	-2.72
	-10.01	28.01	16.83	7.84	16.35	13.94	5.97	0.55	11.19	14.65	-2.08	22.01	12.34	14.82	-3.02
	-21.37	27.17	16.36	4.98	16.00	8.96	4.89	0.05	8.77	10.71	-4.02	19.59	10.99	11.26	-3.89
	-26.16	26.46	15.12	2.11	15.81	7.44	3.64	-0.27	8.52	7.77	-4.38	18.44	10.88	10.10	-4.60
	-33.79	18.91	15.06	0.10	10.94	2.47	3.37	-0.81	6.67	7.62	-4.62	14.32	7.82	6.17	-4.84
	-35.65	11.47	10.16	-4.18	8.78	0.07	2.45	-1.44	4.68	7.50	-4.68	8.72	7.51	5.96	-5.31
	-37.00	11.41	7.75	-5.72	6.98	-2.02	0.04	-3.30	2.65	5.23	-11.01	8.43	7.11	5.28	-5.93
	-37.74	5.93	6.54	-12.14	4.79	-2.60	-2.19	-4.41	2.18	3.54	-11.25	8.39	1.19	0.05	-6.97
	-43.33	1.92	6.31	-13.32	4.21	-8.61	-4.90	-4.47	1.00	3.01	-13.73	7.69	0.67	-1.55	-7.53
	-47.01	0.21	5.70	-15.94	0.11	-8.83	-4.95	-14.92	0.51	1.70	-14.58	5.34	-3.12	-2.52	-8.53
Worst	-53.33	-29.76	0.13	-18.42	-1.06	-9.52	-17.01	-24.66	0.33	0.86	-17.89	2.28	-8.00	-2.54	-10.95
	S&P 500 - US Large Cap	R 2000 - US Small Cap	MSCI EAFE (Net) - Int'l Dev.	MSCI EAFE SC (Net) - Int'l SC	MSCI EM (Net) - Int'l Emg Mkts	Bloombrg US Agg Bond - FI	Bloombrg US Corp Hi Yield - FI	Bloombrg US Trsy US TIPS - FI	Bloombrg US Gov Credit Lng - FI	NCREIF ODCE (Gross) - Real Estate	FTSE NAREIT Eq REITs Index (TR)	HFRI FOF Comp Index - ARS	Bloombrg Comdty (TR) - Commod.	ICE BofAML 3 Mo T-Bill - Cash Equiv	

NCREIF ODCE (Gross) performance is reported quarterly; performance is shown N/A in interim-quarter months.



Total Fund



Watch List Managers	Date Added to Watch List	Benchmark	Peer Group	Inception Date	Quantitative Factors						Qualitative Factors	Last Meeting w/Staff or RVK	Rationale for Addition to Watch List
					Rolling 5-Year Return (GoF) for three consecutive quarters vs. Benchmark			Rolling 5-Year Return (GoF) for three consecutive quarters vs. Peer Group universe			Meaningful Updates		
					5-Years Ending Mar-2022	5-Years Ending Dec-2021	5-Years Ending Sept-2021	5-Years Ending Mar-2022	5-Years Ending Dec-2021	5-Years Ending Sept-2021			
US Equity													
Pinnacle US SMID Cap Growth	Oct-20	R2500 Growth	IM US SMID Cap Growth Equity (SA+CF) Median	Mar-10	✓	✓	✓	✓	✓	✓	N/A	Apr-22	Rolling five-year return (gross of fees) has fallen below the rolling five-year benchmark return for three consecutive quarters, and; Rolling five-year return (gross of fees) has ranked in the bottom third of the peer group for three consecutive quarters.
Fixed Income													
FT Global Multisector Plus	Oct-20	FT Global Multisector Index	IM Global FI (SA+CF) Median	Sep-07	✗	✗	✗	✗	✗	✗	N/A	Apr-22	Rolling five-year return (gross of fees) has fallen below the rolling five-year benchmark return for three consecutive quarters, and; Rolling five-year return (gross of fees) has ranked in the bottom third of the peer group for three consecutive quarters.

✓ = strategy exceeds the benchmark / peer group over the stated trailing period.
✗ = strategy does not exceed the benchmark / peer group over the stated trailing period.

Organization, Team, Process, and AUM Developments

Pinnacle US SMID Cap Growth (please refer to page 19 for gross performance)

Firm and product assets have remained stable. There are no recent personnel changes to report nor indications of a change to the investment process. The strategy protected capital successfully relative to its benchmark during the volatile first quarter of 2022. This positive quarter of excess returns follows strong relative results in calendar year 2021. The high quality bias of the portfolio and avoidance of speculative areas of the market have been tailwinds for the portfolio. RVK rates Pinnacle SMID Cap Growth as neutral and views it as an institutional quality option.

Recommendation: RVK recommends Pinnacle US SMID Cap Growth be removed from the Watch List due to improvement in performance relative to its benchmark and rankings amongst peers.

Franklin Templeton Global Multisector Plus (please refer to page 20 for gross performance)

The Global MultiSector Plus team has remained stable and continues to follow a top-down research-led process with a multi-year investment horizon. Assets have continued to decline, from a peak of over \$54B in 2013 to \$6.1B in 2022 Q1. RVK continues to monitor the asset levels of the strategy across vehicles. Performance QTD outperformed the benchmark. Long-term trailing absolute and relative returns remain negative, excluding 10 years and since inception. RVK rates the strategy as neutral and views it as an institutional quality option.

Recommendation: No recommended action at this time. While continued outflows remain concerning, the team and investment process remain stable. Performance for the strategy continues to trail its benchmark and ranks in the bottom third of its peer group over the last three consecutive rolling five-year periods. As such, RVK recommends they remain on the Watch List.



City of Jacksonville Employees' Retirement System
Asset Allocation, Performance & Schedule of Investable Assets

As of March 31, 2022

	Allocation		Performance (%)		Allocation		Performance (%)
	Market Value (\$)	%	QTD		Market Value (\$)	%	QTD
US Equity	1,015,541,190	39.90	-7.05	Real Estate	443,917,977	17.44	5.35
Eagle Capital Large Cap Value (SA)	257,493,947	10.12	-8.87	Harrison Street Core Property, LP	121,034,295	4.76	2.55
Mellon Large Cap Core Index (CF)	303,153,090	11.91	-5.13	PGIM Real Estate PRISA II LP (CF)	70,250,623	2.76	6.47
Loomis Sayles Large Cap Growth (CF)	194,821,516	7.65	-7.82	Principal US Property (CF)	164,106,199	6.45	7.33
Pinnacle Associates US SMID Cap Growth (SA)	88,974,856	3.50	-5.69	UBS Trumbull Property (CF)	82,187,852	3.23	5.16
Kayne Anderson US SMID Value (SA)	82,847,245	3.25	N/A	Vanguard RE Idx;ETF (VNQ)	1,446,436	0.06	-6.08
Systematic Financial US SMID Value (SA)	88,250,537	3.47	N/A	H.I.G. Realty Fund IV (CF)	4,892,572	0.19	N/A
International Equity	571,686,598	22.46	-7.89	Diversifying Assets	61,163,100	2.40	9.07
Silchester International Value (CF)	264,118,979	10.38	0.18	Hancock Timberland (SA)	11,678,728	0.46	0.00
Baillie Gifford International Growth (BGEFX)	168,771,745	6.63	-21.73	Adams Street Private Equity (SA)	34,286,180	1.35	16.01
Acadian Emerging Markets (CF)	138,795,874	5.45	-1.81	Hamilton Lane Private Credit (SA)	15,198,191	0.60	0.08
Fixed Income	447,031,506	17.56	-4.46	Dreyfus Gvt Csh Mgt;Inst (DGCXX)	5,864,673	0.23	0.08
Baird Core Fixed Income (SA)	218,468,576	8.58	-6.17	Transition Account	100,377	0.00	N/A
Franklin Templeton Global Multisector Plus (CF)	93,848,660	3.69	1.43				
Loomis Sayles Multisector Full Discretion (CF)	134,714,269	5.29	-5.48				

Schedule of Investable Assets (Total Assets)

Periods Ending	Beginning Market Value (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)	% Return
CYTD	2,664,636,142	608,172	-119,938,894	2,545,305,421	-4.49

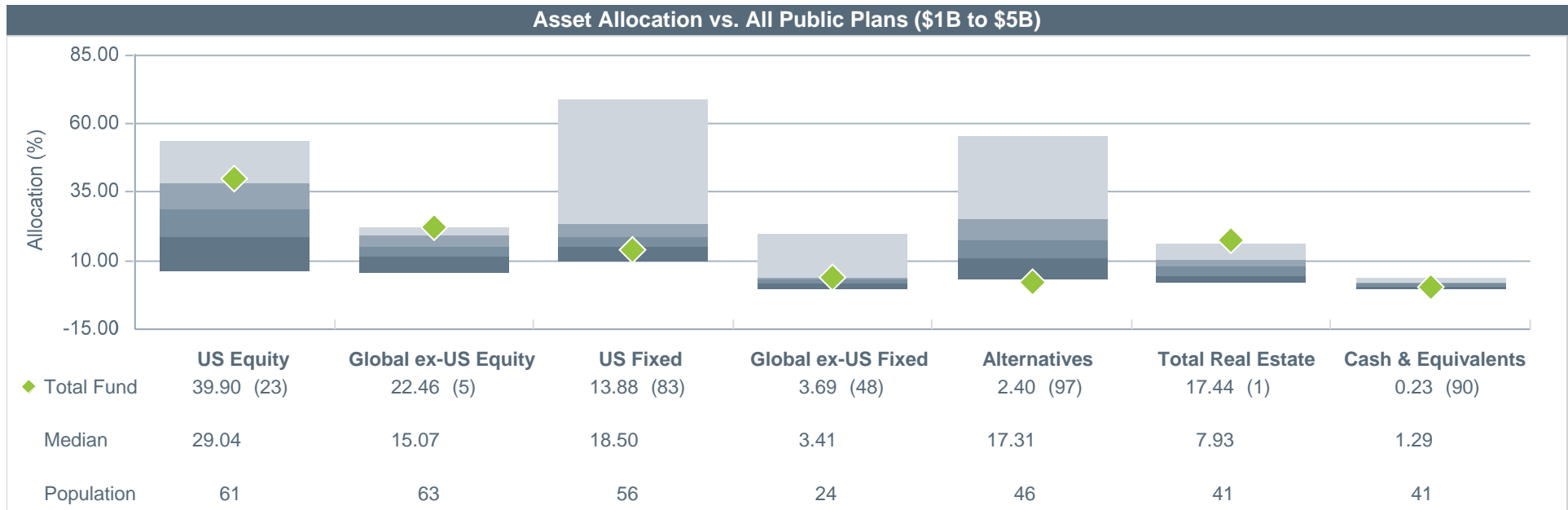
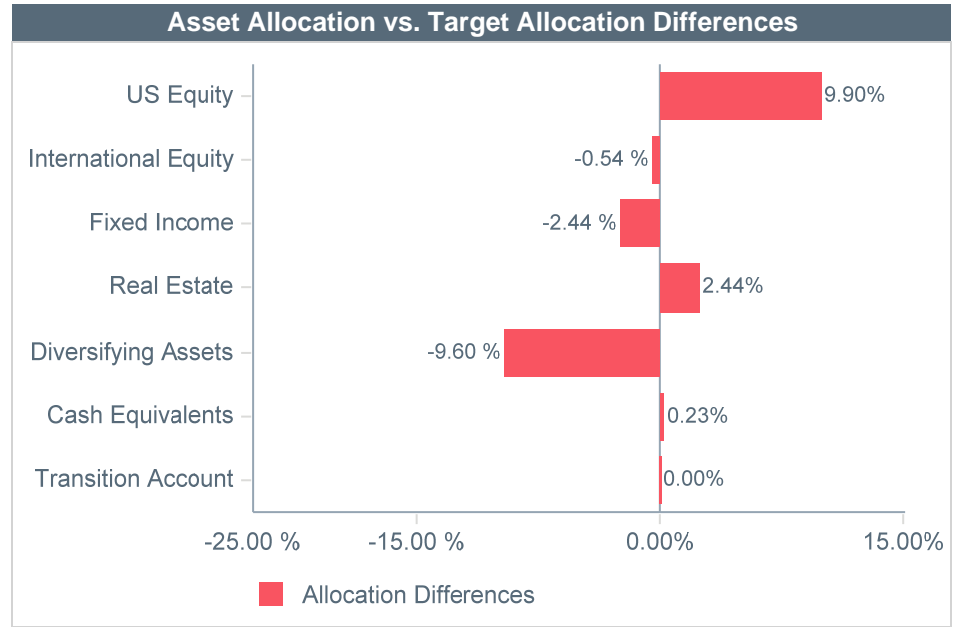
Performance shown is net of fees. Allocations shown may not sum up to 100% exactly due to rounding. During 01/2022, H.I.G. Realty Fund IV (CF) was funded. Additionally, Mellon Small Cap Value Index (CF) was liquidated. During 02/2022, Kayne Anderson US SMID Value (SA) and Systematic Financial US SMID Value (SA) were funded.



City of Jacksonville Employees' Retirement System
Total Fund vs. All Public Plans (\$1B to \$5B)
Asset Allocation vs. Target and Plan Sponsor Peer Group

As of March 31, 2022

Asset Allocation vs. Target Allocation					
	Market Value (\$)	Allocation (%)	Min (%)	Target (%)	Max (%)
Total Fund	2,545,305,421	100.00	-	100.00	-
US Equity	1,015,541,190	39.90	20.00	30.00	40.00
International Equity	571,686,598	22.46	13.00	23.00	25.00
Fixed Income	447,031,506	17.56	10.00	20.00	30.00
Real Estate	443,917,977	17.44	0.00	15.00	20.00
Diversifying Assets	61,163,100	2.40	0.00	12.00	20.00
Cash Equivalents	5,864,673	0.23	0.00	0.00	10.00
Transition Account	100,377	0.00	0.00	0.00	0.00

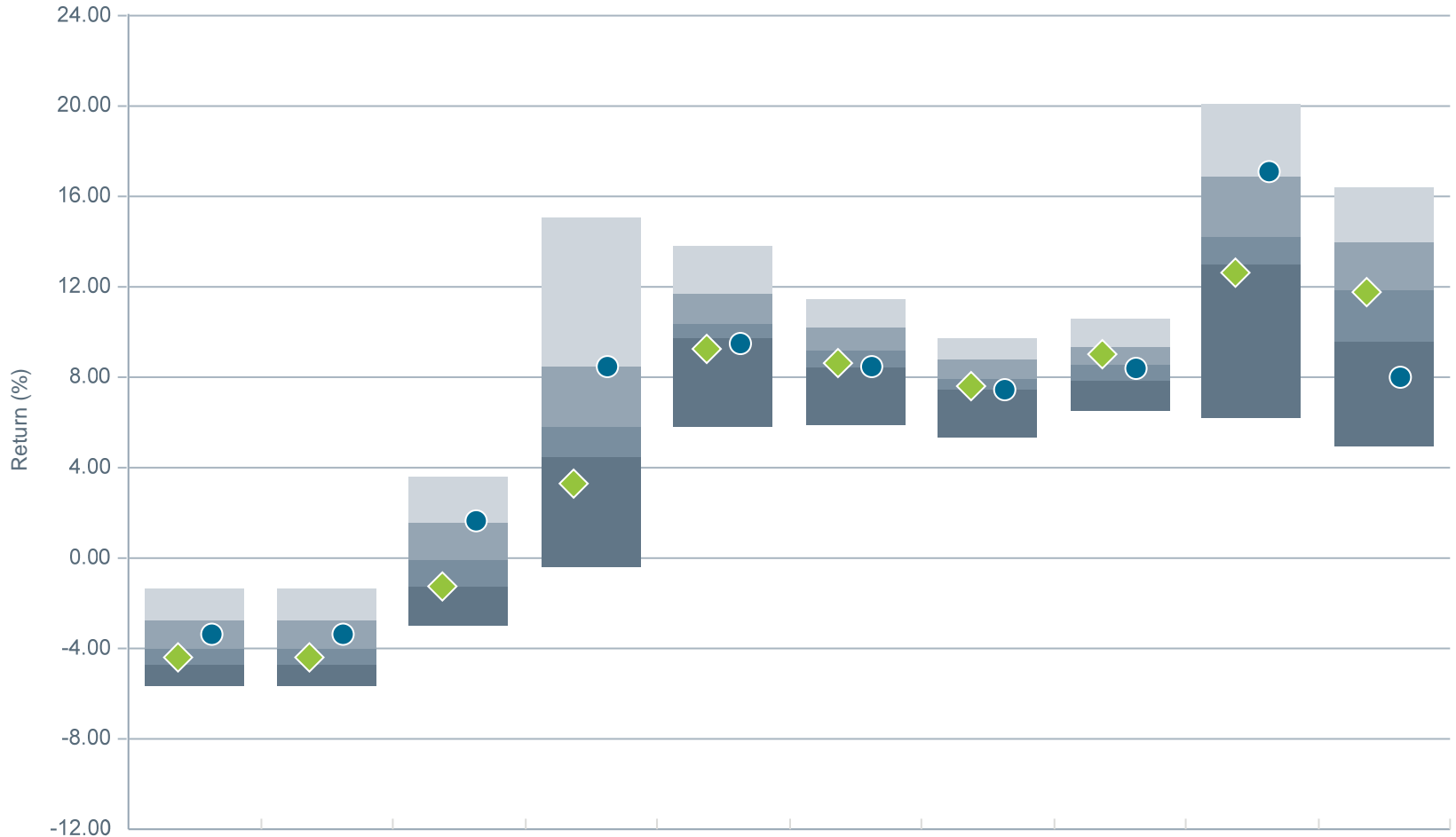


Allocations shown may not sum up to 100% exactly due to rounding. Parentheses contain percentile ranks.



City of Jacksonville Employees' Retirement System
 Total Fund vs. All Public Plans (\$1B to \$5B)
 Plan Sponsor Peer Group Analysis

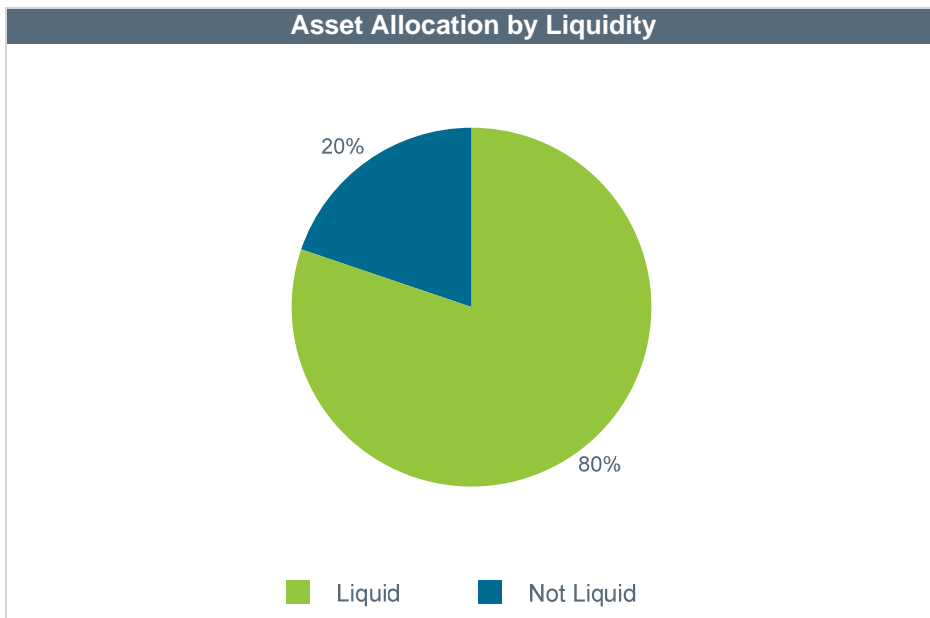
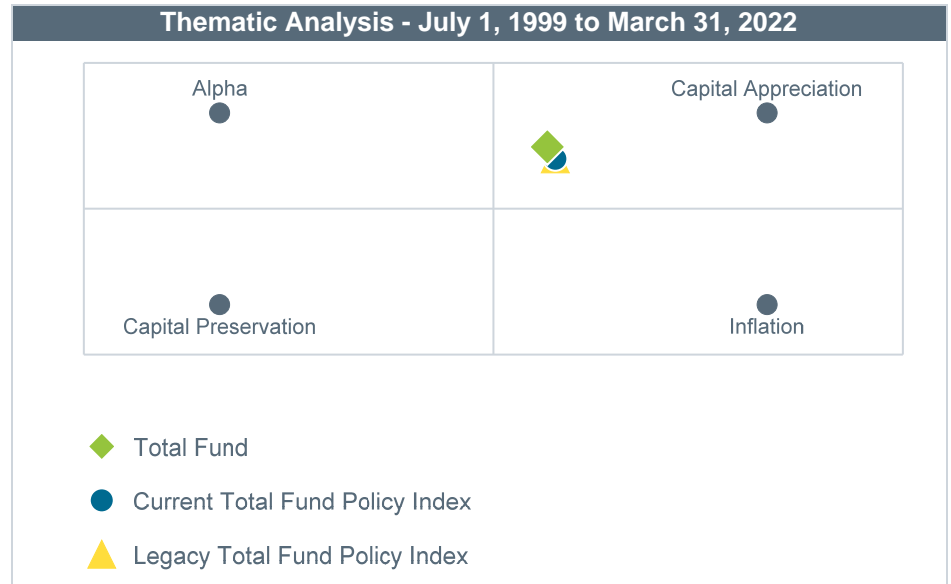
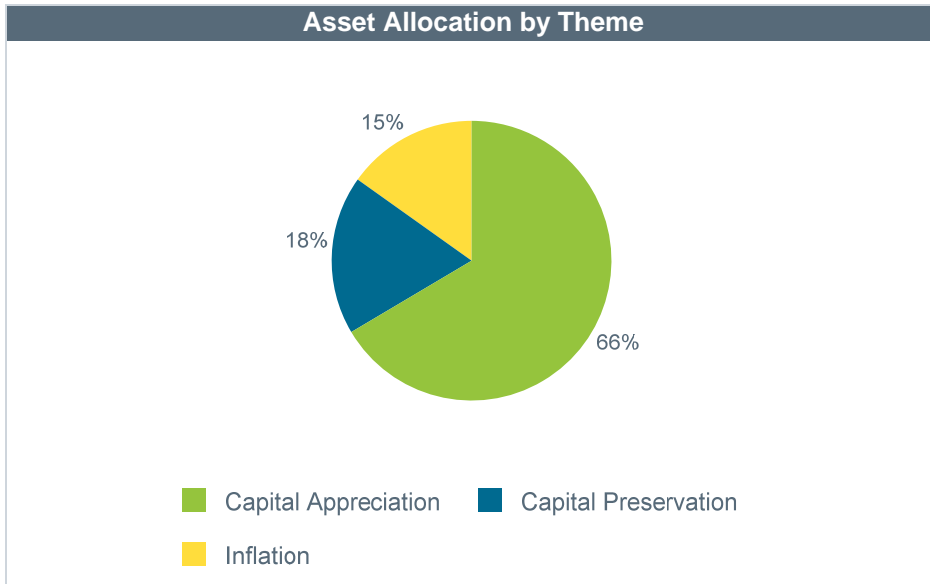
As of March 31, 2022



	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020
◆ Total Fund	-4.37 (65)	-4.37 (65)	-1.26 (80)	3.30 (84)	9.29 (87)	8.62 (71)	7.60 (61)	9.00 (33)	12.64 (80)	11.73 (52)
● Current Total Fund Policy Index	-3.35 (33)	-3.35 (33)	1.64 (24)	8.50 (25)	9.52 (83)	8.44 (80)	7.43 (79)	8.36 (54)	17.09 (21)	8.02 (92)
5th Percentile	-1.33	-1.33	3.64	15.07	13.84	11.41	9.75	10.59	20.11	16.39
1st Quartile	-2.77	-2.77	1.56	8.44	11.65	10.17	8.75	9.32	16.90	14.00
Median	-3.98	-3.98	-0.09	5.79	10.35	9.18	7.95	8.52	14.21	11.81
3rd Quartile	-4.69	-4.69	-1.22	4.44	9.74	8.49	7.47	7.86	13.05	9.60
95th Percentile	-5.69	-5.69	-2.98	-0.40	5.82	5.92	5.32	6.55	6.17	4.95

Performance shown is gross of fees. Parentheses contain percentile ranks. Fiscal year for the COJ ends 09/30.



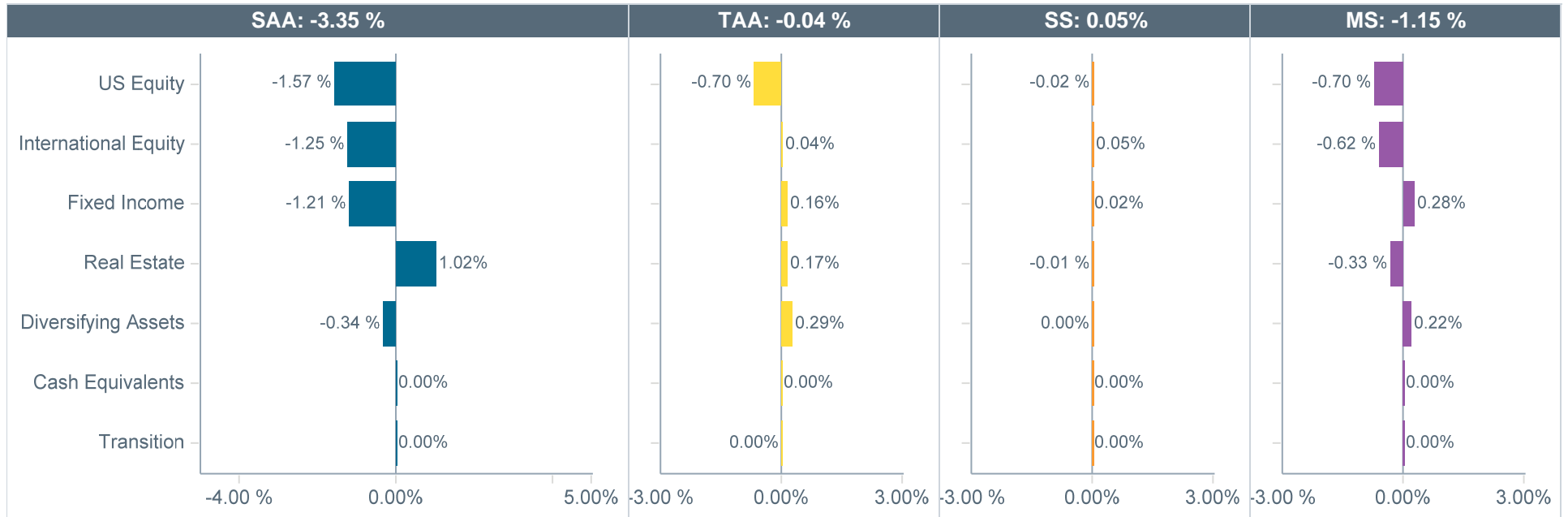
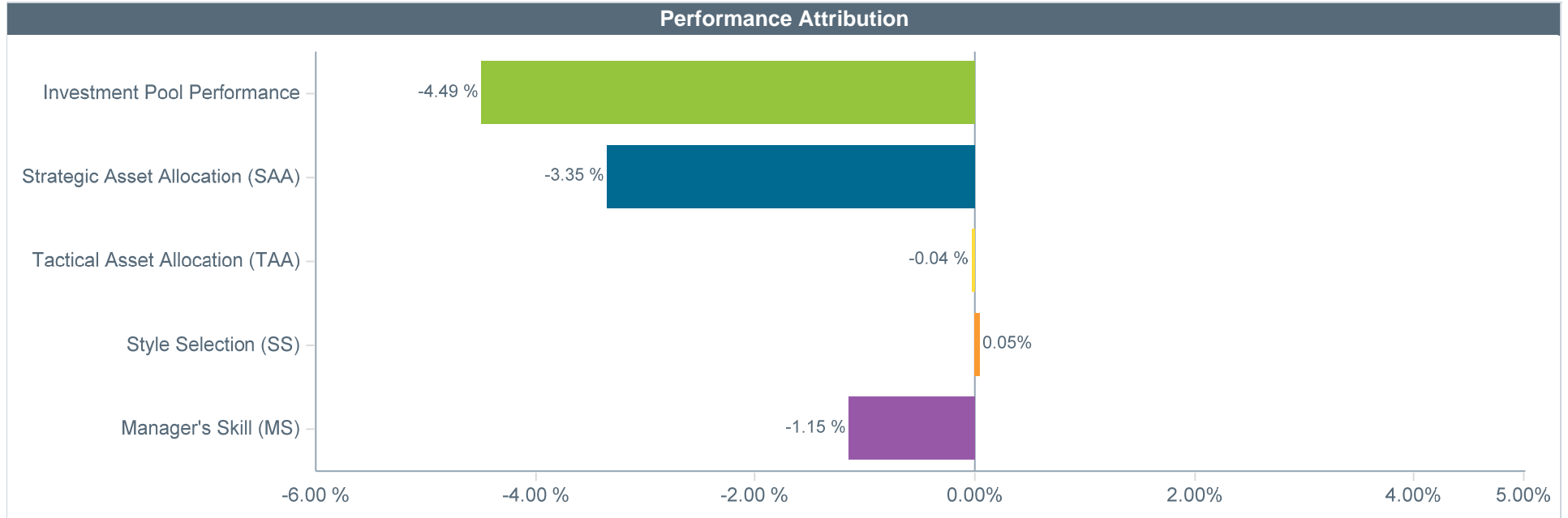


Correlation Matrix - 10 Years

	A	B	C	D
A	1.00			
B	0.64	1.00		
C	-0.15	-0.27	1.00	
D	0.55	0.75	-0.09	1.00

A = HFRI EH: Equity Market Neutral Index (Alpha)
 B = MSCI ACW Index (USD) (Gross) (Capital Appreciation)
 C = Bloomberg US Gov't Bond Index (Capital Preservation)
 D = Real Return Custom Index (Inflation)

Asset Allocation by Theme is based on dedicated manager allocations; as such, thematic allocations are approximations. The RVK Liquidity Rating is calculated using beginning of month investment weights applied to each corresponding asset class liquidity rating. Please see the Glossary for additional information regarding liquidity, thematic, and custom index descriptions.

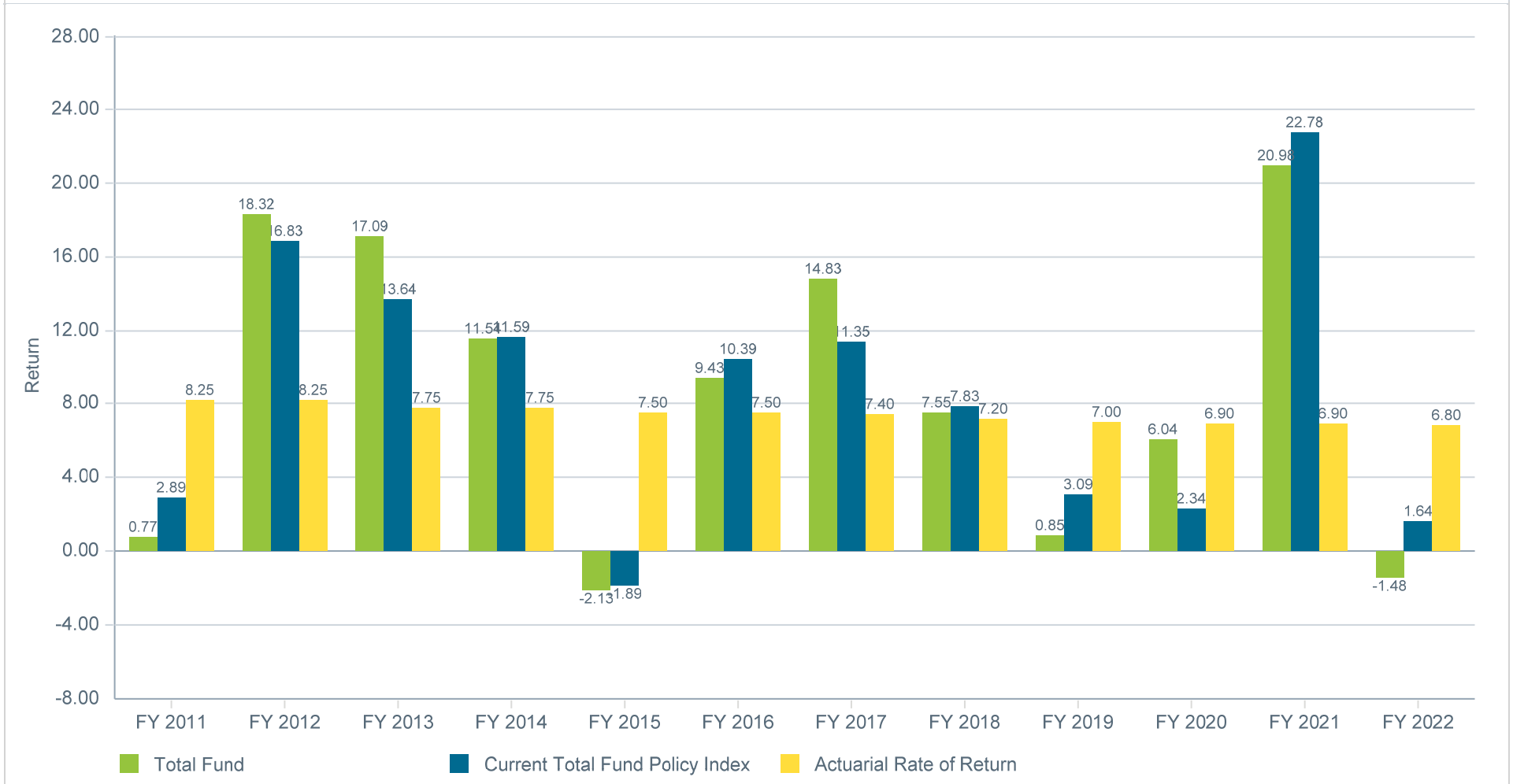


Performance shown is net of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution - IDP calculation.

City of Jacksonville Employees' Retirement System
Historical Fiscal Year Returns

As of March 31, 2022

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FYTD
Total Fund	11.31	0.77	18.32	17.09	11.54	-2.13	9.43	14.83	7.55	0.85	6.04	20.98	-1.48
Current Total Fund Policy Index	8.32	2.89	16.83	13.64	11.59	-1.89	10.39	11.35	7.83	3.09	2.34	22.78	1.64
Difference	2.99	-2.12	1.49	3.45	-0.05	-0.24	-0.96	3.48	-0.28	-2.24	3.70	-1.80	-3.12
Actuarial Rate of Return	8.40	8.25	8.25	7.75	7.75	7.50	7.50	7.40	7.20	7.00	6.90	6.90	6.80
Difference	2.91	-7.48	10.07	9.34	3.79	-9.63	1.93	7.43	0.35	-6.15	-0.86	14.08	-8.28



Performance shown is net of fees. Fiscal year for the COJ ends 09/30. The Fiscal Year Actuarial Rate of Return changed from 8.40% to 8.25% effective 10/01/2010, changed to 7.75% effective 10/01/2012, changed to 7.50% effective 10/01/2014, changed to 7.40% effective 10/01/2016, changed to 7.20% effective 10/01/2017, changed to 7.00% effective 10/01/2018, changed to 6.90% effective 10/01/2019, and then changed to 6.80% effective 10/01/2021. Please see the Addendum for custom index definitions.



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

As of March 31, 2022

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Total Fund	2,545,305,421	100.00	-4.37	-4.37	-1.26	3.30	9.29	8.62	7.60	9.00	6.86	07/01/1999
Current Total Fund Policy Index			-3.35	-3.35	1.64	8.50	9.52	8.44	7.43	8.36	6.24	
Difference			-1.02	-1.02	-2.90	-5.20	-0.23	0.18	0.17	0.64	0.62	
All Public Plans (\$1B to \$5B) (Custom PG) Median			-3.98	-3.98	-0.09	5.79	10.35	9.18	7.95	8.52	6.51	
Rank			65	65	80	84	87	71	61	33	31	
Total Equity	1,587,227,788	62.36	-7.23	-7.23	-4.28	-0.14	13.53	11.97	10.25	11.54	7.14	07/01/1999
US Equity	1,015,541,190	39.90	-6.93	-6.93	-1.39	5.26	16.84	14.62	12.37	13.70	7.87	07/01/1999
US Equity Index			-5.28	-5.28	3.51	11.92	18.24	15.40	13.38	14.28	7.75	
Difference			-1.65	-1.65	-4.90	-6.66	-1.40	-0.78	-1.01	-0.58	0.12	
IM U.S. Equity (SA+CF) Median			-5.24	-5.24	2.84	8.95	16.23	13.48	11.73	13.38	9.65	
Rank			63	63	70	65	44	43	44	46	84	
International Equity	571,686,598	22.46	-7.76	-7.76	-9.01	-8.45	8.34	7.79	6.76	7.81	6.35	07/01/1999
International Equity Index			-5.44	-5.44	-3.72	-1.48	7.51	6.76	5.19	5.55	4.26	
Difference			-2.32	-2.32	-5.29	-6.97	0.83	1.03	1.57	2.26	2.09	
IM International Equity (SA+CF) Median			-7.25	-7.20	-5.88	-2.12	8.27	7.56	6.32	7.11	7.30	
Rank			54	54	67	74	50	46	43	38	66	
Fixed Income	447,031,506	17.56	-4.38	-4.38	-4.95	-3.05	1.21	1.79	1.93	2.60	4.88	07/01/1999
Fixed Income Index			-6.11	-6.11	-6.14	-4.23	1.85	2.25	1.95	2.30	4.44	
Difference			1.73	1.73	1.19	1.18	-0.64	-0.46	-0.02	0.30	0.44	
IM Global Fixed Income (SA+CF) Median			-4.62	-4.62	-4.63	-3.27	3.45	3.57	3.42	3.28	6.10	
Rank			47	47	54	49	82	87	84	59	66	
Real Estate	443,917,977	17.44	5.49	5.49	12.77	20.03	8.06	8.21	8.57	9.33	6.81	12/01/2005
NCREIF ODCE Index (AWA) (Gross)			7.36	7.36	15.92	28.45	11.29	9.88	10.19	10.93	7.99	
Difference			-1.87	-1.87	-3.15	-8.42	-3.23	-1.67	-1.62	-1.60	-1.18	
Diversifying Assets	61,163,100	2.40	9.20	9.20	24.15	44.35	9.35	6.42	3.82	7.37	8.15	03/01/2011
Diversifying Assets Index			-2.81	-2.81	3.71	16.23	1.05	1.07	0.26	3.39	3.58	
Difference			12.01	12.01	20.44	28.12	8.30	5.35	3.56	3.98	4.57	

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

As of March 31, 2022

	Allocation		Performance (%)									
	Market Value (\$)	%	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)	257,493,947	10.12	-8.69	-8.69	-5.62	5.21	16.46	14.78	13.32	14.94	11.78	02/01/2007
Russell 1000 Val Index			-0.74	-0.74	6.98	11.67	13.02	10.29	9.73	11.70	7.28	
Difference			-7.95	-7.95	-12.60	-6.46	3.44	4.49	3.59	3.24	4.50	
IM U.S. Large Cap Value Equity (SA+CF) Median			-0.37	-0.37	8.21	13.47	15.26	12.18	10.83	12.60	8.79	
Rank			98	98	100	97	33	13	10	7	2	
Mellon Large Cap Core Index (CF)	303,153,090	11.91	-5.13	-5.13	4.15	13.31	N/A	N/A	N/A	N/A	17.65	05/01/2019
Russell 1000 Index			-5.13	-5.13	4.15	13.27	18.71	15.82	13.72	14.53	17.69	
Difference			0.00	0.00	0.00	0.04	N/A	N/A	N/A	N/A	-0.04	
IM U.S. Large Cap Core Equity (SA+CF) Median			-4.58	-4.58	5.22	13.98	17.92	15.39	13.14	14.30	16.81	
Rank			60	60	63	55	N/A	N/A	N/A	N/A	38	
Loomis Sayles Large Cap Growth (CF)	194,821,516	7.65	-7.65	-7.65	-1.33	6.99	18.73	N/A	N/A	N/A	17.51	08/01/2017
Russell 1000 Grth Index			-9.04	-9.04	1.54	14.98	23.60	20.88	17.34	17.04	20.66	
Difference			1.39	1.39	-2.87	-7.99	-4.87	N/A	N/A	N/A	-3.15	
IM U.S. Large Cap Growth Equity (SA+CF) Median			-9.86	-9.86	-1.43	10.61	20.16	18.87	15.57	15.92	18.44	
Rank			26	26	50	73	74	N/A	N/A	N/A	67	
Pinnacle Associates US SMID Cap Growth (SA)	88,974,856	3.50	-5.19	-5.19	-2.00	-4.22	19.29	15.46	12.97	14.50	15.37	03/01/2010
Russell 2500 Grth Index			-12.30	-12.30	-12.13	-10.12	12.99	13.22	10.53	12.69	13.79	
Difference			7.11	7.11	10.13	5.90	6.30	2.24	2.44	1.81	1.58	
IM U.S. SMID Cap Growth Equity (SA+CF) Median			-12.64	-12.64	-8.89	-1.42	16.67	16.41	12.82	13.76	15.40	
Rank			5	5	20	62	26	65	48	39	53	
Kayne Anderson US SMID Value (SA)	82,847,245	3.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.36	03/01/2022
Russell 2500 Val Index			-1.50	-1.50	4.77	7.73	12.98	9.19	8.86	11.04	2.11	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-2.47	
IM U.S. SMID Cap Value Equity (SA+CF) Median			-2.69	-2.69	4.19	7.70	15.09	10.93	9.77	12.19	0.47	
Rank			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	74	
Systematic Financial US SMID Value (SA)	88,250,537	3.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.37	03/01/2022
Russell 2500 Val Index			-1.50	-1.50	4.77	7.73	12.98	9.19	8.86	11.04	2.11	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-2.48	
IM U.S. SMID Cap Value Equity (SA+CF) Median			-2.69	-2.69	4.19	7.70	15.09	10.93	9.77	12.19	0.47	
Rank			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	74	

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

As of March 31, 2022

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
International Equity												
Silchester International Value (CF)	264,118,979	10.38	0.32	0.32	0.42	3.64	7.65	6.46	6.19	8.66	9.72	06/01/2009
MSCI EAFE Val Index (USD) (Net)			0.33	0.33	1.51	3.55	5.24	4.18	3.13	4.87	5.30	
Difference			-0.01	-0.01	-1.09	0.09	2.41	2.28	3.06	3.79	4.42	
IM EAFE Value (SA+CF) Median			-4.79	-4.79	-2.24	1.91	7.05	5.87	5.06	6.45	7.51	
Rank			6	6	19	25	36	32	21	11	12	
Baillie Gifford International Growth (BGEFX)	168,771,745	6.63	-21.63	-21.63	-25.10	-26.74	10.57	11.77	9.18	9.61	10.72	06/01/2009
Baillie Gifford Index			-10.78	-10.78	-8.66	-6.16	9.12	8.28	6.36	7.13	7.97	
Difference			-10.85	-10.85	-16.44	-20.58	1.45	3.49	2.82	2.48	2.75	
Baillie Gifford Spliced Index			-5.44	-5.44	-3.72	-1.48	8.14	6.93	5.26	6.38	6.93	
Difference			-16.19	-16.19	-21.38	-25.26	2.43	4.84	3.92	3.23	3.79	
IM ACWI Ex US Growth (SA+CF) Median			-12.22	-12.22	-10.51	-4.54	10.59	10.05	7.72	8.16	9.31	
Rank			99	99	98	99	51	24	26	17	16	
Acadian Emerging Markets (CF)	138,795,874	5.45	-1.67	-1.67	-0.84	-0.34	9.11	7.05	5.94	4.90	4.41	02/01/2011
MSCI Emg Mkts Index (USD) (Net)			-6.97	-6.97	-8.19	-11.37	4.94	5.98	4.69	3.36	2.59	
Difference			5.30	5.30	7.35	11.03	4.17	1.07	1.25	1.54	1.82	
IM Emerging Markets Equity (SA+CF) Median			-7.04	-7.04	-8.09	-9.13	6.81	6.86	5.94	5.08	4.05	
Rank			19	19	17	24	28	47	51	53	41	
Fixed Income												
Baird Core Fixed Income (SA)	218,468,576	8.58	-6.12	-6.12	-6.29	-4.06	N/A	N/A	N/A	N/A	-4.76	03/01/2021
Bloomberg US Agg Bond Index			-5.93	-5.93	-5.92	-4.15	1.69	2.14	1.87	2.24	-4.95	
Difference			-0.19	-0.19	-0.37	0.09	N/A	N/A	N/A	N/A	0.19	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			-5.81	-5.81	-5.87	-3.88	2.24	2.66	2.37	2.75	-4.60	
Rank			84	84	88	69	N/A	N/A	N/A	N/A	64	
Franklin Templeton Global Multisector Plus (CF)	93,848,660	3.69	1.53	1.53	-0.87	-1.26	-3.44	-1.72	-0.36	1.49	5.19	09/01/2007
Frank. Temp. Global Multisector Index			-6.05	-6.05	-6.71	-6.22	0.77	1.78	1.74	1.21	2.90	
Difference			7.58	7.58	5.84	4.96	-4.21	-3.50	-2.10	0.28	2.29	
IM Global Fixed Income (SA+CF) Median			-4.62	-4.62	-4.63	-3.27	3.45	3.57	3.42	3.28	3.99	
Rank			5	5	12	34	100	100	100	77	34	
Loomis Sayles Multisector Full Discretion (CF)	134,714,269	5.29	-5.39	-5.39	-5.46	-2.61	4.93	4.85	4.46	5.66	6.47	10/01/2007
Bloomberg Gbl Agg Bond Index			-6.16	-6.16	-6.79	-6.40	0.69	1.70	1.58	1.04	2.56	
Difference			0.77	0.77	1.33	3.79	4.24	3.15	2.88	4.62	3.91	
IM Global Fixed Income (SA+CF) Median			-4.62	-4.62	-4.63	-3.27	3.45	3.57	3.42	3.28	3.80	
Rank			63	63	59	45	24	23	35	17	8	

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

As of March 31, 2022

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Real Estate												
Harrison Street Core Property, LP	121,034,295	4.76	2.55	2.55	5.41	9.95	7.03	8.08	N/A	N/A	7.84	11/01/2015
NCREIF ODCE Index (AWA) (Gross)			7.36	7.36	15.92	28.45	11.29	9.88	10.19	10.93	9.90	
Difference			-4.81	-4.81	-10.51	-18.50	-4.26	-1.80	N/A	N/A	-2.06	
PGIM Real Estate PRISA II LP (CF)	70,250,623	2.76	6.63	6.63	14.53	22.63	9.19	9.40	9.86	N/A	10.00	01/01/2015
NCREIF ODCE Index (AWA) (Gross)			7.36	7.36	15.92	28.45	11.29	9.88	10.19	10.93	10.33	
Difference			-0.73	-0.73	-1.39	-5.82	-2.10	-0.48	-0.33	N/A	-0.33	
Principal US Property (CF)	164,106,199	6.45	7.54	7.54	18.59	29.65	12.39	11.02	11.23	N/A	11.61	01/01/2014
NCREIF ODCE Index (AWA) (Gross)			7.36	7.36	15.92	28.45	11.29	9.88	10.19	10.93	10.59	
Difference			0.18	0.18	2.67	1.20	1.10	1.14	1.04	N/A	1.02	
UBS Trumbull Property (CF)	82,187,852	3.23	5.36	5.36	11.94	16.81	2.91	4.29	5.61	7.12	5.99	12/01/2005
NCREIF ODCE Index (AWA) (Gross)			7.36	7.36	15.92	28.45	11.29	9.88	10.19	10.93	7.99	
Difference			-2.00	-2.00	-3.98	-11.64	-8.38	-5.59	-4.58	-3.81	-2.00	
Vanguard RE Idx;ETF (VNQ)	1,446,436	0.06	-6.08	-6.08	8.02	21.28	11.36	9.54	7.78	9.55	13.65	12/01/2008
Custom REITs Index			-5.95	-5.95	8.10	21.58	11.55	10.08	8.19	9.95	14.44	
Difference			-0.13	-0.13	-0.08	-0.30	-0.19	-0.54	-0.41	-0.40	-0.79	
H.I.G. Realty Fund IV (CF)	4,892,572	0.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	04/01/2022
NCREIF ODCE Index (AWA) (Net)			7.17	7.17	15.37	27.29	10.31	8.91	9.21	9.92	N/A	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Diversifying Assets												
Hancock Timberland (SA)	11,678,728	0.46	0.00	0.00	3.88	19.14	8.86	9.42	7.28	8.15	4.77	10/01/2006
NCREIF Timberland Index			3.21	3.21	7.91	11.83	4.75	4.08	3.85	5.60	5.55	
Difference			-3.21	-3.21	-4.03	7.31	4.11	5.34	3.43	2.55	-0.78	
Adams Street Private Equity (SA)	34,286,180	1.35	16.01	16.01	43.41	66.71	N/A	N/A	N/A	N/A	43.44	11/01/2020
S&P 500 Index+3%			-3.89	-3.89	7.50	19.12	22.49	19.47	17.43	18.08	31.58	
Difference			19.90	19.90	35.91	47.59	N/A	N/A	N/A	N/A	11.86	
Hamilton Lane Private Credit (SA)	15,198,191	0.60	0.65	0.65	2.99	4.27	N/A	N/A	N/A	N/A	4.27	04/01/2021
ICE BofAML Gbl Hi Yld Index +2%			-5.55	-5.55	-5.80	-2.76	5.26	5.96	6.65	7.19	-2.76	
Difference			6.20	6.20	8.79	7.03	N/A	N/A	N/A	N/A	7.03	
Dreyfus Gvt Csh Mgt;Inst (DGCXX)	5,864,673	0.23	0.12	0.12	0.26	0.70	0.97	1.26	0.99	0.72	1.36	04/01/2001
FTSE 3 Mo T-Bill Index			0.03	0.03	0.04	0.06	0.76	1.09	0.84	0.60	1.29	
Difference			0.09	0.09	0.22	0.64	0.21	0.17	0.15	0.12	0.07	

