



**County Employees Retirement System  
Board of Trustees – Regular Meeting  
March 10, 2025, at 2:00 pm ET (1:00 pm CT)  
Live Video Conference/Facebook Live**

**AGENDA**

- |  |                       |
|--|-----------------------|
| 1. Call to Order   | Lisle Cheatham        |
| 2. Opening Statement   | Eric Branco           |
| 3. Roll Call/Public Comment  | Sherry Rankin         |
| 4. Approval of Minutes* -- December 2, 2024; December 17, 2024;<br>December 19, 2024; January 3, 2025; February 11, 2025 | Lisle Cheatham        |
| 5. Chairman’s Corner   | Lisle Cheatham        |
| a. Trustee Recognition   |                       |
| 6. Personnel Committee   | JT Fulkerson          |
| a. CERS CEO Performance Plan*  | Lori Casey            |
| 7. Finance Committee   | Bill O’Mara           |
| a. Hazardous Duty Requests*  | D’Juan Surratt        |
| b. Finance Committee Strategic Plan*   | Betty Pendergrass     |
| c. Quarterly Financial Update  | Mike Lamb             |
| 8. Investment Committee  | Dr. Merl Hackbart     |
| a. US Large Cap Equity Recommendation*   | Joe Gilbert/Wilshire  |
| b. Public Equity Performance Benchmark Recommendation*   |                       |
| c. Real Return Recommendation*   | Anthony Chiu          |
| d. Real Return Recommendation*   |                       |
| e. Quarterly Investment Update   | Steve Willer/Wilshire |
| 9. CERS Strategic Plan*  | Betty Pendergrass     |
| 10. Joint Retiree Health Plan Committee  | Jerry Powell          |
|  | Connie Pettyjohn      |
| 11. CERS Election Update/Timeline  | Kristen Coffey        |
| 12. CEO Quarterly Update   | Ed Owens, III         |
| 13. KPPA Quarterly Update  | Ryan Barrow           |
| 14. Closed Session*  | Eric Branco           |
|  | Michael Board         |
| 15. Adjourn  | Lisle Cheatham        |

\*Board May Take Action

**MINUTES OF MEETING  
COUNTY EMPLOYEES RETIREMENT SYSTEM  
BOARD OF TRUSTEES MEETING  
DECEMBER 2, 2024, AT 2:00 P.M. ET  
VIA LIVE VIDEO TELECONFERENCE**

At the Regular Meeting of the County Employees Retirement System Board of Trustees held on December 2, 2024, the following members were present: George Cheatham, Dr. Patricia Carver, Michael Foster, Jim Tony Fulkerson, Dr. Merl Hackbart, William O’Mara, Betty Pendergrass, and Jerry Powell. Staff members present were CERS CEO Ed Owens III, Ryan Barrow, Erin Surratt, Michael Board, Victoria Hale, Nathan Goodrich, Michael Lamb, Steve Willer, Leigh Ann Davis, D’Juan Surratt, Brian Caldwell, Anthony Chiu, Joe Gilbert, Connie Davis, Kristen Coffey, Phillip Cook, Ashley Gabbard, Sandy Hardin, and Sherry Rankin. Others present included Eric Branco with Johnson Branco & Brennan LLP, David Lindberg and Craig Morton with Wilshire, Danny White and Janie Shaw with GRS, and Ryan Graham with Blue & Company.

1. Mr. Cheatham called the meeting to order.
2. Mr. Branco read the *Opening Statement*.
3. Ms. Rankin took *Roll Call*.

Mr. Cheatham introduced the agenda item *Public Comment* (Video 00:07:18 to 00:10:44).

Ms. Rankin indicated there was one public comment and read as follows:

Andrew Parrish:

*Good morning, I hope you all are doing well, and I appreciate your commitment to the Commonwealth and the ones you serve. I would like to briefly introduce myself. My name is A. J. Parrish, and I currently serve as the night shift sergeant for the Paducah Police Department and am under the Tier 3 system as I joined the force in May of 2014. I am submitting this comment to you all because I want to bring to light an issue with retention*

*among law enforcement that you are likely all too familiar with. While this issue is affecting agencies nationwide, I want to focus on our issues specifically here in Kentucky. Currently, the Commonwealth offers three Tiers for retirement, but I will focus on the one that is currently in effect as of January 1, 2014, which is Tier 3. Essentially, peace officers are no longer under a pension style retirement but rather a 401K. Unlike the other retirement Tiers prior to 2014, under Tier 3, the participant has the option to leave law enforcement and take their 401K balance with them. Specifically, they are vested after 60 months (or 5 years) of employment. What this means is that instead of staying in law enforcement for 25 years, officers can now leave law enforcement at 5 years of service and go work in the private sector with their 401K. This is causing a massive strain on law enforcement agencies across the Commonwealth to retain seasoned, veteran officers. Instead, agencies are now forced to cycle through hiring young officers, send them to the academy to get trained and then hope that they will stay faithful to law enforcement for 25 years. While this seems grim, I do have a solution to this issue. In January, House Bill 143 was introduced which would afford Tier 3 participants the option of going to Tier 2. This would greatly benefit the safety and security of the communities within our Commonwealth by retaining law enforcement professionals for 25 years to reach full retirement under the pension system. I humbly request you take some time to fully research this issue and support the efforts to afford us the opportunity to go from a Tier 3 retirement system to Tier 2. I would be happy to discuss this issue further and can be reached via e-mail or phone at xxx-xxx-xxxx. Again, thank you for your time and support in this matter.*

Mr. Cheatham acknowledged that the comments have been heard and fully understands the challenges faced by our first responders. Mr. Owens III will respond accordingly.

4. Mr. Cheatham introduced agenda item ***Approval of Minutes –October 10, 2024; October 16, 2024; and November 4, 2024*** (Video 00:10:44 to 00:13:06).

Mr. Fulkerson made a motion to approve the October 10, 2024, minutes as presented. The motion was seconded by Mr. Foster and passed unanimously.

Dr. Hackbart made a motion to approve the October 16, 2024, minutes as presented. The motion was seconded by Dr. Carter and passed unanimously.

Mr. O'Mara made a motion to approve the November 4, 2024, minutes as presented. The motion was seconded by Dr. Hackbart and passed unanimously.

5. Mr. Cheatham introduced agenda item *Chairman's Corner* (Video 00:13:06 to 00:13:44). Mr. Cheatham highlighted key projects the CERS Board has been working on including the first independent SAFR (Summary Annual Finance Report) valuations, the recommended Investment Policy Statement (IPS), and the Strategic Plan. Mr. Cheatham expressed satisfaction with the progress on several outstanding legal issues.
  
6. Mr. Cheatham introduced agenda item *Actuarial Committee Report* (Video 00:13:44 to 00:26:54). Mr. Foster noted that the Actuarial Committee met on November 4, 2024, where GRS presented the draft results of the CERS 2024 Actuarial Valuation. On the same day, a regular Board of Trustees meeting was held, during which GRS presented the same draft to the CERS Board for approval. Mr. Foster introduced Mr. Danny White and Ms. Janie Shaw from GRS. Mr. White presented the highlights of the 2024 Valuation Results, noting that the required employer contribution for CERS Non-hazardous will decrease by a little over 1%, while the contribution for CERS Hazardous will decrease by 2.88%. In response to Mr. Cheatham's request for clarification, Mr. White provided a detailed explanation, emphasizing that the reduction in contribution rates was due to an increase in payroll for both non-hazardous and hazardous categories. He explained how the increase in payroll positively impacted the valuation results, leading to the decreased contribution rates. In summary, Mr. White noted it was a positive year for the CERS plans. Mr. Cheatham emphasized for the record the goal of being fully funded by the end of the actuarial period in 2049. Mr. White confirmed this timeline, explaining that the 2019 unfunded base was set with a 30-year funding period, ending in 2049. He noted that while it is too early to discuss specific actions, adjustments to the funding strategy are likely over time to avoid a steep drop in contribution rates. Mr. White assured that the current

funding amortization policy, as written in the statute, will be followed until further modifications are made.

Dr. Hackbart inquired about blending strategies to avoid the cliff effect and adjusting more quickly if investment returns follow anticipated patterns. Mr. White explained that they worked with the legislative research group on a similar issue with a bigger focus on the KRS non-hazardous system. He noted that new gains or losses each year will cause subtle changes, but the overall premise remains. Mr. White emphasized the importance of increasing the funded ratio and stated that the current funding strategy is effective.

Mr. Cheatham asked Mr. White to clarify the contribution of Tier 3 members to the unfunded liability. Mr. White explained that assets are pooled across Tiers 1, 2, and 3, unlike the separation between non-hazardous and hazardous assets. He noted that over half of the total liability for CERS non-hazardous is attributable to retirees. While nearly half of the active members are now earning Tier 3 benefits, they represent only about 10% of the total liability due to their younger age and not yet earning their full liability. Mr. Cheatham asked if the remaining Tier 1 and Tier 2 active members account for the other 40%, to which Mr. White confirmed, stating these are estimates.

A motion was made by Mr. Foster and seconded by Mr. Powell to adopt the employer contribution rates for FY 2025-2026 as presented. The motion passed unanimously.

7. Mr. Cheatham introduced agenda item ***KPPA Audit Committee Report*** (Video 00:26:54 to 00:48:09). Mr. O'Mara indicated that the draft June 30, 2024, External Audit Report would be presented first by Mr. Ryan Graham from Blue & Co. Mr. Lamb then introduced Mr. Graham from Blue & Co. Mr. Graham presented the CERS draft FYE June 30, 2024, External Audit Report which included the financial section of the annual report and GASB 67 and 74, report on internal control, and auditor communications with those charged with governance.

Mr. Lamb then reviewed the draft Annual Comprehensive Financial Report (ACFR) for the fiscal year ended June 30, 2024, with the CERS Board of Trustees. Mr. Lamb and Mr. O'Mara expressed their gratitude to all involved.

Mr. O'Mara made the motion to accept the auditor's report and approve the financial statements as presented, and Ms. Pendergrass seconded the motion. The motion passed unanimously.

Next, Mr. O'Mara introduced Mr. Lamb to present the Fiscal Year 2023 Government Finance Officers Association's (GFOA) ACFR) NTD (ACFR is defined above). Mr. Lamb noted that upon receiving the Certificate of Achievement for Excellence in Financial Reporting, the GFOA included comments on the submitted 2023 ACFR. Mr. Lamb reviewed these comments alongside management's responses. Mr. Lamb highlighted that this marks the 25th consecutive year of receiving this recognition. He noted plans to apply for two awards: one for the CERS ACFR and one for the KRS ACFR, aiming to continue the tradition. Ms. Pendergrass inquired about the Popular Financial Reporting Award, and Mr. Lamb confirmed they recently received it, noting favorable comments from the group. They plan to apply for this award again after issuing the SAFR in January. Mr. O'Mara extended congratulations to Mr. Lamb and his staff for their continued excellence.

Next, Mr. O'Mara introduced Ms. Coffey to present the Internal Audit Report. Ms. Coffey presented the summary of the November 19, 2024, KPPA Audit Committee Meeting and reviewed the items discussed during the meeting.

8. Mr. Cheatham introduced agenda item ***Investment Committee Report*** (Video 00:48:09 to 01:07:02). Dr. Hackbart reported that there were two items to present: the Investment Policy Statement and the Quarterly Financial Update. He noted that the CERS Investment Committee has held two meetings. The first was a special-called meeting on November 18, 2024, to discuss the CERS Investment Policy Statement (IPS). The second was the

regular meeting on November 26, 2024, where a variety of topics were discussed, including the financial outlook and the performance report for the first quarter.

At the special-called meeting on November 18, 2024, after thorough discussion, the Investment Committee unanimously approved the proposed IPS, subject to five minor modifications. The recommendation by the CERS Investment Committee was for the CERS Board of Trustees to ratify the actions taken by the Committee as presented. Dr. Hackbart reviewed the discussion with the Trustees, and Mr. Lindberg provided an overview of the IPS development process, emphasizing the goal of enhancing governance while ensuring staff can effectively implement and execute their responsibilities. Mr. Cheatham added that the meeting also led to the decision to create an executive summary of the IPS, which Mr. Branco is working on, to help the general public understand its contents. He further noted that any decisions made by the CERS Investment Committee will require full approval from the CERS Board.

Dr. Hackbart made a motion to ratify the CERS Investment Committee's approval of the amendments to the Investment Policy Statement as presented. Ms. Pendergrass seconded the motion. The motion passed unanimously.

Next, Mr. Willer presented the CERS Investment Office Quarterly Update for the quarter ending September 30, 2024. He noted that there was a robust discussion during the November 25, 2024, CERS Finance Committee Meeting on current market conditions and the outlook going forward. Mr. Willer provided an overview of the performance update for the quarter, highlighting the CERS Economic and Market Update, the CERS Performance and Asset Allocations, the Compliance Report, and the Capital Calls and Distributions. Additionally, Mr. Willer announced the news that Carrie Bass has officially started as the new compliance officer. She has already begun reviewing and overhauling the compliance function and reporting with plans to make enhancements in this area going forward.

9. Mr. Cheatham introduced agenda item ***Finance Committee Report*** (Video 01:07:02 to 01:14:42). Mr. O'Mara noted that the CERS Finance Committee met on November 25, 2024. He stated that the Committee is bringing to the Board for ratification the Finance Committee's approval of the Hazardous Duty Requests. Mr. O'Mara indicated a total of nine (9) requests for Hazardous Duty designation for positions in member organizations were considered. After hearing the presentation from KPPA staff, which indicated that each request had been reviewed and determined to meet the statutory guidelines for Hazardous coverage, the CERS Finance Committee voted unanimously to approve each request.

Mr. O'Mara made the motion to ratify the CERS Finance Committee's approval of the Hazardous Duty Requests as presented. Ms. Pendergrass seconded the motion. The motion passed unanimously.

Next, Mr. Lamb presented the Quarterly Financial Reports for the quarter ending September 30, 2024. He highlighted the Combining Statement for Fiduciary Net Position, Combining Statement of Changes in Fiduciary Net Position, the CERS Contribution Report, Outstanding Invoice Report, the Penalty Waiver Report, the Administrative Budget for FY 2024-2025, and the JP Morgan Chase Credit Earnings and Fees for the Fiscal Year Ending June 30, 2025. Mr. Lamb noted an error in the Budget-To-Actual Analysis in the Employee Paid FICA, Retirement, and Health Insurance line items. He assured that the updated Budget-to-Actual Analysis will be corrected going forward, and a new control has been implemented to prevent such errors in the future.

10. Mr. Cheatham introduced agenda item ***CERS Election Update/Timeline*** (Video 01:14:42 to 01:23:37) Ms. Coffey presented an update on the CERS 2025 timeline. She provided an overview on the completed timeline and noted the addition of a new item, indicating that anyone interested in filing a petition to be put on the ballot could do so, with the deadline set for November 30, 2024. Ms. Coffey noted that, as of the time of this meeting, she had not received any petitions. She then reviewed the remaining items that need to be completed, noting that the term for the new members begins on April 1, 2025, and



individuals are typically sworn in at the first CERS Board meeting that takes place after April 1, 2025.

Next, Mr. Branco reviewed the letter received from the Attorney General regarding our request concerning the constitutional eligibility for election to the CERS Board. The Office identified no constitutional, statutory, or common law incompatibility issue that would arise from any of the named individuals serving as a Trustee while simultaneously holding their positions identified as presented.

Mr. Cheatham asked Ms. Coffey to clarify whether the paperwork each candidate files in order to run addresses their status regarding continued employment or the need to retire. Ms. Coffey explained that one of the first boxes candidates must check on the application, after filling out their name and background information, indicates that if there is a constitutional incompatibility with their current job, they agree to either resign from that position or understand that they cannot serve as a Trustee. She noted this requirement was also discussed with candidates at an informational meeting in August, and it was reiterated in a write-up sent to all candidates, including those who could not attend the meeting.

Mr. Cheatham acknowledged the possibility of conflicting Attorney General opinions circulating and noted that the state statute governing this matter possibly has been amended since those original opinions. He mentioned that Mr. Branco previously indicated the only way to get a definitive clarification would be if the issue ended up in court. Mr. Branco felt the letter from the Attorney General's office was a sufficient response, as the only way to challenge that opinion would be through a court case, which is a difficult scenario to foresee.

11. Mr. Cheatham introduced agenda item *Closed Session* (Video 01:23:37 to 01:24:37). Mr. Foster made a motion to enter closed session to discuss pending litigation pursuant to KRS 61.810(1)(c). The motion was seconded by Mr. O'Mara and passed unanimously.

Mr. Cheatham read the following closed session statement: A motion having been made in open session to move into a closed session for a specific purpose, and such motion having carried by majority vote in open, public session, the Board shall now enter closed session to consider litigation, pursuant to KRS 61.810(1)(c), because of the necessity of protecting the confidentiality of the Systems' litigation strategy and preserving any available attorney-client privilege.

*Closed Session (Video - Part 2 - 00:00:29 to 00:01:29).*

\*\*\*Mr. Fulkerson exited the meeting prior to the start of closed session.\*\*\*

\*\*\*Ms. Pendergrass exited the meeting during closed session.\*\*\*

Coming back into open session, Mr. Cheatham requested a motion to come out of closed session. Mr. O'Mara made a motion to return to open session, and this was seconded by Dr. Carver. The motion passed unanimously. Mr. Cheatham stated that no action was taken as a result of the closed session discussions.

12. There being no further business, Mr. Cheatham requested a motion to *adjourn* the meeting. The motion to adjourn the meeting was made by Mr. Powell and seconded by Dr. Carver. The motion passed unanimously.

Copies of all documents presented are incorporated as part of the Minutes of the Board of Trustees held December 2, 2024, except documents provided during a closed session conducted pursuant to the Open Meetings Act and exempt under the Open Records Act.

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## CERTIFICATION

I do certify that I was present at this meeting, and I have recorded the above actions of the Trustees on the various items considered by it at this meeting. Further, I certify that all requirements of KRS 61.805-61.850 were met in conjunction with this meeting.

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Recording Secretary

I, the Chair of the Board of Trustees of the County Employees Retirement System, do certify that the Minutes of Meeting held on December 2, 2024, were approved on March 10, 2025.

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Chair of the Board of Trustees

I have reviewed the Minutes of the December 2, 2024, Board of Trustees Meeting for content, form, and legality.

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Executive Director  
Office of Legal Services

**MINUTES OF MEETING  
COUNTY EMPLOYEES RETIREMENT SYSTEM  
SPECIAL CALLED  
BOARD OF TRUSTEES MEETING  
DECEMBER 17, 2024, AT 2:00 P.M. ET  
VIA LIVE VIDEO TELECONFERENCE**

At the Special-Called Meeting of the County Employees Retirement System Board of Trustees held on December 17, 2024, the following members were present: George Cheatham, Dr. Patricia Carver, Michael Foster, Jim Tony Fulkerson, Dr. Merl Hackbart, William O'Mara, and Jerry Powell. Staff members present were CERS CEO Ed Owens III, Ryan Barrow, Rebecca Adkins, Erin Surratt, Victoria Hale, Steve Willer, Brian Caldwell, Anthony Chiu, Joe Gilbert, Phillip Cook, Ashley Gabbard, Sandy Hardin, and Sherry Rankin. Others present included Eric Branco with Johnson Branco & Brennan LLP; David Lindberg, Craig Morton, Chris Tessman, John Patterson, and Marc Friedberg with Wilshire; Ian Leverich with XTP.

1. Mr. Cheatham called the meeting to order.
2. Mr. Branco read the *Opening Statement*.
3. Ms. Rankin took *Roll Call*.
4. Mr. Cheatham introduced the agenda item *Public Comment* (Video 00:08:44 to 00:8:49). Ms. Rankin indicated there were no public comments submitted.
5. Mr. Cheatham introduced agenda item *Chairman's Corner* (Video 00:08:44 to 00:10:14). Mr. Cheatham thanked everyone for taking the time to attend today. He expressed that he believes today's meeting will be very informative and useful. Mr. Cheatham also extended his gratitude to Mr. David Lindberg and the rest of the Wilshire staff. He noted that this is the first opportunity for Wilshire to provide an in-depth overview of their services, what we've contracted for, and what they currently offer or could provide.

Mr. Cheatham mentioned that a special-called meeting is scheduled for Thursday afternoon to discuss an investment opportunity.

6. Mr. Cheatham introduced agenda item ***Investment Committee: Review of Wilshire Services*** (*Video 00:10:14 to 02:05:06*). Mr. Owens III welcomed the Wilshire team and handed the floor to Dr. Hackbart for introductions. Dr. Hackbart introduced the Wilshire Investment team, with Mr. David Lindberg, Mr. Chris Tessman, Mr. Craig Morton, Mr. John Patterson, and Mr. Marc Friedberg presenting an overview of their services. Wilshire, a global financial services firm, is trusted by approximately 500 institutional investors and financial intermediaries to improve investment outcomes. They offer a comprehensive suite of services, including investment consulting and advisory, strategic advice on asset allocation, risk management, investment policy development, and investment manager evaluation. Wilshire supports complex investment needs through direct lending, opportunistic, and distressed/special situations fund manager search. They also provide advisory services to financial advisors and intermediaries, offering market-tested strategies and customized solutions. During the presentation, the Wilshire team reviewed the services currently utilized and answered questions from the Trustees.

Mr. Lindberg introduced Mr. Ian Leverich from XTP Implementation Services, a tech-enabled and data-driven specialist. XTP provides key services in partnership with Wilshire, focusing on enhancing cost transparency, reducing investment-related risks, improving investment governance, and increasing net returns for institutional investors globally.

- 7/8. With no closed session business to address, Mr. Cheatham ***adjourned*** the meeting.

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## CERTIFICATION

I do certify that I was present at this meeting, and I have recorded the above actions of the Trustees on the various items considered by it at this meeting. Further, I certify that all requirements of KRS 61.805-61.850 were met in conjunction with this meeting.

\_\_\_\_\_  
Recording Secretary

I, the Chair of the Board of Trustees of the County Employees Retirement System, do certify that the Minutes of Meeting held on December 17, 2024, were approved on March 10, 2025.

\_\_\_\_\_  
Chair of the Board of Trustees

I have reviewed the Minutes of the December 17, 2024, Board of Trustees Meeting for content, form, and legality.

\_\_\_\_\_  
Executive Director  
Office of Legal Services

**MINUTES OF MEETING  
COUNTY EMPLOYEES RETIREMENT SYSTEM  
SPECIAL CALLED  
BOARD OF TRUSTEES MEETING  
DECEMBER 19, 2024, AT 3:30 P.M. ET  
VIA LIVE VIDEO TELECONFERENCE**

At the Special-Called Meeting of the County Employees Retirement System Board of Trustees held on December 19, 2024, the following members were present: George Cheatham, Dr. Patricia Carver, Michael Foster, Dr. Merl Hackbart, William O'Mara, Betty Pendergrass, and Jerry Powell. Staff members present were CERS CEO Ed Owens, III, Ryan Barrow, Victoria Hale, Rebecca Adkins, Michael Lamb, Steve Willer, Anthony Chiu, Brian Caldwell, Joe Gilbert, Phillip Cook, Sandy Hardin, and Sherry Rankin. Others present included Eric Branco with Johnson Branco & Brennan LLP and David Lindberg with Wilshire.

1. Mr. Cheatham called the meeting to order.
2. Mr. Branco read the Opening Statement.
3. Ms. Rankin called Roll.
4. Mr. Cheatham introduce agenda item ***Public Comment***. Ms. Rankin noted no public comment was submitted.
5. Mr. Cheatham introduced agenda item ***Chairman's Corner*** (Video 00:05:19 to 00:05:37) Mr. Cheatham noted he did not have any updates to report.
6. Mr. Cheatham introduced agenda item ***Real Return Investment Recommendation*** (Video 00:05:37 to 00:13:33). Dr. Hackbart reported that the CERS Investment Committee held a special-called meeting at 2:00 p.m. today to consider a Real Return investment recommendation from the KPPA Investment Staff.

Mr. Steve Willer began with a summary of the investment and provided an update on the current portfolio status. Mr. Anthony Chiu reviewed the other Real Return strategies. He then reviewed the CERS Pension Portfolio, highlighting the Real Return Allocations and their impact and rationale.

Mr. Chiu then presented the proposed investment by the KPPA Investment Staff in the ITE Rail Fund, L.P. He explained that it is an open-ended fund managed by Industrial Transportation Equipment. Mr. Chiu reviewed the details of this proposal, concluding that given the attractive risk/reward profile, compelling market opportunity, and current Real Return allocations, the Staff recommends an investment of up to \$200 million to be shared among all CERS portfolios, pending successful legal negotiations. When fully funded, this investment would represent approximately 1.0% to 1.1% of Plan assets, depending on market value fluctuations. The expected net return for this investment is projected to be between 6% and 9%. Following the presentation, Mr. Chiu and Mr. Willer addressed and answered questions posed by the Trustees.

After the presentation and discussion, the CERS Investment Committee voted unanimously to approve the recommendation to invest up to \$200 million in the ITE Rail Fund, L.P., subject to contract negotiations, and now requests that the CERS Board of Trustees ratify the action taken by the Investment Committee.

Mr. Powell made the motion to ratify the CERS Investment Committee's recommendation to invest up to \$200 million to the ITE Rail Fund, L.P., subject to successful contract negotiations. Dr. Hackbart seconded the motion, and the motion passed unanimously.

- 7/8. There being no closed session business, Mr. Cheatham requested a motion to *adjourn*. Ms. Pendergrass made a motion to adjourn and was seconded by Mr. Powell. The motion was passed unanimously.

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## CERTIFICATION

I do certify that I was present at this meeting, and I have recorded the above actions of the Trustees on the various items considered by it at this meeting. Further, I certify that all requirements of KRS 61.805-61.850 were met in conjunction with this meeting.

\_\_\_\_\_  
Recording Secretary

I, the Chair of the Board of Trustees of the County Employees Retirement System, do certify that the Minutes of Meeting held on December 19, 2024, were approved on March 10, 2025.

\_\_\_\_\_  
Chair of the Board of Trustees

I have reviewed the Minutes of the December 19, 2024, Board of Trustees Meeting for content, form, and legality.

\_\_\_\_\_  
Executive Director  
Office of Legal Services

**MINUTES OF MEETING  
COUNTY EMPLOYEES RETIREMENT SYSTEM  
SPECIAL CALLED  
BOARD OF TRUSTEES MEETING  
JANUARY 3, 2025, AT 10:30 A.M. EST  
LIVE VIDEO TELECONFERENCE**

At the January 3, 2025, Special-Called Meeting of the County Employees Retirement System Board of Trustees held in conjunction with the Kentucky Retirement Systems and the Kentucky Public Pensions Authority Boards, the following Members were present: George Cheatham (Chair), George Cheatham, Michael Foster, Dr. Merl Hackbart, William O'Mara, Betty Pendergrass, and Jerry Powell. Staff members present: Ryan Barrow, Michael Board, Rebecca Adkins, Erin Surratt, Michael Lamb, Shaun Case, Sandy Hardin, and Sherry Rankin. Other members present: CERS CEO Ed Owens III; Janet Jakubowicz with Dentons, Bingham, Greenebaum; and Paul Harnice and Chris Schaefer with Stoll, Keenon, Ogden PLLC.

1. Mr. Cheatham called the meeting to order.
2. Mr. Board read the Legal Opening Statement.
3. Ms. Rankin called roll.

Mr. Cheatham introduced agenda item **Public Comment** (Video 00:04:59 to 00:05:04). Ms. Rankin indicated no public comment was submitted.

4. Mr. Cheatham introduced agenda item **Closed Session**. (Video 00:05:04 to 00:07:23) Ms. Pendergrass made a motion and was seconded by Mr. Powell to enter closed session to discuss pending litigation. The motion passed unanimously.

Mr. Board read the following closed session statement: A motion having been made in open session to move into a closed session for a specific purpose, and such motion having carried by majority vote in open, public session, the Board shall now enter closed session to consider

litigation matters, pursuant to KRS 61.810(1)(c), because of the necessity of protecting the confidentiality of the Systems' litigation strategy and preserving any available attorney-client privilege.

All other attendees exited the meeting.

**Closed Session.** (Video: 00:00:20 to 00:05:09:00) Mr. Cheatham called the meeting back to open session.

Mr. Cheatham requested a motion that, in closed session, the CERS Board has determined it is in the best interest of the CERS Board to approve the settlement agreement with the hedge fund litigation and authorize the CERS Board Chair to sign the agreement. A motion was made by Ms. Pendergrass and seconded by Mr. O'Mara. Following a roll call vote, the motion was approved unanimously, and Mr. Cheatham declared the motion passed.

5. There being no further business, Mr. Cheatham **adjourned** the meeting.

Copies of all documents presented are incorporated as part of the Minutes of the Board of Trustees held January 3, 2025, except documents provided during a closed session conducted pursuant to the Open Meetings Act and exempt under the Open Records Act.

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## CERTIFICATION

I do certify that I was present at this meeting, and I have recorded the above actions of the Trustees on the various items considered by it at this meeting. Further, I certify that all requirements of KRS61.805-61.850 were met in conjunction with this meeting.

\_\_\_\_\_  
Recording Secretary

I, the Chair of the County Employees Retirement System, do certify that the Minutes of Meeting held on January 3, 2025, were approved on March 10, 2025.

\_\_\_\_\_  
Chair of the Board  
of Trustees

I have reviewed the Minutes of the January 3, 2025, Kentucky Public Pensions Authority Meeting for content, form, and legality.

\_\_\_\_\_  
Executive Director, Office of Legal Services

**MINUTES OF MEETING  
COUNTY EMPLOYEES RETIREMENT SYSTEM  
BOARD OF TRUSTEES SPECIAL-CALLED MEETING  
FEBRUARY 11, 2025, AT 2:00 P.M. ET  
VIA LIVE VIDEO TELECONFERENCE**

At the Special-Called Meeting of the County Employees Retirement System Board of Trustees held on February 11, 2025, the following members were present: George Cheatham, Dr. Patricia Carver, Michael Foster, JT Fulkerson, Dr. Merl Hackbart, William O’Mara, Betty Pendergrass, and Jerry Powell. Staff members present were CERS CEO Ed Owens III, Ryan Barrow, Erin Surratt, Michael Lamb, Michael Board, Steve Willer, Anthony Chiu, Shaun Case, Sandy Hardin, and Sherry Rankin. Others present included Ryan Stippich and Mark Cameli with Reinhart, Boerner, Van Deuren and Eric Branco with Johnson Branco & Brennan, LLP.

1. Mr. Cheatham called the meeting to order.
2. Mr. Board read the Opening Statement.
3. Ms. Rankin called Roll.
4. Ms. Rankin noted one **Public Comment** was submitted by Teresa Lay and reads as follows: (00:01:54 to 00:02:37)

Teresa Lay

We are overdue Cola. There is no denying this. We had nothing to do with this, but we have been paying the price. There is a way to resolve it if you want to. This is very cruel to do to hard working people that only did their jobs. Thank you.

Mr. Cheatham expressed his appreciation for the public comment and asked Mr. Owens to follow-up and contact her.

5. Mr. Cheatham introduced agenda item **Closed Session** (Video 00:02:37 to 00:03:26).

Mr. Foster made a motion to enter closed session to discuss pending litigation pursuant to KRS 61.810(1)(c). The motion was seconded by Dr. Hackbart and passed unanimously.

Mr. Branco read the following closed session statement: A motion having been made in open session to move into a closed session for a specific purpose, and such motion having carried by majority vote in open, public session, the Board shall now enter closed session to consider litigation, pursuant to KRS 61.810(1)(c), because of the necessity of protecting the confidentiality of the Systems' litigation strategy and preserving any available attorney-client privilege.

***Closed Session*** (Video - Part 2 - 00:00:01 to 00:02:03).

\*\*\* Mr. Fulkerson left during closed session. \*\*\*

Coming back into open session, Mr. Cheatham requested a motion to come out of closed session. Mr. O'Mara made the motion to return to open session and was seconded by Mr. Powell. The motion passed unanimously. Mr. Cheatham stated that no action was taken as a result of the closed session discussions.

Mr. Cheatham requested a motion to approve the resolution of the Bay Hills litigation on the terms included in the Term Sheet discussed in closed session subject to the successful negotiation of a full settlement agreement and approval the Board Chair to sign the settlement agreement on the Board's behalf. Mr. Foster made the motion to approve as stated and was seconded by Mr. Powell. The motion passed unanimously.

6. There being no further business, Mr. Cheatham requested a motion to **adjourn**. Mr. Powell made a motion to adjourn and was seconded by Ms. Pendergrass. The motion passed unanimously.

Copies of all documents presented are incorporated as part of the Minutes of the Board of Trustees held February 11, 2025, except documents provided during a closed session conducted pursuant to the Open Meetings Act and exempt under the Open Records Act.

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## CERTIFICATION

I do certify that I was present at this meeting, and I have recorded the above actions of the Trustees on the various items considered by it at this meeting. Further, I certify that all requirements of KRS 61.805-61.850 were met in conjunction with this meeting.

\_\_\_\_\_  
Recording Secretary

I, the Chair of the Board of Trustees of the County Employees Retirement System, do certify that the Minutes of Meeting held on February 11, 2025, were approved on March 10, 2025.

\_\_\_\_\_  
Chair of the Board of Trustees

I have reviewed the Minutes of the February 11, 2025, Board of Trustees Meeting for content, form, and legality.

\_\_\_\_\_  
Executive Director  
Office of Legal Services





## MEMORANDUM

**TO:** County Employees Retirement System Board of Trustees

**From:** JT Fulkerson, Chair  
Personnel Committee

**Date:** March 10, 2025

**Subject:** Summary of Personnel Committee Meeting

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The County Employees Retirement System Personnel Committee held a special meeting on January 22, 2025.

1. **The following items were approved by the Personnel Committee and are being forwarded to the County Employees Retirement System Board of Trustees for ratification\***
  - a. **CERS CEO Performance Plan** – The Personnel Committee considered the presentation of Lori Casey, Director of Human Resources for KPPA, concerning the establishment of a CERS CEO Performance Plan that is in line with other outside 18(A) employees of KPPA. After hearing the presentation from Ms. Casey, the Committee unanimously agreed to recommend the approval of the CERS CEO Performance Plan to the entire CERS Board of Trustees.

**RECOMMENDATION: The Personnel Committee requests the County Employees Retirement System Board of Trustees ratify the actions taken by the Personnel Committee.**

2. **The following items were also discussed during the Personnel Committee meeting:**
  - a. Kristen Coffey, Chief Auditor for KPPA and the administrator of the CERS Trustee election, reported to the committee on the status of the election. Kristen stated the term of elected Trustees ends on March 31, 2025. By July 31, 2024, nine (9) individuals had submitted paperwork to seek election to the CERS Board of Trustees. On September 9, 2024, the CERS Board voted to place all nine candidates on the election ballot.

Kristen indicated that voting started on January 20, 2025, and is scheduled to close on March 1, 2025. The independent vendor and counter of the votes will release the results of the CERS election on March 15, 2025.

- b. Ed Owens presented information concerning a KPPA unified way to capture Trustee education. Currently, CERS has two trigger points for establishing the 12-month year to measure compliance with the statutory requirement of Trustee training. Ed indicated the KPPA, K and C have had discussions surrounding establishing the calendar year as the trigger point for compliance. By doing so the Trustee education process would be standardized.

The committee recommended that the current fiscal year be completed utilizing the current process and that we move to the new process for fiscal year 2026. There was also discussion by the committee concerning a Trustee retreat. The consensus was that KPPA would coordinate dates for a Trustee retreat for all three Boards.

**\*Board of Trustees Action Required**



## MEMORANDUM

**TO:** County Employees Retirement System Board of Trustees

**From:** William O'Mara, Chair  
Finance Committee

**Date:** March 10, 2025

**Subject:** Summary of Finance Committee Quarterly Meeting

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The County Employees Retirement System Finance Committee held a regular meeting on February 17, 2025.

1. **The following items were approved by the Finance Committee and are being forwarded to the County Employees Retirement System Board of Trustees for ratification\***
  - a. **Hazardous Duty Requests** – The Finance Committee considered a total of nine (9) requests for Hazardous Duty designation for positions in member organizations. After hearing the presentation from KPPA staff indicating staff had reviewed each request and determined that they meet the statutory guidelines for Hazardous coverage, the Finance Committee voted unanimously to approve each request.
  - b. **Finance Committee Strategic Plan** – The Finance Committee considered several strategic plan components that would become part of the overall CERS Board Strategic Plan. After discussion and refinement of some component parts, the Finance Committee voted unanimously to approve the committee's submission to the overall strategic plan.

**RECOMMENDATION:** The Finance Committee requests the County Employees Retirement System Board of Trustees ratify the actions taken by the Finance Committee.

2. The Finance Committee heard a presentation made by XTP Implementation Services (XTP), a wholly owned subsidiary of Wilshire. XTP offers a holistic trade cost analysis of

all processes and procedures related to the investment office portfolio of KPPA. Ian Leverich, Managing Director, and Mark Becker, Senior Analyst, made the presentation for XTP.

XTP reviews over 180 cost components of the public and private investments of clients which includes a review of all applicable contracts and related fees. A standard review would generally cover, at least, the following factors: 1) contract governance; 2) custodian bank compliance; 3) service provider compliance; and 4) contract optimization potential.

The Committee engaged in a robust dialogue with XTP concerning how XTP would be compensated for their services. It was indicated that no money would be required from the C Trust and XTP would only be compensated from verified savings based on their work. XTP would be entitled to fifty (50%) percent of the savings for the first two years.

The Committee also discussed how we should proceed with the procurement process. There was discussion that the matter might not return to the Committee but might be addressed at the CERS Board level. It was determined that we needed more information concerning how the procurement process would work in this situation.

**3. The following items were also discussed during the Finance Committee meeting:**

- a. KPPA staff presented six month financial reports consisting of:
  - a. YTD Financial Spreadsheet
  - b. Administration Expense to Budget
  - c. Investment Expense to Budget
  - d. Contribution Report
  - e. Outstanding Invoice Report
  - f. Penalty Waiver Report
  
- b. The CFO made several pertinent observations concerning the financial position of the CERS funds comparing the last six months of 2023 to 2024. The fiduciary net position for the pension/insurance funds stood at approximately \$19.1 billion which was up over 8.4% from the year-over-year fiscal quarter 2023. The increase totals approximately \$1.4 billion in pension/insurance fund growth.

The member contributions were up significantly in both the HAZ and non-HAZ pension plans. The employer contribution; however, was down in both pension plans. There are three (3) reasons for the decrease in employer contributions: 1) CERS Board increase in the assumed rate of return from 6.25% to 6.50%; 2) the demographic factor actuarial reduction; and 3) the inherent contribution reduction associated with the 30-year funding plan adopted by the state legislature. The committee agreed to keep a focus on the employer contribution level going forward.

Importantly, the CERS Outstanding Invoices was reduced from the third quarter of 2024 to the fourth quarter of 2024 by approximately 31%. The total outstanding balance now stands at approximately \$2.3 million. The Committee acknowledged the hard work of the ERCE and the legal team in their focus on invoices.

**\*Board of Trustees Action Required**



# KENTUCKY PUBLIC PENSIONS AUTHORITY

Ryan Barrow, Executive Director

1260 Louisville Road • Frankfort, Kentucky 40601  
kyret.ky.gov • Phone: 502-696-8800 • Fax: 502-696-8822



To: CERS Finance Committee

From: D’Juan Surratt  
Director of Employer Reporting, Compliance and Education

Date: February 17, 2025

Subject: Hazardous Position Classification

AGENCIES ARE REQUESTING HAZARDOUS DUTY COVERAGE FOR THE FOLLOWING POSITIONS:

<u>Agency</u>	<u>Position</u>	<u>Effective Date</u>
City of Central City	Sergeant	1/1/2025
City of Central City	Police Officer	1/1/2025
City of Central City	Chief of Police	1/1/2025
City of Central City	Assistant Chief	1/1/2025
City of Central City	Fire Chief	1/1/2025
City of Central City	Firefighter	1/1/2025
City of Central City	Assistant Fire Chief	3/1/2025
Madison County EMS	Education Officer	12/1/2024
City of Versailles	Battalion Chief/ Training Officer	3/1/2025

Kentucky Public Pensions Authority has reviewed the above requests and determined that they meet the statutory guidelines for Hazardous coverage. Position Questionnaires and Job Descriptions are attached.



**KENTUCKY COUNTY EMPLOYEES' RETIREMENT SYSTEM  
STRATEGIC PLAN 2025-2029**

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**KENTUCKY COUNTY EMPLOYEES' RETIREMENT SYSTEM  
STRATEGIC PLAN 2025-2029**

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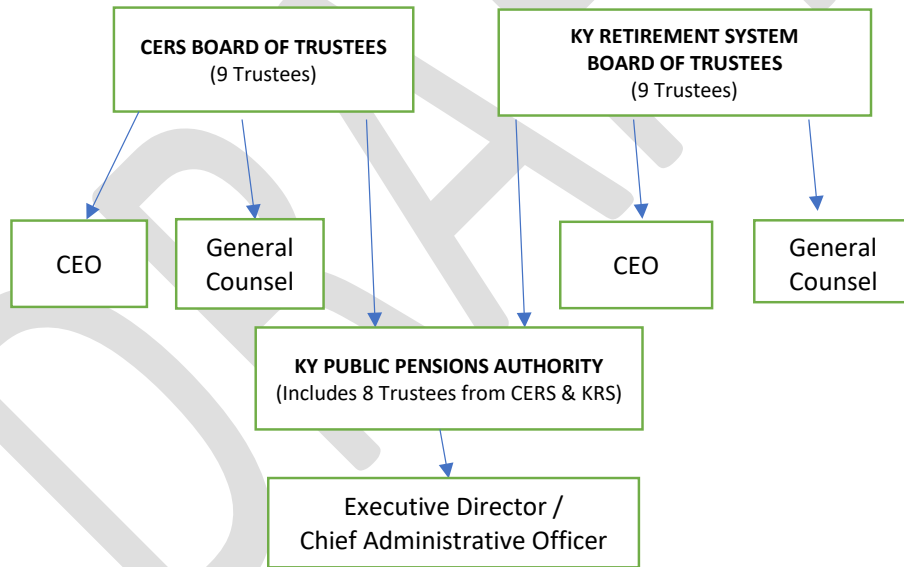
DRAFT

**EXECUTIVE SUMMARY**

**INTRODUCTION**

The Kentucky County Employees Retirement System (CERS) was established July 1, 1958, by the Kentucky General Assembly. Guidance for CERS is found in Chapter 78 of the Kentucky Revised Statutes (KRS). Chapter 78 outlines the governing board structure, postretirement plan design, membership, and authority for employee and employer contributions for both a Non-Hazardous plan and a Hazardous plan. In 2020, the Kentucky General Assembly created a separate governing board for CERS and effective April 1, 2021, the new governance structure was initiated.

Administrative support is provided by the Kentucky Public Pensions Authority (KPPA), also created effective April 1, 2021 (KRS 61.505). CERS is represented by four Trustees on the KPPA governing board along with four Trustees from the Kentucky Retirement Systems (Ky Retirement). Ky Retirement is the governing board for the Kentucky Employees Retirement Systems (KERS—hazardous and nonhazardous) and the State Police Retirement System (SPRS). The relationship among the three board is illustrated below.



Employees of cities, counties, and special purpose governments are covered by the CERS, a cost-sharing multiple-employer defined benefit pension plan administered by the Kentucky Public Pensions Authority (KPPA), an agency of the Commonwealth of Kentucky. In addition, employees of Kentucky school districts whose positions do not require a degree beyond a high school diploma also participate in CERS. As of April 1, 2021, Kentucky Revised Statute (“KRS”) Section 78.782 shifted the governance of CERS to a separate Board of Trustees of the County Employees Retirement System. The CERS Board manages the CERS trust, including investment management. KPPA provides the day-to-day administration (KRS 61.505) for accounting and benefit administration for CERS. The Kentucky General Assembly has the authority to establish and amend benefit provisions.

2025 – 2029 CERS Strategic Plan  
Executive Summary (continued)

CERS, KERS, and SPRS all provide defined benefit pension and other post-employment benefits for public employees. Retirement benefits to these retirees adds over \$2 billion to the Commonwealth's economy across 120 counties.

This inaugural Strategic Plan outlines the key goals and objectives that the CERS Board of Trustees hopes will provide a sustainable governing structure in compliance with the organizational guidance in Kentucky Revised Statutes, Chapter 78. The CERS Board of Trustees recognizes the importance of a partnership with key stakeholders in the Commonwealth, including public employees, employers, professional associations, and the citizens of the Commonwealth. These goals are focused on supporting the CERS organization, investment management, and support services to our membership. Postretirement benefits for both pension income and postretirement healthcare are critical for supporting all the public services to the citizens and the public employees who provide those services. These benefits provide financial security to CERS members and return an economic benefit to the citizens we serve.

The CERS Board of Trustees takes its fiduciary role very seriously. Governing statutes include specific guidance about our fiduciary roles and compliance with both the Kentucky Executive Branch Ethics Code and the CFA Pension Trustee Code of Conduct. In addition, Chapter 78 outlines the basic structures for investment management, Trustee education, as well as accountability and transparency. Goals in this Strategic Plan were selected based on the underlying guidance in Chapter 78 and the expectations of our stakeholders and the citizens of the Commonwealth.

#### **MISSION**

To deliver governance for the postretirement plans that support the financial security of our membership.

#### **VISION**

Provide a sustainable funding structure with an approach that is viable for all stakeholders.

#### **CORE VALUES**

We focus on supporting the KPPA delivery of quality customer service, providing a sound investment strategy, and communicating with our stakeholders to demonstrate transparency and accountability.

Our efforts will adhere to basic principles for quality customer service, ethical conduct, excellence, fiduciary duty, and ongoing operational improvement. We also commit to collaboration with the Kentucky Retirement System Board of Trustees to enhance the retirement programs for KERS and SPRS, as well as CERS.

#### **STRATEGIC GOALS**

Now that CERS has completed its organizational first year and adopted Board administrative and governance policies, the focus of the 2025 – 2029 Strategic Plan includes the following goals to strengthen the CERS retirement plans.

- Goal 1** *Actuarial* **Strengthen actuarial administration to achieve full funding of the CERS plans.**
- Goal 2** *Investment* **Enhance investment management to support prudent portfolio performance and compliance oversight.**
- Goal 3** *Finance* **Collaborate with Kentucky Retirement Systems to develop a cost-effective administrative cost budget, financial management, and cost allocation policies.**
- Goal 4** *Administrative* **Provide structure to support efficient governance for CERS post-retirement plans.**

*2025 – 2029 CERS Strategic Plan  
Executive Summary (continued)*

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The Strategic Goals section outlines the goals, expands the discussion of objectives for each goal, including targets and measurement principles, and describes how the CERS Board will identify success. The last section of the Plan summarizes a proposed timeline for working on the goals and objectives.

**FUTURE PLANNING**

The CERS Board of Trustees has developed this first five-year strategic plan to set the stage for future improvements in managing the postretirement benefit plans for local government employees. We also plan to update this strategic plan in the future to maintain a dynamic governance and management structure for the CERS plans, members, stakeholders, and citizens.

ADOPTED BY THE CERS BOARD OF TRUSTEES \_\_\_\_\_, 2025

\_\_\_\_\_  
Chair, CERS Board of Trustees

\_\_\_\_\_  
CEO, CERS Board of Trustees

\_\_\_\_\_  
General Counsel, CERS Board of Trustees

<b>GOALS, OBJECTIVES, MEASURES AND TARGETS</b>
--

**Goal 1**     *Actuarial* Strengthen actuarial administration to achieve full funding of the CERS plans.  
 (Approved by Actuarial Committee on November 2, 2022.)

<b>Objective A. Actuarial assumptions reflect actual trends.</b>
<p>1)    <b>Measure:</b> The CERS Board will require the actuary to use industry prevalent practices and methods for the analysis and recommendation of actuarial assumptions (economic and demographic) for use in the actuarial valuation.</p> <p>      <b>Target:</b> Annually in April.</p>
<b>Objective B. Avoid Negative Amortization.</b>
<p>1)    <b>Measure:</b> The CERS Board will work with the legislators on possible future changes to the funding policy that is in Statute such that any changes will not result in actuarial back loading (i.e. negative amortization of the unfunded actuarial accrued liability).</p> <p>      <b>Target:</b> Ongoing.</p>
<b>Objective C. Attain 100% funded status in reasonable period.</b>
<p>1)    <b>Measure:</b> The financial goal is for the Systems to attain a 100% funded ratio in a reasonable time period with the CERS Board-adopted contributions increasing or decreasing as appropriate.</p> <p>      <b>Target:</b> January 2038.</p>
<b>Objective D. Monitor financial and economic risks to plan.</b>
<p>1)    <b>Measure:</b> The CERS Board will request the actuary to perform a risk analysis or stress test from time to time to understand and quantify possible financial risks due to possible changing economic conditions or risks associated possible legislation that would result in materially lower contributions.</p> <p>      <b>Target:</b> January 2025.</p>

<b>Goal 1. How Will the CERS Board Evaluate Success</b>
<p>1)    Employer contributions are consistent across the five years 2025 – 2029.</p> <p>2)    Actuarial assumptions are consistent with actual experience.</p> <p>3)    Funded status continues to improve.</p>

2025 – 2029 CERS Strategic Plan  
 Goals, Objectives, Measures, & Targets (continued)

**Goal 2** *Investments* Enhance investment management by providing prudent portfolio guidelines and compliance oversight.

**(Approved by Investment Committee on December 19, 2024.)**

<p><b>Objective A. Monitor the ratio of investment earnings versus contribution resources to evaluate the health of the CERS system.</b></p>	
<p>1)</p>	<p><b>Measure:</b> The 5-year geometric average net investment return (GANIR) calculation for Tier 3 interest credits shall be used to evaluate returns in the CERS portfolios (NonHaz, Haz, and Insurance).</p> <p><b>Target:</b> The GANIR should range from 6.25% to 10%.</p>
<p>2)</p>	<p><b>Measure:</b> Investment cash flow from realized gains, interest, and dividends, net of fees, compared to total benefits/expenses paid.</p> <p><b>Target:</b> Investment component, on a five-year rolling average should range between 45% and 65%.</p>
<p><b>Objective B. Investment Policy Statement (IPS) should meet Best Practices to ensure CERS meets its fiduciary responsibilities.</b></p>	
<p>1)</p>	<p><b>Measure:</b> Asset allocation in the IPS reflects the Board’s goals for investment performance.</p> <p><b>Target:</b> Projected return from IPS approved asset allocation should equal or exceed the discount rate for the actuarial valuation.</p>
<p>2)</p>	<p><b>Measure:</b> Quarterly investment reports include performance analysis that compares realized performance to investment goals established by CERS Investment Committee and Board of Trustees.</p> <p><b>Target:</b></p> <ul style="list-style-type: none"> <li>a) Realized total returns for CERS assets are compared to capital market assumptions utilized in asset allocation modelling .</li> <li>b) Returns for internally managed assets are reported separately.</li> <li>c) Compliance reporting highlight variances from IPS policies.</li> <li>d) Historical trend reporting (GANIR) is updated annually.</li> <li>e) Manager watch list that identifies managers with excellent performance or performance below expectations should be added to Compliance reporting.</li> </ul>
<p>3)</p>	<p><b>Measure:</b> Evaluate the asset allocation and identify a key timeline for asset liability studies and risk management issues to develop updates to the asset allocation.</p> <p><b>Target:</b> Conduct an asset liability study, including portfolio risk analysis, every 3 – 5 years.</p>

2025 – 2029 CERS Strategic Plan  
 Goals, Objectives, Measures, & Targets (continued)

**Objective C. Outline benchmarks to evaluate investment performance versus actuarial analysis and strengthen risk monitoring.**

- 1) **Measure:** CERS should use the actuarial discount rate, Total Fund Benchmark and a peer universe identified by Investment staff and investment consultant as benchmarks to evaluate returns and risk-adjusted returns over 5-year period on the CERS portfolio.  
  
**Target:** Realized returns over 5-year periods should always exceed the benchmarks.
- 2) **Measure:** Quarterly reporting provides analysis of manager performance by asset class.  
  
**Target:** Externally managed asset realized returns provide sufficient excess returns, net of management and performance fees. Periodic reporting should provide an opportunity for the Investment Committee to provide oversight of management fees.
- 3) **Measure:** Strengthen the role of the Investment Compliance Officer to monitor investment risk and report on investment risk.  
  
**Target:** Quarterly investment performance reports include:
  - a) Risk-adjusted returns for investment portfolio, by asset class
  - b) Identification of market, credit, concentration, liquidity, and volatility risk in CERS portfolio
  - c) Analysis of CERS portfolio market risk based on economic trends and industry sectors in the CERS portfolio

**Goal 2. How Will the CERS Board Evaluate Success**

- 1) Performance and compliance reports provide key information for CERS Investment Committee and Board of Trustees oversight.
- 2) Performance and compliance reports are readily available to stakeholders on the KPPA website.



2025 – 2029 CERS Strategic Plan  
 Goals, Objectives, Measures, & Targets (continued)

**Goal 3** *Finance Collaborate with Kentucky Retirement Systems to develop a cost-effective administrative cost budget, financial management, and cost allocation policies. (Finance Committee approved on 2/17/2025.)*

**Objective A. Work with Office of the CFO on CERS specific Annual Comprehensive Financial Report (ACFR) issues.**

- 1) **Measure:** Communications with the external audit firm (or the APA) regarding the CERS specific annual audit and ACFR are completed on a timely basis.  
**Target:** External Audit firm meets with Finance Committee annually in August at the start of the external audit and outlines key issues for annual audit.  
**Target:** External Audit firm meets with Finance Committee annually in November to present DRAFT ACFR and discuss other external audit findings and communications.  
**Target:** CERS Audit report and ACFR is delivered to Ky Finance & Administration by the due date established by Finance for inclusion in the Commonwealth’s ACFR.
- 2) **Measure:** Annual CERS ACFR is submitted to GFOA by December 31 each year for the Certificate of Achievement in Financial Reporting (COA) award. The CERS ACFR meets requirements for and achieves the GFOA COA award .  
**Target:** GFOA awards Certificate of Achievement for Excellence in Financial Reporting to the CERS ACFR, annually.  
**Target:** GFOA comments for improvements to the CERS ACFR demonstrate CERS compliance with generally accepted governmental accounting principles and governmental financial reporting best practices.

**Goal 3 Finance Collaborate with Kentucky Retirement Systems to develop a cost-effective administrative cost budget, financial management, and cost allocation policies. (Finance Committee approved on 2/17/2025.) (Continued)**

<b>Objective B. Ensure CERS specific policies and procedures surrounding financial reporting are adequate.</b>	
1)	<p><b>Measure:</b> CERS annual and interim financial reporting provide essential information to assess accountability for CERS assets and pension management.</p> <p><b>Target:</b> CERS financial reporting provides key data to evaluate long-term financial trends and conduct historical analysis.</p> <p><b>Target:</b> CERS continues to achieve progress toward actuarial goals for full funding (See Goal 1 discussion).</p>
2)	<p><b>Measure:</b> Financial reporting metrics in annual and quarterly reports provide long-term trend analysis to evaluate CERS financial condition. Such metrics should include employer/employee contributions, administrative expenses, cash flow, and employer invoicing and collection.</p> <p><b>Target:</b> Monitors growth in employer and employee contributions.</p> <p><b>Target:</b> Monitors the increase/decrease in administrative expenses relative contribution growth.</p> <p><b>Target:</b> Establish an acceptable recovery percentage for legacy invoices beyond a Board approved threshold.</p> <p><b>Target:</b> Establish a total outstanding invoice dollar amount that the Committee deems prudent.</p>
3)	<p><b>Measure:</b> Clarify CERS representation during procurement process.</p> <p><b>Target:</b> Complete analysis of CERS procurement functions within a year.</p>

<b>Objective C. Establish an Escalation Policy for the Office of the CFO regarding policy decisions for the Committee</b>	
1)	<p><b>Measure:</b> KPPA CFO identifies financial metrics in quarterly reporting that may require special attention.</p> <p><b>Target:</b> Financial metrics that trigger reporting to the CERS Finance Committee for discussion of potential policy changes include:</p> <ul style="list-style-type: none"> <li>• Administrative budget categories that exceed 20% in a line-item of budget-to-actual summary or 10% of total administrative budget.</li> <li>• Critical issues related to annual audit or financial reporting.</li> <li>• Investment budget categories that exceed 20% in a line-item of budget-to-actual summary or 10% of total Investment budget.</li> </ul>

2025 – 2029 CERS Strategic Plan  
 Goals, Objectives, Measures, & Targets (continued)

**Goal 3 Finance Collaborate with Kentucky Retirement Systems to develop a cost-effective administrative cost budget, financial management, and cost allocation policies. (Finance Committee approved on 2/17/2025.) (Continued)**

<p><b>Objective D. Ensure that all regulations related to Participation of CERS Employers and Employer duties are updated and codified</b></p>
<p>2) <b>Measure:</b> ERCE and the legal ad-hoc regulation groups provide recommendations for updates to Ky Administrative Regulations that clearly identify employer participation and compliance requirements.</p> <p><b>Target:</b> Employer compliance and timely reporting continues to improve, outstanding receivables decrease, and administrative actions against employers decline.</p> <p><b>Target:</b> Annual survey of employers indicates employers’ satisfaction and understanding of KRS and KAR based on clarity of KPPA communications surrounding employer responsibilities.</p> <p>3) <b>Measure:</b> ERCE and KPPA communications department updates communication brochures that clearly highlight and explain changes in employer responsibility.</p> <p><b>Target:</b> Catalog of relevant employer communication material that is used as training tools for employer staff.</p> <p><b>Target:</b> New administrative policies are clearly explained in timely employer communications to employers and addressed in periodic employer training.</p>

<p><b>Goal 3. How Will the CERS Board Evaluate Success</b></p>
<p>1) CERS annual audit is completed timely with no material findings of noncompliance or material deficiencies in internal controls.</p> <p>2) CERS ACFR is presented in accordance with generally accepted governmental accounting principles established by the Governmental Accounting Standards Board.</p> <p>3) CERS ACFR achieves the GFOA Certificate of Achievement of Excellence in Financial reporting annually.</p> <p>4) CERS provides input for managing administrative costs prior to KPPA approval of administrative budget.</p> <p>5) KPPA approves administrative budget prior to submission to Governor’s State Budget Director.</p> <p>6) CERS interim and annual financial reporting provides key information to provide accountability for CERS assets and pension management.</p>

2025 – 2029 CERS Strategic Plan  
 Goals, Objectives, Measures, & Targets (continued)

**Goal 4** *Administrative* **Finalize structure to support efficient governance for CERS retirement plans.**  
**(Personnel Committee approved their section 1/9/2024.)**  
**(Betty Pendergrass developed remainder as Chair prior to 4/1/2024.)**

<b>Objective A. Enhance Personnel Committee framework for CERS staff evaluations, professional development, and succession planning.</b>	
1)	<b>Measure:</b> Adopt CEO Performance Plan. <b>Target:</b> Annually in January
2)	<b>Measure:</b> Evaluate CEO annually. <b>Target:</b> Annually in June
3)	<b>Measure:</b> Recruit Trustees for elected and appointed positions. <b>Target:</b> July 2025 (Elected Trustees) & 2025 (Appointed Trustees)
<b>Objective B. Enhance communications with stakeholders.</b>	
1)	<b>Measure:</b> Periodic articles in association newsletters. <b>Target:</b> Ongoing
2)	<b>Measure:</b> Host webinars to highlight key retirement management issues. <b>Target:</b> September 2025
3)	<b>Measure:</b> Periodic testimony to Public Pension Oversight Board to highlight CERS performance and governance. <b>Target:</b> Ongoing
<b>Objective C. Formalize annual planning for Trustee Education.</b>	
1)	<b>Measure:</b> Educational sessions (January, July, & October) to provide a minimum of 6 hours of CERS-sponsored education. <b>Target:</b> Ongoing
2)	<b>Measure:</b> Education catalog of videos provide Trustees with additional resources for training hours, including specific training for New Trustee Orientation sessions. <b>Target:</b> July 2025
3)	<b>Measure:</b> All Trustees meet the statutory requirements for 12 hours of annual training. <b>Target:</b> Ongoing
<b>Objective D. Risk Management</b>	
1)	<b>Measure:</b> Establish methodology to evaluate effectiveness of Board governance with an independent analysis of CERS Board governance. <b>Target:</b> September 2025 and ongoing

2025 – 2029 CERS Strategic Plan  
 Goals, Objectives, Measures, & Targets (continued)

<b>Objective E. Evaluate CERS By-Laws and administrative policies to improve Board’s effectiveness and enhance transparency.</b>	
1)	<b>Measure:</b> By-laws updated to incorporate recommendations from governance evaluation consultant. <b>Target:</b> 2025
2)	<b>Measure:</b> Administrative policies updated to incorporate recommendations from governance evaluation consultant. <b>Target:</b> 2025
<b>Objective F. Initiate planning process to update CERS Strategic Plan.</b>	
1)	<b>Measure:</b> Ad-Hoc Committee appointed to review and update Strategic Plan. <b>Target:</b> 2029

<b>Goal 4. How Will the CERS Board Evaluate Success</b>	
1)	Timetable and criteria are established for CEO evaluation.
2)	Stakeholders’ feedback provides insights for additional improvements for system governance.
3)	Annual Trustee Education classes scheduled each year.
4)	Timetable and criteria are outlined for evaluation of CERS Board governance.
5)	By-laws and administrative policies are updated or confirmed as effective guidance for governance and accountability.
6)	Process established for updating the CERS Strategic Plan.

**2025 – 2029 CERS STRATEGIC PLAN TIMETABLE**

This section outlines a proposed timetable for implementation activities for each Goal and Objective of the Strategic Plan. This timing establishes a proposed schedule for activities that will contribute toward the goals and objectives. Activities may be assigned to CERS Executive Staff, the CERS Board and its Committees, with requests for assistance as needed from the KPPA administrative staff.

GOAL/OBJECTIVE	2025	2025	2026	2027	2029
<b>Goal 1. Actuarial Strengthen the actuarial administration to achieve full funding of the CERS plans.</b>					
1) Actuarial assumptions reflect actual trends					Ongoing
2) Avoid negative amortization.					Ongoing
3) Attain 100% funded status (2040).					Reassess
4) Monitor economic & financial risks.					Ongoing

GOAL/OBJECTIVE	2025	2026	2027	2028	2029
<b>Goal 2. Investment Enhance investment management to support prudent portfolio performance and compliance oversight.</b>					
A) Monitor health of CERS					Ongoing
B) Update IPS	XX				XX
C) Benchmarks for investment performance					Ongoing

GOAL/OBJECTIVE	2025	2026	2027	2028	2029
<b>Goal 3. Finance Collaborate with Kentucky Retirement Systems to develop a cost-effective administrative cost budget, financial management, and cost allocation policies.</b>					
1) Annual Comprehensive Financial Report					Ongoing
2) CERS reporting policies		XX			
3) Escalation policy		XX			
4) Employer participation policies					Ongoing

2025 – 2029 CERS Strategic Plan  
 Timetable (continued)

GOAL/OBJECTIVE	2025	2026	2027	2028	2029
<b>Goal 4. Administrative Finalize structure to support efficient governance for CERS post-retirement plans.</b>					
1) CERS staff evaluations, professional development, and succession planning.	Ongoing				
2) Enhance communications with stakeholders.	Ongoing				
3) Formalize annual planning for Trustee education.	Ongoing				
4) Risk Management.	Ongoing				
5) Evaluate CERS By-Laws and administrative policies to improve Board’s effectiveness and enhance transparency.		XX		XX	
6) Initiate planning process to update CERS Strategic Plan.					XX

DRAFT

<b>Combining Statement of Fiduciary Net Position</b>								
For the six month period ending December 31, 2024, with Comparative Totals for the six month period ending December 31, 2023 (\$ in Thousands) (Unaudited)								
ASSETS	Pension		Insurance		CERS Total			
	CERS Nonhazardous	CERS Hazardous	CERS Nonhazardous	CERS Hazardous	2025	2024		
<b>CASH AND SHORT-TERM INVESTMENTS</b>								
Cash Deposits	\$284	\$26	\$105	\$25	\$441	\$4,894	(90.99)%	1
Short-term Investments	367,949	168,860	122,991	39,209	699,010	523,554	33.51%	2
<b>Total Cash and Short-term Investments</b>	<b>368,234</b>	<b>168,886</b>	<b>123,096</b>	<b>39,235</b>	<b>699,451</b>	<b>528,448</b>		
<b>RECEIVABLES</b>								
Accounts Receivable	64,834	27,203	5,076	2,118	99,230	120,941	(17.95)%	3
Accounts Receivable - Investments	46,262	17,273	17,912	7,554	89,001	84,887	4.85%	
<b>Total Receivables</b>	<b>111,096</b>	<b>44,476</b>	<b>22,988</b>	<b>9,672</b>	<b>188,231</b>	<b>205,828</b>		
<b>INVESTMENTS, AT FAIR VALUE</b>								
Core Fixed Income	1,283,351	457,285	476,372	222,501	2,439,509	1,742,617	39.99%	4
Public Equities	4,678,423	1,667,380	1,725,080	818,426	8,889,308	8,815,778	0.83%	
Private Equities	616,216	218,587	244,808	136,693	1,216,304	1,263,706	(3.75)%	
Specialty Credit	2,034,861	718,402	765,600	363,686	3,882,549	3,451,588	12.49%	5
Derivatives	1,448	572	465	129	2,614	(1,090)	(339.90)%	6
Real Return	496,004	176,308	174,410	83,277	929,999	665,761	39.69%	7
Real Estate	520,917	165,825	188,689	103,545	978,975	979,784	(0.08)%	
<b>Total Investments, at Fair Value</b>	<b>9,631,221</b>	<b>3,404,359</b>	<b>3,575,423</b>	<b>1,728,256</b>	<b>18,339,258</b>	<b>16,918,145</b>	8.40%	
Securities Lending Collateral Invested	247,488	88,221	76,274	36,510	448,493	349,007	28.51%	8
<b>CAPITAL/INTANGIBLE ASSETS</b>								
Capital Assets	1,701	153	-	-	1,854	1,854	0.00%	
Intangible Assets	9,961	827	-	-	10,788	10,788	(0.00)%	
Accumulated Depreciation	(1,701)	(153)	-	-	(1,854)	(1,854)	0.00%	
Accumulated Amortization	(9,961)	(827)	-	-	(10,788)	(10,788)	0.00%	
<b>Total Capital Assets</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>		
<b>Total Assets</b>	<b>10,358,040</b>	<b>3,705,942</b>	<b>3,797,781</b>	<b>1,813,672</b>	<b>19,675,433</b>	<b>18,001,427</b>		
<b>LIABILITIES</b>								
Accounts Payable	5,246	891	82	9	6,227	6,539	(4.76)%	
Investment Accounts Payable	82,229	30,305	31,383	13,703	157,620	130,076	21.18%	9
Securities Lending Collateral	247,488	88,221	76,274	36,510	448,493	349,007	28.51%	10
<b>Total Liabilities</b>	<b>334,962</b>	<b>119,417</b>	<b>107,740</b>	<b>50,222</b>	<b>612,341</b>	<b>485,621</b>		
<b>Total Fiduciary Net Position Restricted</b>	<b>\$10,023,077</b>	<b>\$3,586,525</b>	<b>\$3,690,041</b>	<b>\$1,763,451</b>	<b>\$19,063,093</b>	<b>\$17,515,806</b>	8.83%	
<b>NOTE - Variance Explanation for changes greater than 10% and more than \$1 million. Differences due to rounding, notes continued on next page.</b>								



- 1) *The variance is a result of continuous fluctuation of deposits and transactions that flow through the cash account. As a result of an Internal Audit finding, we continue to evaluate the optimum cash balances at JP Morgan Chase.*
- 2) *Short term investments are primarily comprised of cash on hand at the custodial bank, the variance in the balance is a result of the cash flows of each plan.*
- 3) *The decrease in Accounts Receivable is due to a decrease in the month end accrual for member and employer contributions.*
- 4) *The increase in Core Fixed Income is a result of additional funding and favorable market conditions.*
- 5) *The increase in Specialty Credit is a result of additional funding and favorable market conditions.*
- 6) *The variance in Derivatives is a result of hedging and arbitration of risk within the portfolios.*
- 7) *The increase in Real Return is a result of additional funding of new managers and favorable market conditions.*
- 8) *The variance is a result of the demand of the Securities Lending Program.*
- 9) *The variance in Investment Accounts Payable is primarily the result of pending trades.*
- 10) *The variance is a result of the demand of the Securities Lending Program.*

Combining Statement of Changes In Fiduciary Net Position							
For the six month period ending December 31, 2024, with Comparative Totals for the six month period ending December 31, 2023 (\$ in Thousands) (Unaudited)							
	Pension		Insurance		CERS Total		
	CERS Nonhazardous	CERS Hazardous	CERS Nonhazardous	CERS Hazardous	2025	2024	
<b>ADDITIONS</b>							
Member Contributions	\$78,447	\$33,041	\$-	\$-	\$111,488	\$105,740	5.44%
Employer Contributions	316,672	152,444	416	8,907	478,439	527,808	(9.35)%
Pension Spiking Contributions	12	51	-	-	63	49	28.85%
Health Insurance Contributions (HB1)	(31)	(29)	10,489	2,830	13,259	11,961	10.85% 1
Humana Gain Share Payment	-	-	-	-	-	12,082	(100.00)% 2
Medicare Drug Reimbursement	-	-	-	-	-	-	
Insurance Premiums	-	-	64	2	66	172	(61.48)%
Retired Reemployed Healthcare	-	-	6,421	1,121	7,543	4,125	82.85% 3
<b>Total Contributions</b>	<b>395,099</b>	<b>185,507</b>	<b>17,391</b>	<b>12,861</b>	<b>610,858</b>	<b>661,938</b>	
<b>INVESTMENT INCOME</b>							
From Investing Activities							
Net Appreciation (Depreciation) in FV of Investments	322,432	113,472	113,630	54,781	604,314	678,126	10.88% 4
Interest/Dividends	160,697	57,346	59,354	28,160	305,558	267,061	14.41% 5
Total Investing Activities Income (loss)	483,129	170,818	172,984	82,941	909,872	945,187	
Less: Investment Expense	34,570	11,859	12,972	6,653	66,054	56,674	16.55% 6
Less: Performance Fees	13,838	4,673	5,081	2,686	26,278	15,494	69.60% 7
Net Income (loss) from Investing Activities	434,721	154,286	154,930	73,602	817,540	873,020	
From Securities Lending Activities							
Securities Lending Income	6,375	2,377	2,101	853	11,706	9,925	
Less: Securities Lending Borrower Rebates (Income)/Expense	5,674	2,116	1,852	748	10,390	8,776	
Less: Securities Lending Agent Fees	105	39	37	16	197	172	
Net Income from Securities Lending	596	221	212	90	1,119	977	14.57%
<b>Net Investment Income (loss)</b>	<b>435,316</b>	<b>154,508</b>	<b>155,143</b>	<b>73,692</b>	<b>818,659</b>	<b>873,996</b>	
<b>Total Additions</b>	<b>830,416</b>	<b>340,015</b>	<b>172,534</b>	<b>86,553</b>	<b>1,429,517</b>	<b>1,535,934</b>	

**Combining Statement of Changes In Fiduciary Net Position (continued)**


For the six month period ending December 31, 2024, with Comparative Totals for the six month period ending December 31, 2023 (\$ in Thousands) (Unaudited)


	Pension		Insurance		CERS Total			
	CERS	CERS	CERS	CERS	2025	2024		
	Nonhazardous	Hazardous	Nonhazardous	Hazardous				
<b>DEDUCTIONS</b>								
Benefit Payments	499,711	187,908	-	-	687,619	627,052	9.66%	
Refunds	12,614	4,338	-	-	16,951	16,595	2.15%	
Administrative Expenses	12,640	1,104	463	263	14,471	13,977	3.53%	
Healthcare Premiums Subsidies	-	-	65,768	51,917	117,685	100,850	16.69%	8
Self Funded Healthcare Costs	-	-	2,155	325	2,481	2,003	23.85%	9
Excise Tax	-	-	-	-	-	7		
<b>Total Deductions</b>	<b>524,965</b>	<b>193,350</b>	<b>68,387</b>	<b>52,506</b>	<b>839,207</b>	<b>760,485</b>		
Net Increase (Decrease) in Fiduciary Net Position Restricted for Pension Benefits	305,451	146,665	104,147	34,047	590,310	775,449		
<b>Total Fiduciary Net Position Restricted for Pension Benefits</b>								
<b>Beginning of Period</b>	<b>9,717,626</b>	<b>3,439,860</b>	<b>3,585,894</b>	<b>1,729,403</b>	<b>18,472,784</b>	<b>16,740,356</b>		
<b>End of Period</b>	<b>\$10,023,077</b>	<b>\$3,586,525</b>	<b>\$3,690,041</b>	<b>\$1,763,450</b>	<b>\$19,063,094</b>	<b>\$17,515,805</b>	8.83%	

**NOTE - Variance Explanation for changes greater than 10% and more than \$1 million. Differences due to rounding.**

- 1) Health Insurance Contributions will continue to increase as Tier 2 and Tier 3 members increase.
- 2) The Humana Gain Share payment will fluctuate year to year based on claims paid.
- 3) Retired Reemployed Healthcare contributions increased due to an increase in retired reemployed members in CERS Nonhazardous and CERS Hazardous.
- 4) The increase in Net Appreciation in Fair Value of Investments is the result of gains largely from Public Equities and Specialty Credit.
- 5) The increase in Interest/Dividend Income is largely from Specialty Credit, Real Estate, and Core Fixed Income.
- 6) The increase in Investment expenses is a result of additional investments and appreciation of current investments increasing fees based on MV largely from the Specialty Credit asset class.
- 7) The increase in performance fees is a result of gains from the Real Return and Private Equity asset classes.
- 8) Healthcare Premiums Subsidies increased due to an increase in premiums paid for 65 and older retirees.
- 9) Self Funded Healthcare Costs increased due to an increase in reimbursements for claims on self funded retirees.

**CERS Contribution Report**  
 For the six month period ending December 31, 2024, with comparative totals for the six month period ending December 31, 2023 (\$ in Millions)

	County Employees Retirement System			
	Nonhazardous		Hazardous	
	Pension			
	FY25	FY24	FY25	FY24
Member Contributions	\$78.4	\$75.5	\$33.0	\$30.2
Employer Contributions	316.7	358.9	152.5	156.8
Net Investment Income	112.9	102.4	41.0	36.6
<b>Total Inflows</b>	<b>508.0</b>	<b>536.8</b>	<b>226.5</b>	<b>223.6</b>
Benefit Payments/Refunds	512.3	474.6	192.2	169.0
Administrative Expenses	12.7	12.2	1.1	1.1
<b>Total Outflows</b>	<b>525.0</b>	<b>486.8</b>	<b>193.3</b>	<b>170.1</b>
<b>NET Contributions</b>	<b>(17.0)</b>	<b>50.0</b>	<b>33.2</b>	<b>53.5</b>
Realized Gain/(Loss)	250.3	35.6	88.2	12.4
Unrealized Gain/(Loss)	72.2	316.9	25.2	112.4
<b>Change in Net Position</b>	<b>305.5</b>	<b>402.5</b>	<b>146.6</b>	<b>178.3</b>
<b>Beginning of Period</b>	<b>9,717.6</b>	<b>8,781.4</b>	<b>3,439.9</b>	<b>3,055.8</b>
<b>End of Period</b>	<b>\$10,023.1</b>	<b>\$9,183.9</b>	<b>\$3,586.5</b>	<b>\$3,234.1</b>
Net Contributions less Net Investment Income	(\$129.9)	(\$52.4)	(\$7.8)	\$16.9
Cash Flow as % of Net Assets	(1.30)%	(0.57)%	(0.22)%	0.52%
Net Investment Income	\$112.9	\$102.4	\$41.0	\$36.6
Yield as % of Net Assets	1.13%	1.11%	1.14%	1.13%

	County Employees Retirement System			
	Nonhazardous		Hazardous	
	Insurance			
	FY25	FY24	FY25	FY24
Employer Contributions	\$0.4	\$2.0	\$8.9	\$10.2
Insurance Premiums	0.1	0.2	0.0	0.0
Humana Gain Share	0.0	10.4	0.0	1.6
Retired Reemployed Healthcare	6.4	3.3	1.1	0.9
Health Insurance Contributions	10.5	9.6	2.8	2.4
Net Investment Income	41.5	38.8	18.9	18.0
<b>Total Inflows</b>	<b>58.9</b>	<b>64.3</b>	<b>31.7</b>	<b>33.1</b>
Healthcare Premiums	67.9	55.4	52.2	47.4
Administrative Expenses	0.5	0.5	0.3	0.3
<b>Total Outflows</b>	<b>68.4</b>	<b>55.9</b>	<b>52.5</b>	<b>47.7</b>
<b>NET Contributions</b>	<b>(9.5)</b>	<b>8.4</b>	<b>(20.8)</b>	<b>(14.6)</b>
Realized Gain/(Loss)	95.9	15.3	47.6	9.1
Unrealized Gain/(Loss)	17.7	120.4	7.2	56.1
<b>Change in Net Position</b>	<b>104.1</b>	<b>144.1</b>	<b>34.0</b>	<b>50.6</b>
<b>Beginning of Period</b>	<b>3,585.9</b>	<b>3,289.5</b>	<b>1,729.4</b>	<b>1,613.6</b>
<b>End of Period</b>	<b>\$3,690.0</b>	<b>\$3,433.6</b>	<b>\$1,763.4</b>	<b>\$1,664.2</b>
Net Contributions less Net Investment Income	(\$51.0)	(\$30.4)	(\$39.7)	(\$32.6)
Cash Flow as % of Net Assets	(1.38)%	(0.89)%	(2.25)%	(1.96)%
Net Investment Income	\$41.5	\$38.8	\$18.9	\$18.0
Yield as % of Net Assets	1.13%	1.13%	1.07%	1.08%



## CERS Outstanding Invoices by Type and Employer

Invoice Type	12/31/2024	9/30/2024	Change H/(L)
Averaging Refund to Employer	\$(413,159)	\$(473,525)	-13%
Employer Free Military and Decompression Service	31,715	35,736	-11%
Member Pension Spiking Refund	(6,629)	(4,787)	38%
Monthly Reporting Invoice	102,716	271,125	(62)%
Penalty – Monthly Reporting	144,000	197,000	-27%
Reinstatement	171,358	171,358	0%
Other Invoices**	4,160	2,728	53%
<b>Total</b>	<b>34,161</b>	<b>199,635</b>	
Health Insurance Reimbursement	216,203	1,038,678	(79)%
Omitted Employer	1,254,781	1,210,979	4%
Employer Pension Spiking*	719,035	715,480	0%
Standard Sick Leave	38,910	91,770	(58)%
<b>Total</b>	<b>2,228,928</b>	<b>3,056,907</b>	<b>(27)%</b>
<b>Grand Total</b>	<b>\$2,263,089</b>	<b>\$3,256,541</b>	<b>(31)%</b>

\*Pension Spiking invoices on this report are Employer Pension Spiking. By statute these invoices are due 12 months from the invoice date. Employer Pension Spiking is in effect only for retirements prior to July 1, 2018, therefore, unless there has been a recently created invoice for a backdated retirement, all of these invoices are greater than 12 months old.

\*\*Other Invoices include Expense Allowance; Expired Post Pending; Personnel Adjustment; and, Refunded Member Contributions Due.

Employer Name (Top Ten)	12/31/2024	9/30/2024	Change H/(L)
Kentucky River Regional Jail***	\$973,164	\$973,164	0%
City of Covington***	425,803	422,841	1%
City of Fort Thomas***	282,961	279,457	1%
City of Taylor Mill	143,227	143,227	0%
City of Jeffersontown***	125,755	124,198	1%
Elliott County Ambulance Service	108,316	88,793	22%
City of Dry Ridge	74,213	-	100%
Bullitt County Fiscal Court	74,194	86,527	-14%
City of Frankfort	65,866	108,776	-39%
City of Cave City	\$41,894	\$46,767	-10%

\*\*\*Indicates invoices turned over to Legal for further action

	Total Unpaid Balance	Invoice Count
CERS	\$1,275,128	738
CERH	987,961	82
<b>Grand Total:</b>	<b>\$2,263,089</b>	<b>820</b>

As of February 28, 2025				
PAST DUE INVOICES	CERS TOTAL			
	715 Invoices Past Due	Across 188 Employers		Totaling \$ 2,042,420.45
PAST DUE INVOICES	CERS-NonHazardous			
	665 Invoices Past Due	Across 179 Employers		Totaling \$ 1,465,403.56
0-90 Days Past Due	236	129	129	\$ 82,239.57
91-180 Days Past Due	66	41	143	\$ 37,490.08
181-360 Days Past Due	102	32	154	\$ 92,295.06
1-2 years Past Due	51	19	158	\$ (9,286.00)
2-3 Years Past Due	38	15	163	\$ 34,928.43
3-5 Years Past Due	67	14	166	\$ 808,227.36
Over 5 Years Past Due	105	24	179	\$ 419,509.06
PAST DUE INVOICES	CERS Hazardous			
	50 Invoices Past Due	Across 19 Employers		Totaling \$ 577,016.89
0-90 Days Past Due	16	13	13	\$ 24,811.02
91-180 Days Past Due	1	13	13	\$ (1,903.43)
181-360 Days Past Due	1	1	14	\$ 2,392.41
1-2 years Past Due	2	2	15	\$ 148,028.55
2-3 Years Past Due	0	0	15	\$ -
3-5 Years Past Due	0	0	15	\$ -
Over 5 Years Past Due	30	6	19	\$ 403,688.34

As of June 30, 2024				
PAST DUE INVOICES	CERS TOTAL			
	1625 Invoices Past Due	Across 292 Employers		Totaling \$ 3,609,800.10
PAST DUE INVOICES	CERS-NonHazardous			
	1465 Invoices Past Due	Across 271 Employers		Totaling \$ 2,190,572.64
0-90 Days Past Due	313	152	152	\$ 159,291.71
91-180 Days Past Due	155	68	171	\$ 74,200.78
181-360 Days Past Due	193	77	200	\$ (46,097.53)
1-2 years Past Due	194	70	230	\$ 29,862.66
2-3 Years Past Due	137	43	238	\$ 339,917.42
3-5 Years Past Due	164	50	249	\$ 815,544.67
Over 5 Years Past Due	309	55	271	\$ 817,852.93
PAST DUE INVOICES	CERS Hazardous			
	160 Invoices Past Due	Across 46 Employers		Totaling \$ 1,419,227.46
0-90 Days Past Due	38	22	22	\$ 52,022.29
91-180 Days Past Due	14	12	29	\$ 1,738.26
181-360 Days Past Due	19	12	34	\$ 246,011.83
1-2 years Past Due	10	5	35	\$ (8,163.28)
2-3 Years Past Due	4	4	37	\$ 65,668.12
3-5 Years Past Due	8	4	39	\$ 144.21
Over 5 Years Past Due	67	13	46	\$ 1,061,806.03



County Employees Retirement System

Penalty Invoices Report

From: 10/1/2024 To: 12/31/2024

Note: Delinquent Interest amounts are included in the totals for the invoice

Invoice Amount	Invoice Remaining Balance	Delinquent Interest	Invoice Status Date	Invoice Due Date	Invoice Status	Employer Classification	Comments
\$1,000	\$-	\$-	10/25/2024	7/12/2018	CANC	Conservation Districts	KPPA error \$0 contributions owed.
1,000	-	-	10/25/2024	7/13/2018	CANC	Conservation Districts	KPPA error \$0 contributions owed.
1,000	-	-	10/25/2024	7/13/2018	CANC	Conservation Districts	KPPA error \$0 contributions owed.
1,000	-	-	10/25/2024	7/13/2018	CANC	Conservation Districts	KPPA error \$0 contributions owed.
1,000	-	-	10/25/2024	7/19/2018	CANC	Conservation Districts	KPPA error \$0 contributions owed.
1,000	-	-	10/25/2024	9/8/2018	CANC	Conservation Districts	KPPA error \$0 contributions owed.
1,000	-	-	11/18/2024	12/5/2018	CANC	Libraries	New Employer Reporting Official
1,000	-	-	10/25/2024	6/4/2020	CANC	Conservation Districts	KPPA error \$0 contributions owed.
1,000	-	-	11/18/2024	8/23/2020	CANC	Libraries	New Employer Reporting Official
1,000	-	-	12/20/2024	5/8/2021	CANC	Cities	Employer Reporting Official medical illness
1,000	-	-	12/20/2024	5/8/2021	CANC	Cities	Employer Reporting Official medical illness
1,000	-	-	10/8/2024	5/14/2021	CANC	Cities	KPPA system issue
1,000	-	-	11/18/2024	3/12/2022	CANC	Libraries	New Employer Reporting Official
1,000	-	-	12/20/2024	8/15/2024	CANC	Cities	Employer Reporting Official medical illness
1,000	-	-	11/19/2024	10/17/2024	CANC	Housing Authorities	New Employer Reporting Official
1,000	-	-	12/4/2024	11/7/2024	CANC	Special Districts & Boards	New Employer Reporting Official
1,000	-	-	12/3/2024	12/18/2024	CANC	Area Development Districts	Employer in good standing with KPPA
1,000	-	-	12/10/2024	1/2/2025	CANC	Development Authorities	New Employer Reporting Official
1,000	-	-	12/10/2024	1/2/2025	CANC	Development Authorities	New Employer Reporting Official
1,000	-	-	11/4/2024	11/15/2024	CANC	Boards of Education	Circumstances outside of employer's control
<b>Total</b>	<b>\$20,000</b>	<b>\$-</b>					
\$1,000	\$1,000	\$-	10/3/2024	11/2/2024	CRTD	Ambulance Services	
1,000	1,000	-	10/10/2024	11/9/2024	CRTD	Conservation Districts	
1,000	1,000	-	10/16/2024	11/15/2024	CRTD	Conservation Districts	
1,000	1,000	-	11/20/2024	12/20/2024	CRTD	Cities	
1,000	1,000	-	12/2/2024	1/1/2025	CRTD	Libraries	
1,000	1,000	-	12/5/2024	1/4/2025	CRTD	Fiscal Courts	
1,000	1,000	-	12/5/2024	1/4/2025	CRTD	Fiscal Courts	
1,000	1,000	-	12/5/2024	1/4/2025	CRTD	Fiscal Courts	



County Employees Retirement System  
Penalty Invoices Report  
From: 10/1/2024 To: 12/31/2024

Note: Delinquent Interest amounts are included in the totals for the invoice

Invoice Amount	Invoice Remaining Balance	Delinquent Interest	Invoice Status Date	Invoice Due Date	Invoice Status	Employer Classification	Comments
1,000	1,000	-	12/5/2024	1/4/2025	CRTD	Fiscal Courts	
1,000	1,000	-	12/17/2024	1/16/2025	CRTD	Housing Authorities	
1,236	1,236	-	12/18/2024	1/17/2025	CRTD	Cities	
1,000	1,000	-	12/20/2024	1/19/2025	CRTD	Cities	
1,000	1,000	-	12/20/2024	1/19/2025	CRTD	Cities	
<b>Total</b>	<b>\$13,236</b>	<b>\$13,236</b>					
		<b>\$-</b>					
\$1,000	\$-	\$-	11/4/2024	3/28/2013	PAID	Cities	
1,000	-	-	11/26/2024	8/24/2013	PAID	Cities	
1,000	-	-	10/28/2024	8/24/2013	PAID	Cities	
1,000	-	-	12/10/2024	9/22/2013	PAID	Conservation Districts	
1,000	-	-	12/20/2024	2/12/2015	PAID	Conservation Districts	
1,000	-	-	12/20/2024	6/19/2015	PAID	Conservation Districts	
1,000	-	-	12/9/2024	3/23/2016	PAID	Housing Authorities	
1,000	-	-	12/9/2024	11/4/2016	PAID	Housing Authorities	
1,000	-	-	11/26/2024	6/9/2017	PAID	Planning Commissions	
1,000	-	-	12/12/2024	9/28/2017	PAID	Fiscal Courts	
1,000	-	-	11/12/2024	11/22/2017	PAID	Housing Authorities	
1,000	-	-	11/26/2024	11/24/2017	PAID	Planning Commissions	
1,000	-	-	11/26/2024	11/24/2017	PAID	Planning Commissions	
1,000	-	-	12/30/2024	1/26/2018	PAID	Planning Commissions	
1,000	-	-	12/30/2024	1/27/2018	PAID	Planning Commissions	
1,000	-	-	10/14/2024	3/14/2018	PAID	Special Districts & Boards	
1,000	-	-	10/14/2024	3/29/2018	PAID	Special Districts & Boards	
1,000	-	-	12/20/2024	3/31/2018	PAID	Libraries	
1,000	-	-	12/10/2024	11/30/2018	PAID	Cities	
1,000	-	-	11/4/2024	12/30/2018	PAID	Cities	
1,000	-	-	12/10/2024	12/5/2019	PAID	Libraries	
1,000	-	-	12/30/2024	2/1/2020	PAID	Planning Commissions	





County Employees Retirement System  
Penalty Invoices Report  
From: 10/1/2024 To: 12/31/2024