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

As of March 31, 2022

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Total Fund	2,545,305,421	100.00	-4.49	-4.49	-1.48	2.83	8.75	8.09	7.07	8.47	6.54	07/01/1999
Current Total Fund Policy Index			-3.35	-3.35	1.64	8.50	9.52	8.44	7.43	8.36	6.24	
Difference			-1.14	-1.14	-3.12	-5.67	-0.77	-0.35	-0.36	0.11	0.30	
Total Equity	1,587,227,788	62.36	-7.36	-7.36	-4.50	-0.59	12.95	11.41	9.68	10.96	6.82	07/01/1999
US Equity	1,015,541,190	39.90	-7.05	-7.05	-1.59	4.82	16.28	14.07	11.81	13.13	7.56	07/01/1999
US Equity Index			-5.28	-5.28	3.51	11.92	18.24	15.40	13.38	14.28	7.75	
Difference			-1.77	-1.77	-5.10	-7.10	-1.96	-1.33	-1.57	-1.15	-0.19	
International Equity	571,686,598	22.46	-7.89	-7.89	-9.26	-8.94	7.76	7.19	6.17	7.21	6.01	07/01/1999
International Equity Index			-5.44	-5.44	-3.72	-1.48	7.51	6.76	5.19	5.55	4.26	
Difference			-2.45	-2.45	-5.54	-7.46	0.25	0.43	0.98	1.66	1.75	
Fixed Income	447,031,506	17.56	-4.46	-4.46	-5.09	-3.31	0.94	1.53	1.70	2.39	4.72	07/01/1999
Fixed Income Index			-6.11	-6.11	-6.14	-4.23	1.85	2.25	1.95	2.30	4.44	
Difference			1.65	1.65	1.05	0.92	-0.91	-0.72	-0.25	0.09	0.28	
Real Estate	443,917,977	17.44	5.35	5.35	12.46	19.38	7.31	7.45	7.80	8.51	6.14	12/01/2005
NCREIF ODCE Index (AWA) (Net)			7.17	7.17	15.37	27.29	10.31	8.91	9.21	9.92	6.99	
Difference			-1.82	-1.82	-2.91	-7.91	-3.00	-1.46	-1.41	-1.41	-0.85	
Diversifying Assets	61,163,100	2.40	9.07	9.07	23.82	43.21	8.70	5.85	3.28	6.82	7.60	03/01/2011
Diversifying Assets Index			-2.81	-2.81	3.71	16.23	1.05	1.07	0.26	3.39	3.58	
Difference			11.88	11.88	20.11	26.98	7.65	4.78	3.02	3.43	4.02	

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

As of March 31, 2022

	Allocation		Performance (%)									
	Market Value (\$)	%	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)	257,493,947	10.12	-8.87	-8.87	-5.97	4.44	15.52	13.93	12.48	14.08	11.07	02/01/2007
Russell 1000 Val Index			-0.74	-0.74	6.98	11.67	13.02	10.29	9.73	11.70	7.28	
Difference			-8.13	-8.13	-12.95	-7.23	2.50	3.64	2.75	2.38	3.79	
Mellon Large Cap Core Index (CF)	303,153,090	11.91	-5.13	-5.13	4.14	13.29	N/A	N/A	N/A	N/A	17.62	05/01/2019
Russell 1000 Index			-5.13	-5.13	4.15	13.27	18.71	15.82	13.72	14.53	17.69	
Difference			0.00	0.00	-0.01	0.02	N/A	N/A	N/A	N/A	-0.07	
Loomis Sayles Large Cap Growth (CF)	194,821,516	7.65	-7.82	-7.82	-1.61	6.33	18.13	N/A	N/A	N/A	16.93	08/01/2017
Russell 1000 Grth Index			-9.04	-9.04	1.54	14.98	23.60	20.88	17.34	17.04	20.66	
Difference			1.22	1.22	-3.15	-8.65	-5.47	N/A	N/A	N/A	-3.73	
Pinnacle Associates US SMID Cap Growth (SA)	88,974,856	3.50	-5.69	-5.69	-2.52	-4.99	18.47	14.77	12.21	13.69	14.59	03/01/2010
Russell 2500 Grth Index			-12.30	-12.30	-12.13	-10.12	12.99	13.22	10.53	12.69	13.79	
Difference			6.61	6.61	9.61	5.13	5.48	1.55	1.68	1.00	0.80	
Kayne Anderson US SMID Value (SA)	82,847,245	3.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.41	03/01/2022
Russell 2500 Val Index			-1.50	-1.50	4.77	7.73	12.98	9.19	8.86	11.04	2.11	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-2.52	
Systematic Financial US SMID Value (SA)	88,250,537	3.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.37	03/01/2022
Russell 2500 Val Index			-1.50	-1.50	4.77	7.73	12.98	9.19	8.86	11.04	2.11	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-2.48	
International Equity												
Silchester International Value (CF)	264,118,979	10.38	0.18	0.18	0.14	3.05	7.03	5.85	5.58	8.03	9.08	06/01/2009
MSCI EAFE Val Index (USD) (Net)			0.33	0.33	1.51	3.55	5.24	4.18	3.13	4.87	5.30	
Difference			-0.15	-0.15	-1.37	-0.50	1.79	1.67	2.45	3.16	3.78	
Baillie Gifford International Growth (BGEFX)	168,771,745	6.63	-21.73	-21.73	-25.29	-27.10	10.03	11.21	8.62	9.08	10.30	06/01/2009
Baillie Gifford Index			-10.78	-10.78	-8.66	-6.16	9.12	8.28	6.36	7.13	7.97	
Difference			-10.95	-10.95	-16.63	-20.94	0.91	2.93	2.26	1.95	2.33	
Baillie Gifford Spliced Index			-5.44	-5.44	-3.72	-1.48	8.14	6.93	5.26	6.38	6.93	
Difference			-16.29	-16.29	-21.57	-25.62	1.89	4.28	3.36	2.70	3.37	
Acadian Emerging Markets (CF)	138,795,874	5.45	-1.81	-1.81	-1.12	-0.90	8.49	6.44	5.32	4.27	3.81	02/01/2011
MSCI Emg Mkts Index (USD) (Net)			-6.97	-6.97	-8.19	-11.37	4.94	5.98	4.69	3.36	2.59	
Difference			5.16	5.16	7.07	10.47	3.55	0.46	0.63	0.91	1.22	

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

As of March 31, 2022

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Fixed Income												
Baird Core Fixed Income (SA)	218,468,576	8.58	-6.17	-6.17	-6.39	-4.23	N/A	N/A	N/A	N/A	-4.92	03/01/2021
Bloomberg US Agg Bond Index			-5.93	-5.93	-5.92	-4.15	1.69	2.14	1.87	2.24	-4.95	
Difference			-0.24	-0.24	-0.47	-0.08	N/A	N/A	N/A	N/A	0.03	
Franklin Templeton Global Multisector Plus (CF)	93,848,660	3.69	1.43	1.43	-1.08	-1.67	-3.87	-2.19	-0.88	0.85	4.47	09/01/2007
Frank. Temp. Global Multisector Index			-6.05	-6.05	-6.71	-6.22	0.77	1.78	1.74	1.21	2.90	
Difference			7.48	7.48	5.63	4.55	-4.64	-3.97	-2.62	-0.36	1.57	
Loomis Sayles Multisector Full Discretion (CF)	134,714,269	5.29	-5.48	-5.48	-5.63	-2.93	4.52	4.46	4.06	5.24	6.11	10/01/2007
Bloomberg Gbl Agg Bond Index			-6.16	-6.16	-6.79	-6.40	0.69	1.70	1.58	1.04	2.56	
Difference			0.68	0.68	1.16	3.47	3.83	2.76	2.48	4.20	3.55	
Real Estate												
Harrison Street Core Property, LP	121,034,295	4.76	2.55	2.55	5.41	9.95	6.50	7.59	N/A	N/A	7.46	11/01/2015
NCREIF ODCE Index (AWA) (Net)			7.17	7.17	15.37	27.29	10.31	8.91	9.21	9.92	8.91	
Difference			-4.62	-4.62	-9.96	-17.34	-3.81	-1.32	N/A	N/A	-1.45	
PGIM Real Estate PRISA II LP (CF)	70,250,623	2.76	6.47	6.47	14.17	21.83	8.33	8.36	8.97	N/A	9.13	01/01/2015
NCREIF ODCE Index (AWA) (Net)			7.17	7.17	15.37	27.29	10.31	8.91	9.21	9.92	9.34	
Difference			-0.70	-0.70	-1.20	-5.46	-1.98	-0.55	-0.24	N/A	-0.21	
Principal US Property (CF)	164,106,199	6.45	7.33	7.33	18.13	28.63	11.50	10.13	10.33	N/A	10.72	01/01/2014
NCREIF ODCE Index (AWA) (Net)			7.17	7.17	15.37	27.29	10.31	8.91	9.21	9.92	9.60	
Difference			0.16	0.16	2.76	1.34	1.19	1.22	1.12	N/A	1.12	
UBS Trumbull Property (CF)	82,187,852	3.23	5.16	5.16	11.50	15.91	2.17	3.47	4.72	6.16	5.07	12/01/2005
NCREIF ODCE Index (AWA) (Net)			7.17	7.17	15.37	27.29	10.31	8.91	9.21	9.92	6.99	
Difference			-2.01	-2.01	-3.87	-11.38	-8.14	-5.44	-4.49	-3.76	-1.92	
Vanguard RE Idx;ETF (VNQ)	1,446,436	0.06	-6.08	-6.08	8.02	21.28	11.36	9.54	7.78	9.55	13.65	12/01/2008
Custom REITs Index			-5.95	-5.95	8.10	21.58	11.55	10.08	8.19	9.95	14.44	
Difference			-0.13	-0.13	-0.08	-0.30	-0.19	-0.54	-0.41	-0.40	-0.79	
H.I.G. Realty Fund IV (CF)	4,892,572	0.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	04/01/2022
NCREIF ODCE Index (AWA) (Net)			7.17	7.17	15.37	27.29	10.31	8.91	9.21	9.92	N/A	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

Performance shown is net of fees and is annualized for periods greater than one year. Allocations may not sum up to 100% due to the exclusion of managers in liquidation. Please see the addendum for custom benchmark definitions. Fiscal year for the COJ ends 09/30.



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

As of March 31, 2022

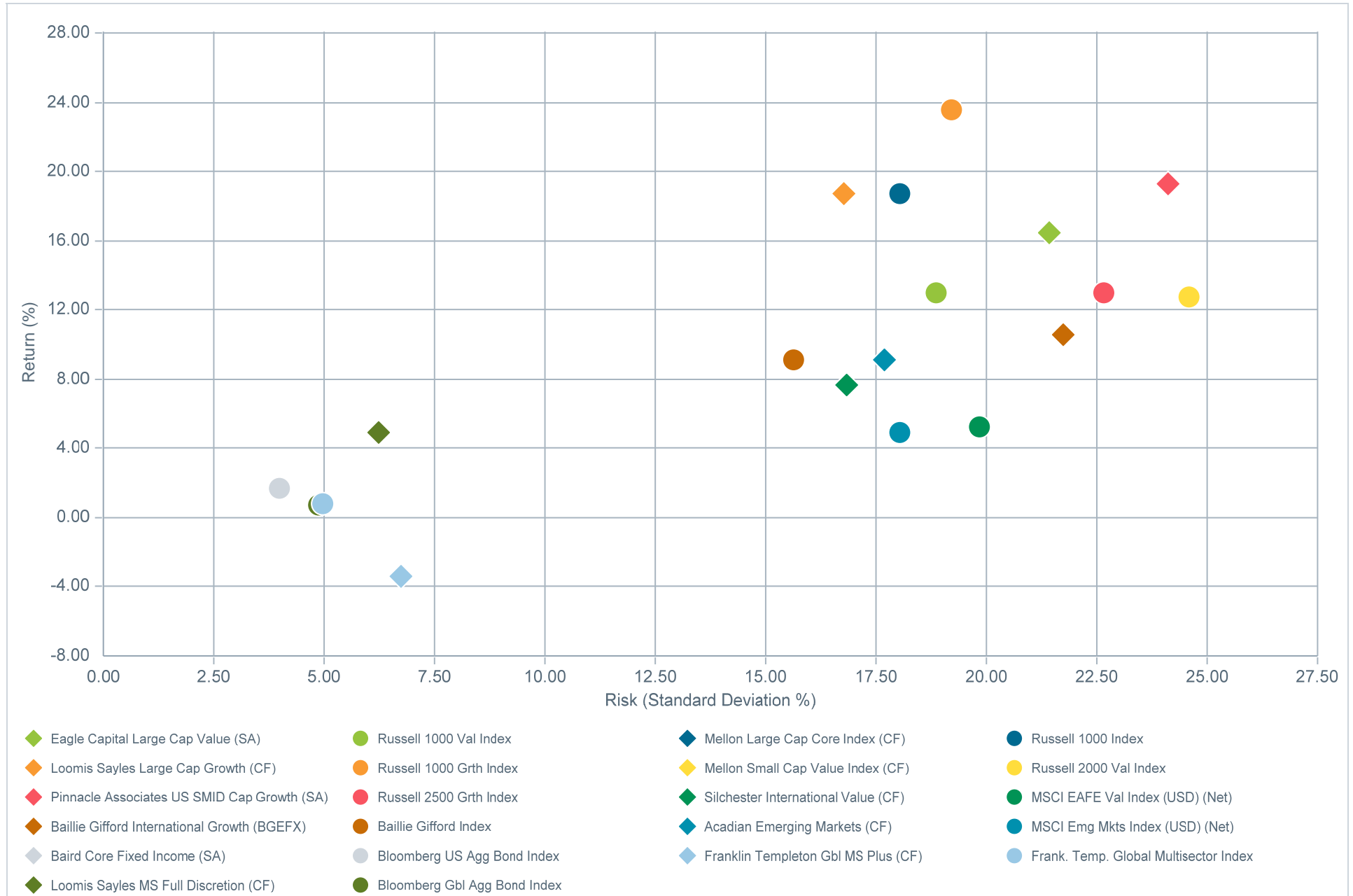
	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Diversifying Assets												
Hancock Timberland (SA)	11,678,728	0.46	0.00	0.00	3.88	19.14	8.86	9.42	7.28	8.15	4.77	10/01/2006
NCREIF Timberland Index			3.21	3.21	7.91	11.83	4.75	4.08	3.85	5.60	5.55	
Difference			-3.21	-3.21	-4.03	7.31	4.11	5.34	3.43	2.55	-0.78	
Adams Street Private Equity (SA)	34,286,180	1.35	16.01	16.01	43.41	66.71	N/A	N/A	N/A	N/A	43.44	11/01/2020
S&P 500 Index+3%			-3.89	-3.89	7.50	19.12	22.49	19.47	17.43	18.08	31.58	
Difference			19.90	19.90	35.91	47.59	N/A	N/A	N/A	N/A	11.86	
Hamilton Lane Private Credit (SA)	15,198,191	0.60	0.08	0.08	1.69	-8.47	N/A	N/A	N/A	N/A	-8.47	04/01/2021
ICE BofAML Gbl Hi Yld Index +2%			-5.55	-5.55	-5.80	-2.76	5.26	5.96	6.65	7.19	-2.76	
Difference			5.63	5.63	7.49	-5.71	N/A	N/A	N/A	N/A	-5.71	
Dreyfus Gvt Csh Mgt;Inst (DGCXX)	5,864,673	0.23	0.08	0.08	0.18	0.55	0.81	1.15	0.90	0.66	1.32	04/01/2001
FTSE 3 Mo T-Bill Index			0.03	0.03	0.04	0.06	0.76	1.09	0.84	0.60	1.29	
Difference			0.05	0.05	0.14	0.49	0.05	0.06	0.06	0.06	0.03	

Performance shown is net of fees and is annualized for periods greater than one year. Allocations may not sum up to 100% due to the exclusion of managers in liquidation. Please see the addendum for custom benchmark definitions. Fiscal year for the COJ ends 09/30.



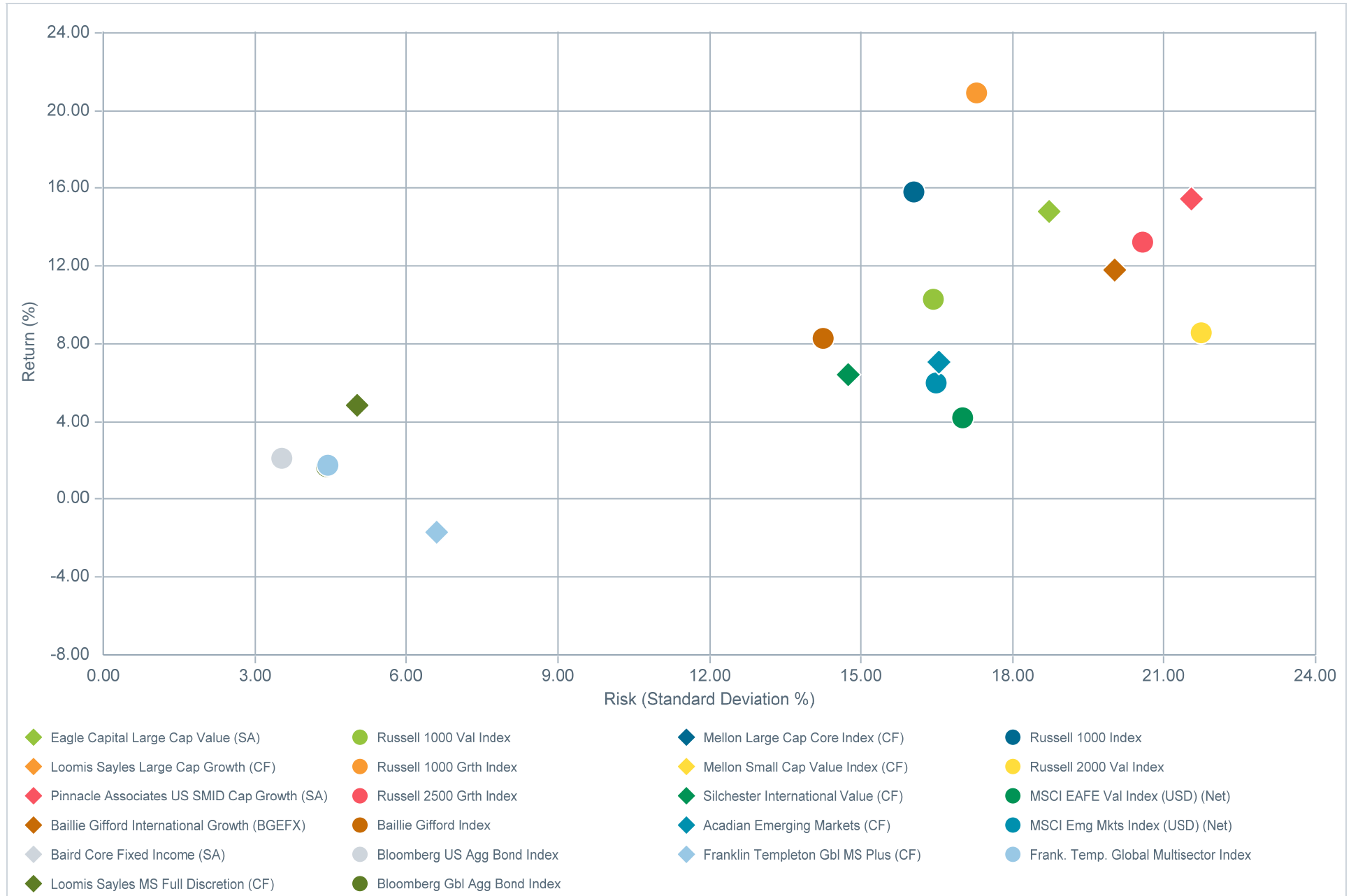
City of Jacksonville Employees' Retirement System
 Risk and Return
 Traditional Managers

3 Years Ending March 31, 2022

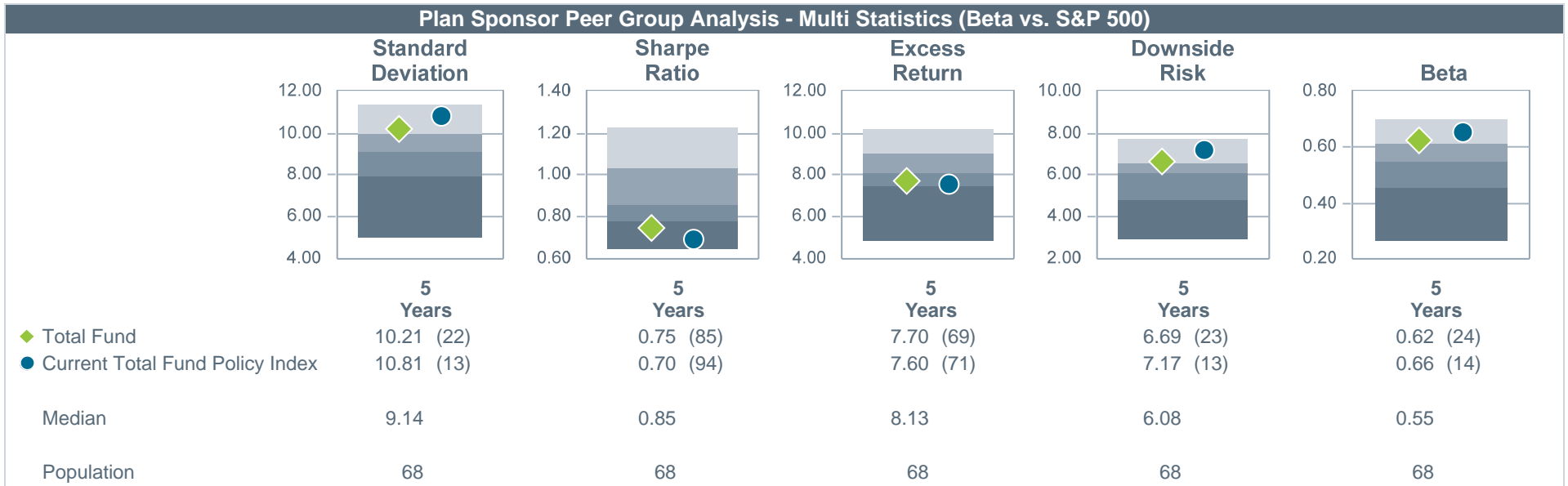
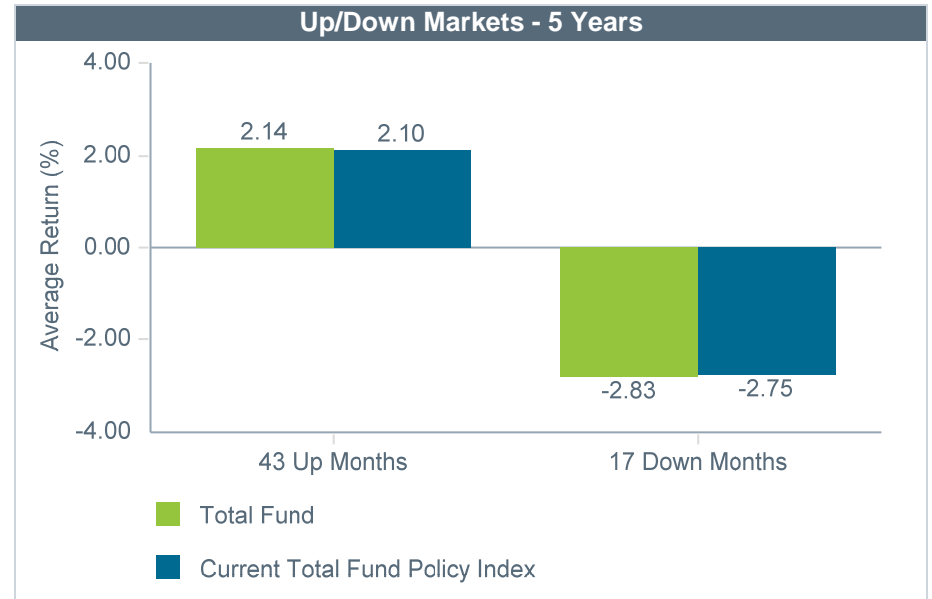
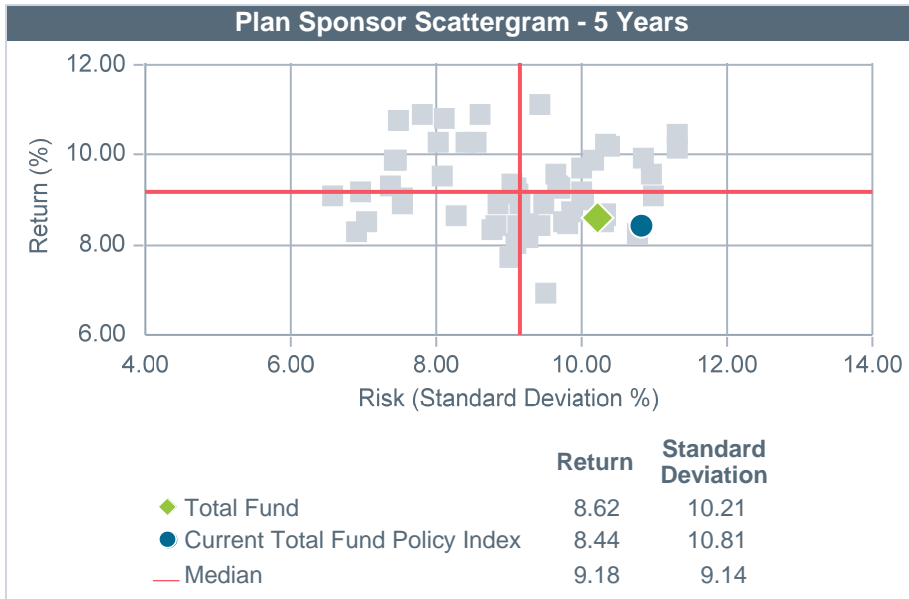


Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Managers with less history than the specified time period will not appear. Please see the Addendum for custom index definitions.

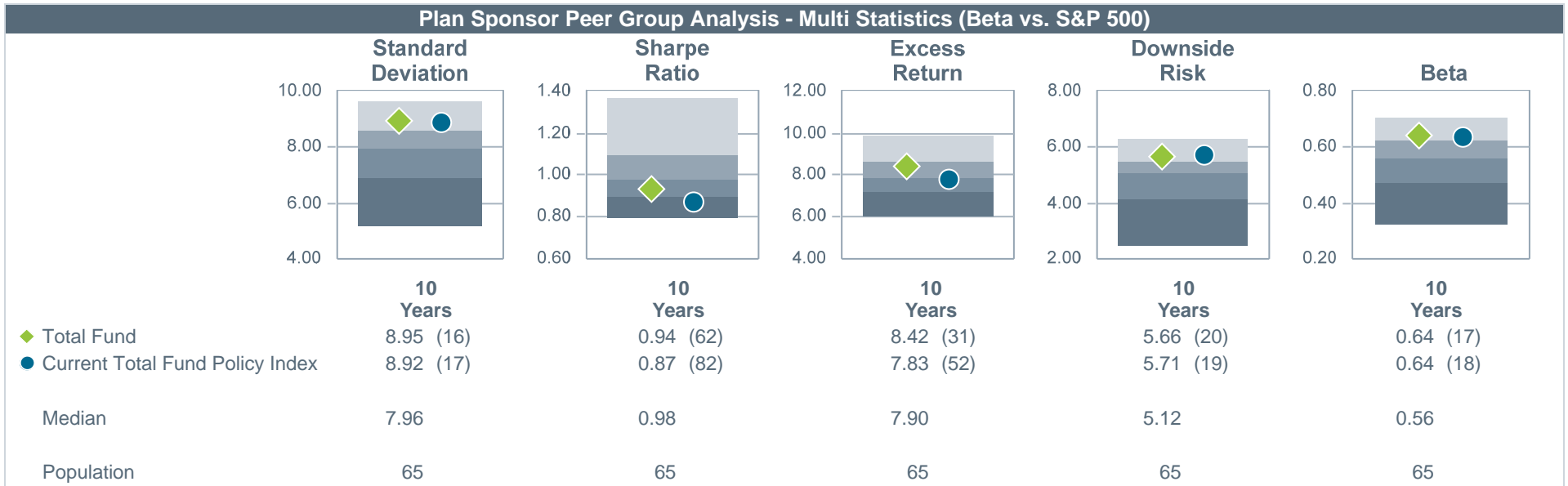
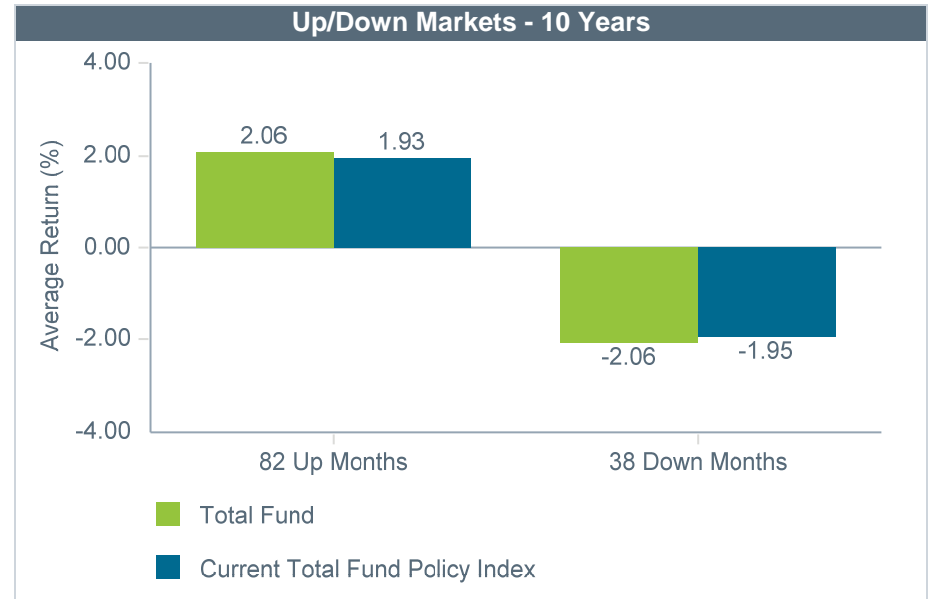
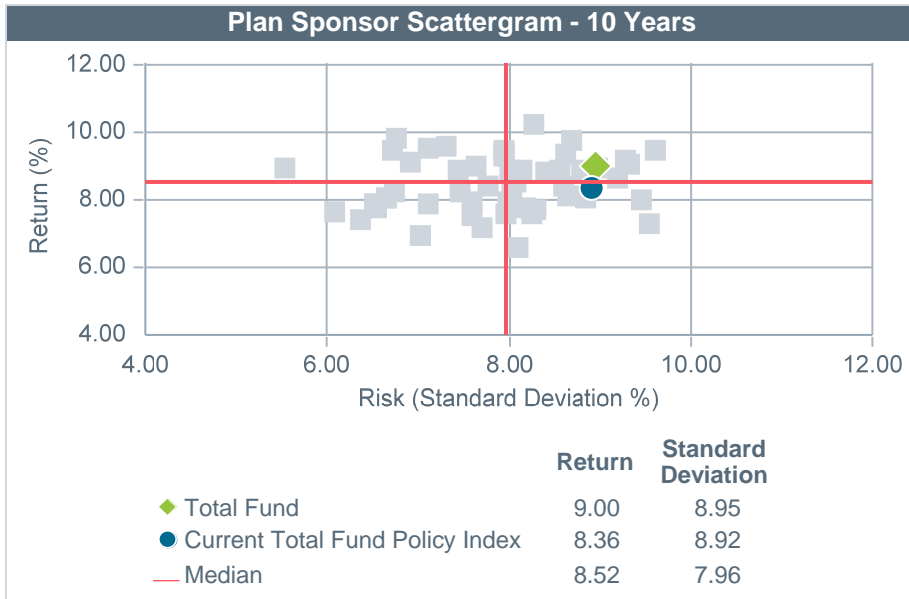




Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Managers with less history than the specified time period will not appear. Please see the Addendum for custom index definitions.



Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



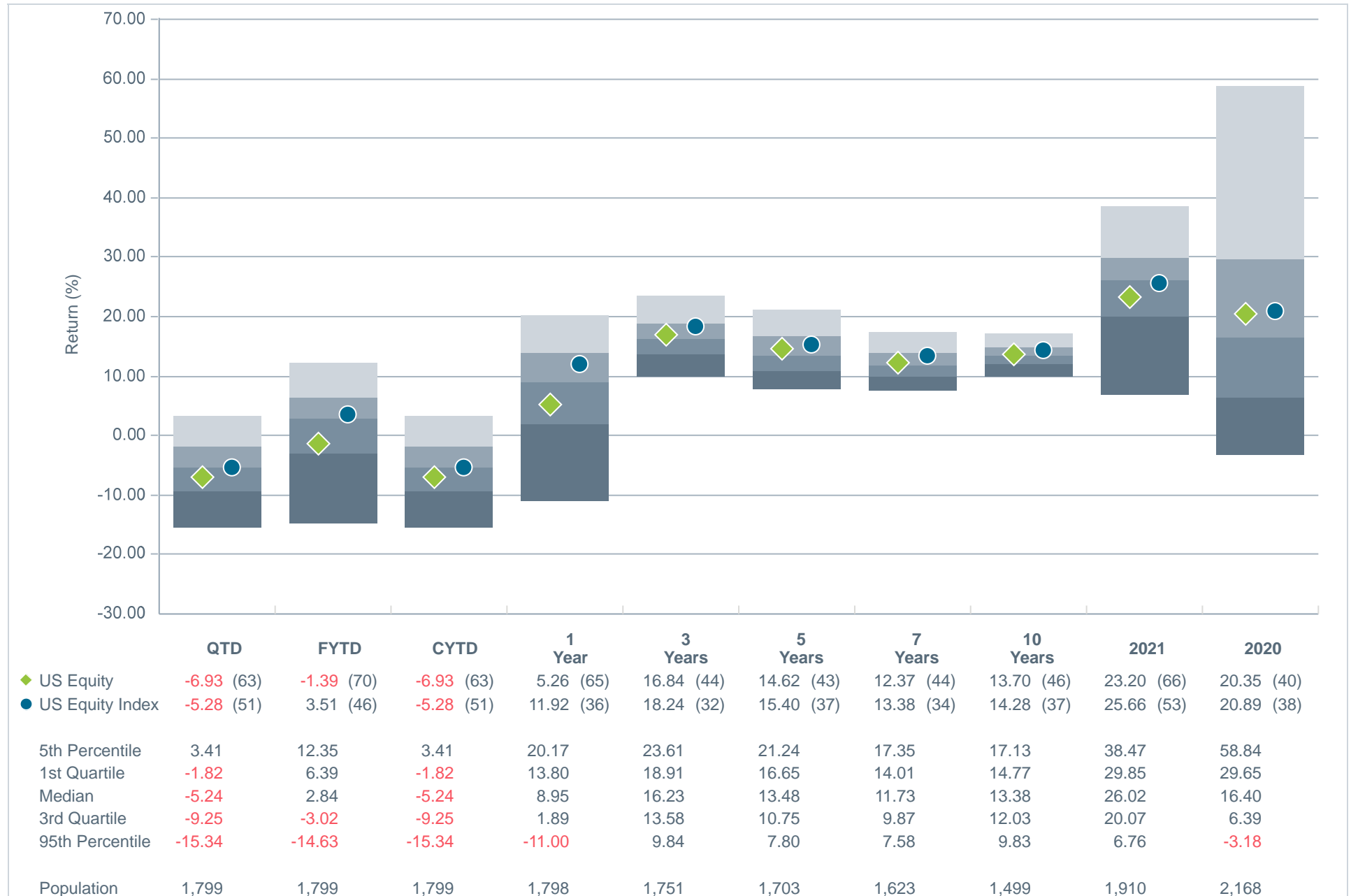
Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Composite Profiles



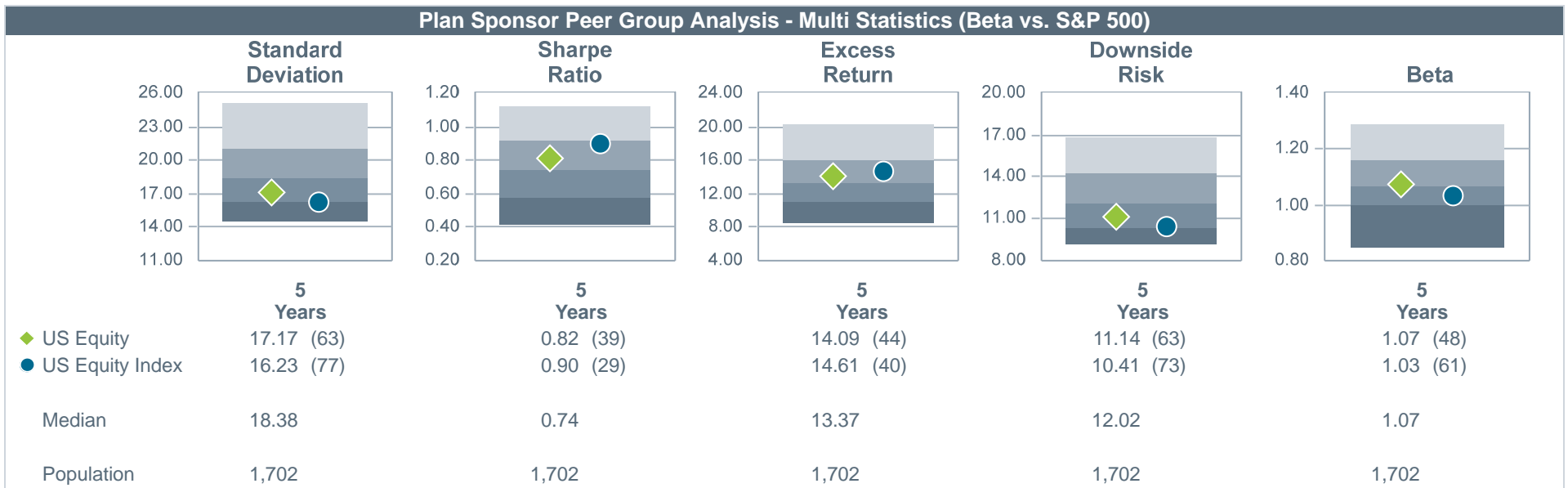
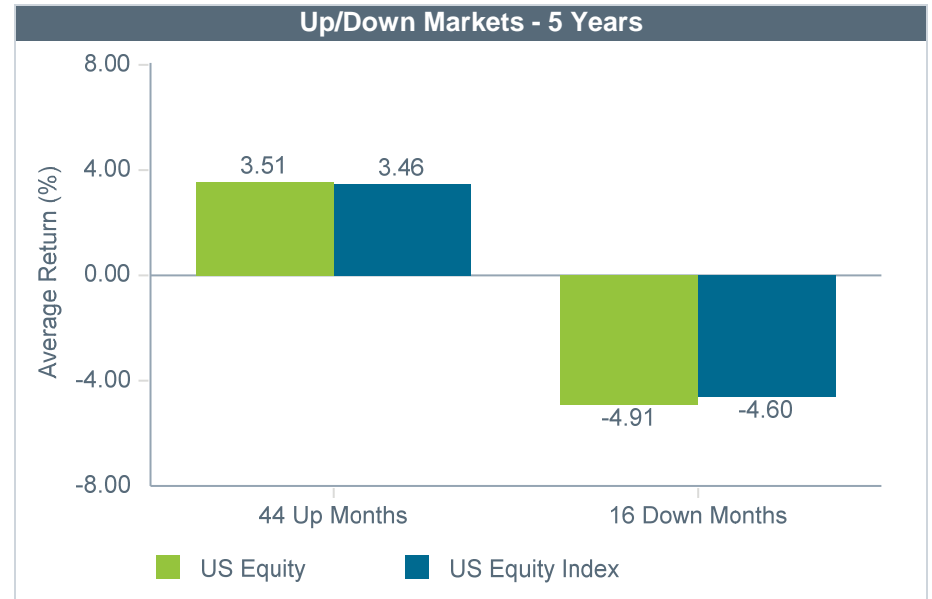
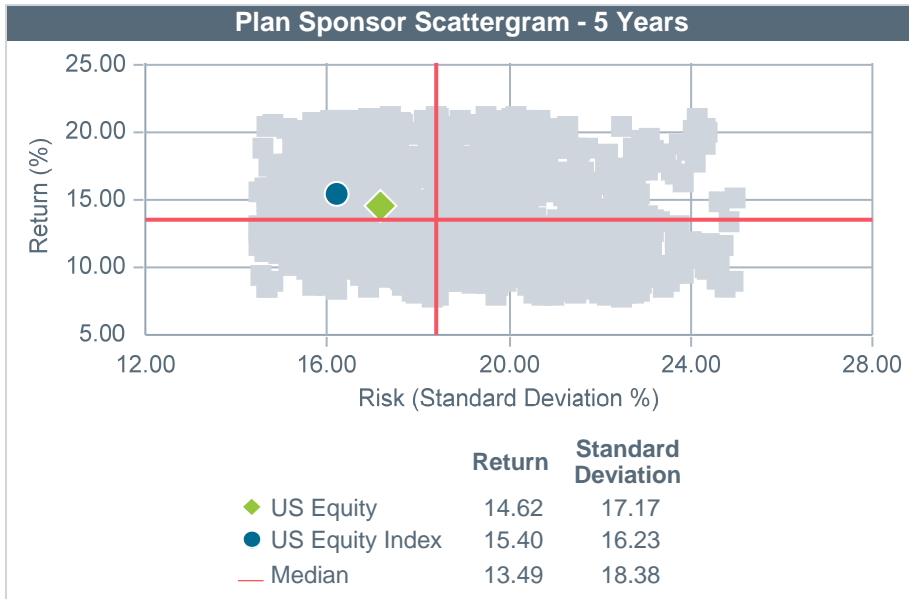
City of Jacksonville Employees' Retirement System
 US Equity vs. IM U.S. Equity (SA+CF)
 Peer Group Analysis

As of March 31, 2022



Performance shown is gross of fees. Parentheses contain percentile ranks. Fiscal year for the COJ ends 09/30.





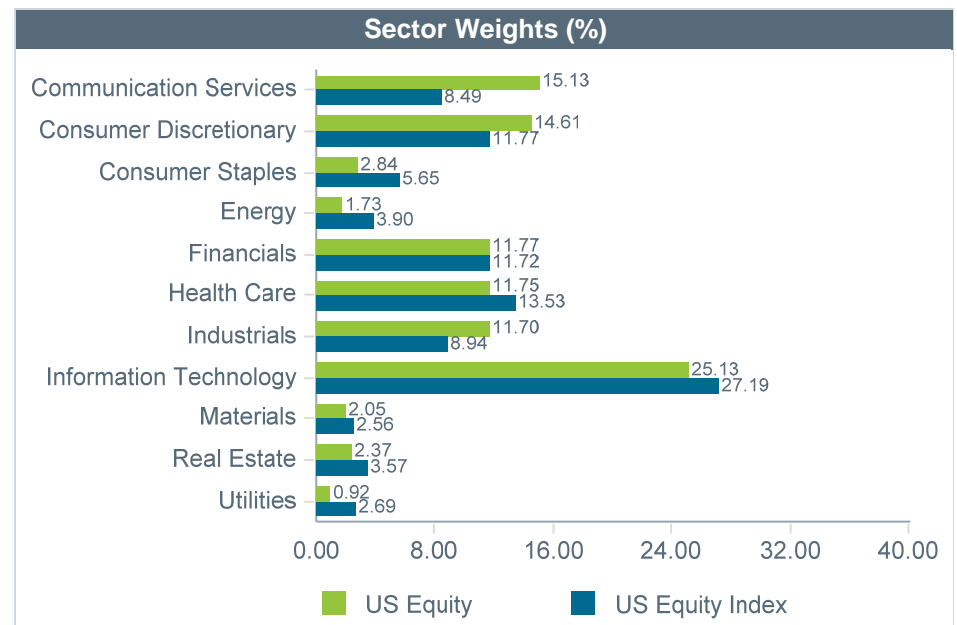
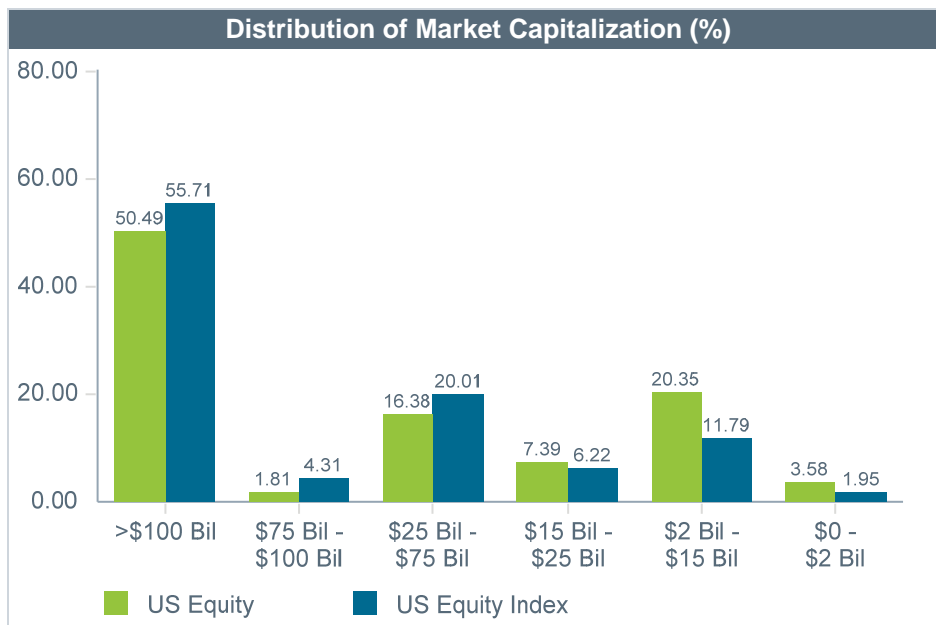
Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

City of Jacksonville Employees' Retirement System
 US Equity vs. US Equity Index
 Portfolio Characteristics

As of March 31, 2022

Top Ten Equity Holdings				
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Microsoft Corp	5.06	5.17	-0.11	-8.14
Amazon.com Inc	4.07	3.15	0.92	-2.23
Alphabet Inc	3.70	1.72	1.98	-3.48
Meta Platforms Inc	2.64	1.14	1.50	-33.89
Apple Inc	1.93	5.99	-4.06	-1.54
NVIDIA Corporation	1.79	1.45	0.34	-7.21
Visa Inc	1.70	0.82	0.88	2.50
Unitedhealth Group Inc	1.57	1.07	0.50	1.86
Netflix Inc	1.44	0.36	1.08	-37.82
Alphabet Inc	1.39	1.86	-0.47	-3.99
% of Portfolio	25.29	22.73	2.56	

Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	444,490	544,408
Median Mkt. Cap (\$M)	11,984	2,224
Price/Earnings Ratio	20.21	21.31
Price/Book Ratio	3.96	4.22
5 Yr. EPS Growth Rate (%)	22.70	20.99
Current Yield (%)	0.97	1.35
Beta (5 Years, Monthly)	1.05	1.00
Number of Securities	1,163	3,039



Alphabet Inc. is shown twice in the Top Ten Equity Holdings but represents two different share classes: GOOGL (Class A) and GOOG (Class C).



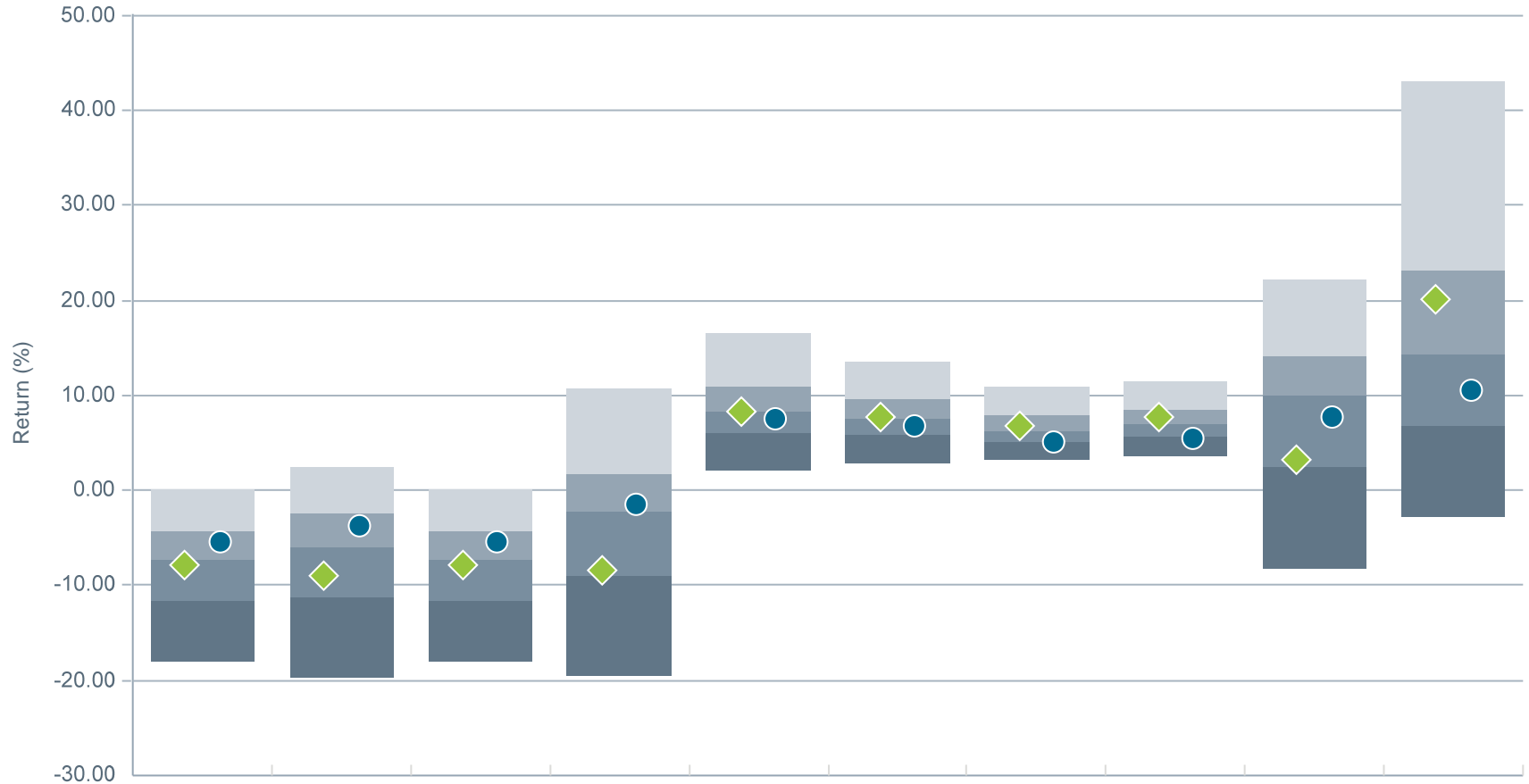
Style Map with History (12 Months)



Calculation is based on monthly periodicity. This is a return based calculation. Performance prior to manager inception date is backfilled with product specific returns.