Note: Delinquent Interest amounts are included in the totals for the invoice

Invoice Amount	Invoice Remaining Balance	Delinquent Interest	Invoice Status Date	Invoice Due Date	Invoice Status	Employer Classification	Comments
\$1,000	\$-	\$-	12/20/2024	5/9/2020	PAID	Libraries	
1,000	-	-	12/9/2024	9/19/2020	PAID	Cities	
1,000	-	-	11/8/2024	9/20/2020	PAID	Cities	
1,000	-	-	12/17/2024	10/10/2020	PAID	Cities	
1,000	-	-	12/17/2024	1/13/2021	PAID	Cities	
1,000	-	-	12/12/2024	2/11/2021	PAID	Fiscal Courts	
1,000	-	-	12/12/2024	2/18/2022	PAID	Fiscal Courts	
1,000	-	-	12/30/2024	5/14/2022	PAID	Planning Commissions	
1,000	-	-	12/30/2024	6/30/2022	PAID	Planning Commissions	
1,000	-	-	12/30/2024	9/25/2022	PAID	Planning Commissions	
1,000	-	-	12/12/2024	10/9/2022	PAID	Fiscal Courts	
1,000	-	-	12/12/2024	10/16/2022	PAID	Fiscal Courts	
1,055	-	-	11/6/2024	11/18/2022	PAID	Fiscal Courts	
1,000	-	-	10/29/2024	1/5/2023	PAID	Cities	
1,000	-	-	11/7/2024	3/11/2023	PAID	Housing Authorities	
1,000	-	-	11/4/2024	4/5/2023	PAID	Conservation Districts	
1,000	-	-	11/7/2024	4/7/2023	PAID	Housing Authorities	
1,000	-	-	10/14/2024	4/20/2023	PAID	Special Districts & Boards	
1,000	-	-	11/6/2024	5/25/2023	PAID	Fiscal Courts	
1,000	-	-	11/6/2024	5/25/2023	PAID	Fiscal Courts	
1,000	-	-	11/6/2024	5/25/2023	PAID	Fiscal Courts	
1,000	-	-	11/6/2024	5/25/2023	PAID	Fiscal Courts	
1,000	-	-	11/6/2024	5/25/2023	PAID	Fiscal Courts	
1,000	-	-	10/1/2024	5/25/2023	PAID	County Attorneys	
1,045	-	-	11/6/2024	5/25/2023	PAID	Fiscal Courts	
1,000	-	-	11/6/2024	9/17/2023	PAID	Fiscal Courts	
1,000	-	-	11/6/2024	10/21/2023	PAID	Fiscal Courts	
1,000	-	-	11/6/2024	10/28/2023	PAID	Fiscal Courts	
1,000	-	-	11/6/2024	11/23/2023	PAID	Fiscal Courts	
1,000	-	-	10/4/2024	12/16/2023	PAID	Housing Authorities	
1,000	-	-	12/20/2024	12/27/2023	PAID	Libraries	



**County Employees Retirement System  
Penalty Invoices Report  
From: 10/1/2024 To: 12/31/2024  
Note: Delinquent Interest amounts are included in the totals for the invoice**

Invoice Amount	Invoice Remaining Balance	Delinquent Interest	Invoice Status Date	Invoice Due Date	Invoice Status	Employer Classification	Comments
1,000	-	-	12/12/2024	2/17/2024	PAID	Fiscal Courts	
1,000	-	-	11/11/2024	2/17/2024	PAID	Libraries	
1,000	-	-	11/6/2024	4/10/2024	PAID	Fiscal Courts	
1,000	-	-	11/6/2024	4/10/2024	PAID	Fiscal Courts	
1,000	-	-	11/6/2024	4/10/2024	PAID	Fiscal Courts	
1,000	-	-	11/6/2024	4/10/2024	PAID	Fiscal Courts	
1,000	-	-	11/6/2024	4/10/2024	PAID	Fiscal Courts	
1,000	-	-	11/6/2024	4/10/2024	PAID	Fiscal Courts	
1,000	-	-	11/6/2024	4/10/2024	PAID	Fiscal Courts	
1,000	-	-	11/26/2024	5/8/2024	PAID	Development Authorities	
1,000	-	-	12/20/2024	5/11/2024	PAID	Libraries	
1,000	-	-	10/2/2024	5/25/2024	PAID	Special Districts & Boards	
1,000	-	-	11/14/2024	5/31/2024	PAID	Boards of Education	
1,000	-	-	11/14/2024	6/15/2024	PAID	Boards of Education	
1,000	-	-	10/2/2024	7/20/2024	PAID	Special Districts & Boards	
1,000	-	-	11/12/2024	8/14/2024	PAID	Fiscal Courts	
1,000	-	-	11/6/2024	8/16/2024	PAID	Fiscal Courts	
1,000	-	-	11/6/2024	8/16/2024	PAID	Fiscal Courts	
1,000	-	-	11/6/2024	8/16/2024	PAID	Fiscal Courts	
1,000	-	-	11/6/2024	8/16/2024	PAID	Fiscal Courts	
1,000	-	-	11/6/2024	8/16/2024	PAID	Fiscal Courts	
1,000	-	-	11/19/2024	8/22/2024	PAID	Cities	
1,000	-	-	11/14/2024	8/31/2024	PAID	Boards of Education	
1,000	-	-	12/17/2024	9/18/2024	PAID	Cities	
1,000	-	-	10/8/2024	9/20/2024	PAID	Fiscal Courts	
1,000	-	-	10/1/2024	10/3/2024	PAID	Utility Boards	
1,000	-	-	11/14/2024	10/4/2024	PAID	Boards of Education	
1,000	-	-	10/9/2024	10/5/2024	PAID	Fiscal Courts	
1,255	-	-	10/10/2024	10/17/2024	PAID	Cities	
1,000	-	-	10/16/2024	10/17/2024	PAID	Boards of Education	



**County Employees Retirement System  
Penalty Invoices Report  
From: 10/1/2024 To: 12/31/2024  
Note: Delinquent Interest amounts are included in the totals for the invoice**

Invoice Amount	Invoice Remaining Balance	Delinquent Interest	Invoice Status Date	Invoice Due Date	Invoice Status	Employer Classification	Comments
1,000	-	-	10/16/2024	10/17/2024	PAID	Cities	
1,000	-	-	11/7/2024	10/17/2024	PAID	Cities	
1,000	-	-	11/12/2024	10/19/2024	PAID	Cities	
1,000	-	-	11/19/2024	10/23/2024	PAID	Cities	
1,000	-	-	11/14/2024	10/25/2024	PAID	Boards of Education	
1,000	-	-	10/4/2024	10/25/2024	PAID	Housing Authorities	
1,000	-	-	11/6/2024	11/2/2024	PAID	Utility Boards	
1,000	-	-	11/12/2024	11/7/2024	PAID	Fiscal Courts	
1,000	-	-	10/9/2024	11/7/2024	PAID	Cities	
1,000	-	-	11/8/2024	11/8/2024	PAID	Utility Boards	
1,000	-	-	11/13/2024	11/15/2024	PAID	Cities	
1,000	-	-	11/19/2024	11/20/2024	PAID	Cities	
1,000	-	-	10/30/2024	11/21/2024	PAID	Libraries	
1,000	-	-	11/18/2024	11/23/2024	PAID	Area Development Districts	
1,000	-	-	12/3/2024	11/28/2024	PAID	Development Authorities	
1,176	-	-	11/18/2024	11/29/2024	PAID	Fiscal Courts	
1,000	-	-	11/5/2024	12/4/2024	PAID	Cities	
1,000	-	-	12/27/2024	12/12/2024	PAID	Fiscal Courts	
1,000	-	-	12/16/2024	12/18/2024	PAID	Cities	
1,000	-	-	12/9/2024	12/18/2024	PAID	Area Development Districts	
1,102	-	-	12/10/2024	12/18/2024	PAID	Fiscal Courts	
1,000	-	-	12/10/2024	12/19/2024	PAID	Ambulance Services	
1,000	-	-	12/9/2024	12/20/2024	PAID	Parks and Recreation	
1,000	-	-	12/2/2024	12/21/2024	PAID	Cities	
1,000	-	-	12/2/2024	12/21/2024	PAID	Cities	
1,000	-	-	12/16/2024	12/22/2024	PAID	Cities	
1,000	-	-	12/17/2024	12/26/2024	PAID	Cities	
1,000	-	-	12/9/2024	1/1/2025	PAID	Cities	
1,000	-	-	12/10/2024	1/5/2025	PAID	Cities	



**County Employees Retirement System  
Penalty Invoices Report  
From: 10/1/2024 To: 12/31/2024  
Note: Delinquent Interest amounts are included in the totals for the invoice**

Invoice Amount	Invoice Remaining Balance	Delinquent Interest	Invoice Status Date	Invoice Due Date	Invoice Status	Employer Classification	Comments
1,000	-	-	12/20/2024	1/16/2025	PAID	Cities	
1,000	-	-	12/27/2024	1/18/2025	PAID	Housing Authorities	
1,000	-	-	11/4/2024	6/28/2012	PAID	County Attorneys	
1,000	-	-	12/10/2024	11/28/2012	PAID	Conservation Districts	
<b>Total</b>	<b>\$115,634</b>	<b>\$-</b>					

**Notes:**  
**Invoice Status:**  
 CANC - Cancelled  
 CRTD - Created  
 PAID - Paid

<b>KPPA ADMINISTRATIVE BUDGET FY 2024-2025</b> <b>BUDGET-TO-ACTUAL SUMMARY ANALYSIS</b> FOR THE SIX MONTHS ENDING DECEMBER 31, 2024, WITH COMPARATIVE TOTALS FOR THE SIX MONTHS ENDING DECEMBER 31, 2023						
CATEGORY	BUDGETED	FY 2025 EXPENSE	REMAINING	PERCENT REMAINING	FY 2024 EXPENSE	PERCENT DIFFERENCE
PERSONNEL	\$36,798,000	\$17,467,495	\$19,330,505	52.53%	\$16,870,195	3.54%
LEGAL CONTRACTS	2,030,000	884,509	1,145,491	56.43%	578,954	52.78%
AUDITING	300,000	98,496	201,504	67.17%	214,821	(54.15)%
ACTUARIAL SERVICES	525,000	100,628	424,372	80.83%	190,067	(47.06)%
MEDICAL REVIEWERS	1,800,000	562,150	1,237,850	68.77%	693,145	(18.90)%
OTHER PERSONNEL	510,000	173,438	336,562	65.99%	145,071	19.55%
<b>PERSONNEL TOTAL</b>	<b>\$41,963,000</b>	<b>\$19,286,716</b>	<b>\$22,676,285</b>	<b>54.04%</b>	<b>\$18,692,253</b>	<b>3.18%</b>
RENTALS - BUILDING & EQUIPMENT	1,175,000	518,062	656,938	55.91%	525,891	(1.49)%
INFORMATION TECHNOLOGY	4,230,000	1,598,800	2,631,200	62.20%	1,312,370	21.83%
OTHER OPERATIONAL	1,397,500	435,168	962,332	68.86%	441,129	(1.35)%
<b>OPERATIONAL TOTAL</b>	<b>\$6,802,500</b>	<b>\$2,552,030</b>	<b>\$4,250,470</b>	<b>62.48%</b>	<b>\$2,279,390</b>	<b>11.96%</b>
RESERVE	216,000	-	216,000	100.00%	-	0.00%
<b>ADMINISTRATIVE BUDGETED AMOUNT</b>	<b>\$48,981,500</b>	<b>\$21,838,746</b>	<b>\$27,142,755</b>	<b>55.41%</b>	<b>\$20,971,643</b>	<b>4.13%</b>

### Administrative Budget Summary Notes

KPPA has spent \$17.5 million in through quarter two, which is 48.47% of the entire budget (leaving 51.53%), and is 3.53% higher than last years quarter two total.

Last Quarter, we pointed out that one item was close to its annual budget, workers comp. This is budgeted at \$15K and we have been billed our annual premium of \$12.5K (likely leaving us \$2.5K under budget for the year). This item and two other items, Employer Paid Health Insurance and Employer Paid Life Insurance, are the only other line items currently over 50%(slightly) through two quarters.

**PERSONNEL (Staffing):**

**LEGAL CONTRACTS:**

**OTHER PERSONNEL CATEGORIES:**

**OPERATIONAL TOTAL:**

**OVERALL:**

KPPA has spent \$885K or 43.57% of the annual budget (leaving 56.43%), prior years amount through two quarters was \$579K.

All other personnel categories were under budget through the second quarter, bringing the total personnel category to \$19.3M or 46% of the total personnel budget (leaving 54.04% left to spend. This was 3.18% or \$594K higher than the prior year.

KPPA spent \$2.6M in the operations category leaving 62.48% of the budget for the next two quarters.

The total administrative expenses through quarter two were \$21.8M, which was 4.13% higher than the prior year comparison, leaving 55.41% (or \$27M) of the original \$49M budget.

KPPA ADMINISTRATIVE BUDGET FY 2024-2025						
BUDGET-TO-ACTUAL ANALYSIS						
FOR THE SIX MONTHS ENDING DECEMBER 31, 2024, WITH COMPARATIVE TOTALS FOR THE SIX MONTHS ENDING DECEMBER 31, 2023						
Account Name	Budgeted	FY 2025 Expense	Remaining	Percent Remaining	FY 2024 Expense	Percent Difference
<b>PERSONNEL</b>						
<b>Staff</b>						
Salaries/Wages	\$21,138,000	\$10,091,272	\$11,046,728	52.26%	\$8,909,245	13.27%
Wages (Overtime)	310,000	104,257	205,743	66.37%	133,960	(22.17)%
Emp Paid FICA	1,641,000	721,822	919,178	56.01%	639,447	12.88%
Emp Paid Retirement	10,511,000	4,931,455	5,579,545	53.08%	5,864,267	(15.91)%
Emp Paid Health Ins	2,875,000	1,515,566	1,359,434	47.28%	1,265,934	19.72%
Emp Paid Sick Leave	250,000	81,740	168,260	67.30%	40,221	103.23%
Adoption Assistance Benefit	10,000	-	10,000	100.00%	-	0.00%
Escrow for Admin Fees	-	-	-	100.00%	-	0.00%
Workers Compensation	15,000	12,485	2,515	16.76%	11,116	12.32%
Unemployment	10,000	2,007	7,993	79.93%	-	100.00%
Emp Paid Life Ins	3,000	1,540	1,460	48.67%	1,494	3.08%
Employee Training	25,000	5,351	19,649	78.60%	5,511	(2.90)%
Tuition Assistance	10,000	-	10,000	100.00%	-	0.00%
Bonds	-	-	-	0.00%	-	0.00%
<b>Staff Subtotal</b>	<b>36,798,000</b>	<b>17,467,495</b>	<b>19,330,505</b>	<b>51.53%</b>	<b>16,871,195</b>	<b>3.53%</b>
<b>LEGAL &amp; AUDITING SERVICES</b>						
Legal Hearing Officers	270,000	90,948	179,052	66.32%	111,175	(18.19)%
Legal (Stoll, Keenon)	250,000	-	250,000	100.00%	7,847	(100.00)%
Frost Brown	1,000,000	420,639	579,361	57.94%	265,426	58.48%
Reinhart	50,000	-	50,000	100.00%	-	0.00%
Ice Miller	300,000	199,704	100,296	33.43%	154,040	29.64%
Johnson, Bowman, Branco LLC	100,000	51,274	48,726	48.73%	37,638	36.23%
Dentons Bingham & Greenbaum	50,000	61,380	(11,380)	(22.76)%	2,828	0.00%
Legal Expense	10,000	60,564	(50,564)	(505.64)%	-	100.00%
Auditing	300,000	98,496	201,504	67.17%	214,821	100.00%
<b>Total Legal &amp; Auditing Services</b>	<b>2,330,000</b>	<b>983,005</b>	<b>1,346,995</b>	<b>57.81%</b>	<b>793,774</b>	<b>23.84%</b>
<b>CONSULTING SERVICES</b>						
Medical Reviewers	1,800,000	562,150	1,237,850	68.77%	693,145	(18.90)%
Escrow for Actuary Fees	-	-	-	0.00%	(500)	0.00%
<b>Total Consulting Services</b>	<b>1,800,000</b>	<b>562,150</b>	<b>1,237,850</b>	<b>68.77%</b>	<b>692,645</b>	<b>(18.84)%</b>
<b>CONTRACTUAL SERVICES</b>						
Miscellaneous Contracts	425,000	145,468	279,532	65.77%	125,434	15.97%
Human Resources Consulting	10,000	-	10,000	100.00%	-	0.00%
Actuarial Services	525,000	100,628	424,372	80.83%	190,067	0.00%
Facility Security Charges	75,000	27,970	47,030	62.71%	20,137	38.90%
<b>Contractual Subtotal</b>	<b>1,035,000</b>	<b>274,066</b>	<b>760,934</b>	<b>73.52%</b>	<b>335,638</b>	<b>(18.34)%</b>
<b>PERSONNEL SUBTOTAL</b>	<b>\$41,963,000</b>	<b>\$19,286,716</b>	<b>\$22,676,284</b>	<b>54.04%</b>	<b>\$18,692,253</b>	<b>3.18%</b>
<b>OPERATIONAL</b>						
Natural Gas	45,000	7,340	37,660	83.69%	7,164	2.46%
Electric	130,000	62,027	67,973	52.29%	58,606	5.84%
Rent-Non State Building	80,000	-	80,000	100.00%	-	0.00%
Building Rental - PPW	1,000,000	480,984	519,016	51.90%	480,985	(0.00)%
Copier Rental	90,000	33,993	56,007	62.23%	42,579	(20.16)%
Rental Carpool	5,000	3,085	1,915	38.30%	2,327	32.57%
Vehicle/Equip. Maint.	1,300	21,048	(19,748)	(1519.05)%	-	0.00%

<b>KPPA ADMINISTRATIVE BUDGET 2024-25</b>						
<b>BUDGET-TO-ACTUAL ANALYSIS</b>						
FOR THE SIX MONTHS ENDING DECEMBER 31, 2024, WITH COMPARATIVE TOTALS FOR THE SIX MONTHS ENDING DECEMBER 31, 2023						
<b>Account Name</b>	<b>Budgeted</b>	<b>FY 2025 Expense</b>	<b>Remaining</b>	<b>Percent Remaining</b>	<b>FY 2024 Expense</b>	<b>Percent Difference</b>
Postage	450,000	38,226	411,774	91.51%	148,193	(74.21)%
Freight	200	-	200	100.00%	-	0.00%
Printing (State)	15,000	50	14,950	99.67%	200	100.00%
Printing (non-state)	85,000	16,822	68,178	80.21%	20,231	0.00%
Insurance	7,500	12,692	(5,192)	(69.23)%	5,090	149.35%
Garbage Collection	7,000	3,293	3,707	52.96%	3,391	(2.89)%
Conference Expense	45,000	18,926	26,074	57.94%	11,177	69.33%
Conference Exp. Investment	2,000	-	2,000	100.00%	-	0.00%
Conference Exp. Audit	3,000	-	3,000	100.00%	-	0.00%
MARS Usage	50,000	29,355	20,645	41.29%	13,550	116.64%
COVID-19 Expenses	-	-	-	0.00%	-	0.00%
Office Supplies	90,000	23,187	66,813	74.24%	23,460	(1.16)%
Furniture & Office Equipment	30,000	1,606	28,394	94.65%	-	100.00%
Travel (In-State)	15,500	6,456	9,044	58.35%	7,080	(8.81)%
Travel (In-State) Investment	-	-	-	0.00%	-	0.00%
Travel (In-State) Audit	1,000	-	1,000	100.00%	-	0.00%
Travel (Out of State)	77,000	33,200	43,800	56.88%	35,235	(5.78)%
Travel (Out of State) Investment	135,000	7,983	127,017	94.09%	14,535	(45.08)%
Travel (Out of State) Audit	3,000	-	3,000	100.00%	-	0.00%
Dues & Subscriptions	69,000	41,566	27,434	39.76%	37,372	11.22%
Dues & Subscriptions Invest	15,000	6,360	8,640	57.60%	14,321	(55.59)%
Dues & Subscriptions Audit	1,000	-	1,000	100.00%	-	0.00%
Miscellaneous	55,000	61,651	(6,651)	(12.09)%	17,430	253.71%
Miscellaneous Investment	-	-	-	0.00%	90	0.00%
Miscellaneous Audit	-	-	-	0.00%	-	0.00%
COT Charges	40,000	8,167	31,833	79.58%	7,622	7.15%
Telephone - Wireless	10,000	3,760	6,240	62.40%	4,305	(12.66)%
Telephone - Other	90,000	67,027	22,973	25.53%	42,947	56.07%
Telephone - Video Conference	15,000	1,949	13,051	87.00%	-	100.00%
Computer Equip./Software	4,120,000	1,561,278	2,558,722	62.10%	1,291,198	20.92%
Comp. Equip./Software Invest	-	-	-	0.00%	-	0.00%
Comp. Equip./Software Audit	20,000	-	20,000	100.00%	-	0.00%
<b>OPERATIONAL SUBTOTAL</b>	<b>\$6,802,500</b>	<b>\$2,552,030</b>	<b>\$4,250,470</b>	<b>62.48%</b>	<b>\$2,279,390</b>	<b>11.96%</b>
<b>SUB-TOTAL</b>	<b>\$48,765,500</b>	<b>\$21,838,746</b>	<b>\$26,926,754</b>	<b>55.22%</b>	<b>\$20,971,643</b>	<b>4.13%</b>
<b>Reserve</b>	<b>216,000</b>	<b>-</b>	<b>216,000</b>	<b>100.00%</b>	<b>-</b>	<b>0.00%</b>
<b>TOTAL</b>	<b>\$48,981,500</b>	<b>\$21,838,746</b>	<b>\$27,142,754</b>	<b>55.41%</b>	<b>\$20,971,643</b>	<b>4.13%</b>

*Differences due to rounding*

<b>Plan</b>	<b>Budgeted</b>	<b>FY 2025 Expense</b>	<b>% of Total KPPA FY 2025 Expense</b>
<b>CERS Nonhazardous</b>	<b>\$28,899,085</b>	<b>\$12,884,860</b>	<b>59.00%</b>
<b>CERS Hazardous</b>	<b>2,527,445</b>	<b>1,126,879</b>	<b>5.16%</b>
<b>KERS Nonhazardous</b>	<b>15,436,030</b>	<b>6,882,262</b>	<b>31.514%</b>
<b>KERS Hazardous</b>	<b>1,771,661</b>	<b>789,907</b>	<b>3.617%</b>
<b>SPRS</b>	<b>347,279</b>	<b>154,837</b>	<b>0.709%</b>
<b>TOTAL</b>	<b>\$48,981,500</b>	<b>\$21,838,746</b>	<b>100.00%</b>

**JP MORGAN CHASE CREDIT EARNINGS AND FEES**

**FOR THE FISCAL YEAR ENDING JUNE 30, 2025**

	<b>Earnings</b>	<b>Fees</b>	<b>Net Earnings</b>
July-24	\$-	\$(7,337)	\$(7,337)
August-24	-	(7,646)	\$(7,646)
September-24		(7,733)	\$(7,733)
October-24		(6,919)	\$(6,919)
November-24		(6,823)	\$(6,823)
December-24		(7,572)	\$(7,572)
January-25			\$-
February-25			\$-
March-25			\$-
April-25			\$-
May-25			\$-
June-25			\$-
<b>Total</b>	<b>\$-</b>	<b>\$(44,030)</b>	<b>\$(44,030)</b>

**JP MORGAN CHASE HARD INTEREST EARNED**

**FOR THE FISCAL YEAR ENDING JUNE 30, 2025**

	<b>Clearing Account</b>	<b>CERS</b>	<b>KERS</b>	<b>SPRS</b>	<b>Total</b>
July-24	\$25,823	\$15,119	\$7,930	\$348	\$49,220
August-24	27,262	20,476	10,633	1,081	\$59,451
September-24	34,046	16,441	8,353	262	\$59,101
October-24	15,627	13,684	7,931	330	\$37,572
November-24	14,694	12,366	9,711	249	\$37,021
December-24	20,158	18,973	11,170	655	\$50,957
January-25					\$-
February-25					\$-
March-25					\$-
April-25					\$-
May-25					\$-
June-25					\$-
<b>Total</b>	<b>\$137,611</b>	<b>\$97,059</b>	<b>\$55,728</b>	<b>\$2,925</b>	<b>\$293,322</b>





## MEMORANDUM

**TO:** County Employees Retirement System Board of Trustees

**From:** Dr. Merl Hackbart, Chair  
Investment Committee

**Date:** March 10, 2025

**Subject:** Summary of Investment Committee Meetings

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The County Employees Retirement System Investment Committee held a regular meeting on February 26, 2025.

1. **The following items were approved by the Investment Committee and are being forwarded to the County Employees Retirement System Board of Trustees for ratification.\***
  - a. **US Large Cap Equity Recommendations --** The Investment Committee accepted a recommendation made by the KPPA Investment Office, in consultation with Wilshire, to allocate the CERS Large Cap Equity position to two new Investment Managers. J.P. Morgan and T. Rowe Price were unanimously approved by the Committee to manage equal allocations which will be funded from the KPPA internal US Large Cap Factor-based portfolio and the internal S&P 500 portfolio.
  - b. **Real Return Recommendation –** KPPA Investment Office presented the Committee the opportunity to invest \$70 million in the new Arctos American Football Fund. The Committee has previously approved a \$250 million investment in Arctos Sports II. The Committee voted unanimously to approve the \$70 million investment in Arctos American Football Fund.
  - c. **Real Return Recommendation –** KPPA Investment Office presented the Committee the opportunity to increase the CERS commitment (\$250 million) in American Rivers Fund, LLC managed by Maritime Partners. After the presentation, the Committee voted unanimously to increase the CERS commitment by an additional \$70 million.
  - d. **Public Equity Performance Benchmark Recommendation –** KPPA Investment Office, in consultation with Wilshire, recommended adopting the MSCI All Country

**World Investable Market Index (MSCI ACWI IMI) as this benchmark represents a better alignment of the actual exposure and strategy of the portfolio. The Committee voted unanimously to change the public equity benchmark.**

**RECOMMENDATION: The Investment Committee requests the County Employees Retirement System Board of Trustees ratify the actions taken by the Investment Committee.**

**2. During the regular meeting the Committee also received information concerning the following:**

- a. Wilshire presented the economic and market overview for the committee. US equities were up 2.6% for the fourth quarter lead by information technology, financials and consumer discretionary. Small caps underperformed large caps by 180 bps during the quarter. In fixed-income the 10-year Treasury yield ended up 4.5% for the quarter. Wilshire was clear that their research shows a negative equity risk premium over the next ten years. In other words, stocks will not outperform bonds over that period.
- b. The Investment Office reported that all CERS funds had a negative return for the quarter ranging around 0.34% against a benchmark of 0.06%. The relative underperformance in the public equity portfolio and underperformance in the private equity portfolio were the biggest drivers. International Public Equity markets were extremely negative for the quarter as growth weakened and political uncertainty persisted.

The Core Fixed Income portfolio produced a return of -2.92% for the quarter; however, it slightly outperformed the benchmark by 8 bps. Cash produced a return of 1.20% for the quarter.

Specialty Credit and Real Return were bright spots for the quarter. Specialty Credit returned 2.23% for the quarter outperforming the custom benchmark by 1.22%. Over a longer period, this portfolio has outperformed the benchmark by 230 bps (3-year) and 205 bps (5-year).

Real Return posted gains of 3.7% for the quarter beating the benchmark by 1.0%. Infrastructure debt, marine transportation and sports investments significantly contributed to the overperformance.

- c. The committee heard the first Compliance Report from the new KPPA Compliance Officer, Carrie Bass. Ms. Bass laid out the format for future compliance reports and informed the committee how those reports would be organized. The committee asked whether she had the opportunity yet to meet with the Chief Auditor to discuss issues related to Investment compliance. She indicated she had not yet done so but was looking forward to the meeting and collaboration.

**\*Board of Trustee Action Required**



**EXTERNAL MANAGER SEARCH AND SELECTION REPORT: US LARGE CAP EQUITY**

IN CONJUNCTION WITH WILSHIRE ASSOCIATES

## RECOMMENDATION



- Kentucky Public Pensions Authority (KPPA) Staff and Wilshire are recommending investments for all CERS portfolios in two actively managed U.S. large cap equity mandates to be managed by J.P. Morgan and T. Rowe Price pending successful investment management agreement negotiations.
- Primary funding to come from the retirement of the Internal U.S. Large Cap Factor-based portfolio; secondary funding to come from the Internal S&P 500 portfolio
- No placement agents have been involved or will be compensated as a result of this recommendation.

## INTRODUCTION



- Continue to work to improve the public equity allocation
  - Terminate the U.S. large cap factor-based portfolio
    - Factor tilts (size, value, momentum & volatility) have not been rewarded for a sustained period
    - Experienced greater tracking error
  - Relative performance to be driven by stock selection rather than structural biases
  - Add value by utilizing lower tracking error active management with reasonable fees given the exposure and expected relative performance
- This report serves as a review of the competitive search process utilized by staff in accordance with the Investment Policy Statement and Investment Procurement Policy in its pursuit to improve the public equity allocation.

## GENERAL PROCESS



- Start with Wilshire Investment Management database (over 12,000 strategies)
- Applied minimum criteria to cull list to a more manageable size (qualitative)
- Staff may add managers to the list that may not participate in the database
- Additional cut (quantitative)
- Distribute a Request for Information (RFI) to remaining candidates (7 firms / 9 strategies)
- Staff and consultant having read the RFI responses narrowed down the candidate list (4)
- Discussions / onsite visits with short-list candidates
- Additional discussions with front-runners prior to final decision

## ESTABLISHED CRITERIA



- Screening Criteria
  - U.S. large cap universe: Benchmarks included SP500 and/or R1000
  - Active Management: majority of holdings must be U.S. large cap stocks
  - Firm AUM: greater than \$10billion
  - Strategy AUM: greater than \$1billion
  - Minimum five-year track record
  - Firm / Team ranked by Wilshire's Manager Research Team third decile or better (qualitative)
  - Separate Account Offering
  - Relative Returns (1,3,5&10Yrs): Positive Excess
  - Tracking Error (1,3,5&10Yrs): Above 1%
  - Information Ratios (1,3,5&10Yrs): Above 0.50
  - Sharpe Ratios (1,3,5&10Yrs): Positive Excess
  - Up / Down Capture Ratios (1,3,5&10Yrs): Above 1.0 / Below 1.0



## CANDIDATE POOL



- Preliminary screening provided a broad candidate list of 111 potential strategies
- Additional screening culled the list down to 7 firms (9 strategies), who received a Request for Information (RFI)
- Short list created for further review
  - BlackRock: Systematic Active Equity U.S. Alpha Tilts
  - Columbia Threadneedle: U.S. Contrarian Large Cap Core Strategy
  - J.P. Morgan: U.S. Large Cap Core
  - T. Rowe Price: U.S. Structured Research Equity Strategy

## J.P. Morgan



- Organization Structure
  - Founded in 1863
  - Publicly traded on the NYSE; employees hold 3.5% of outstanding
  - Firm public equity AUM over \$1T; Strategy AUM of \$81.9b
- Investment Team
  - Consists of 3 PMs (25/19); supported by a team of 18 career sector specialists (23/12)
  - Lead PM ultimately responsible for portfolio construction and risk management
- Client / Product Stability
  - Past few years, strategy has added 21 (+70) clients with net inflows over \$740m
- Investment Philosophy
  - Understanding the normalized earnings power of a company; take advantage of mispricing from near-term information
  - Stock selection in the context of a high conviction fully invested, broadly diversified and style consistent portfolio
  - Information advantage developed through proprietary, fundamental research

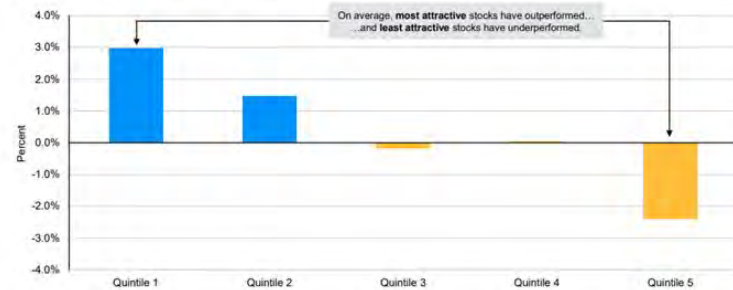
## J.P. Morgan (cont.)



- Investment Process
  - Create as sustainable, proprietary information advantage by leveraging fundamental analysts
    - Gain an understanding of the dynamics of a business, its growth prospects, and sustainability of competitive advantage
  - Utilize a systematic valuation process to quantify forward looking views
    - Forecasts earnings and dividends (long-term)
    - Determine normalized long-term earnings and whether the current stock price is under or over-valued
    - Each stock is characterized into industry sector and ranked into quintiles

January 1, 1987 – December 31, 2024

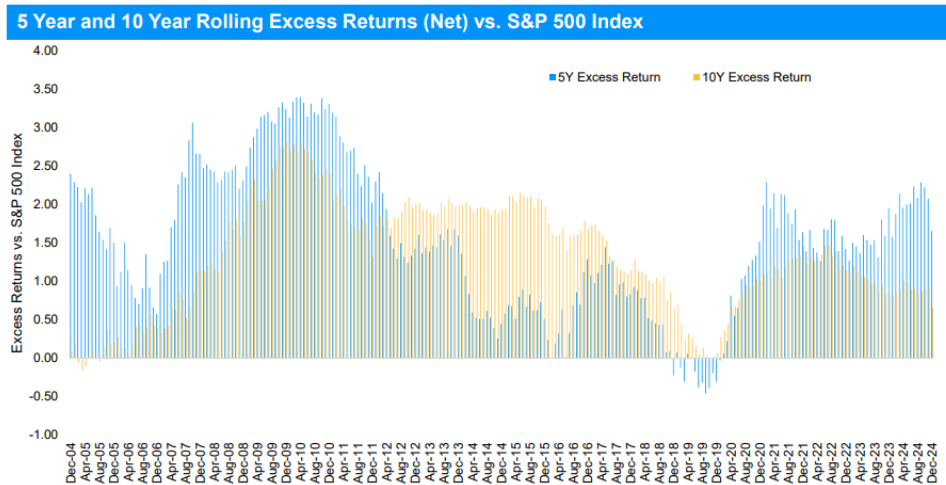
Quintile Performance vs. S&P 500 Index



# J.P. Morgan (cont.)



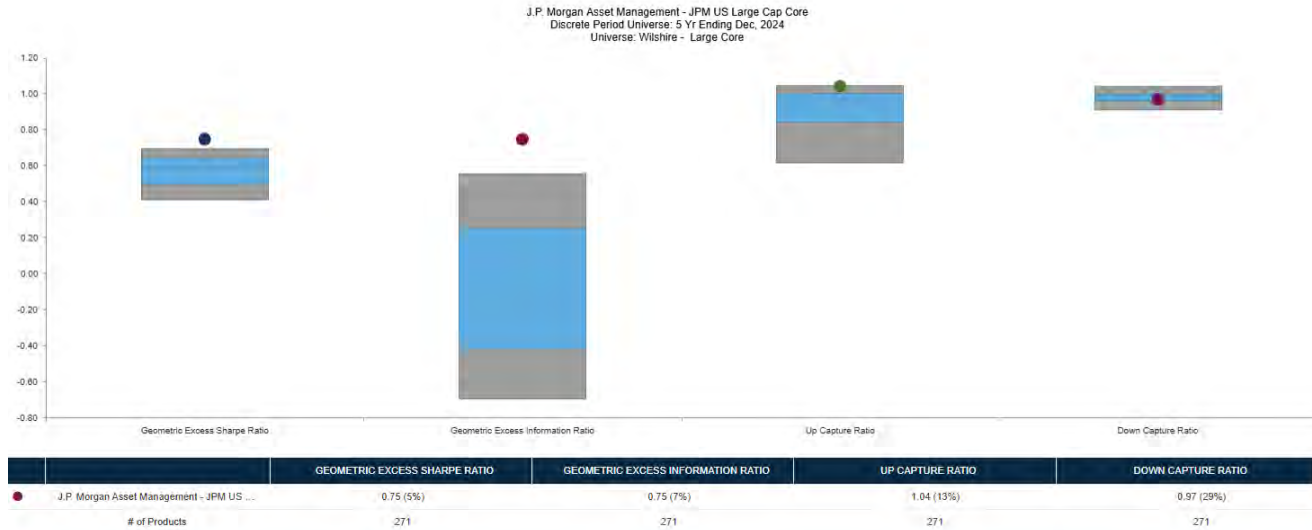
- Investment Process (cont.)
  - Construct portfolio driven by stock selection while concentrating risk into the highest conviction ideas
    - PM selects from most attractively valued stocks within each sector (typically first 2 quintiles)
    - Attractively valued, where insights are differentiated and conviction is high, where there exists a compelling risk-reward relationship
      - 50-70 names; TE 2-4%; relative sector weights +/- 4%; specific security weights +/- 4%
  - Style neutral portfolio, stock selection driven excess performance



# J.P. Morgan (cont.)



J.P. Morgan					
As of: 12/31/24	1YR	3YR	5YR	10YR	SI
US Large Cap Core Equity Strategy	24.83	9.21	16.49	14.06	12.49
S&P 500 Index	25.02	8.94	14.53	13.10	11.31
<i>Relative Performance (+/-)</i>	-0.19	0.27	1.96	0.96	1.18
Inception Date: 12/31/85					



## T. Rowe Price



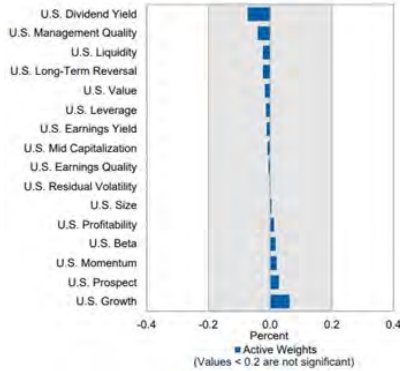
- Organization Structure
  - Founded in 1937; IPO 1986
  - 2000 became T. Rowe Price Group; employees hold 7% of outstanding
  - Firm AUM over \$1.6T; Strategy AUM of \$89.6b
- Investment Team
  - Analyst driven (28) who are industry specialists; managed by 5-member Portfolio Oversight Committee (21/9)
- Client / Product Stability
  - Past few years, strategy has added 7 clients with net inflows over \$300m
- Investment Philosophy
  - Fundamental research is key; differentiated sources can create a competitive advantage
  - Company earnings and revenue can be mispriced; stock price mean reversion
  - Investors overreact to news, providing opportunities
  - Seek to add value over a full market cycle rather than short-term fluctuations; leadership is often difficult to anticipate

# T. Rowe Price (cont.)



- Investment Process
  - Strategy is a collection of industry focused analyst driven portfolios; bottom-up stock selection
    - Capital allocated across the analyst team in alignment with index weights associated with coverage area
    - Each analyst manages their own portfolio; express conviction in each holdings based on research
      - Business model / management quality / market position / valuation
  - Portfolio Oversight Committee
    - 5 PMs, assign coverage areas, mentors / develops analysts, oversees activity, ensures adherence with portfolio constraints & risk controls

BARRA<sup>12</sup> RISK FACTORS FOR US STRUCTURED RESEARCH EQUITY  
REPRESENTATIVE PORTFOLIO-ACTIVE EXPOSURES

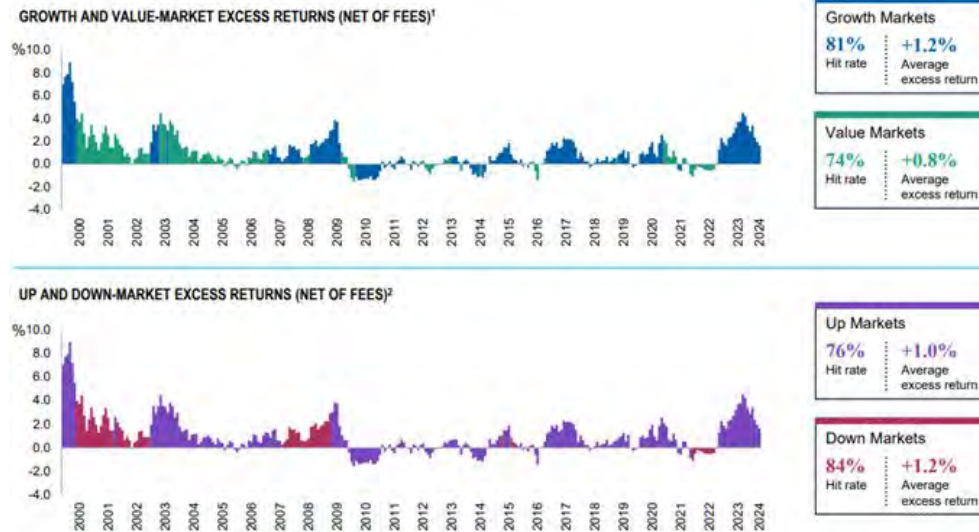


	Total	Info Tech	Financials	Health Care	Comm Svcs	Consum Stpls	Materials	Utilities	Real Estate	Industrials & Bus Svcs	Energy	Consum Disc
Over (Under) Weight	-	-0.20	1.06	-0.05	0.29	-0.46	-0.03	0.12	-0.35	-1.10	-0.27	0.36
Portfolio Weight (Average)	100.00	24.55	15.06	13.61	9.95	6.44	2.52	2.90	2.28	7.66	3.39	11.02
Index Weight (Average)	100.00	24.74	14.00	13.67	9.65	6.90	2.54	2.78	2.63	8.76	3.66	10.66

## T. Rowe Price (cont.)



- Investment Process (cont.)
  - Portfolio consists of 200-275 stocks; relative weight +/- 15bps ; TE < 1.75%
    - Relatively industry (+/- 100bps) & sector (+/- 150bps) neutral; active positions +/- 100bps
  - All weather portfolio not dependent on factor or style leadership, driven by individual stock risk

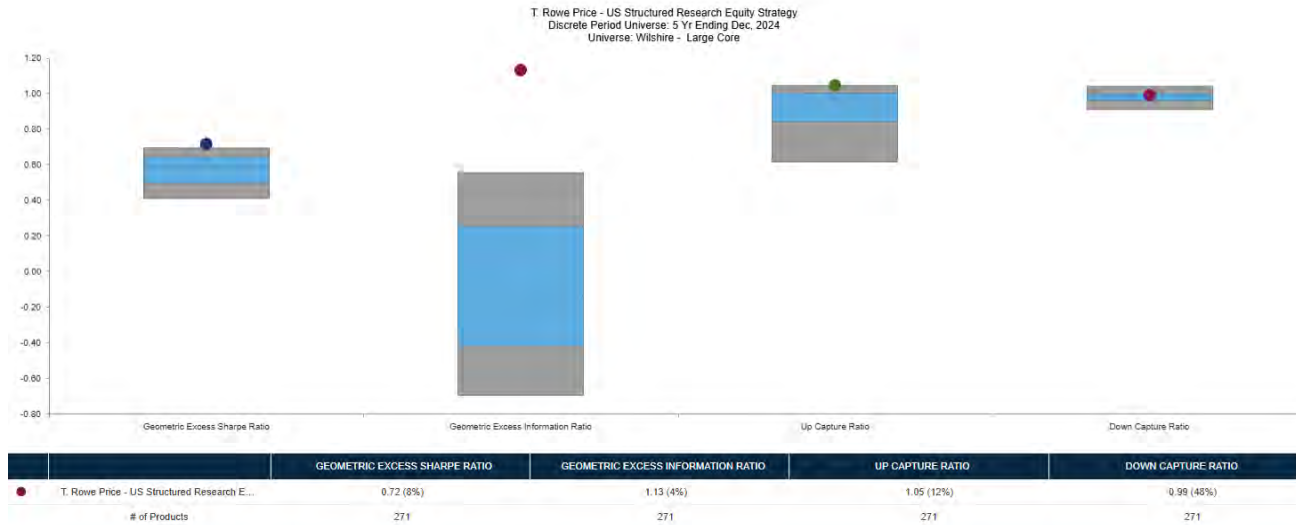




# T. Rowe Price (cont.)



T. Rowe Price					
As of: 12/31/24	1YR	3YR	5YR	10YR	SI
US Structured Research Equity Strategy	26.99	10.53	15.87	14.37	9.59
S&P 500 Index	25.02	8.94	14.53	13.10	8.06
<i>Relative Performance (+/-)</i>	1.97	1.59	1.34	1.27	1.53
Inception Date: 05/31/99					



## Implementation & Sizing



- As of 12/31/24, \$397.1m invested in the U.S. large cap factor-based portfolio (5.2% U.S. / 3.3% public equity)
  - Retire the investment; primary source of funding for new mandates
  
- Allocation should be more meaningful in terms of attribution to performance (Internal S&P 500)
  
- Upsizing the allocation and blending the two finalists, expected return can be improved while maintaining current risk levels in the greater portfolio
  - Strategies complement one another – both expected to outperform over a market cycle, but do so with differentiated return paths
    - T. Rowe Price – well-diversified large number of incremental bets that compound overtime
    - J.P. Morgan – takes larger relative positions, creates opportunity for greater excess return albeit with higher level of relative risk, less predictable return path
      - Blending the two yields a higher expected return, yet smoother return path (correlation 0.53)
  
- Seeking approval to invest up to 12.5% of public equities; with initial funding to approximate 6.6%

Initial Approximate Plan Participation based on 12/31/24 Allocations				
KERS	77,000,000.00	KERS INS	40,300,000.00	117,300,000.00
KERS-H	27,300,000.00	KERS-H INS	16,200,000.00	43,500,000.00
CERS	308,800,000.00	CERS INS	111,000,000.00	419,800,000.00
CERS-H	111,600,000.00	CERS-H INS	57,400,000.00	169,000,000.00
SPRS	14,300,000.00	SPRS INS	6,600,000.00	20,900,000.00
	539,000,000.00		231,500,000.00	770,500,000.00

## RECOMMENDATION



- Staff and consultant believe J.P. Morgan and T. Rowe Price will be a positive addition to the KPPA investment program.
  - While distinct, the shared philosophical belief in conjunction with differentiated construction methodologies, yields complimentary return profiles.
    - Neither relies on style biases or tilts but rather on idiosyncratic stock selection to drive relative performance, which helps to insulate from macro theme influences
  - The expected result is a more efficient public equity portfolio, with a better risk/reward profile and increased diversification, as both strategies have low to negative correlations with already existing mandates
- ***J.P. Morgan – U.S. Large Cap Core Equity Strategy***
  - ***Up to 6.25% of the total public equity allocation, with initial funding of approximately 3.3% (approximately \$383.3m). Primary funding to come from the internal factor-based U.S. large cap portfolios, with additional funds from the Internal S&P 500 portfolios.***
- ***T. Rowe Price – U.S. Structured Research Equity Strategy***
  - ***Up to 6.25% of the total public equity allocation, with initial funding of approximately 3.3% (approximately \$383.3m). Primary funding to come from the internal factor-based U.S. large cap portfolios, with additional funds from the Internal S&P 500 portfolios.***



EXTERNAL MANAGER  
SEARCH AND  
SELECTION REPORT:  
US LARGE CAP PUBLIC  
EQUITY

IN CONJUNCTION WITH  
WILSHIRE ASSOCIATES

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## Recommendation

Kentucky Public Pensions Authority (KPPA) Staff and Wilshire are recommending investments for all CERS portfolios in two actively managed U.S. Large Cap Public Equity mandates to be managed by J.P. Morgan and T. Rowe Price pending successful investment management agreement negotiations.

No placement agents have been involved or will be compensated as a result of this recommendation.

## Introduction

In a continued effort to improve the portfolio, staff has decided to terminate its efforts managing a US large cap factor-based public equity portfolio modeled after Scientific Beta's US Four Factor Equal Weighted Index. This strategy seeks to implement tilts towards factors believed to add value over the longer-term (size, value, momentum, & volatility). While the strategy has performed relatively as expected, these factors have not been rewarded during its tenure in the KPPA portfolio for any sustainable period. In addition, the tracking error has been greater than expected. Therefore, it has been determined that the strategy should no longer be utilized as part of KPPA's global public equity strategy allocation. The liquidation of this portfolio will serve as the primary funding source for the new recommended active US large cap public equity strategies, with supplemental funding provided by the Internal S&P 500 Index portfolio. Staff desires to add value over the US large cap index through lower tracking error active management with reasonable fees given the exposure and expected relative performance.

This report serves as a review of the competitive, open search process in accordance with the Investment Policy Statement and the Investment Procurement Policy and serves as a recommendation to the Investment Committee to approve investments in the strategies within the global public equity allocation.

## Established Criteria

The initial screening was established through collaboration with our independent investment consultant, Wilshire. The criteria were designed to capture as many strategies as possible, while at the same time ensuring the strategies meet certain minimum qualifications. Due to such a large universe of potential candidates, screening criteria was refined several times. The final screening criteria were as follows:

- U.S. Large Cap Universe: Benchmarks included S&P 500 and/or Russell 1000
- Active Management: Majority of holdings must be U.S. large cap stocks
- Firm AUM: greater than \$10 billion
- Strategy AUM: greater than \$1 billion
- Minimum five-year track record
- Firm/Team ranked by Wilshire's Manager Research Team third decile or better (qualitative)
- Separate Account Offering
- Relative Returns (1,3,5 &10Year Periods): Positive Excess
- Tracking Error (1,3,5 &10Year Periods): Above 1%
- Excess Information Ratios (1,3,5 &10Year Periods): Above 0.50
- Sharpe Ratios (1,3,5 &10Year Periods): Positive Excess
- Up/Down Capture Ratios (1,3,5, &10Year Periods): Above 1.0/Below 1.0

## Candidate Pool

Preliminary screening from the Wilshire Investment Management database provided a candidate list of 111 potential strategies. Additional screening and staff input culled this list down to seven firms (nine strategies). These firms were provided a Request For Information (RFI), and from those responses, a short list was created for further due diligence.



The RFI recipients consisted of the following seven firms and nine strategies:

- Acadian Asset Management: Enhanced U.S. Equity
- BlackRock: Systematic Active Equity U.S. Alpha Tilts\*\*
- Columbia Threadneedle: U.S. Contrarian Large Cap Core Strategy\*\*
- Intech Investment Management: U.S. Enhanced Plus
- J.P. Morgan: Large Cap Core\*\*
- J.P. Morgan: U.S. Analyst Large Cap Core Strategy
- J.P. Morgan: REI 150 Strategy
- Los Angeles Capital Management: U.S. Large Cap Enhanced Equity
- T. Rowe Price: U.S. Structured Research Equity Strategy\*\*

\*\* Strategy selected for further discussions.

### **General Process**

Staff and consultant employed the same systematic process used in prior searches to narrow the potential candidates down to the finalists. The Wilshire Investment Management database, which consists over 12,000 strategies, is the starting point for setting the universe of potential ideas. This database is self-populated by external managers and contains a significant amount of information regarding their specific firm and its product(s). Minimum criteria are set to cull the potential candidate list down to a more manageable size, regarded as the short list. This criteria includes, but is not limited to qualitative assessments of the firm and portfolio management team, firm / product asset under management, available capacity, a demonstrated ability to add value over varying periods, length of track record, etc. Staff may add managers to the list that may not have either made it through the initial screen or who may not participate in the database. From this point, an additional cut is made based on further quantitative evaluation including, but not limited to, capture ratios, risk/return profiles, active share, etc. Staff then sent a Request For Information (RFI) to the remaining candidates (7 across 9 strategies) designed to generate insight into the firm's structure, staffing, product stability, investment team/philosophy/process, and other meaningful data points. Staff and consultant having read the RFI responses narrowed down the candidate list further for presentations and discussions (4). Additional discussions were held with the perceived frontrunner(s) prior to making the final decision to bring the finalists for presentation to the Investment Committee.

### **Organization Structure and Stability**

#### J.P. Morgan

J.P. Morgan Investment Management Inc. is an investment advisor under J.P. Morgan Asset Management and is wholly owned by J.P. Morgan Chase & Company (founded in 1863), which is publicly traded on the NYSE (JPM). As of most recent available data, employees of J.P. Morgan Chase held roughly 3.5% of outstanding shares. The firm manages over \$1 trillion in public equity markets; the U.S. Large Cap Core Equity Strategy had an AUM of roughly \$81.9 billion as of 12/31/24.

#### T. Rowe Price

T. Rowe Price was founded in 1937 and later incorporated in 1947. It remained a wholly owned, privately held company for nearly 40 years. In 1986 the firm initiated its public offering, and in 2000, the firm reorganized itself into a holding company, known as T. Rowe Price Group, Inc. (TRPG). Today, TRPG remains an independent publicly traded company, with significant employee ownership, of approximately 7% of the outstanding shares. Firm AUM stood at approximately \$1,607 billion as of close 12/31/24. The U.S. Structured Research Equity Strategy platform had an AUM of \$89.6 billion.

### **Investment Team**

#### J.P. Morgan

The investment team consists of three portfolio managers with an average of 25 years of investment experience, 19 of which have been spent with the firm. The lead portfolio manager has ultimate authority over all buys and sells. In



addition, the portfolio management team is responsible for ensuring strategy implementation, adherence to guidelines and risk controls. Portfolio managers are supported by a team of 18 dedicated career analysts who are sector specialists. Analysts average nearly 23 years of industry experience, and 12 years with the firm. Supporting each analyst is a “junior” person who has seven years of experience on average. Firm tenure across the team demonstrates stability.

#### T. Rowe Price

The strategy is analyst driven; however, it is managed by a five-member portfolio oversight committee. The committee assigns coverage to an analyst stable of 28, who are industry specialists. In addition to assigning coverage areas, the committee is responsible for mentoring and developing the analysts, ensuring adherence to portfolio constraints, and risk management. Members of the portfolio oversight committee have an average investment experience of over 21 years, and an average tenure on the strategy of approximately 9 years, demonstrating stability. Analysts’ investment experience ranges from four to +15 years.

### **Investment Philosophy and Process**

#### J.P. Morgan

The firm believes that by understanding the long-term normalized earnings power of a company, they can take advantage of mispricing that results from near-term information. Further, the team holds that consistent outperformance can be achieved through solid stock selection in the context of a high conviction fully invested, broadly diversified and style consistent portfolio. The key to being able to do this lies in an information advantage that is developed through proprietary, fundamental research.

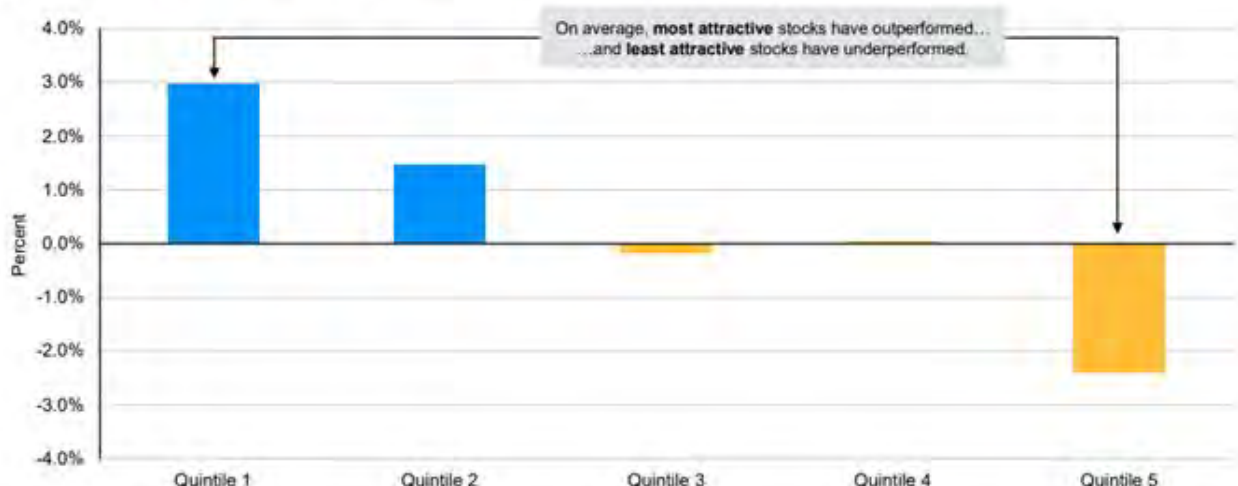
The investment process breaks down into three key steps: 1) create a sustainable, proprietary information advantage by leveraging a dedicated team of fundamental analysts, 2) utilize a systematic valuation process to quantify forward-looking views and capture analysts’ insights, and 3) construct portfolios with a focus on driving alpha through stock selection while concentrating the risk budget in the highest conviction ideas.

The team looks to build an information advantage by leaning on proprietary, fundamental research conducted by analysts who are career specialists in a particular industry. Analysts spend time meeting with company management, suppliers, competitors, and end-users, to gain a full appreciation of the investment drivers of stocks they cover. Analysts strive to gain an understanding of the dynamics of a business, its growth prospects, and the sustainability of competitive advantage. This is done by studying the economics (how a business creates value for shareholders), duration (the sustainability of value creation), and governance of an opportunity. All three of these are influenced by industry factors, company factors, and management choices.

The team follows a systematic valuation process where the main inputs are the analysts’ forecasts of company earnings and dividends, determined by extensive analysis of each company’s business outlook and financial situation. Long-term forecasts of future earnings, cash flows and dividends, as well as a stock’s current price, are key inputs into the valuation process. Analysts seek to determine normalized long-term earnings and establish if the current stock price is under or over-valued given this outlook. Each stock is characterized into an industry sector and ranked into quintiles based on the determined internal rate of return for each stock.

January 1, 1987 – December 31, 2024

**Quintile Performance vs. S&P 500 Index**



Portfolio construction is a function of the portfolio manager selecting the most attractively valued stocks within each sector, typically purchasing those names in the first two quintiles. However, the PM may purchase and hold names ranked in any quintile. This could be from a risk mitigation perspective (portfolio construction), or acknowledgement that a stock ranked in the fourth quartile of one sector may be more attractive than a stock ranked in the first quintile of another. Holdings are focused among those names that are attractively valued, where insights are differentiated, and conviction is high. Ultimately, where there exists a compelling risk-reward relationship. The manager states, the best stock to own is one “which is fundamentally undervalued, displays positive price momentum, and has a healthy balance sheet with positive earnings estimates.” Conversely, those names that find themselves slipping down the quintile rankings are candidates for trimming or full sells.

The final portfolio typically consists of 50-70 stocks and has an expected tracking error of 2-4%. Relative sector weights are limited to +/- 4%. Security specific relative weights are also, +/- 4%; however, securities are limited to maximum exposure of 5% at the time of purchase. The portfolio is expected to be fully invested with a cash position of 0-3%.

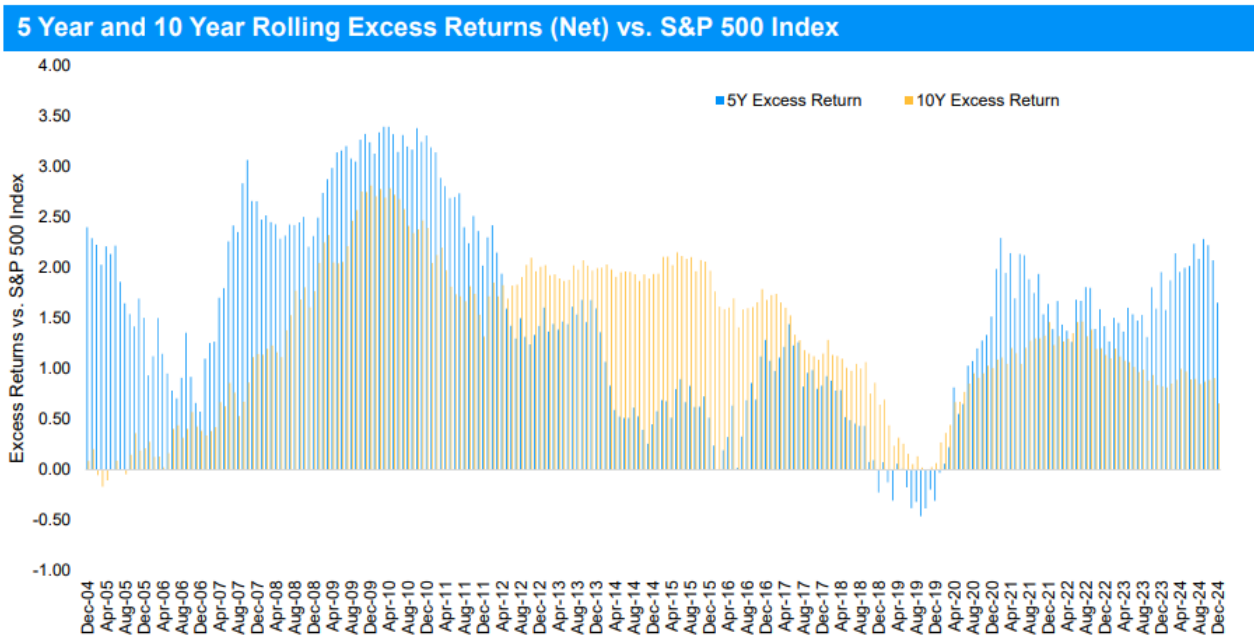
The portfolio management team is responsible for evaluating the overall level of risk relative to the benchmark. The team utilizes tools such as Barra and FactSet to monitor for style drift or value at risk. Further, a Guidelines and Monitoring Team is responsible for monitoring daily compliance with client guidelines. Trading compliance software (Sentinel) is utilized to run pre-trade checks on all orders submitted prior to execution to ensure portfolio compliance with guidelines.







As demonstrated from the chart above, the strategy is not style dependent. The primary driver of relative performance is stock selection. The strategy is most successful when the market is rational, and values companies based on their fundamental long-term expected profitability. Analysts’ ability to forecast accurately versus market consensus is critical. The strategy is likely to struggle when the market values securities outside of fundamental characteristics. However, these periods tend to be short-lived. The following chart demonstrates the consistency of the strategy’s relative outperformance.



T. Rowe Price

The firm’s investment philosophy hinges on three core beliefs. First, fundamental research is key to discovering companies that will outperform their peers. This tenant is bolstered by the insight that not all investors are equally well-informed meaning research and the pursuit of differentiated sources of information can provide a competitive edge.



Further, a company’s earnings and revenue stream are often mispriced (relative to history, sector/industry, or market) and gains can be harvested through stock price mean reversion. Second, the firm believes many investors overreact to news, whether good or bad, which provides disciplined investors opportunities to both buy and/or sell. Last, the strategy seeks to add value over a full market cycle rather than in short-term market fluctuations, recognizing that sector, style, and capitalization leadership is often difficult to anticipate.

The strategy is essentially a collection of industry focused analyst driven portfolios that use a fundamental bottom-up approach to stock selection. Capital is allocated across the analyst team in alignment with the index weights associated with their coverage area. Each analyst manages their own portfolio in the terms of security selection, weights, and the timing of trades. Analysts choose to overweight, underweight, or hold non-index securities expressing conviction in each holding based on company-specific research. This research incorporates a business’s financial condition, an evaluation of a company’s business model / management quality / market position, and an assessment of the company’s valuation. A sell discipline is incorporated throughout the assessment / portfolio monitoring process. Holdings are candidates for sell (whether trimming or wholesale) are those that experience a change in their fundamental assessment, relative valuation becomes no longer attractive, better opportunities emerge, and through rebalancing.



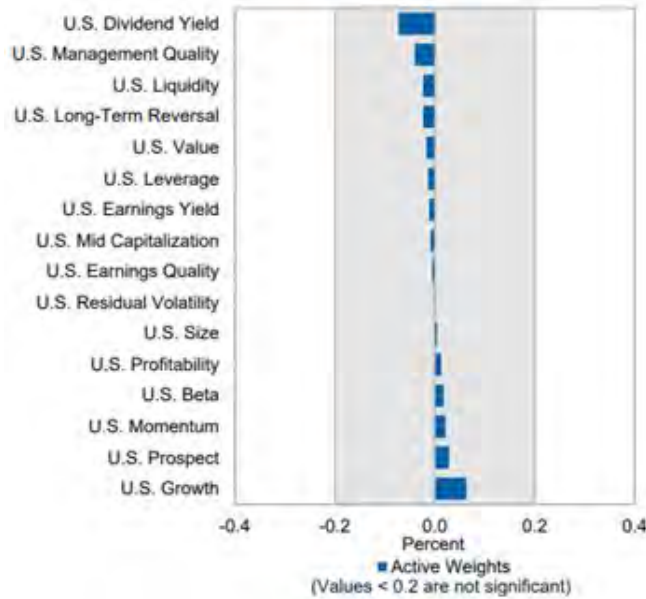
The final portfolio typically consists of 200-275 stocks with typical relative weights ranging in +/-15bps, resulting in a portfolio with an expected tracking error of less than 1.75%. The portfolio is relatively industry/sector neutral with industry ranges of +/-100bps and sector ranges of +/-150bps. Active position sizes typically range +/-100bps (stocks that are more than 3% of the index, +/-150bps). The portfolio is allowed to invest in non-benchmark securities with a maximum position of 50bps, and an aggregate limit of 10%.

As noted, analyst activity is subject to the Portfolio Oversight Committee. The committee is comprised of five portfolio managers who assign coverage areas, mentor and develop analysts, oversees analyst activity, and ensures adherence to portfolio constraints and risk controls.

Risk management is primarily the responsibility of the Portfolio Oversight Committee. The committee utilizes a proprietary tool to monitor the risk profile of the portfolio, along with Barra risk model, Zepher SyleADVISOR, and FactSet to develop a daily risk management report. Risk is managed by closely monitoring factor exposures, controlling active position sizes, maintaining industry and sector neutrality, and monthly rebalancing.



**BARRA<sup>1,2</sup> RISK FACTORS FOR US STRUCTURED RESEARCH EQUITY REPRESENTATIVE PORTFOLIO—ACTIVE EXPOSURES**



As mentioned, (and demonstrated by the above chart) the strategy’s relative success is not dependent on style, sector, or the direction of market. As such, this is an all-weather strategy that should perform in both bull and bear markets regardless of drivers. However, the strategy can find itself lagging in more narrowly led markets.

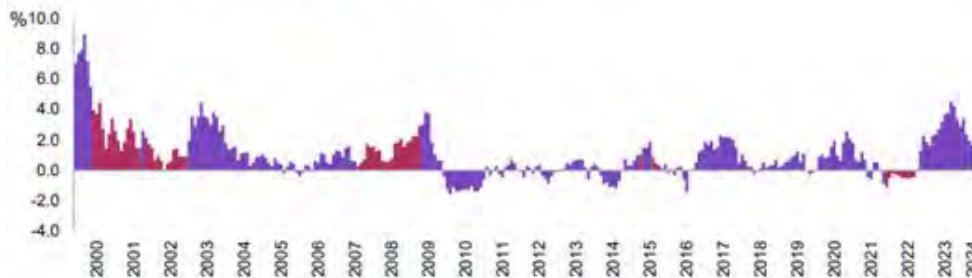
**GROWTH AND VALUE-MARKET EXCESS RETURNS (NET OF FEES)<sup>1</sup>**



**Growth Markets**  
81% Hit rate ..... +1.2% Average excess return

**Value Markets**  
74% Hit rate ..... +0.8% Average excess return

**UP AND DOWN-MARKET EXCESS RETURNS (NET OF FEES)<sup>2</sup>**



**Up Markets**  
76% Hit rate ..... +1.0% Average excess return

**Down Markets**  
84% Hit rate ..... +1.2% Average excess return



**Client Stability**

J.P. Morgan

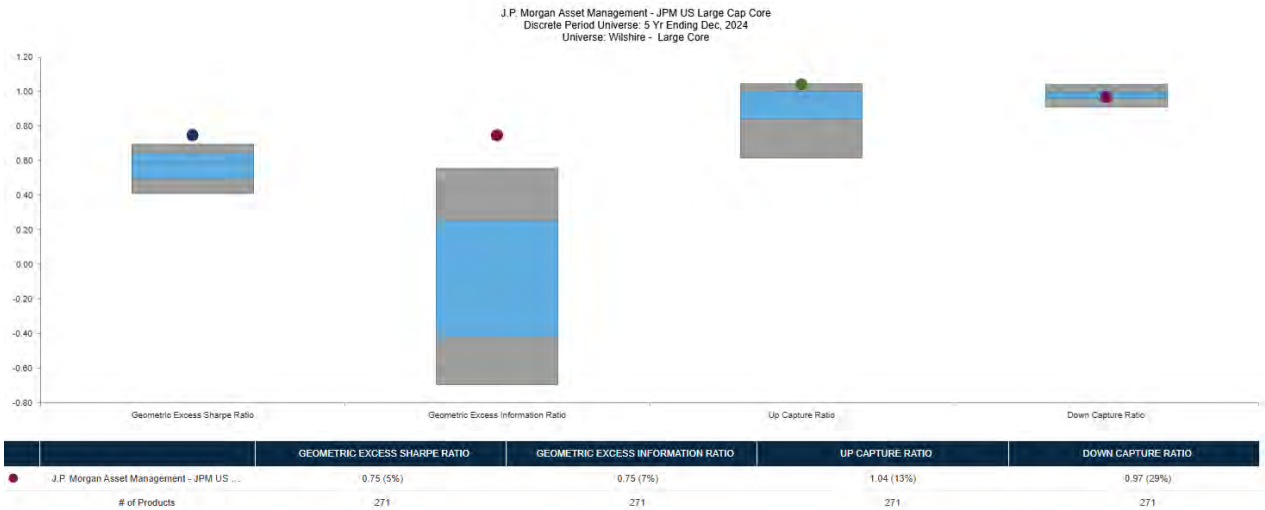
The strategy has been stable in terms of the number of clients and net flows. Over the past few years, the strategy has netted an additional 21 client relationships, bringing the total to over 70. Further, the strategy has experienced net inflows of over \$740 million during that same period. Per the manager, this is considered the flagship strategy of their core domestic efforts, and as such is seeing significant interest from potential clients.

T. Rowe Price

The strategy has been relatively stable in terms of the number of clients and net flows. Over the past few years, the strategy has netted an additional seven client relationships, bringing the total to nearly 50. Further, the strategy has experienced net inflows of over \$300 million during that same period.

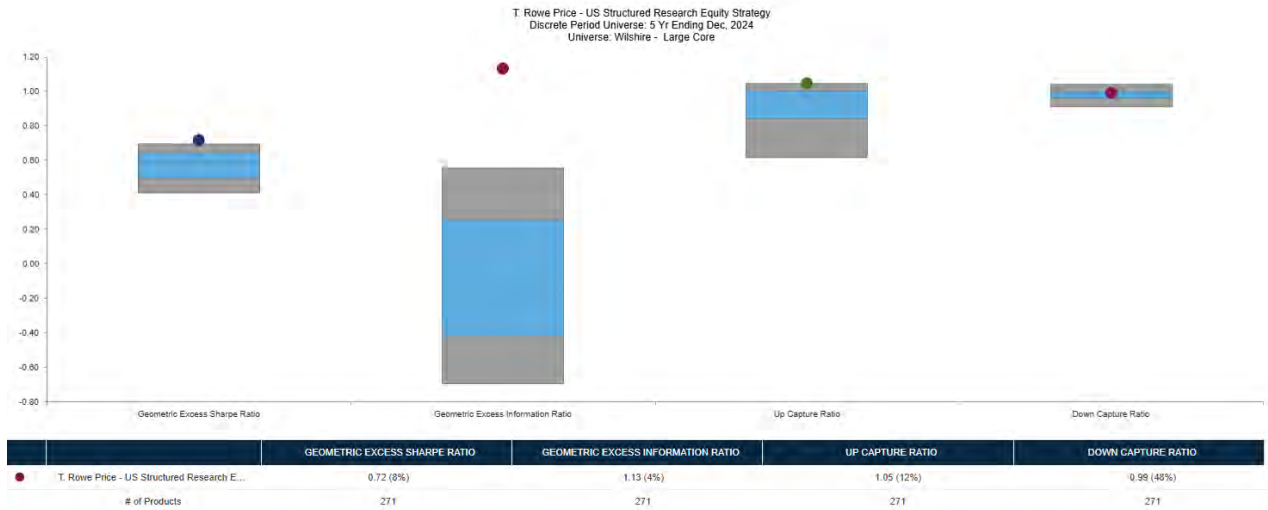
**Performance**

J.P. Morgan					
As of: 12/31/24	1YR	3YR	5YR	10YR	SI
<b>US Large Cap Core Equity Strategy</b>	<b>24.83</b>	<b>9.21</b>	<b>16.49</b>	<b>14.06</b>	<b>12.49</b>
S&P 500 Index	25.02	8.94	14.53	13.10	11.31
<i>Relative Performance (+/-)</i>	<i>-0.19</i>	<i>0.27</i>	<i>1.96</i>	<i>0.96</i>	<i>1.18</i>
Inception Date: 12/31/85					



T. Rowe Price					
As of: 12/31/24	1YR	3YR	5YR	10YR	SI
<b>US Structured Research Equity Strategy</b>	<b>26.99</b>	<b>10.53</b>	<b>15.87</b>	<b>14.37</b>	<b>9.59</b>
S&P 500 Index	25.02	8.94	14.53	13.10	8.06
<i>Relative Performance (+/-)</i>	<i>1.97</i>	<i>1.59</i>	<i>1.34</i>	<i>1.27</i>	<i>1.53</i>
Inception Date: 05/31/99					





### Implementation and Portfolio Sizing

As of close December 31, 2024, across the pension and insurance trusts KPPA invested approximately \$397.1 million in the U.S. large cap factor-based strategy. This equates to roughly 5.2% of the U.S. equity exposure, or approximately 3.3% of KPPA's total global public equity investments.

Staff and the consultant believe that it is time to retire from its current factor-based investing efforts. These funds should be utilized to fund calculated risk-aware active investment management. Further, staff and the consultant believe the allocation should be more meaningful in terms of its attribution to performance. As mentioned previously, additional funds would be provided from the internal large cap portfolios.

Standalone, each suggested alternative produces less risk, defined by tracking error, than the current factor-based strategy. Further, by upsizing the allocation and blending the two finalists, expected return can be improved while maintaining current risk levels in the greater portfolio. The two strategies complement one another, while both candidates are expected to outperform the index over a market cycle, they are expected to do so with differentiated return paths. T. Rowe Price's offering provides a well-diversified large number of incremental bets that historically produce an all-weather portfolio that produces outperformance that compounds overtime. On the other hand, J.P. Morgan's offering, while diversified, takes larger relative positions versus the index. This creates the opportunity for greater excess return, albeit with a higher level of relative risk, which leads to a less predictable return path. It should be noted that both strategies boast impressive Sharpe and information ratios, pointing to a good risk / reward trade. By blending the two strategies, staff believes that the Systems can benefit from an increased expected return while smoothing the return path. Given the two strategies operate in the same space utilizing the same benchmark, it is expected that they would have a positive correlation; however, because of the differences in portfolio construction and expected return paths, the projected correlation between the two strategies is 0.53, far from perfectly correlated, demonstrating a level of diversification.



Staff is seeking approval for up to a total of 12.5% of the Global Public Equity allocation in the combined mandates, with initial funding of approximately 6.6% of the Global Public Equity allocation.

Initial Approximate Plan Participation based on 12/31/24 Allocations				
KERS	77,000,000.00	KERS INS	40,300,000.00	117,300,000.00
KERS-H	27,300,000.00	KERS-H INS	16,200,000.00	43,500,000.00
CERS	308,800,000.00	CERS INS	111,000,000.00	419,800,000.00
CERS-H	111,600,000.00	CERS-H INS	57,400,000.00	169,000,000.00
SPRS	14,300,000.00	SPRS INS	6,600,000.00	20,900,000.00
	539,000,000.00		231,500,000.00	770,500,000.00

### Management Fees

#### J.P. Morgan

The manager has proposed an effective annual fee for the strategy of 28bps based on an initial funding allocation size of approximately \$383.3 million across both the pension and insurance trusts. This is a competitive rate based on the universe data supplied by Wilshire for similar strategies of similar size. The proposed rate ranks just outside of the top quartile (cheapest) among active U.S. large cap strategies. It should be noted that the manager will offer relational pricing upon funding. This would effectively bring the strategy cost down to 27bps and would create additional savings of 3-4bps on the emerging market strategy currently utilized in the global public equity allocation.

#### T. Rowe Price

The manager has proposed an effective annual fee for the strategy of 24bps based on an initial funding allocation size of approximately \$383.3 million across both the pension and insurance trusts. This is a competitive rate based on the universe data supplied by Wilshire for similar strategies of similar size. The proposed rate ranks in the top quartile (cheapest) among active U.S. large cap strategies.

### Third-Party Provider and Placement Agent Disclosure

In accordance with KRS' & CERS' gating practices, staff has requested the finalist to acknowledge transparency requirements, and to complete a conflict of interest statement and placement agent form. No placement agents have been involved or will be compensated as a result of this recommendation. A copy of the managers' Statement of Conflict of Interest and Placement Agent questionnaire have been attached to this recommendation.

### Recommendation

As previously stated, in a continued effort to improve the portfolio, staff has made the determination to recommend terminating the internal US large cap factor-based portfolios. The allocation will serve as the primary funding source to establish the new active relationships in the US large cap space, with secondary funding coming from the Internal S&P 500 mandates.

Staff and the consultant believe the J.P. Morgan's US Large Cap Core Equity and the T. Rowe Price's US Structured Research Equity strategies will be a positive addition to the KPPA investment program. While distinct strategies, the shared philosophical belief in conjunction with differentiated construction methodologies, yields complimentary return profiles. Neither strategy relies on style biases or tilts to drive relative performance, but rather on idiosyncratic stock selection, which helps to insulate relative performance from macro themes. The expected result is a more efficient public equity portfolio, with a better risk/reward profile and increased diversification, as the strategies have low to negative correlations with existing public equity mandates.

Based on the comprehensive search conducted and the compelling opportunity to enhance the overall global public equity allocation, KPPA Staff and Wilshire put forth the following recommendations for the Investment Committee's consideration:

*J.P. Morgan – U.S. Large Cap Core Equity Strategy*

*Up to 6.25% of the total global public equity allocation, with initial funding of approximately 3.3% (approximately \$383.3 million). Primary funding to come from the existing internal factor-based US large cap portfolios, with additional funds from the Internal S&P 500 portfolios.*

*T. Rowe Price – U.S. Structured Research Equity Strategy*

*Up to 6.25% of the total global public equity allocation, with initial funding of approximately 3.3% (approximately \$383.3 million). Primary funding to come from the existing internal factor-based US large cap portfolios, with additional funds from the Internal S&P 500 portfolios.*

We welcome any comments or questions by the Committee.

**Appendix**

- Wilshire: Large Cap Core Manager Search Packet (Contains Short-list Candidate Pool)
- J.P. Morgan Conflict of Interest and Placement Agent Disclosure
- T. Rowe Price Conflict of Interest and Placement Agent Disclosure

**Wilshire**

# Kentucky Public Pensions Authority

Large Cap Core Manager Search

February 2025



## Introduction

- Wilshire has worked with Staff to identify risk-controlled Large Cap Core strategies to replace the Scientific Beta strategy
- Sizing of the mandate is approximately \$700m which could be awarded to a single investment manager or split between two firms
- Managers and strategies included in the search are:
  - BlackRock US Alpha Tilts
  - Columbia Threadneedle US Contrarian Large Cap
  - JP Morgan US Large Cap Core
  - T. Rowe Price US Structured Research Equity

## Search Overview

- Initial screen included both quantitative and qualitative screening criteria resulted in over 100 strategies
  - Performance (Absolute and Excess returns)
  - Tracking Error
  - Sharpe Ratio
  - Information Ratio
  - Up/Down Capture Fees
  - Wilshire Manager Research Ranking
- Evaluated characteristics above over one, three, five, and ten-year periods
- Narrowed the list by relative consistency and ranking of the characteristics over all time periods
- Invited eight firms, spreading across ten strategies, to participate in an RFI (Request for Information)
- Seven firms responded across nine strategies from which virtual interviews were scheduled
- Final interviews were conducted with four firms across four strategies

## U.S. Equity Large Cap Core Finalists

Firm	Strategy	Location	Firm AUM (\$MM)	Year Firm Established	Product Inception	Product AUM (\$MM)	Percentage of Assets	Fee Schedule
BlackRock	US Alpha Tilts	Wilmington, DE	\$11,551,251	1988	1985	\$2,814	24.88%	0.30% first \$100M 0.25% on balance
Columbia Threadneedle	US Contrarian Large Cap Core	Stamford, CT	\$649,586	1994	2002	\$29,446 <sup>(1)</sup>	2.38%	0.32% first \$200M 0.26% next \$200M 0.20% next \$400M
JP Morgan Asset Management	US Large Cap Core	New York, NY	\$3,479,228	1863	1996	\$81,745	0.86%	0.32% first \$250M 0.30% on balance
T. Rowe Price	US Structured Research Equity	Zurich, SWITZ	\$1,574,400 <sup>(1)</sup>	1937	1999	\$85,469 <sup>(1)</sup>	0.82%	0.24%

(1) As of 9/30/2024

## Wilshire Manager Research

Investment Manager	Overall Decile Rating	Organization (20%)	Information (20%)	Forecasting (20%)	Portfolio Construction (20%)	Implementation (10%)	Attribution (10%)
BlackRock US Alpha Tilts	2 <sup>nd</sup>	3 <sup>rd</sup>	3 <sup>rd</sup>	1 <sup>st</sup>	1 <sup>st</sup>	1 <sup>st</sup>	1 <sup>st</sup>
Columbia Threadneedle US Contrarian Large Cap	1 <sup>st</sup>	1 <sup>st</sup>	1 <sup>st</sup>	1 <sup>st</sup>	1 <sup>st</sup>	3 <sup>rd</sup>	2 <sup>nd</sup>
JP Morgan US Large Cap Core	1 <sup>st</sup>	2 <sup>nd</sup>	1 <sup>st</sup>	1 <sup>st</sup>	1 <sup>st</sup>	1 <sup>st</sup>	2 <sup>nd</sup>
T. Rowe Price US Structured Research Equity	2 <sup>nd</sup>	1 <sup>st</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	2 <sup>nd</sup>	4 <sup>th</sup>	3 <sup>rd</sup>

- **Organization:** Scores organizational structure and stability
- **Information:** Scores the ability to gather and process unique sources of information
- **Forecasting:** Scores the discipline and consistency of a forecasting process
- **Portfolio Construction:** Scores portfolio construction and risk management
- **Implementation:** Scores a manager’s ability to transact in the market
- **Attribution:** Scores the use of attribution information and portfolio feedback
- **Total =** Weighted sum product of the individual criteria

		Rating Scale									
Decile		1	2	3	4	5	6	7	8	9	10
Corresponding Grade		A		B		C		D		E	

## Strategy Highlights

### BlackRock US Alpha Tilts

The BlackRock Systematic Active Equity (SAE) group, which was formerly known as Barclays Global Investors (BGI) Active Equity, offers a quantitatively engineered US Alpha Tilts portfolio that seeks to outperform the S&P 500 Index. The strategy is managed by a seasoned team of investment professionals that is under the co-Heads of Systematic Active Equity, Raffaele Savi and Jeff Shen. The process incorporates fundamental rationale and is quantitatively driven to produce a diversified portfolio of roughly 100-300 securities. Some of these fundamental insights include Relative Valuation, Earnings Quality, Sentiment, and Macro Themes. The process is research intensive as the team endeavors to maintain a competitive profile by constantly exploring new factors to incorporate. The intent of the strategy is to outperform the benchmark by roughly 1-2% with a tracking error level around 2%.

### Columbia Threadneedle US Contrarian Large Cap

The Columbia Contrarian Large Cap Core strategy is a moderately concentrated, active strategy that seeks to produce 150 to 350 basis points of excess returns on an annual basis versus the Russell 1000 Index. The strategy is led by portfolio manager Guy Pope, who leverages the insights of a research platform consisting of industry-specific analysts. Mr. Pope has served as a PM for the firm since 1996 and for this particular strategy since July 2004, gradually becoming the sole PM as his peers resigned in 2005 and 2006. For the management of the strategy, the team leverages the research of the fundamental equity team, which consists of over 20 analysts/associates that demonstrate deep industry knowledge. They are also supported by the six-member quantitative research team. The philosophy seeks out-of-favor companies and hence is contrarian in nature. Overall, the process has impressive depth in research, while maintaining flexibility with respect to exact valuation methodology at the stock level. The team has demonstrated a strong and consistent ability to add value through security selections while not taking excessive risk to do so. The process is flexible and may emphasize value or growth stocks at any given time. The resulting portfolio is risk-minded, but active.

## Strategy Highlights

### JPM US Large Cap Core

JP Morgan Large Cap Core is a highly competitive large cap product that is designed to outperform the S&P 500 Index by approximately 2% over a full market cycle gross of fees with an expected tracking error of 2-4%. Backing the portfolio management team is a relatively stable and very deep team of sector specific research analysts. The process is robust and forward looking, calculating an internal rate of return through an expected returns framework utilizing proprietary estimates. The investment process is also highly objective using a ranking system. Overall, Wilshire finds the product suitable for standalone large cap core exposure. Scott Davis, who has been a portfolio manager on the strategy since 2014, took over lead portfolio management responsibilities following Tom Luddy's retirement in January 2018.

### T. Rowe Price US Structured Research Equity

The T. Rowe Price US Structured Research Strategy represents a "best of breed" option in the fundamental research based enhanced index universe. The firm's Capital Opportunity Fund mirrors this strategy but offers a longer term track record for comparison purposes. The strategy is a low tracking error (<175 bps) product that relies upon a large number of fundamental research analysts to individually manage sleeves of the portfolio. It is somewhat unique in that it has low active risk, a large number of holdings, yet is driven by qualitative research. This strategy is attractive, as it provides the disciplined portfolio construction of quantitative products with the rich insights of fundamental research.

## Performance (Absolute and Excess Returns)

December 31, 2024					
Absolute	Quarter	One Year	Three Years	Five Years	Ten Years
BlackRock - US Alpha Tilts	2.09	27.16	9.31	15.19	13.44
Columbia Threadneedle - US Contrarian Large Cap Core	2.52	24.22	10.68	15.87	13.56
JPM - US Large Cap Core	1.31	24.74	9.16	16.45	14.07
T. Rowe Price - US Structured Research Equity	2.95	26.97	10.55	15.95	14.35
<i>S&amp;P 500</i>	<i>2.41</i>	<i>25.02</i>	<i>8.94</i>	<i>14.53</i>	<i>13.10</i>
<i>Russell 1000</i>	<i>2.75</i>	<i>24.51</i>	<i>8.41</i>	<i>14.28</i>	<i>12.87</i>
Excess	Quarter	One Year	Three Years	Five Years	Ten Years
BlackRock - US Alpha Tilts	-0.32	2.14	0.37	0.66	0.34
Columbia Threadneedle - US Contrarian Large Cap Core <sup>(1)</sup>	-0.23	-0.29	2.27	1.59	0.69
JPM - US Large Cap Core	-1.10	-0.28	0.22	1.92	0.97
T. Rowe Price - US Structured Research Equity	0.54	1.95	1.61	1.42	1.25

(1) Columbia Threadneedle – US Contrarian Large Cap Core is benchmarked against the Russell 1000 Index. All other managers and strategies are benchmarked against the S&P 500 Index.

## Annual Returns (Absolute and Excess)

December 31, 2024											
Absolute Returns	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
BlackRock - US Alpha Tilts	14.38	1.02	11.33	24.53	-4.51	30.12	19.33	30.12	-18.73	26.40	27.16
Columbia Threadneedle - US Contrarian Large Cap Core	13.88	3.77	9.37	22.49	-8.21	33.83	23.14	25.09	-17.96	33.03	24.22
JPM - US Large Cap Core	15.15	1.38	11.85	22.20	-5.35	32.87	27.40	29.20	-18.50	27.94	24.74
T. Rowe Price - US Structured Research Equity	12.86	3.61	10.88	24.36	-3.93	32.86	20.74	28.49	-18.37	30.34	26.97
S&P 500	13.69	1.38	11.96	21.83	-4.38	31.49	18.40	28.71	-18.11	26.29	25.02
Russell 1000	13.25	0.92	12.05	21.69	-4.78	31.43	20.96	26.45	-19.13	26.53	24.51
Excess Returns	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
BlackRock - US Alpha Tilts	0.69	-0.36	-0.63	2.70	-0.13	-1.37	0.93	1.41	-0.62	0.11	2.14
Columbia Threadneedle - US Contrarian Large Cap Core <sup>(1)</sup>	0.63	2.85	-2.68	0.8	-3.43	2.40	2.18	-1.36	1.17	6.5	-0.29
JPM - US Large Cap Core	1.46	0.00	-0.11	0.37	-0.97	1.38	9.00	0.49	-0.39	1.65	-0.28
T. Rowe Price - US Structured Research Equity	-0.83	2.23	-1.08	2.53	0.45	1.37	2.34	-0.22	-0.26	4.05	1.95

(1) Columbia Threadneedle – US Contrarian Large Cap Core is benchmarked against the Russell 1000 Index. All other managers and strategies are benchmarked against the S&P 500 Index.



## Risk (Absolute and Excess)

December 31, 2024				
Standard Deviation of Return	One Year	Three Years	Five Years	Ten Years
BlackRock - US Alpha Tilts	11.07	17.11	18.10	15.31
Columbia Threadneedle - US Contrarian Large Cap Core	10.40	17.05	18.18	15.50
JPM - US Large Cap Core	11.47	17.04	18.27	15.86
T. Rowe Price - US Structured Research Equity	10.71	17.42	18.38	15.53
<i>S&amp;P 500</i>	<i>10.67</i>	<i>17.40</i>	<i>18.21</i>	<i>15.36</i>
<i>Russell 1000</i>	<i>11.04</i>	<i>17.65</i>	<i>18.64</i>	<i>15.65</i>
Standard Deviation of Excess Returns (Tracking Error)	One Year	Three Years	Five Years	Ten Years
BlackRock - US Alpha Tilts	1.41	1.36	1.31	1.47
Columbia Threadneedle - US Contrarian Large Cap Core <sup>(1)</sup>	2.72	2.80	2.77	2.45
JPM - US Large Cap Core	1.85	1.97	2.25	2.33
T. Rowe Price - US Structured Research Equity	1.08	1.07	1.10	1.07

(1) Columbia Threadneedle – US Contrarian Large Cap Core is benchmarked against the Russell 1000 Index. All other managers and strategies are benchmarked against the S&P 500 Index.