City of Jacksonville Employees' Retirement System
 International Equity vs. IM International Equity (SA+CF)
 Peer Group Analysis

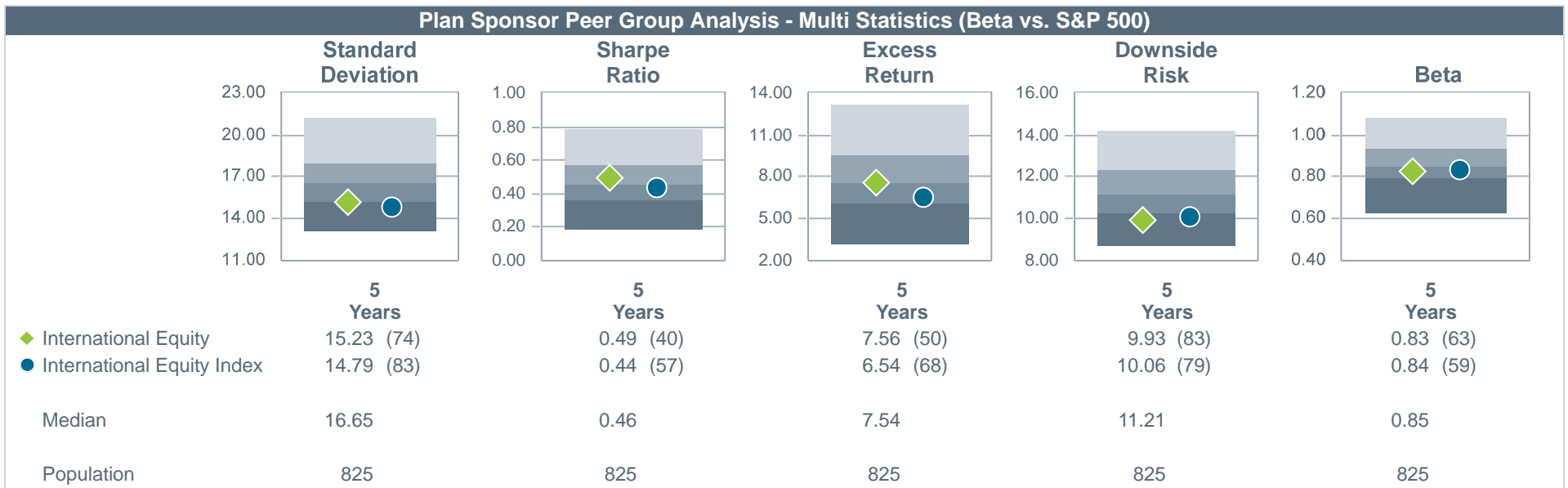
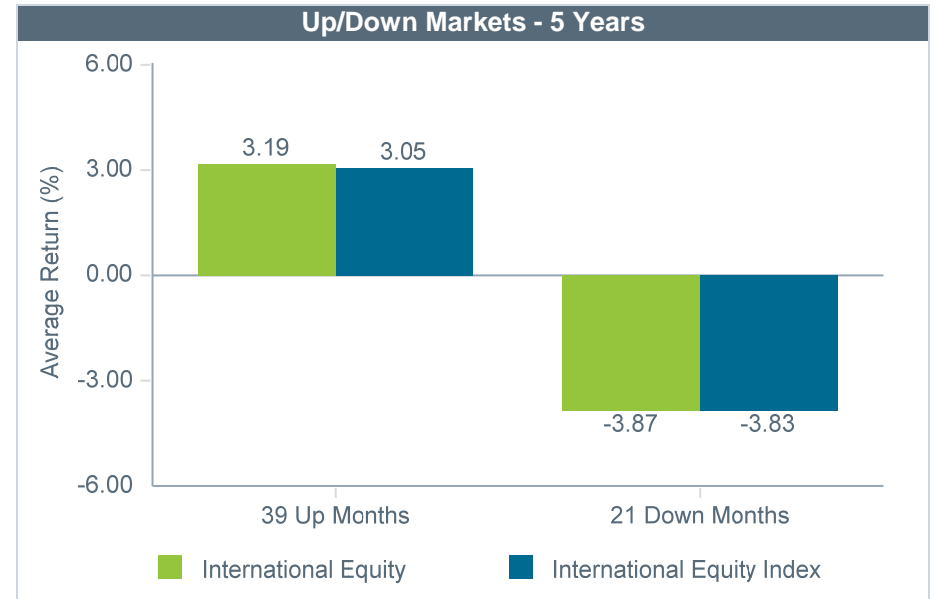
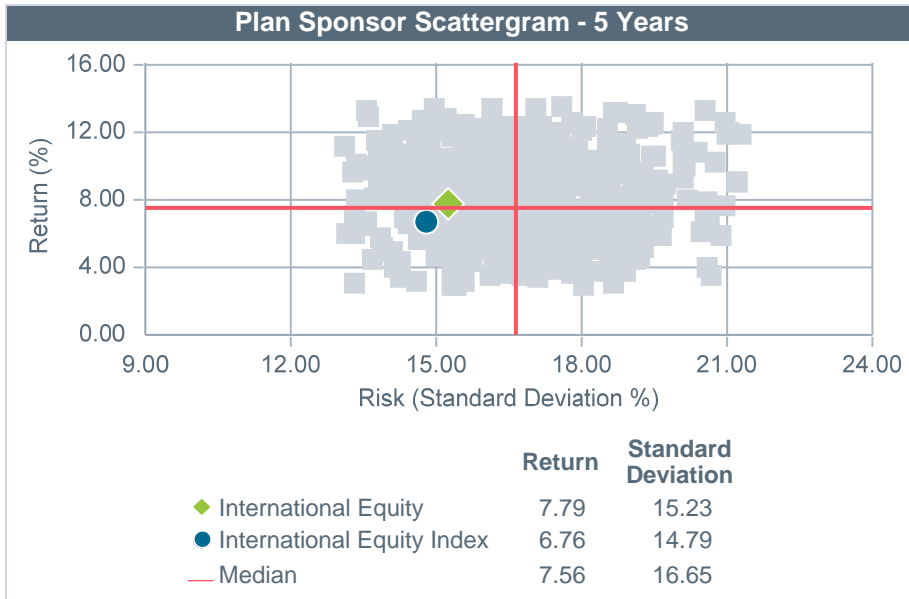
As of March 31, 2022



	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020
◆ International Equity	-7.76 (54)	-9.01 (67)	-7.76 (54)	-8.45 (74)	8.34 (50)	7.79 (46)	6.76 (43)	7.81 (37)	3.25 (74)	20.20 (32)
● International Equity Index	-5.44 (36)	-3.72 (34)	-5.44 (36)	-1.48 (45)	7.51 (61)	6.76 (63)	5.19 (74)	5.55 (78)	7.82 (60)	10.65 (62)
5th Percentile	0.14	2.48	0.14	10.67	16.54	13.49	10.99	11.55	22.29	42.96
1st Quartile	-4.26	-2.32	-4.26	1.74	10.94	9.62	7.92	8.55	14.22	23.23
Median	-7.25	-5.88	-7.25	-2.21	8.27	7.56	6.33	7.07	10.00	14.31
3rd Quartile	-11.52	-11.17	-11.52	-9.04	6.11	5.91	5.10	5.73	2.54	6.79
95th Percentile	-18.02	-19.68	-18.02	-19.48	2.06	2.88	3.17	3.57	-8.26	-2.84
Population	937	934	937	927	881	825	762	642	974	1,083

Performance shown is gross of fees. Parentheses contain percentile ranks. Fiscal year for the COJ ends 09/30.





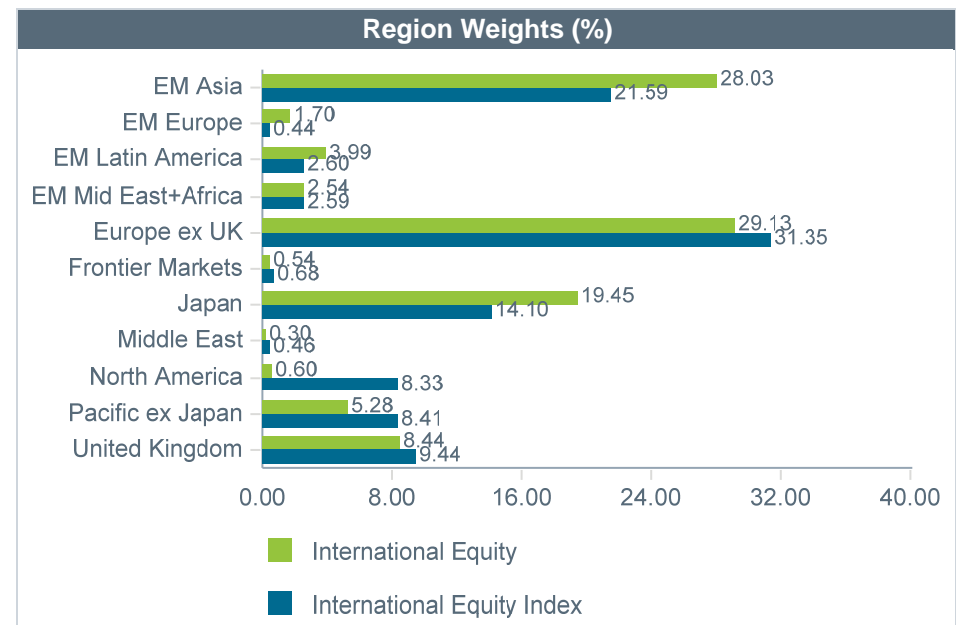
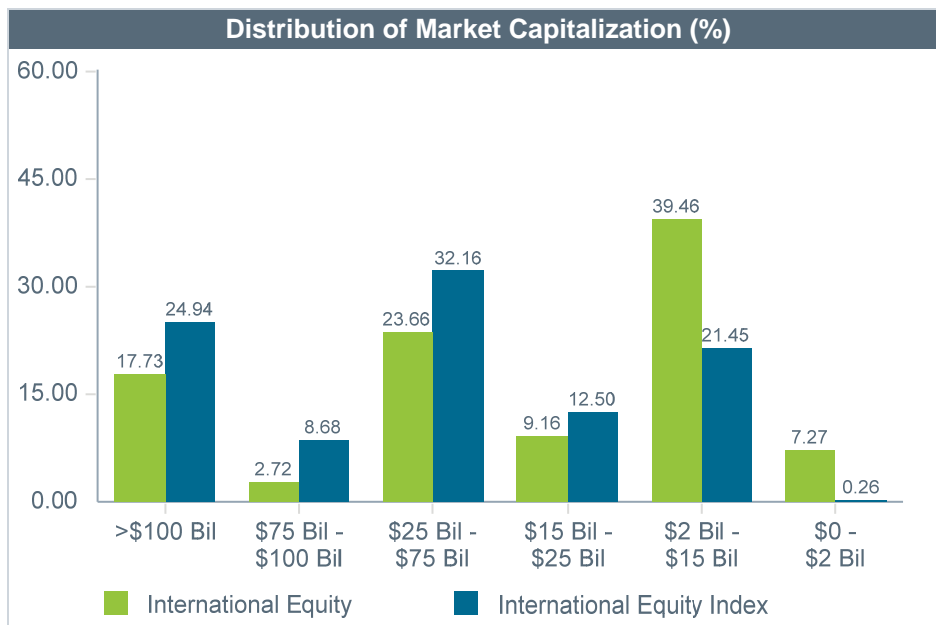
Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

City of Jacksonville Employees' Retirement System
International Equity vs. International Equity Index
Portfolio Characteristics

As of March 31, 2022

Top Ten Equity Holdings				
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
ASML Holding NV	2.44	1.10	1.34	-15.69
Taiwan Semiconductor Mfg	2.19	2.01	0.18	-5.63
Tencent Holdings LTD	1.97	1.08	0.89	-16.10
Ferrari NV	1.73	0.11	1.62	-14.69
MercadoLibre Inc	1.68	0.00	1.68	-11.79
Honda Motor Co Ltd	1.61	0.18	1.43	3.96
Sanofi	1.61	0.46	1.15	2.01
Adyen N.V	1.43	0.16	1.27	-23.56
Kering	1.40	0.19	1.21	-20.05
Glaxosmithkline PLC	1.37	0.43	0.94	1.05
% of Portfolio	17.43	5.72	11.71	

Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	66,155	89,512
Median Mkt. Cap (\$M)	1,431	9,768
Price/Earnings Ratio	10.42	13.68
Price/Book Ratio	2.70	2.51
5 Yr. EPS Growth Rate (%)	16.64	15.41
Current Yield (%)	3.27	2.80
Beta (5 Years, Monthly)	1.00	1.00
Number of Securities	912	2,308

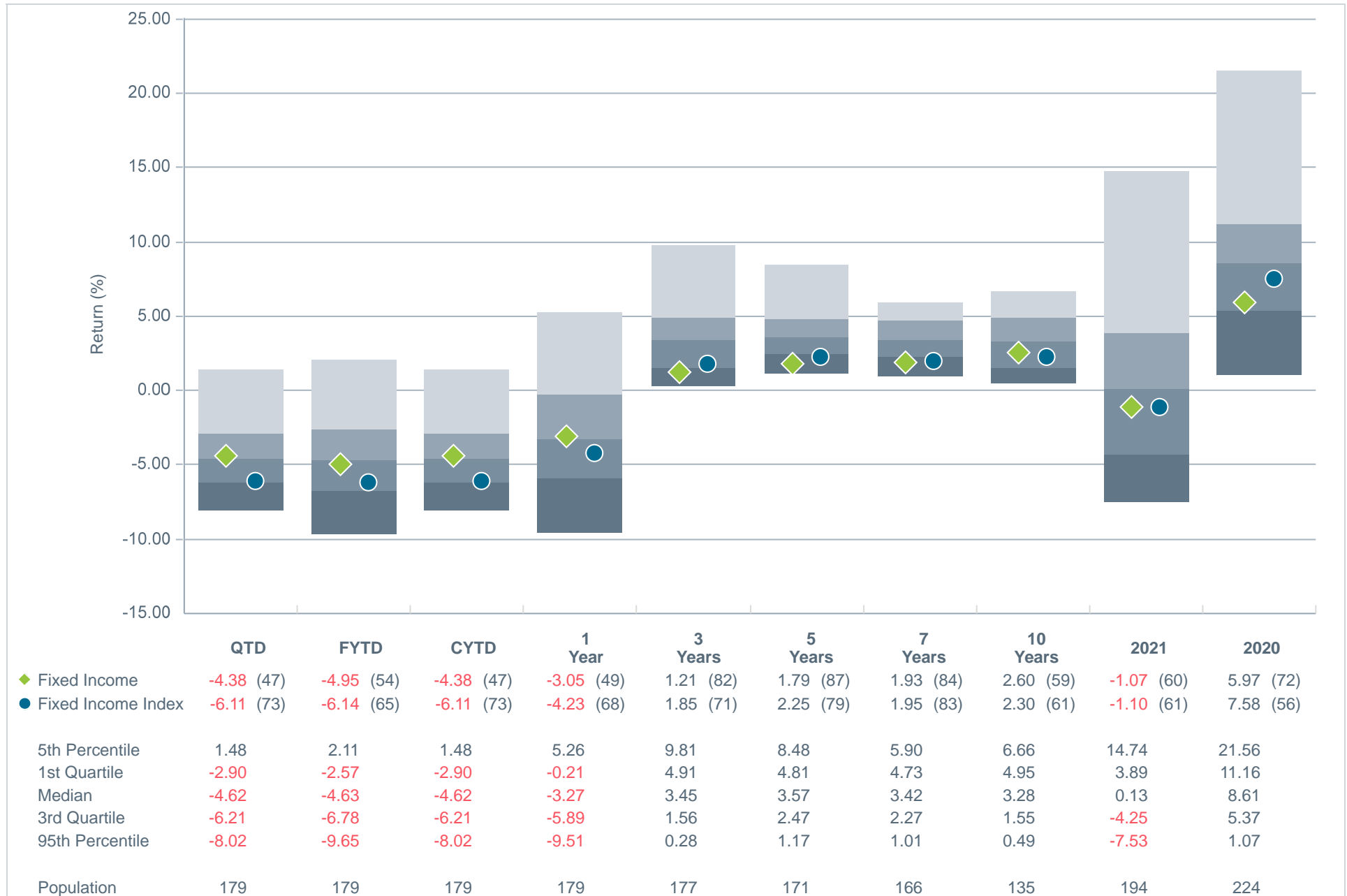


The Top Ten International Equity Holdings included Meituan (1.38%) in Q4 2021 which was replaced by Glaxosmithkline PLC in Q1 2022.



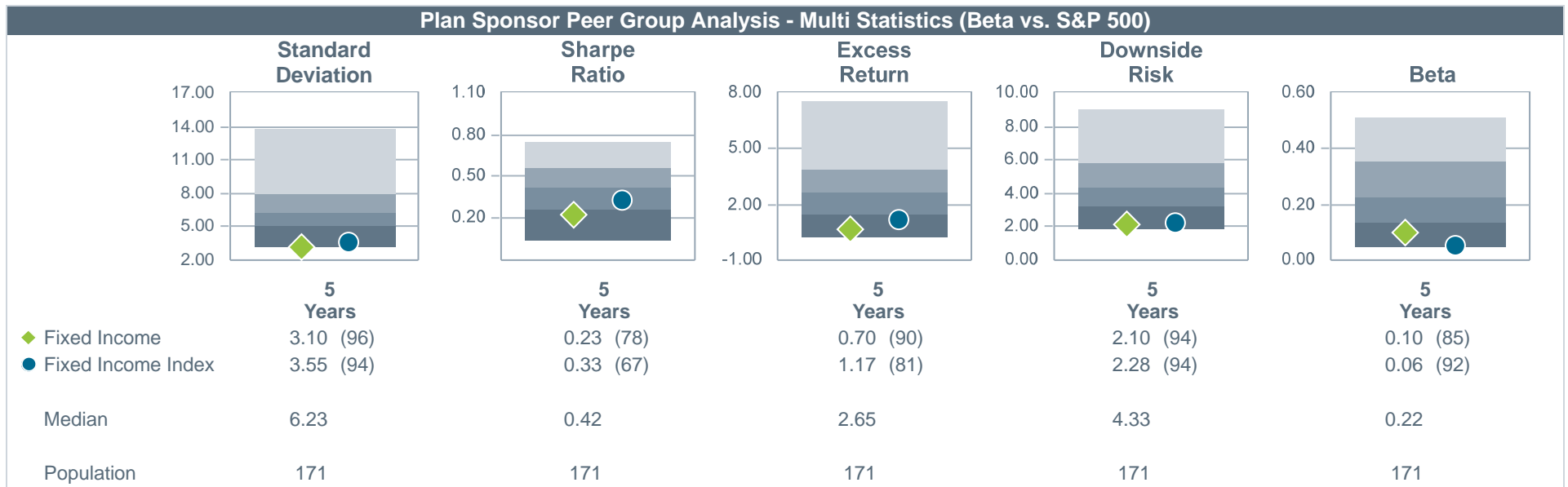
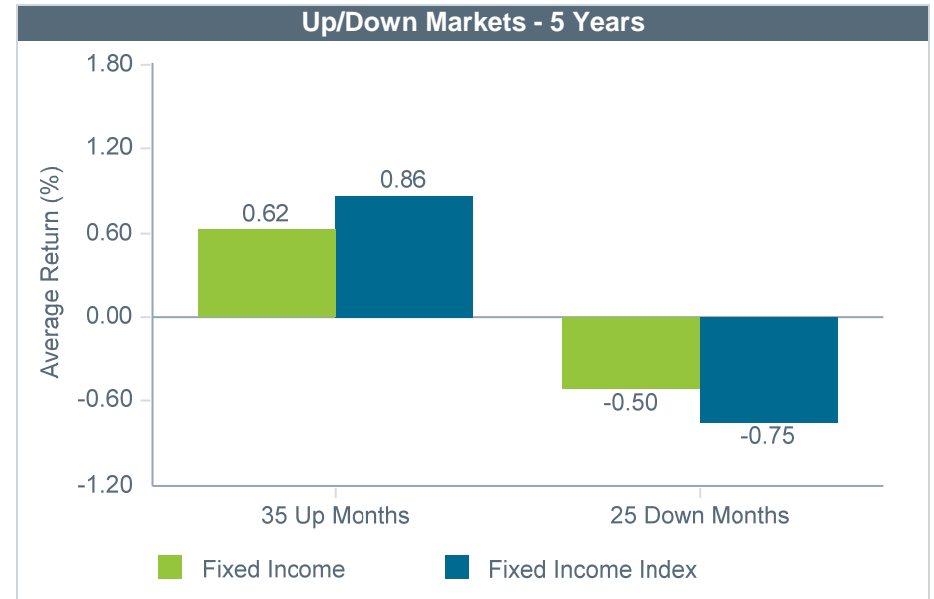
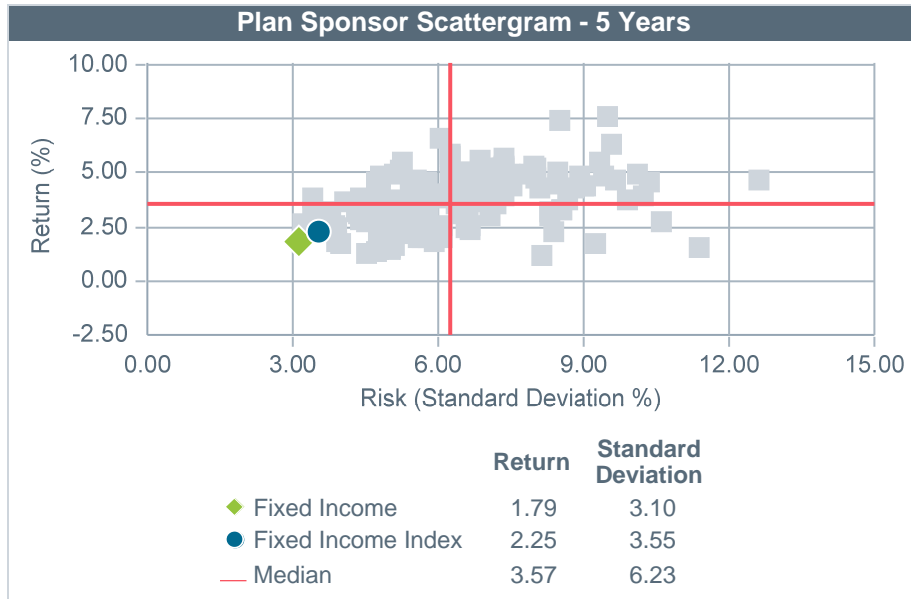
City of Jacksonville Employees' Retirement System
 Fixed Income vs. IM Global Fixed Income (SA+CF)
 Peer Group Analysis

As of March 31, 2022



Performance shown is gross of fees. Parentheses contain percentile ranks. Fiscal year for the COJ ends 09/30.



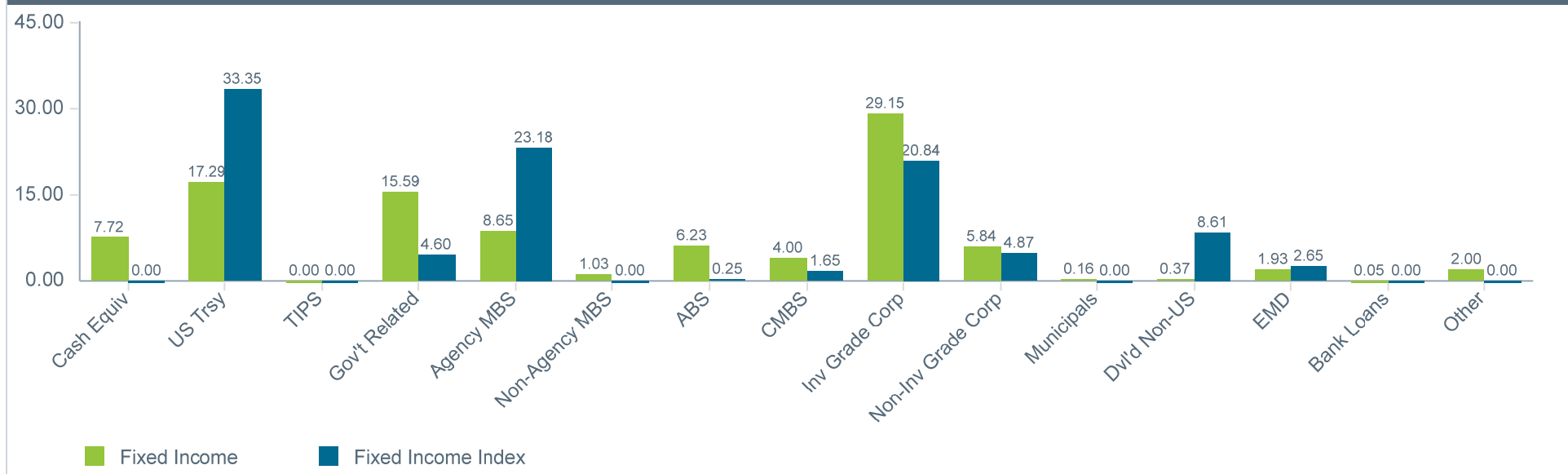


Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Portfolio Characteristics

	Portfolio	Benchmark
Effective Duration	4.94	6.36
Avg. Maturity	6.69	8.61
Avg. Quality	A3	N/A
Yield To Maturity (%)	N/A	3.30
Coupon Rate (%)	3.17	2.75
Current Yield (%)	2.69	N/A

Sector Distribution (%)

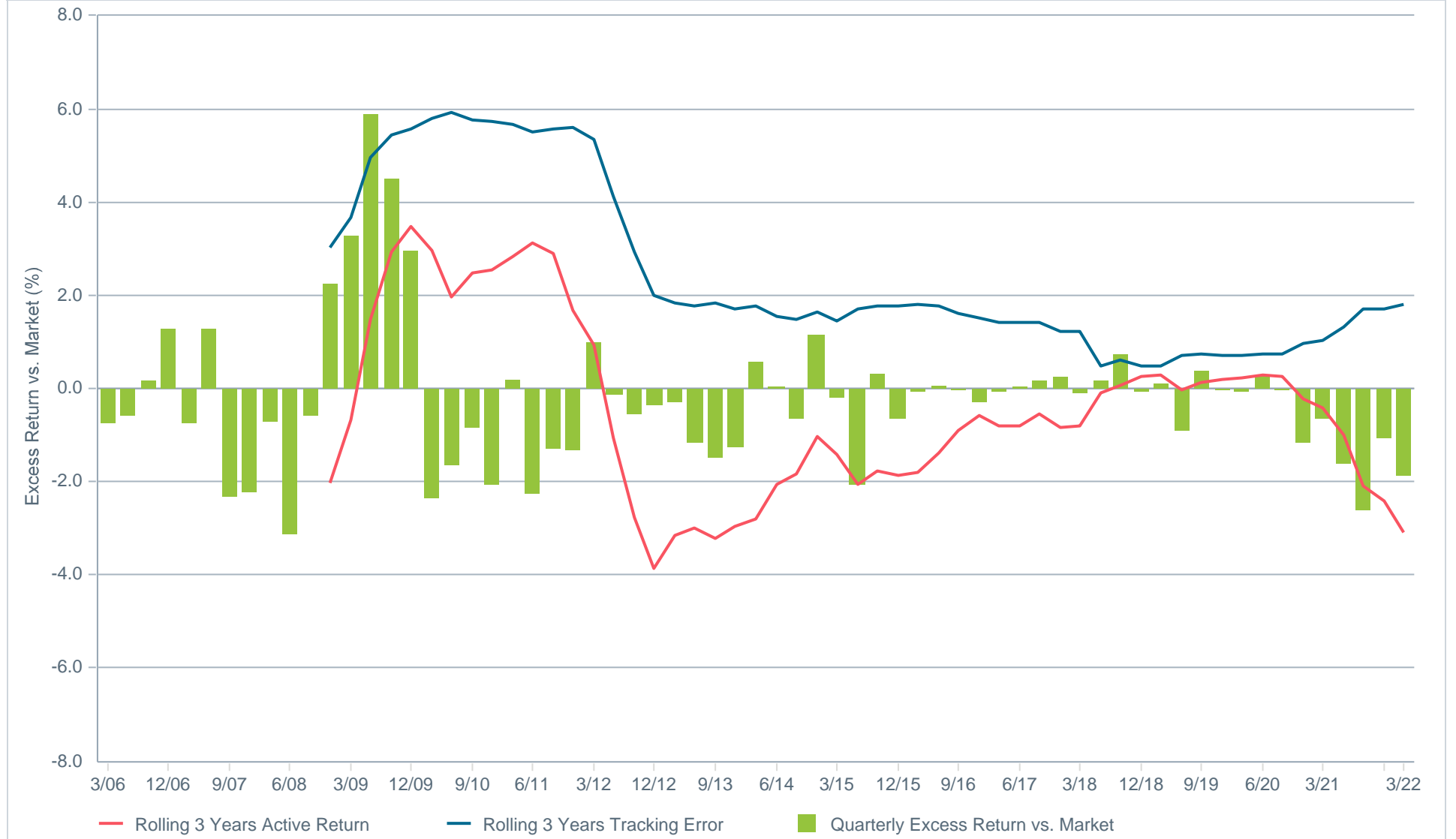


Cash equivalents are defined as any security with duration under one year. Allocation to "Other" consists of derivatives, preferred equity, and convertibles.

City of Jacksonville Employees' Retirement System
 Real Estate vs. NCREIF ODCE Index (AWA) (Gross)
 Comparative Performance & Rolling Return

As of March 31, 2022

	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	Since Incep.	Inception Date
Real Estate	5.49	5.49	12.77	20.03	8.06	8.21	8.57	9.33	15.43	0.31	4.85	6.81	12/01/2005
NCREIF ODCE Index (AWA) (Gross)	7.36	7.36	15.92	28.45	11.29	9.88	10.19	10.93	22.17	1.19	5.34	7.99	
Difference	-1.87	-1.87	-3.15	-8.42	-3.23	-1.67	-1.62	-1.60	-6.74	-0.88	-0.49	-1.18	



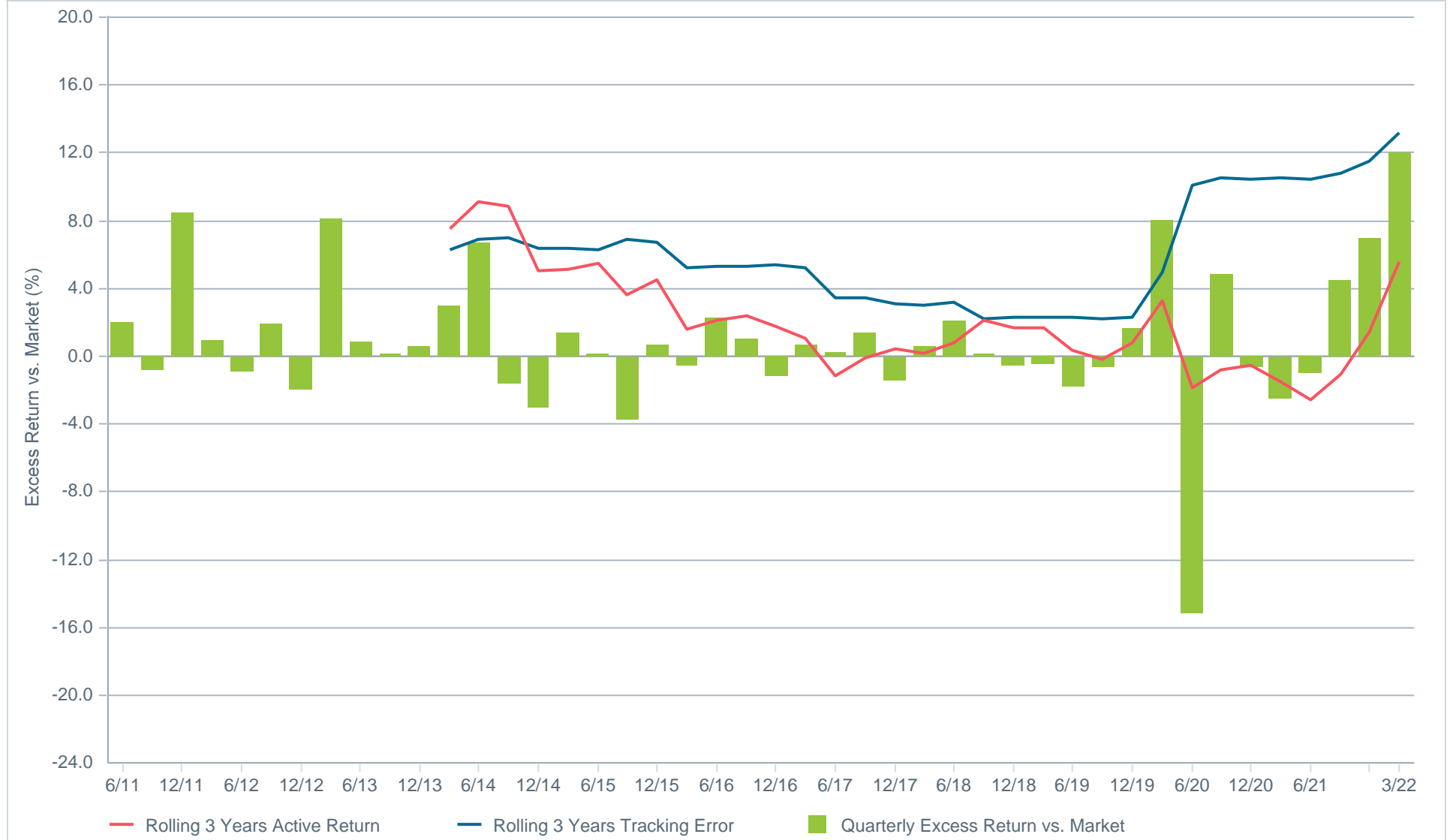
Performance shown is gross of fees. Calculation is based on quarterly periodicity.



City of Jacksonville Employees' Retirement System
Diversifying Assets vs. Diversifying Assets Index
Comparative Performance & Rolling Return

As of March 31, 2022

	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	Since Incep.	Inception Date
Diversifying Assets	9.20	9.20	24.15	44.35	9.35	6.42	3.82	7.37	47.46	-14.35	6.21	8.15	03/01/2011
Diversifying Assets Index	-2.81	-2.81	3.71	16.23	1.05	1.07	0.26	3.39	36.38	-18.40	7.29	3.58	
Difference	12.01	12.01	20.44	28.12	8.30	5.35	3.56	3.98	11.08	4.05	-1.08	4.57	



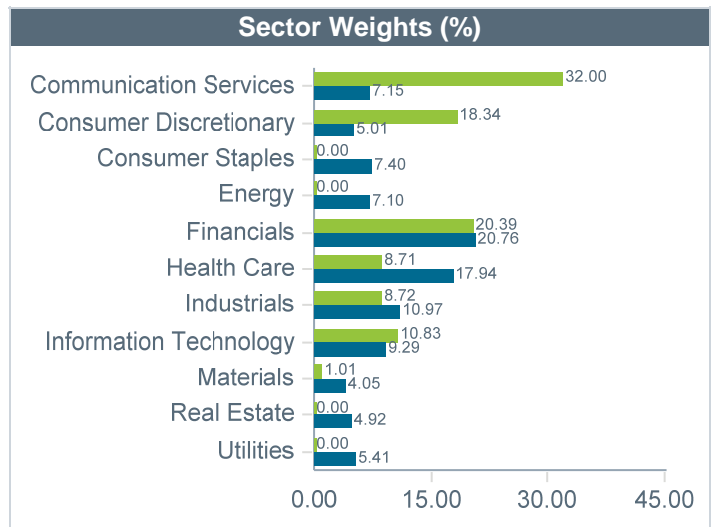
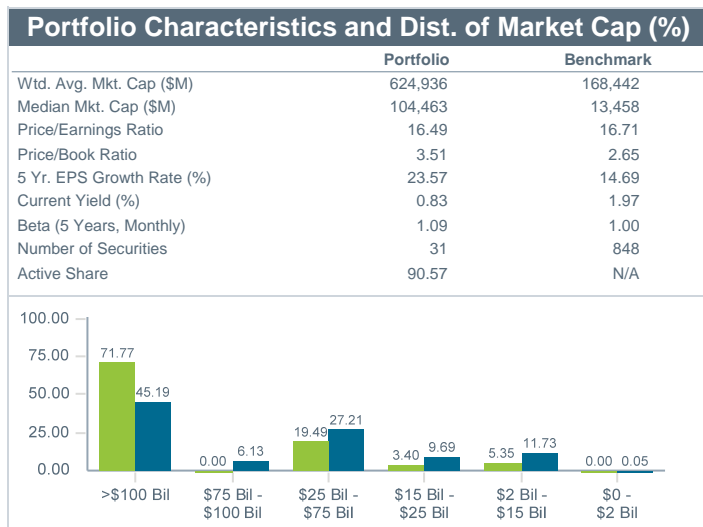
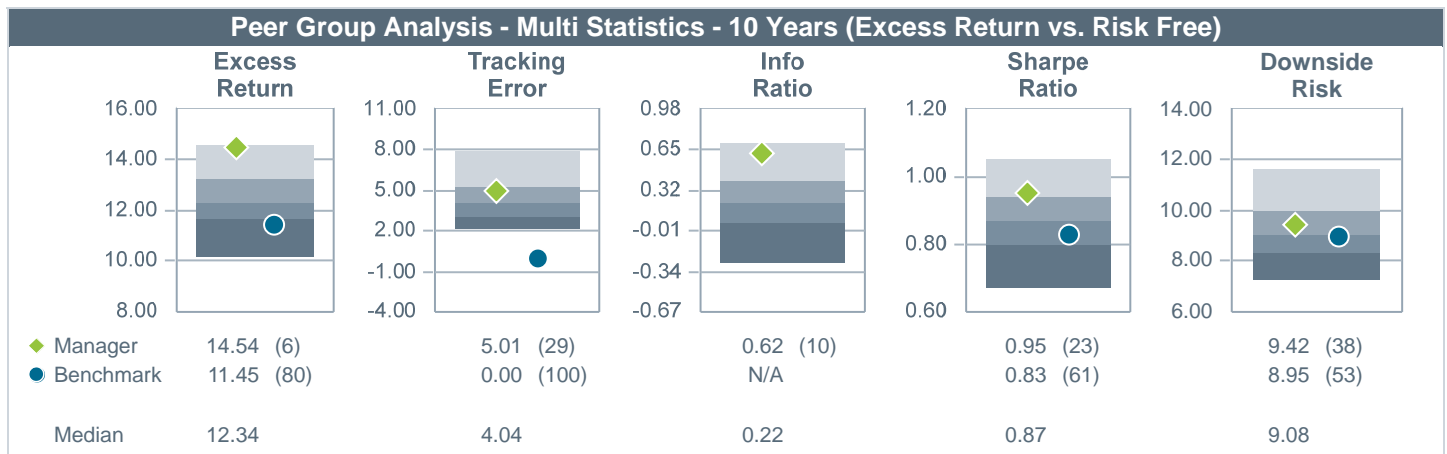
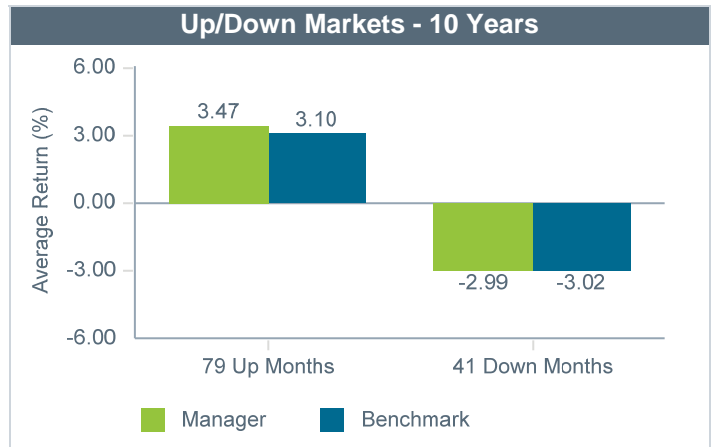
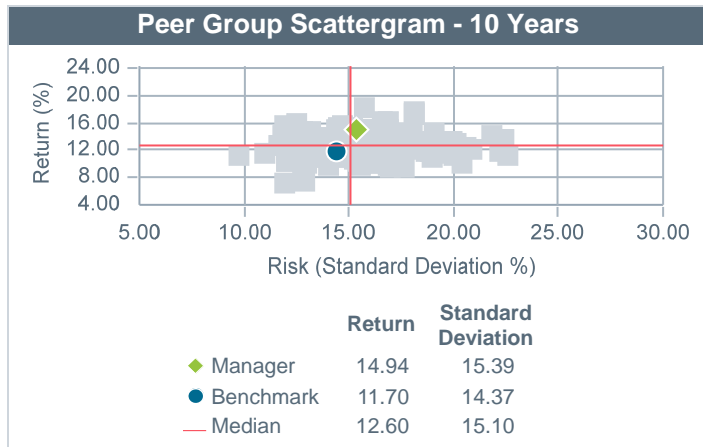
Performance shown is gross of fees. Calculation is based on quarterly periodicity.



Investment Manager Profiles



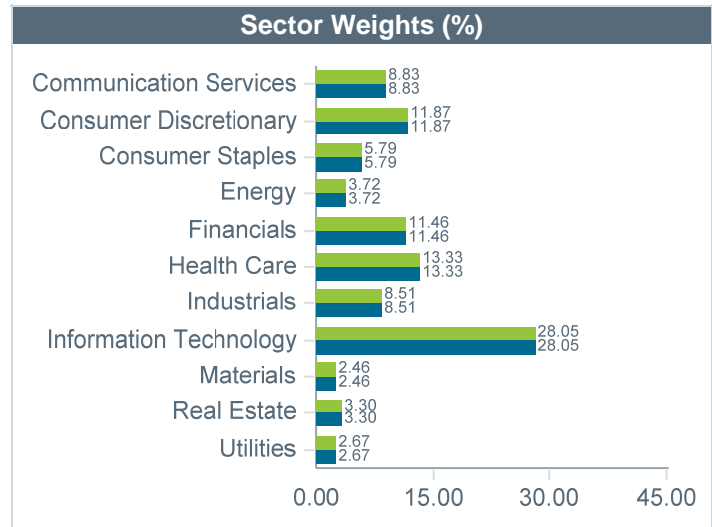
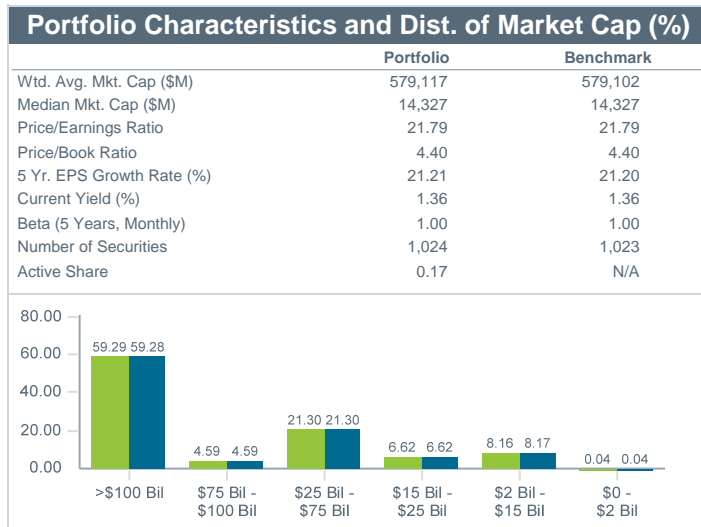
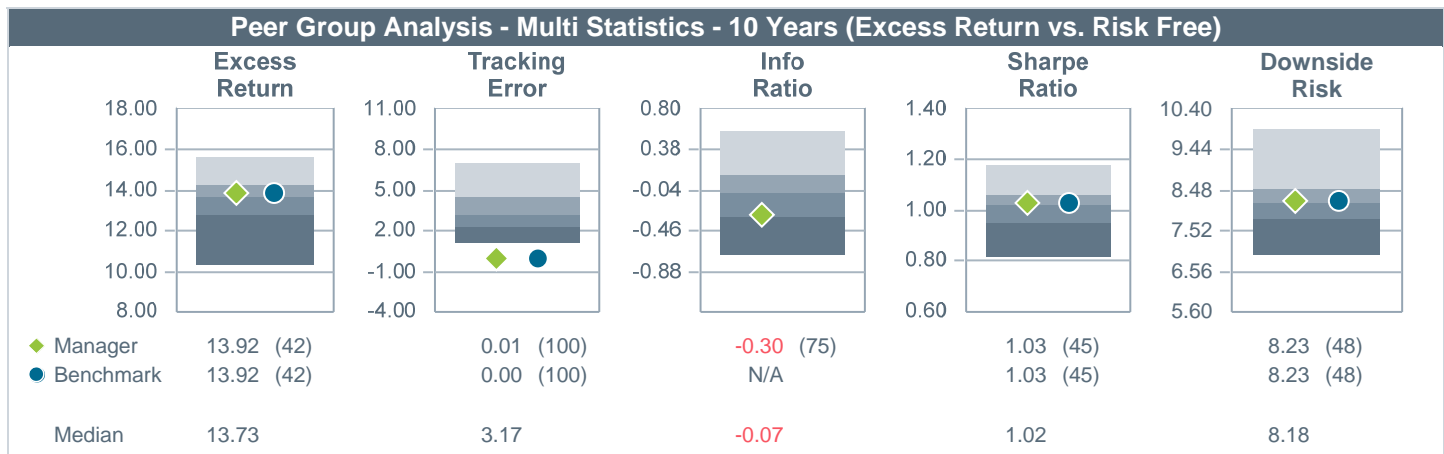
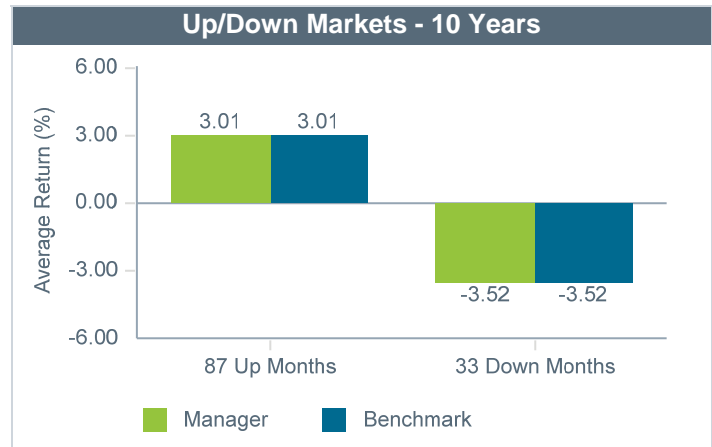
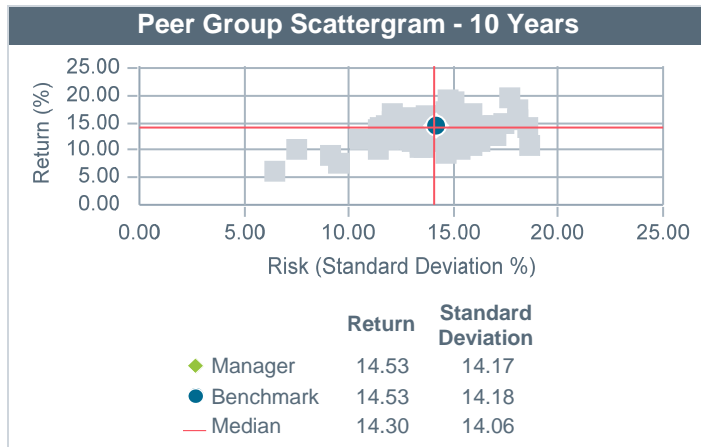
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-8.69	5.21	16.46	14.78	13.32	14.94	28.01	15.54	31.94	-3.90	24.19
Benchmark	-0.74	11.67	13.02	10.29	9.73	11.70	25.16	2.80	26.54	-8.27	13.66
Difference	-7.95	-6.46	3.44	4.49	3.59	3.24	2.85	12.74	5.40	4.37	10.53
Peer Group Median	-0.37	13.47	15.26	12.18	10.83	12.60	27.67	5.75	27.45	-8.31	17.30
Rank	98	97	33	13	10	7	46	14	14	16	8
Population	247	247	241	236	231	218	256	290	319	336	353



Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



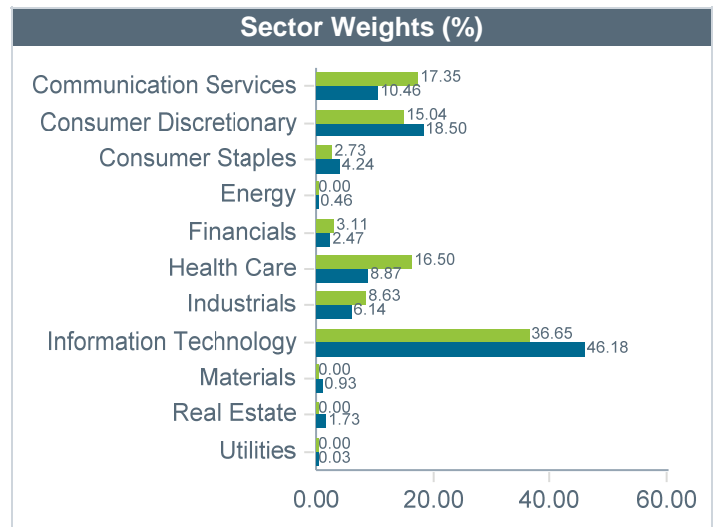
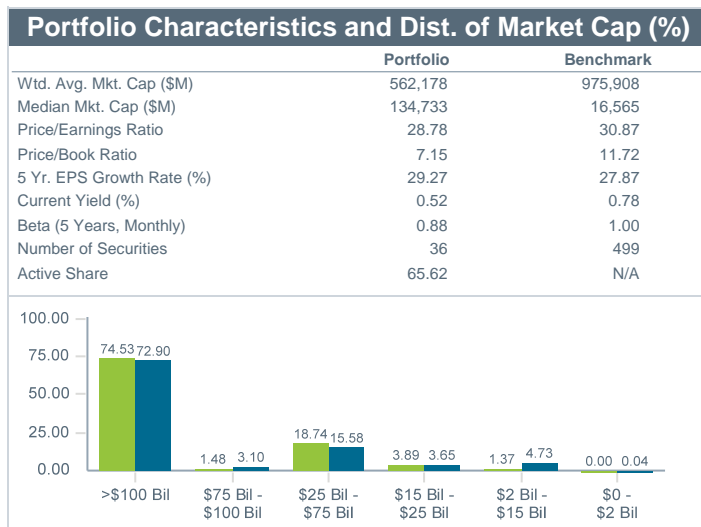
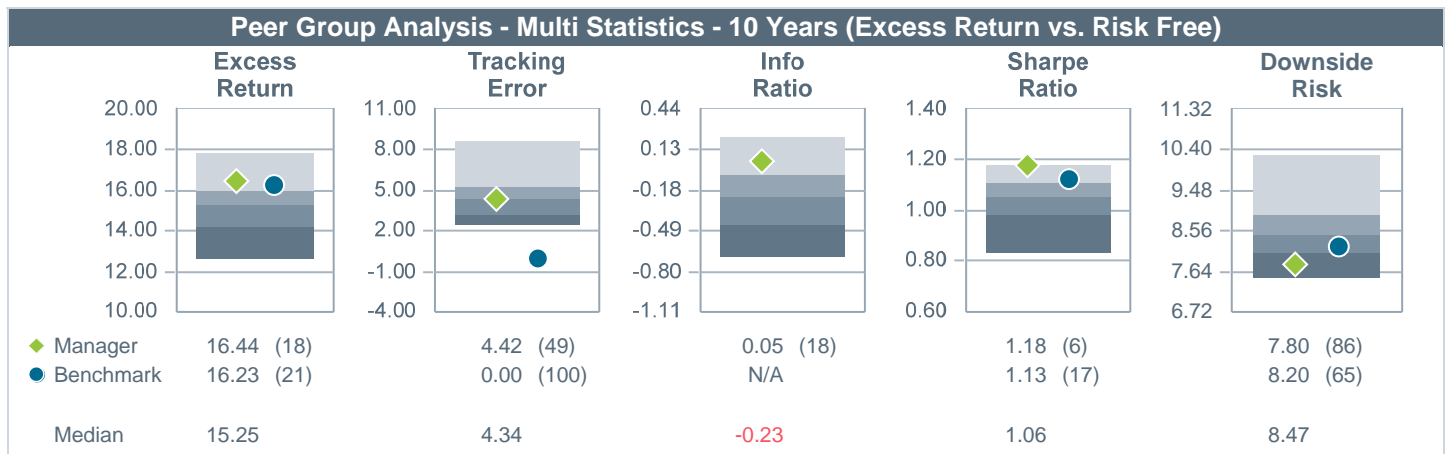
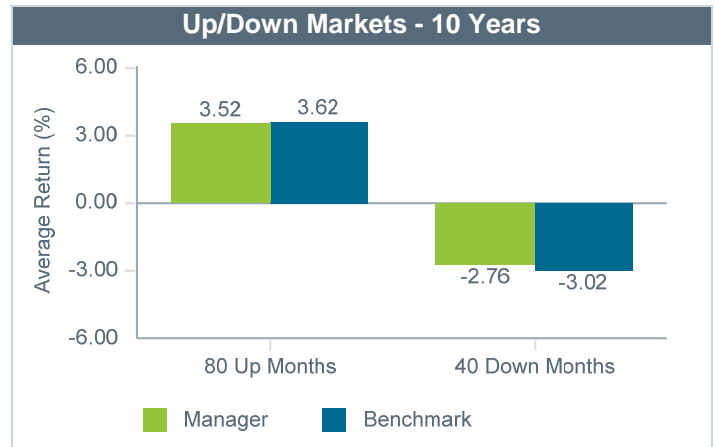
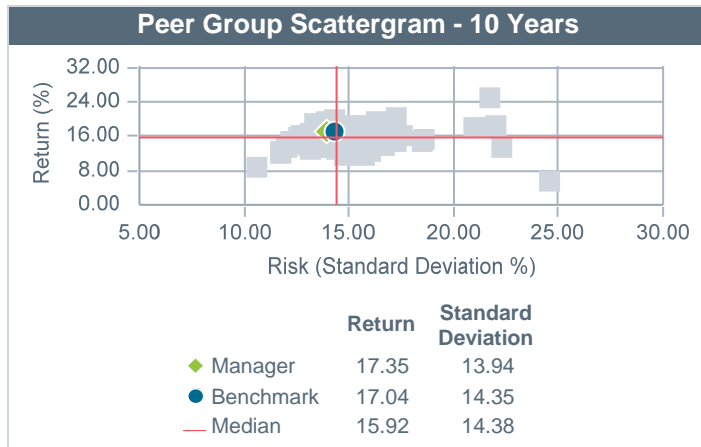
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-5.13	13.27	18.69	15.81	13.71	14.53	26.46	20.91	31.42	-4.77	21.68
Benchmark	-5.13	13.27	18.71	15.82	13.72	14.53	26.45	20.96	31.43	-4.78	21.69
Difference	0.00	0.00	-0.02	-0.01	-0.01	0.00	0.01	-0.05	-0.01	0.01	-0.01
Peer Group Median	-4.58	13.98	17.92	15.39	13.14	14.30	27.89	17.25	30.03	-5.15	21.85
Rank	60	56	37	39	34	41	59	29	37	43	54
Population	185	185	180	174	167	152	197	225	252	275	298



Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



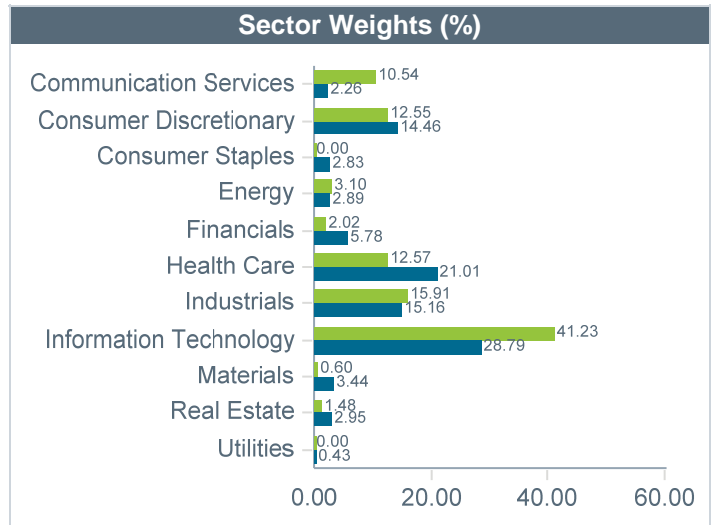
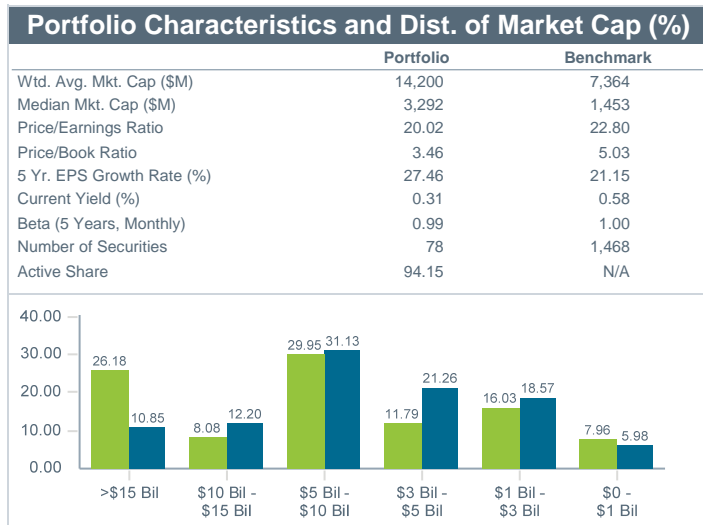
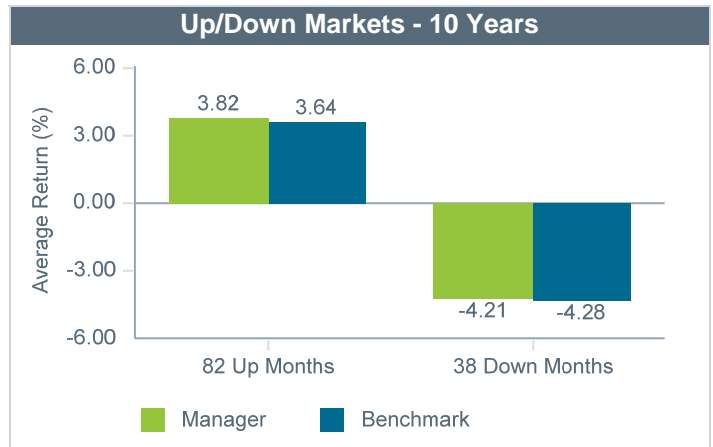
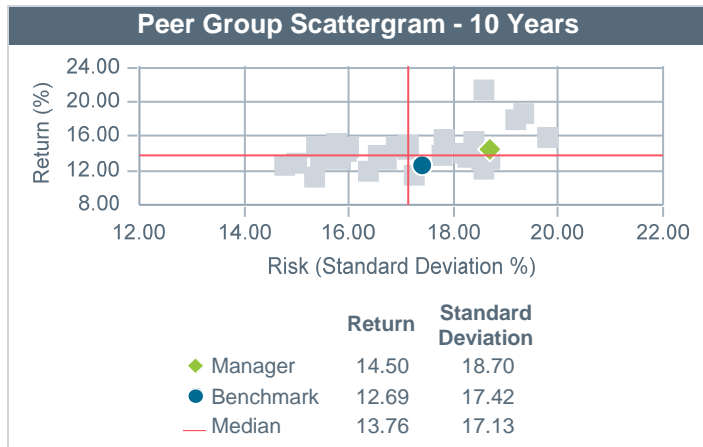
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-7.59	6.98	18.79	18.72	16.67	17.35	19.45	32.95	32.71	-1.72	34.03
Benchmark	-9.04	14.98	23.60	20.88	17.34	17.04	27.60	38.49	36.39	-1.51	30.21
Difference	1.45	-8.00	-4.81	-2.16	-0.67	0.31	-8.15	-5.54	-3.68	-0.21	3.82
Peer Group Median	-9.86	10.61	20.16	18.87	15.57	15.92	25.26	34.79	33.81	-1.02	28.21
Rank	25	73	73	54	26	14	82	60	61	56	16
Population	202	202	200	195	188	177	218	245	258	282	291



Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



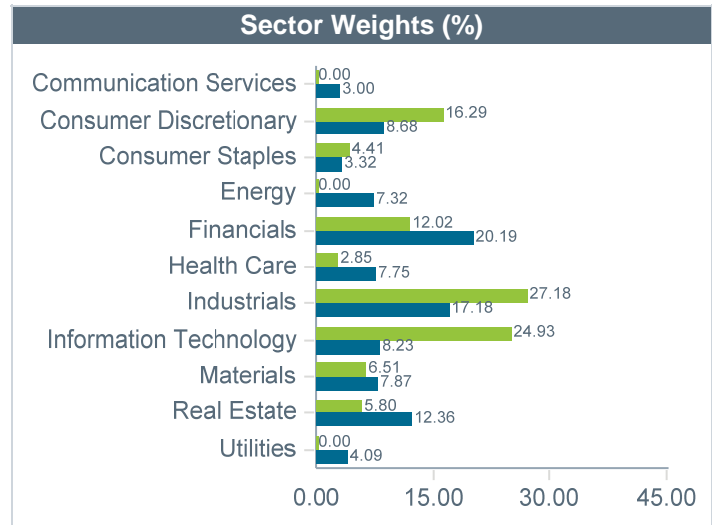
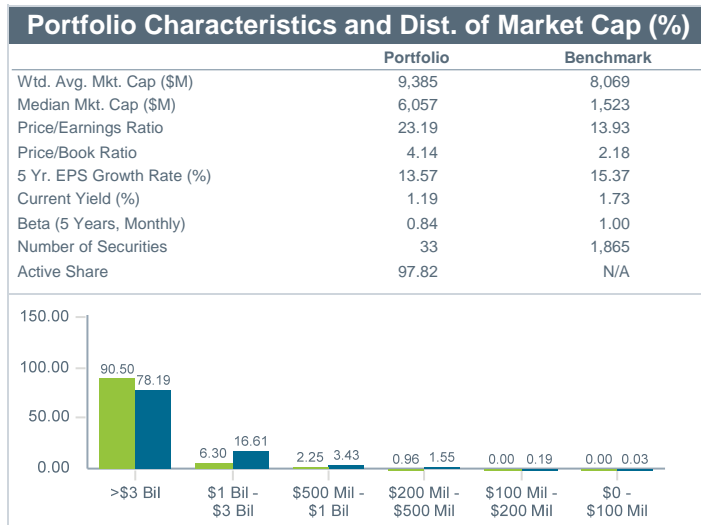
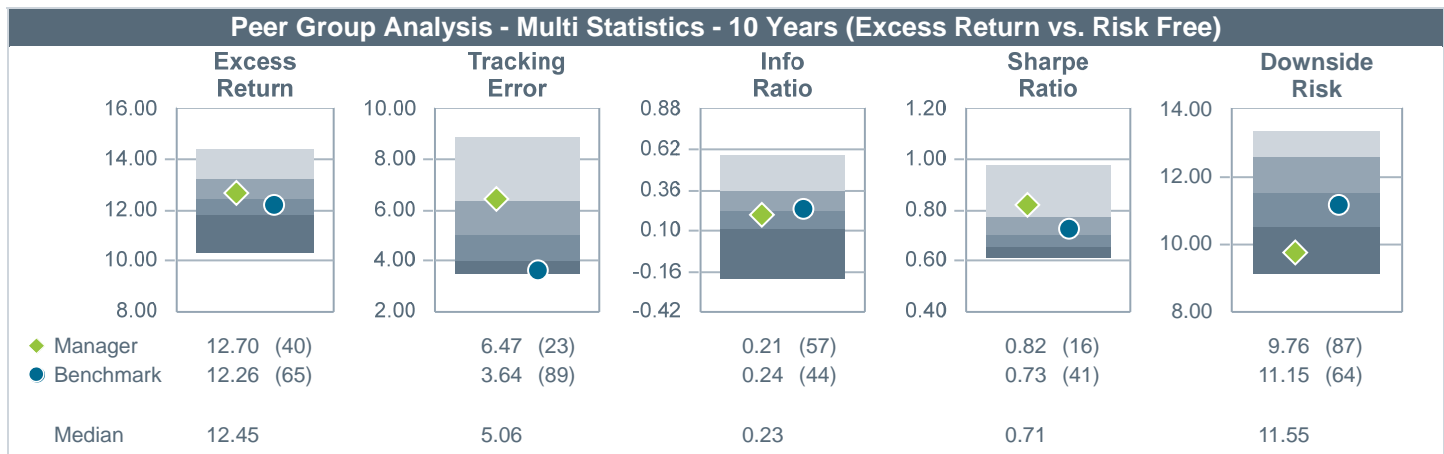
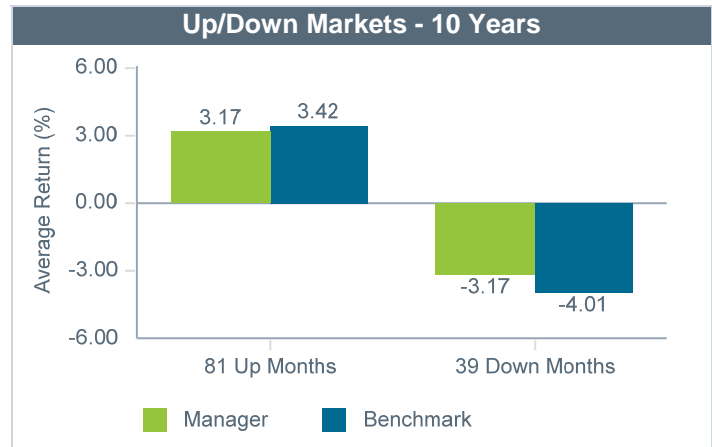
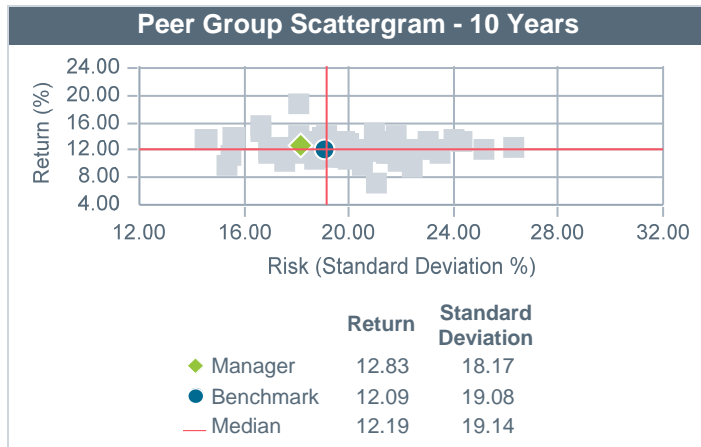
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-5.19	-4.22	19.29	15.46	12.97	14.50	12.71	33.32	41.57	-10.36	25.99
Benchmark	-12.30	-10.12	12.99	13.22	10.53	12.69	5.04	40.47	32.65	-7.47	24.46
Difference	7.11	5.90	6.30	2.24	2.44	1.81	7.67	-7.15	8.92	-2.89	1.53
Peer Group Median	-12.64	-1.42	16.67	16.41	12.82	13.76	16.65	42.60	31.74	-4.63	24.95
Rank	5	62	26	65	48	39	56	72	3	87	44
Population	56	56	50	46	38	29	58	59	59	64	63



Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



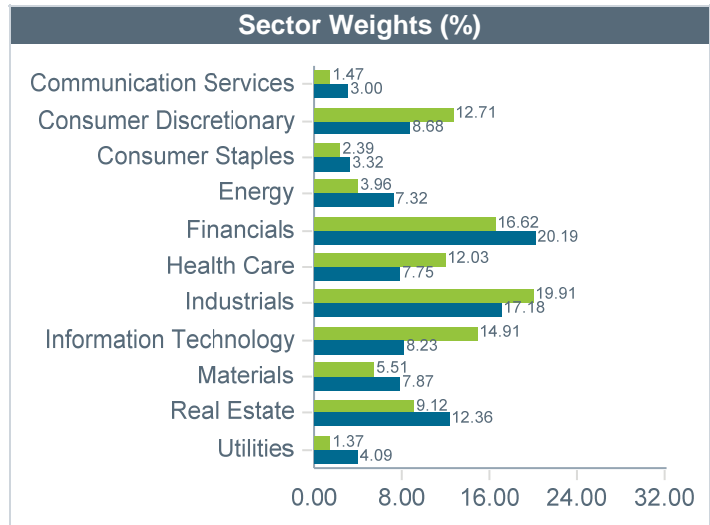
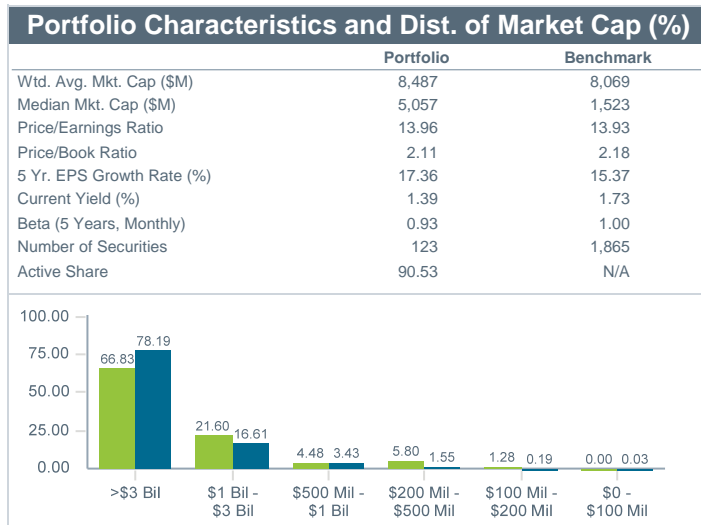
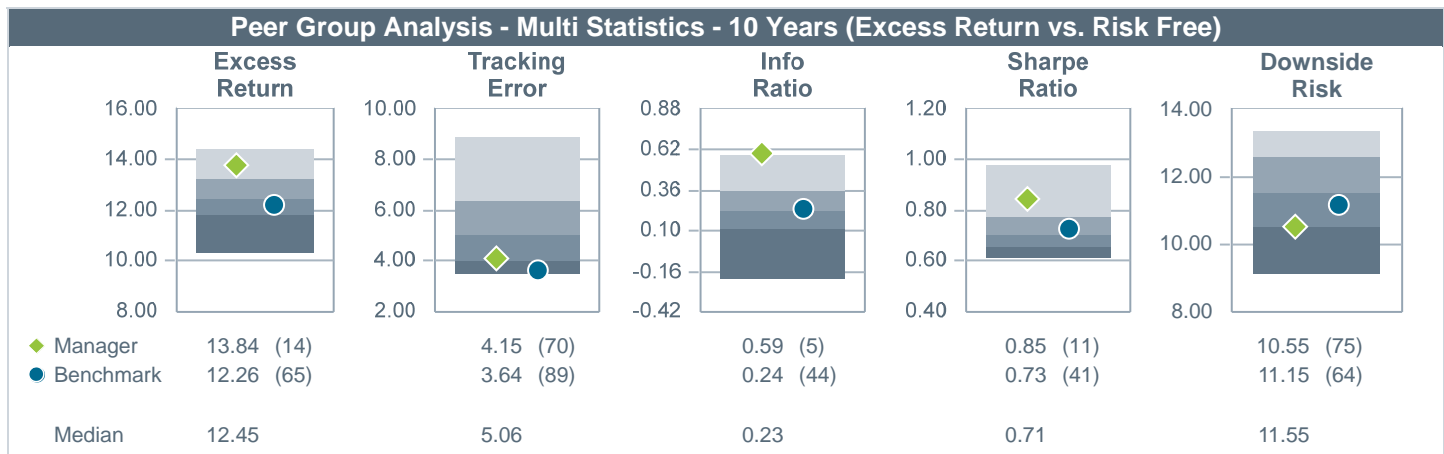
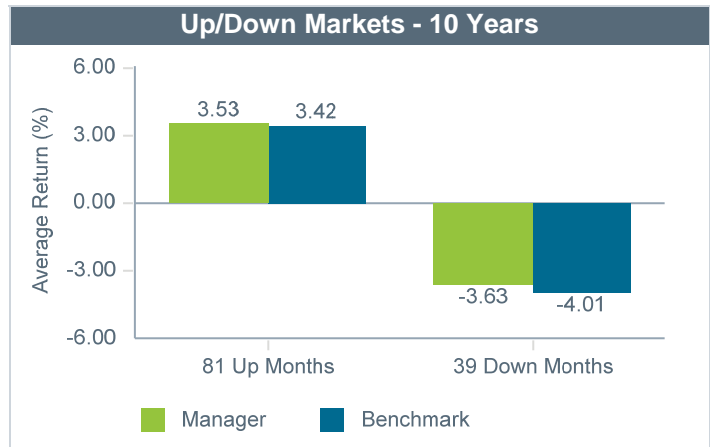
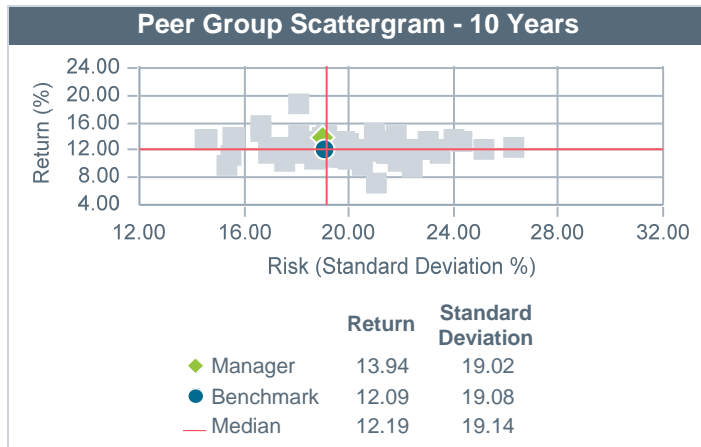
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-11.66	-4.16	16.23	12.16	11.30	12.83	22.19	24.69	33.21	-11.99	18.47
Benchmark	-1.50	7.73	12.98	9.19	8.86	11.04	27.78	4.88	23.56	-12.36	10.36
Difference	-10.16	-11.89	3.25	2.97	2.44	1.79	-5.59	19.81	9.65	0.37	8.11
Peer Group Median	-2.69	7.70	15.09	10.93	9.77	12.19	28.46	7.66	27.58	-12.98	14.78
Rank	99	97	29	27	21	29	89	7	9	38	21
Population	82	82	78	76	71	67	85	100	100	107	112



Performance shown is and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



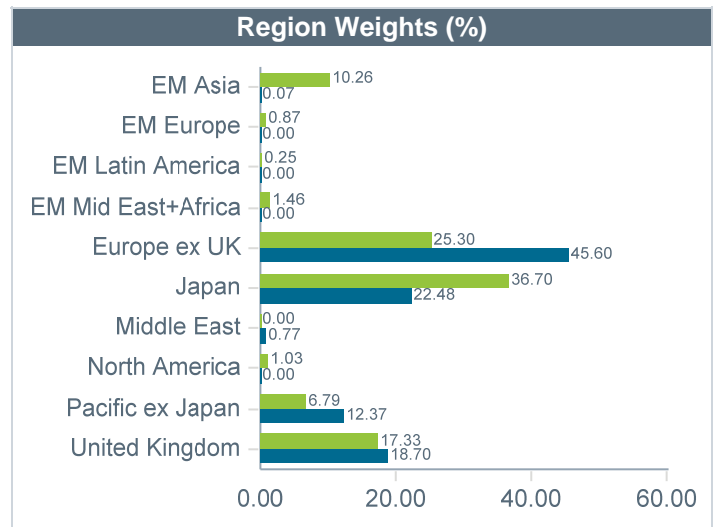
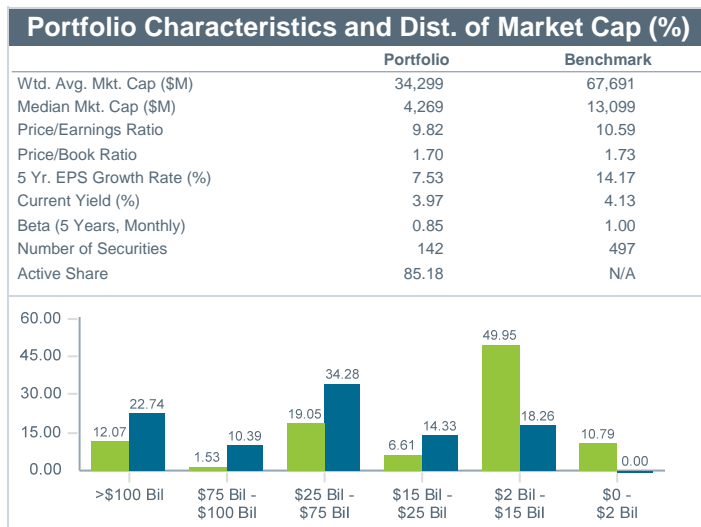
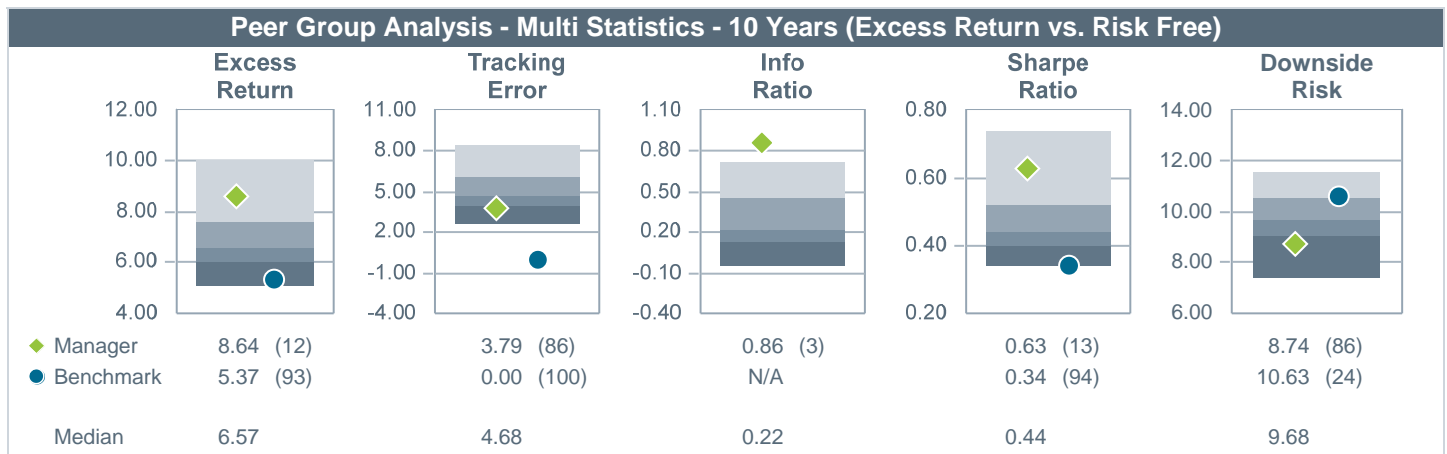
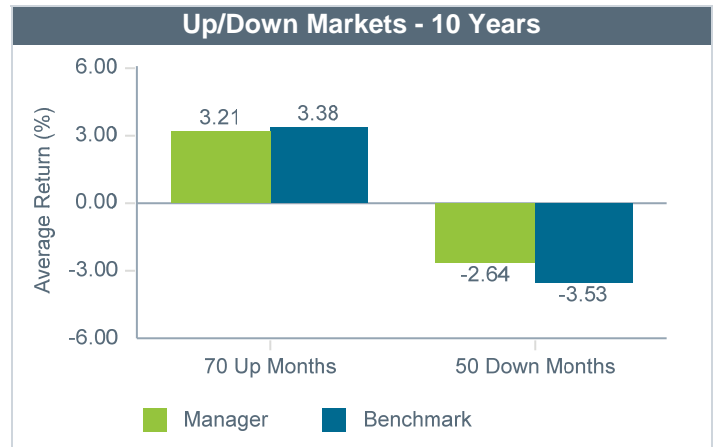
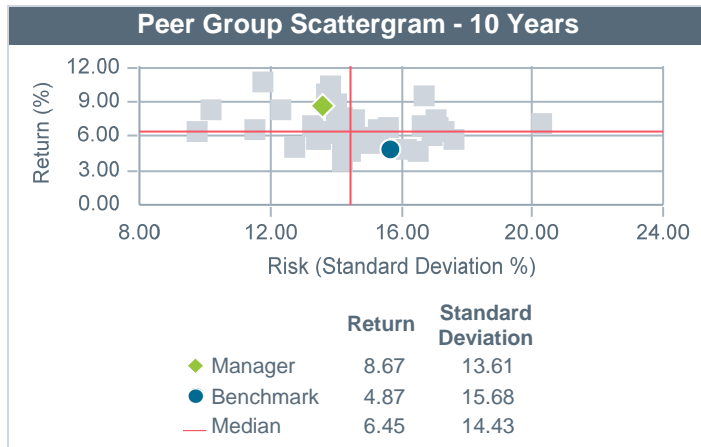
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-1.79	8.57	16.42	12.82	12.63	13.94	31.53	7.55	27.80	-14.17	25.80
Benchmark	-1.50	7.73	12.98	9.19	8.86	11.04	27.78	4.88	23.56	-12.36	10.36
Difference	-0.29	0.84	3.44	3.63	3.77	2.90	3.75	2.67	4.24	-1.81	15.44
Peer Group Median	-2.69	7.70	15.09	10.93	9.77	12.19	28.46	7.66	27.58	-12.98	14.78
Rank	44	41	24	18	11	13	28	51	47	60	3
Population	82	82	78	76	71	67	85	100	100	107	112



Performance shown is and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



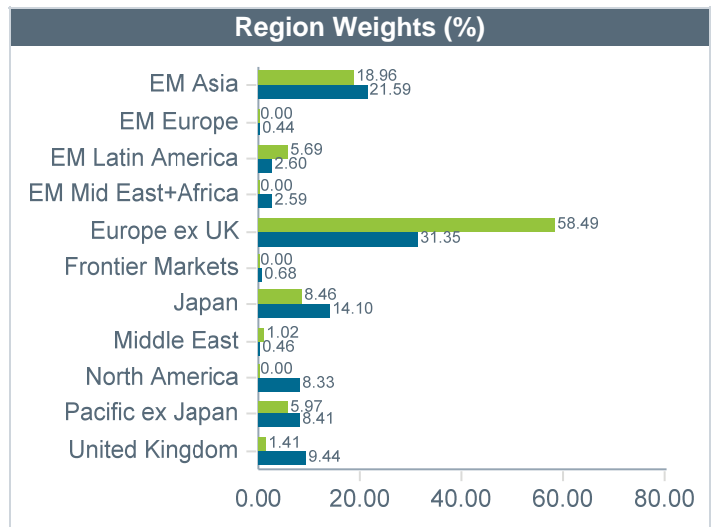
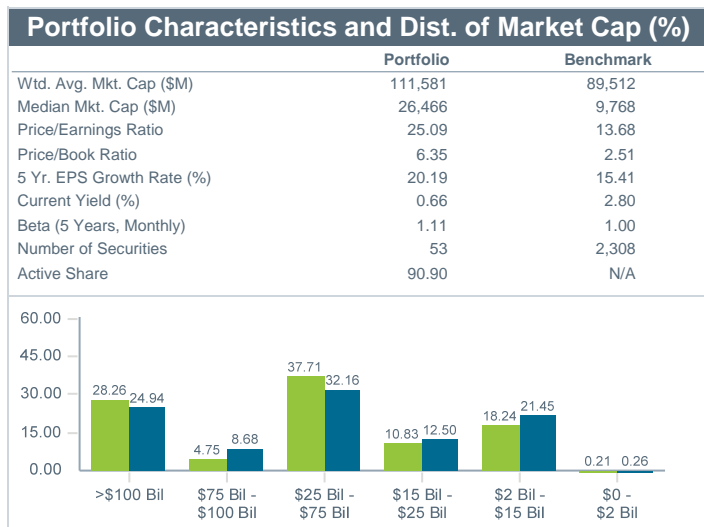
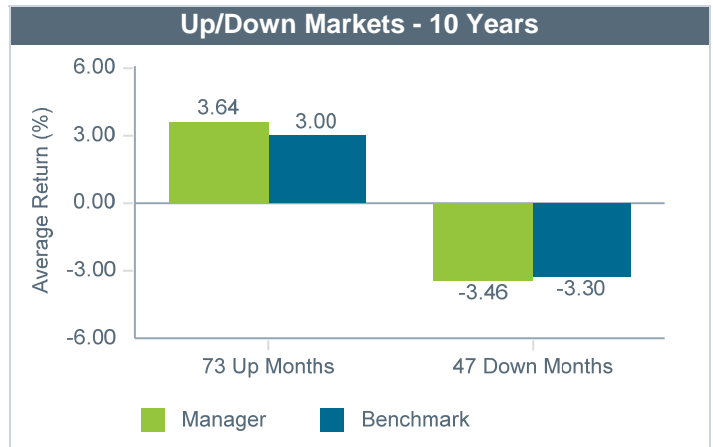
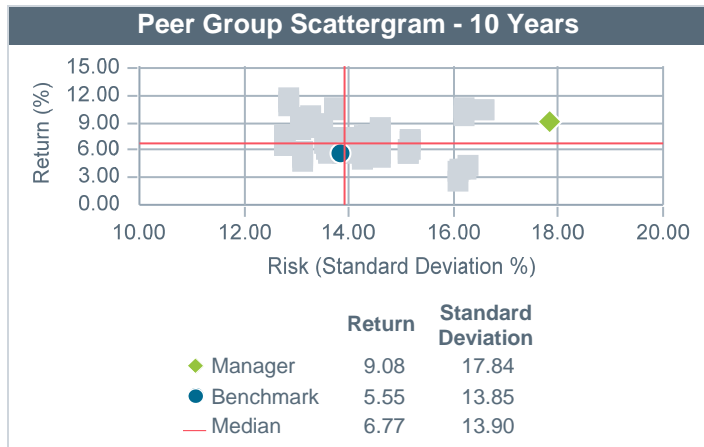
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	0.32	3.69	7.67	6.47	6.20	8.67	12.58	0.17	18.05	-13.74	28.10
Benchmark	0.33	3.55	5.24	4.18	3.13	4.87	10.89	-2.63	16.09	-14.78	21.44
Difference	-0.01	0.14	2.43	2.29	3.07	3.80	1.69	2.80	1.96	1.04	6.66
Peer Group Median	-4.79	1.91	7.05	5.87	5.06	6.45	11.65	4.45	21.10	-15.76	24.17
Rank	6	24	35	32	21	11	41	81	88	41	26
Population	42	42	42	42	42	42	44	50	56	59	61



Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



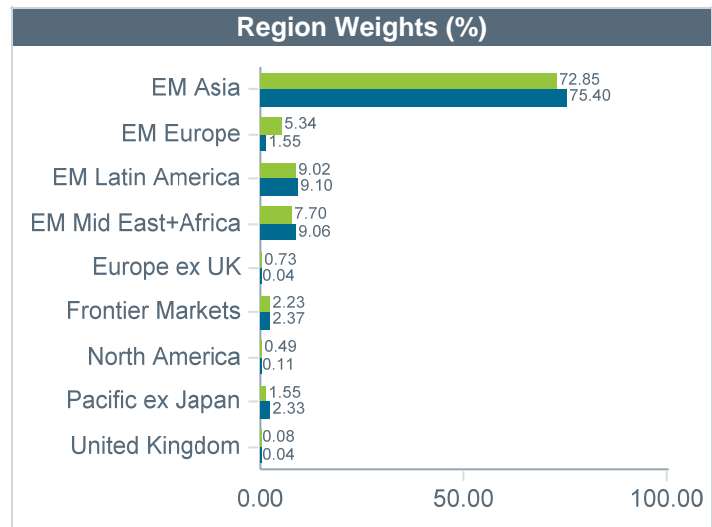
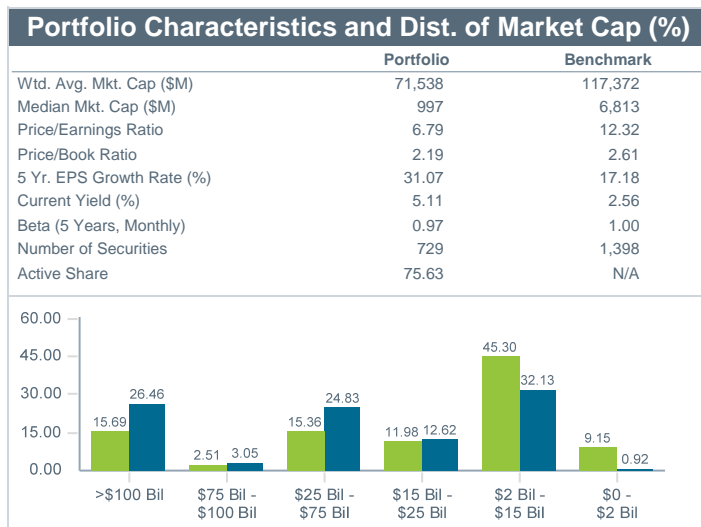
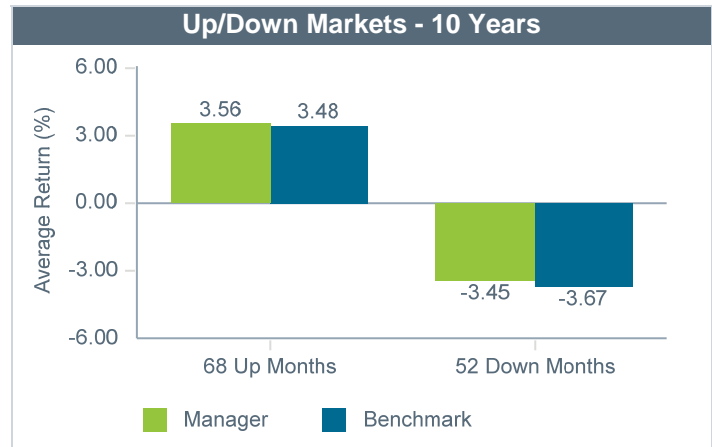
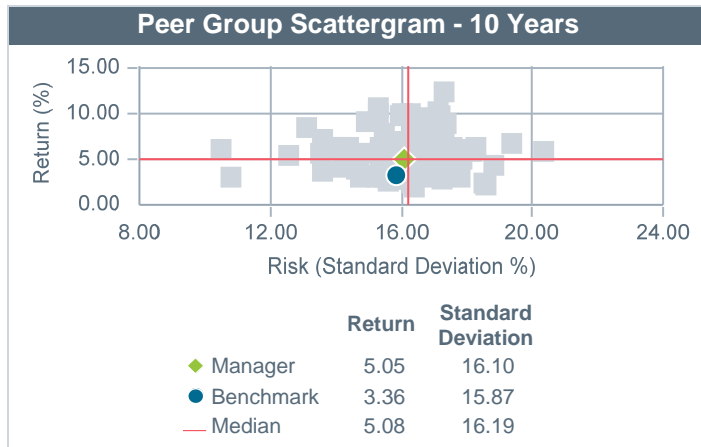
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-21.73	-27.10	10.03	11.21	8.62	9.08	-9.32	63.13	37.48	-17.23	46.37
Benchmark	-5.44	-1.48	7.51	6.76	5.19	5.55	7.82	10.65	21.51	-14.20	27.19
Difference	-16.29	-25.62	2.52	4.45	3.43	3.53	-17.14	52.48	15.97	-3.03	19.18
Peer Group Median	-13.62	-8.06	9.42	8.92	6.21	6.77	7.93	22.75	27.84	-14.32	32.37
Rank	98	95	40	18	16	15	98	1	2	79	5
Population	170	170	170	170	137	110	170	170	172	176	188



Performance shown is net of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

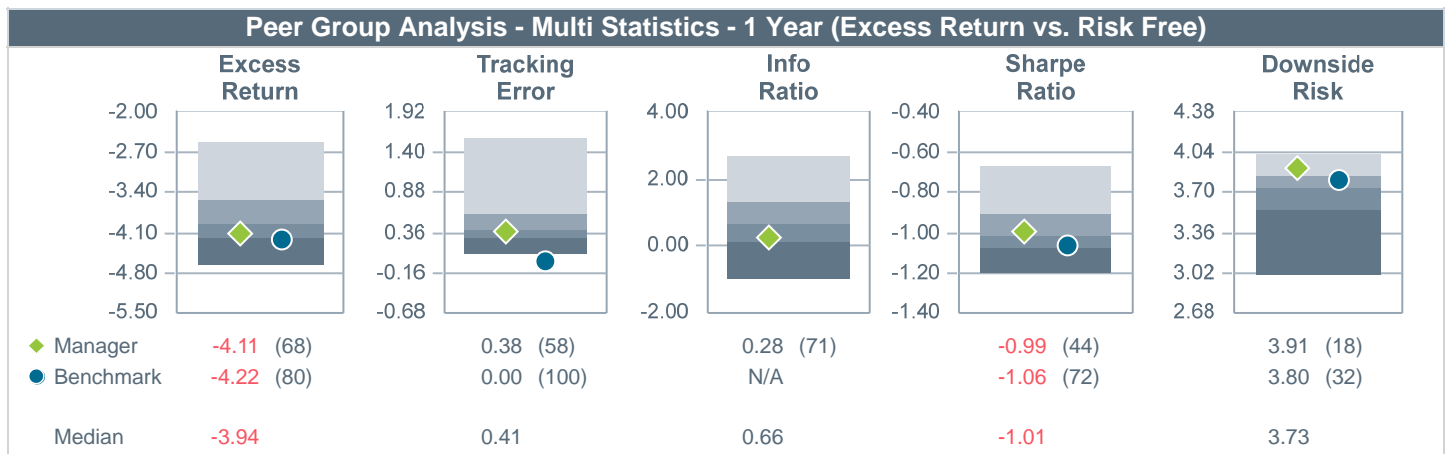
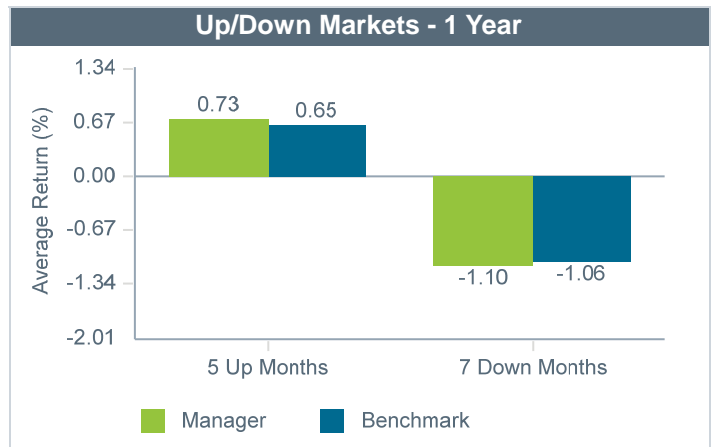
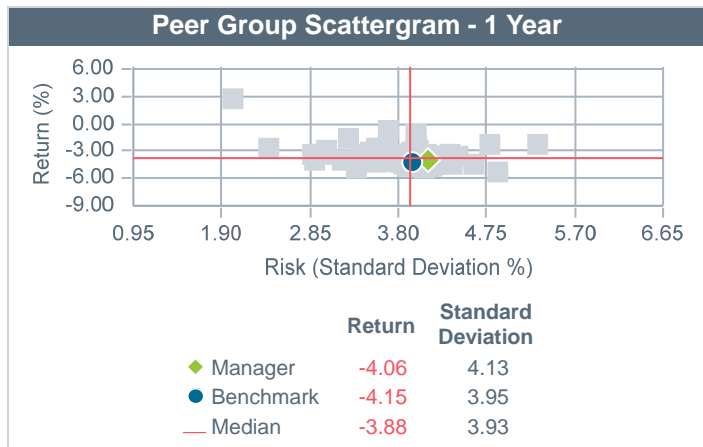


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-1.65	-0.17	9.22	7.17	6.07	5.05	8.75	12.55	18.00	-18.30	38.94
Benchmark	-6.97	-11.37	4.94	5.98	4.69	3.36	-2.54	18.31	18.44	-14.58	37.28
Difference	5.32	11.20	4.28	1.19	1.38	1.69	11.29	-5.76	-0.44	-3.72	1.66
Peer Group Median	-7.04	-9.13	6.81	6.86	5.94	5.08	1.16	18.09	19.53	-15.23	36.80
Rank	19	24	27	45	46	51	26	73	64	81	36
Population	266	262	248	226	208	164	270	300	330	333	344



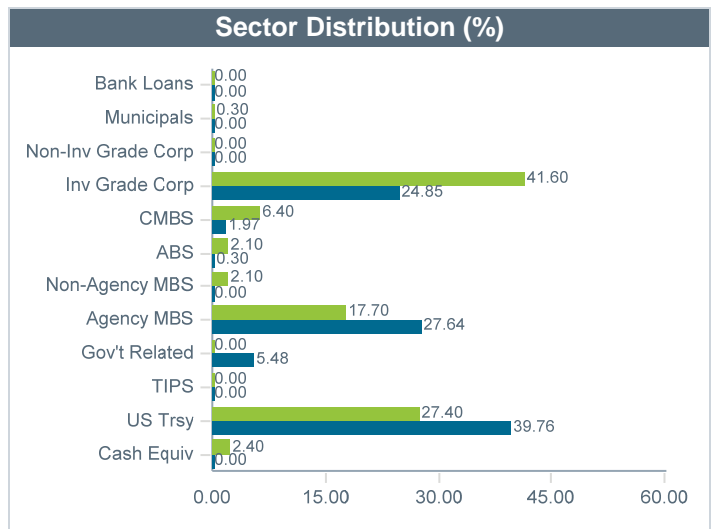
Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-6.12	-4.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benchmark	-5.93	-4.15	1.69	2.14	1.87	2.24	-1.55	7.51	8.72	0.01	3.54
Difference	-0.19	0.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Peer Group Median	-5.81	-3.88	2.24	2.66	2.37	2.75	-1.21	8.52	9.19	0.06	4.01
Rank	84	69	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Population	133	132	131	128	125	120	140	150	152	158	163



Portfolio Characteristics

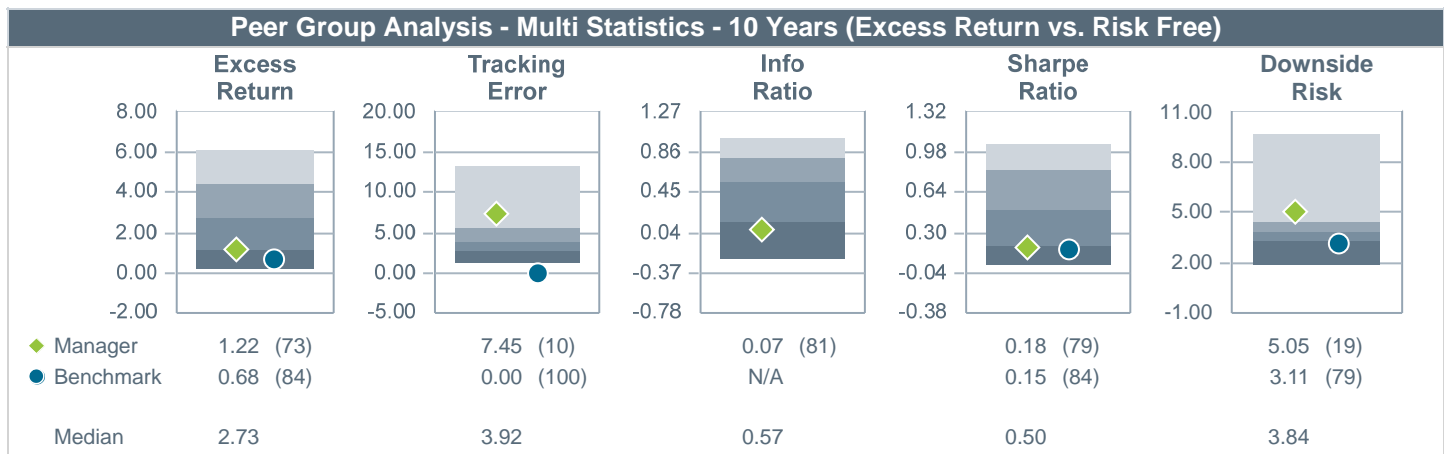
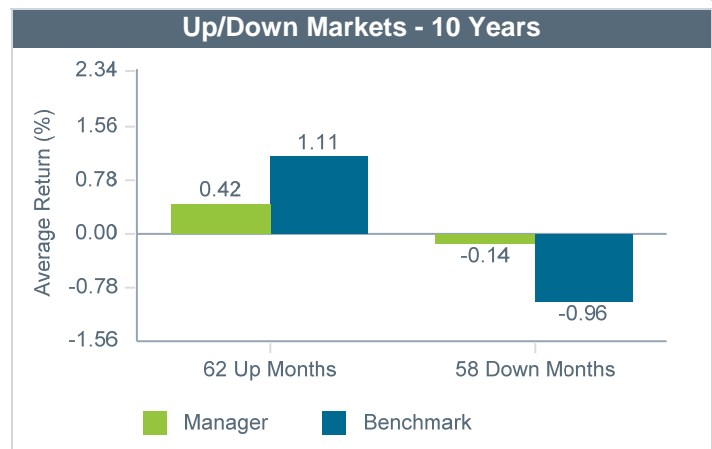
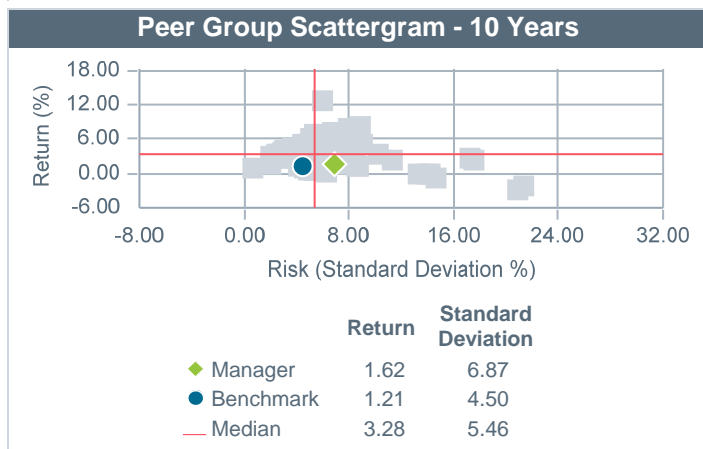
	Portfolio	Benchmark
Effective Duration	6.58	6.58
Spread Duration	3.75	N/A
Avg. Maturity	8.42	8.77
Avg. Quality	Aa3	Aa1/Aa2
Yield To Maturity (%)	N/A	2.92
Coupon Rate (%)	2.80	2.44
Current Yield (%)	N/A	N/A
Holdings Count	237	12,538



Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

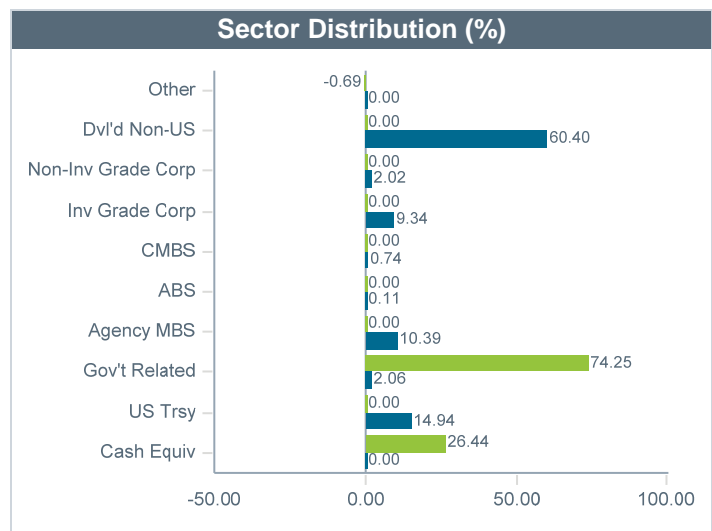


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	0.50	-1.18	-3.36	-1.66	0.07	1.62	-4.72	-3.81	-0.33	0.52	5.06
Benchmark	-6.05	-6.22	0.77	1.78	1.74	1.21	-4.51	9.02	7.13	-1.36	7.69
Difference	6.55	5.04	-4.13	-3.44	-1.67	0.41	-0.21	-12.83	-7.46	1.88	-2.63
Peer Group Median	-4.62	-3.27	3.45	3.57	3.42	3.28	0.13	8.61	9.48	-1.81	7.67
Rank	8	33	100	100	100	75	80	99	100	19	79
Population	179	179	177	171	166	135	194	224	239	255	263



Portfolio Characteristics

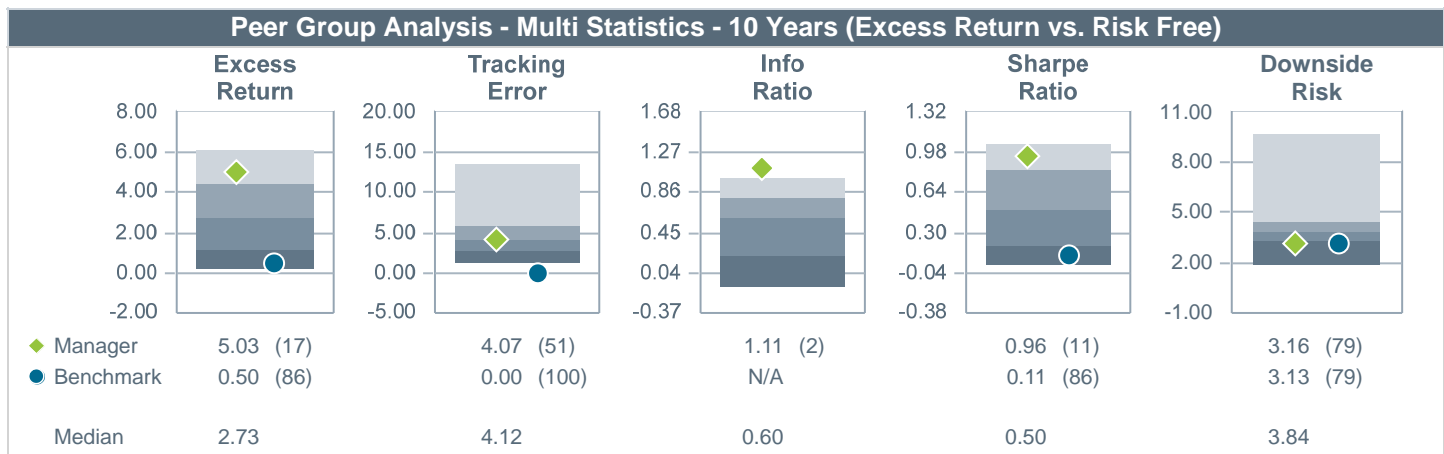
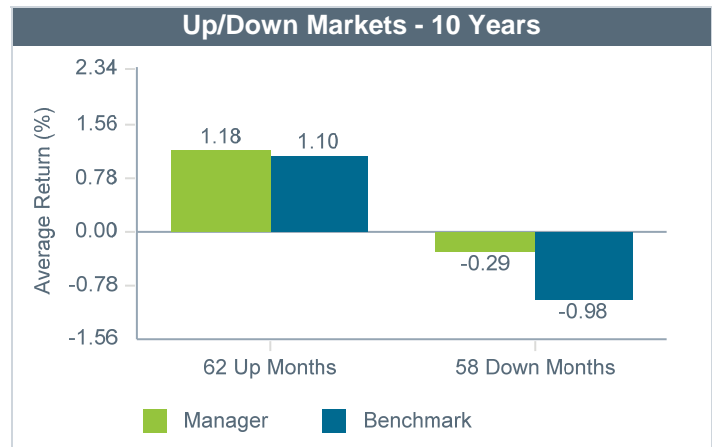
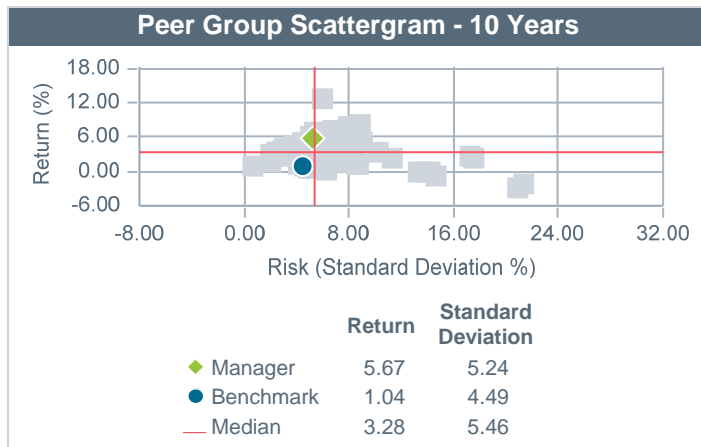
	Portfolio	Benchmark
Effective Duration	1.69	7.14
Spread Duration	1.77	N/A
Avg. Maturity	2.77	8.94
Avg. Quality	N/A	N/A
Yield To Maturity (%)	6.33	2.39
Coupon Rate (%)	3.79	2.35
Current Yield (%)	3.33	N/A
Holdings Count	106	32,106



Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Allocation to "Other" consists of derivatives.

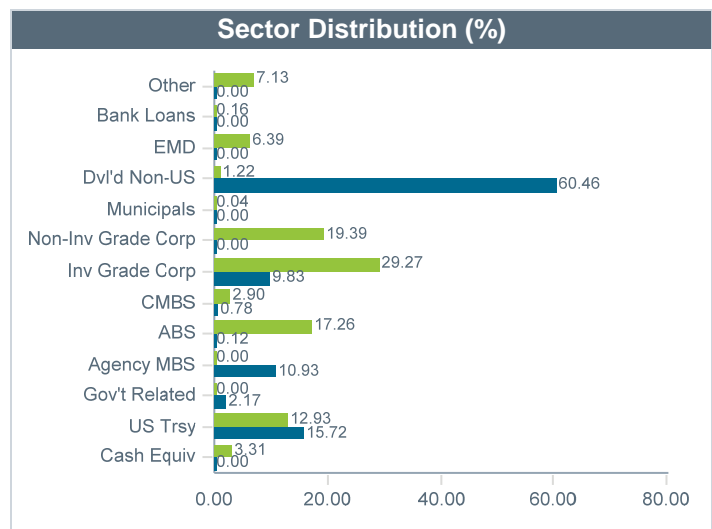


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-5.39	-2.61	4.97	4.87	4.47	5.67	0.55	15.08	9.80	0.09	8.74
Benchmark	-6.16	-6.40	0.69	1.70	1.58	1.04	-4.71	9.20	6.84	-1.19	7.39
Difference	0.77	3.79	4.28	3.17	2.89	4.63	5.26	5.88	2.96	1.28	1.35
Peer Group Median	-4.62	-3.27	3.45	3.57	3.42	3.28	0.13	8.61	9.48	-1.81	7.67
Rank	63	45	22	22	34	17	44	8	47	23	31
Population	179	179	177	171	166	135	194	224	239	255	263



Portfolio Characteristics

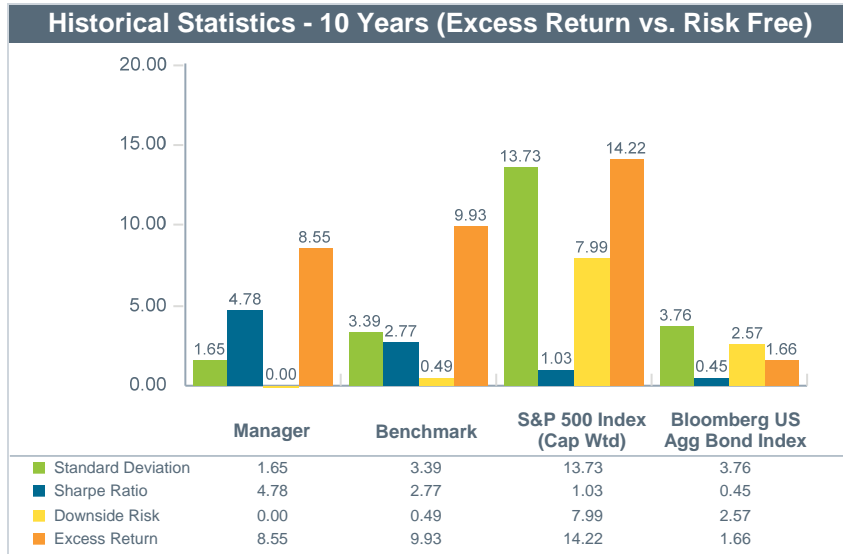
	Portfolio	Benchmark
Effective Duration	4.54	7.28
Spread Duration	4.32	N/A
Avg. Maturity	6.62	9.05
Avg. Quality	Baa2	N/A
Yield To Maturity (%)	4.32	2.15
Coupon Rate (%)	3.35	2.18
Current Yield (%)	3.54	N/A
Holdings Count	930	28,086



Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Allocation to "Other" consists of preferred equity, hedges, and convertibles.

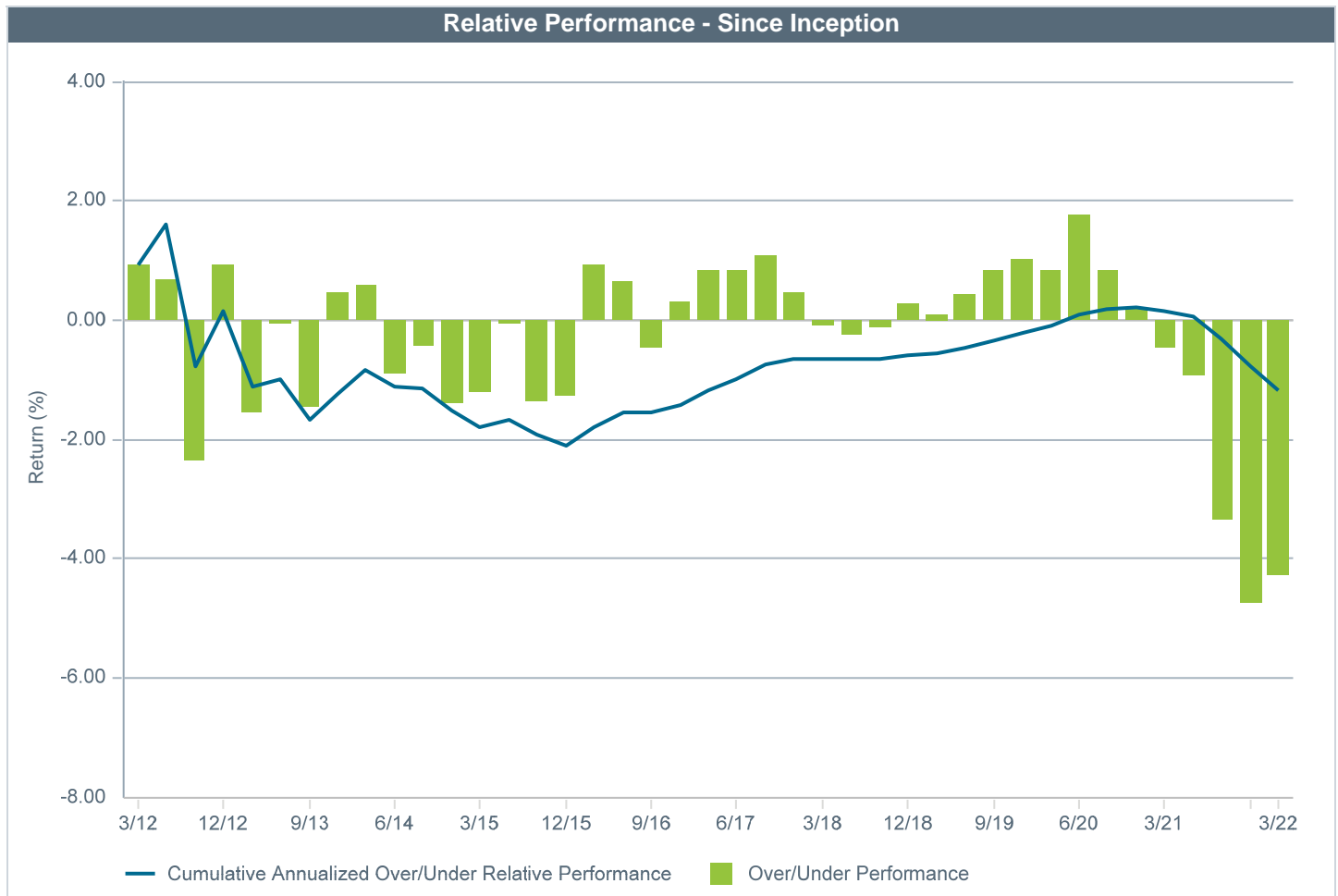


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	2.77	12.18	8.32	8.61	9.21	9.49	10.94	4.91	7.87	8.18	11.11
Benchmark	7.36	28.45	11.29	9.88	10.19	10.93	22.17	1.19	5.34	8.35	7.62
Difference	-4.59	-16.27	-2.97	-1.27	-0.98	-1.44	-11.23	3.72	2.53	-0.17	3.49



Actual Correlation - 10 Years

	Actual Correlation
NCREIF ODCE Index (AWA) (Gross)	0.48
S&P 500 Index (Cap Wtd)	-0.29
Russell 2000 Index	-0.32
MSCI EAFE Index (USD) (Net)	-0.26
MSCI Emg Mkts Index (USD) (Net)	-0.27
Bloomberg US Agg Bond Index	-0.26
Bloomberg US Trsy US TIPS Index	-0.34
Wilshire US REIT Index	-0.16
HFRI FOF Comp Index	-0.32
Bloomberg Cmnty Index (TR)	-0.04
ICE BofAML 3 Mo US T-Bill Index	-0.22
Cons Price Index (Unadjusted)	0.05
NCREIF ODCE Index (AWA) (Gross)	0.48



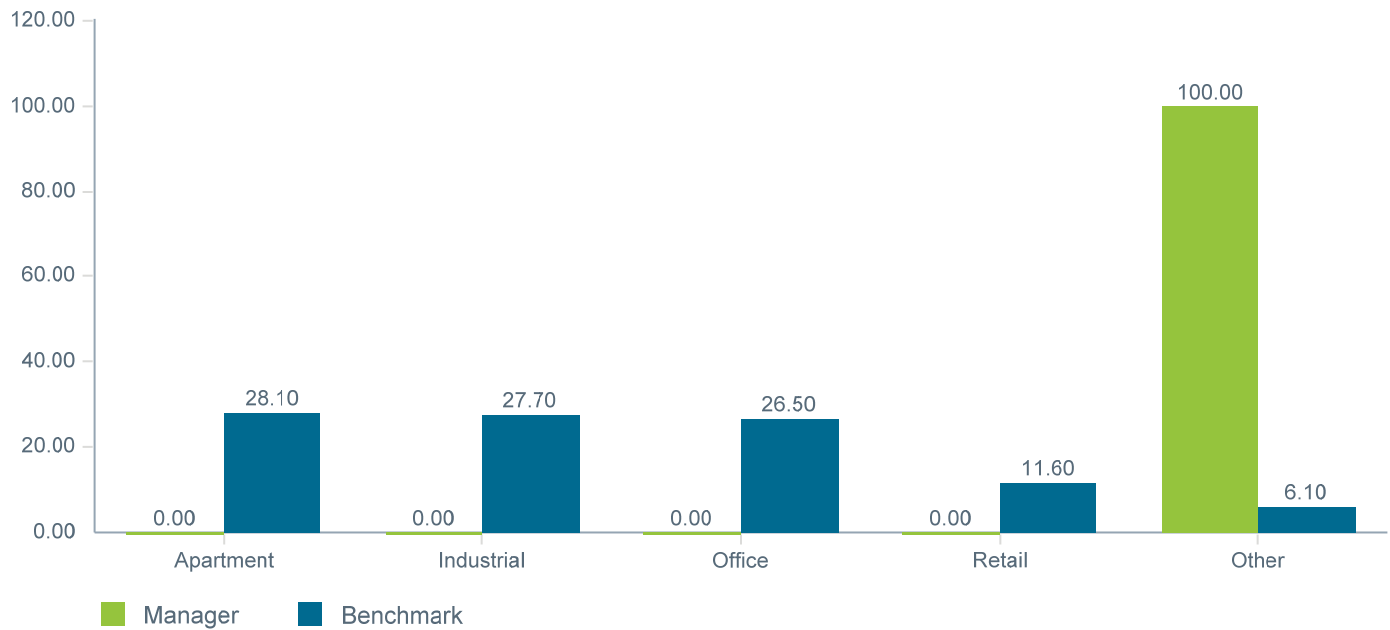
Investment Strategy

The Fund's strategy is on primarily stabilized income-producing investments in niche sectors; Education, Health, and Storage. Within these sectors the fund invests in student housing, seniors housing, medical office buildings, life science buildings, and self-storage. The majority of the return from the Fund is expected to be realized from current income, with a modest portion of the return to be derived from asset appreciation. Harrison Street believes that the primary property types it targets will provide better risk/return profiles than properties in traditional core portfolios across all economic cycles.

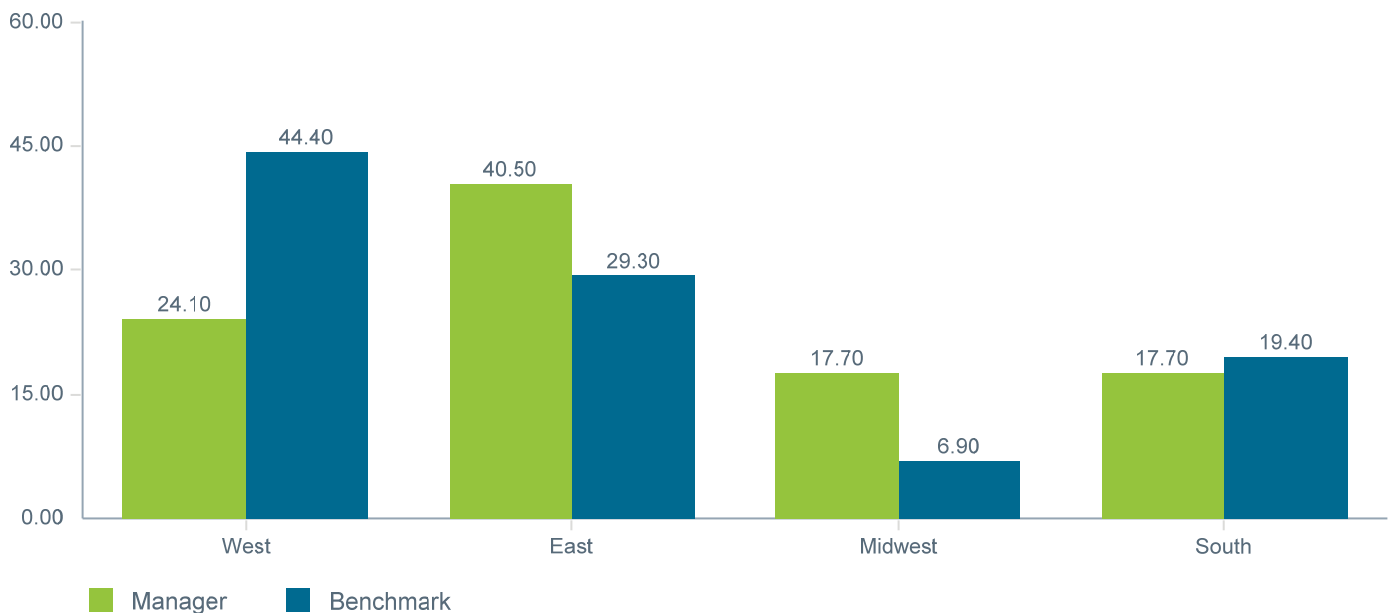
Investment Profile

Fund Inception	2011
Legal Structure	LP
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	12,276
Fund Leverage %	22.89
Portfolio Occupancy %	89.40
Cash Reserve %	0.60
Number of Investments	382
Number of Limited Partners	229

Property Type Allocation (%)



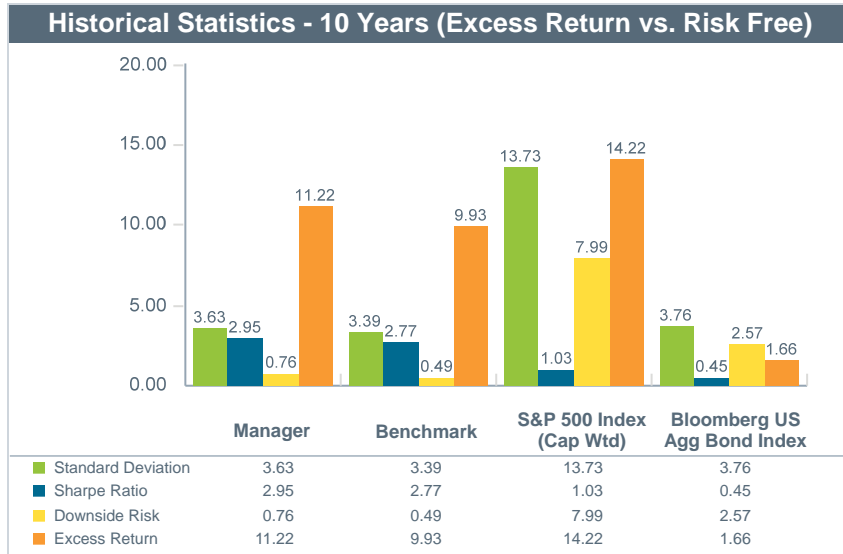
Geographic Allocation (%)



Performance shown is gross of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Manager allocation to "Other" consists of education, healthcare, senior housing, and storage real estate. Benchmark allocation to "Other" consists of entertainment (theaters, golf courses, bowling alleys), healthcare (hospitals, clinics), manufactured homes, parking lots, self-storage units, senior living, and undeveloped land.

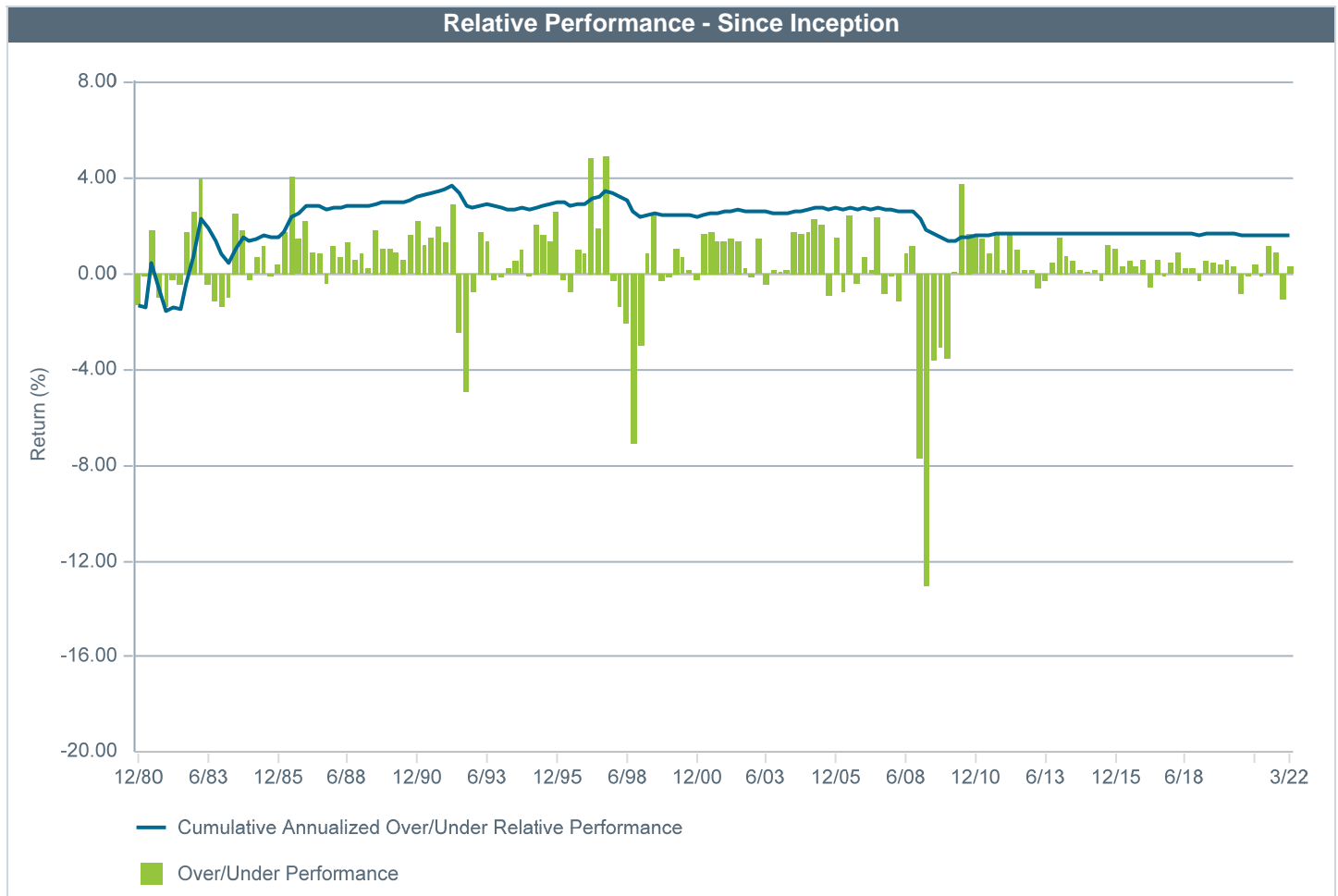


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	7.72	30.11	12.26	11.02	11.52	12.32	23.30	1.03	7.52	9.48	8.06
Benchmark	7.36	28.45	11.29	9.88	10.19	10.93	22.17	1.19	5.34	8.35	7.62
Difference	0.36	1.66	0.97	1.14	1.33	1.39	1.13	-0.16	2.18	1.13	0.44



Actual Correlation - 10 Years

	Actual Correlation
NCREIF ODCE Index (AWA) (Gross)	0.95
S&P 500 Index (Cap Wtd)	-0.21
Russell 2000 Index	-0.28
MSCI EAFE Index (USD) (Net)	-0.22
MSCI Emg Mkts Index (USD) (Net)	-0.40
Bloomberg US Agg Bond Index	-0.43
Bloomberg US Trsy US TIPS Index	-0.28
Wilshire US REIT Index	0.05
HFRI FOF Comp Index	-0.28
Bloomberg Cmnty Index (TR)	0.15
ICE BofAML 3 Mo US T-Bill Index	-0.38
Cons Price Index (Unadjusted)	0.31



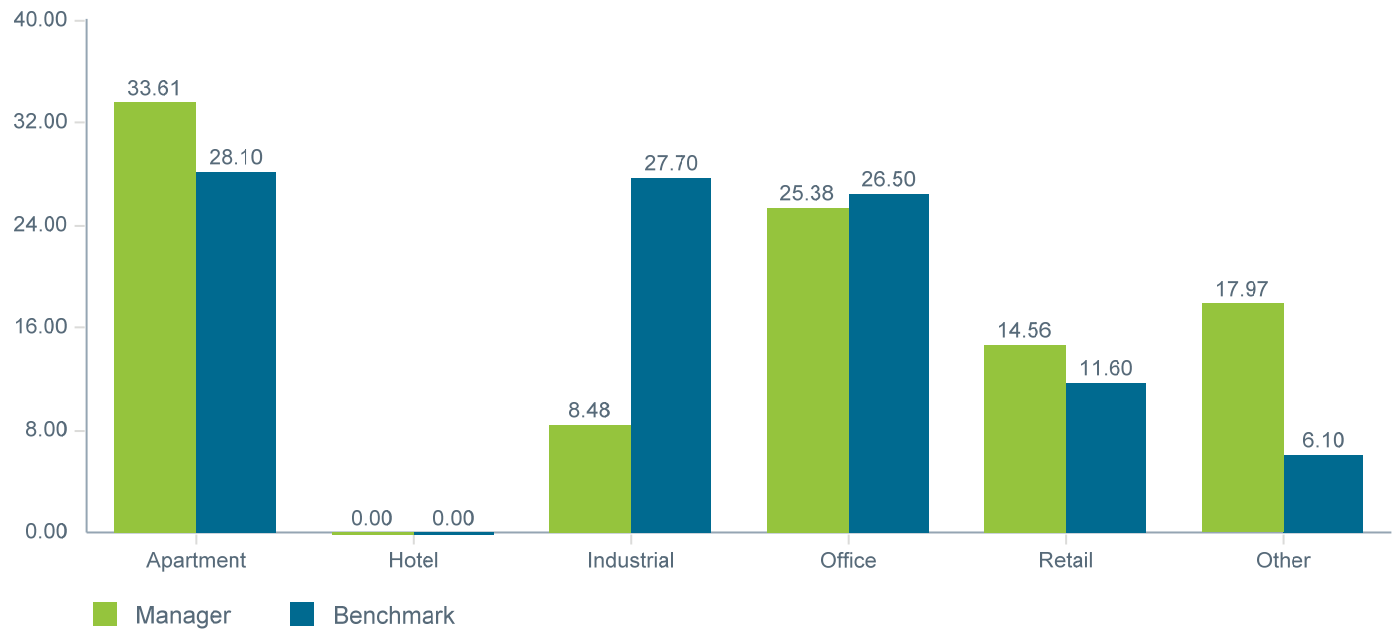
Investment Strategy

The Fund pursues a diversified core-plus real estate strategy that seeks to outperform the NCREIF ODCE Index by 100 basis points over a complete market cycle by structuring investments to enhance risk-adjusted returns. Investments may be made through direct property ownership or indirectly through such vehicles as joint ventures, general or limited partnerships, limited liability companies, mortgage loans and other loan types, including mezzanine debt, and debt secured by an interest in the borrowing entity or interests in companies or entities that directly or indirectly hold real estate or real estate interests. It operates with a leverage limit of 40% and may invest up to 35% of its gross assets in higher-risk, non-core real estate investment opportunities.

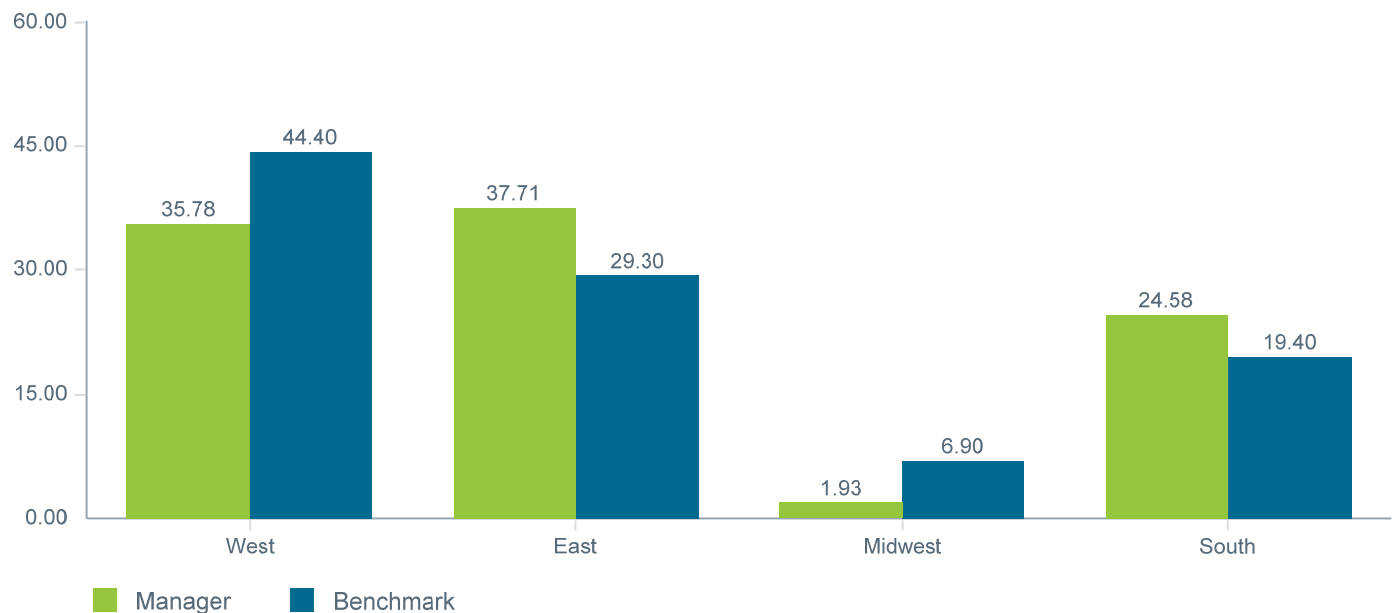
Investment Profile

Fund Inception	1980
Legal Structure	REIT
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	16,371
Fund Leverage %	33.65
Portfolio Occupancy %	90.21
Cash Reserve %	2.62
Number of Investments	161
Number of Limited Partners	106

Property Type Allocation (%)



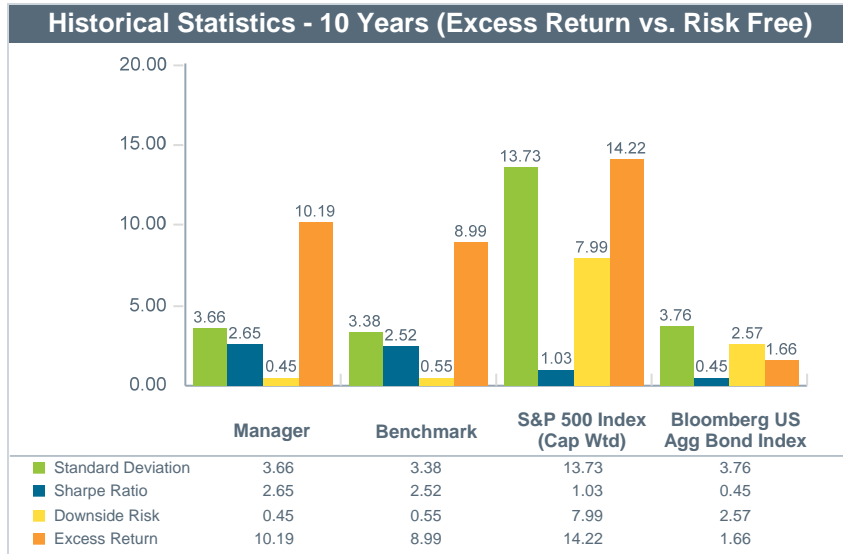
Geographic Allocation (%)



Performance shown is gross of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Manager allocation to "Other" consists of land and life science/lab space. Benchmark allocation to "Other" consists of entertainment (theaters, golf courses, bowling alleys), healthcare (hospitals, clinics), manufactured homes, parking lots, self-storage units, senior living, and undeveloped land.

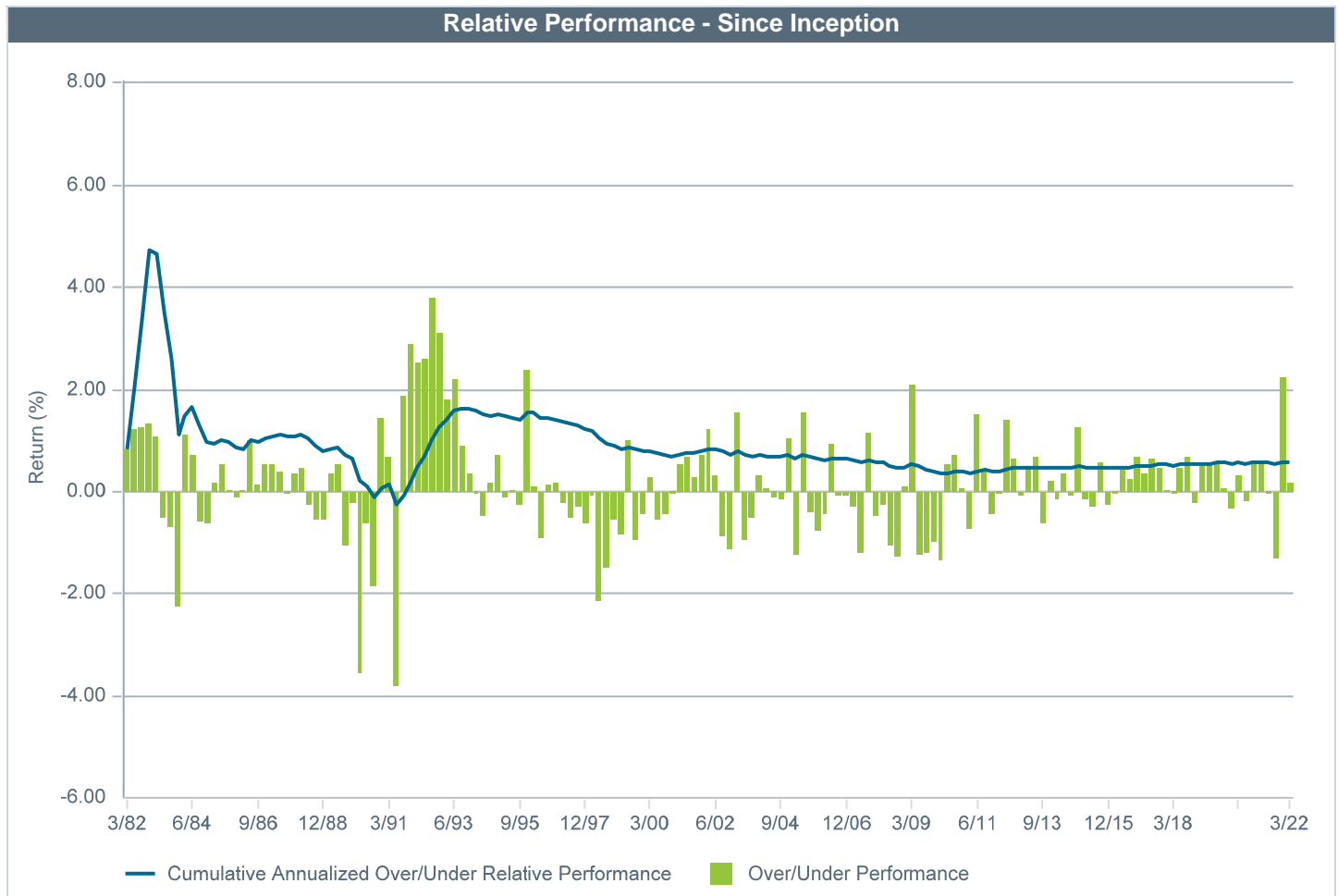


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	7.35	28.69	11.55	10.20	10.40	11.20	22.83	0.81	6.22	8.32	8.29
Benchmark	7.17	27.29	10.31	8.91	9.21	9.92	21.02	0.34	4.39	7.36	6.66
Difference	0.18	1.40	1.24	1.29	1.19	1.28	1.81	0.47	1.83	0.96	1.63



Actual Correlation - 10 Years

	Actual Correlation
NCREIF ODCE Index (AWA) (Net)	0.94
S&P 500 Index (Cap Wtd)	-0.06
Russell 2000 Index	-0.15
MSCI EAFE Index (USD) (Net)	-0.17
MSCI Emg Mkts Index (USD) (Net)	-0.34
Bloomberg US Agg Bond Index	-0.43
Bloomberg US Trsy US TIPS Index	-0.28
Wilshire US REIT Index	0.22
HFRI FOF Comp Index	-0.21
Bloomberg Cmdty Index (TR)	0.12
ICE BofAML 3 Mo US T-Bill Index	-0.38
Cons Price Index (Unadjusted)	0.34
NCREIF ODCE Index (AWA) (Gross)	0.95



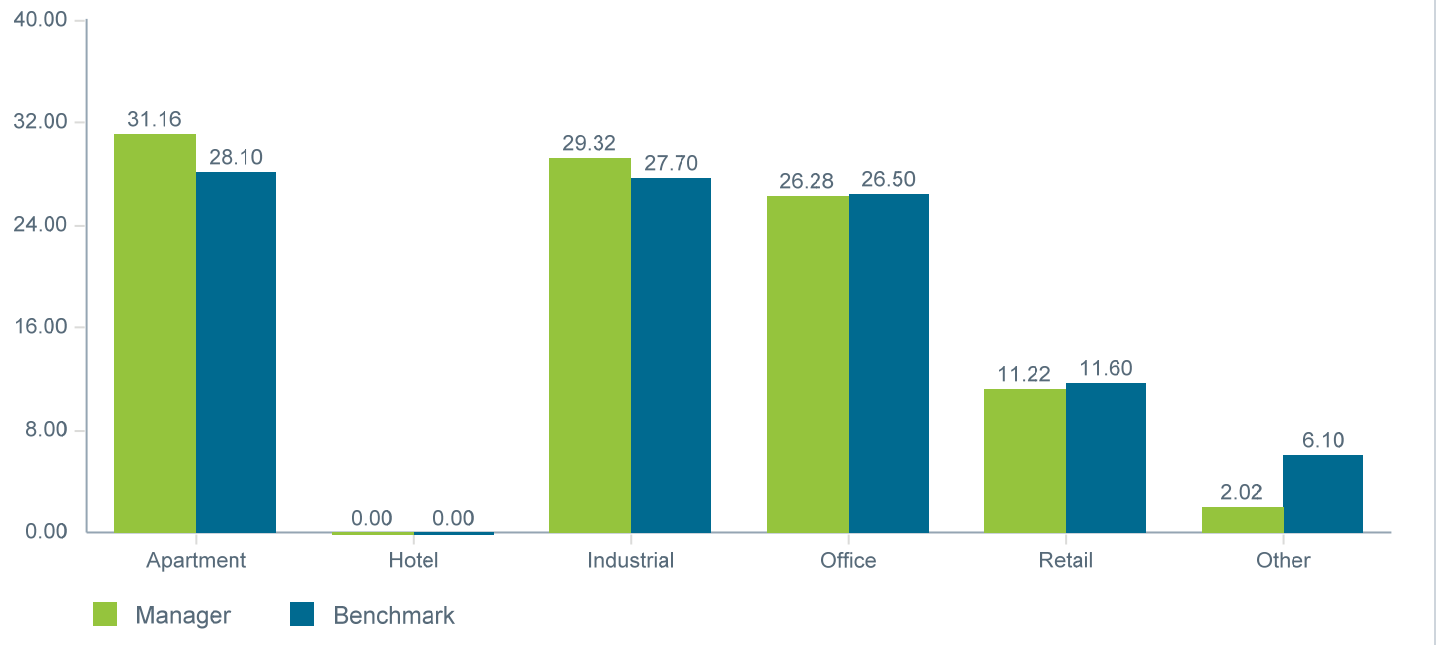
Investment Strategy

The Principal U.S. Property Account is a core real estate account designed to have a low to moderate risk profile consistent with other open-end real estate funds comprising the NFI-ODCE. This risk profile has two components: 1) a low to moderate real estate property risk profile; and 2) a low to moderate risk portfolio level operating profile. Low to moderate real estate property risk is accomplished by investing primarily in well-leased properties on an unleveraged basis. Low to moderate portfolio level risk is accomplished by operating with limited portfolio level obligations and a well-diversified portfolio. The Account invests in the traditional real estate property types; multifamily, office, industrial, and retail.

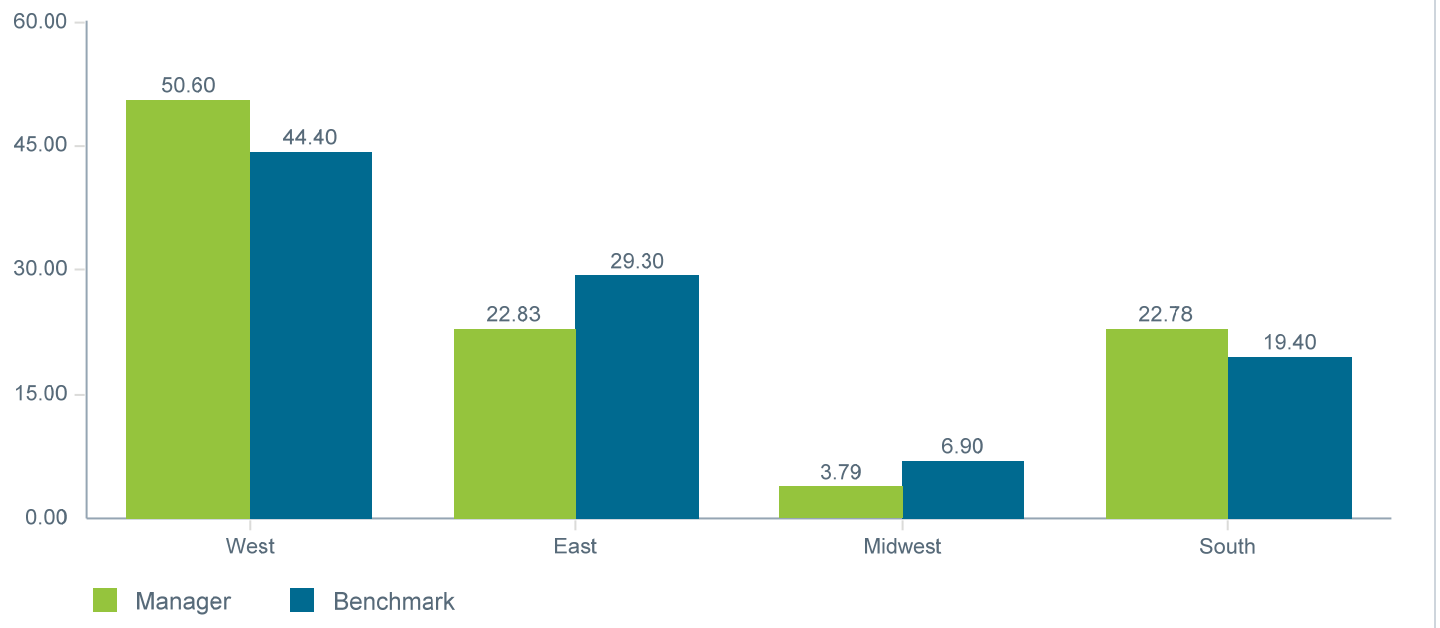
Investment Profile

Fund Inception	1982
Legal Structure	Insurance SA
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	12,515
Fund Leverage %	21.73
Portfolio Occupancy %	91.91
Cash Reserve %	3.21
Number of Investments	142
Number of Limited Partners	4,844

Property Type Allocation (%)



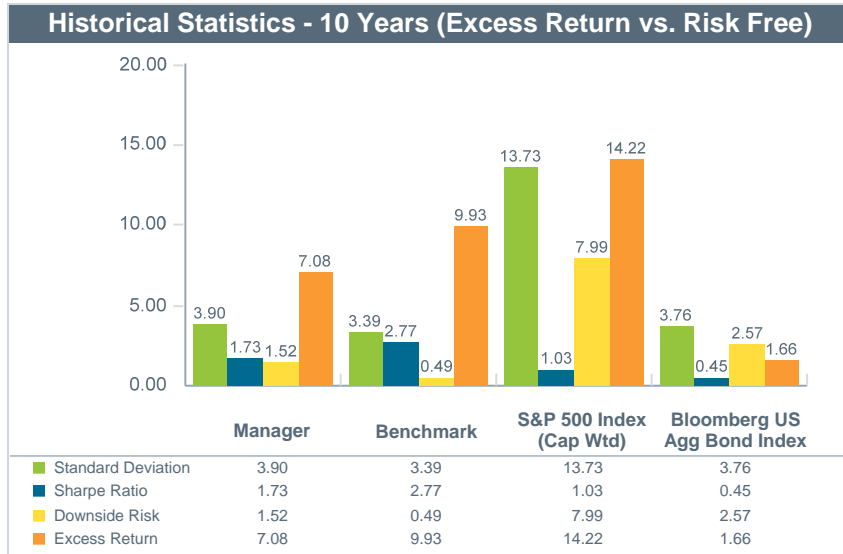
Geographic Allocation (%)



Performance shown is net of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Manager allocation to "Other" consists of land, self storage, and manufactured housing. Benchmark allocation to "Other" consists of entertainment (theaters, golf courses, bowling alleys), healthcare (hospitals, clinics), manufactured homes, parking lots, self-storage units, senior living, and undeveloped land.