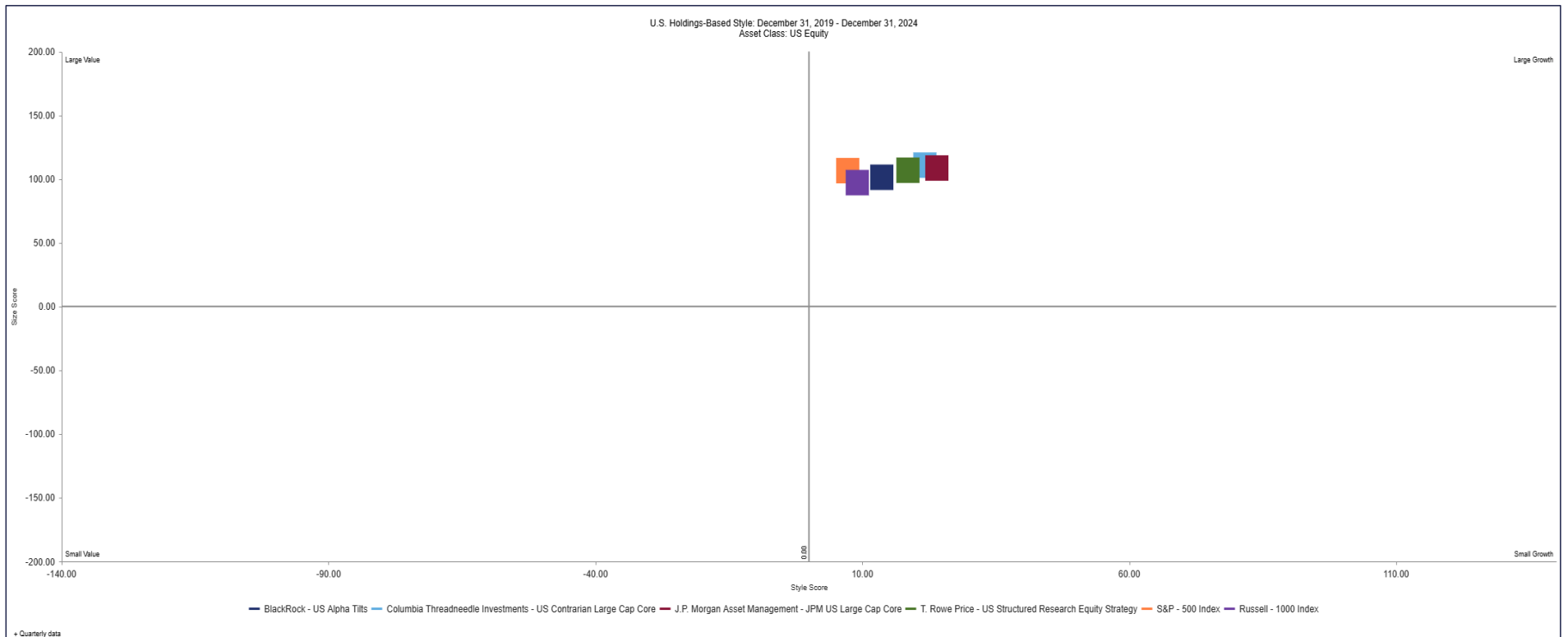
## Portfolio Characteristics

Sector	BlackRock US Alpha Tilts	Columbia Threadneedle US Contrarian Large Cap Core	JPM US Large Cap Core	T. Rowe Price US Structured Research	S&P 500 Index	Russell 1000 Index
Beta	0.95	0.95	0.96	0.97	0.96	0.99
R-squared (%)	0.99	0.97	0.98	0.99	0.99	1.00
P/E	28.71	34.13	29.42	31.09	30.46	30.83
P/B	5.19	5.68	5.69	5.27	5.06	4.77
Equity Yield	1.19	1.04	1.13	1.12	1.28	1.27
EPS Growth	14.75	14.99	16.34	16.15	15.54	15.09
Dividend Growth	7.10	6.19	7.29	6.32	6.23	6.23
ROE	53.99	41.25	49.09	56.05	55.91	51.89
D/EQT	0.91	0.88	1.01	0.91	0.89	0.90
Median Mkt Cap (\$BB)	32.10	129.36	105.44	55.43	37.13	14.61
Weighted Mkt Cap (\$BB)	1,162.68	1,094.83	1,158.61	1,114.18	1,054.05	951.53
% > \$25 Billion	91.25	94.62	99.92	93.11	94.63	88.65
% \$25 – 10 Billion	6.45	4.91	0.08	5.81	4.91	7.53
% \$10 – 2 Billion	2.30	0.48	0.00	1.08	0.47	3.77

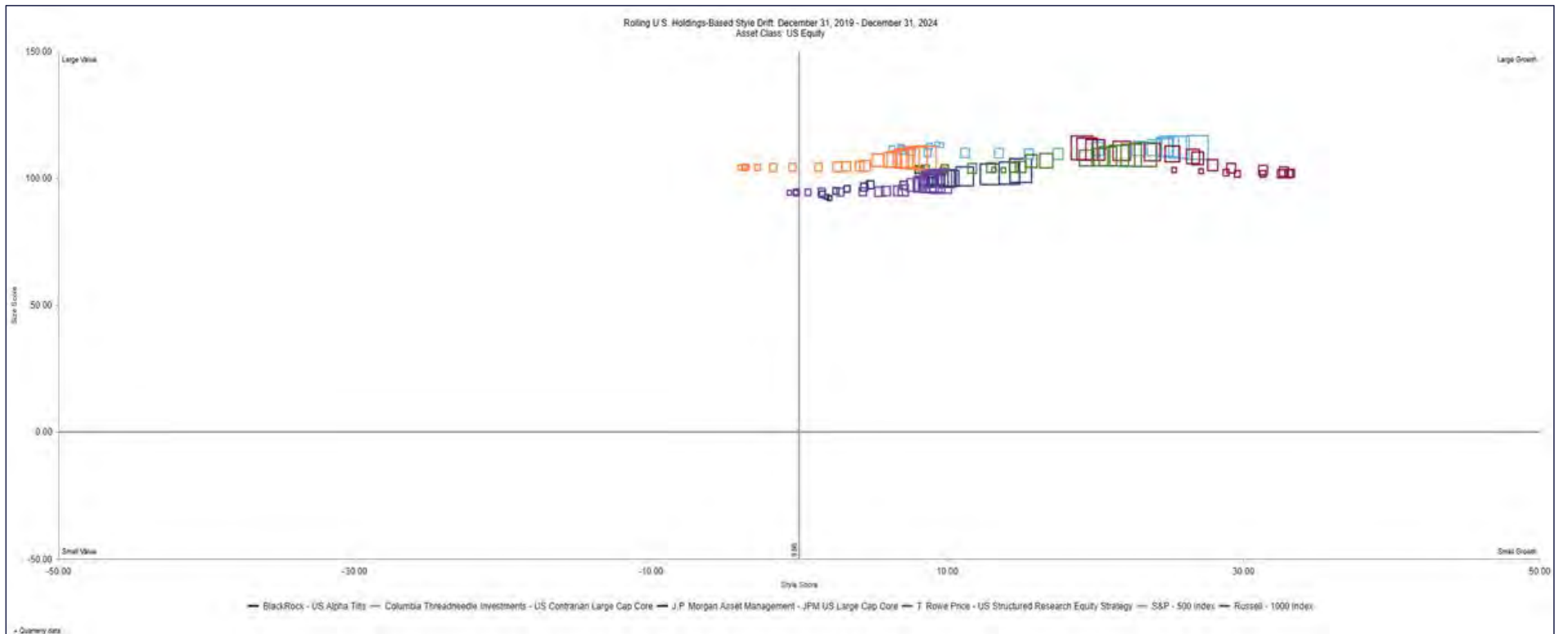
## Portfolio Sectors

Sector	BlackRock US Alpha Tilts	Columbia Threadneedle US Contrarian Large Cap Core	JPM US Large Cap Core	T. Rowe Price US Structured Research	S&P 500 Index	Russell 1000 Index
Consumer Discretionary	10.17	10.82	12.47	11.43	11.26	11.48
Consumer Staples	5.11	5.22	1.20	5.32	5.53	5.38
Energy	2.47	3.15	4.85	3.28	3.16	3.29
Financials	14.13	14.63	14.32	14.12	13.62	14.03
Healthcare Services	10.15	9.70	10.10	10.37	10.09	10.06
Industrials	9.55	7.23	9.85	7.22	8.16	9.00
Information Technology	33.5	33.06	34.56	32.79	32.49	30.72
Materials	2.45	0.65	1.91	1.82	1.89	2.20
Real Estate	1.46	1.09	0.80	1.81	2.10	2.39
Telecommunications	9.61	12.60	6.39	9.47	9.37	9.22
Utilities	1.40	1.86	3.56	2.36	2.33	2.23

# Holdings Based Style Analysis

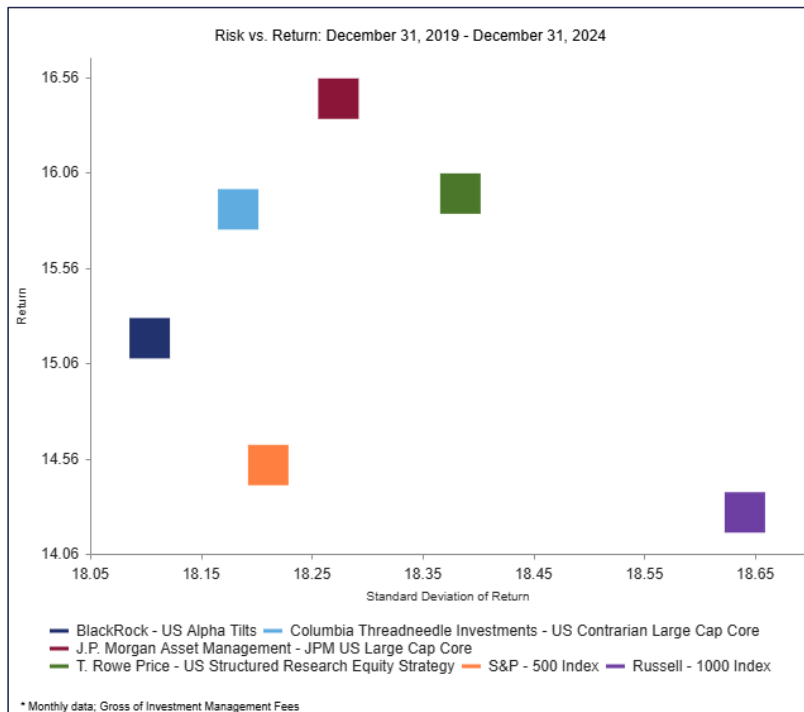


## Rolling Holdings Based Style Analysis

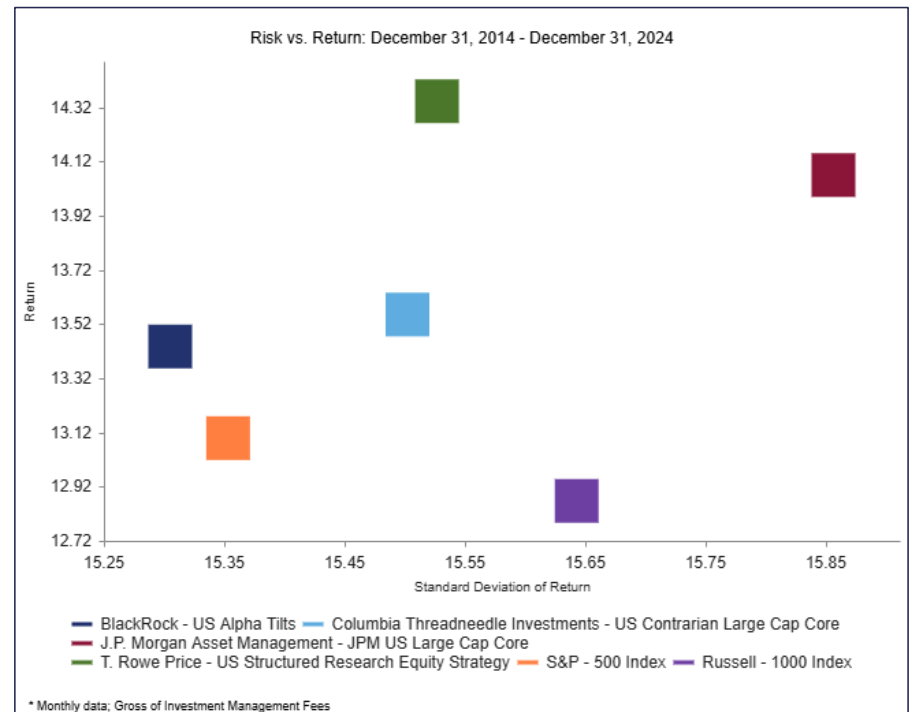


## Risk vs. Return – Total

5 year

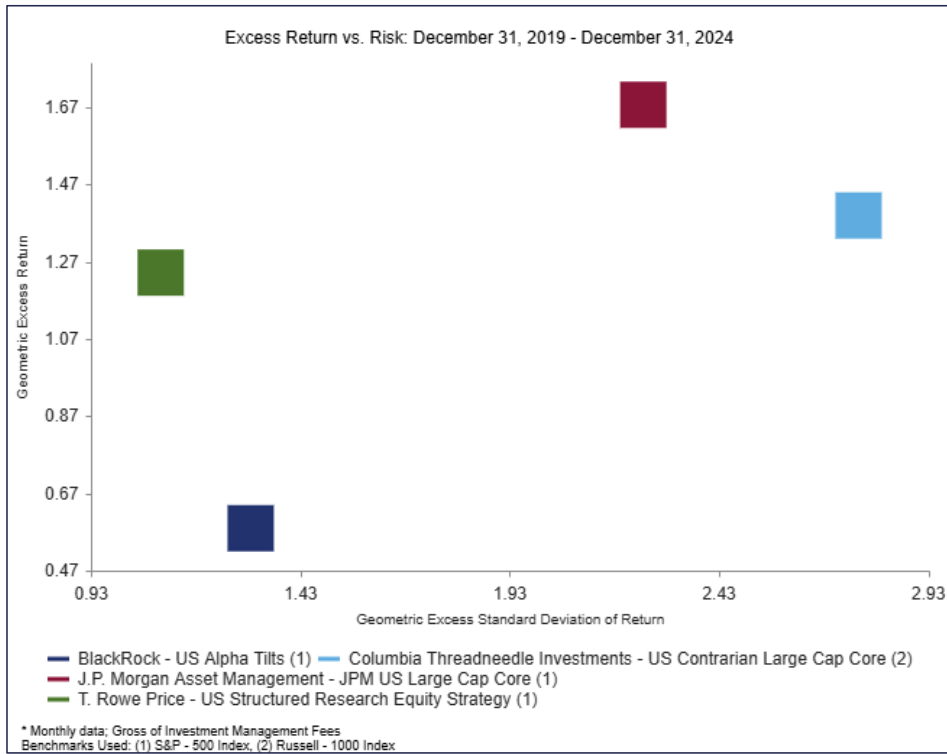


10 year

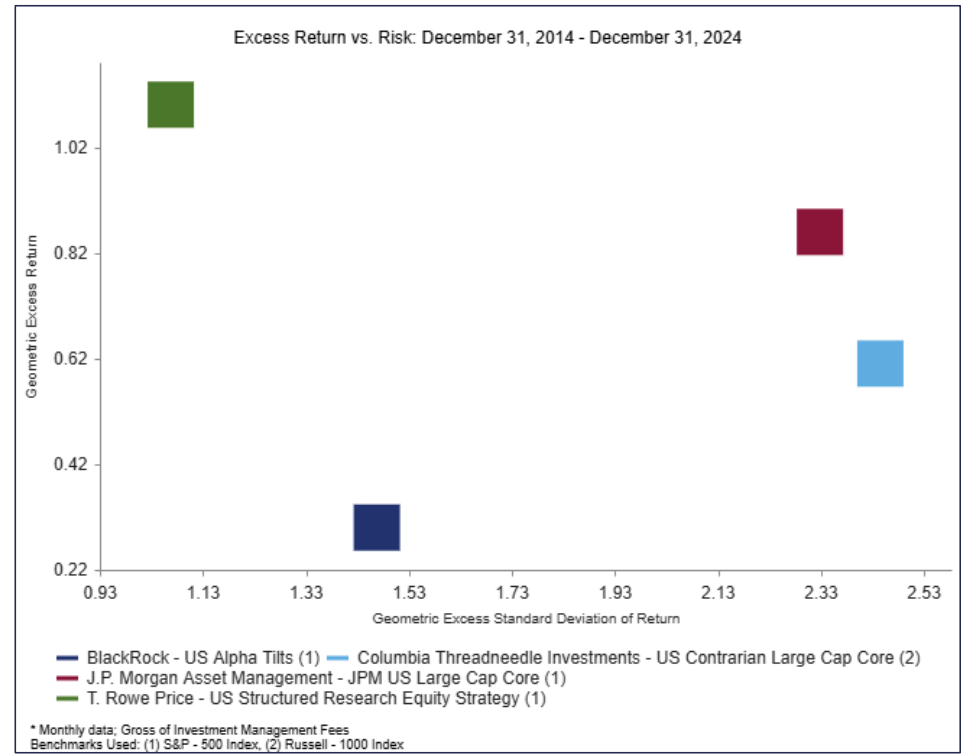


# Risk vs. Return – Excess

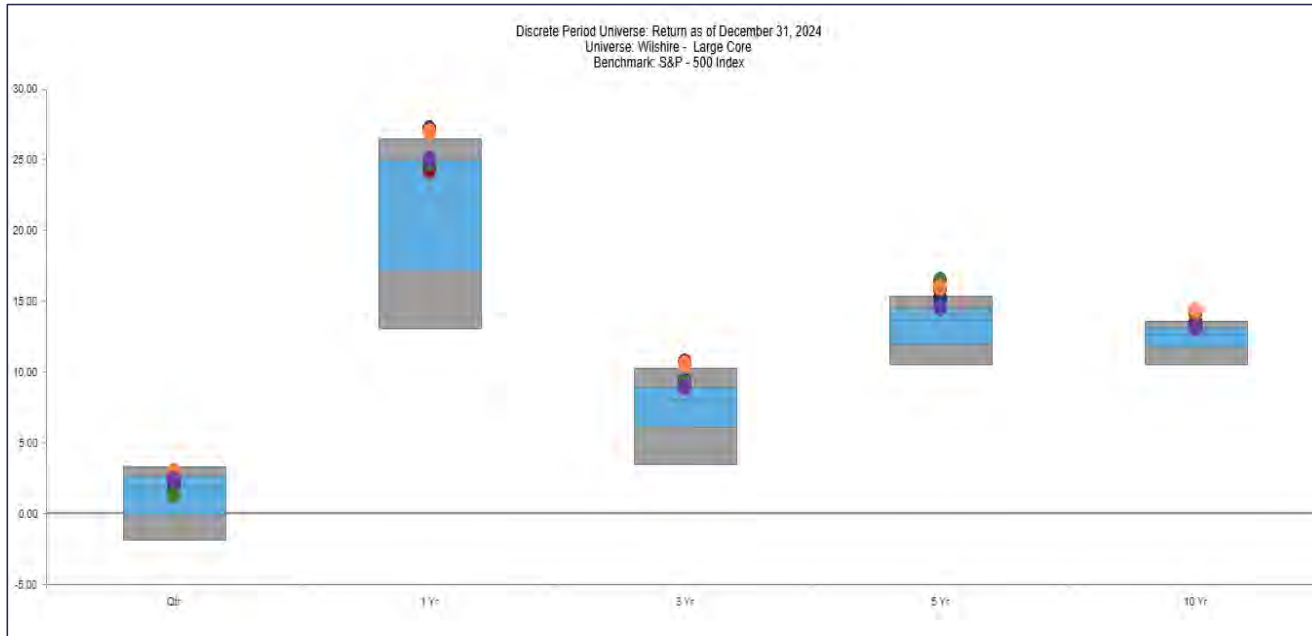
5 year



10 year



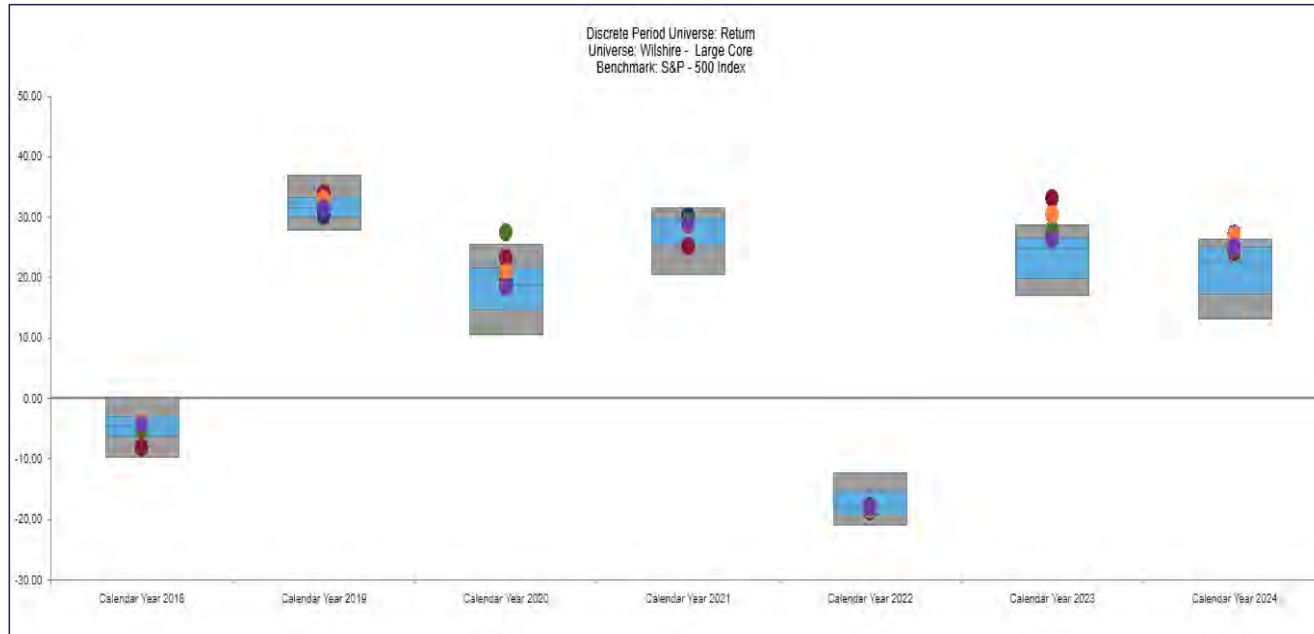
## Peer Group / Universe Analysis



	QTR	1 YR	3 YR	5 YR	10 YR
● BlackRock - US Alpha Tilts	2.09 (48%)	27.16 (8%)	9.31 (21%)	15.19 (12%)	13.44 (14%)
● Columbia Threadneedle Investments - US Contrarian Large Cap Core	2.52 (33%)	24.22 (37%)	10.68 (7%)	15.87 (8%)	13.56 (13%)
● J.P. Morgan Asset Management - JPM US Large Cap Core	1.31 (60%)	24.74 (29%)	9.16 (23%)	16.45 (5%)	14.07 (6%)
● T. Rowe Price - US Structured Research Equity Strategy	2.95 (13%)	26.97 (9%)	10.55 (9%)	15.95 (7%)	14.35 (5%)
● S&P - 500 Index	2.41 (37%)	25.02 (24%)	8.94 (27%)	14.53 (25%)	13.10 (29%)
# of Products	282	282	282	271	240

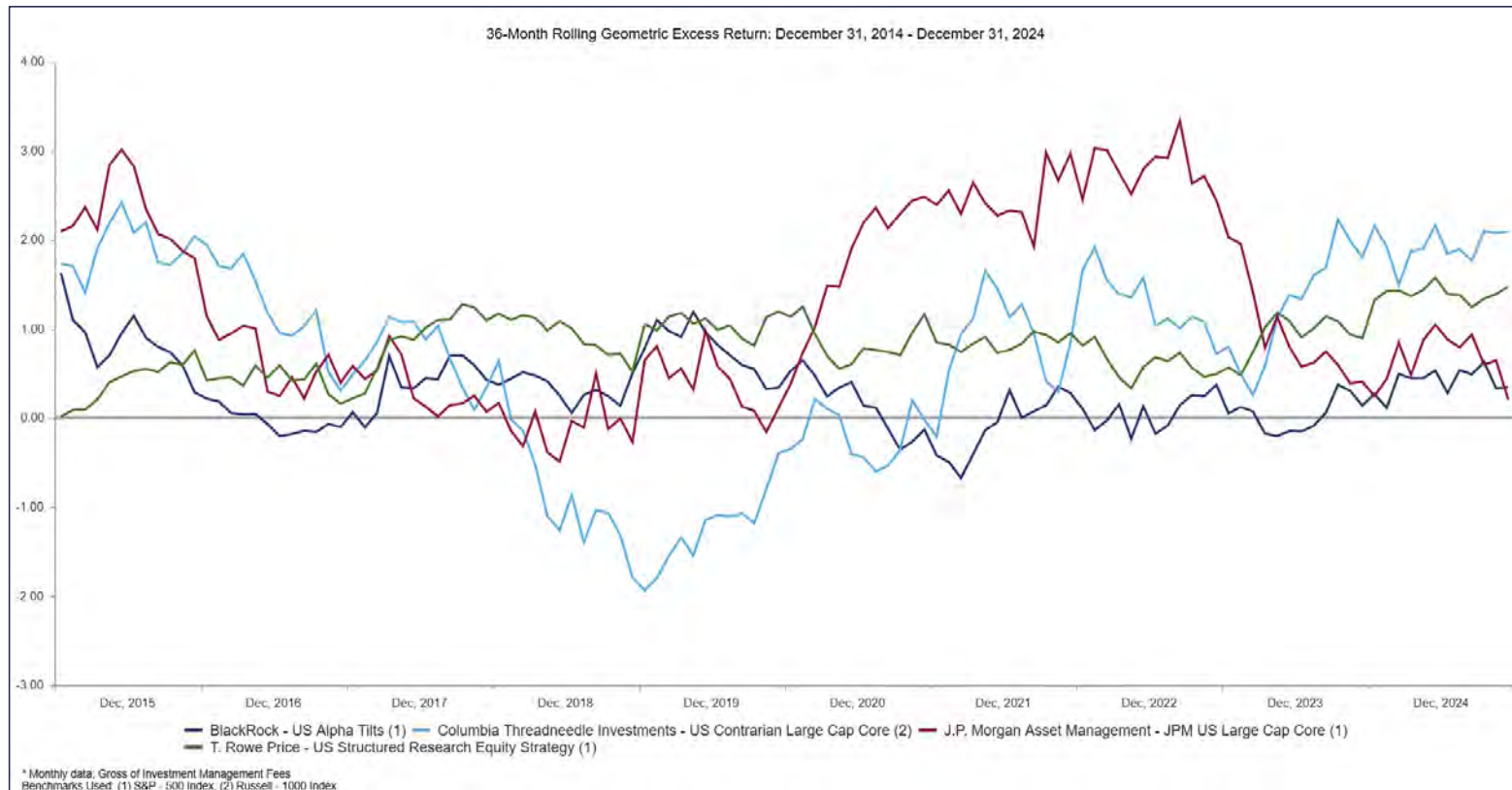


## Peer Group / Universe Analysis (Annual)

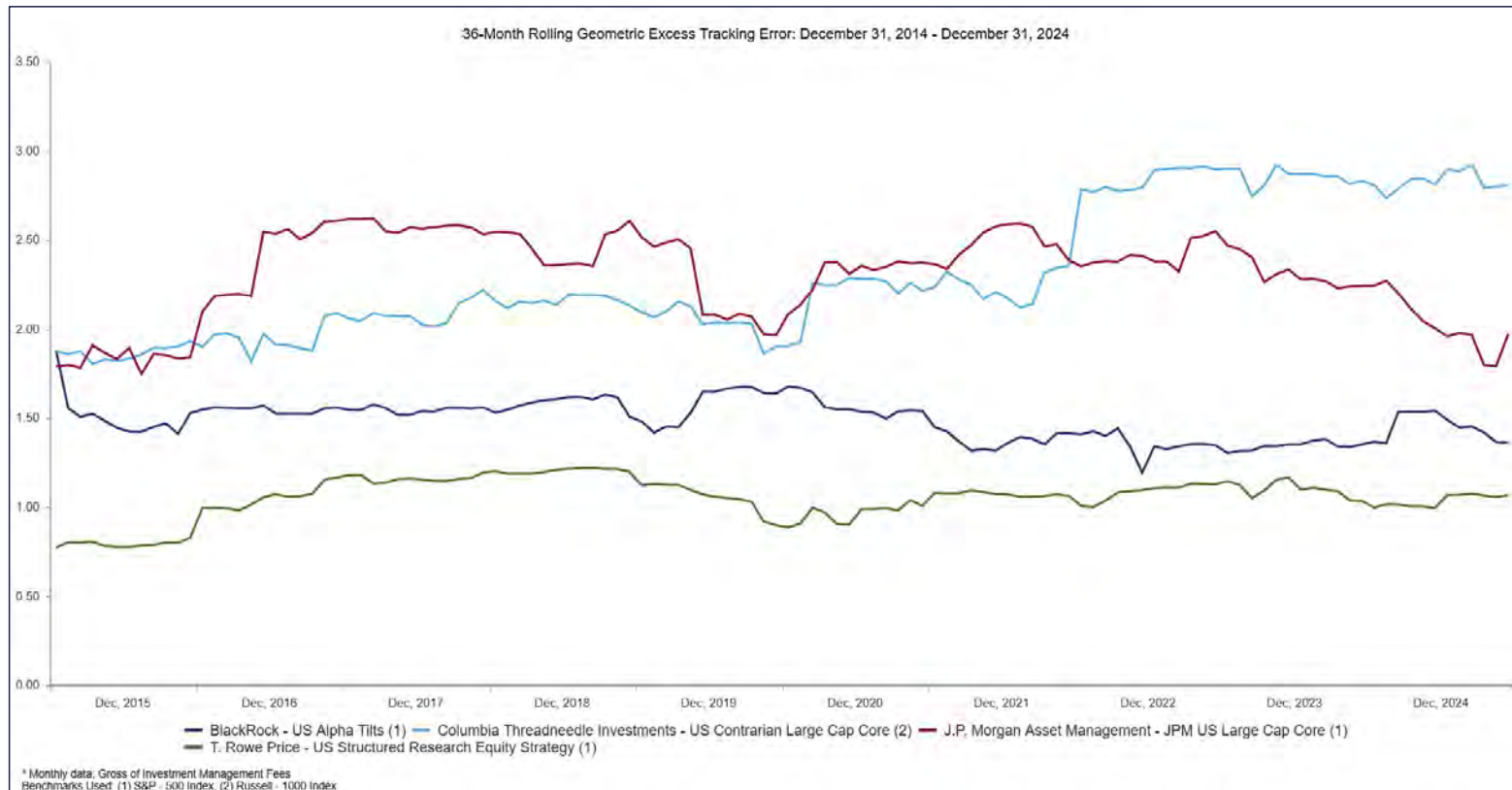


	CALENDAR YEAR 2018	CALENDAR YEAR 2019	CALENDAR YEAR 2020	CALENDAR YEAR 2021	CALENDAR YEAR 2022	CALENDAR YEAR 2023	CALENDAR YEAR 2024
● BlackRock - US Alpha Tilts	-4.51 (50%)	30.12 (73%)	19.33 (46%)	30.12 (22%)	-18.73 (65%)	26.40 (29%)	27.16 (8%)
● Columbia Threadneedle Investments - US Contrarian Large Cap Core	-8.21 (87%)	33.83 (22%)	23.14 (20%)	25.09 (76%)	-17.96 (50%)	33.03 (4%)	24.22 (37%)
● J.P. Morgan Asset Management - JPM US Large Cap Core	-5.35 (69%)	32.87 (29%)	27.40 (6%)	29.20 (30%)	-18.50 (62%)	27.94 (15%)	24.74 (29%)
● T. Rowe Price - US Structured Research Equity Strategy	-3.93 (35%)	32.86 (29%)	20.74 (36%)	28.49 (42%)	-18.37 (61%)	30.34 (8%)	26.97 (9%)
● S&P - 500 Index	-4.38 (46%)	31.49 (50%)	18.40 (55%)	28.71 (37%)	-18.11 (56%)	26.29 (30%)	25.02 (24%)
# of Products	262	270	275	284	286	286	282

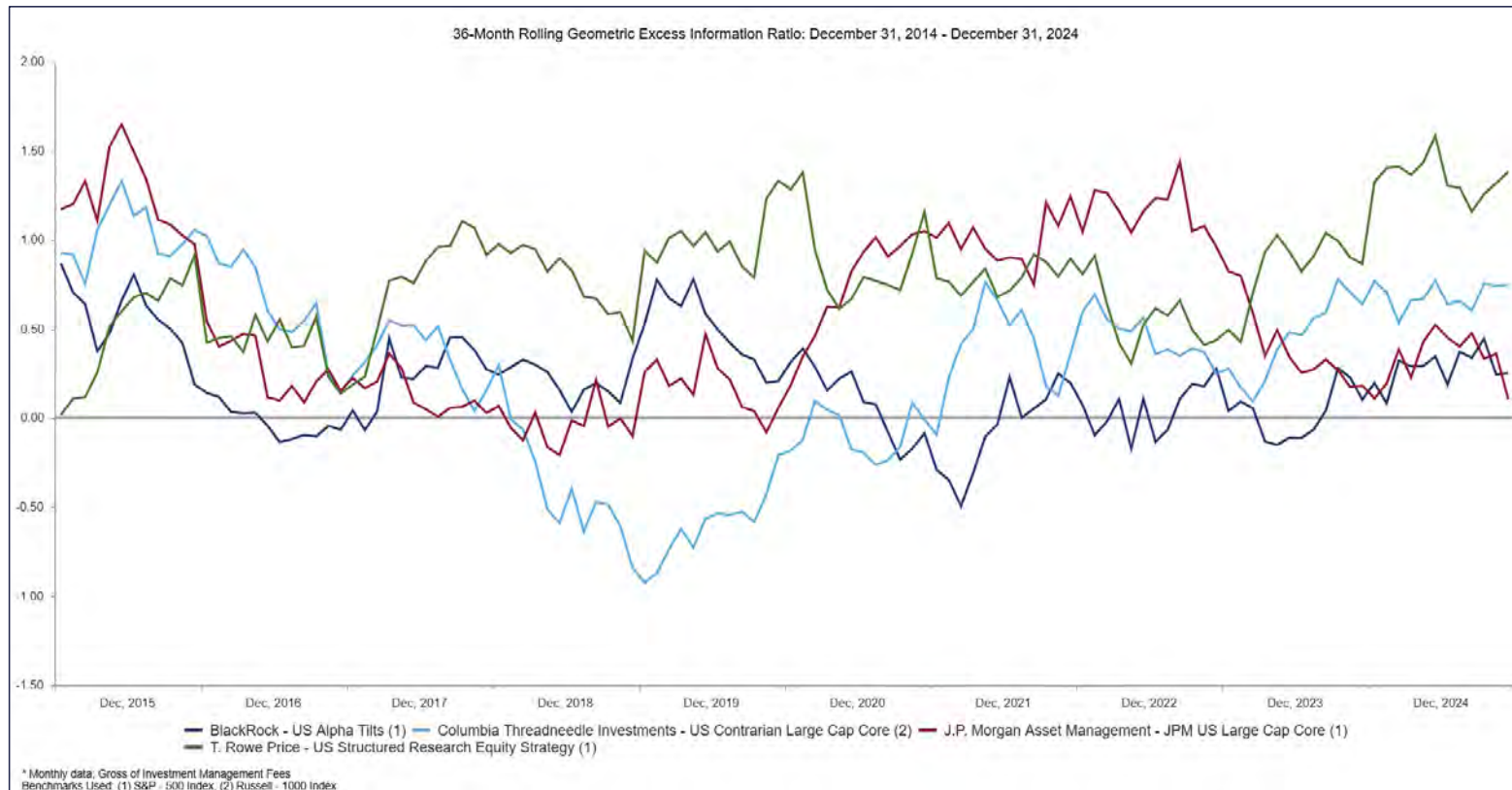
## Rolling Excess Return



## Rolling Tracking Error



## Rolling Information Ratio



# Appendix I: Form ADV

## Form ADV

Wilshire reviewed the SEC Form ADV Part I and IIA (as posted on the SEC investment advisor search website at <http://www.adviserinfo.sec.gov>) of each investment manager in the table below only to determine whether the manager had made any disclosures in the listed categories. If the manager disclosed information in a category, it is the client’s responsibility to review and assess the provided information. The information was collected as of the date(s) indicated and may change. Wilshire assumes no responsibility for the accuracy of the information provided by a manager.

Investment Manager	Review Date	ADV Part I		ADV Part IIA		
		Item 11: Disclosure Information		Item 9: Disciplinary Information	Item 19 (D): Requirements for State-Registered Advisors	
		Form ADV Part I Date	Disclosure (Yes or No)	Disclosure (Yes or No)	Form ADV Part IIA Date	Disclosure (Yes or No)
BlackRock	1/22/2025	1/2/2025	Yes	No	1/2/2025	--
Columbia Threadneedle Investments	1/22/2025	11/18/2024	No	Yes	3/29/2024	--
JP Morgan Asset Management	1/22/2025	3/14/2024	No	No	3/4/2024	No
T. Rowe Price	1/22/2025	10/24/2024	No	No	3/28/2024	--

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# Appendix II: Full Manager Research Evaluations

# Wilshire

Manager Research

## BlackRock

### US Alpha Tilts

Wilshire Manager Research Team

August 22, 2024

Rating Decile	Weight
2nd	100%

#### Summary

The BlackRock Systematic Active Equity (SAE) group, which was formerly known as Barclays Global Investors (BGI) Active Equity, offers a quantitatively engineered US Alpha Tilts portfolio that seeks to outperform the S&P 500 Index. The strategy is managed by a seasoned team of investment professionals that is under the co-Heads of Systematic Active Equity, Raffaele Savi and Jeff Shen. The process incorporates fundamental rationale and is quantitatively driven to produce a diversified portfolio of roughly 100-300 securities. Some of these fundamental insights include Relative Valuation, Earnings Quality, Sentiment, and Macro Themes. The process is research intensive as the team endeavors to maintain a competitive profile by constantly exploring new factors to incorporate. The intent of the strategy is to outperform the benchmark by roughly 1-2% with a tracking error level around 2%.

	Rating Decile	Weight
<b>I. Organization</b>	<b>3rd</b>	<b>20%</b>
Firm	4th	50%
Team	2nd	50%

BlackRock, founded in 1988, is known for combining sophisticated analytical tools with a systematic process to manage fixed income, equity, and alternative strategies. Through multiple mergers and acquisitions over the past 30+ years, BlackRock has grown to the world's largest asset manager with AUM of approximately \$10.1T as of the end of 4Q23.

BlackRock was founded in 1988 with AUM of \$1B. In the 1990's, BlackRock became fixed-income investment manager for PNC Financial Services. BlackRock went public (NYSE: BLK) in 1999 with PNC as majority shareholder. In the 2000's, BlackRock launched BlackRock Solutions, acquired State Street Research and Management, SSR Realty and also acquired fund of funds business from Quellos Group, LLC. In 2008, BlackRock launched Financial Markets Advisory business as part of BlackRock Solutions. In 2009, BlackRock hired 29 investment professionals from R3 Capital Partners and purchased BGI. In May 2020, PNC announced that it would be divesting its 22.4% stake in BlackRock through a registered offering with BlackRock repurchasing \$1.1B in shares.

The SAE platform is co-headed by Raffaele Savi and Jeff Shen who are responsible for oversight of the investment team responsible for constructing the various SAE-related portfolios. The US Alpha Tilts fund is managed by Raffaele Savi who works with Travis Cooke, Managing Director, and Richard Mathieson, Managing Director. Mr. Mathieson also leads management for the Advantage Small Cap Core, which is the mutual fund vehicle for the strategy. The portfolio managers are supported by the broader team that boasts numerous regional portfolio managers, researchers, and analysts. Important to note, the platform is very team-oriented and applies research collaboratively to manage many quantitative mandates across US and international products. However, this team has experienced some turnover underneath the leadership ranks, which has caused some concern in the past. Despite this, we believe the team is deep enough to withstand occasional changes in personnel. This depth, when coupled with the fairly static nature of the quantitative engine on which they operate, results in a high rating of the team relative to peers.



# Wilshire

Manager Research

## BlackRock

US Alpha Tilts

Wilshire Manager Research Team

August 22, 2024

	Rating Decile	Weight
<b>II. Information</b>	3rd	20%

Given the quantitative investment process, information gathering is focused on identifying new ideas or insights that help capture abnormal returns. These ideas can be sourced from data vendors, academic research, performance attribution, or an analyst's own revelation. At the start of each year, all PMs are invited to a research offsite where the research agenda for the year is finalized and new or current projects are discussed. When an analysts develops an idea into a hypothesis, it must pass on four categories: "sensible" (must be grounded in solid economic theory), "predictive" (must be able to forecast returns), "consistent" (is it consistent across universes), and "additive" (is it already reflected in the model). Official documentation on new research projects is disseminated across SAE and a formal meeting is held that is open to all SAE team members. There is one dedicated researcher who is formally required to review the research and respond to the lead researcher with any suggestions for improvement. A project can take anywhere between 1 – 12 months to complete depending on its complexity. The team oversees data from roughly 400 third-party vendors and proprietary sources. SAE has dedicated forensic accountants and equity analysts who follow-up on outlier issues and make necessary adjustments to GAAP-reported items. The SAE group has evolved its research process to focus more on new alpha sources in an attempt to be more forward-thinking than its competitors with respect to the power of existing signals (i.e. - analyst revisions, earnings quality, etc.) and future trends (i.e. - themes and baskets). The quantitative research effort is well-resourced and constantly endeavors to generate insight from various projects dedicated to alpha signal improvement, resulting in an above-average rating.

	Rating Decile	Weight
<b>III. Forecasting</b>	1st	20%

The stock selection model consists of three main components: company fundamentals, sentiment, and macro themes. The company fundamentals component ensures the team is buying stocks that are trading cheaply relative to the stock's intrinsic value. The sentiment component measures a stock's trends and the behavior of other market participants. Macro themes measures a stock's exposure to certain factors like the business cycle, currency rates, or monetary policy. On a daily basis, stocks receive an alpha score that reflects the insights in each category. The team constructs and rebalances the portfolio using a proprietary optimizer, which yields a recommended trade list that will move the portfolio to the new optimal portfolio with the goal of maximizing alpha, subject to tracking error and transaction costs. On rare occasions, the team will override the model if there is something material that is uncaptured by the model, such as a corporate action or news headline.

The process is designed to outperform in any environment; however, the greatest headwinds occur when markets ignore fundamentals and positive returns are concentrated in a limited number of names. Performance has outperformed over trailing periods with tracking error falling around the 2% target. The forecasting process has demonstrated an ability to add alpha over short and long periods of time, resulting in a high rating.

# Wilshire

Manager Research

## BlackRock

US Alpha Tilts

Wilshire Manager Research Team

August 22, 2024

	Rating Decile	Weight
<b>IV. Portfolio Construction</b>	1st	20%

The benchmark for the strategy is the S&P 500 Index and the strategy targets an active return in the 1 – 2% range. The strategy imposes tight benchmark-relative parameters for stocks (+/- 2%), industry (+/- 4%), and sector (+/- 4%) and typically holds between 100 – 300 stocks. Individual position sizes are determined by the proprietary optimizer, which reflects the alpha forecast from the model. PMs can override the optimizer when necessary.

For this portfolio, tracking error is perhaps the most important measurement for risk. BlackRock's Risk and Quantitative Analysis Group (RQA) oversees the risk management process and partners with SAE to monitor the portfolio's risk metrics. The team uses BARRA risk models as the basis for risk management, supplemented by risk controls developed internally. In addition, the team examines the portfolio against the market to ensure the relevance of the team's investment ideas remain intact.

	Rating Decile	Weight
<b>V. Implementation</b>	1st	10%

Trading is led by Dan Veiner and Jatin Vara. The Global Equity Trading Group comprises roughly 220 professionals as of 2Q24. The Global Equity Trading Group resides under the Global Trading Group umbrella, which consists of approximately 50 traders and executes trades on behalf of all portfolio management teams.

The firm uses the proprietary platform called Aladdin which integrates and instantly connects all the functions needed to manage assets: from portfolio management and trading to compliance, operations, and risk oversight. Aladdin provides pre-trade compliance, order management, accessing liquidity pools, and trade execution. The trading operation contains a highly automated compliance process to help ensure that portfolio are managed in accordance with their stated guidelines and applicable regulatory requirements. Key sources of liquidity include: single dealer platforms, an extensive network of broker dealers, including principal liquidity, trading venues such as dark pools, ECNs, MTFs, etc., direct market access, and internal crossing. The firm's Market Structure and Electronic Trading team is responsible for the firm's proprietary transaction cost model. This function is critical as it provides trade cost measurement (quantifies full cost of trading), forecast (estimates of trading using proprietary models), and management (best execution).

Turnover for the US Alpha Tilts strategy is expected to be between 100 – 200% annually and capacity is there is officially no capacity constraint for the strategy. BlackRock maintains a robust trading desk with strong infrastructure, but capacity will need to be monitored as there are no formal constraints. Implementation receives an above average rating for these reasons.

# Wilshire

Manager Research

Wilshire Manager Research Team

August 22, 2024

## BlackRock

US Alpha Tilts

Rating Decile	Weight
1st	10%

### VI. Attribution

Performance attribution is performed by the SAE team using internally developed analytical tools. The team uses a combination of third-party systems such as BARRA and proprietary programs like Aladdin. The team not only employs traditional performance attribution tools and can better articulate security-level impact than most other quant efforts, but has also established a practice to constantly revisit prior factors, procedures, and research findings for testing. This constant search for alpha is done because the team realizes it cannot continue to succeed on past R&D efforts, and therefore, must continually evolve and reinvest its research effort to keep its performance competitive.

		Rating									
Decile		1	2	3	4	5	6	7	8	9	10
Corresponding Grade		A		B		C		D		F	

# Wilshire

Manager Research

## BlackRock

US Alpha Tilts

Wilshire Manager Research Team

August 22, 2024

### Firm Information

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## Manager Research

### Columbia Threadneedle Investments

#### US Contrarian Large Cap Core

Rating Decile	Weight
1st	100%

#### Summary

The Columbia Contrarian Large Cap Core strategy is a moderately concentrated, active strategy that seeks to produce 150 to 350 basis points of excess returns on an annual basis versus the Russell 1000 Index. The strategy is led by portfolio manager Guy Pope, who leverages the insights of a research platform consisting of industry-specific analysts. Mr. Pope has served as a PM for the firm since 1996 and for this particular strategy since July 2004, gradually becoming the sole PM as his peers resigned in 2005 and 2006. For the management of the strategy, the team leverages the research of the fundamental equity team, which consists of over 20 analysts/associates that demonstrate deep industry knowledge. They are also supported by the six-member quantitative research team.

The philosophy seeks out-of-favor companies and hence is contrarian in nature. Overall, the process has impressive depth in research, while maintaining flexibility with respect to exact valuation methodology at the stock level. The team has demonstrated a strong and consistent ability to add value through security selections while not taking excessive risk to do so. The process is flexible and may emphasize value or growth stocks at any given time. The resulting portfolio is risk-minded, but active.

The strategy is listed under the tickers CCCIX, COFYX, and sub advisory tickers VLCCX and ISFIX.

Rating Decile	Weight
1st	20%
4th	50%
1st	50%

#### I. Organization

*Firm*

*Team*

Columbia Threadneedle Investments North America (Columbia) is a wholly owned subsidiary of Ameriprise (NYSE: AMP), who purchased the firm from Bank of America in 2Q10 and combined them with their existing asset management business, RiverSource. Ted Truscott, the CIO of RiverSource, assumed leadership of the combined organization as CEO. Mike Jones, formerly president of Columbia Management, served as President of the U.S. asset management business immediately after the transaction; however, he left the firm in 1Q12 to join Pyramid. Colin Moore, previously Columbia's Head of Active US Equity, became the CIO. As a result of the transaction, Columbia's organization was left largely intact, while RiverSource experienced significant turnover, including their head of fixed income. Overall, Columbia's transition from a bank owned parent company to an asset management organization is viewed as a positive development. On March 30, 2015, affiliated companies Columbia Management and Threadneedle Investments began doing business under the global brand Columbia Threadneedle Investments. The new brand represents the combined capabilities and resources of both organizations and its offshore asset management affiliates, offering clients access to both firms. However, there is no change to the corporate structure or regulated entities as a result of the new brand. The firm is co-headquartered in Boston, MA for their North American business and London, UK for their EMEA and Asia Pacific businesses, managing \$587B as of 3Q23 staffed with 650+ investment professionals.

Both research analyst and portfolio manager compensation are comprised of a base salary and an annual incentive award. The incentive bonus award can either be all cash, given that the amount is under a pre-specified threshold, or can be a combination of cash, restricted stock/stock options, and deferred compensation. These incentive components are largely performance based on the various accounts.

Guy Pope is the lead PM for the Columbia Contrarian Large Cap Core strategy. Mr. Pope has served as a PM for the firm since 1996 and for this particular strategy since July 2004, gradually becoming the sole PM as his peers resigned in 2005 and 2006. He is supported by Generalist PMs Harvey Liu, Michael Welter and Nicholas Smith. Mr. Liu joined the product in 2010; while, Messrs. Welter and Smith joined the team in 2012. For the management of the strategy, the Contrarian Large Cap Core team leverages the research of the fundamental equity analyst team of 20+ analysts/associates who possess deep industry knowledge. They are also supported by the quantitative research team led by Brian Condon.

The Contrarian Large Cap Core strategy was first managed by the predecessor firm Crabbe Huson in Portland, OR. In 2003, Crabbe Huson was combined under Columbia Management. Overall, Wilshire has a slightly favorable view of the Columbia organization given the quality and the stability of the investment professionals along with the senior management. Wilshire is encouraged by the continual commitment to resources and personnel for the strategy.

## Manager Research

### Columbia Threadneedle Investments

#### US Contrarian Large Cap Core

	Rating Decile	Weight
<b>II. Information</b>	1st	20%

Fundamental research is done by the strategy's portfolio management team, in collaboration with the firm's 20+ member Fundamental Equity Research team. Effective April 1, 2017, Tom West, Head of Global Equity Research, left the firm and Kirk Moore, former Head of Global Fixed Income research, was appointed Global Head of Research, overseeing both equity and fixed income research efforts.

Approximately 85% of research for the Contrarian LCC strategy is generated internally, with the remaining 15% coming from sell-side brokers. The fundamental analysts conduct management interviews and frequent company visits, in addition to attending conference. The analysts provide ratings for approximately 75% of the domestic indices, using a variety of data and analytical tools including, BARRA, Holt, FactSet, Bloomberg, Zephyr, and STARMINE. Daily discussions take place between the strategy PMs and the research teams via conference call.

The Contrarian Large Cap Core team also leverages the resources of the six-member quantitative research team led by Brian Condon. The quant team primarily conducts performance attribution and risk analysis, but also uses multi-factor models to rate most domestic stocks. The models use a combination of value, quality and momentum factors. Overall, the information gathering process ranks above average due to the impressive resources along with the depth and breadth of industry knowledge of the investment professionals.

	Rating Decile	Weight
<b>III. Forecasting</b>	1st	20%

The Contrarian Large Cap Core strategy begins with an evaluation of the investable universe, which consists of securities within the Russell 1000 and ADRs with greater than \$2 billion market cap at the time of purchase. The team uses a proprietary quantitative screening tool to narrow down potential research ideas, attempting to identify out-of-favor securities. Attractive companies are generally in the bottom 1/3 of their 52 week price range and demonstrate attractive risk/reward potential over an 18-24 month time frame. Though there are a variety of names that pass through the initial screen, the next step of the investment process, valuation/fundamental analysis, reduces the universe to a select few.

The Fundamental Research Group tends to focus on discounted cash flow combined with other metrics such as P/E, P/FCF, P/B, Enterprise Value to Sales, and Enterprise Value to EBITDA. The valuation approach depends on the industry and security in question and is reviewed from both an absolute and relative basis. The team evaluates the security, looking for a potential thesis for future growth and tends to rely on normalized earnings power. Before a stock is included in the portfolio, an upside price target and downside target are established and the team runs both a bull and bear case scenario in an attempt to analyze the security from various angles and scenarios. While Mr. Pope pays close attention to relative valuations, he generally prefers companies with strong enough earnings growth to withstand shorter-term periods of turmoil or disruption.

Overall, the process has impressive depth in research, while maintaining flexibility with respect to exact valuation methodology at the stock level. The team has demonstrated a strong and consistent ability to add value through security selections while not taking excessive risk to do so. Opportunistic stock picking in periods of heightened volatility has led to solid performance across a variety of market environments; however, the strategy is expected to perform better in up markets.

	Rating Decile	Weight
<b>IV. Portfolio Construction</b>	1st	20%

The 60-80 name portfolio seeks to achieve an excess return of 150-350 bps annually while maintaining a max tracking error of 700 bps (currently ~300 bps) versus the Russell 1000 benchmark. The strategy may invest up to 20% of the portfolio in non-US companies, ADRs, or non-dollar denominated securities not in the benchmark; however, the non-US exposure has typically been in the 7-10% range. Individual securities are limited to a 3.5% active weight. Sector and/or industry weights are a byproduct of the bottom-up process, though each sector is limited to +/- 9% of the benchmark weighting. While sector biases will vary, the team is typically underweight in the Utilities and REIT sectors and relative weights are typically kept within the +/- 6% range.

The team monitors factor exposures such as volatility, size, momentum, beta, and leverage using a proprietary portfolio construction tool called Equity Portfolio Analysis developed by the Quantitative Research Team. The firm's Investment Risk Management Department monitors the risk profile of the strategy on an ongoing basis. Tools utilized include Monte Carlo simulations of VaR, factor analysis, and stress testing/scenario analysis. The portfolio is also subject to the firm's semiannual 5P review, which includes an assessment on the team's process and positioning. With respect to style, the strategy has been slightly more opportunistic with small shifts to growth over time. Overall, the portfolio construction process is active and reasonably concentrated, but remains adequately risk controlled.

# Wilshire

Wilshire Manager Research Team

July 24, 2024

Manager Research

## Columbia Threadneedle Investments

US Contrarian Large Cap Core

Rating Decile	Weight
3rd	10%

### V. Implementation

The Contrarian LCC strategy has experienced outflows in recent years, peaking at ~\$28B in 4Q17 and falling to about \$22B as of 2Q23. Estimated capacity for the strategy is approximately \$30 billion. Columbia has an active, centralized equity block-trading desk that trades issues for this strategy, led by Head of Trading Stephen Harasimowicz. The Centralized Global Equity Trading team consists of 19 professionals based in both Portland, OR and Boston.

The Equity platform uses the LongView Trading System ("LVTS") as both an order entry and guideline-monitoring tool with both pre- and post-trade compliance capabilities. Columbia has also developed an in-house software system to simulate the pre-trade impact on total portfolio risk. Trading costs are measured and reviewed using ITG. Turnover for the strategy has historically averaged 60-80%.

Rating Decile	Weight
2nd	10%

### VI. Attribution

The team uses comprehensive reporting systems and metrics including BARRA, Holt, Wilshire, FactSet, Bloomberg and Zephyr style analysis. In addition, FactSet is used to evaluate portfolio performance versus the benchmark. They rely on FactSet for attribution analysis. FactSet attribution analysis applies the Brinson-Fachler Model, a holdings-based model which uses daily returns. In addition, the portfolio is also subject to the firm's semiannual 5P review, which includes an assessment of the product's positioning, philosophy, people, process, and performance. Findings from this review are presented to the firm's Investment Oversight Committee, and recommendations are made as needed to ensure the team is adhering to the started objective. The team utilizes attribution to a greater degree than simple client reporting and attempt to use the results for future improvements on the investment process.

	Rating									
Decile	1	2	3	4	5	6	7	8	9	10
Corresponding Grade	A		B		C		D		F	

## Manager Research

# Columbia Threadneedle Investments

US Contrarian Large Cap Core

### Firm Information

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On January 8, 2021, Wilshire was purchased (the "Transaction") by Monica Holdco (US) Inc. ("Buyer"). The Buyer is indirectly controlled by CC Monica Holdings, LLC (which is affiliated with and Motive Monica LLC. As part of the Transaction, Ares Management Corporation became a lender to the Buyer.

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# Wilshire

Manager Research

Wilshire Manager Research Team

February 2, 2024

## J.P. Morgan Asset Management

JPM US Large Cap Core

Rating Decile	Weight
1st	100%

### Summary

JPMorgan Large Cap Core is a highly competitive large cap product that is designed to outperform the S&P 500 Index by approximately 2% over a full market cycle gross of fees with an expected tracking error of 2-4%. Backing the portfolio management team is a relatively stable and very deep team of sector specific research analysts. The process is robust and forward looking, calculating an internal rate of return through an expected returns framework utilizing proprietary estimates. The investment process is also highly objective using a ranking system. Overall, Wilshire finds the product suitable for standalone large cap core exposure. Scott Davis, who has been a portfolio manager on the strategy since 2014, took over lead portfolio management responsibilities following Tom Luddy's retirement in January 2018.

# Wilshire

Manager Research

Wilshire Manager Research Team

February 2, 2024

## J.P. Morgan Asset Management

JPM US Large Cap Core

	Rating Decile	Weight
<b>I. Organization</b>	<b>2nd</b>	<b>20%</b>
Firm	4th	50%
Team	1st	50%

JP Morgan Asset Management, Inc. (JPMAM) is a wholly owned subsidiary of JPMorgan Chase & Co, a publicly traded and leading global financial services firm with an extensive array of capabilities. The asset management division is headed by George Gatch and is comprised of over 7000 employees and more than 750 investment professionals worldwide. The firm collectively manages ~\$3 trillion in assets (as of 4Q23), which in turn translates into a minor share of the parent company's overall revenue. The asset management division is managed autonomously with distinct separation from the parent organization regarding compensation, product development, and management. The firm's compensation structure is attractive with an annual fixed salary and a variable performance bonus consisting of cash incentives, restricted stock, and in most cases, mandatory deferred comp. For variable bonuses, both relative- and absolute- performance measures (75%) are evaluated with an emphasis placed on three- and five-year statistics, followed by one-year results. The 25% balance is qualitative in nature.

The asset management division has a legacy of acquiring businesses, many of which faced integration issues and resulted in significant senior personnel departures—most notably within the fixed income and international equity divisions. Integrations have also faced challenges in merging technological infrastructures, investment team cultures, and buy-in to the firm's operating structure. In addition, the sheer nature of being a publicly owned institution has moderately constrained the operating environment of the firm, i.e., communication delays/miscues, unanticipated fund closures, abrupt personnel departures/terminations, excessive capacity constraints, etc. While Wilshire has historically held JPMAM's U.S. Equity division in high regards and the firm has a history of closing strategies (typically too late), asset gathering (~\$550B in active domestic equity AUM as of 11/30/23) has become an issue across the division and will likely continue to negatively impact relative performance results going forward. Given these issues, Wilshire has tempered JPMAMs qualitative firm rating, despite maintaining high conviction across a variety of the firm's investment teams/strategies globally.

The Large Cap Core strategy is managed by lead PM Scott Davis - who is supported by a large pool of experienced research analysts with specific sector responsibilities. Mr. Davis took over lead portfolio management responsibilities following the retirement of Tom Luddy in January 2018. Mr. Luddy was with J.P. Morgan for over 40 years and was the lead PM on the Large Cap Core and Large Cap Core 130/30 products. Mr. Davis has been a PM on the US Equity fund since 2014 and has over 25 years of experience. Prior to transitioning to portfolio management, Mr. Davis was one of the firm's research analysts, and he places a high priority on effective communication with the analyst team. In 4Q21 Shilpee Raina was added to the team as a portfolio manager. She has been with the firm for nearly 20 years as a research analyst. Susan Bao, who had been a PM on the 130/30 LCC product since its inception, was removed as PM in 4Q20 in order to focus on the firm's short-enabled strategies. The research analysts on the team possess significant industry experience and solid academic credentials.

The entire team is located in JPMorgan's New York office, allowing the team to discuss investment ideas in a formal and informal fashion on a daily basis. The role of the research analyst at the firm is regarded as a career path as opposed to being a steppingstone to becoming a PM, and the analysts have an average of 20 years of experience. Turnover has been relatively low for a team of this size, with most departures in the form of internal transfers rather than leaving the firm altogether.

# Wilshire

Manager Research

Wilshire Manager Research Team

February 2, 2024

## J.P. Morgan Asset Management

JPM US Large Cap Core

	Rating Decile	Weight
<b>II. Information</b>	1st	20%

The team employs a robust information gathering process through its commitment to fundamental in-house research. The analysts, all sector specialists, devote 100% of their time to making bottom-up earnings and earnings growth projections, which become the chief inputs for the valuation model. To develop the projections, the analysts spend the majority of their time conducting independent research by meeting with company management and analyzing SEC filings. Due to the firm's large presence in the equity markets, the analysts have a good level of access to company management, aiding in the creation of a sustainable information advantage. In addition, the analysts have the ability to leverage the research conducted by the firm's global network of analysts. Since the companies that constitute the large cap universe have a strong global presence, the analyst's ability to gain independent insight on global markets is a key competitive advantage. The analysts supplement their original research with information available from industry contacts and Wall Street firms; however, the external research is used primarily to compare their independent research with consensus information. Overall, the team adds significant value to the process through its in-depth information gathering process.

	Rating Decile	Weight
<b>III. Forecasting</b>	1st	20%

The forecasting process begins with approximately 500 large and mid-cap domestic companies, where each stock in the universe is categorized into one of 18 industry sectors. The strategy is very much a fundamental bottom-up driven product. Following the screen, the team conducts fundamental research on the narrowed universe of attractive companies. The team seeks favorable supply/demand imbalances, competitive dynamics, attractive business models, a strong management team with a proven track record, and attractive balance sheet metrics. These metrics are generally evaluated using a 3–5-year timeframe. Analysts not only focus on developing mid- to long-term earnings and cash flows, but also, as industry experts, they are focused on structural changes in the industries they cover, as well as the business cycle. This research translates into a proprietary valuation framework. To avoid valuing companies on peak or trough earnings, the analysts use intermediate-term normalized estimates that reflect each company's sustainable level of earnings. Stocks are then ranked into quintiles based on the analyst's determination of the stock's expected return and hence relative attractiveness within each of the 18 sectors. The rest of the process is fairly transparent - overweighting the highest ranked stocks and underweighting the lowest ranked stocks. According to Wilshire attribution analysis, the team has been successful in adding value from stock selection over the life of the product. Additionally, the strategy's long-term track record (absolute and risk-adjusted) is highly competitive within the large cap core universe from both a cumulative and rolling period standpoint. Forecasting rates highly.

# Wilshire

Manager Research

Wilshire Manager Research Team

February 2, 2024

## J.P. Morgan Asset Management

JPM US Large Cap Core

	Rating Decile	Weight
<b>IV. Portfolio Construction</b>	1st	20%

Portfolio positioning is ultimately driven by the PM, who overlays his conviction on the team's research. The portfolio is actively constructed with 50 to 80 securities with a typical minimum of \$1 billion in market cap. Although the relative rankings by the analysts drive the majority (90%) of the decisions, the PM incorporate macro views into the decision-making process (10%) to determine which stocks are attractive or unattractive given the current market sentiment. The team limits security and sector exposures to within 4% of the S&P 500 Index weight, respectively. As a result of the portfolio construction process, the tracking error for the portfolio is expected to be 2-4%. According to a Compass rolling consistency analysis, the ex-post tracking error has typically ranged from 2-5%. To analyze factor exposures such as risk indices and industries, the team employs BARRA as well as a proprietary multi-factor model. The team looks at these exposures on a daily basis. Overall, the portfolio construction process is solid and adds value.

	Rating Decile	Weight
<b>V. Implementation</b>	1st	10%

The firm has its own in-house trading team of U.S. equity specialists that are responsible for executing all domestic trades. Trading is viewed as a key component of the investment process along with best execution. For best execution, the team uses a broad range of trading strategies that include electronic trading, electronic crossing networks, portfolio trading and traditional block trading. Over two-thirds of the overall trading volume is conducted through state-of-the-art trading techniques such as crossing networks which significantly reduces the average commission costs while limiting market impact. For examining best execution, the team utilizes two external trade cost analysis vendors, Plexus and Abel Noser. The annual turnover of the strategy is roughly 80%.

	Rating Decile	Weight
<b>VI. Attribution</b>	2nd	10%

The team uses BARRA, Factset and Wilshire's third-party analytics tool for its performance attribution analysis. Using these software programs, the team is able to break down returns at the stock and sector level as well as into market timing, industry and asset allocation decisions, and factor exposures. The team expects to realize returns largely from stock selection and its attribution confirms this tendency. Overall, the team's performance attribution is highly ranked due to the depth and breadth of the attribution efforts.

	Rating									
Decile	1	2	3	4	5	6	7	8	9	10
Corresponding Grade	A		B		C		D		F	

# Wilshire

Manager Research

Wilshire Manager Research Team

February 2, 2024

## J.P. Morgan Asset Management

JPM US Large Cap Core

### Firm Information

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# Wilshire

Manager Research

## T. Rowe Price

### US Structured Research Equity Strategy

Wilshire Manager Research Team

January 31, 2024

Rating Decile	Weight
2nd	100%

#### Summary

The T. Rowe Price U.S. Structured Research Strategy represents a "best of breed" option in the fundamental research based enhanced index universe. The firm's Capital Opportunity Fund mirrors this strategy but offers a longer term track record for comparison purposes. The strategy is a low tracking error (<175 bps) product that relies upon a large number of fundamental research analysts to individually manage sleeves of the portfolio. It is somewhat unique in that it has low active risk, a large number of holdings, yet is driven by qualitative research. This strategy is attractive, as it provides the disciplined portfolio construction of quantitative products with the rich insights of fundamental research.

	Rating Decile	Weight
<b>I. Organization</b>	<b>1st</b>	<b>20%</b>
Firm	1st	50%
Team	1st	50%

Founded in 1937, T. Rowe Price represents one of the largest multi-product investment management firms with a significant presence in both the institutional and retail mutual fund markets. The firm has a diverse product lineup, which includes equity, fixed income, and asset allocation capabilities. T. Rowe Price has built a global research platform with investment professionals located in various offices around the world. Approximately 80% of the firm's employees are shareholders in the company and combined with vested but unexercised options own approximately 15-20% of the firm's publicly traded equity (TROW). The firm has established a competitive franchise in both investment management and distribution due to its conservative culture and high emphasis on fiduciary standards.

T. Rowe Price has developed a good reputation for recruiting and retaining talented investment professionals throughout the organization. In terms of compensation for investment professionals, the firm provides a modest base salary and a performance bonus that can be multiples of the base salary. The firm also offers stock options and restricted stock to certain investment and key senior professionals. Restricted stock and options vest over a five-year period. Bonuses are tied closely to performance for both portfolio managers and research analysts, with an emphasis on three- and five-year relative and risk-adjusted results.

During 2020, T. Rowe Price announced its intentions to create a new investment adviser, T. Rowe Price Investment Management (TRPIM), which was completed during 2022. TRPIM has its own investment platform and investment leadership, which is separate and distinct from existing investment adviser, T. Rowe Price Associates (TRPA). Six investment strategies moved to TRPIM which include U.S. Capital Appreciation, U.S. Mid-Cap Growth Equity, U.S. Small-Cap Core Equity, U.S. Small-Cap Value Equity, U.S. Smaller Companies Equity, and U.S. High Yield Bond. In total these six strategies represent approximately 10-15% of total T. Rowe Price AUM. TRPIM is a wholly owned subsidiary of T. Rowe Price Associates.

The Structured Research Strategy portfolio is a low tracking error, active risk strategy driven by the firm's equity research analyst group. The strategy is directed by a portfolio oversight committee, comprised of five investment professionals: Ann Holcomb, Jason Polun, Jay Nogueira, Alexa Gagliardi, and Tamzin Manning. Ms. Gagliardi is new to the team as associate portfolio manager is responsible for managing the day-to-day management of cash flows while Ms. Manning is the team's new client portfolio manager. The oversight committee does not make stock selections; rather, the strategy leverages the insights of approximately 25 analysts, each of whom is responsible for making the final buy and sell decisions for a sleeve of the portfolio. Five of the analysts are currently responsible for control of ~45% of the portfolio. The oversight committee is responsible for ensuring adherence to portfolio constraints and risk controls, in addition to managing inter-analyst communication and activity. While analyst turnover has historically been modest at around 10% per annum, it appears to have increased modestly. Overall, the analyst staff is very experienced and many of the analysts have prior industry backgrounds in the areas they cover.

# Wilshire

Manager Research

Wilshire Manager Research Team

January 31, 2024

## T. Rowe Price

### US Structured Research Equity Strategy

	Rating Decile	Weight
<b>II. Information</b>	1st	20%

T. Rowe's approach to fundamental research encompasses the same degree of Porter's Five Force analysis that other large firms with centralized research groups engage in. The firm's sector-specific analysts conduct over 4,000 on-site visits a year and complement these visits with telephone conversations, participation in conference calls, and attending industry and investment conferences. In addition, the firm hosts over a 1,000 company meetings in their offices annually. The analysts primarily meet with senior- and mid-level managers but will also meet with competitors and various stakeholders up and down the supply chain to truly assess a company's position in the marketplace. During these visits, the analysts focus on gathering information about the viability and sustainability of a company's business model; the quality of the management team and alignment of interests with shareholders; and the company's financial position as well as the drivers and obstacles to continued financial success. Each of the firm's analysts are responsible for creating 3-5 year forecasts for 30-50 companies and for issuing a 1-5 rating on each company falling under their coverage.

Research analysts in the firm can be career analysts and most of them have extensive prior industry experience. We continue to rank T. Rowe highly in information gathering due to the depth and the breath of the firm's research resources.

	Rating Decile	Weight
<b>III. Forecasting</b>	2nd	20%

The Structured Research Strategy uses a variety of valuation models to create a security outlook and forecast. The techniques utilized by the analysts will vary depending on what is relevant within a given industry/sector. The valuation models include Price-to-Earnings, Price-to-Book, Price-to-Sales, Price-to-Cash Flow, Dividend Yield and Price-to-Earnings Growth. When creating the forecast, the analyst gives strong consideration to the viability/sustainability of the business model, the quality and shareholder orientation of management and a complete understanding of the company's financial statements. Each forecast is expressed by an analyst rating of 1 (Strong Buy) to 5 (Strong Sell), using a 12-month forecast horizon.

While the analysts cover and recommend stocks across the value to growth spectrum, one common theme is that the firm's research culture favors companies with attributes that lead to long-term outperformance: high quality management teams, high or increasing return on capital, attractive valuation, etc. In keeping with the long-term orientation employed across the firm, there is little focus on the highest growth companies that are priced for perfection or major turnaround stories that represent a call option on the survivability of the firm.

The forecasting effort is necessarily robust given the broad style composition of a core benchmark. A premium is placed on the experience and knowledge of each individual analyst to be able to appropriately value the wide universe of stocks, as opposed to relying on the expertise of one portfolio manager. Our attribution analysis shows that stock selection has been favorable strong over the long-term.

# Wilshire

Manager Research

## T. Rowe Price

### US Structured Research Equity Strategy

Wilshire Manager Research Team

January 31, 2024

	Rating Decile	Weight
<b>IV. Portfolio Construction</b>	2nd	20%

To construct the portfolio for the Structured Research Strategy, each analyst is provided a capital allocation which is proportional to the industry weight in the S&P 500 Index. From there, each analyst makes buy or sell decisions by overweighting highly rated securities and underweighting or excluding poorly rated securities. In addition, there are sector, industry, and position limits of +/- 150 bps, +/- 100 bps and +/- 100 bps, respectively. For stocks representing more than 3% of the index, the constraints are +/- 150 bps. Stocks not represented in the S&P 500 index can be purchased, but these non-benchmark names are limited to 50 bps, while a total aggregate limit of 10% placed on non-benchmark names.

The final portfolio typically holds 200-275 securities. The targeted active risk of the strategy is 125 – 175 basis points. The firm uses a Daily Risk Monitoring Report, which integrated several internal applications as well as the Barra Aegis model. This serves as another source of risk management, ensuring that the portfolio's aggregate characteristics are not overly exposed to any unintended risk factors. (Any portfolio risk exposure approaching a 0.2 standard deviation variance from the index exposure will be trimmed back by the oversight committee.)

As opposed to many other enhanced index strategies, this is a relatively simple portfolio construction effort. It does not ensure the optimal balance between the return opportunities described by the forecast and the risks described by the risk model. Thus, even though the risk management effort monitors such risk factors as style, size, and momentum, there is no process that integrates the risk management feedback into the stock selection effort. Compared to most large cap core managers, the portfolio construction is very strong, but compared to other enhanced index efforts, it lacks some robustness. Overall, the effort scores above average.

	Rating Decile	Weight
<b>V. Implementation</b>	4th	10%

T. Rowe Price has approximately 25 equity traders with an average of 15 years of trading experience. The firm utilizes the Macgregor Financial Trading Platform for their order management system and for pre-trade compliance. Once inputted into the system, the trade is placed with a broker via telephone or through one of the over 100 FIX connections on the Macgregor network. To minimize trading costs, T. Rowe searches out alternative pools of liquidity and adapts their style, approach, and venue where appropriate. The firm trades with more than 200 regional and national broker-dealers, including several ECNs and alternative sources of liquidity. The firm internally monitors execution costs and subscribes to ITG for third-party transaction cost analysis. The firm does manage a considerable amount of assets in the U.S. large cap space, but this strategy is highly diversified and annual turnover is fairly low.



# Wilshire

Manager Research

Wilshire Manager Research Team

January 31, 2024

## T. Rowe Price

US Structured Research Equity Strategy

	Rating Decile	Weight
<b>VI. Attribution</b>	3rd	10%

The strategy uses various third party and proprietary risk models to monitor performance and risk. In addition, each analyst is measured on their own predictive capabilities which are used to determine, in part, the compensation of each analyst. The use of risk models to monitor exposures is commendable in general. However, the portfolio construction process described above precludes the strategy from accruing the full potential benefit from these systems. It is not clear how the attribution process is used to help analysts improve their effort.

	Rating									
Decile	1	2	3	4	5	6	7	8	9	10
Corresponding Grade	A		B		C		D		F	

# Wilshire

Manager Research

Wilshire Manager Research Team

January 31, 2024

## T. Rowe Price

US Structured Research Equity Strategy

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Third party information contained herein has been obtained from sources believed to be reliable. Wilshire makes no representations or warranties as to the accuracy of such information, and accepts no responsibility or liability (including for indirect, consequential or incidental damages) for any error, omission or inaccuracy in such information and for results obtained from its use.

Wilshire has extensive business relationships with, and may provide services to investment managers and other financial services providers that are evaluated or recommended by Wilshire to its advisory clients. In addition, Wilshire provides products and services that compete with managers and products which we evaluate.

Wilshire recognizes that conflicts of interest arise in the provision of its services. Specifically, there are conflicts of interest between Wilshire's obligation to provide objective advice to clients and Wilshire's business relationships (including being a competitor) with the investment managers and financial services providers we recommend to those clients. It is Wilshire's policy to make evaluations, recommendations and decisions based solely upon the best interests of clients and without regard to any benefit (economic or otherwise) that Wilshire receives or might receive. Wilshire is committed to ensuring that it does not consider an investment manager's or financial service provider's business relationship with Wilshire, or lack thereof, in performing evaluations for or making recommendations to its advisory clients. Wilshire has implemented policies and procedures that seek to mitigate conflicts of interest through appropriate oversight, transparency and controls. Wilshire's policy is to disclose material conflicts of interest to its clients and prospective clients. Additional information regarding conflicts of interest is available in Wilshire's ADV Part 2.

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## Important Information

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In preparing the analysis in this report, Wilshire has used information and data provided to us by third parties believed to be reliable, including the investment managers and market index providers discussed herein. We have relied on such data and information as being complete and accurate. We have not independently verified and make no representations or warranties as to the accuracy or completeness of the data or information. Wilshire accepts no responsibility or liability (including for indirect, consequential or incidental damages) for any error, omission or inaccuracy in such information and for results obtained from its use. Information and opinions are as of the date indicated and are subject to change without notice. Wilshire assumes no duty to update this material.

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This report is not to be used or considered as an offer to sell, or a solicitation to an offer to buy, any security. Nothing contained herein should be considered a recommendation or advice to purchase or sell any security. Past performance is no guarantee of future results.

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**Kentucky Retirement Systems  
&  
Kentucky Retirement Systems Insurance Trust Fund (collectively, "KRS")**

**Gating Issues for Investing**

**(version November 2019)**

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Below are KRS's "gating items," with which the GP/investment manager needs to agree in order for KRS to make the proposed fund investment. Following confirmation that the GP/investment manager agrees with KRS on these gating issues, KRS will provide a comment memo and a full side letter.

We are disseminating the gating items list at the beginning of the process, so that internal counsel for the GP/ investment manager (and its law firm) can unambiguously understand that the side letter will need to be consistent with these gating items, and KRS will not accept the fund's "standard" provisions if they are in any way inconsistent with these gating items.

1. Disclsoure/Public Records Law. The GP/investment manager understands that KRS is subject to Kentucky's public records/disclosure laws and that KRS will disclose certain fund-level information, all contracts/offering documents, and other fee information, as described in KRS's side letter request and applicable Kentucky law. (See Exhibit A for a copy of the provision.)

Particularly, the GP/investment manager understands that:

(a) Pursuant to Kentucky Revised Statutes sections 61.645(19)(l) and (20), KRS is required to disclose all contracts or offering documents for services, goods, or property purchased or utilized by KRS. KRS intends to post any contracts with the GP/investment manager/fund on its website, which may include partnership agreements, side letters or similar documents. KRS may also post offering documents to its website if such offering documents contain substantive legal terms that are not contained in KRS's contracts with the GP/investment manager/fund or if there is no separate contract governing the investment. The GP/investment manager is invited to send KRS a redacted version of the contracts/offering documents.

(b) With respect to redacted documents, the GP/investment manager can only redact information that is exempt under Kentucky Revised Statutes sections 61.878(1)(c)(1); 61.878(1)(k) or 61.645(20) (i.e., information that is proprietary or otherwise exempt under Kentucky Revised Statutes section 61.878). Redacted documents should be reviewed by KRS prior to closing. ***KRS will NOT wire initial funding of any investment until redacted fund documents have been received and accepted by KRS internal legal staff.***

(c) In KRS's side letter (or in other relevant document executed by KRS), the GP/investment manager must clearly state the final closing date of the fund, and acknowledge that the final closing date is the date on which all redacted documents will be/may be posted on KRS's website or disclosed to the public. Further, the side letter must state that the fund/GP/investment manager will

not make any claim against KRS if it makes available to the public any document, report, notice or other information that KRS received from the fund, which was required to be made public by KRS pursuant to the Open Records Act, the Fee Disclosure Law, or the Document Disclosure Law (even if a court or the Attorney General later determines that certain information disclosed by KRS falls within an exemption under the Open Records Act, the Fee Disclosure Law, or the Document Disclosure Law.)

(d) pursuant to Kentucky Revised Statutes section 61.645(19)(i), KRS is required to disclose certain fee information. (See paragraph 1(d) in Exhibit A.)

2. Compliance with and Adherence to Investment Advisers Act of 1940, et.al. The GP/investment manager confirms that the GP and the investment manager shall comply with Kentucky Revised Statutes Section 61.650(1)(d)(2). (See paragraph 2 in Exhibit A for standard letter provision.)

3. KRS's Indemnification Obligation. KRS's indemnification obligations under the Subscription Agreement and the Partnership Agreement are not expressly authorized by the laws of the Commonwealth of Kentucky. Thus, KRS can't make any payment constituting such indemnification to the extent not authorized under such laws. (See paragraph 3 in Exhibit A.)

4. Sovereign Immunity. As a public agency, KRS reserves all immunities, defenses, rights or actions arising out of its sovereign status or under the 11th Amendment to the U.S. Constitution. (See paragraph 4 in Exhibit A.)

5. Jurisdiction/Venue.

(a) KRS requires its side letter to be governed by the laws of the Commonwealth of Kentucky, to the extent the terms in the side letter require interpretation or enforcement of a law, regulation or publicly policy of Kentucky. (See paragraph 5 in Exhibit A.); and

(b) The GP/investment manager agrees to the exclusive jurisdiction of the Franklin County Circuit Court in the Commonwealth of Kentucky, in connection with any legal proceeding involving any claim asserted by or against KRS arising out of the Partnership Agreement, the Subscription Agreement or related documents.

6. Conflict of Interest Statement. As part of KRS' internal policy, the GP/manager is required to sign and return KRS' Conflict of Interest Statement. (See Exhibit B.)

7. Statement of Disclosure and Placement Agent. As part of KRS' internal policy, the GP/manager is required to complete and return KRS' Statement of Disclosure and Placement Agent (Exhibit C: See KRS's Statement of Disclosure and Placement Agents – Manager Questionnaire).

**EXHIBIT A - Side Letter Provisions**1. Public Records.

(a) The Partnership hereby acknowledges that the Investor is a public agency subject to (i) Kentucky's public record law (Kentucky Revised Statutes sections 61.870 to 61.884, the "Open Records Act"), which provide generally that all records relating to a public agency's business are open to public inspection and copying unless exempted under the Open Records Act, (ii) Kentucky Revised Statutes section 61.645(19)(i) (the "Fee Disclosure Law"), and (iii) Kentucky Revised Statutes sections 61.645 (19)(l) and (20) (the "Document Disclosure Law"), which provide generally that all contracts or offering documents for services, goods, or property purchased or utilized by the Investor shall be made available to the public unless exempted under the Document Disclosure Law. Notwithstanding any provision in the Partnership Agreement or the Subscription Agreement to the contrary, the Partnership hereby agrees that (i) the Investor will generally treat all information received from the General Partner or the Partnership as open to public inspection under the Open Records Act, the Fee Disclosure Law or the Document Disclosure Law, unless such information falls within an exemption under the Open Records Act, the Fee Disclosure Law or the Document Disclosure Law, and (ii) the Investor will not be deemed to be in violation of any provision of the Partnership Agreement or the Subscription Agreement relating to confidentiality if the Investor discloses or makes available to the public (e.g., via Investor's website) any information regarding the Partnership to the extent required pursuant to or under the Open Records Act, the Fee Disclosure Law or the Document Disclosure Law, including the Fund-Level Information in paragraph 1(b) (even if a court or the Attorney General later determines that certain information disclosed by the Investor falls within an exemption under the Open Records Act, the Fee Disclosure Law, or the Document Disclosure Law).

(b) The General Partner acknowledges that the Investor considers certain fund level information public under the Open Records Act, the Fee Disclosure Law or the Document Disclosure Law and that the Investor has concluded that it is obligated to disclose such information upon request (e.g., via Investor's website). Notwithstanding any provision in the Partnership Agreement or Subscription Agreement to the contrary, the General Partner agrees that the Investor may disclose the following information without notice to the General Partner or the Partnership: (i) the name of the Partnership, (ii) the vintage year of the Partnership and/or the date in which the Investor's initial investment was made in the Partnership; (iii) the amount of the Investor's Capital Commitment and unfunded Capital Commitment, (iv) aggregate funded contributions made by the Investor and aggregate distributions received by the Investor from the Partnership as of a specified date; (v) the estimated current value of the Investor's investment in the Partnership as of any previous date, (vi) the net asset value of the Partnership as of a specified date, (vii) the estimated IRR of the Investor's investment in the Partnership as of a specified date, and (viii) the amount of fees and commissions (including, but not limited to, the Management Fees, amounts paid in lieu of the Management Fees, and Carried Interest Distributions) paid to the General Partner and its Affiliates with respect to the Investor's interests (the "Fund-Level Information"). Nothing contained herein shall require the General Partner to disclose to the Investor information not otherwise made available to all Limited Partners pursuant to the Partnership Agreement.

(c) The General Partner agrees that the Investor may disclose the redacted versions of [Confidential Private Placement Memorandum of the Partnership,<sup>1</sup> the Partnership Agreement, this Side Letter, and the Investor's Subscription Documents] (collectively, the "Partnership Documents"), in each case to the extent required by the Document Disclosure Law, once

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<sup>1</sup> Please note KRS may be able to remove the PPM from the list if the PPM includes all substantial legal terms that are addressed in the LPA. If the PPM has substantial legal terms that are not addressed in the LPA, it should be included in the list.

the offering period ends and the final closing date [FUND TO INSERT THE FINAL CLOSING DATE] occurs. It is further understood and agreed that the parties hereto shall amend and restate this Side Letter to reflect any elections under [MFN paragraph] hereof and shall amend the redacted version of this Side Letter in connection therewith.

(d) Notwithstanding any provision in the Partnership Agreement or Subscription Agreement to the contrary, the General Partner shall provide the Investor on at least a quarterly basis the information set forth in the Fee Disclosure Law, including but not limited to, (i) the dollar value of fees and commissions paid by the Investor (including via Capital Contributions) to the Partnership (including any Alternative Investment Vehicle), General Partner, Management Company or their respective Affiliates; (ii) the dollar value of the Investor's pro rata share of any profit sharing, Carried Interest Distributions or any other incentive arrangements, partnership agreements, or any other partnership expenses paid to the Partnership, General Partner, Management Company or their Affiliates; and (iii) if applicable, the name and address of all individual underlying managers or partners in any fund of funds in which Investor's assets are invested.

(e) The General Partner agrees that the Investor may disclose confidential information to any governmental body that has oversight over it and its statutory auditor, without notice to the General Partner or the Partnership; provided that such information retains the same confidential treatment with the recipient.

(f) The General Partner agrees to provide reporting to the Investor in accordance with the Fee Template published by the Institutional Limited Partners Association (available at [ilpa.org](http://ilpa.org)).

(g) The General Partner and the Partnership acknowledge and agree that pursuant to the Open Records Act, the Fee Disclosure Law or the Document Disclosure Law, the Investor may publicly disclose the information set forth in this paragraph 1 without further notice to the General Partner.

2. Investment Advisers Act of 1940. The General Partner confirms that pursuant to Kentucky Revised Statutes Section 61.650(1)(d)(2), the General Partner and the Management Company shall comply with (a) the Investment Advisers Act of 1940, as amended, and the rules and regulations promulgated thereunder, and (b) all other federal securities statutes and related rules and regulations applicable to investment managers. **[Note to GP/Manager: To the extent the manager views itself exempt from the registration with the SEC, KRS expects that the manager would act as if they were a registered investment adviser (i.e., comply with substantive provisions of the Advisers Act (everything except filing requirements) and provide a private action to KRS in the event of violations of the Advisers Act terms).]**

3. Indemnification. The General Partner acknowledges that the Investor has advised it that indemnification obligations under the Investor's Subscription Agreement and the Partnership Agreement that may be attributed to the Investor are not expressly authorized by the laws of the Commonwealth of Kentucky. As a result thereof, the Investor shall not be obligated to make any payment constituting such indemnification to the extent not authorized under such laws. Representations, warranties or covenants made by the Investor in the Partnership Agreement or the Investor's Subscription Agreement respecting limited partner interests in the Partnership shall be deemed to be modified so as to be consistent with the provisions of the preceding sentence. Nothing contained herein, however, shall relieve the Investor of any obligation it may have under the Partnership Agreement to contribute capital in respect of its Capital Commitment under the terms and conditions of the Partnership Agreement.

4. Reservation of Immunities. The Investor hereby reserves all immunities, defenses, rights or actions arising out of its sovereign status or under the Eleventh Amendment to the United

States Constitution, and no waiver of any such immunities, defenses, rights or actions shall be implied or otherwise deemed to exist by its entry into the Partnership Agreement, the Subscription Agreement or this Side Letter (the "Investment Agreements"), by any express or implied provision thereof or by any actions or omissions to act on behalf of the Investor or any representative or agent of the Investor, whether taken pursuant to the Partnership Agreement or the Subscription Agreement or prior to the entry by the Investor into the Partnership Agreement or the Subscription Agreement.

Notwithstanding the foregoing sentence, the Investor hereby acknowledges that the foregoing sentence in no way compromises or otherwise limits the obligations (including the contractual liability) of the Investor under the Investment Agreements nor shall it reduce or modify the rights of the General Partner and the Partnership to enforce such obligations at law or in equity, in each case including but not limited to (a) Investor's obligations to make contributions and (b) any obligation to reimburse or otherwise pay the Partnership or any other Partner for any loss, damage or liability arising from a breach of any representation, warranty or agreement of the Investor contained in the Partnership Agreement or the Investor's Subscription Agreement.

5. Governing Law; Jurisdiction. Except to the extent the terms hereof require interpretation or enforcement of a law, regulation or public policy of the Commonwealth of Kentucky, in which case the laws of the Commonwealth of Kentucky shall govern, this Side Letter shall be governed by the laws of the [State of Delaware] without regard to principles of conflicts of law. Notwithstanding anything to the contrary in the Partnership Agreement or the Subscription Agreement, the General Partner agrees with the Investor that any legal proceeding involving any claim asserted by or against the Investor arising out of the Partnership Agreement or the Subscription Agreement may be brought only in and subject to the exclusive jurisdiction of the Franklin County Circuit Court in the Commonwealth of Kentucky.