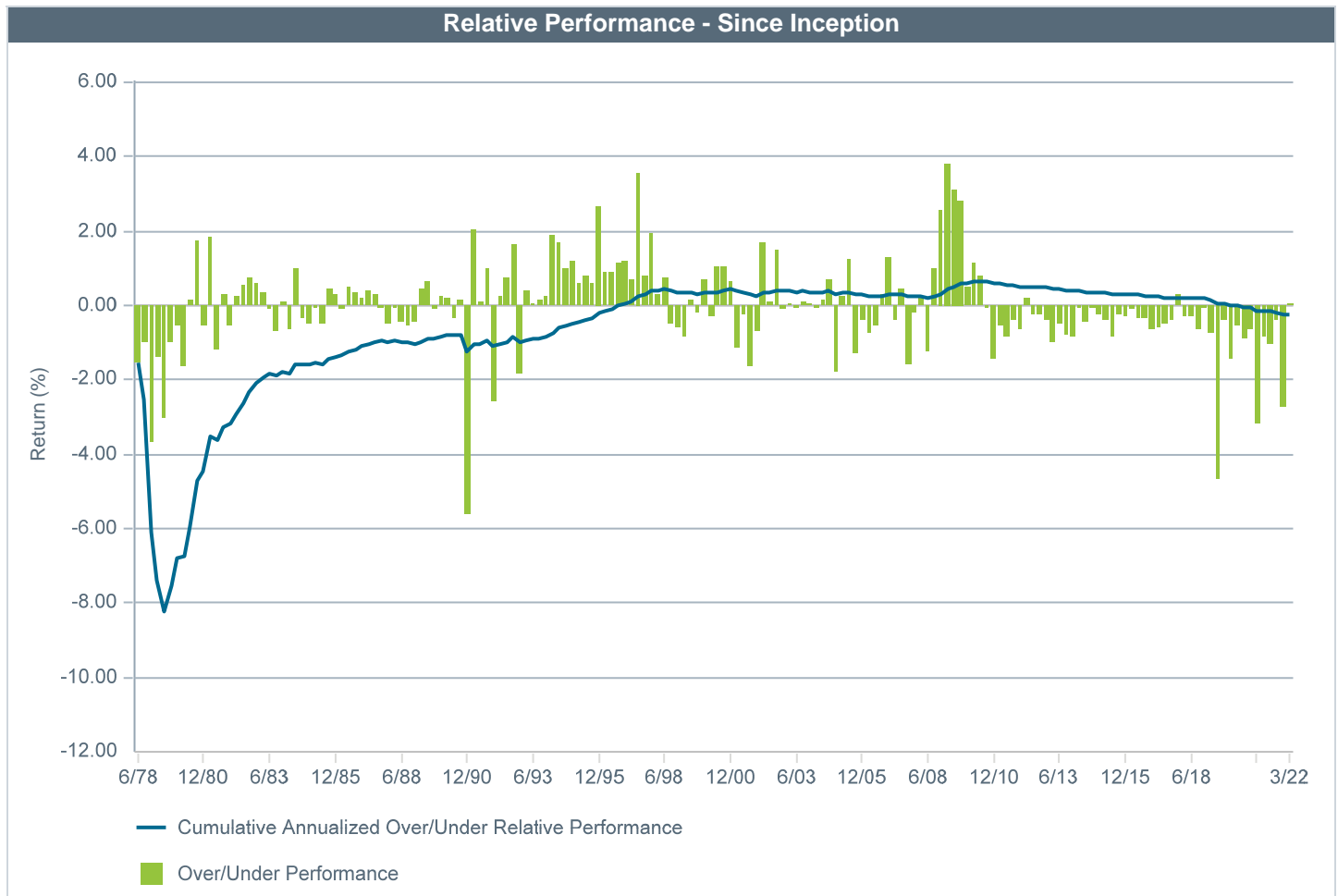


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	7.39	23.27	5.21	5.69	6.64	7.85	16.24	-4.04	-2.10	6.99	6.30
Benchmark	7.36	28.45	11.29	9.88	10.19	10.93	22.17	1.19	5.34	8.35	7.62
Difference	0.03	-5.18	-6.08	-4.19	-3.55	-3.08	-5.93	-5.23	-7.44	-1.36	-1.32



Actual Correlation - 10 Years

	Actual Correlation
NCREIF ODCE Index (AWA) (Gross)	0.88
S&P 500 Index (Cap Wtd)	-0.30
Russell 2000 Index	-0.38
MSCI EAFE Index (USD) (Net)	-0.33
MSCI Emg Mkts Index (USD) (Net)	-0.43
Bloomberg US Agg Bond Index	-0.47
Bloomberg US Trsy US TIPS Index	-0.36
Wilshire US REIT Index	-0.03
HFRI FOF Comp Index	-0.38
Bloomberg Cmdty Index (TR)	0.08
ICE BofAML 3 Mo US T-Bill Index	-0.44
Cons Price Index (Unadjusted)	0.27



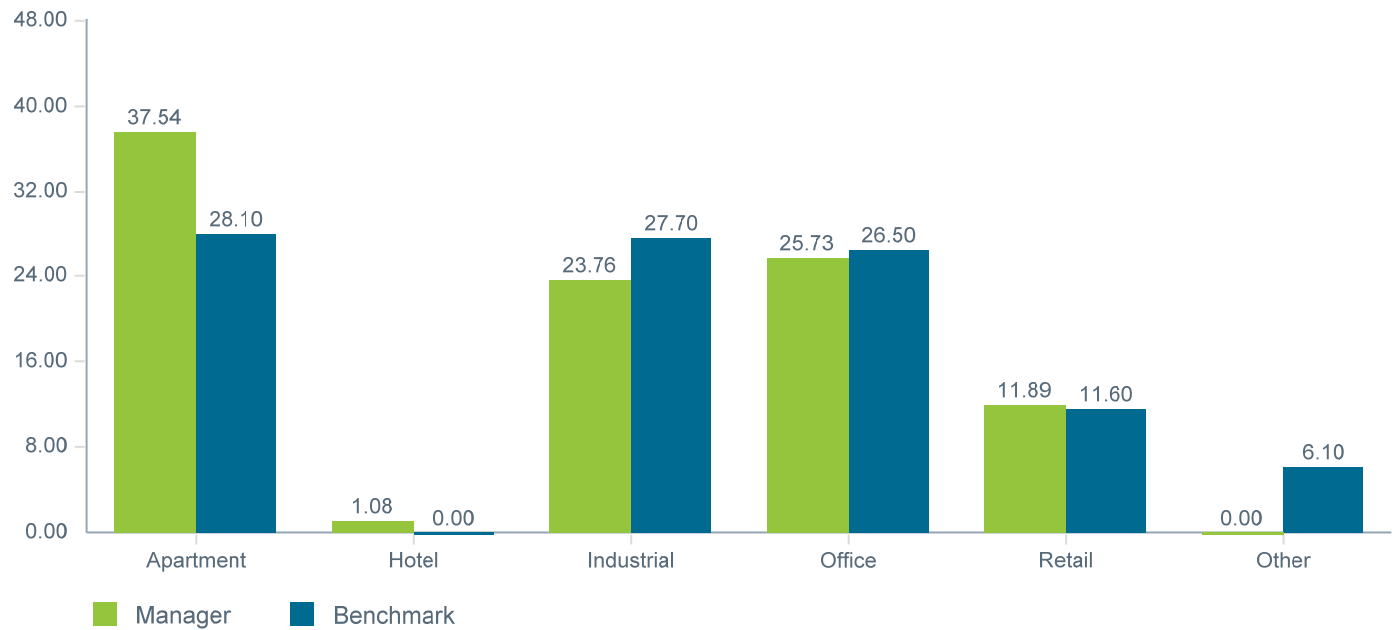
Investment Strategy

The Fund pursues a diversified core real estate strategy that seeks to produce attractive risk-adjusted returns by focusing on selective acquisitions, diversification, active portfolio management, and asset management. The Fund invests in well-leased, stabilized assets in major US metropolitan markets and receives the majority of its return from the income component. Diversification for the Fund is consistently pursued on many levels, including geographic region, property type, and economic sector. The Fund has historically maintained a leverage ratio significantly lower than the NCREIF ODCE Index and invests 5-15% of its gross assets in value-added type real estate investment opportunities.

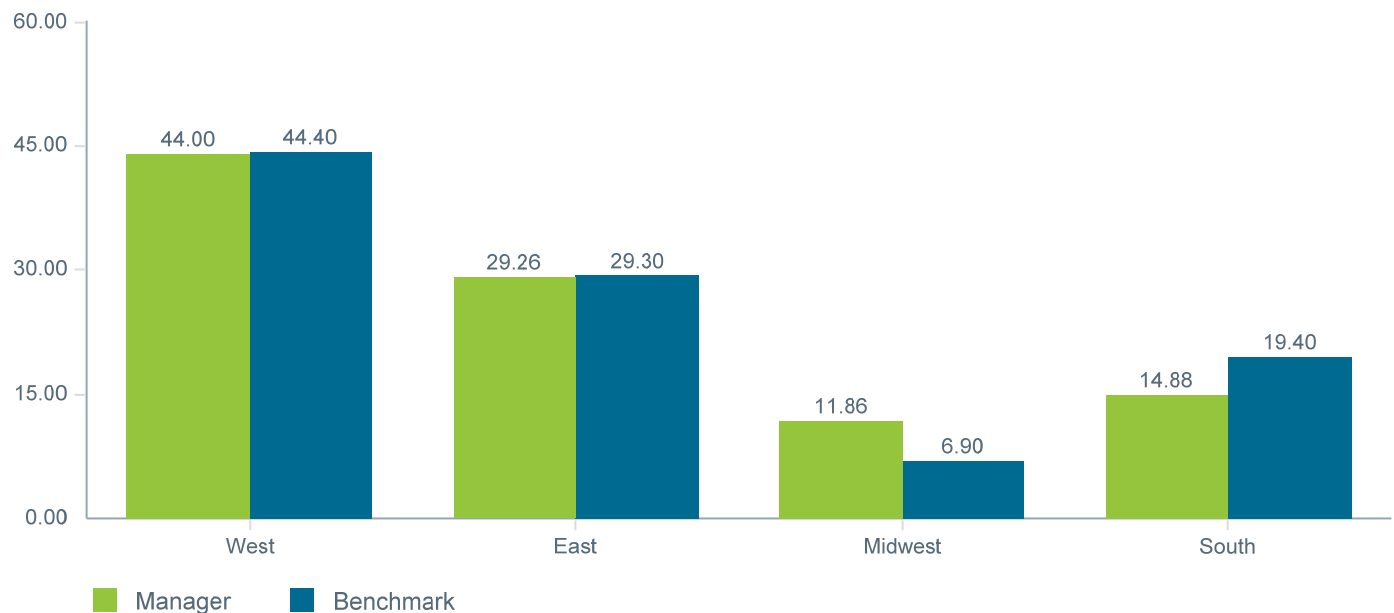
Investment Profile

Fund Inception	1978
Legal Structure	LP
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	18,103
Fund Leverage %	16.90
Portfolio Occupancy %	92.50
Cash Reserve %	4.20
Number of Investments	158
Number of Limited Partners	443

Property Type Allocation (%)



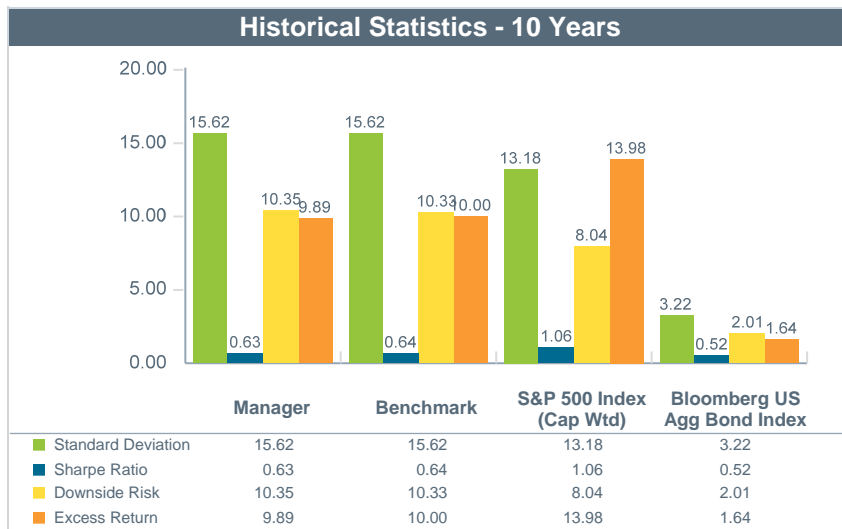
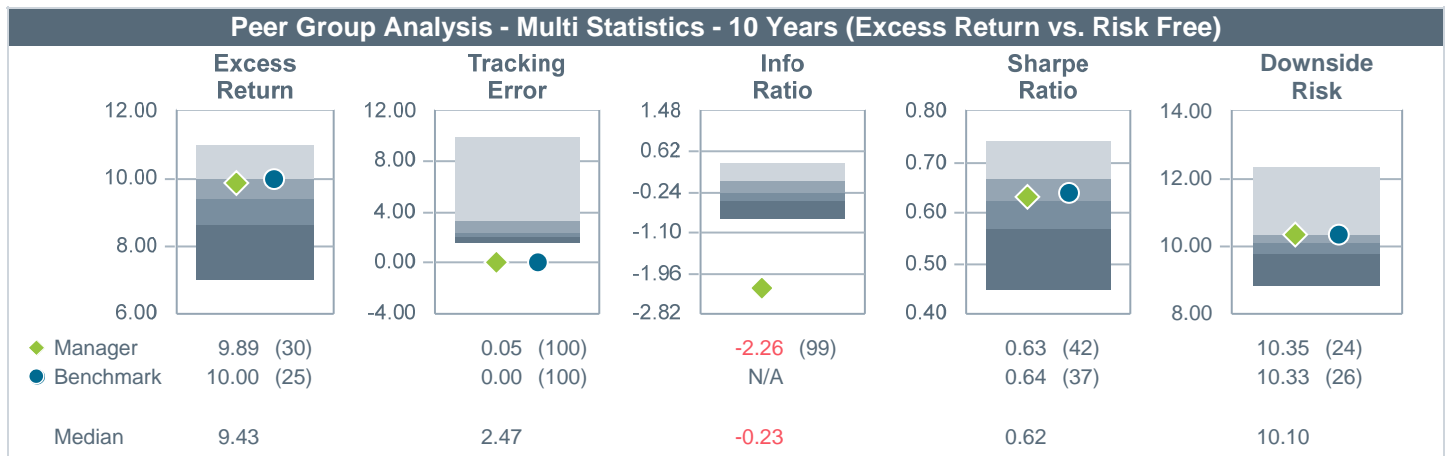
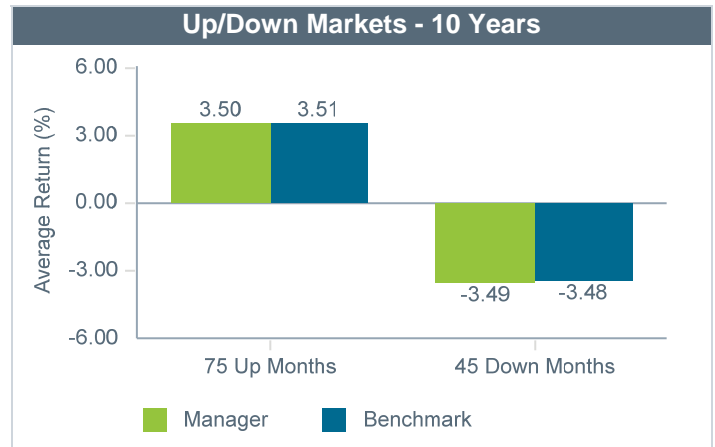
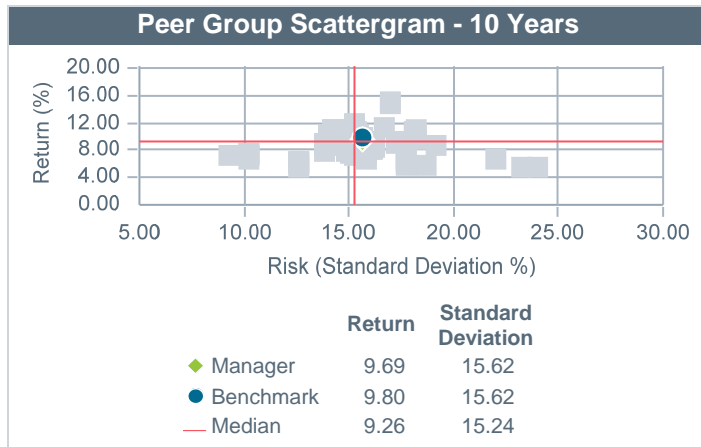
Geographic Allocation (%)



Performance shown is gross of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Benchmark allocation to "Other" consists of entertainment (theaters, golf courses, bowling alleys), healthcare (hospitals, clinics), manufactured homes, parking lots, self-storage units, senior living, and undeveloped land.



Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-5.97	21.45	11.40	9.65	7.85	9.69	40.38	-4.72	28.91	-5.95	4.95
Benchmark	-5.95	21.58	11.55	9.78	7.98	9.80	40.56	-4.55	29.03	-5.86	5.07
Difference	-0.02	-0.13	-0.15	-0.13	-0.13	-0.11	-0.18	-0.17	-0.12	-0.09	-0.12
Peer Group Median	-5.28	23.92	11.80	9.83	7.83	9.26	41.22	-4.21	27.38	-5.75	5.20
Rank	63	75	59	56	49	30	62	57	36	54	56
Population	258	253	236	208	182	152	251	248	256	244	244



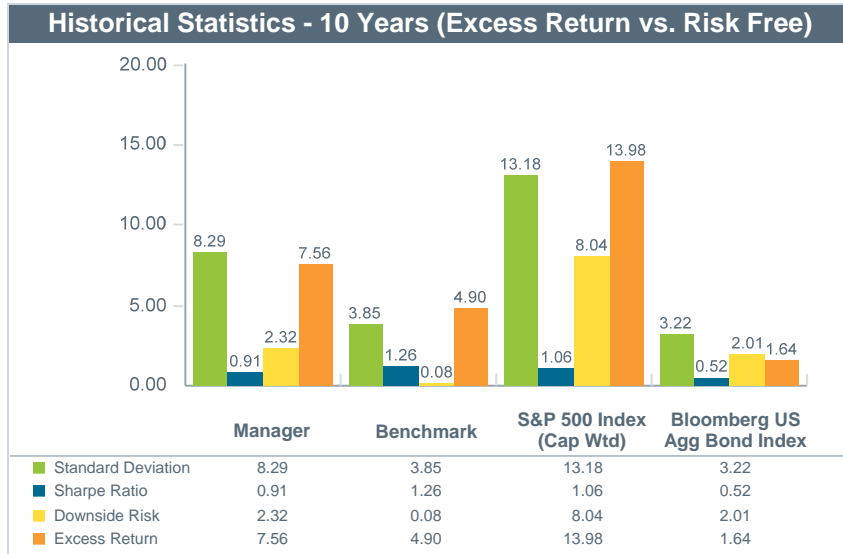
Actual Correlation - 10 Years

Index	Actual Correlation
Vanguard Spl Real Estate Index	1.00
S&P 500 Index (Cap Wtd)	0.66
Russell 2000 Index	0.60
MSCI EAFE Index (USD) (Net)	0.58
MSCI Emg Mkts Index (USD) (Net)	0.47
Bloomberg US Agg Bond Index	0.38
Bloomberg US Trsy US TIPS Index	0.46
Wilshire US REIT Index	0.99
HFRI FOF Comp Index	0.56
Bloomberg Cmnty Index (TR)	0.25
ICE BofAML 3 Mo US T-Bill Index	-0.14
Cons Price Index (Unadjusted)	0.01

Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Performance shown is calculated using Net Asset Values (NAV). Parentheses contain percentile ranks. Benchmark consists of MSCI US REIT Index (USD) (Gross) adjusted to include a 2% cash position (Lipper Money Market Average) through 04/30/09; MSCI US REIT Index (USD) (Gross) through 01/31/18; MSCI US IM Real Estate 25/50 Transition Index through 07/24/18; and MSCI US IM Real Estate 25/50 Index (Gross) thereafter.

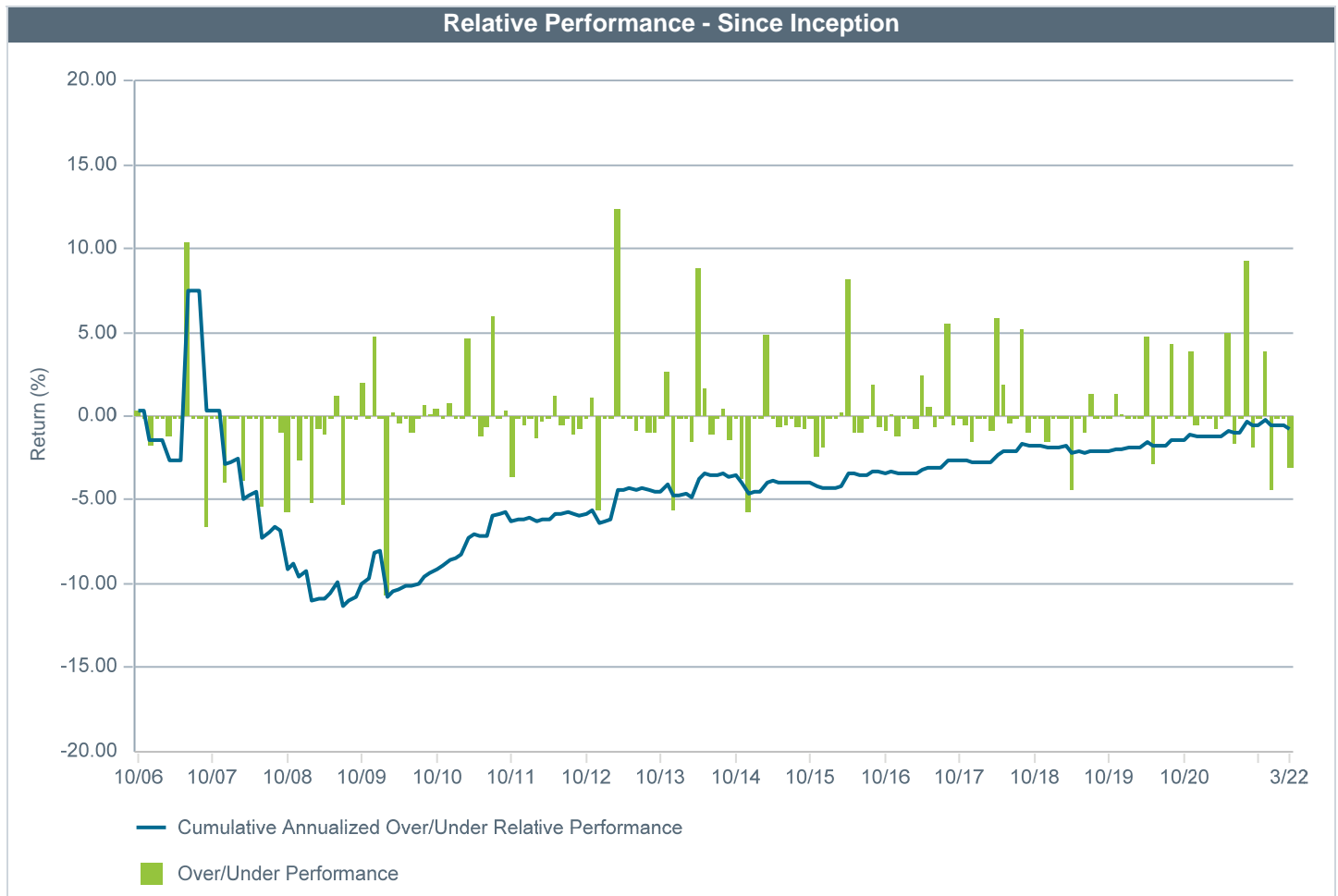


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	0.00	19.14	8.86	9.42	7.28	8.15	19.14	10.18	-1.69	12.47	8.08
Benchmark	3.21	11.83	4.75	4.08	3.85	5.60	9.17	0.81	1.30	3.21	3.63
Difference	-3.21	7.31	4.11	5.34	3.43	2.55	9.97	9.37	-2.99	9.26	4.45



Actual Correlation - 10 Years

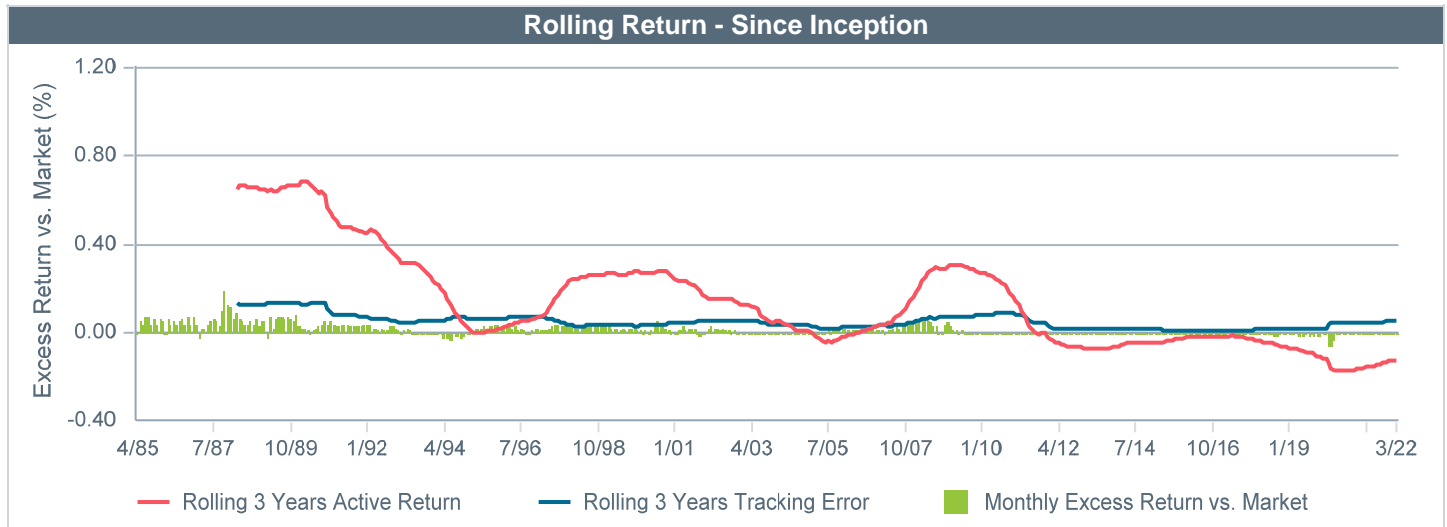
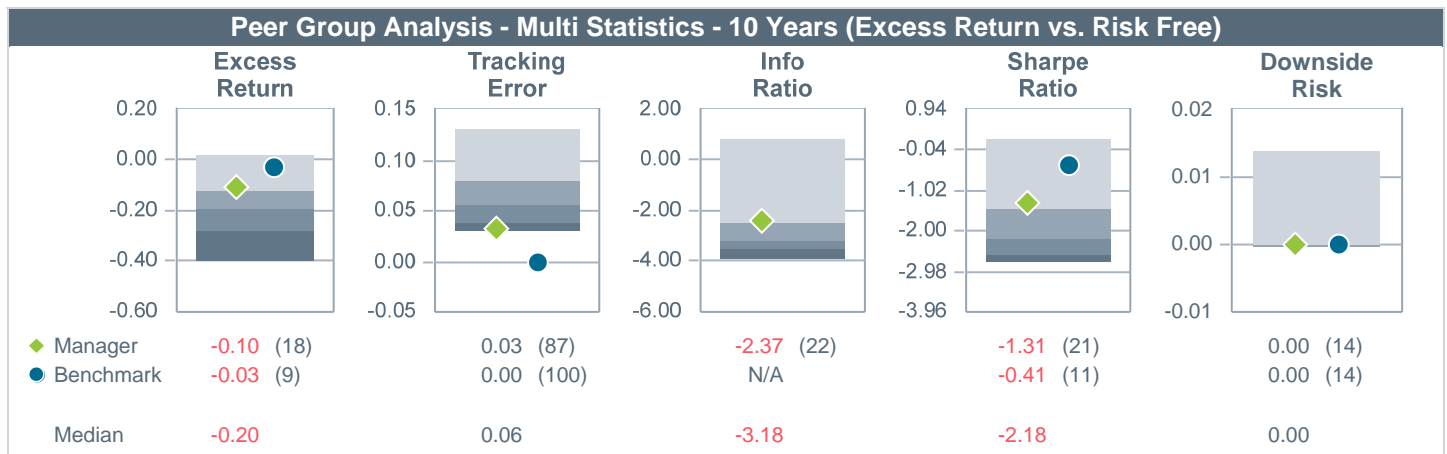
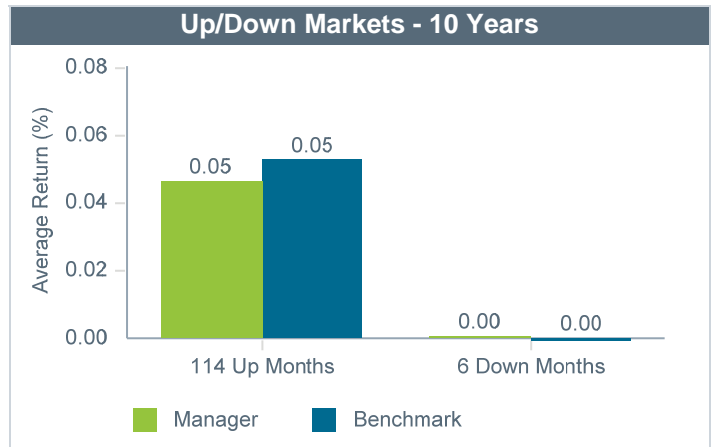
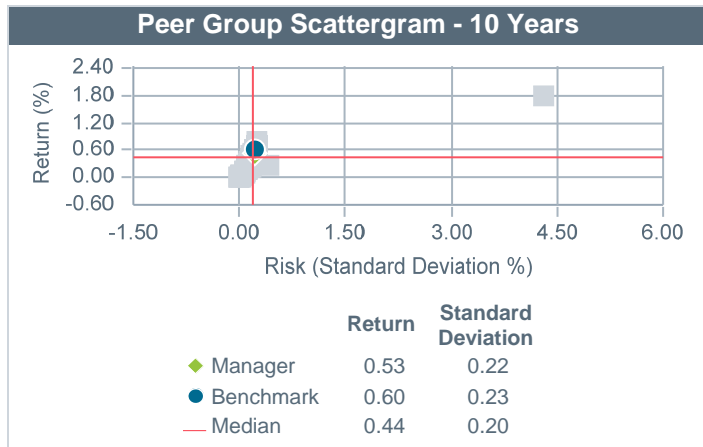
	Actual Correlation
NCREIF Timberland Index	-0.02
S&P 500 Index (Cap Wtd)	0.11
Russell 2000 Index	0.11
MSCI EAFE Index (USD) (Net)	0.09
MSCI Emg Mkts Index (USD) (Net)	0.04
Bloomberg US Agg Bond Index	0.06
Bloomberg US Trsy US TIPS Index	0.12
Wilshire US REIT Index	0.09
HFRI FOF Comp Index	0.09
Bloomberg Comdty Index (TR)	0.08
ICE BofAML 3 Mo US T-Bill Index	-0.07
Cons Price Index (Unadjusted)	0.09



Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity.



Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	0.01	0.04	0.64	0.98	0.75	0.53	0.03	0.37	2.09	1.73	0.79
Benchmark	0.03	0.06	0.76	1.09	0.84	0.60	0.05	0.58	2.25	1.86	0.84
Difference	-0.02	-0.02	-0.12	-0.11	-0.09	-0.07	-0.02	-0.21	-0.16	-0.13	-0.05
Peer Group Median	0.00	0.01	0.57	0.85	0.63	0.44	0.01	0.30	1.90	1.54	0.55
Rank	10	9	22	20	18	18	12	31	20	22	17
Population	800	768	705	663	555	530	772	792	796	820	834



Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



Addendum & Glossary



City of Jacksonville Employees' Retirement System Addendum

Performance Related Comments:

- Performance is annualized for periods greater than one year.
- The inception date shown indicates the first full month of performance following initial funding.
- The market value shown for the Transition Account includes residual assets from terminated managers.
- RVK began monitoring the assets of the City of Jacksonville Retirement System on 01/01/2019. Prior historical data was provided by the custodian and previous consultant.
- Franklin Templeton Global Multisector Plus (CF) performance prior to 03/2016 is represented by Templeton Global Total Return (SICAV).

Custom Composite Benchmark Comments:

- **Current Total Fund Policy Index:** The passive Current Total Fund Policy Index is calculated monthly and currently consists of 30% Russell 3000 Index, 20% MSCI ACW Ex US Index (USD) (Net), 20% Fixed Income Index, 15% NCREIF ODCE Index (AWA) (Net), and 15% Diversifying Assets Index.
- **US Equity Index:** The passive US Equity Index consists of 100% DJ US TSM Index through 06/2009 and 100% Russell 3000 Index thereafter.
- **International Equity Index:** The passive International Equity Index consists of 100% MSCI EAFE Index (USD) (Gross) through 01/2011 and 100% MSCI ACW Ex US Index (USD) (Net) thereafter.
- **Fixed Income Index:** The passive Fixed Income Index consists of 100% Bloomberg US Agg Bond Index through 10/2017 and 100% Bloomberg US Universal Bond Index thereafter.
- **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.
- **Frank. Temp. Global Multisector Index:** The passive Frank. Temp. Global Multisector Index consists of 100% ICE BofAML Gbl Hi Yld Index through 12/2009 and 100% Bloomberg Multiverse Index 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.
- **Tortoise Spliced Index:** The passive Tortoise Spliced Index consists of 100% S&P MLP Index (TR) through 07/2020 and 100% Alerian Midstream Energy Index thereafter.

Glossary

Active Return - The difference between the investment manager/composite performance relative to the performance of an appropriate market benchmark.

Active Share - Measures the degree to which the holdings of a fund differ from the holdings of the benchmark. Active share is calculated by taking the sum of the absolute value of the differences of the weight of each holding in the fund versus the weight of each holding in the benchmark and dividing by two.

Alpha - A measure of the difference between a portfolio's actual returns and its expected performance, given its level of risk as measured by beta. It is a measure of the portfolio's historical performance not explained by movements of the market or a portfolio's non-systematic return.

Alpha Ratio - A measure of a portfolio's non-systematic return per unit of downside risk. It is measured by dividing the alpha of a portfolio by the downside risk. The non-systematic return is a measure of a portfolio's historical performance not explained by movements of the market.

Average Quality - Bond quality ratings are reported using the investment managers' and the index providers' preferred rating agency. *Average Quality for managers unable to provide this statistic is instead provided by Morningstar; if unavailable on Morningstar, it has been estimated using a credit quality distribution provided by the manager.* There are two primary rating agencies in the US. *Moody's* assigns ratings on a system that employs up to four symbols (consisting of letters and numbers), such as, Aaa, Aa2, etc., with Aaa being the highest or safest rating. *Standard & Poor's (S&P)* employs a system that uses + and - along with letters, such as AAA, AA+, etc. The two rating agencies' systems are summarized below:

<u>S&P</u>	<u>Moody's</u>	<u>Explanation</u>	<u>S&P</u>	<u>Moody's</u>	<u>Explanation</u>
Higher Credit Quality – Investment Grade			Lower Credit Quality – Below Investment Grade		
AAA	Aaa	Prime/Highest credit quality	BB+	Ba1	Speculative/Low credit quality
AA+	Aa1	High credit quality	BB	Ba2	
AA	Aa2		BB-	Ba3	
AA-	Aa3		B+	B1	Highly speculative
A+	A1	Upper-medium credit quality	B	B2	
A	A2		B-	B3	
A-	A3		CCC+	Caa1	Substantial credit/default risk
BBB+	Baa1	Lower-medium credit quality	CCC	Caa2	Extremely speculative
BBB	Baa2		CCC-	Caa3	
BBB-	Baa3		CC	Ca	Vulnerable to default
			C	Ca	
			D	C	In default

Benchmark Effect - The difference between the blended return of each respective managers' benchmark within a composite and the composite's benchmark return.

Beta - A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of a portfolio's non-diversifiable or systematic risk.

Box Plots - A graphical representation of the distribution of observations. From top to bottom, the four boxes represent the spread between the maximum value and the minimum value in each quartile. A quartile represents the values that divide the observations into four quarters (i.e., 1st quartile, 2nd quartile, 3rd quartile, and 4th quartile). The median observation is where the 2nd quartile and 3rd quartile meet.

Buy and Hold Attribution - At the beginning of the time period under analysis, the manager and benchmark portfolios are broken down into segments (i.e., styles, sectors, countries, and regions) based on the desired type of attribution. The formula assumes zero turn-over to the manager and benchmark portfolios throughout the period and calculates the segment returns ("buy and hold returns") to arrive at performance attribution. Due to portfolio turnover, buy and hold attribution may not accurately represent quarterly performance relative to the benchmark. Country, region, sector, and style allocations are as of the date one quarter prior to the reporting date, and the returns shown are for those segments throughout the quarter reported. Due to disclosure guidelines set by each investment manager, equity characteristics shown are as of the most recent date available. The following is the methodology for segment classification:

Sector - Attribution is calculated using the Global Industry Classification Standard (GICS), which is a detailed and comprehensive structure for sector and industry analysis. Stocks are classified by their primary sector as defined by S&P Capital IQ data.

Country/Region - Attribution is calculated using the Morgan Stanley Capital International (MSCI) region standards. Stocks are classified by their domicile country/region, as defined by S&P Capital IQ data, and thus may differ from the classification of the investment manager and/or index provider.

Style - Stocks are classified into the following style boxes: large/mid/small vs. growth/neutral/value. Stocks are classified along large/mid/small categories at the time of the Russell index rebalancing, using the index market cap boundaries as cutoff points. Stocks are classified along growth/neutral/value categories at the time of the Russell index rebalancing, using the price/book ratio as supplied by S&P Capital IQ. Stocks in the Russell 3000 Index portfolio are sorted by price/book ratio; names with the highest price/book ratio that make up 1/3 of the total market capitalization are assigned to the growth category, and names that make up the subsequent 1/3 of the total market capitalization are assigned to the neutral category, while the balance of the names are assigned to the value category. Stocks are unclassified when there is not enough data to determine a size and style metric.

Portfolio Characteristics and Buy and Hold Attribution reports utilize product-specific data for all mutual funds and commingled funds.

Capital Markets Review -

Breakeven Inflation - Measures the expected inflation rate at each stated maturity by taking the difference between the real yield of the inflation-linked maturity curve and the yield of the closest nominal Treasury maturity.

Consumer Confidence - Measures domestic consumer confidence as defined by the degree of optimism on the state of the economy that consumers express through saving and spending.

Consumer Price Index (CPI) - Measures the change in the price level of consumer goods and services.

Glossary

- Federal Funds Rate** - The interest rate at which a depository institution lends funds maintained at the Federal Reserve to another depository institution overnight. It is one of the most influential interest rates in the US economy, since it affects monetary and financial conditions, which in turn have a bearing on key aspects of the broad economy including employment, growth and inflation.
- Option-Adjusted Spread** - Measures the flat spread of an index or bond to the Treasury yield curve after removing the effect of any embedded options.
- Purchasing Managers Index (PMI)** - Measures economic activity by surveying purchasing managers on a monthly basis as to whether business conditions have improved, worsened, or stayed the same.
- Real Gross Domestic Product (Real GDP)** - An inflation-adjusted measure that reflects the value of all goods and services produced by an economy in a given year.
- Unemployment Rate** - The percentage of the total labor force that is unemployed but actively seeking employment.
- US Dollar Total Weighted Index** - Measures the value of the US Dollar relative to a basket of other world currencies. It is calculated as the weighted geometric mean of the dollar's value versus the EUR, GBP, CAD, SEK, CHF, and JPY.
- VIX** - Measures the implied volatility of S&P 500 Index options by looking at the market's expectation of the S&P 500 Index volatility over the next 30 day period. Commonly referred to as the "fear index" or the "fear gauge."
- Cash Flow Effect** – The composite's active return minus the sum of each managers' active return minus the benchmark effect.
- Consistency** - The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. The higher the consistency figure, the more value a manager has contributed to the product's performance.
- Convexity** - A measure of the shape of the curve that describes the relationship between bond prices and bond yields.
- Correlation** - A statistical measure of the relationship between asset class returns. A value of 1.00 is a perfect correlation; that is, the asset classes always move in the same direction. A value of -1.00 indicates a perfect negative correlation, in which the asset classes always move in opposite directions of each other. A value of 0 indicates there is no relationship between the direction of returns of the two asset classes. Correlation calculations only consider the direction of changes relative to two variables and not the magnitude of those changes.
- Coupon Rate** - The percentage rate of interest paid on a bond or fixed income security; it is typically paid twice per year.
- Current Yield** - The annual income of a security divided by the security's current price.
- Down Market Capture** - Down market by definition is negative benchmark return and down market capture represents the ratio in % terms of the average portfolios return over the benchmark during the down market period. The lower the value of the down market capture the better the product's performance.
- Downside Risk** - A measure similar to standard deviation that focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative returns for the selected periodicity. The higher the factor, the riskier the product.
- Earnings Per Share** - It is backward looking, calculated using the one year current EPS divided by the one year EPS five years ago.
- Effective Duration** - The approximate percentage change in a bond's price for a 100 basis point change in yield.
- Excess Return vs. Market** - Average of the monthly arithmetic difference between the manager's return and the benchmark return over a specified time period, shown on an annualized basis.
- Excess Return vs. Risk Free** - Average of the monthly arithmetic difference between the manager's return and the risk-free return (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise) over a specified time period, shown on an annualized basis.
- Excess Risk** - A measure of the standard deviation of a portfolio's performance relative to the risk-free return.
- Expense Ratios** - Morningstar is the source for mutual fund expense ratios.
- Gain/Loss** - The net increase or decrease in the market value of a portfolio excluding its Net Cash Flow for a given period.
- Indices** - All indices and related information are considered intellectual property and are licensed by each index provider. The indices may not be copied, used, or distributed without the index provider's prior written approval. Index providers make no warranties and bear no liability with respect to the indices, any related data, their quality, accuracy, suitability, and/or completeness.
- Information Ratio** - Measured by dividing the active rate of return by the tracking error. The higher the information ratio, the more value-added contribution by the manager.
- Liability Driven Investing (LDI)** - A method to optimally structure asset investments relative to liabilities. The change in liabilities is estimated by the Ryan Labs Generic PPA Index of appropriate duration for that Plan. This benchmark is based on generic data and is therefore an approximation. RVK is not an actuarial firm, and does not have actuarial expertise.
- Estimated Funded Status** - The estimated ratio of a Plan's assets relative to its future liabilities. This is calculated by dividing the Plan's asset market value by the estimated present value of its liabilities. The higher the estimated funded status, the better the Plan's ability to cover its projected benefit obligations. An estimated funded status of 100% indicates a Plan that is fully funded.
- Estimated PV of Liabilities** - An estimate of a Plan's future liabilities in present value terms. The beginning of the period liability is provided by the Plan's actuary. The period-end present value liability estimate provided in this report is derived by applying the estimated percentage change generated using the Ryan Labs Generic PPA Index with duration similar to that reported on the most recent actuarial valuation report.
- Duration of Liabilities** - The sensitivity of the value of a Plan's liabilities to changes in interest rates, as calculated by the Plan's actuary.
- Duration of Assets** - The dollar-weighted average duration of all the individual Plan assets.
- Estimated Plan Hedge Ratio** - The estimate of how well a Plan's investment portfolio is hedged against changes in interest rates - a primary driver of funded status movements. This is calculated by dividing the dollar-weighted values of both the Plan asset duration by the liability duration and

Glossary

multiplying by the estimated funded status. An estimated plan hedge ratio of zero indicates that the Plan's liabilities have not been hedged, whereas a value of one indicates fully hedged.

Modified Duration - The approximate percentage change in a bond's price for a 100 basis point change in yield, assuming the bonds' expected cash flows do not change.

Mutual Fund Performance - Whenever possible, manager performance is extended for any share class that does not have 10 years of history. Using Morningstar's methodology, a single ticker within the same fund family (often the oldest share class) is chosen to append historical performance.

Net Cash Flow - The sum, in dollars, of a portfolio's contributions and withdrawals. This includes all management fees and expenses only when performance shown is gross of fees.

Peer Groups -

Plan Sponsor Peer Groups - RVK utilizes the Mellon Analytical Solutions Trust Universe along with the Investment Metrics Plan Sponsor Universe. The combined Mellon Analytical Solutions Trust Universe and Investment Metrics Plan Sponsor Universe is used for comparison of total fund composite results and utilizes actual client performance compiled from consultant and custodian data. The Plan Sponsor Peer Group database includes performance and other quantitative data for over 2,100 plans which include corporate, endowment, foundation, public, and Taft Hartley plans.

Investment Manager Peer Groups - RVK utilizes Investment Metrics' Peer Groups for investment manager peer comparison and ranking. The Investment Metrics Peer Group database includes performance and other quantitative data for over 840 investment management firms and 29,000 investments products, across more than 160 standard peer groups. Mutual Fund Peer Groups are net of fees.

Percentile Rankings - Percentile rank compares an individual fund's performance with those of other funds within a defined peer group of managers possessing a similar investment style. Percentile rank identifies the percentage of a fund's peer group that has a higher return (or other comparative measurement) than the fund being ranked. Conversely, 100 minus the individual fund's ranking will identify the percentage of funds within the peer group that have a lower return than the fund being ranked.

1 - Highest Statistical Value 100 - Lowest Statistical Value

Example: American Funds AMCP;R-4 (RAFEX) is ranked in the 4th percentile within the IM US Equity Large-Cap Growth Funds (MF) Peer Group for the Sharpe Ratio. Within the IM US Equity Large-Cap Growth Funds peer group, 4% of the other funds performed better than American Funds AMCP;R-4 (RAFEX), while 96% of the funds performed worse.

Performance Methodology - RVK calculates performance for investment managers and composites using different methodologies.

Investment Managers - Performance is calculated for interim periods between all large external cash flows for a given month and geometrically linked to calculate period returns. An external cash flow is defined as cash, securities, or assets that enter or exit a portfolio. RVK defines a "large cash flow" as a net aggregate cash flow of $\geq 10\%$ of the beginning-period portfolio market value or any cash flow that causes RVK calculated performance to deviate from manager/custodian reported performance in excess of 5 basis points for a given month.

Composites - The Modified Dietz methodology is utilized to calculate asset class, sub-asset class, and total fund composite performance. The Modified Dietz method calculates a time-weighted total rate of return that considers the timing of external cash flows; however, it does not utilize interim period performance to mitigate the impact of significant cash in- and outflows to the composite.

RVK calculates performance beginning with the first full month following inception. Since inception performance may vary from manager reported performance due to RVK using the first full month of returns as the inception date. Performance for both managers and composites is annualized for periods greater than one year.

Portfolio Characteristics - Due to disclosure guidelines set by each investment manager, portfolio characteristics shown are as of the most recent date available.

Price to Earnings Ratio - The ratio valuing a company's current share price relative to its trailing 12-month per-share earnings (EPS).

Private Equity Quartile Ranks - Private Equity quartile ranks are generated using vintage year peer group data provided by Thomson Reuters, and are based on each fund's annualized, since inception internal rate of return (IRR). Three Private Equity peer groups are available via Thomson Reuters: Buyout, Venture, and All Private Equity. Ranks are available quarterly, at a one-quarter lag.

R-Squared - The percentage of a portfolio's performance explained by the behavior of the appropriate benchmark. High R-Squared means a higher correlation of the portfolio's performance to the appropriate benchmark.

Return - Compounded rate of return for the period.

% Return - The time-weighted rate of return of a portfolio for a given period.

Risk Free Benchmark - ICE BofAML 3 Mo US T-Bill Index unless specified otherwise.

Glossary

RVK Liquidity Rating - A qualitative method for determining the relative amount of liquidity in a portfolio. The characteristics considered when determining relative liquidity include trading volume, gates for redemption, leverage, nature of transactions, and pricing mechanisms. The RVK Liquidity Rating is calculated using beginning of month investment weights applied to each corresponding asset class liquidity rating.

<u>Asset Class</u>	<u>RVK Liquidity Rating</u>	<u>Asset Class</u>	<u>RVK Liquidity Rating</u>
<u>Liquid Investments</u>		<u>Less Liquid Investments</u>	
T-Bills and Treasuries	100	Fixed Income Plus Sector	50
Cash Equivalents	98	Stable Value (Plan Sponsor Directed)	50
TIPS	95	Hedge Funds of Funds	35
US Large Cap Equity	95		
Diversified Real Return	93		
Stable Value (Participant Directed)	91		
Global Equity	90	<u>Not Liquid Investments</u>	
Non-US Large Cap Equity	90	Core Real Estate	25
Global Tactical Asset Allocation	88	Core Plus Real Estate	15
MLPs	85	Non-Core Real Estate	5
US Mid Cap Equity	85	Private Equity Funds of Funds	5
US SMid Cap Equity	85		
US Small Cap Equity	85		
REITs	85		
Non-US Small Cap Equity	85		
Emerging Markets Equity	85		
Core Fixed Income	85		
Core Plus Fixed Income	80		

Sector Allocation - Negative fixed income sector allocation reflects manager's use of derivatives, short selling, or interest rate swaps.

Sharpe Ratio - Represents the excess rate of return over the risk-free return (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise), divided by the standard deviation of the excess return to the risk free asset. The result is the absolute rate of return per unit of risk. The higher the value, the better the product's historical risk-adjusted performance.

Simple Alpha - The difference between the manager's return and the benchmark's return.

Spread Duration - The approximate percentage change in a bond's price for a 100 basis point change in its spread over a Treasury of the same maturity.

Standard Deviation - A statistical measure of the range of a portfolio's performance. The variability of a return around its average return over a specified time period.

Thematic Classification - Represents dedicated manager allocations; as such, thematic allocations are approximations. RVK categorizes the following asset classes as Alpha, Capital Appreciation, Capital Preservation, and Inflation:

<u>Alpha</u>	<u>Capital Appreciation</u>	<u>Capital Preservation</u>	<u>Inflation</u>
Absolute Return Strategies	Public Equity	Core Fixed Income	TIPS
Currency Overlay	Private Equity	CMBS Fixed Income	Bank Loans
	Preferred Securities	Asset Backed Fixed Income	Core Real Estate
	High Yield	Domestic Core Plus Fixed Income	Real Return
	Convertible Fixed Income	Mortgage Backed Fixed Income	Inflation Hedges
	TALF Funds	International Developed Fixed Income	REITs
	Distressed Debt	Cash Equivalents	Commodities
	Emerging Market Fixed Income	Stable Value	
	Value Added Real Estate		
	Opportunistic Real Estate		

Time Period Abbreviations - **QTD** - Quarter-to-Date. **CYTD** - Calendar Year-to-Date. **FYTD** - Fiscal Year-to-Date. **YOY** - Year Over Year.

Total Fund Attribution - The Investment Decision Process (IDP) model provides an approach to evaluating investment performance that applies to all asset classes and investment styles. The IDP model is based on a top-down hierarchy framework of investment decisions, with each decision contributing to the overall profit or loss. The IDP approach starts from the strategic asset allocation and follows the flow of the investments down to the manager's skill.

Strategic Asset Allocation (SAA) - The percentage return gained or lost from the long-term strategic asset allocation decision, the most significant determinant of long-term performance. SAA is the product of the target asset allocation multiplied by the corresponding benchmark returns.

Tactical Asset Allocation (TAA) - The percentage return gained or lost from not having been precisely allocated at the target asset allocation mix, whether by deviations that are tactical in nature or a by-product of moving towards the target mix. TAA is the product of the actual asset allocation multiplied by the broad asset class benchmarks, less the SAA.

Style Selection (SS) - The percentage return gained or lost from intentional style biases within each asset class (e.g. value rather than core or overweight to emerging markets relative to benchmark). SS is the product of the actual manager allocation within each asset class multiplied by their specific benchmark, less TAA.

Manager's Skill (MS) - The percentage return gained or lost from manager value added relative to their specific benchmark. MS is the product of the actual manager allocation multiplied by their achieved excess return.

Total Fund Beta - Total Fund Beta is calculated using the S&P 500 as the benchmark. It represents a measure of the sensitivity of the total fund to movements in the S&P 500 and is a measure of the Total Fund's non-diversifiable or systematic risk.

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Tracking Error - A measure of the standard deviation of a portfolio's performance relative to the performance of an appropriate market benchmark.

Treynor Ratio - Similar to Sharpe ratio, but focuses on beta rather than excess risk (standard deviation). Treynor ratio represents the excess rate of return over the risk-free rate (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise) divided by the beta. The result is the absolute rate of return per unit of risk. The higher the value, the better historical risk-adjusted performance.

Unit Value - The dollar value of a portfolio, assuming an initial nominal investment of \$100, growing at the compounded rate of %Return for a given period.

Up Market Capture - Up market by definition is positive benchmark return and up market capture represents the ratio in % terms of the average portfolio's return over the benchmark during the up market period. The higher the value of the up market capture the better the product's performance.

Yield to Maturity - The rate of return achieved on a bond or other fixed income security assuming the security is bought and held to maturity and that the coupon interest paid over the life of the bond will be reinvested at the same rate of return. The 30-Day SEC Yield is similar to the Yield to Maturity and is reported for mutual funds.

Yield to Worst - The bond yield calculated by using the worst possible yield taking into consideration all call, put, and optional sink dates.