6. Conflicts Interest Statement. The General Partner acknowledges and agrees it will act in accordance with the Conflict of Interest Statement attached hereto as Exhibit B and will promptly notify the Investor if it becomes aware of a violation of such Exhibit.

7. Statement of Disclosure and Placement Agent. The General Partner acknowledges and agrees it will promptly notify KRS in writing if any of the responses set forth in the Statement of Disclosure and Placement Agents attached hereto as [Exhibit \_\_\_] cease to be accurate.



**EXHIBIT B – Conflict of Interest Statement**

**KENTUCKY RETIREMENT SYSTEMS  
CONFLICT OF INTEREST STATEMENT**

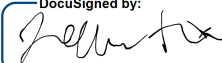
In consideration of the investment by Kentucky Retirement Systems and Kentucky Retirement Systems Insurance Trust Fund (collectively, "KRS") in a vehicle or account ("Account") managed by J.P. Morgan Investment Management Inc. (the "Manager"), the Manager acknowledges the need to maintain the public's confidence and trust in the integrity of KRS and the Commonwealth of Kentucky. In light of the forgoing, the Manager agrees to:

- Diligently identify, disclose, avoid and manage conflicts of interest that may arise through its relationship with KRS.
- Conduct activities with KRS so as not to advance or protect its own interests or the private interests of others with whom it has a relationship in a way that is detrimental to the interests of KRS.
- Conduct its activities in a manner to best promote the interests of KRS, but subject to the Manager's duty which requires it not to put the interests of one investor ahead of those of another investor.
- Upon discovery of an actual or potential conflict of interest involving KRS, disclose such conflict of interest to KRS and work with KRS in good faith to resolve or mitigate such conflict.
- Not engage directly or indirectly in any financial or other transactions with a trustee or employee of KRS that would violate the standards of the Executive Branch Ethics provisions as set forth in KRS Chapter 11A.

Agreed this the 10<sup>th</sup> day of February, 2025

MANAGER

For itself and on behalf of the Account

DocuSigned by:  
  
By: \_\_\_\_\_  
175F098FF357446...

Name: Jeffrey Fox

Title: Managing Director, Client Advisor

J.P. Morgan Investment Management Inc. has carefully reviewed the Gating Terms (including the Conflict of Interest Statement – Exhibit B) and, while we do not believe there are any material issues that cannot be resolved to our mutual benefit, we respectfully reserve the right to further discuss with you how we may tailor certain provisions of the Gating Terms to the vehicle and structure you ultimately decide on so as to appropriately address any legal, regulatory or operational requirements that pertain to the services being offered.

**EXHIBIT C – Statement of Disclosure and Placement Agents**

 <p><b>Kentucky Retirement Systems</b> <b>Statement of Disclosure and Placement Agents – Manager Questionnaire</b></p>
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1. Did your firm use a placement agent as defined in the KRS “Statement of Disclosure and Placement Agents” policy in an effort to solicit an Investment from KRS Please indicate fund vehicle title if relevant? If yes, please continue to question 2; if no, please proceed to question 10.

No, J.P. Morgan Investment management Inc. (“JPMIM”) does not hire 3<sup>rd</sup> party marketing or placement agents. JPMIM provides a salary, discretionary incentive award and benefits to JPMIM employees. Salaries are paid on a semi-monthly basis, while the discretionary incentive award is distributed annually in the form of cash and JPMorgan Chase & Co. (“JPMC”) Restricted Stock Units. Discretionary incentive awards are determined by management based upon factors that include individuals, JPMIM, and over-all JPMC performance. All compensation and benefits are believed to be commensurate with what is provided by competitor organizations. Employees will receive compensation under these provisions whether or not Kentucky Retirement Systems decide to invest in the Proposed Investment.

2. Please disclose the name of the placement agency used, the names of the individuals contracted by the placement agency (either as employees or as sub-agents) in order to solicit an investment from KRS, and the fees paid or payable to the placement agent in connection with a prospective KRS investment.

N/A

3. Please represent that any fees paid to placement agents are the sole obligation of the investment manager and not that of KRS or the limited partnership.

N/A

4. Please disclose the names of any current or former Kentucky elected or appointed government officials (federal, state, and local government), KRS Board of Trustees members, employees, or consultants of KRS, or any other person, if any, who suggested the retention of the placement agent.

N/A

5. Please provide evidence of the regulatory agencies, if any, in any Federal, state or foreign jurisdiction the placement agent or any of its affiliates are registered with, such as the Securities and Exchange Commission (“SEC”), FINRA, or any similar regulatory agency.

N/A

6. Please provide a resume for each officer, partner or principal of the Placement Agent detailing the person’s education, professional designations, regulatory licenses and investment and work experience.

N/A

7. Please describe the services to be performed by the Placement Agent.

N/A

8. Please disclose whether the Placement Agent, or any of its affiliates, is registered as a lobbyist with any and all Kentucky state and local (county) governments.

N/A

9. Please disclose any political contributions made by the Placement Agent to any Kentucky official within the prior 2 years.

N/A

10. Please disclose the names of any current or former Kentucky elected or appointed government officials (federal, state, and local government) KRS Board of Trustees members, employees, or consultants of KRS that are receiving any fees or compensation from the External Manager and/or placement agent. Please disclose any additional known relationships or conflicts with same.

None.

11. Please disclose any political contributions made by External Manager or principals of the External Manager in the prior 2 years.

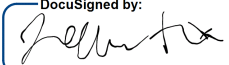
To the best of our knowledge, information and belief, no political contributions were identified from JPMIM or JPMIM's principals to any current or former Kentucky elected or appointed government officials (federal, state, and local government) in the prior two years.

12. Please disclose whether any principals of the firm have been involved in any regulatory proceedings, and if so, details concerning the same.

JPMorgan Chase & Co. and/or its subsidiaries (collectively, the "Firm") are defendants or putative defendants in numerous legal proceedings, including private civil litigations and regulatory/government investigations. The litigations range from individual actions involving a single plaintiff to class action lawsuits with potentially millions of class members. Investigations involve both formal and informal proceedings, by both governmental agencies and self-regulatory organizations. These legal proceedings are at varying stages of adjudication, arbitration or investigation, and involve each of the Firm's lines of business and geographies and a wide variety of claims (including common law tort and contract claims and statutory antitrust, securities and consumer protection claims), some of which present novel legal theories. Based on current knowledge, the Firm believes it has asserted meritorious defenses to the claims asserted against it in its currently outstanding legal proceedings, intends to defend itself vigorously in all such matters, and does not believe that any pending legal proceeding would have a material effect on the Firm's performance of the services contemplated by the Request for Proposal. For further discussion, please refer to JPMorgan Chase & Co.'s publicly-filed disclosures, including its most recent Annual Report on Form 10-K and Quarterly Reports on Form 10-Q filed with the U.S. Securities and Exchange Commission (available at: <https://jpmorganchaseco.gcs-web.com/ir/sec-other-filings/overview>).

13. Please provide a statement representing and warranting the accuracy of the information provided to KRS regarding the Statement of Disclosure, and acknowledge that similar language will be included in any final written agreement with a continuing obligation to update any such information within 10 business days of any change in the information.

JPMIM represents and warrants (i) that the information provided to KRS regarding the Statement of Disclosure is accurate and (ii) acknowledges that a similar language will be included in any final written agreement with a continuing obligation to update any such information within 10 business days of any change in the information.

DocuSigned by:  
  
175F03BFF337440...  
External Manager Signature                      Feb 10, 2025 | 10:34 AM PST  
Date

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**Kentucky Retirement Systems  
&  
Kentucky Retirement Systems Insurance Trust Fund (collectively, "KRS")**

**Gating Issues for Investing**

**(version November 2019)**

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Below are KRS's "gating items," with which the GP/investment manager needs to agree in order for KRS to make the proposed fund investment. Following confirmation that the GP/investment manager agrees with KRS on these gating issues, KRS will provide a comment memo and a full side letter.

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**EXHIBIT A - Side Letter Provisions**

1. Public Records.

(a) The Partnership hereby acknowledges that the Investor is a public agency subject to (i) Kentucky's public record law (Kentucky Revised Statutes sections 61.870 to 61.884, the "Open Records Act"), which provide generally that all records relating to a public agency's business are open to public inspection and copying unless exempted under the Open Records Act, (ii) Kentucky Revised Statutes section 61.645(19)(i) (the "Fee Disclosure Law"), and (iii) Kentucky Revised Statutes sections 61.645 (19)(l) and (20) (the "Document Disclosure Law"), which provide generally that all contracts or offering documents for services, goods, or property purchased or utilized by the Investor shall be made available to the public unless exempted under the Document Disclosure Law. Notwithstanding any provision in the Partnership Agreement or the Subscription Agreement to the contrary, the Partnership hereby agrees that (i) the Investor will generally treat all information received from the General Partner or the Partnership as open to public inspection under the Open Records Act, the Fee Disclosure Law or the Document Disclosure Law, unless such information falls within an exemption under the Open Records Act, the Fee Disclosure Law or the Document Disclosure Law, and (ii) the Investor will not be deemed to be in violation of any provision of the Partnership Agreement or the Subscription Agreement relating to confidentiality if the Investor discloses or makes available to the public (e.g., via Investor's website) any information regarding the Partnership to the extent required pursuant to or under the Open Records Act, the Fee Disclosure Law or the Document Disclosure Law, including the Fund-Level Information in paragraph 1(b) (even if a court or the Attorney General later determines that certain information disclosed by the Investor falls within an exemption under the Open Records Act, the Fee Disclosure Law, or the Document Disclosure Law).

(b) The General Partner acknowledges that the Investor considers certain fund level information public under the Open Records Act, the Fee Disclosure Law or the Document Disclosure Law and that the Investor has concluded that it is obligated to disclose such information upon request (e.g., via Investor's website). Notwithstanding any provision in the Partnership Agreement or Subscription Agreement to the contrary, the General Partner agrees that the Investor may disclose the following information without notice to the General Partner or the Partnership: (i) the name of the Partnership, (ii) the vintage year of the Partnership and/or the date in which the Investor's initial investment was made in the Partnership; (iii) the amount of the Investor's Capital Commitment and unfunded Capital Commitment, (iv) aggregate funded contributions made by the Investor and aggregate distributions received by the Investor from the Partnership as of a specified date; (v) the estimated current value of the Investor's investment in the Partnership as of any previous date, (vi) the net asset value of the Partnership as of a specified date, (vii) the estimated IRR of the Investor's investment in the Partnership as of a specified date, and (viii) the amount of fees and commissions (including, but not limited to, the Management Fees, amounts paid in lieu of the Management Fees, and Carried Interest Distributions) paid to the General Partner and its Affiliates with respect to the Investor's interests (the "Fund-Level Information"). Nothing contained herein shall require the General Partner to disclose to the Investor information not otherwise made available to all Limited Partners pursuant to the Partnership Agreement.

(c) The General Partner agrees that the Investor may disclose the redacted versions of [Confidential Private Placement Memorandum of the Partnership,<sup>1</sup> the Partnership Agreement, this Side Letter, and the Investor's Subscription Documents] (collectively, the "Partnership Documents"), in each case to the extent required by the Document Disclosure Law, once

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<sup>1</sup> Please note KRS may be able to remove the PPM from the list if the PPM includes all substantial legal terms that are addressed in the LPA. If the PPM has substantial legal terms that are not addressed in the LPA, it should be included in the list.

the offering period ends and the final closing date [FUND TO INSERT THE FINAL CLOSING DATE] occurs. It is further understood and agreed that the parties hereto shall amend and restate this Side Letter to reflect any elections under [MFN paragraph] hereof and shall amend the redacted version of this Side Letter in connection therewith.

(d) Notwithstanding any provision in the Partnership Agreement or Subscription Agreement to the contrary, the General Partner shall provide the Investor on at least a quarterly basis the information set forth in the Fee Disclosure Law, including but not limited to, (i) the dollar value of fees and commissions paid by the Investor (including via Capital Contributions) to the Partnership (including any Alternative Investment Vehicle), General Partner, Management Company or their respective Affiliates; (ii) the dollar value of the Investor's pro rata share of any profit sharing, Carried Interest Distributions or any other incentive arrangements, partnership agreements, or any other partnership expenses paid to the Partnership, General Partner, Management Company or their Affiliates; and (iii) if applicable, the name and address of all individual underlying managers or partners in any fund of funds in which Investor's assets are invested.

(e) The General Partner agrees that the Investor may disclose confidential information to any governmental body that has oversight over it and its statutory auditor, without notice to the General Partner or the Partnership; provided that such information retains the same confidential treatment with the recipient.

(f) The General Partner agrees to provide reporting to the Investor in accordance with the Fee Template published by the Institutional Limited Partners Association (available at [ilpa.org](http://ilpa.org)).

(g) The General Partner and the Partnership acknowledge and agree that pursuant to the Open Records Act, the Fee Disclosure Law or the Document Disclosure Law, the Investor may publicly disclose the information set forth in this paragraph 1 without further notice to the General Partner.

2. Investment Advisers Act of 1940. The General Partner confirms that pursuant to Kentucky Revised Statutes Section 61.650(1)(d)(2), the General Partner and the Management Company shall comply with (a) the Investment Advisers Act of 1940, as amended, and the rules and regulations promulgated thereunder, and (b) all other federal securities statutes and related rules and regulations applicable to investment managers. **[Note to GP/Manager: To the extent the manager views itself exempt from the registration with the SEC, KRS expects that the manager would act as if they were a registered investment adviser (i.e., comply with substantive provisions of the Advisers Act (everything except filing requirements) and provide a private action to KRS in the event of violations of the Advisers Act terms).]**

3. Indemnification. The General Partner acknowledges that the Investor has advised it that indemnification obligations under the Investor's Subscription Agreement and the Partnership Agreement that may be attributed to the Investor are not expressly authorized by the laws of the Commonwealth of Kentucky. As a result thereof, the Investor shall not be obligated to make any payment constituting such indemnification to the extent not authorized under such laws. Representations, warranties or covenants made by the Investor in the Partnership Agreement or the Investor's Subscription Agreement respecting limited partner interests in the Partnership shall be deemed to be modified so as to be consistent with the provisions of the preceding sentence. Nothing contained herein, however, shall relieve the Investor of any obligation it may have under the Partnership Agreement to contribute capital in respect of its Capital Commitment under the terms and conditions of the Partnership Agreement.

4. Reservation of Immunities. The Investor hereby reserves all immunities, defenses, rights or actions arising out of its sovereign status or under the Eleventh Amendment to the United



States Constitution, and no waiver of any such immunities, defenses, rights or actions shall be implied or otherwise deemed to exist by its entry into the Partnership Agreement, the Subscription Agreement or this Side Letter (the "Investment Agreements"), by any express or implied provision thereof or by any actions or omissions to act on behalf of the Investor or any representative or agent of the Investor, whether taken pursuant to the Partnership Agreement or the Subscription Agreement or prior to the entry by the Investor into the Partnership Agreement or the Subscription Agreement.

Notwithstanding the foregoing sentence, the Investor hereby acknowledges that the foregoing sentence in no way compromises or otherwise limits the obligations (including the contractual liability) of the Investor under the Investment Agreements nor shall it reduce or modify the rights of the General Partner and the Partnership to enforce such obligations at law or in equity, in each case including but not limited to (a) Investor's obligations to make contributions and (b) any obligation to reimburse or otherwise pay the Partnership or any other Partner for any loss, damage or liability arising from a breach of any representation, warranty or agreement of the Investor contained in the Partnership Agreement or the Investor's Subscription Agreement.

5. Governing Law; Jurisdiction. Except to the extent the terms hereof require interpretation or enforcement of a law, regulation or public policy of the Commonwealth of Kentucky, in which case the laws of the Commonwealth of Kentucky shall govern, this Side Letter shall be governed by the laws of the [State of Delaware] without regard to principles of conflicts of law. Notwithstanding anything to the contrary in the Partnership Agreement or the Subscription Agreement, the General Partner agrees with the Investor that any legal proceeding involving any claim asserted by or against the Investor arising out of the Partnership Agreement or the Subscription Agreement may be brought only in and subject to the exclusive jurisdiction of the Franklin County Circuit Court in the Commonwealth of Kentucky.

6. Conflicts Interest Statement. The General Partner acknowledges and agrees it will act in accordance with the Conflict of Interest Statement attached hereto as Exhibit B and will promptly notify the Investor if it becomes aware of a violation of such Exhibit.

7. Statement of Disclosure and Placement Agent. The General Partner acknowledges and agrees it will promptly notify KRS in writing if any of the responses set forth in the Statement of Disclosure and Placement Agents attached hereto as [Exhibit \_\_\_] cease to be accurate.

**EXHIBIT B – Conflict of Interest Statement**

**KENTUCKY RETIREMENT SYSTEMS  
CONFLICT OF INTEREST STATEMENT**

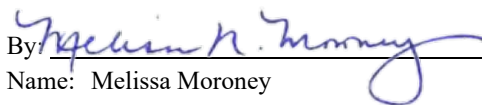
In consideration of the investment by Kentucky Retirement Systems and Kentucky Retirement Systems Insurance Trust Fund (collectively, "KRS") in a vehicle or account ("Account") managed by T. Rowe Price Associates, Inc. (the "Manager"), the Manager acknowledges the need to maintain the public's confidence and trust in the integrity of KRS and the Commonwealth of Kentucky. In light of the forgoing, the Manager agrees to:

- Diligently identify, disclose, avoid and manage conflicts of interest that may arise through its relationship with KRS.
- Conduct activities with KRS so as not to advance or protect its own interests or the private interests of others with whom it has a relationship in a way that is detrimental to the interests of KRS.
- Conduct its activities in a manner to best promote the interests of KRS, but subject to the Manager's duty which requires it not to put the interests of one investor ahead of those of another investor.
- Upon discovery of an actual or potential conflict of interest involving KRS, disclose such conflict of interest to KRS and work with KRS in good faith to resolve or mitigate such conflict.
- Not engage directly or indirectly in any financial or other transactions with a trustee or employee of KRS that would violate the standards of the Executive Branch Ethics provisions as set forth in KRS Chapter 11A.

Agreed this the 10<sup>th</sup> day of February, 2025

MANAGER

For itself and on behalf of the Account

By:  \_\_\_\_\_  
Name: Melissa Moroney  
Title: Vice President

(Rev. Feb 2018)

**EXHIBIT C – Statement of Disclosure and Placement Agents**



**Kentucky Retirement Systems  
Statement of Disclosure and Placement Agents – Manager Questionnaire**

1. Did your firm use a placement agent as defined in the KRS “Statement of Disclosure and Placement Agents” policy in an effort to solicit an Investment from KRS Please indicate fund vehicle title if relevant? If yes, please continue to question 2; if no, please proceed to question 10.  
No.
2. Please disclose the name of the placement agency used, the names of the individuals contracted by the placement agency (either as employees or as sub-agents) in order to solicit an investment from KRS, and the fees paid or payable to the placement agent in connection with a prospective KRS investment.
3. Please represent that any fees paid to placement agents are the sole obligation of the investment manager and not that of KRS or the limited partnership.
4. Please disclose the names of any current or former Kentucky elected or appointed government officials (federal, state, and local government), KRS Board of Trustees members, employees, or consultants of KRS, or any other person, if any, who suggested the retention of the placement agent.
5. Please provide evidence of the regulatory agencies, if any, in any Federal, state or foreign jurisdiction the placement agent or any of its affiliates are registered with, such as the Securities and Exchange Commission (“SEC”), FINRA, or any similar regulatory agency.
6. Please provide a resume for each officer, partner or principal of the Placement Agent detailing the person’s education, professional designations, regulatory licenses and investment and work experience.
7. Please describe the services to be performed by the Placement Agent.
8. Please disclose whether the Placement Agent, or any of its affiliates, is registered as a lobbyist with any and all Kentucky state and local (county) governments.

9. Please disclose any political contributions made by the Placement Agent to any Kentucky official within the prior 2 years.

10. Please disclose the names of any current or former Kentucky elected or appointed government officials (federal, state, and local government) KRS Board of Trustees members, employees, or consultants of KRS that are receiving any fees or compensation from the External Manager and/or placement agent. Please disclose any additional known relationships or conflicts with same.

Not applicable.

11. Please disclose any political contributions made by External Manager or principals of the External Manager in the prior 2 years.

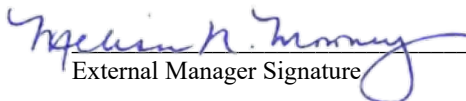
There have been no political contributions made concerning any Kentucky federal, state or local government organizations or persons.

12. Please disclose whether any principals of the firm have been involved in any regulatory proceedings, and if so, details concerning the same.

Not applicable.

13. Please provide a statement representing and warranting the accuracy of the information provided to KRS regarding the Statement of Disclosure, and acknowledge that similar language will be included in any final written agreement with a continuing obligation to update any such information within 10 business days of any change in the information.

External Manager represents and warrants the information provided to KRS regarding the Statement of Disclosure is accurate and acknowledges that similar language will be included in any final written agreement with a continuing obligation to update any such information within 10 business days of any change in the information.

 02/10/2025  
External Manager Signature Date



**To: KRS Investment Committee**  
**From: Investment Staff**  
**Subject: Public Equity Performance Benchmark Recommendation**  
**Date: February 19, 2025**

**Recommendation**

The Investment Policy Statement currently prescribes the MSCI All Country World Index Net USD (MSCI ACWI \$ net) as the performance benchmark for the Public Equity Asset Class. Staff and Wilshire have made the determination that this Index does not represent the current investment exposure and strategy of the asset class and embeds an unintended bias in the Global Equity allocation. Staff and Wilshire recommend adopting the MSCI All Country World Investable Market Index (MSCI ACWI IMI) as this benchmark represents a better alignment of the actual exposure and strategy of the portfolio as well as the desires of the Board.

**History**

Investment Policy Statements (IPS) prior to April 2022 provided a target allocation to both US Public Equities and to NonUS Public Equities. Accordingly, these previous IPSs prescribed regional performance benchmarks for measurement of those asset classes. With the adoption of the April 2022 IPS, the individual targets to both US and NonUS Public Equity allocations were removed in favor of the adoption of a Global Public Equity target using the MSCI ACWI \$ net as the performance benchmark.

Staff managed these changes in Asset Class targets and classifications utilizing the existing roster of investment managers and strategies in a manner appropriate to provide the desired Global Public Equity exposure, with the aim of minimizing both the direct and indirect costs of a significant portfolio turnover event.

**Public Equity**

04/30/22	Current	MSCI ACWI Net	100.0%				
01/31/16	03/31/22	Ruseell 3000	50.0%	MSCI ACWI ex US IMI Net	50.0%		
07/31/13	12/31/15	Russell 3000	45.5%	MSCI ACWI ex US	45.5%	MSCI EM Index	9.0%

**US Equity**

04/31/13	Current	Russell 3000	100.0%
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**Non US Equity**

10/31/17	Current	MSCI ACWI es US IMI Net	100.0%
01/31/16	09/30/17	MSCI ACWI ex US IMI	100.0%
07/31/13	12/31/15	MSCI ACWI ex US	100.0%

**Issue**

It is expected that relative performance deviations will occur regularly due to tracking error, whether the result of active management or actively managed positioning tilts within the portfolio, surrounding style, region, or market cap. Those deviations should be attributed to a known source. In the recent market environment of large cap



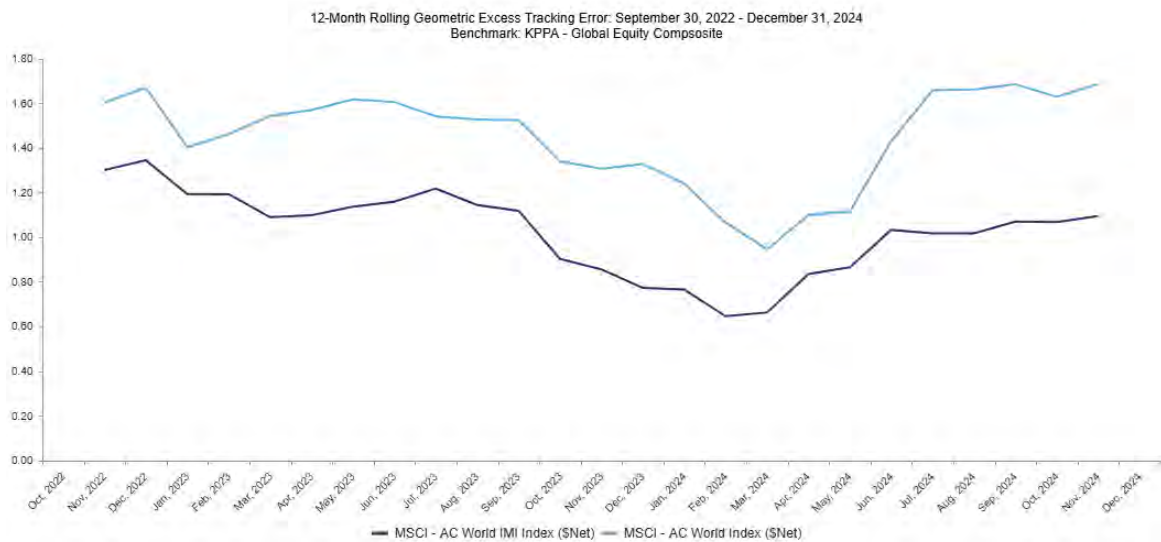
dominance, the degree of relative performance deviations at the Global Public Equity asset class level could not be fully explained by identifiable performance attributes or positioning.

This prompted staff to initiate an investigation into the current performance benchmark utilized in terms of its appropriateness given the actual portfolio’s exposures. Historically for the Public Equity asset class given the legacy strategies and asset class categorizations, staff utilized the Russell family of indices for the US portfolios and the MSCI family of indices for Non-US mandates. While blending two distinct index families can be difficult, the methodology employed by staff to build the Global Equity exposure has proven effective and has performed as expected. Legacy benchmarks (shown above) utilized included the R3000 and MSCI ACWI ex US IMI, providing the broadest definition of the investable universe.

The most recent IPS’s adoption of the MSCI ACWI \$ Net as the Global Equity performance benchmark created what Staff believes was an unintended structural small cap bias within the Global Equity portfolio, embedding an increased level of tracking error. This unintended embedded bias surfaced due to the significant performance deviations between US Public Equity market caps.

After discussions with MSCI (the index provider) and Wilshire, it has been confirmed that the MSCI ACWI \$ Net Index does not incorporate the bottom 15% of companies (by market cap), confirming the structural bias.

The following chart provided by Wilshire, demonstrates the shift in tracking error had KPPA employed the MSCI ACWI IMI. As demonstrated, tracking error would have been consistently decreased, at times by as much as +40%. A tighter tracking error is indicative of a more appropriate benchmark given a portfolio’s exposure.



**Recommendation**

Staff and Wilshire recommend that the IPS performance benchmark for Global Public Equity allocation be changed from the MSCI ACWI \$ Net to the more appropriate MSCI ACWI IMI. This change would expand the investable universe of the performance benchmark to one that is more appropriate given the exposures and strategy of the KPPA Global Public Equity portfolio.



<b>Performance - 12/31/24</b>	<b>FYTD</b>	<b>1YR</b>	<b>3YR</b>	<b>5YR</b>
KPPA Global Equity	5.04%	15.22%	4.43%	9.28%
<i>MSCI ACWI</i>	5.56%	17.49%	5.41%	10.06%
<i>MSCI ACWI IMI</i>	5.52%	16.37%	4.90%	9.67%

**To:** Kentucky Public Pensions Authority  
**From:** Wilshire Advisors  
**Subject:** Global Equity Benchmark  
**Date:** January 30, 2025

## Background

In 2021/2022 the U.S. and Non-U.S. Equity composites were combined into a Global Equity composite. This combination provided staff with a single public equity target instead of static regional targets between the U.S. and Non-U.S. markets. Static benchmark weights do not enable the benchmarking process to reflect the natural shifts that occur over time between U.S. and Non-U.S. market weights. The U.S. Equity composite had previously been benchmarked to the Russell 3000 index while the Non-U.S. composite was benchmarked to the MSCI All Country World ex. U.S. IMI Index (ACWI ex US IMI). Both of these indexes are commonly used by institutional investors. Upon the creation of the new Global Equity composite, the MSCI ACWI was selected as the new asset class benchmark.

According to the CFA Institute, a valid benchmark should possess the following characteristics, aligning the benchmark's style and risk with the asset class or manager:

- **Specified in advance**: The benchmark should be known at the start of the period
- **Appropriate/Relevant**: The benchmark should be consistent with the investment approach and style
- **Measurable**: Its value and return can be determined on a reasonably frequent basis
- **Unambiguous**: Clearly defined identities and weights of securities constituting the benchmark
- **Reflective of the current investment options**: The managers have current knowledge of and expertise with the securities in the benchmark
- **Accountable**: The manager(s) should accept the applicability of the benchmark and recognize differences in performance between the portfolio and benchmark as the results of active management
- **Investable**: The benchmark should be possible to replicate passively

## Analysis

Upon a recent review of the Global Equity composite, it was determined that the experienced tracking error of the composite vs. its benchmark was higher than expected. Staff and Wilshire investigated the sources of tracking error within the portfolio and determined that while the MSCI ACWI represents the qualities above of a good benchmark, the MSCI ACWI IMI index was a better fit due to the construction methodology of the IMI index. Specifically, the MSCI ACWI index only covers 85% of the market capitalization per MSCI's construction methodology. Given the implementation of the public equity composite within small and micro-capitalization strategies, the MSCI ACWI IMI index is a better reflection of the current investment options in the portfolio as it covers 99% of the global equity investment opportunity set.





Given the tracking error above incorporates active management in addition to benchmark differences, analysis was performed to compare the underlying benchmarks at the region level to quantify the impact of using the standard MSCI regional index vs. the IMI counterpart. It was determined that by using the IMI version of the index as the global equity benchmark, over 65% of the systematic tracking error could be removed, reducing the one-year tracking error from 81bps down to 27bps.

**Recommendation**

Wilshire and staff are in agreement that the MSCI ACWI IMI Index is a better benchmark for the reasons listed above and would recommend that the global equity benchmark be changed accordingly within the Investment Policy Statement and used for performance reporting purposes.



## KENTUCKY PUBLIC PENSIONS AUTHORITY



### INVESTMENTS

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To: CERS Investment Committee

From: Anthony Chiu, Deputy CIO

Date: February 26, 2025

Subject: Investment Recommendation – Arctos American Football Fund

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KPPA Investment Staff is proposing an investment in the Arctos American Football Fund (“AAFF” or the “Fund”) contingent on successful IMA negotiations. Based in Dallas, Arctos Sports Partners (“Arctos” or the “Firm”) provides liquidity and strategic capital to the owners of major professional sports franchises, with a focus on what they call the United States’ Big 5 sports leagues - Major League Baseball (“MLB”), the National Basketball Association (“NBA”), the National Hockey League (“NHL”), Major League Soccer (“MLS”), and the National Football League (“NFL”). This mandate would be part of the Real Return asset allocation.

In February 2023, KPPA committed \$250 million (including co-investment) to Arctos Sports II (“Arctos II” or “Fund II”), which had a final close in April 2024 at more than \$4 billion (including co-investment). When KPPA made its commitment, the NFL was the only one of the major US sports leagues that had not approved institutional private equity investment in its teams. However, based on media reports and discussions, it appeared that the NFL had been observing and studying the other leagues’ experiences with institutional investment - and Staff was confident that the Arctos Sports II investment would eventually include NFL exposure.

In August 2024, the NFL announced that it would open to private equity investment, with a very select group of four investors provisionally approved: Arctos, Ares, Sixth Street, and a consortium that includes Blackstone, Carlyle, and CVC. While the league’s guidelines were similar to the other US leagues, the NFL had some additional requirements, including at least \$2 billion of committed capital and a maximum of 10% ownership in any single team.

Arctos created AAFF to invest in multiple NFL franchises and additional sports assets. In December, the first private equity investments in NFL teams were approved and announced, including Arctos’s investment with the Buffalo Bills.

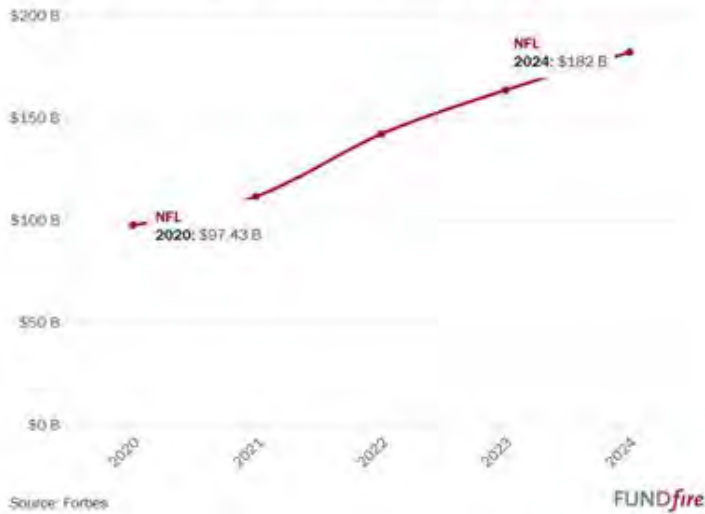
KPPA will have a small indirect investment in AAFF through Arctos II, and Staff is proposing an additional investment in AAFF to have a more meaningful exposure to the unique asset that is the NFL. This proposed investment will also help all KPPA plans continue to move toward their Real Return target allocations and replace the existing proxy real asset exposures in portfolios.

#### **Investment Opportunity:**

As with any investment, valuation is a key driver of future returns. And as discussed 2 years ago during the Arctos II approval process, a potential key risk for this strategy is that Arctos is providing liquidity to sellers of vanity assets that are underpinned by consumer and corporate spending near a market top.

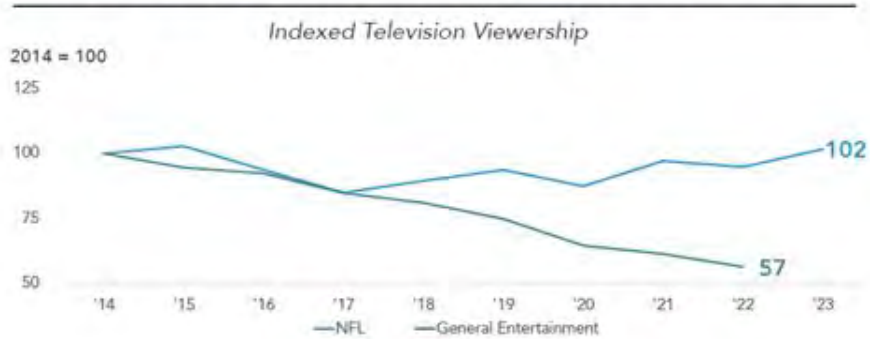
### NFL's Rocketing Valuations

The combined worth of the National Football League's 32 franchises has nearly doubled since the pandemic, even before the league permitted its first investments by private equity firms.

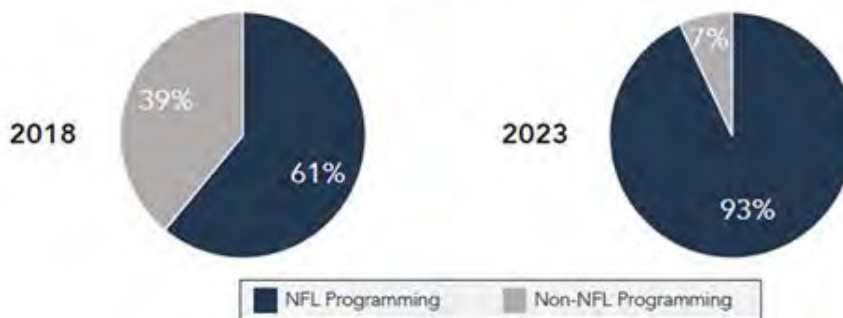


Subsequent to our commitment, US major league sports team valuations have continued to rise, but this has been fundamentally underpinned by their increasingly valuable media rights. Today people have essentially infinite choices for content consumption, and the resulting fragmentation of consumer attention has made live sports one of the few assets that can reliably deliver audiences at scale. The charts below show just how far the viewership for scripted and other produced shows has fallen compared to sports in just the past 5 to 10 years.

### THE NFL IS CAPTURING GREATER LEVERAGE OVER LINEAR

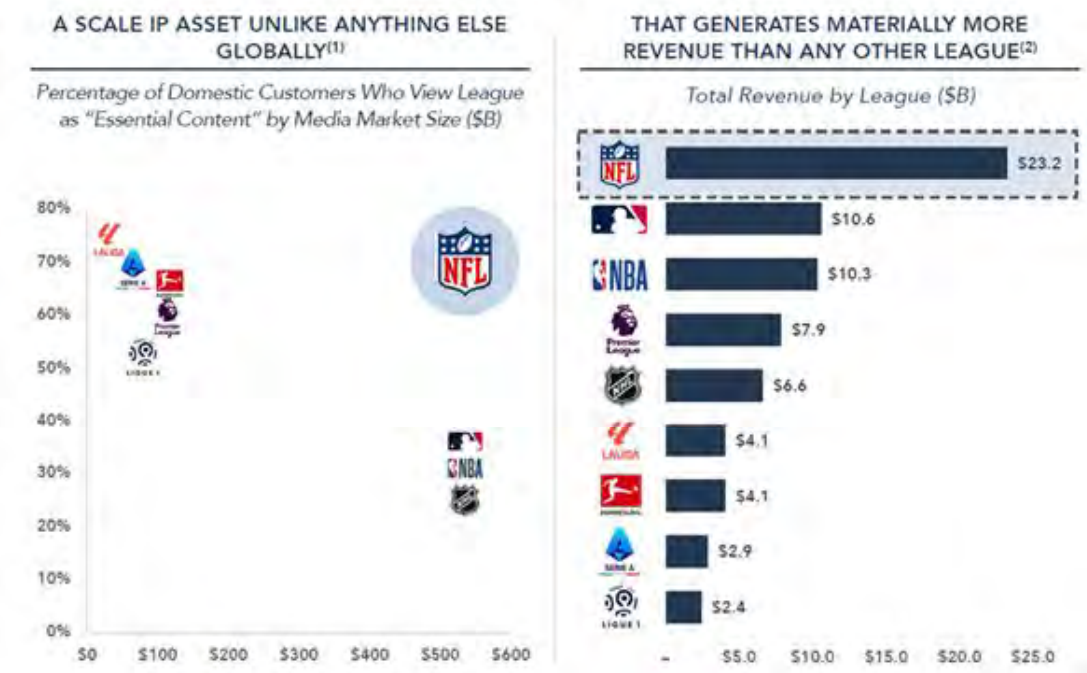


### Top 100 TV Broadcasts by Category



Thus, both linear television networks and streaming providers **need** premium sports content – TV networks simply for survival and streaming services for subscriber growth. And among sports leagues, the NFL is literally in a league of its own for the fan interest and revenue that it drives.

## The NFL is an Unrivaled Global IP Asset



The resulting cash flow streams (which are contracted and growing) combined with the scarcity of the underlying assets (the last NFL expansion team added was Houston in 2002, more than 20 years ago) make this a compelling real asset exposure for KPPA.

### HIGHLY RECURRING CORE REVENUE



**Performance:**

Fund	Vintage	Size (\$ MM)	Net	
			Net IRR	Multiple
Arctos Sports I	2020	\$2,137	19%	1.5x
Arctos Sports II	2022	\$3,445	18%	1.3x

Source: Arctos as of 9/30/24

As of 9/30/24, Fund I is marked at 1.7x gross, with key positions including Sacramento Kings, Houston Astros, Golden State Warriors, and Tampa Bay Lightning. Fund II is marked at 1.5x gross and includes stakes in the Utah Jazz, Philadelphia 76ers / New Jersey Devils, and Los Angeles Dodgers among its top positions.

**Conclusion:** Staff is recommending an investment of \$70 million to be shared among all CERS plans. When fully funded, this would represent an additional ~0.3% of assets and provide ~0.35 – 0.50% NFL exposure to each plan (depending on fluctuations in market value).

Investment and Terms Summary

**Type of Investment:** Real Return

**Structure:** GP / LP

**Management Fee:** Years 1-5: 1.75% on committed capital  
Thereafter: 1.25% on invested capital, net of write-offs and distributions

**Performance Fee:** 20% over an 8% preferred return

**Purpose:** Capture the long-term valuation growth of scarce NFL league and team assets, which are backed by sizable contracted cash flow streams and profitability.

**Risks:** Equity, Liquidity, Lack of Control, Valuation, Key Person

**Exp. Net Return:** 8% - 12%



## KENTUCKY PUBLIC PENSIONS AUTHORITY



### INVESTMENTS

To: CERS Investment Committee

From: Anthony Chiu, Deputy CIO

Date: February 26, 2025

Subject: Investment Recommendation – Maritime Partners additional investment

KPPA Investment Staff is proposing an additional investment in American Rivers Fund, LLC (the “Fund”), an open-end fund managed by Maritime Partners (“Maritime” or the “Firm”). Based near New Orleans, Maritime primarily leases barges, towboats, and tankers for US marine transportation of essential dry and liquid cargoes such as food, fuel, chemicals, and aggregates.

In February 2023, KPPA committed \$250 million to the Fund. Approximately 75% of the commitment was called in October 2023 and has subsequently yielded ~10% as anticipated, with cash distributed quarterly.

#### **Investment Opportunity:**

Similar to their M/G Transport, JR Flowers, American Tanker, and US Marine Management acquisitions, Maritime continues to look opportunistically across the US marine transportation industry for attractive assets to acquire. Maritime has indicated that they have visibility to deals that would utilize the rest of our existing commitment as well as an additional \$100 million of capacity for KPPA.

Like two years ago when Staff first presented the Fund, the marine transportation supply / demand dynamic remains extremely favorable. Demand for the essential cargoes that the Fund’s fleet transports is strong, with utilization remaining near 100%. Meanwhile, new vessel supply is largely at replacement levels for an aging inland marine fleet.

This is because lease rates still need to increase significantly to justify new vessel construction – and even if that were to occur immediately, it would still take several years to deliver new equipment due to widespread shipyard closures over the past decade and today’s current labor shortage.

For reference, publicly traded barge operator Kirby Corporation (NYSE: KEX) provides regular color on the inland marine market, including the following quotes from their earnings call on January 30, 2025.

*We continue to see inflationary pressures, and there remains an acute mariner shortage in the industry, which continues to drive up labor costs. These pressures, along with the increasing cost of equipment should continue to put upward pressure on spot and contract pricing.*

*That's why we're so constructive about the pricing environment, and that's all driven by supply and demand. I mean there's not a lot of new supply.*

*Spot pricing is well above term, it's probably in the order of 10% above term right now... And then if you look at where pricing needs to go to justify building new equipment, for a two-barge tow it's got to increase probably 40% from where we are now...Look, our competitors understand that...there's a lot of discipline in terms of new construction right now. It just doesn't make sense*

*to build new equipment. What little building is happening is entirely for replacement right now...our estimation is it's all for replacement. To build new capacity, we need significant rates improvement.*

*-David Grzebinski, CEO, Kirby Corporation – January 30, 2025*

**Performance:**

<b>Fund</b>	<b>1 yr</b>	<b>3 yr</b>	<b>5 yr</b>	<b>Since Inception</b>	<b>Inception Date</b>
American Rivers Fund	9.6%	15.9%	15.7%	16.3%	Dec-18

Source: Maritime Partners as of 9/30/24

**Conclusion:** Staff is recommending an investment of \$70 million to be shared among all CERS plans. When fully funded, this would represent an additional ~0.3% of assets and provide around 1.2% exposure for each plan (depending on fluctuations in market value).

Investment and Terms Summary

**Type of Investment:** Real Return

**Structure:** Open end

**Management Fee:** 2% on invested capital

**Performance Fee:** 20% of profits above a 7% annual cash hurdle, with a 50/50 catch up

**Purpose:** Capture current income and inflation exposure from barge and towboat lease payments.

**Risks:** Key Person, Customer Concentration, Barge Operator Credit, Liquidity

**Exp. Net Return:** 7% - 10%

# Marine Transportation – 2025 Outlook

Strong outlook with near-term headwinds, seasonal weather and coastal shipyard activity

## ▪ Inland

- Positive market dynamics due to limited new barge construction
- Barge utilization expected to be in the low to mid 90% range
- Continued improvements on spot and term contracts. Mariner shortage and increasing cost of equipment continue to put upward pressure on spot prices
- First quarter revenues and margins impacted by normal seasonal conditions
- Full year revenue growth in mid to high single digit range
- Operating margins on average 200-300 bps higher for the full year compared to 2024 with the first quarter being the lowest

## ▪ Coastal

- Balanced supply and demand driving favorable market conditions
- Steady customer demand with barge utilization expected to be mid-90% range
- Full year revenues are expected to be up high single to low double digits year-over-year
- Operating margins are expected to be in the mid-teens range on a full year basis with first quarter being the lowest due to shipyards





County Employees Retirement System

# Investment Office Quarterly Update

Quarter Ending: December 31, 2024

County Employees Retirement System

# Economic and Market Update

Quarter Ending: December 31, 2024

## Market Commentary

### U.S. Equity

The U.S. stock market was up 2.6% for the fourth quarter and is up 23.8% for the year-to-date. Sector performance was, in fact, mostly negative for the quarter, with seven sectors producing a loss. However, the three largest sectors by market capitalization were all up – information technology (+5.9%), financials (+7.8%) and consumer discretionary (+12.3%). Small-cap underperformed large-cap by 180 basis points while growth stocks generally outperformed value by a large margin.