PORTLAND

BOISE

CHICAGO

NEW YORK

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Monthly Investment Performance Analysis

City of Jacksonville Employees' Retirement System

Period Ended: April 30, 2022

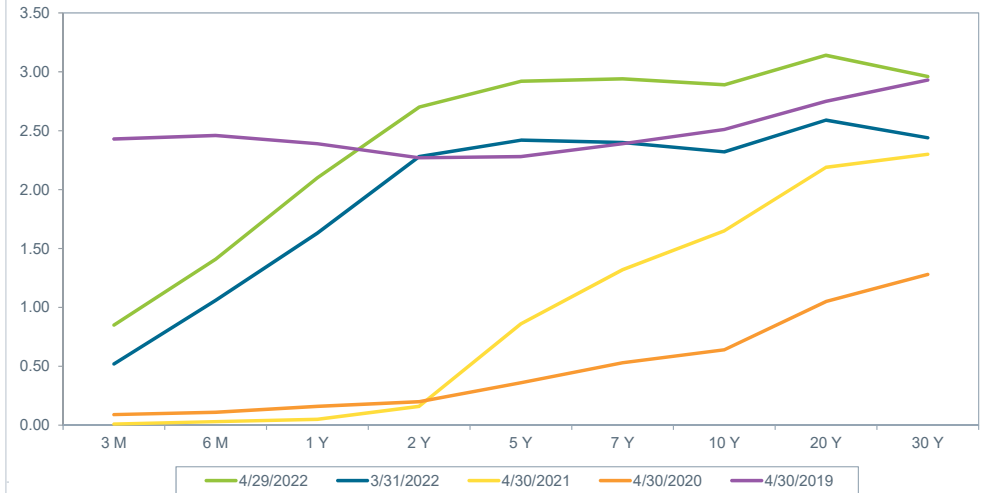


General Market Commentary

- Global equity markets pulled back sharply in April, with all major indices finishing in negative territory. Domestic and international indices posted mid-single digit to low-double digit losses, with growth stocks significantly underperforming their value counterparts.
- Inflation weighed on the minds of investors as CPI reached 8.5% YoY. The Fed has signaled that it will evaluate all options to tame inflation, both through an aggressive wind down of balance sheet assets, and Chairman Powell has stated that a 50 basis point rate hike is 'on the table' at the May FOMC meeting.
- U.S. GDP unexpectedly contracted in the first quarter of 2022 at an annualized rate of 1.4%, missing previous estimates of a 1.0% pace of expansion. The decline was due to several factors, including but not limited to a widening trade deficit, a deceleration in pace of inventory accumulation, and decreasing government spending. However, there was a rise in consumer and business spending for the quarter, limiting the economy from contracting further.
- Equity markets posted negative returns in April as the S&P 500 (Cap Wtd) Index returned -8.72% and the MSCI EAFE (Net) Index returned -6.47%. Emerging markets returned -5.56% as measured by the MSCI EM (Net) Index.
- The Bloomberg US Aggregate Bond Index returned -3.79% in April, underperforming the -1.60% return by the Bloomberg US Treasury Intermediate Term Index. International fixed income markets returned -7.79%, as measured by the FTSE Non-US World Gov't Bond Index.
- Public real estate, as measured by the FTSE NAREIT Eq REITs Index (TR), returned -4.36% in April and 8.62% over the trailing five-year period.
- The Cambridge US Private Equity Index returned 38.90% for the trailing one-year period and 20.21% for the trailing five-year period ending December 2021.
- Absolute return strategies, as measured by the HFRI FOF Comp Index, returned 0.08% for the month and -0.80% over the trailing one-year period.
- Crude oil's price increased by 4.40% during the month, and has increased by 64.66% YoY.

Economic Indicators	Apr-22	Mar-22	Apr-21	10 Yr	20 Yr
Federal Funds Rate (%)	0.33	—	0.33	0.05	0.63
Breakeven Inflation - 5 Year (%)	3.35	▼	3.43	2.59	1.83
Breakeven Inflation - 10 Year (%)	2.94	▲	2.83	2.41	1.97
Breakeven Inflation - 30 Year (%)	2.59	▲	2.44	2.28	2.04
Bloomberg US Agg Bond Index - Yield (%)	3.48	▲	2.92	1.51	2.25
Bloomberg US Agg Bond Index - OAS (%)	0.49	▲	0.41	0.29	0.48
Bloomberg US Agg Credit Index - OAS (%)	1.25	▲	1.08	0.83	1.20
Bloomberg US Corp: HY Index - OAS (%)	3.79	▲	3.25	2.91	4.36
Capacity Utilization (%)	N/A	N/A	78.30	74.79	76.50
Unemployment Rate (%)	3.6	—	3.6	6.0	5.6
PMI - Manufacturing (%)	55.4	▼	57.1	60.6	54.5
Baltic Dry Index - Shipping	N/A	N/A	2,040	3,053	1,287
Consumer Conf (Conf Board)	107.30	▼	107.60	117.50	102.81
CPI YoY (Headline) (%)	8.5	—	8.5	4.2	2.0
CPI YoY (Core) (%)	6.5	—	6.5	3.0	2.2
PPI YoY (%)	N/A	N/A	15.2	9.7	1.8
M2 YoY (%)	N/A	N/A	9.9	18.3	8.4
US Dollar Total Weighted Index	119.64	▲	115.35	112.12	108.12
WTI Crude Oil per Barrel (\$)	105	▲	100	64	66
Gold Spot per Oz (\$)	1,897	▼	1,937	1,769	1,432

Treasury Yield Curve (%)



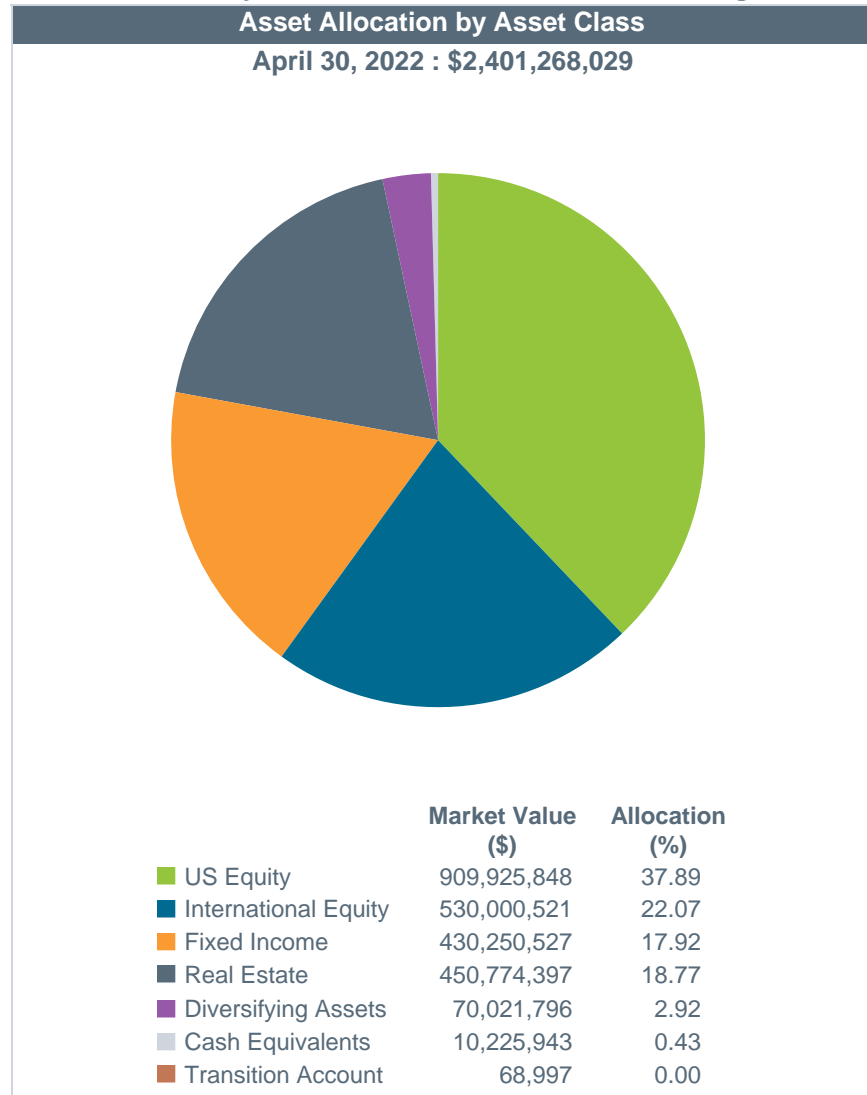
Treasury Yield Curve (%)	Apr-22	Mar-22	Apr-21	Apr-20	Apr-19
3 Month	0.85	0.52	0.01	0.09	2.43
6 Month	1.41	1.06	0.03	0.11	2.46
1 Year	2.10	1.63	0.05	0.16	2.39
2 Year	2.70	2.28	0.16	0.20	2.27
5 Year	2.92	2.42	0.86	0.36	2.28
7 Year	2.94	2.40	1.32	0.53	2.39
10 Year	2.89	2.32	1.65	0.64	2.51
20 Year	3.14	2.59	2.19	1.05	2.75
30 Year	2.96	2.44	2.30	1.28	2.93

Market Performance (%)	MTD	QTD	CYTD	1 Yr	3 Yr	5 Yr	7 Yr	10 Yr
S&P 500 (Cap Wtd)	-8.72	-8.72	-12.92	0.21	13.85	13.66	12.38	13.67
Russell 2000	-9.91	-9.91	-16.69	-16.87	6.73	7.24	7.66	10.06
MSCI EAFE (Net)	-6.47	-6.47	-12.00	-8.15	4.44	4.77	3.52	5.77
MSCI EAFE SC (Net)	-6.86	-6.86	-14.81	-13.71	4.93	5.02	5.54	7.59
MSCI EM (Net)	-5.56	-5.56	-12.15	-18.33	2.24	4.32	2.75	2.89
Bloomberg US Agg Bond	-3.79	-3.79	-9.50	-8.51	0.38	1.20	1.36	1.73
ICE BofAML 3 Mo US T-Bill	0.01	0.01	0.05	0.08	0.75	1.12	0.88	0.63
NCREIF ODCE (Gross)	N/A	N/A	7.36	28.45	11.29	9.88	10.19	10.93
FTSE NAREIT Eq REITs Index (TR)	-4.36	-4.36	-8.08	11.92	9.56	8.62	8.17	9.01
HFRI FOF Comp Index	0.08	0.08	-2.65	-0.80	5.58	4.54	3.28	3.96
Bloomberg Cmtly Index (TR)	4.14	4.14	30.75	43.53	17.87	10.22	4.10	-0.26

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

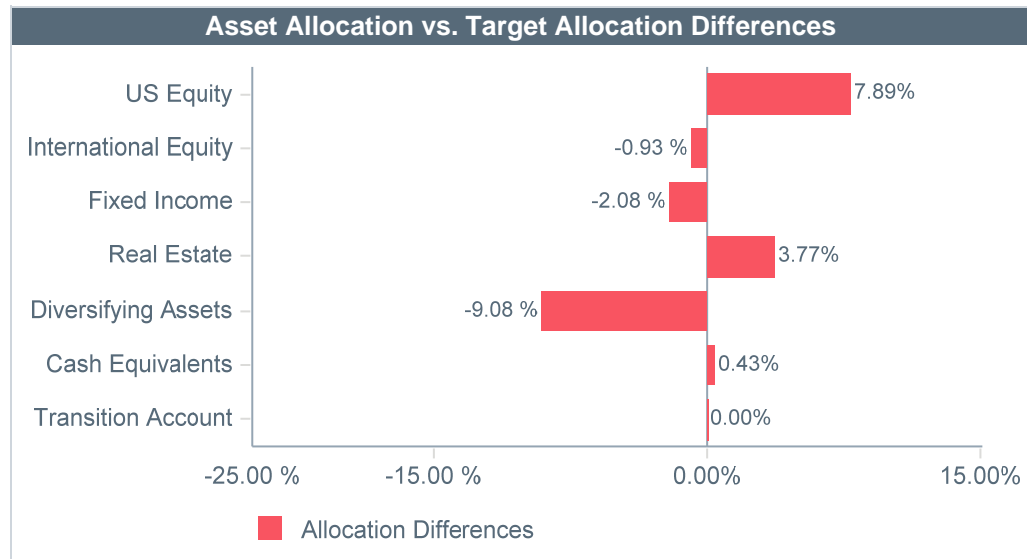


Asset Allocation by Asset Class, Asset Allocation vs. Target, and Schedule of Investable Assets



Asset Allocation vs. Target Allocation

	Market Value (\$)	Allocation (%)	Min (%)	Target (%)	Max (%)
Total Fund	2,401,268,029	100.00	-	100.00	-
US Equity	909,925,848	37.89	20.00	30.00	40.00
International Equity	530,000,521	22.07	13.00	23.00	25.00
Fixed Income	430,250,527	17.92	10.00	20.00	30.00
Real Estate	450,774,397	18.77	0.00	15.00	20.00
Diversifying Assets	70,021,796	2.92	0.00	12.00	20.00
Cash Equivalents	10,225,943	0.43	0.00	0.00	10.00
Transition Account	68,997	0.00	0.00	0.00	0.00



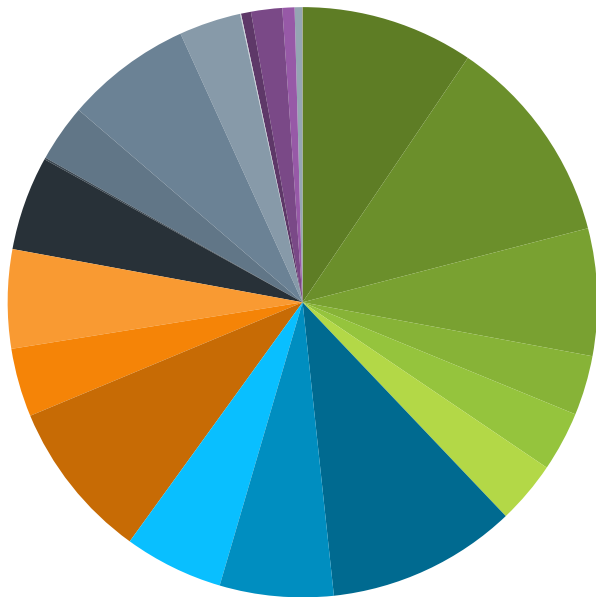
Schedule of Investable Assets

Periods Ending	Beginning Market Value (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)	% Return
CYTD	2,664,636,142	766,755	-264,134,868	2,401,268,029	-9.84

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.



April 30, 2022 : \$2,401,268,029



	Market Value (\$)	Allocation (%)
Eagle Capital Large Cap Value (SA)	227,336,625	9.47
Mellon Large Cap Core Index (CF)	276,115,161	11.50
Loomis Sayles Large Cap Growth (CF)	167,099,681	6.96
Pinnacle Associates US SMID Cap Growth (SA)	78,497,960	3.27
Kayne Anderson US SMID Value (SA)	78,606,645	3.27
Systematic Financial US SMID Value (SA)	82,269,775	3.43
Silchester International Value (CF)	249,968,832	10.41
Baillie Gifford International Growth (BGEFX)	149,585,523	6.23
Acadian Emerging Markets (CF)	130,446,166	5.43
Baird Core Fixed Income (SA)	210,277,390	8.76
Franklin Templeton Global Multisector Plus (CF)	90,115,619	3.75
Loomis Sayles Multisector Full Discretion (CF)	129,857,518	5.41
Harrison Street Core Property, LP	124,054,558	5.17
H.I.G. Realty Fund IV (CF)	2,456,111	0.10
PGIM Real Estate PRISA II LP (CF)	75,436,721	3.14
Principal US Property (CF)	166,003,776	6.91
UBS Trumbull Property (CF)	81,435,864	3.39
Vanguard RE Idx;ETF (VNQ)	1,387,367	0.06
Hancock Timberland (SA)	12,977,259	0.54
Adams Street Private Equity (SA)	41,043,790	1.71
Hamilton Lane Private Credit (SA)	16,000,747	0.67
Dreyfus Gvt Csh Mgt;Inst (DGCXX)	10,225,943	0.43
Transition Account	68,997	0.00

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

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

As of April 30, 2022

	Allocation		Performance (%)										
	Market Value (\$)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Total Fund	2,401,268,029	100.00	-5.60	-5.60	-9.84	-7.00	-5.86	5.88	6.55	6.02	7.85	6.25	07/01/1999
Total Fund Policy Index			-5.58	-5.58	-8.74	-4.04	-0.60	6.85	7.02	6.34	7.77	5.95	
Difference			-0.02	-0.02	-1.10	-2.96	-5.26	-0.97	-0.47	-0.32	0.08	0.30	
Total Equity	1,439,926,369	59.97	-9.28	-9.28	-15.96	-13.36	-13.41	7.84	8.80	7.94	9.96	6.34	07/01/1999
US Equity	909,925,848	37.89	-10.40	-10.40	-16.72	-11.83	-10.16	10.22	11.21	10.13	11.95	7.02	07/01/1999
US Equity Index			-8.97	-8.97	-13.78	-5.78	-3.11	13.11	13.01	11.79	13.29	7.28	
Difference			-1.43	-1.43	-2.94	-6.05	-7.05	-2.89	-1.80	-1.66	-1.34	-0.26	
International Equity	530,000,521	22.07	-7.29	-7.29	-14.60	-15.87	-18.47	4.11	5.02	4.30	6.53	5.64	07/01/1999
International Equity Index			-6.28	-6.28	-11.38	-9.77	-10.31	4.30	4.94	3.49	5.04	3.95	
Difference			-1.01	-1.01	-3.22	-6.10	-8.16	-0.19	0.08	0.81	1.49	1.69	
Fixed Income	430,250,527	17.92	-3.75	-3.75	-8.04	-8.65	-7.96	-0.53	0.66	1.10	1.91	4.53	07/01/1999
Fixed Income Index			-3.73	-3.73	-9.62	-9.64	-8.57	0.52	1.32	1.45	1.79	4.25	
Difference			-0.02	-0.02	1.58	0.99	0.61	-1.05	-0.66	-0.35	0.12	0.28	
Real Estate	450,774,397	18.77	4.02	4.02	9.59	16.99	22.81	8.70	8.14	8.45	8.90	6.36	12/01/2005
NCREIF ODCE Index (AWA) (Net)			0.00	0.00	7.17	15.37	27.29	10.31	8.91	9.21	9.92	6.96	
Difference			4.02	4.02	2.42	1.62	-4.48	-1.61	-0.77	-0.76	-1.02	-0.60	
Diversifying Assets	70,021,796	2.92	6.23	6.23	15.87	31.53	46.49	11.84	7.16	3.67	7.31	8.13	03/01/2011
Diversifying Assets Index			-5.82	-5.82	-8.47	-2.33	4.17	-0.73	0.02	-1.04	2.66	3.00	
Difference			12.05	12.05	24.34	33.86	42.32	12.57	7.14	4.71	4.65	5.13	

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



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

As of April 30, 2022

	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)	227,336,625	9.47	-11.71	-11.71	-19.54	-16.98	-13.74	8.42	10.81	10.22	12.71	10.10	02/01/2007
Russell 1000 Val Index			-5.64	-5.64	-6.34	0.94	1.32	9.58	9.06	8.68	11.17	6.83	
Difference			-6.07	-6.07	-13.20	-17.92	-15.06	-1.16	1.75	1.54	1.54	3.27	
Mellon Large Cap Core Index (CF)	276,115,161	11.50	-8.92	-8.92	-13.59	-5.15	-2.08	13.51	N/A	N/A	N/A	13.51	05/01/2019
Russell 1000 Index			-8.91	-8.91	-13.59	-5.14	-2.10	13.57	13.44	12.10	13.53	13.57	
Difference			-0.01	-0.01	0.00	-0.01	0.02	-0.06	N/A	N/A	N/A	-0.06	
Loomis Sayles Large Cap Growth (CF)	167,099,681	6.96	-14.23	-14.23	-20.94	-15.61	-13.53	10.31	N/A	N/A	N/A	12.90	08/01/2017
Russell 1000 Grth Index			-12.08	-12.08	-20.03	-10.72	-5.35	16.68	17.28	15.12	15.56	17.05	
Difference			-2.15	-2.15	-0.91	-4.89	-8.18	-6.37	N/A	N/A	N/A	-4.15	
Pinnacle Associates US SMID Cap Growth (SA)	78,497,960	3.27	-11.78	-11.78	-16.79	-14.00	-16.36	12.39	11.64	10.46	12.34	13.31	03/01/2010
Russell 2500 Grth Index			-11.42	-11.42	-22.32	-22.16	-23.08	7.28	10.12	8.96	11.43	12.57	
Difference			-0.36	-0.36	5.53	8.16	6.72	5.11	1.52	1.50	0.91	0.74	
Kayne Anderson US SMID Value (SA)	78,606,645	3.27	-5.12	-5.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	03/01/2022
Russell 2500 Val Index			-6.78	-6.78	-8.18	-2.33	-3.70	9.10	7.69	8.00	10.33	-4.81	
Difference			1.66	1.66	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.70	
Systematic Financial US SMID Value (SA)	82,269,775	3.43	-6.78	-6.78	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	03/01/2022
Russell 2500 Val Index			-6.78	-6.78	-8.18	-2.33	-3.70	9.10	7.69	8.00	10.33	-4.81	
Difference			0.00	0.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-2.31	
International Equity													
Silchester International Value (CF)	249,968,832	10.41	-5.36	-5.36	-5.19	-5.22	-3.94	4.26	4.35	4.06	7.69	8.55	06/01/2009
MSCI EAFE Val Index (USD) (Net)			-5.06	-5.06	-4.74	-3.63	-3.53	2.64	2.68	1.74	4.65	4.84	
Difference			-0.30	-0.30	-0.45	-1.59	-0.41	1.62	1.67	2.32	3.04	3.71	
Baillie Gifford International Growth (BGEFX)	149,585,523	6.23	-11.37	-11.37	-30.63	-33.78	-38.56	3.90	7.48	6.15	7.86	9.20	06/01/2009
Baillie Gifford Index			-7.44	-7.44	-17.41	-15.46	-16.23	5.25	5.98	4.64	6.40	7.27	
Difference			-3.93	-3.93	-13.22	-18.32	-22.33	-1.35	1.50	1.51	1.46	1.93	
Baillie Gifford Spliced Index			-6.28	-6.28	-11.38	-9.77	-10.31	4.86	5.02	3.70	5.90	6.35	
Difference			-5.09	-5.09	-19.25	-24.01	-28.25	-0.96	2.46	2.45	1.96	2.85	
Acadian Emerging Markets (CF)	130,446,166	5.43	-6.02	-6.02	-7.72	-7.07	-10.86	5.90	4.68	3.47	3.62	3.21	02/01/2011
MSCI Emg Mkts Index (USD) (Net)			-5.56	-5.56	-12.15	-13.30	-18.33	2.24	4.32	2.75	2.89	2.05	
Difference			-0.46	-0.46	4.43	6.23	7.47	3.66	0.36	0.72	0.73	1.16	

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



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

As of April 30, 2022

	Allocation		Performance (%)										
	Market Value (\$)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Fixed Income													
Baird Core Fixed Income (SA)	210,277,390	8.76	-3.75	-3.75	-9.69	-9.90	-8.64	N/A	N/A	N/A	N/A	-7.65	03/01/2021
Bloomberg US Agg Bond Index			-3.79	-3.79	-9.50	-9.49	-8.51	0.38	1.20	1.36	1.73	-7.71	
Difference			0.04	0.04	-0.19	-0.41	-0.13	N/A	N/A	N/A	N/A	0.06	
Franklin Templeton Global Multisector Plus (CF)	90,115,619	3.75	-3.98	-3.98	-2.61	-5.01	-7.26	-5.64	-2.91	-1.59	0.41	4.16	09/01/2007
Frank. Temp. Global Multisector Index			-5.44	-5.44	-11.16	-11.78	-12.47	-1.01	0.42	0.76	0.53	2.50	
Difference			1.46	1.46	8.55	6.77	5.21	-4.63	-3.33	-2.35	-0.12	1.66	
Loomis Sayles Multisector Full Discretion (CF)	129,857,518	5.41	-3.61	-3.61	-8.88	-9.03	-7.33	3.07	3.51	3.40	4.81	5.81	10/01/2007
Bloomberg Gbl Agg Bond Index			-5.48	-5.48	-11.30	-11.90	-12.63	-1.09	0.33	0.61	0.35	2.15	
Difference			1.87	1.87	2.42	2.87	5.30	4.16	3.18	2.79	4.46	3.66	
Real Estate													
Harrison Street Core Property LP	124,054,558	5.17	2.50	2.50	5.11	8.04	11.10	7.37	7.60	N/A	N/A	7.76	11/01/2015
NCREIF ODCE Index (AWA) (Net)			0.00	0.00	7.17	15.37	27.29	10.31	8.91	9.21	9.92	8.79	
Difference			2.50	2.50	-2.06	-7.33	-16.19	-2.94	-1.31	N/A	N/A	-1.03	
H.I.G. Realty Fund IV (CF)	2,456,111	0.10	0.00	0.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00	04/01/2022
NCREIF ODCE Index (AWA) (Net)			0.00	0.00	7.17	15.37	27.29	10.31	8.91	9.21	9.92	0.00	
Difference			0.00	0.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00	
PGIM Real Estate PRISA II LP (CF)	75,436,721	3.14	7.38	7.38	14.32	22.60	28.54	10.93	9.71	10.08	N/A	10.09	01/01/2015
NCREIF ODCE Index (AWA) (Net)			0.00	0.00	7.17	15.37	27.29	10.31	8.91	9.21	9.92	9.23	
Difference			7.38	7.38	7.15	7.23	1.25	0.62	0.80	0.87	N/A	0.86	
Principal US Property (CF)	166,003,776	6.91	1.16	1.16	8.57	19.50	29.48	11.81	10.29	10.40	N/A	10.76	01/01/2014
NCREIF ODCE Index (AWA) (Net)			0.00	0.00	7.17	15.37	27.29	10.31	8.91	9.21	9.92	9.50	
Difference			1.16	1.16	1.40	4.13	2.19	1.50	1.38	1.19	N/A	1.26	
UBS Trumbull Property (CF)	81,435,864	3.39	7.54	7.54	13.08	19.91	23.30	4.68	4.98	5.81	6.94	5.51	12/01/2005
NCREIF ODCE Index (AWA) (Net)			0.00	0.00	7.17	15.37	27.29	10.31	8.91	9.21	9.92	6.96	
Difference			7.54	7.54	5.91	4.54	-3.99	-5.63	-3.93	-3.40	-2.98	-1.45	
Vanguard RE Idx;ETF (VNQ)	1,387,367	0.06	-4.08	-4.08	-9.91	3.61	7.86	9.88	8.57	8.06	8.82	13.21	12/01/2008
Custom REITs Index			-4.18	-4.18	-9.88	3.58	7.90	10.01	9.11	8.47	9.17	13.98	
Difference			0.10	0.10	-0.03	0.03	-0.04	-0.13	-0.54	-0.41	-0.35	-0.77	

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

As of April 30, 2022

	Allocation		Performance (%)										
	Market Value (\$)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Diversifying Assets													
Hancock Timberland (SA)	12,977,259	0.54	11.12	11.12	11.12	15.43	32.39	14.46	11.22	8.91	9.30	5.46	10/01/2006
NCREIF Timberland Index			0.00	0.00	3.21	7.91	11.83	4.75	4.08	3.85	5.60	5.52	
Difference			11.12	11.12	7.91	7.52	20.56	9.71	7.14	5.06	3.70	-0.06	
Adams Street Private Equity (SA)	41,043,790	1.71	8.48	8.48	25.84	55.56	80.84	N/A	N/A	N/A	N/A	48.43	11/01/2020
S&P 500 Index+3%			-8.50	-8.50	-12.06	-1.63	3.22	17.26	17.07	15.75	17.08	22.14	
Difference			16.98	16.98	37.90	57.19	77.62	N/A	N/A	N/A	N/A	26.29	
Hamilton Lane Private Credit (SA)	16,000,747	0.67	-2.94	-2.94	-2.86	-1.30	-1.30	N/A	N/A	N/A	N/A	-10.34	04/01/2021
ICE BofAML Gbl Hi Yld Index +2%			-4.24	-4.24	-9.56	-9.80	-8.43	3.26	4.68	5.59	6.64	-6.37	
Difference			1.30	1.30	6.70	8.50	7.13	N/A	N/A	N/A	N/A	-3.97	
Dreyfus Gvt Csh Mgt;Inst (DGCXX)	10,225,943	0.43	0.02	0.02	0.10	0.20	0.57	0.76	1.14	0.91	0.66	1.31	04/01/2001
FTSE 3 Mo T-Bill Index			0.03	0.03	0.06	0.07	0.08	0.71	1.09	0.84	0.61	1.29	
Difference			-0.01	-0.01	0.04	0.13	0.49	0.05	0.05	0.07	0.05	0.02	

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

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

Performance Related Comments:

- Performance is annualized for periods greater than one year.
- Performance and market values shown are preliminary and subject to change.
- The inception date shown indicates the first full month of performance following initial funding.
- The market value shown for the Transition Account includes residual assets from terminated managers.
- RVK began monitoring the assets of the City of Jacksonville Retirement System on 01/01/2019. Prior historical data was provided by the custodian and previous consultant.
- Franklin Templeton Global Multisector Plus (CF) performance prior to 03/2016 is represented by Templeton Global Total Return (SICAV).

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

Custom Manager Benchmark Comments:

- **Baillie Gifford Index:** The passive Baillie Gifford Index consists of 100% MSCI EAFE Grth Index (USD) (Net) through 10/2017 and 100% MSCI ACW Ex US Grth Index (USD) (Net) thereafter.
- **Baillie Gifford Spliced Index:** The passive Baillie Gifford Spliced Index consists of 100% MSCI EAFE Index (USD) (Net) through 11/2019 and 100% MSCI ACW Ex US Index (USD) (Net) thereafter.
- **Frank. Temp. Global Multisector Index:** The passive Frank. Temp. Global Multisector Index consists of 100% ICE BofAML Gbl Hi Yld Index through 12/2009 and 100% Bloomberg Multiverse Index thereafter.

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

PORTLAND

BOISE

CHICAGO

NEW YORK

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Memorandum

To	Board of Trustees of the City of Jacksonville (“COJ”) Retirement System
From	RVK Inc. (“RVK”)
Subject	Unconstrained Securitized Fixed Income Evaluation
Date	May 26, 2022

Background

The purpose of this memorandum is to provide the City of Jacksonville Employees’ Retirement System (“City of Jacksonville ERS” or the “City”) Board with an overview of the evaluation process of Securitized Fixed Income managers conducted by Staff and RVK. The purpose of the evaluation was to explore the potential for further enhancement of the fixed income composite through additional alpha generation and diversification.

Following a review of potential complimentary strategies for the City’s fixed income composite, unconstrained securitized was identified as an attractive and additive asset class, providing valuable diversification and attractive risk adjusted returns. Staff and RVK conducted a review of the opportunity set, which included discussion of qualitative and quantitative factors such as absolute and risk-adjusted performance (over trailing and rolling time periods), firm structure, team experience, investment philosophy and process, among others. Ultimately, there were six candidates selected for further evaluation, including interviews with key members of each investment team. These candidates are listed below.

- Amundi Asset Management
- Columbia Threadneedle
- Fort Washington Investment Advisors
- Schroders Capital
- TCW Asset Management
- Voya Investment Management

Following the interview stage, there was collective agreement between Staff and RVK that three of the candidates separated themselves from the others with regards to offering differentiated approaches, which had achieved a high level of performance consistency. The three managers listed below were those determined to be brought forward to the Board for consideration.

- Columbia Threadneedle
- Schroders Capital
- TCW Asset Management



Detailed information on each of the three managers being brought forward can be found in the appendices of this memorandum. Appendix I includes summaries of the firm, investment team and strategies of each manager. Appendix II includes a comparison of performance and risk for each manager's strategy, the correlation of the three managers versus the current fixed income composite mandates, and fixed income characteristics and allocation data.

Search Background

When evaluating the City's overall fixed income composite, RVK and Staff discussed and considered a variety of potential asset classes including emerging market debt, global unconstrained credit, and securitized fixed income. Securitization notably offered little overlap with the City's current fixed income composite, and includes exposure primarily to securities backed by a diverse range of consumer loans, including agency and non-agency mortgage backed securities (MBS), asset backed securities (ABS), and commercial mortgage backed securities (CMBS). This exposure contrasts with the City's current fixed income composite, which includes primarily core fixed income, investment grade corporate credit, below investment grade corporate credit, and emerging market debt. While the City does hold some securitized exposure, it is largely agency-backed and more heavily influenced by interest rate fluctuations, as opposed to non-agency securitized, which is more heavily influenced by consumer credit. Non-agency securitized is more heavily represented in unconstrained securitized strategies specifically. As a result, unconstrained securitized was identified as an asset class that meets the objective of enhanced diversification.

Additionally, unconstrained securitized fixed income can benefit the City's fixed income composite in the current environment of low yields and rising interest rates, given the asset class's low interest rate sensitivity, enhanced yield, and attractive risk adjusted returns, particularly relative to core fixed income.

As such, managers selected by RVK and Staff are those who have demonstrated the capabilities to evaluate and invest in unconstrained securitized fixed income and which meaningfully diversify from core and corporate credit exposure.



Search Update – May 26, 2022

On May 19th, the three finalists Columbia Threadneedle, Schroders, and TCW, each presented unconstrained securitized strategies to the COJ Board and Staff, with RVK in attendance. The candidates reviewed their investment philosophy, process, team, and track record within securitized fixed income. The goal of the presentations ultimately being to help inform a decision as to whether any of the three managers should be awarded a mandate as either a replacement or in addition to the current fixed income composite. Following the interviews, as tasked by the Board, RVK solicited a best and final fee from each candidate, as listed below (full fee schedules are listed in Appendix III). These fees each represent a discount from the standard manager fee schedules.

Fee Comparison

Manager	Separate Account Fee* (\$)	Separate Account Fee (Bps)	
5th Percentile	\$204,480	20	
25th Percentile	\$325,000	32	
Median	\$390,000	39	
75th Percentile	\$550,000	55	
95th Percentile	\$750,000	75	
			Rank
Columbia Threadneedle (Separate Account)	\$230,000	23	6
Schroders (Limited Partnership)	\$600,000	60	82*
TCW (Separate Account)	\$500,000	50	64

*Fees shown assumes a \$100 million mandate.

**The Schroders product shown is a Limited Partnership. This fund comes with a management fee (60 bps) and operating costs of 17 bps, included in the total fee shown, for an all-in fee of 77 bps. As fund assets grow, operating costs are expected to decrease. RVK clients receive a manager fee break which would bring the all-in fee to 72 basis points should total RVK client asset within the Schroder LP reach \$350 million.

***When comparing Schroders fees to the eVestment peer group, it should be noted the eVestment peer group compares against a universe of public fixed income securitized managers offering separate accounts, whereas the Schroders product includes an approximate allocation to 2/3 public and 1/3 private securities in a pooled vehicle. This creates a mismatch in vehicle and risk profiles when comparing offered fees.

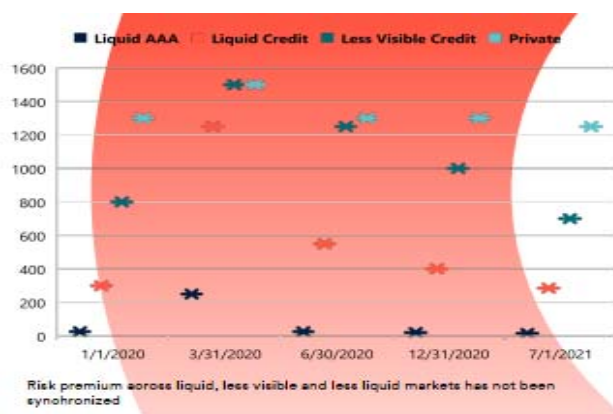
Per the best and final fee offers, it is worth highlighting the steep discount offered by TCW, who decreased their fee by 25 bps. Likewise, it is worth highlighting that for the Schrodgers product, this strategy carries a profile which includes private securities. As a result, comparing fees to strategies which are 100% public fixed income may skew the comparison. RVK views the proposed Schrodgers fees, given the profile of approximately 2/3 public and 1/3 private credit exposure, as competitive. As a reference, in the private credit space, it is quite common to see management fees around 150bps, plus an additional performance fee, over a given hurdle.

Further Evaluation

In addition to fees, RVK and Staff compared and contrasted the additive features of each candidate. The Schrodgers product stood out as offering historically enhanced risk-adjusted returns after accounting for fees, a competitive yield, low to no interest rate sensitivity, and the ability to access the full spectrum of public securitized fixed income, in addition to private portions of the market, further enhancing the ability for relative value decisions.

The specific vehicle under consideration, Schrodgers Flexibles Secured Income (“FLEXSI”), targets a return of cash + 5%, investing across the full spectrum of securitized fixed income. The vehicle seeks to achieve their return target with an investment profile that is roughly 2/3 liquid public credit, and 1/3 private credit that can dynamically evolve over time based on the opportunity set. The Schrodgers team has the flexibility to source relative value across the full spectrum of securitized fixed income, as demonstrated in the below graphics. Additionally, the Schrodgers FLEXSI product is positioned as a non-core fixed income diversifier, with a lower quality tilt in the securitized space. As a result, the strategy targets a high yield and low interest rate sensitivity, while offering diversification from traditional fixed income.

FLEXSI – Spectrum of Asset Classes (source: Schrodgers)





Recommendation

Following the interviews and best and final fee solicitation, RVK and Staff discussed and re-ranked the three candidates based on the presentations, strength of the respective teams and process, risk-adjusted performance, trailing return track records, proposed fees, liquidity requirements, and diversification benefits relative to the COJ incumbent fixed income managers, among other factors. RVK and Staff believe all three of the managers to be compelling opportunities for the Board to consider, but ultimately have identified Schrodgers as the candidate which we collectively believe best satisfies the goal of identifying an unconstrained securitized strategy that will serve to enhance the fixed income composite through additional alpha generation and diversification. **Thus, RVK and Staff recommend that the Board consider hiring the Schrodgers Flexible Secured Income (FLEXSI) LP.**

Additional information regarding the Schrodgers vehicle, liquidity terms, and value proposition can be found below. Further, additional details around RVK and Staff's suggested path for funding and sizing this new mandate can also be found below.

Schrodgers FLEXI LP: Additional Details

The strategy is available in both a separate account and a pooled LP vehicle, of which the pooled LP vehicle is most accessible to the City of Jacksonville assuming a \$100 million allocation. The pooled vehicle entails an 18-month soft lockup. However, a pooled vehicle also enables City of Jacksonville to avoid a longer funding period of 4-6 weeks, instead purchasing into a vehicle with a current 6.2% yield and 0.0 years of duration. Terms for the vehicle are listed below.

The FLEXSI vehicle carries the following terms:

- 18-month soft lock
- Quarterly subscription and redemptions (90-day redemption notice, 10 business day subscription notice)
- No leverage
- Investment Minimum: \$10 million
- Structure: pooled Master/Feeder, ERISA limited to 25%.

Next Steps: Rebalancing

To fund the new mandate, RVK and Staff suggest the Board terminate the Franklin Templeton Global Multisector Plus commingled fund and use the proceeds to help fund the Schrodgers FLEXI LP. The Franklin Templeton strategy has been on the Watch List since October 2020 for failure to meet performance criteria. In 2020 in particular, Franklin Templeton materially underperformed



following the Covid-19 market shock due to market positioning which detracted relative to peers. Since that time, we have continued to see outflows from the strategy, with overall strategy assets under management declining from \$54 billion in 2013 to \$6 billion as of Q1 2022. Likewise, the commingled fund with which the City invests in has seen outflows, with the City now comprising over 75% of the commingled fund assets through mid-May 2022. While the team and investment process have remained fairly stable, performance for the strategy continues to trail its benchmark and ranks in the bottom third of its peer group over the last three consecutive rolling five-year periods (as of March 31, 2022). Additionally, performance has been negative on an absolute basis through 7 years as of March 31, 2022 with material volatility, resulting in poor risk adjusted performance. As a result of this search and evaluation process, RVK and Staff believe we have identified an upgraded option for the core plus fixed income allocation in the Schroder FLEXI LP that will act as a strong compliment, capable of providing competitive risk-adjusted returns to the other incumbent core plus fixed income manager, Loomis Sayles.

As part of this new funding, RVK and Staff recommend the Board consider this as an opportunity to further rebalance intra the fixed income composite. Specifically, we recommend full liquidation of the Franklin Templeton strategy (\$88.6M) and a partial redemption from Loomis Sayles Multisector strategy (\$19.9M), in order to fund the new manager with approximately \$108.5M. Doing so continues to support a roughly 50/50 split between the core and core plus mandates, with a very slight intra fixed income composite overweight to core plus, which we are comfortable with at this point in the market environment given the heightened interest rate sensitivity of core fixed income and relatively higher yields in non-core fixed income. This approach will also reduce some of the administrative burden associated with raising more cash from a third manager (Baird). Finally, this path will also support a 50/50 manager split intra the core plus composite, allowing Loomis and the new manager equal allocations. Should the Board approve this recommended approach, RVK will work with Staff to prudently and efficiently execute on the recommended hiring and rebalancing approach.

City of Jacksonville Employees' Retirement System									
Asset Allocation Rebalance									
As of May 20, 2022									
	Current		Target			Rebalance	Post Transition		
	Market Value	Allocation	Min	Allocation	Max	Total Transition	Market Value	Allocation	Difference
Fixed Income	\$427,729,896	18.1%	10.0%	20.0%	30.0%	\$0	\$427,729,896	18.1%	-1.9%
Baird Core (SA)	\$210,697,386	8.9%		10.0%		\$0	\$210,697,386	8.9%	-1.1%
Franklin Templeton (CF)	\$88,616,715	3.8%		0.0%		-\$88,616,715	\$0	0.0%	0.0%
Loomis Sayles (CF)	\$128,415,795	5.4%		5.0%		-\$19,899,540	\$108,516,255	4.6%	-0.4%
<i>New Securitized Mandate</i>				5.0%		\$108,516,255	\$108,516,255	4.6%	-0.4%



[Appendix I: Manager Summary](#)

Schroder Opportunistic Multi-Sector

Firm

Globally headquartered in London, England with domestic headquarters in New York, New York, Schroders was formed in 1804 and is a global firm consisting of over 200 legal entities operating in 37 countries. Today, Schroders is one of the largest asset managers listed on the London Stock Exchange with nearly \$838 billion in AUM as of March 31, 2022. Of these assets, over \$106 billion are based in the United States. The Schroder family today continues to hold 48% ownership in the equity of the firm. Schroders offers strategies across equities, fixed income, multi-asset, and alternatives.

Team

The Schroders Securitized Credit team has been managing securitized credit for nearly 27 years across a range of strategies, from investment grade to opportunistic securitized. Originally a part of Hyperion capital, founded by Lewis Ranieri, Schroders eventually purchased the then Hyperion-Brookfield team in 2016, bringing over all Hyperion-Brookfield client relationships. Today the Securitized Credit team of 15 is led by Michelle Russell-Dowe and follows a team-based and research-led approach. Teams are organized into a strategy execution framework, with a Low Duration team, a Benchmark Relative team, and an Opportunistic team. The Opportunistic team consists of six members with an average of 28 years relevant experience. All teams are headed by Michelle Russell-Dowe.

Team members are also organized into research teams with focuses across the securitized space including US CMBS, RMBS, Global ABS, and Global CLOs, among others. Schroders believes the team's research expertise and focus on relative value drives best idea selection within the space.

Michelle Russell-Dowe
Head of Securitized Credit, Lead PM

Team Based, Strategy Execution Framework

Low Duration	Benchmark Relative	Opportunistic
Anthony Breaks Chris Ames Robert Graham Adam Pinkerton Bridget Hu	Anthony Breaks Eric Richter Robert Graham Adam Pinkerton Bridget Hu	Chris Ames Anthony Breaks Jeff Williams Paul Bratten Alyse Kelly Bridget Hu
Strategy based teams lend to relative value approach and understanding of client objective		

Research Focus

US CRE/Global CMBS	RMBS	Global ABS/Asset-finance	Global CLO	Quantitative Research	Systems Development
Jeff Williams ¹ Paul Bratten ² Robert Graham ¹	Michelle Russell-Dowe ¹ Anthony Breaks ¹ Adam Pinkerton Bridget Hu ² Eric Richter ¹	Michelle Russell-Dowe ¹ Anthony Breaks ¹ Chris Ames ¹ Bridget Hu ² Adam Pinkerton	Anthony Breaks ¹ Alyse Kelly Bridget Hu ²	Liyun Ma Yusi Xie ²	Sagar Regmi

Source: Schroders

Investment Process

The Schroders Securitized Credit team focuses on areas where the team believes they hold a competitive advantage, and with over \$18 billion in committed capital are a large manager in the securitized space. This Opportunistic Multi-Sector strategy targets unconstrained ABS, MBS, CMBS, CLO and secured financings (loans and/or leases) with the objectives of opportunistic income and positioning as a corporate credit or high yield alternative. The Opportunistic Multi-Sector strategy does not employ leverage and targets a return of cash+400-500 basis points over a market cycle, with exposure to less liquid portions of the asset backed market, in addition to lower quality and more opportunistic regions of the mortgage back and asset backed market. The team approach starts with a top-down examination of fundamental and technical factors. The team then performs bottom up analysis with detailed risk profiling; grouping securities by liquidity, volatility, and structural leverage profiles and incorporating in-depth quantitative assessment and modeling of each bond over various scenarios. The team also performs a qualitative assessment of counterparty, servicer capabilities, and risk, among other key factors.

At the start of the investment process Schroders identifies the fundamental and technical factors that drive performance for the overall securitized market as well as specific sectors by assessing



regulation, access to credit, interest rates, prepayment trends, and delinquency rates. The Schrodgers fixed income and economic research teams can also be leveraged to provide additional insights. Once Schrodgers identifies their inputs for evaluating credit cycles, asset prices, and interest rates the team uses proprietary models for sensitivity analysis. This process seeks to identify risk profiles that represent areas of opportunity that are consistent with Schrodgers' view of the market.

The team will also monitor each securities cash flow and capital structure to identify areas of weakness. Schrodgers believes a thorough understanding of collateral cash flow and structure can drive returns over the long term. Additionally, they will compile information on loan originators and servicers believing that the specific tendencies of the originator and servicer can create differences in performance for bonds with otherwise similar collateral.

The teams research-led evaluation of the investment environment, as described above, is used to determine target levels of risk in the strategy. Portfolio construction then incorporates relative value decisions and looks at risk across liquidity, credit, volatility, and duration. Portfolios are then constructed based on asset valuation, client risk tolerance, and liquidity requirements. Using this framework, the team will select the preferred asset class and sector exposures as well as preferred collateral types and counterparty exposures. Purchases and sales are discussed among the team until a consensus is reached so that the team understands the reasoning behind each transaction and each team member can incorporate the reasoning into their decision making. Each portfolio manager on the investment team also conducts their own trading, which is in line with Schrodgers "team-based" approach.

The overall philosophy of the Schrodgers Securitized Credit team centers around operating in data rich sectors where they believe opportunity can be accurately assessed, deploying capital into inefficient markets, understanding credit cycles, and capitalizing on cyclical opportunities.



TCW Securitized Opportunities

Firm

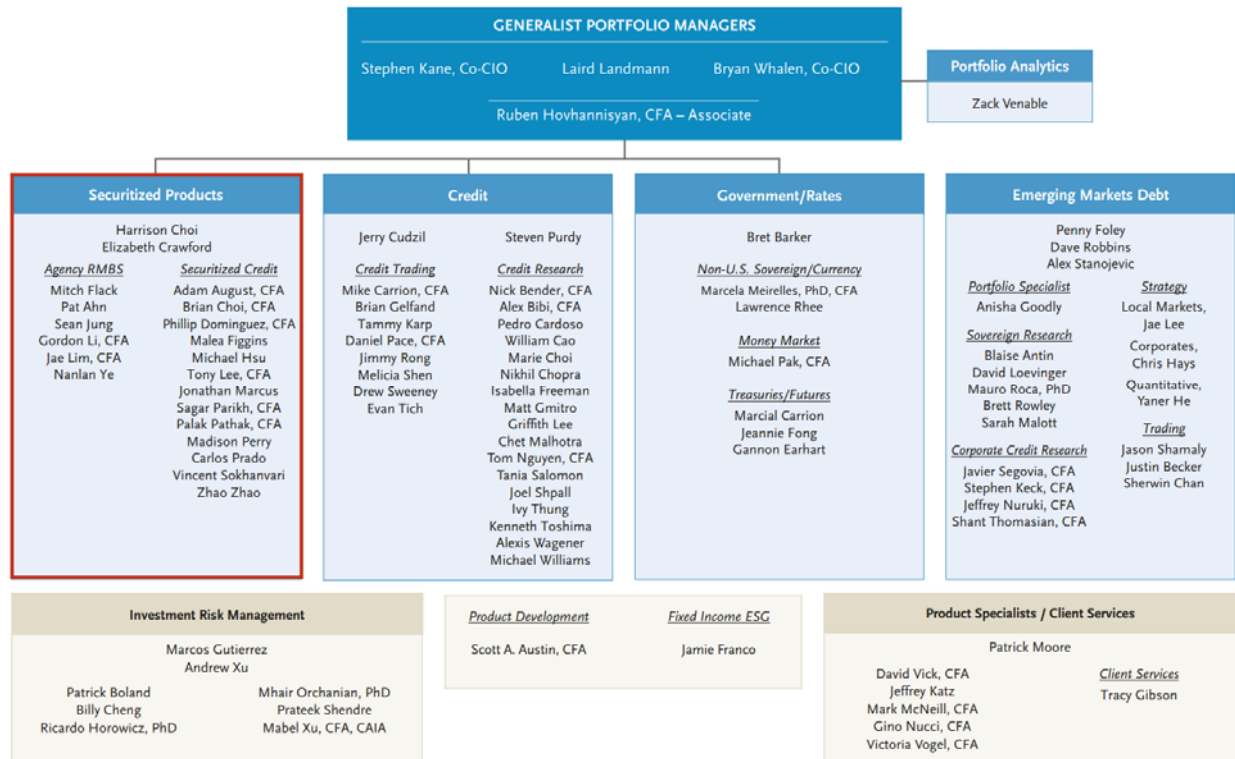
Originally founded in 1971 in Los Angeles, CA, TCW currently manages over \$242 billion in assets under management. With over 600 employees, the vast majority of the firm's assets under management is dedicated to fixed income (\$222 billion), of which core and core plus comprises the lion share. Currently, the firm is owned in part by the Carlyle Group following a management led buyout from the previous owner Société Générale in 2013. In addition, in 2017 Nippon Life acquired a minority stake in TCW of 24.75%. This acquisition had the effect of increasing employee ownership in TCW, resulting in an ownership structure today that is 31% Carlyle, 44% TCW management and employees (spread across 92 employee owners), and 24.8% Nippon Life.

Team

The TCW fixed income team is led by a group of four generalist portfolio managers, who set the top down firm strategy, particularly relevant to multi sector portfolios. For those products dedicated to a particular sector, such as the TCW Securitized Opportunities product, that is led by TCW securitized portfolio managers Harrison Choi and Elizabeth Crawford. This PM team is further supported by a heavily built out and resourced securitized team consisting of 6 Agency MBS specialists and 13 securitized credit specialists.

Dedicated Securitized Products accounts for \$22 billion (as of December 31, 2021) of the firm's assets under management, however, when accounting for securitized allocations across multi sector portfolios such as core fixed income the firm's securitized AUM grows to \$99 billion (as of December 31, 2021) across agency Mortgage Backed Securities, Non-Agency Mortgage Backed Securities, Asset backed securities, and commercial mortgage backed securities.

The TCW Securitized Opportunities product currently holds \$5.3 billion in AUM (as of December 31, 2021), \$3.4 billion of which is in customized separate accounts.



Investment Process

TCW manages securitized product in a truly opportunistic approach, investing across ABS, RMBS, and CMBS across the quality spectrum, with a long-term return target of 500 bps over cash. The strategy does not employ leverage, and will engage in tactical sector rotation. The strategy is headed by structured product sector heads, and while informed by the firm's top down view provided by portfolio manager generalists, allocation decisions are primarily driven by bottom up selection led by sector specialists.

While the strategy is unconstrained, the management team does not employ a constant “pedal to the medal” approach. Rather, the team will opportunistically rotate across the quality spectrum and across securitized sectors as they identify relative value per their long-term reversion to the mean philosophy.



Columbia Threadneedle

Firm

Columbia Threadneedle represents the global asset management group of Ameriprise Financial, a US based financial services firm with asset management, advisory, and insurance capabilities. The investment advisor representing the majority of funds in the Columbia family of funds was founded in 1985, which was combined with the Columbia Management Group when acquired by Ameriprise in 2010. Subsequently in 2015, Ameriprise launched the Columbia Threadneedle Investments global brand representing the firm's global asset management group.

Columbia Threadneedle manages \$461.4 billion in total AUM, of which \$160.3 billion (35%) is institutional and 36% is fixed income. The Columbia Threadneedle Structured Credit product's total AUM of \$4.2B is entirely housed within a retail mutual fund, which may be subject to increased volatility as a pooled vehicle with multiple investors.

Team

The Structured Credit strategy is run by a team of three portfolio managers, Jason Callan, Tom Heuer, and Ryan Osborn averaging 22 years' experience. The team is based in Minneapolis, MN and sit on one combined trading floor to work closely with traders on their assigned sectors.





Investment Process

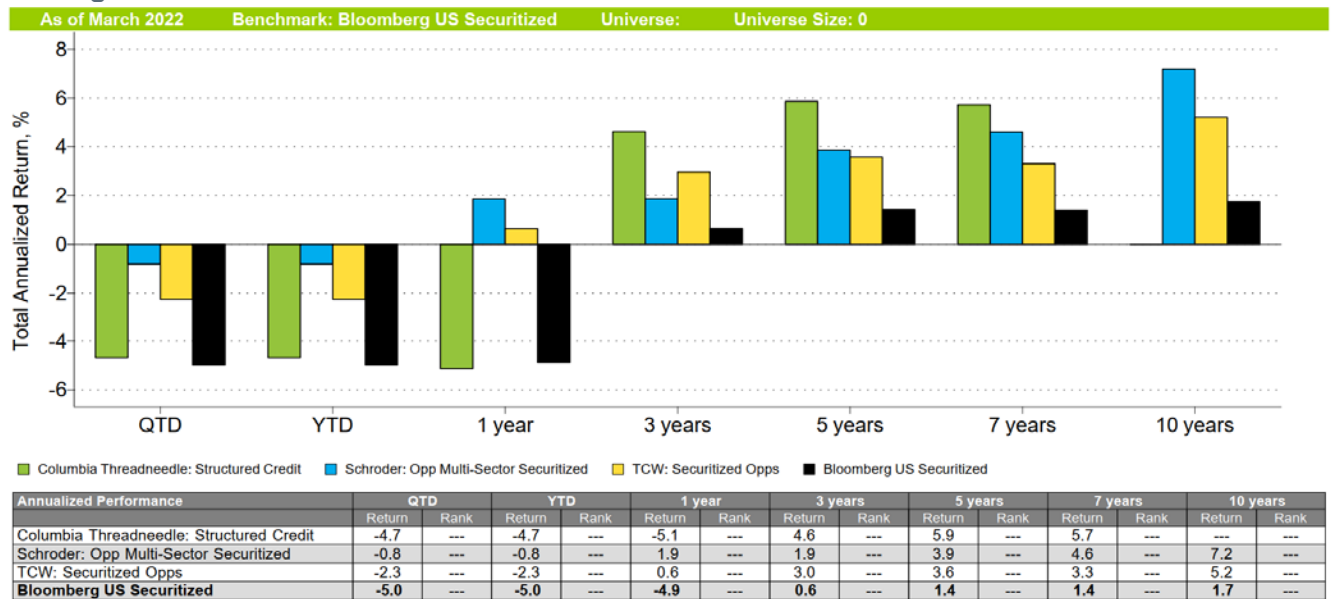
The Columbia Threadneedle process employs fundamental analysis paired with quantitative modeling to drive risk adjusted returns through yield and capital gains. The investment process begins with developing a macro top-down view based on housing and economic metrics to establish an investment thesis, which feeds into determining sector allocations, spread durations, and duration targets. Subsequently, the team develops targets within the investible universe based on the objectives of total return, available yield, and ability to mitigate downside risk. Lastly, security selection is performed by relying heavily on forward looking quantitative analysis driven by research analysts.

The portfolio management team seeks to optimize the portfolio by balancing the teams yield, duration, and convexity targets against the current market environment. The team will also apply macro hedges to hedge duration, convexity, credit risks, or to pursue risk adjusted returns.

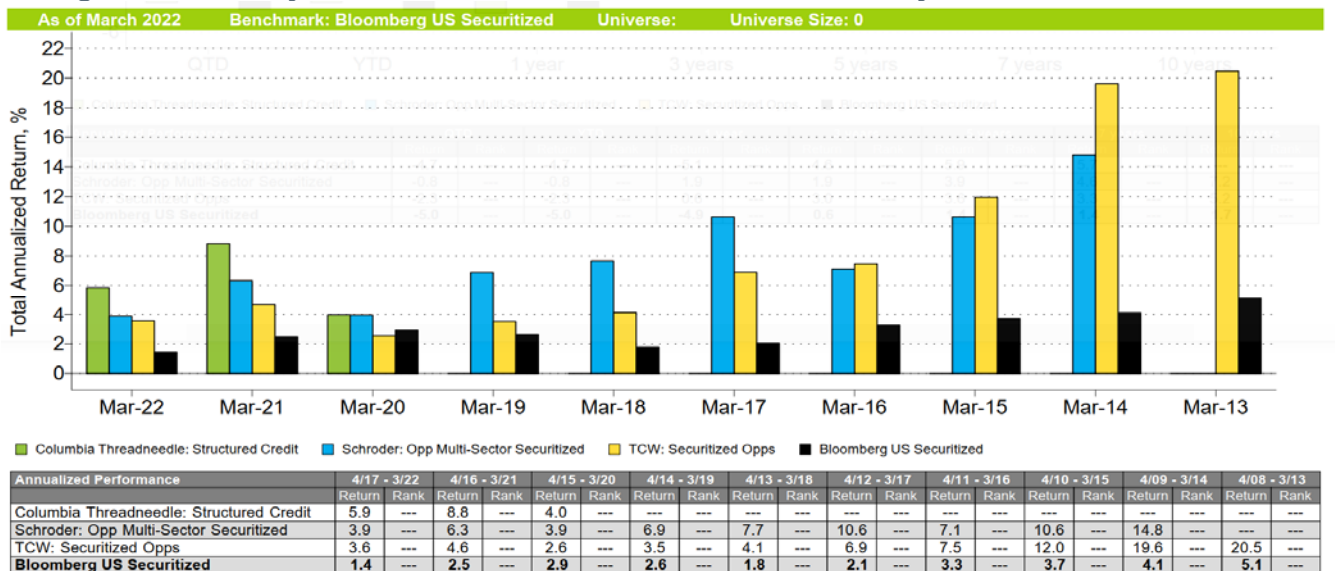
The Columbia Threadneedle strategy has a heavy emphasis on mortgage backed securities (both Agency and non-Agency) with a historical 2/3 mortgage backed product tilt. The products guidelines allow -2 to 8 years duration, -20-100% Agency MBS, 0-90% non-agency MBS, 0-20% Interest Only CMO, 0-15% Inverse IO, -20-90% CMBS, and 0-20% ABS. The strategy allows corporate credit exposure, with an allowance of up to 20% corporate bonds. Corporate bonds are used as a non-cash hedge, as the team considers them a liquid option if they are unable to purchase within the securitized market. An increased allocation to corporate bonds may detract from diversifying benefits relative to other incumbent managers within the City's fixed income composite, should that become a material component of the strategy. Within asset backed securities, the team favors esoteric securities which may offer enhanced yield and complexity premium with heightened liquidity and credit risk.

Appendix II: Comparative Performance and Characteristics

Trailing Period Returns



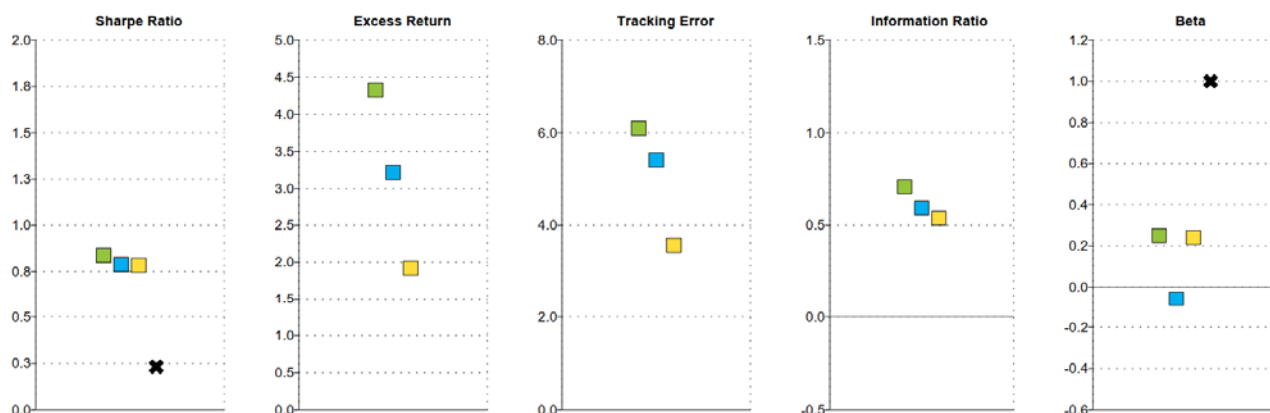
Manager Consistency – 5 Year Annualized Period Calculated Every 12 Months



Performance and risk characteristics shown reference estimated net of fees returns using the stated manager fee schedules.

Modern Portfolio Theory Statistics – Seven Year

As of March 2022 Benchmark: Bloomberg US Securitized Universe: Universe Size: 0



■ Columbia Threadneedle: Structured Credit
 ■ Schroder: Opp Multi-Sector Securitized
 ■ TCW: Securitized Opps
 * Bloomberg US Securitized

Firm/Product	Sharpe Ratio	Rank	Excess Return %	Rank	Tracking Error	Rank	Information Ratio	Rank	Beta	Rank
Columbia Threadneedle: Structured Credit	0.84	---	4.32	---	6.10	---	0.71	---	0.25	---
Schroder: Opp Multi-Sector Securitized	0.79	---	3.21	---	5.41	---	0.59	---	-0.06	---
TCW: Securitized Opps	0.78	---	1.92	---	3.56	---	0.54	---	0.24	---
Bloomberg US Securitized	0.23	---	0.00	---	0.00	---	---	---	1.00	---

7 Year Return Correlations

Correlation: Apr 2015 - Mar 2022	Columbia Threadneedle: Structured Credit	Schroder: Opp Multi-Sector Securitized	TCW: Securitized Opps	Baird: Core Bond	Franklin Templeton: Global MS Plus	Loomis Sayles: Multisector FD
Columbia Threadneedle: Structured Credit	1.00	0.72	0.82	0.37	0.25	0.61
Schroder: Opp Multi-Sector Securitized	0.72	1.00	0.86	0.31	0.32	0.59
TCW: Securitized Opps	0.82	0.86	1.00	0.55	0.23	0.69
Baird: Core Bond	0.37	0.31	0.55	1.00	-0.09	0.67
Franklin Templeton: Global MS Plus	0.25	0.32	0.23	-0.09	1.00	0.38
Loomis Sayles: Multisector FD	0.61	0.59	0.69	0.67	0.38	1.00
Bloomberg US Securitized	0.08	-0.05	0.16	0.83	-0.24	0.30

Performance and risk characteristics shown reference estimated net of fees returns using the stated manager fee schedules.

Fixed Income Characteristics

	Average Quality Issue	Weighted Average Coupon	Yield to Maturity	Average Maturity (Years)	Effective Duration (Years)
Securitized					
Columbia Threadneedle: Structured Credit	A	3.4%	5.3%	3.9	-0.8
Schroder: Opportunistic Multi-Sector Securitized	BB	1.7%	5.8%	1.8	0.1
TCW: Securitized Opportunities	BBB	1.3%	4.4%	5.1	1.2
Incumbents					
Baird: Core Bond	AA-	2.8%	3.2%	8.4	6.6
Franklin Templeton: Global Multi-Sector Plus	BBB	3.8%	6.3%	2.8	1.7
Loomis Sayles: Multisector Full Discretion	BBB	3.4%	4.3%	6.6	4.5
Bloomberg US Securitized	AAA	2.6%	3.0%	6.9	5.1

Issue Allocation

	Gov't/ Gov't Related	Inv. Grade Credit	High Yield	Bank Loans	Agency RMBS	Non-Agency RMBS	CMBS	ABS (Non- Mtg.)	CMO	CLO	Non-US	EMD	Other
Securitized													
Columbia Threadneedle: Structured Credit	0%	0%	0%	0%	26%	42%	7%	15%	0%	0%	9%	0%	0%
Schroder: Opportunistic Multi-Sector Securitized	0%	0%	2%	0%	1%	28%	16%	15%	0%	12%	19%	0%	8%
TCW: Securitized Opportunities	0%	0%	0%	0%	6%	20%	23%	20%	30%	0%	0%	0%	0%
Incumbents													
Baird: Core Bond	27%	28%	0%	0%	18%	2%	6%	2%	0%	0%	14%	0%	2%
Franklin Templeton: Global Multi-Sector Plus	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	74%	26%
Loomis Sayles: Multisector Full Discretion	13%	29%	19%	0%	0%	0%	3%	17%	0%	0%	1%	6%	10%
Bloomberg US Securitized	0%	0%	0%	0%	92%	0%	7%	1%	0%	0%	0%	0%	0%

Allocation to "Other" consists of: Baird (cash and cash equivalents), Franklin Templeton (Cash and cash equivalents), Loomis Sayles (convertibles, cash and cash equivalents), Schroder (CRE Loans, Cash, derivatives).

Appendix III: Best and Final Fees – Full Fee Schedules

Fee Schedules:

Columbia Threadneedle

First \$50 million:	.24%
Balance:	.22%

Schroders

First \$350M	0.60%
Next \$350M	0.55%
Next \$300M	0.50%
Thereafter	0.45%

TCW

First \$500mm	0.50%
Next \$500mm	0.32%
Next \$500mm	0.15%
Thereafter	0.10%



City of Jacksonville Employees' Retirement System

INVESTMENT ACTIVITY UPDATE: May 2022

Events

Board Due Diligence Meetings

1st Thursday Each Month

Presentation: 12:30-2 PM

City Hall Conference Room 3C

June 2, 2022

Systematic- US SMID Value Equity

July 7, 2022

Kayne Anderson-US SMID Value Equity

August 4, 2022

Loomis Sayles- Fixed Income

September 1, 2022

Baird- Core Fixed Income

October 6, 2022

Hamilton Lane- Private Credit

November 3, 2022

UBS Trumbull - Real Estate

December 1, 2022

January 5, 2023

Staff Update

Contract Status

N/A

Other

Hancock Timber

Remaining timberland (TX/LA)
sale on track, proceeds expected
early 3Q22

Abacus Capital – Real Estate

Multifamily Partners VI Fund
-BOT action requested

Securitized Fixed Income

The TCW Group
Columbia Threadneedle
Schroders Investment Mgmt

Meeting Current Managers

Adams Street – PE

ICG- PC (Hamilton Lane PC
investment)

Meeting Prospect Managers

Abacus Capital

CapRidge- RE

Evergreen- Alternative

JP Morgan- PC

Linchris- RE

Loop Capital- FI

PGIM- Equity

PIMCO- FI

RBC- FI

Wellington

Cash Flows

Hamilton Lane-Private Credit

Total Monthly Called:

Carlyle

Capital Call: \$1.15 M

Distributions: \$0.2 M

Total Net Call: \$940,000

Adams Street- Private Equity

Capital Call: \$0

Total Called: ~\$28.0 million

Provider Disbursements

5/31/2022

Acadian: \$195,000 (monthly)

Baird : \$120,000

Bloomberg: \$3,500

Eagle Capital: \$473,000

Franklin Templeton: \$80,500

Kayne Anderson: \$72,000

Pinnacle: \$135,000

Systematic: \$84,000

Silchester: \$120,000 (monthly)

UBS RE: \$183,000

Total Fees: \$1,466,000

Provider Redemptions

None

CITY OF JACKSONVILLE RETIREMENT SYSTEM



CITY OF JACKSONVILLE CORRECTIONS OFFICERS RETIREMENT PLAN

SUMMARY PLAN DESCRIPTION

January 31, 2022

INTRODUCTION

This document is intended to be a plain language summary of the administration and benefits provided by the City of Jacksonville Corrections Officers' Retirement Plan (also known as the "Corrections Officers' Pension Plan" or "COPP"). The COPP is designed to provide members with a lifetime of income once they retire and also includes provisions for disability and death benefits.

The following pages contain valuable information describing the main features of the COPP, including:

- When eligible members qualify for retirement;
- How the pension is calculated and how it can be paid including the Deferred Retirement Option Program (DROP);
- The benefits available to surviving spouses and minor children in the event of the member's death; and
- Additional information that will help you plan ahead.

While efforts have been made to provide an accurate summary, this document is not an official plan document and actual benefits are governed by the appropriate provisions of the actual statutes and ordinances which created the COPP. **If there are conflicts between those legislative provisions and this Summary Plan Description, the COPP will ultimately be administered and benefits will be provided only in accordance with the legislative provisions.** This Summary Plan Description is solely intended as a guide to COPP benefits and is not intended to

create a contract or promise of any specific benefit. **Nothing in this document is intended to, nor does it create a contract for benefits greater than provided by law.** Any questions you have regarding your rights or benefits under the COPP should be directed to the Pension Office.

This Summary Plan Description explains how the COPP works and what it can mean to you as you go about the process of planning for your financial future. Please read these materials carefully and share them with your family and trusted advisors.

LEGAL DOCUMENTS CREATING THE COPP

The COPP arises out of Chapter 16 of the City Charter, Chapter 120 of Ordinance Code of the City of Jacksonville, and Chapter 112, Part VII, Florida Statutes. The City Charter and Code provisions are available for inspection at no cost through the free on-line library. The Florida Statutes are also available on-line at the Florida Legislature's website.

COPP BENEFITS

The COPP is a contributory "defined benefit" public employee retirement plan. The COPP is established under Section 401(a) of the Internal Revenue Code and has been designated as a qualified plan by the Internal Revenue Service. Members make contributions to the COPP by payroll deduction on a pre-tax basis and the retirement benefit is calculated by a predetermined formula that produces a "defined benefit" over the life of the member and the surviving spouse of the member if applicable. The formula used to calculate the benefit is based on the number of years of service and takes into account the salary earned by the member.

COPP ADMINISTRATION

The responsibility for the proper and effective operation of the COPP and for implementing the provisions of the Code is entrusted to the Pension Board of Trustees (BOT). The BOT consists of the following individuals:

1. The Chief Administrative Officer of the City or designee;
2. The Chief Financial Officer or designee;
3. The Chief Human Resources Officer;
4. The Chairperson of the General Employees Pension Advisory Committee;
5. The Chairperson of the Corrections Officers Advisory Committee;
6. A General Employee retiree chosen by the Retired Employees Association;
7. A COPP retiree officer chosen from among the retirees of that plan;
8. One citizen appointed by the City Council with professional experience in either finance, investments, economics, pension management, pension administration and/or accounting; and
9. Another citizen appointed by the City Council with the same qualifications listed above.

There is also a Corrections Officers' Pension Advisory Committee (COPAC) that consists of five (5) elected members that are all active employees participating in the COPP. The COPAC reviews activity and recommends actions to the BOT related to membership, benefits, disability applications, updates of System documents, and other administrative matters related to the fulfillment of COPP provisions outlined in the Code.

Day-to-day record-keeping, processing and customer service functions for the COPP are conducted through the Pension Office which is overseen by the Pension Administration Manager. Additionally, the City Treasurer is responsible for administrative oversight and financial management of the COPP.

ADMINISTRATION OF COPP

- Pension Board of Trustees (BOT)—Responsible for overall administration and implementation of the statutes and ordinances providing for COPP benefits
- Corrections Officers' Pension Advisory Committee (COPAC)—Provides oversight and review of COPP including recommendation to the BOT regarding benefits, documentation and other administrative matters
- Treasury Division—Oversees financial management of COPP and the Pension Office
- Pension Office—Responsible for the day-to-day operation of the COPP and for providing support as necessary to Treasury, COPAC and BOT for all COPP functions.

PENSION OFFICE SERVICES

The Pension Office is available to assist employees, former employees, retirees, survivors and others with needs and questions related to the COPP.

TO CONTACT THE PENSION OFFICE: CALL: 904-255-7280

PORTAL: <https://jaxpensionportal.coj.net>

WEBSITE: <http://www.coj.net/departments/finance/retirement-system>

E-MAIL: citypension@coj.net (Please do not send sensitive information via e-mail unless secured)

LOCATION:

117 West Duval Street, Suite 330

Jacksonville, FL 32202

For in-person visits, members are encouraged to contact the Pension Office and setup an appointment in advance. Most requests can be handled by phone or e-mail.

COMMON SERVICES FOR ACTIVE MEMBERS AND FORMER EMPLOYEES

- Answering GENERAL QUESTIONS
- Calculating ESTIMATES of benefit amounts
- COUNSELING members regarding their COPP benefits and options
- Handling requests for credited SERVICE TIME PURCHASES
- Payment of CONTRIBUTION REFUNDS for non-vested employees leaving their positions
- Processing new age 65 TERM VESTED benefits
- Processing new RETIREMENTS and DROP elections and payments
- COMMUNICATIONS and SYSTEM UPDATES regarding COPP benefits

COMMON SERVICES FOR RETIREES

- Processing BENEFIT PAYMENTS
- Providing AWARD LETTERS/PENSION INCOME VERIFICATION LETTERS
- Processing CHANGE OF ADDRESS requests
- Processing DIRECT DEPOSIT changes and STOPPING DEDUCTIONS
- Updating TAX ELECTIONS using W4P forms
- Receipt of DEATH NOTIFICATIONS for retirees and survivors and processing SURVIVOR BENEFIT requests
- Conducting RETIREE VERIFICATIONS which requires retirees to return a form with their current information
- Annual distribution of 1099R TAX FORMS
- COMMUNICATIONS and SYSTEM UPDATES regarding COPP benefits

IMPORTANT DEFINITIONS

Some of the terms used in the Summary Plan Description have special meaning as applied within the COPP. A few of these terms are defined below:

Accumulated Contributions. The sum of all amounts deducted (or “picked-up”) from a member’s compensation on behalf of a member.

Credited Service. Membership credit upon which a member’s eligibility or benefit amount is based. Credited service is the number of years and months of full-time employment at the City (or for an eligible employer) for which employee pension contributions are made. Credited service generally starts on the first day of membership in the COPP and ends upon termination of employment or DROP entry. Member contributions are required to receive credited service. The pension date (or adjusted pension date) reflects the starting period for credited service. Pension date can be the date of hire, the date contributions started in the COPP or another date reflecting changes for breaks-in-service, leave without pay or purchased service time.

Earnable Compensation. A member’s 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. Earnable compensation does not include payouts of accumulated leave taken as cash upon separation from service or amounts above a member’s IRS compensation limits. Some incentive pay is included in earnable compensation. The Pension Office can answer any questions about eligible pay.

Final Monthly Compensation. The member’s average monthly rate of earnable compensation for his/her highest 36 consecutive months (78 bi-weekly pay periods) out of the last 10 years of employment. Pay-periods with unpaid leave time are generally excluded.

Member. A person actively employed by the City (or eligible employer) making contributions to the COPP.

Vesting. The point at which a member has earned a right to retirement benefits. Any member who completes five years of credited service has a fully vested right to accrued benefits.

Vested Benefit. An immediate or deferred benefit to which a member has gained a non-forfeitable right to a present or future (at Age 65) benefits offered by the provisions of the COPP.

COPP MEMBERSHIP ELIGIBILITY

In order to be eligible for membership, a person must meet the following conditions:

- 1) Hired prior to October 1, 2017 in a position covered by the COPP
- 2) Employed as a full-time Corrections Officer of the City of Jacksonville

Corrections Officers hired October 1, 2017 and later become members of the Public Safety Defined Contribution Plan (PSDC).

Previous members of the COPP that left employment may potentially re-enroll in the plan upon re-hire as a Corrections Officer as long as they were vested and did NOT remove their contributions from the COPP. To re-enroll, employees must notify Employee Services and the Pension Office upon being rehired as a Corrections Officer. Employees cannot actively contribute to both the COPP and the PSDC.

MEMBERSHIP

Employees must have been hired as a Corrections Officer PRIOR to OCTOBER 1, 2017 to potentially be a member of the COPP.

PURCHASING CREDITED SERVICE

Members are eligible to purchase previous full-time service with the City by paying their current contribution rate if they did not previously make contributions for that period. Payments may be made by (i) lump sum payment, (ii) roll over from another qualified retirement plan, (iii) payroll deductions, without interest, over a period not to exceed five years, or (iv) a combination of these payment options.

Members in receipt of Workers' Compensation may make contributions to the COPP which would have been made had the member been in regular pay status to continue to accrue credited service for up to six (6) months.

Members on approved leave of absence without pay status, who are not terminated from employment, may elect to make contributions and receive credited service for up to six months.

Members who are vested may purchase up to two years of active-duty military service as credited service. Military service may be active duty, war time, or non-wartime service, provided that non-wartime service shall not exceed one year. All military service purchased under this section must have occurred prior to any employment with the City. Military service may be purchased at the rate of 20% of the member's earnable compensation.

Members with prior full-time paid service at a defined agency of the City may also be entitled to purchase credited service time at full actuarial cost if certain conditions apply. Those agencies include: Duval County prior to consolidation, any agency of the judicial branch of government in

Duval County also covered under FRS and not currently covered by this Plan, State Attorney in Duval County, Public Defender in Duval County, Jacksonville Transportation Authority, Duval County School Board, former Duval County Hospital, employees or officers of any Duval County constitutional officer who served under the FRS, Agriculture Department employees who participated in FRS, Jacksonville Port Authority, Jacksonville Aviation Authority, the Medical Examiner’s Office, and certain corrections officers for the Florida Department of Corrections. Members must provide proof of their full-time employment and proof that they did not and will not (and have not) receive a vested benefit from FRS or another retirement plan offered by the agency.

A member wishing to purchase credited service must make the request to the Pension Office and complete the purchase prior to leaving employment.

CREDITED SERVICE PURCHASE SUMMARY—MUST BE ACTIVELY EMPLOYED			
Type of Time	How long	Cost	Notes
Full-time worked without contributions	Unlimited	10% of CURRENT pay	
Workers Comp	Time on workers comp up to 6 months	Contributions based on regular pay status	
Approved Unpaid Leave	Up to 6 months	10% of CURRENT pay	
Military Time	Up to 2 years for	20% of CURRENT pay	Must be vested (5

Type of Time	How long	Cost	Notes
	approved wartime service; up to 1 year for other approved service		Years Credited Service) and provide DD Form 214, Certificate of Release or Discharge from Active Duty
Outside Agency Time	Time worked	Full Actuarial Cost	Complete list of eligible agencies available online and through the Pension Office. Proof of full-time employment and divestiture of retirement benefits from agency required.

RETIREMENT ELIGIBILITY AND BENEFITS

Service Retirement. Members of the COPP are eligible to retire with a normal pension benefit upon achieving one of the following:

- (1) completing 20 years of credited service, regardless of age; or
- (2) attaining age 65 with 5 years of credited service.

There is no mandatory retirement age.

Upon reaching one of the two conditions for retirement described above, a member is entitled to a retirement benefit of 3.0% of final monthly compensation (as defined above), multiplied by the number of whole years (and partial credit for whole months) of credited service up to 20 years plus 2.0% for time over 20 years, up to a maximum benefit of 80% of final monthly compensation.

Retirement from active status starts the day after the last-day-worked (“last-day worked” is defined as the last day for which an employee receives regular base pay salary). Retirement benefit payments cannot start before final active payroll is received and verified by the Pension Office. Retirees should allow at least one to two pay-periods after the final active payroll before retirement payments start. The initial payment will give credit back to the retirement date if eligible. Payments will continue until death.

SUMMARY:

<u>RETIREMENT ELIGIBILITY (Retirement directly from active employment)</u>
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<u>Normal Retirement</u>

- | |
|---|
| <ul style="list-style-type: none">• 20 Years Credited Service• 5 Years Credited Service AND Age 65 |
|---|

NORMAL RETIREMENT BENEFIT AMOUNT

Credited Service (Using Years and Whole Months Up to 20 Years)

X

Accrual Percentage (3.0%)

Plus

Credited Service (Using Years and Whole Months Over 20 Years)

X

Accrual Percentage (2.0%)

X

Final Monthly Compensation

=

Monthly Benefit Amount

Monthly benefits are paid as bi-weekly amounts every two weeks until death.

Cost-of-Living Adjustment. Each retiree and survivor is eligible for a cost-of-living adjustment (“COLA”) December 1 of each year. The COLA consists of a 3% increase of the retiree’s or survivor’s pension benefits, which compounds annually. The COLA happens in the first full pay period of December for eligible retirees and survivors.

Supplement. In addition to the regular retirement benefit, there is also a supplemental benefit. The supplement is equal to \$5 multiplied by the number of years of credited service. This benefit may not exceed \$150 per month.

Retirees receive the full supplement within the first two payments of each month. If there is a third pay-period in the month it will NOT include a supplement since it was already paid in full earlier in the month.

LEAVING EMPLOYMENT BEFORE ELIGIBILITY FOR RETIREMENT

Less than five years of credited service. A member who leaves the service of the City as a Corrections Officer prior to completing five years of credited service is NOT entitled to any retirement benefits from the COPP except a refund of employee contributions with no interest. **Once the funds are paid there will be no future benefit available from the COPP.**

Refund applications are available to members from the Pension Office after leaving employment as a Corrections Officer. Refund of contributions can be taken as direct payments (with mandatory 20% federal tax withholding) or as rollover payments, subject to rollover eligibility. Refund of contributions will not be made before final active payroll is received and verified by the Pension Office. Members completing a refund request should allow at least one to two pay-periods after final active payroll before they receive a refund of contributions. Members considering a refund of contributions should review the provided tax notice, consult with a financial advisor and carefully consider all of the consequences of the decision related to their individual situations.

More than five years of credited service. A member who leaves the service of the City as a Corrections Officer prior to eligibility for normal service retirement, but who has completed five years of credited service (and has NOT taken a refund) is eligible to make application for a vested

benefit commencing at age 65 at a 3.0% accrual rate for each year of creditable service. Such benefits will be based on final monthly compensation and credited service as of the date of termination as a Corrections Officer. At commencement, the benefit will include the supplement and be eligible for COLAs. A member should apply for a vested benefit within 90 days of leaving employment.

Members can also request a refund of employee contributions with no interest. This election can be made up to six months prior to commencement of a vested benefit. Once the funds are taken there will be no future benefit available from the COPP.

Death of a separated vested (or non-vested) member/former employee will result in the return of employee contributions to the surviving spouse. If there is no surviving spouse, the employee contributions are paid to the estate.

Members that retain a vested benefit are eligible to re-join the Plan and earn additional benefits if they are hired in a position that is eligible for the COPP.

RECEIVING OR TAKING A REFUND OF EMPLOYEE CONTRIBUTIONS RESULTS IN A FORFEITURE OF ALL FUTURE COPP BENEFITS.

MINIMUM RETIREMENT BENEFIT

The minimum retirement benefit received by a vested member was originally \$25 multiplied by the number of whole years of credited service not to exceed 30 years. For members retiring on or

after August 14, 1995, the minimum payment is increased at a compounded rate of 4% annually on each October 1. The minimum benefit per year of service as of October 1, 2021, is approximately \$72 per year of service not to exceed 30 years.

DEFERRED RETIREMENT OPTION PROGRAM (DROP)

If eligible, a member may elect to join the Deferred Retirement Option Program, or DROP. Actively employed members of the COPP are eligible to join DROP after they reach 20 years of Credited Service. The entry date is the first full pay-period in January, April, July and October. Members that elect DROP have credited service and final monthly compensation frozen for purposes of determining pension benefits. The supplement amount due in retirement is also frozen based on credited service at DROP entry-date. DROP members accrue their deferred retirement benefits plus interest and they are eligible to receive the DROP benefits (along with regular pension benefits) at retirement. When joining DROP the payroll deduction for participation changes from 10% to 2% of earnable compensation.

Eligible COPP members can elect DROP by completing the approved forms and returning them to the Pension Office prior to the next DROP entry date.

Once approved, DROP entry is irrevocable unless an employee currently in DROP becomes an elected or appointed employee and revokes the DROP election. DROP participants are not eligible for disability benefits offered under the COPP. Survivor benefits will apply to DROP members.

DROP TIME-PERIOD

For members that enter DROP prior to 30 years of credited service the maximum time-period to participate in DROP is 130 bi-weekly pay-periods. For members that enter with 30 years but less than 31 years the maximum is 78 bi-weekly pay-periods. For members that enter with 31 years but less than 32 years the maximum is 52 bi-weekly pay-periods. Members are not eligible to enter DROP after reaching 32 years of service. Employees in DROP can choose to retire before the maximum time-period. The DROP entry-date is the first payroll date with the 2% deduction. DROP entry-date is also the date for the first DROP credit. DROP termination is the last payroll date for which a member worked a full pay-period. (Employment termination is typically a week prior to DROP termination.)

ENTERING DROP MEANS YOU ARE AGREEING TO TERMINATE EMPLOYMENT AT THE END OF YOUR DROP PERIOD. YOU CAN OF COURSE LEAVE SOONER THAN THAT IF YOU CHOOSE.
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DROP CREDITS AND INTEREST

DROP credits are applied for DROP members with each full payroll of participation up to the maximum time-period. Credits are applied on pay-dates. DROP contribution credits include calculated base pension plus COLA but do not include the retiree supplement. COLA increases applied each December will apply to DROP credits. DROP credits end with the final full pay-period of participation.

DROP Interest is credited on a monthly basis as of month-end. The Pension Office credits monthly interest using the 1-year net rate of the Fund published by the Plan Custodian. Interest is typically credited for the month by the end of the following month or sooner if feasible. The minimum annual rate used is 2% (0.167% monthly) and there is no maximum rate.

DROP members can obtain updated DROP information through the pension portal or the Pension Office.

DROP interest is credited after DROP termination for up to 90 days as long as funds remain in DROP as of month-end within 90 days of DROP termination. DROP termination is the last payroll date that a DROP bi-weekly deposit occurs.

DROP PAYMENT OPTIONS

Upon termination of employment and retirement, DROP members have the following options:

1. DROP Phase 2. Under this option the COPP retiree elects to receive the DROP balance over a period of time, up to a maximum time-period determined by approved mortality tables. The total balance divided by the elected pay-periods determines the bi-weekly amount added to the retiree bi-weekly payment until the DROP benefits are depleted. Annually, after September 30, interest is applied to the DROP Phase 2 balance based on the average balance for the year and the 1-year net rate of the Fund published by the Plan Custodian as of 9/30. The minimum annual rate used is 0% and the maximum rate is 14%. The bi-weekly payment is adjusted when interest is credited. Once DROP Phase 2 is

elected it cannot be changed except allowing for the retiree to take a 100% payment of the remaining balance as a lump-sum or a rollover.

2. Direct rollover payment paid to an eligible tax-deferred account such as an IRA or a qualified retirement plan. No taxes are withheld for direct rollover payments. This election can be made for any amount up to 100% of the available DROP benefits.
3. Lump sum payment paid directly to the member. The Pension Office is required to withhold 20% for federal taxes for lump sum payments made directly to the member. This election can be made for any amount up to 100% of the available DROP benefits.

DROP members can choose a combination of the options listed above as well.

DROP members may elect to delay receiving their lump-sum or Phase 2 payment. Interest credits apply for 90 days following termination of DROP. After 90 days no further interest will be applied to DROP benefits unless DROP Phase 2 is elected.

<u>SUMMARY OF DROP</u>

- | |
|--|
| <ul style="list-style-type: none">• COPP Members are generally eligible for DROP after reaching 20 years of Credited Service in the pension• Base pension is frozen upon entry and COLAs start during DROP participation• DROP members earn bi-weekly base pension and COLA credits in DROP and also get interest credited monthly• The maximum period of DROP participation is 130 pay-periods (approximately 5 years) |
|--|

- DROP funds are available at retirement as a lump-sum payment, a rollover or a series of payments over time

APPLYING FOR BENEFIT PAYMENTS

A member may apply for a service retirement benefit by contacting the Pension Office. It is best to make the request 4-6 weeks in advance of your retirement date. Members will need to identify a retirement date based on the day after the last day employed. Employees are encouraged to choose a termination date at the end of a pay-period (Fridays in between pay-dates). Employees should consider the pay-out of accrued leave when determining retirement date.

The Pension Office will complete a detailed review of records and pension benefits. The member will be provided with an estimate of retirement benefits. **Please keep in mind that final benefits may change based on changes to information or additional review.**

Members will be required to sign an election form and provide certain information. Examples include: direct deposit information, W4P for tax elections, signed retiree checklist, rollover detail if applicable and identification with proof of birth for members and spouses and proof of marriage if applicable. Contact information for the Pension Office including the Pension Office website is included in this document.

The Pension Office provides communications regarding initiation of vested benefits just prior to age 65. A form is available on the website for refund of contributions for members no longer

employed. Former employees that choose to take a refund of employee contributions forfeit all future benefits from the Plan. You can also contact the Pension Office to commence these benefits.

TAX WITHHOLDING

Ongoing service-retirement benefits and non-service-related disability pensions are taxable and subject to federal withholding. Retirees will complete a W4P form in order to calculate required federal withholding for ongoing retirement benefits.

Lump-sum payments taken as direct payments are subject to mandatory 20% federal tax withholding. Some lump-sum payments may be eligible for rollover.

The retiree will receive a tax form from the COPP at the end of each January reporting the income received in the prior year. For specific tax advice you should consult a qualified tax expert.

Keep in mind some medical deductions may be tax-exempt for former public safety employees up to an allowed limit. Please consult with your health care administration provider or a tax professional for more details.

RETURNING TO WORK AFTER RETIREMENT

Employment outside the City or eligible employer does not affect your retirement benefits.

Retired employees may return to work on a part-time basis (defined as 50 hours or less per 2-week

pay-period) and continue to receive their pension benefit. The same is true for retired employees rehired into temporary positions (positions designated as 6-months or less).

Retired employees in the COPP may also be rehired (full-time, part-time or temporary) as a court bailiff and continue to receive COPP pension benefit payments. The same applies to other positions covered by the Code as an exception including logistical and technical support officer, corrections bond custodian, chaplain, stable manager, corrections mail coordinator, aviation supervisor, court bailiff supervisor, Community Projects inmates work crew supervisor, or temporary corrections officer (if eligible).

If a retiree returns to work for the City in a full-time position covered by the COPP or one of the Defined Contribution Plans offered under Chapter 120, all retirement benefit payments will cease for the period of re-employment unless the position qualifies as an exception. Members that are hired again to a position eligible for the COPP that did not enter DROP will continue participation in the COPP. An updated benefit will be calculated when the member leaves employment again or enters DROP. Members that rejoin and work LESS than four years in the new period can earn an updated benefit based on the new employment period using the original final monthly compensation. Members that rejoin and work MORE than four years in the new period can earn an updated benefit based on the new employment period using a newly calculated final monthly compensation. The COLA wait period will restart for members that receive an updated benefit.

Retired COPP pensioners rehired full-time that are NOT eligible to re-join the COPP will join the applicable DC Plan if eligible. The rehired member's benefits in the COPP will be frozen at the

level in effect at the time of re-employment and will re-commence at the same amount (with COLAs applied if applicable) upon separation from service. (No payments are due for the period the rehired pensioner was employed.)

DEATH AFTER RETIREMENT

Upon the death of a retired member, the surviving spouse receives 75% of the member's retirement benefit and the full supplement. In order to qualify as a surviving spouse, the spouse must be married to and living with the member at the time of the member's death and have been married to the member for a minimum of 365 days immediately prior to death. The surviving spouse's benefit will continue until death and is not affected by remarriage. If there are dependent children under the age of 18, the benefit is increased by 10% for each child to a maximum of 100% of the retiree's pension. Any increase for a surviving minor child is paid to the child at the direction of a guardian of the child and stops when the child turns age 18.

Orphaned children under the age of 18 are entitled to the same benefit as a surviving spouse without children, not to exceed the amount of the surviving spouse benefit in total. The benefit will continue until their marriage or until they reach the age of 18. Children under the age of 18 whose parent is a retiree of the COPP shall receive a benefit of \$300 per child per month upon the death of the retiree where no other survivorship benefit is available, but not to exceed the member's maximum benefit. The benefit continues until the earlier of the child's marriage or reaching age 18. Survivor benefits for eligible disabled children under age 18 may be payable for the life of the child subject to review.

DEATH BENEFITS AFTER RETIREMENT

- Eligible Spouses receive 75% of the retiree's base benefit with COLAs and the full supplement
- Additional benefits provided for surviving children under age 18
- Remaining employee contributions payable to estate if not exhausted and no other survivor benefit is payable

ACTIVE DEATH PRIOR TO RETIREMENT

If an active employee member of the COPP dies before retirement, and is not eligible for a time service retirement, the surviving spouse will receive 75% of the pension the member would have received if the member retired with a time service retirement based on a 2% annual accrual rate. Service time will apply based on assuming the employee would have worked until the first point of retirement eligibility (not early retirement). If the member was eligible for a service retirement, the base benefit will be calculated as if the deceased member was a retiree, and the spouse will receive 75% of the base benefit. The spouse will also receive the full supplement based on actual full years of service worked by the member. The benefits will be increased by 10% for each of the member's children under the age of 18, up to a maximum of 100% of the member's pension benefits. Any increase for a surviving minor child is paid to the child at the direction of a guardian of the child and stops when the child turns age 18.

Orphaned children under the age of 18 are entitled to the same benefit as a surviving spouse without children, not to exceed the amount of the surviving spouse benefit in total. The benefit will continue until their marriage or until they reach the age of 18. Children under the age of 18 whose parent is a member of the COPP shall receive a benefit of \$300 per child per month upon

the death of the member where no other survivorship benefit is available, but not to exceed the member's maximum benefit. The benefit continues until the earlier of the child's marriage or reaching age 18. Survivor benefits for eligible disabled children under age 18 may be payable for the life of the child subject to review.

DEATH BENEFITS FOR MEMBERS THAT DIE AS ACTIVE EMPLOYEES

- If member was NOT retirement eligible, base benefit is based on a 2% accrual and assumes service time until retirement eligibility (supplement is based on actual service time)
- If member was retirement eligible, base benefit calculated assumes the member was a retiree
- Eligible Spouses receive 75% of the member's base benefit with COLAs and the full supplement
- Additional benefits provided for surviving children under age 18
- Remaining employee contributions payable to estate if not exhausted and no other survivor benefit is payable

DISABILITY BENEFITS

A member who has suffered an illness, injury or disease which renders the member permanently and totally incapacitated, physically or mentally, from regular and continuous duty as a corrections officer of the City is considered disabled under the terms of the Retirement System. The Retirement System provides two types of disability benefits: a service-related disability benefit, and a non-service-related disability benefit.

Service-related disability. A service-related disability is a disability arising from an accident, illness or injury arising in the performance of service with the City. The service-related disability benefit is 50% of the member's final monthly compensation at the time of the disability.

Non-service-related disability. A member is only eligible for a non-service-related disability retirement upon completion of five years of credited service. A non-service-related disability retirement is 25% of the member's final monthly compensation at the time of the disability. For each year of service in excess of five years, the benefit shall be increased 2.5% to a maximum of 50%.

Payments of disability benefits are payable each pay-period after termination and will continue until the recovery from the disability or death. A supplement is paid as part of the benefit and COLAs apply for eligible retirees. Upon the death of member who is in receipt of disability benefits, an eligible surviving spouse shall receive 75% of the disability benefit, payable for life.

A disability benefit cannot be based on a condition which pre-existed membership in the Plan.

A member who receives a disability pension may be reexamined by the BOT or COPAC at any time, and if found to have recovered, must resume active service with the City if a position offered. If a member recovers, yet refuses re-employment with the City, the disability retirement benefits will be terminated.

DISABILITIES THAT DO NOT QUALIFY

A member may not receive disability benefits if the disability is the result of: (1) excessive or habitual use of drugs, intoxicants, or narcotics by the member; (2) an injury or disease sustained by the member while willfully and illegally participating in fights, riots, or civil insurrections, or while committing a crime; (3) an injury or disease sustained while the member was serving in the armed forces; or (4) self-inflicted wounds or conditions.

APPLYING FOR A DISABILITY RETIREMENT BENEFIT

A member must complete an application on a form provided by the Pension Office. Application for disability benefits must be made while still a member of the COPP, meaning still actively employed at the time of application. As part of the application, the member must agree to any medical releases necessary to permit the Pension Office, the City's Medical Review officers, COPAC and BOT to review the medical records needed to determine the question of disability. The member will also be required to submit to medical examinations as requested.

Once the application and medical review is completed it is presented to the COPAC. The COPAC can request more information, deny the application or recommend approval to the BOT. If denied, the applicant can request an evidentiary hearing. The COPAC will provide a recommendation following the hearing. At that stage the applicant can appeal directly to the BOT if necessary. The BOT makes the final determination on the question of disability.

DISABILITY RETIREMENT STEPS

1) APPLICATION—Submit Application including medical information and releases. Must be completed

while still employed. Two physician's statements are requested.

2) INITIAL REVIEW AND MEDICAL EXAMINATION—Application and medical information is reviewed by the Pension Office and Medical Review Officers. Applicant required to complete any requested medical examinations and produce any additional requested information at this stage.

3) COPAC REVIEW—COPAC considers case resulting in: request for more information, denial, or recommendation to BOT for approval. Applicants can request an evidentiary hearing with the COPAC based on results.

4) BOT REVIEW—Final stage of process before approval.

FORFEITURES

Members that separate from service before vesting will not receive any benefits from the COPP, although you are entitled to a refund of your contributions. In addition, benefits are forfeitable pursuant to the provisions of Section 112.3173, Florida Statutes, which provides for the forfeiture of retirement benefits of persons convicted of specific offenses even if you have vested in your benefits. Pension benefits may also be forfeited if you are terminated by reason of your admitted commission, aiding or abetting of a specified offense.

DIVORCE, IDOs, IWOs, QDROs

Pension benefits are considered marital property subject to division in a divorce proceeding. While the benefits are not subject to distribution until after a member terminates employment with the City, a court can determine that upon distribution, a certain portion of the pension benefits may be awarded to a former spouse through the Domestic Relations Depository.

The State has provided that Income Deduction Orders (IDOs) or Income Withholding Orders (IWOs) for alimony and child support are mandatory court orders that the Pension Plan must follow. IDOs and IWOs are taken from benefit checks and remanded directly to the DOMESTIC RELATIONS OFFICE for distribution to the spouse. Separate pension checks are not issued to the former spouse. To be approved, the IDO or IWO must include the bi-weekly amount, must be marked as alimony or child support (no other reasons will be accepted including equitable distribution of marital assets), and indicate payment issued to the State.

Qualified Domestic Relations Orders (QDROs) are NOT accepted for payment of benefits to a former spouse or family member.

Divorce laws can be quite complex. Therefore, you may wish to speak to legal counsel to discuss your personal circumstances.

COPP RECORDS AND MEEETINGS

The Treasury Division and Pension Office keeps accurate and detailed accounts of all investments, receipts, disbursements, and other transactions pertaining to the COPP. The Pension Office keeps a record of all BOT and COPAC proceedings and they are available for public inspection. The BOT and COPAC meetings are open to the public.

HIGHLY COMPENSATED CONSIDERATIONS

Some highly compensated members may be subject to limits and receive different benefits from the COPP based on IRS limits including Section 415 and Section 401(a)(17). The Pension

Office provides members detail regarding these limits as needed.

COLLECTIVE BARGAINING AGREEMENTS

For employees represented by bargaining units, retirement benefits are subject to collective bargaining under the Florida Public Employees Labor Relations Act, Chapter 447, Part II, Florida Statutes, as interpreted by the Florida Supreme Court, and may be negotiated from time to time. Any contract provision must be made effective by changing the ordinances which govern this Retirement System.

COPP FUNDING

Money is contributed to the COPP Trust by the members and the City. Under Florida Law, the City is responsible for making certain that the COPP is actuarially sound. The required City contribution is currently determined each year by an actuarial valuation. The valuation is performed to make sure that the Retirement System is able to pay benefits to members. The member contributions and the City contributions are invested in a diversified portfolio of stocks, bonds, real estate and other permissible assets utilizing an investment policy adopted by the BOT and managed by the Treasury Division. Information regarding the COPP valuation and investments is available on the Retirement System website and through the Pension Office.

CONTACT INFORMATION

All questions should be directed to the Retirement System's Pension Office at:

City of Jacksonville Retirement System Pension Office
City Hall, St. James Building
117 W. Duval Street, Suite 330

Jacksonville, FL 32202
Phone: (904) 255-7280

E-mail: citypension@coj.net

Pension Portal: <https://jaxpensionportal.coj.net>

Pension Office Website: <http://www.coj.net/departments/finance/retirement-system>

Fax: (904) 588-0524

Municipal Code Website: <http://library.municode.com>

State of Florida Legislation Website: www.leg.state.fl.us

Official correspondence for the Retirement System, the BOT, COPAC, Treasury or the Pension Office can be sent to the address listed above. You can also send information to this address to the attention of the Pension Administration Manager or the City Treasurer.

CONTACT THE PENSION OFFICE AT 904-255-7280 OR AT CITYPENSION@COJ.NET FOR ASSISTANCE WITH ANYTHING RELATED TO THE COPP

SUMMARY

The foregoing Summary Plan Description has been designed to help answer some of your questions about how the COPP is organized and managed. The final authority on any interpretation of the COPP is the actual legislation which created it. In the event of any conflict between this summary and those laws, the COPP will ultimately be administered and benefits will be provided only in accordance with the law.

Nothing in this summary is intended to, nor does it, constitute a contract for benefits. The ordinances governing the COPP may be found within the Charter and Ordinance Code of the City of Jacksonville.

The City Code may be reviewed in the office of City Council, Legislative Services, or online at

www.municode.com. Plan website address is: <http://www.coj.net/departments/finance/retirement-system>