The Federal Reserve began raising rates in early 2022 in response to 7% annual inflation, which continued to accelerate to 9%. Rates were increased by 525 basis points during a 17-month period before pausing for roughly one year. The U.S. central bank began decreasing rates during 2024 – by a total of 100 basis points in three meetings. While it is probably too early to judge whether they achieved a “soft landing,” early data is positive. The unemployment rate is low – although jobs growth has been unsteady – and the economy continues to expand. However, inflation ticked higher during the fourth quarter and the Fed took notice. Current expectations for rate cuts in 2025 are modest (-0.50%) and down meaningfully from September.

### Non-U.S. Equity

Economic growth in England continues to slow with business confidence waning. Prospects in Germany, Europe’s largest economy, are equally dim due to persistently high energy prices and growing competition with China. Currency changes played a major role in U.S. dollar returns this quarter as the dollar rose meaningfully versus the euro, pound and yen. China’s economy may be turning a corner after several stimulative macroeconomic policies were announced in September. Early indicators show strength in the services sector along with growth in retail sales.

### Fixed Income

The U.S. Treasury yield curve was up across most of the maturity spectrum. The 10-year Treasury yield ended the quarter at 4.57%, up 79 basis points from September. The FOMC met twice during the quarter and decreased their overnight rate by a total of -0.50%. Expectations for rate cuts next year have come down as some officials are concerned that the new administration’s preference for tariffs could push prices higher. In fact, Fed Chair Jerome Powell recently stated that, “when the path is uncertain, you go a little slower.”

## December 2024 Asset Class Assumptions

	Equity						Fixed Income						Real Assets								
	U.S. Stock	Dev ex-U.S. Stock	Emg Stock	Global ex-U.S. Stock	Global Stock	Private Equity	Cash	Core Bond	LT Core Bond	TIPS	High Yield	Private Credit	Dev ex-U.S. Bond (Hdg)	Real Estate			U.S. RES	Global RES	Private RE	Cmdty	Real Assets
<b>Compound Return (%)</b>	4.35	5.35	5.60	5.40	4.70	6.25	3.60	5.20	5.30	4.70	6.35	7.75	3.00	5.70	5.70	6.40	4.85	6.15	2.35		
<b>Arithmetic Return (%)</b>	5.70	6.85	8.60	7.10	6.05	10.00	3.60	5.30	5.75	4.85	6.80	8.50	3.10	7.10	6.95	7.30	6.05	6.90	2.35		
<b>Risk (%)</b>	17.00	18.00	26.00	19.05	17.00	29.65	0.75	4.75	9.90	6.00	10.00	12.75	4.00	17.50	16.55	13.95	16.00	12.60	1.75		
<b>Yield (%)</b>	1.25	3.00	2.50	2.85	1.80	0.00	3.60	5.65	5.70	5.05	9.80	4.85	4.25	3.95	3.95	2.85	3.60	3.70	0.00		
<b>Growth Factor Exposure</b>	8.00	8.00	8.00	8.00	8.00	14.00	0.00	-0.95	-2.55	-3.00	4.00	5.10	-1.00	6.00	6.00	3.70	0.00	0.70	0.00		
<b>Inflation Factor Exposure</b>	-3.00	-1.00	3.00	0.15	-1.95	-4.25	0.00	-2.60	-6.95	2.50	-1.00	-1.50	-3.00	1.00	1.65	1.00	12.00	4.60	1.00		

### Correlations

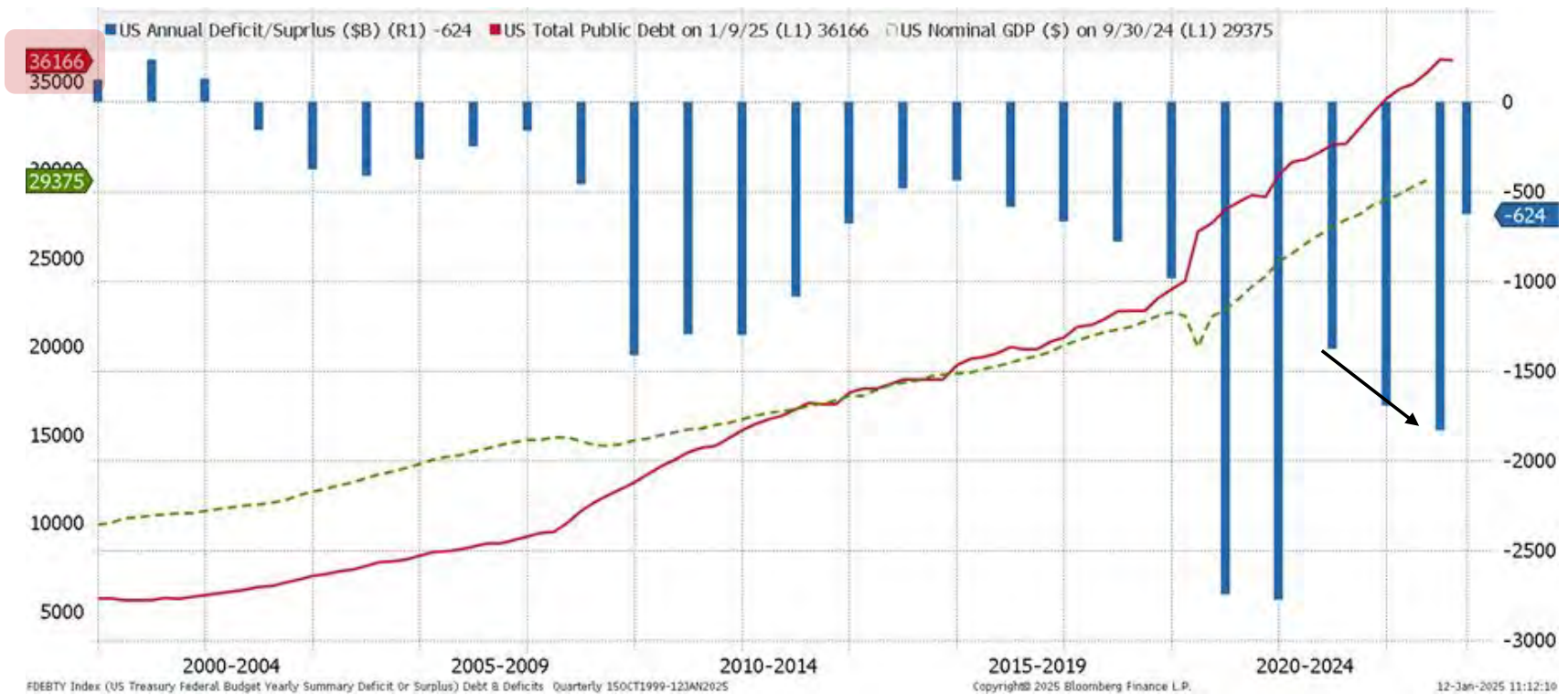
<b>U.S. Stock</b>	1.00																					
<b>Dev ex-U.S. Stock (USD)</b>	0.81	1.00																				
<b>Emerging Mkt Stock</b>	0.74	0.74	1.00																			
<b>Global ex-U.S. Stock</b>	0.84	0.96	0.89	1.00																		
<b>Global Stock</b>	0.98	0.90	0.83	0.93	1.00																	
<b>Private Equity</b>	0.72	0.63	0.61	0.66	0.73	1.00																
<b>Cash Equivalents</b>	-0.05	-0.09	-0.05	-0.08	-0.06	0.00	1.00															
<b>Core Bond</b>	0.27	0.13	0.00	0.08	0.21	0.30	0.18	1.00														
<b>LT Core Bond</b>	0.30	0.15	0.00	0.10	0.24	0.31	0.11	0.95	1.00													
<b>TIPS</b>	-0.05	0.00	0.15	0.06	-0.01	-0.03	0.20	0.60	0.47	1.00												
<b>High Yield Bond</b>	0.54	0.39	0.49	0.46	0.53	0.31	-0.10	0.24	0.32	0.05	1.00											
<b>Private Credit</b>	0.68	0.55	0.58	0.60	0.68	0.44	0.00	0.23	0.30	0.00	0.76	1.00										
<b>Dev ex-U.S. Bond (Hdg)</b>	0.16	0.25	-0.01	0.16	0.17	0.26	0.10	0.68	0.66	0.39	0.26	0.22	1.00									
<b>U.S. RE Securities</b>	0.57	0.47	0.44	0.49	0.56	0.49	-0.05	0.17	0.22	0.10	0.56	0.62	0.05	1.00								
<b>Global RE Securities</b>	0.62	0.55	0.52	0.58	0.63	0.54	-0.05	0.17	0.21	0.11	0.61	0.67	0.04	0.99	1.00							
<b>Private Real Estate</b>	0.55	0.45	0.45	0.48	0.55	0.50	-0.05	0.18	0.24	0.09	0.58	0.63	0.05	0.79	0.79	1.00						
<b>Commodities</b>	0.25	0.34	0.39	0.38	0.31	0.28	0.00	-0.03	-0.04	0.25	0.29	0.29	-0.10	0.25	0.28	0.25	1.00					
<b>Real Assets</b>	0.62	0.63	0.65	0.68	0.67	0.57	-0.03	0.24	0.25	0.32	0.64	0.69	0.06	0.79	0.83	0.77	0.63	1.00				
<b>Inflation (CPI)</b>	-0.10	-0.15	-0.13	-0.15	-0.12	-0.10	0.10	-0.12	-0.12	0.15	-0.08	0.00	-0.08	0.05	0.04	0.05	0.44	0.21	1.00			

# 2024 Rate Environment Segmented



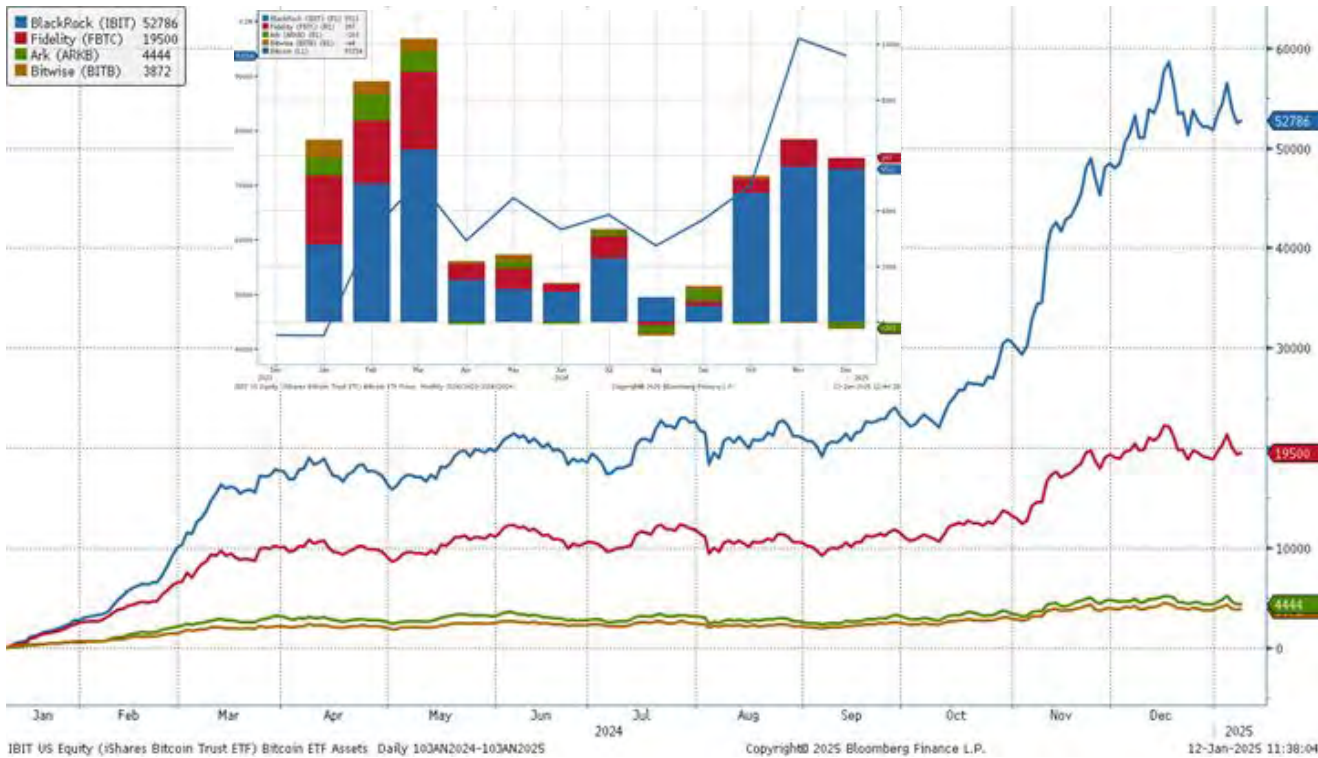
Data Source: Bloomberg

## Debt / Deficit Picture



Data Source: Bloomberg

## Bitcoin Demand: ETF Approval Provides Familiar Access to BTC



Data Source: Bloomberg

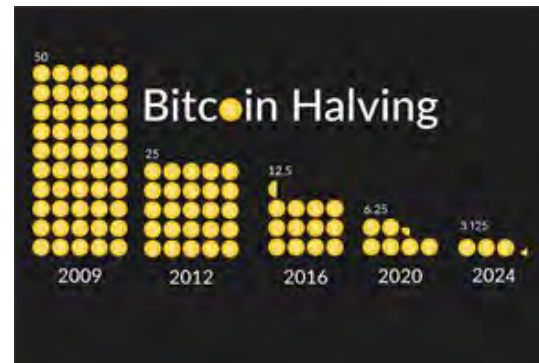
Largest 4 of the new ETFs launched Jan. 2024

- ~\$55B in flows
- ~\$80B in Assets

## Bitcoin Supply

- Only 21 million Bitcoin can ever be created
  - Nearly 95% of which (~19.9 million) already exist today
- Bitcoin supply scarcity is controlled by its creation (“mining”) process
  - Some # of BTC are earned for “solving” blocks in the Bitcoin time chain
  - Rewards drop by half every 210,000 blocks (at ~ 10 minutes per block, this occurs every ~4 years)
  - The last “halving” occurred in April 2024
- Bitcoin’s scarcity — with superior stock-to-flow vs. gold — leads to its Real Asset use case

Event	Date	Bitcoin (millions)		% Mined	Reward	Stock / Flow
		Mined	Left			
BTC Launch	Jan 2009	0.00	21.00	0.0%	50	
1st Halving	Nov 2012	10.50	10.50	50.0%	25	8
2nd Halving	Jul 2016	15.75	5.25	75.0%	12.5	24
3rd Halving	May 2020	18.38	2.63	87.5%	6.25	56
4th Halving	Apr 2024	19.69	1.31	93.8%	3.125	120
5th Halving	Mar 2028	20.34	0.66	96.9%	1.5625	248
...	...	...	...	...	...	...





## Summary Changes

- Yield curve up across most of the maturity spectrum, except the very short term
  - Curve movements resulted in higher forecasts for fixed income asset classes
  - Slight decrease in spreads for investment grade and high yield bonds
- Yields on most real asset securities are up from last quarter; inflation assumption up at 2.35%
- Equity assumptions are up slightly; private equity up to the same degree due to higher leverage costs
- Equity risk premium worsened due to the larger increase in fixed income forecasts

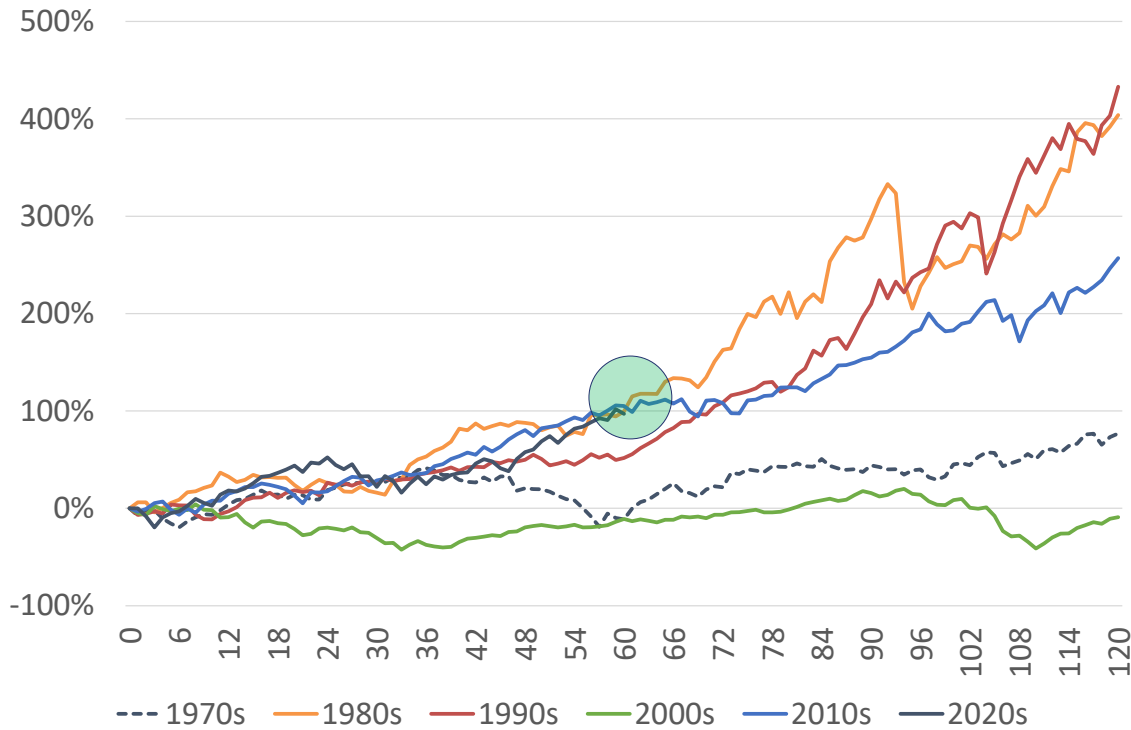
Asset Class Assumption	Total Return (%)			Risk (%)
	Sep 2024	Change	Dec 2024	
Inflation	2.25	0.10	2.35	1.75
Cash Equivalents	3.40	0.20	3.60	0.75
Treasuries	4.05	0.65	4.70	5.00
Core Bonds	4.60	0.60	5.20	4.75
LT Core Bonds	4.65	0.65	5.30	9.90
High Yield Bonds	5.95	0.40	6.35	10.00
Private Credit	7.45	0.30	7.75	12.75
Global RE Securities	5.25	0.45	5.70	16.55
Private Real Estate	6.10	0.30	6.40	13.95
U.S. Stocks	4.25	0.10	4.35	17.00
Dev. ex-U.S. Stocks	5.25	0.10	5.35	18.00
Emerging Market Stocks	5.50	0.10	5.60	26.00
Private Equity	6.15	0.10	6.25	29.65
Global 60/40 (ACWI/U.S. Core)	4.95	0.25	5.20	10.75

Implied Risk Premia	Relative Return (%)		
	Sep 2024	Change	Dec 2024
Cash - Inflation	1.15	0.10	1.25
Treasury - Cash	0.65	0.45	1.10
Core - Treasury	0.55	-0.05	0.50
Long-Term Core - Core	0.05	0.05	0.10
High Yield - Core	1.35	-0.20	1.15
Global RESI - Core	0.65	-0.15	0.50
U.S. Stocks - Core	-0.35	-0.50	-0.85
Private Equity - U.S. Stocks	1.90	0.00	1.90
Implied Real Return (ACA - CPI)			
U.S. Stocks	2.00	0.00	2.00
U.S. Bonds	2.35	0.50	2.85
Cash Equivalents	1.15	0.10	1.25



“Nobody told me there’d be days like these”<sup>1</sup> (Stock Returns by Decade)  
 “Everybody’s flying and never touch the sky”<sup>1</sup>

### US Stock Cumulative Returns

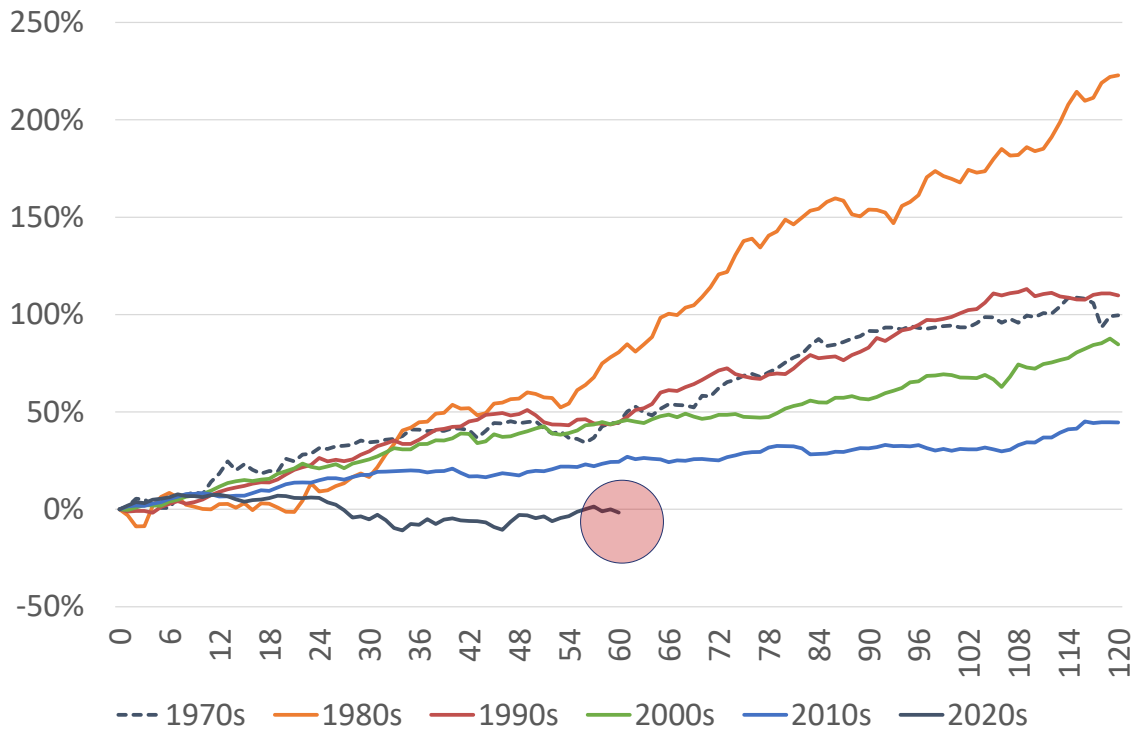


Data Source: Wilshire Compass, Bloomberg

<sup>1</sup> John Lennon, “Nobody Told Me,” *Milk and Honey*, 1984

“Nobody told me there’d be days like these”<sup>1</sup> (Bond Returns by Decade)  
 “Well, everybody’s crying and no one makes a sound”<sup>1</sup>

### US Bond Cumulative Returns

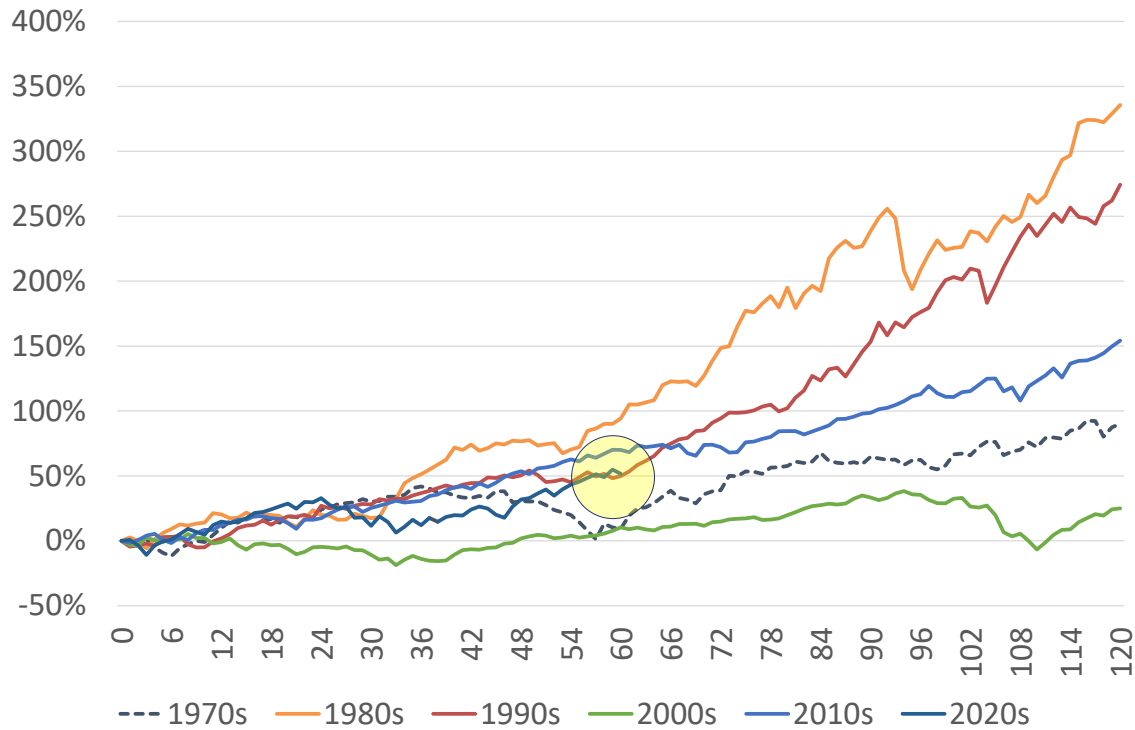


Data Source: Wilshire Compass, Bloomberg

<sup>1</sup> John Lennon, “Nobody Told Me,” *Milk and Honey*, 1984

“Nobody told me there’d be days like these”<sup>1</sup> (60/40 Returns by Decade)  
 “Always something happening and nothing going on”<sup>1</sup>

### 60/40 Blended Cumulative Returns

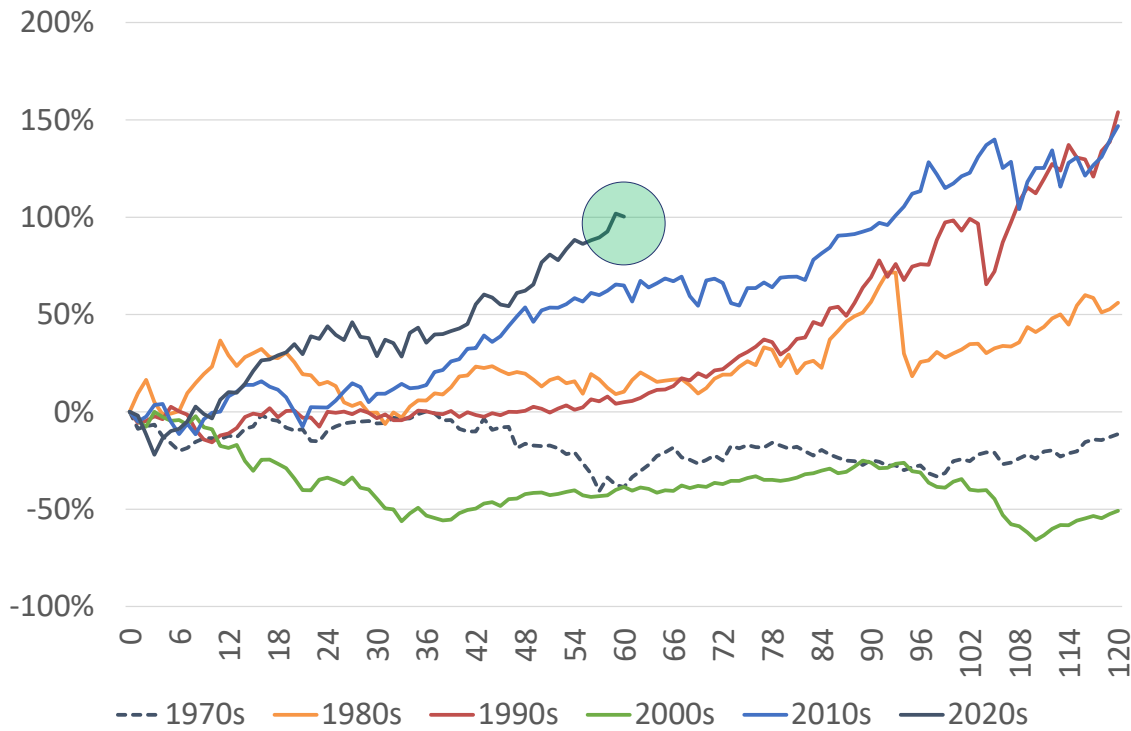


Data Source: Wilshire Compass, Bloomberg

<sup>1</sup> John Lennon, “Nobody Told Me,” *Milk and Honey*, 1984

“Nobody told me there’d be days like these”<sup>1</sup> (Stock > Bond Returns by Decade)  
 “Strange days indeed... Most peculiar, mama”<sup>1</sup>

ERP Cumulative Returns



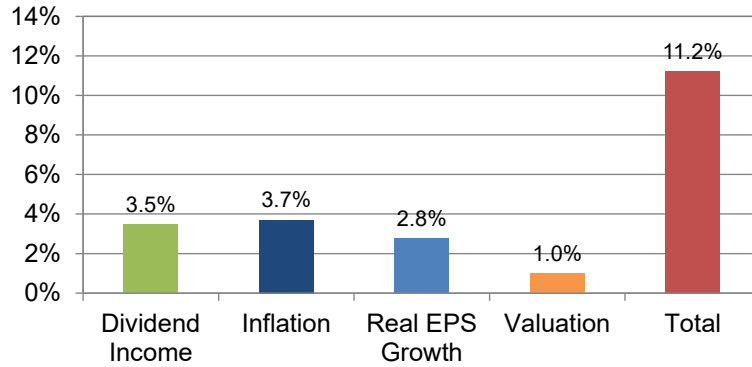
Data Source: Wilshire Compass, Bloomberg

<sup>1</sup> John Lennon, “Nobody Told Me,” *Milk and Honey*, 1984

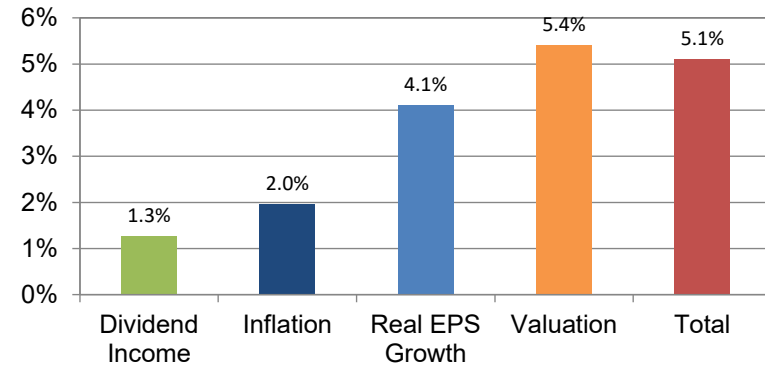
## Contributions to Avg. Return, Risk Levels & Contributions to Risk

Historical data from 1951 through 2024

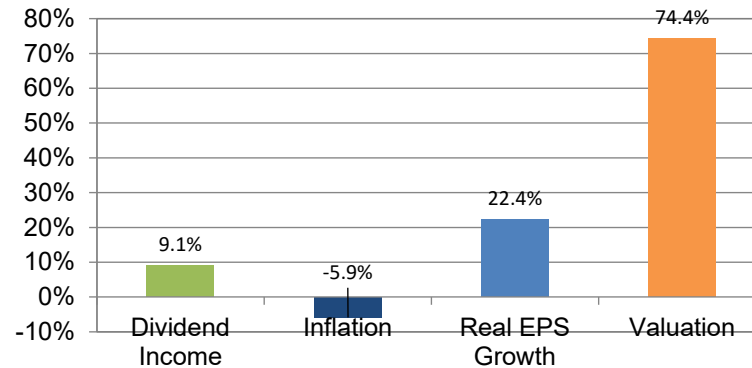
**Avg. Return Contributions**



**St Dev of Return Contributions**



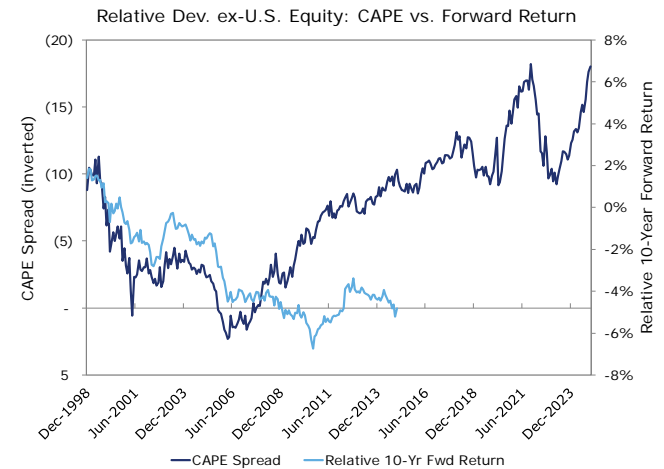
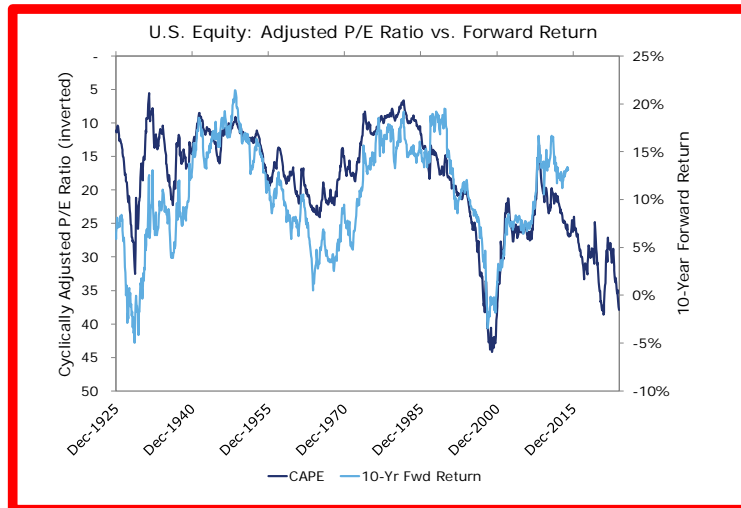
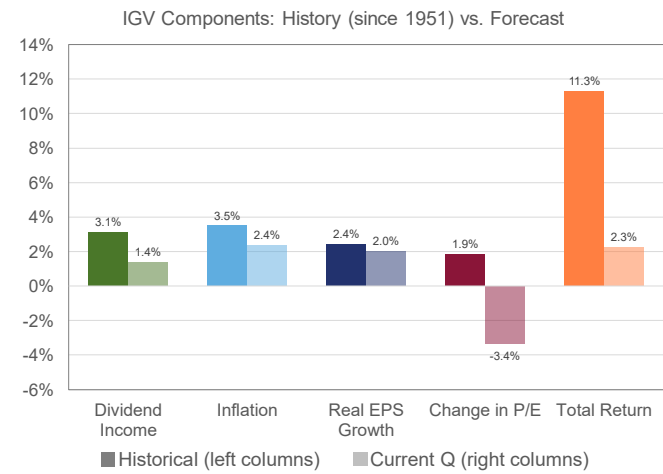
**% Contribution to Risk**



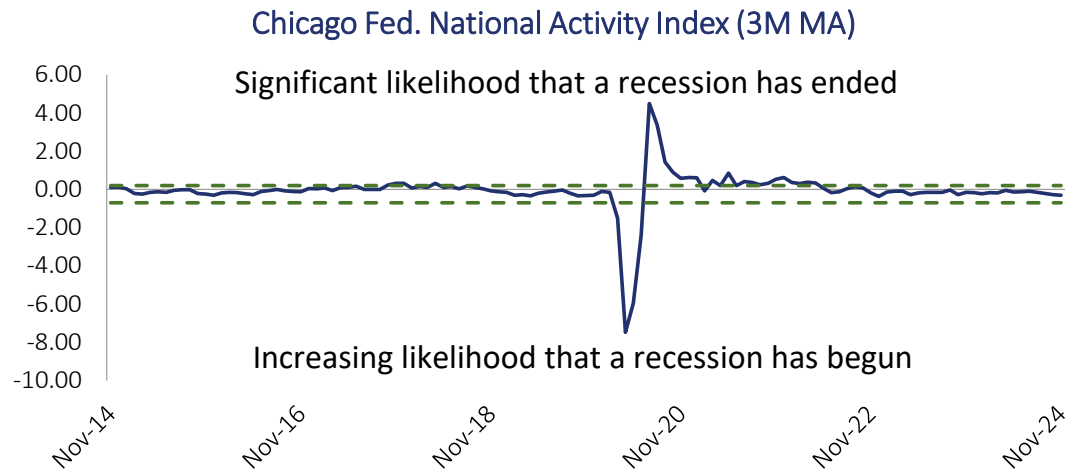
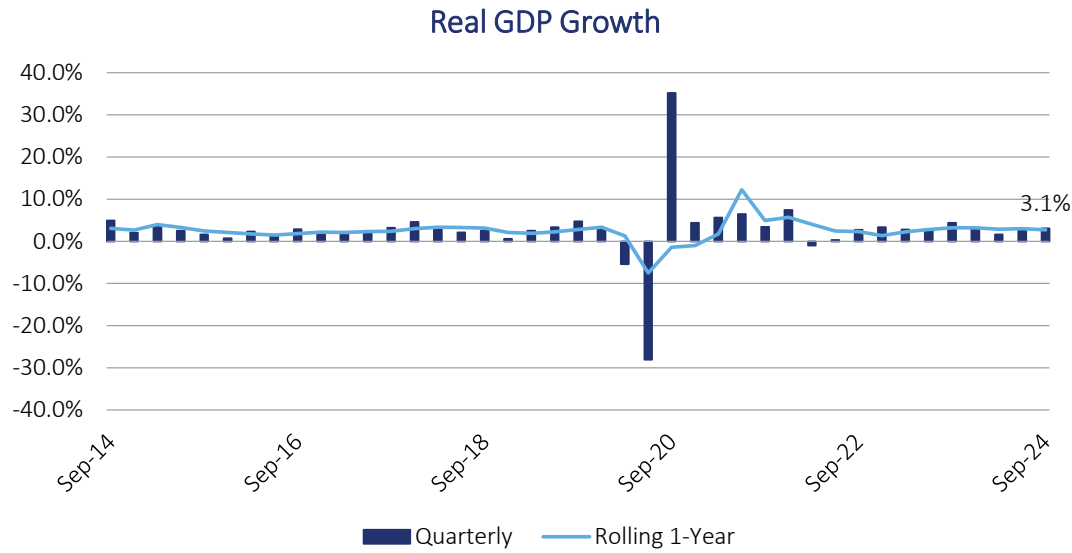
Data Source: S&P

# Equity Markets

Equity: Public & Private		Sep 2024	Change	Dec 2024
Equity	DDM	6.40	0.15	6.55
	IGV	2.20	0.10	2.30
	CAPE	2.35	(1.25)	1.10
U.S. Equity Forecast		4.25	0.10	4.35
Dev-ex-US Equity Forecast		5.25	0.10	5.35
EM Equity Forecast		5.50	0.10	5.60
Private	Cost of Debt (Public)	5.35	0.50	5.85
	Cost of Debt (Private)	7.35	0.20	7.55
Private Market Basket Forecast		6.15	0.10	6.25



# Economic Growth

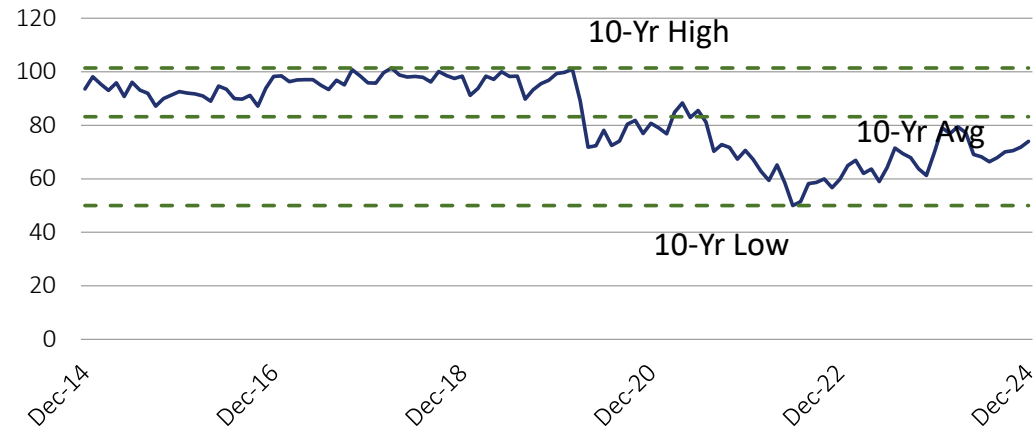


Data Source: Bloomberg

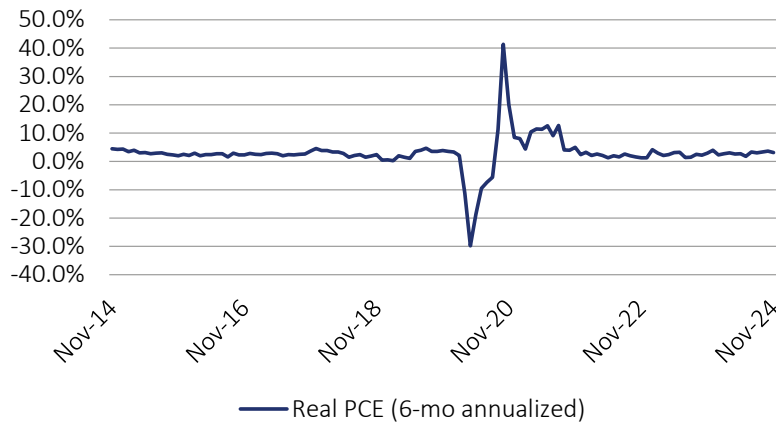


## Consumer Activity

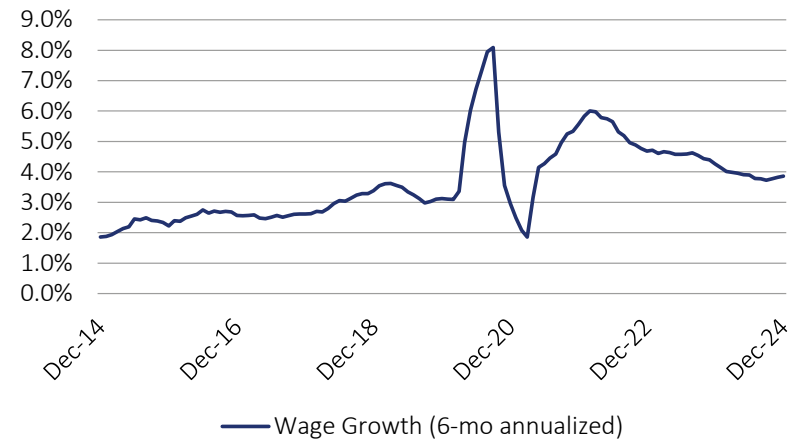
University of Michigan: Consumer Sentiment



Real Personal Consumption Expenditures

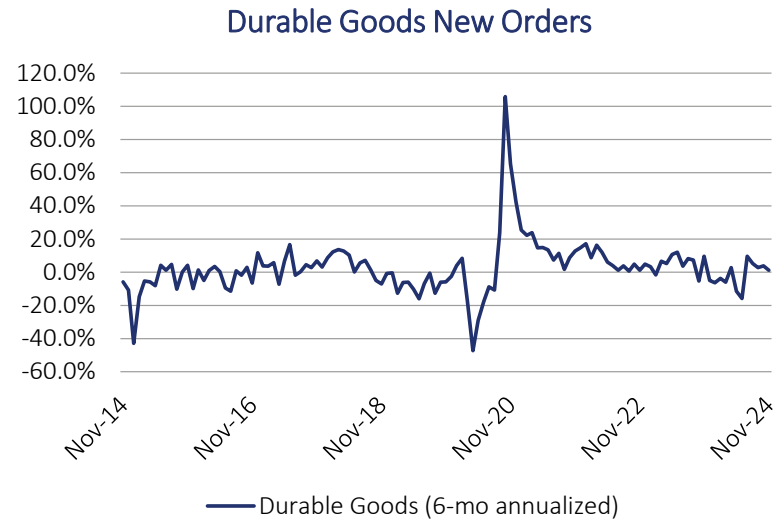
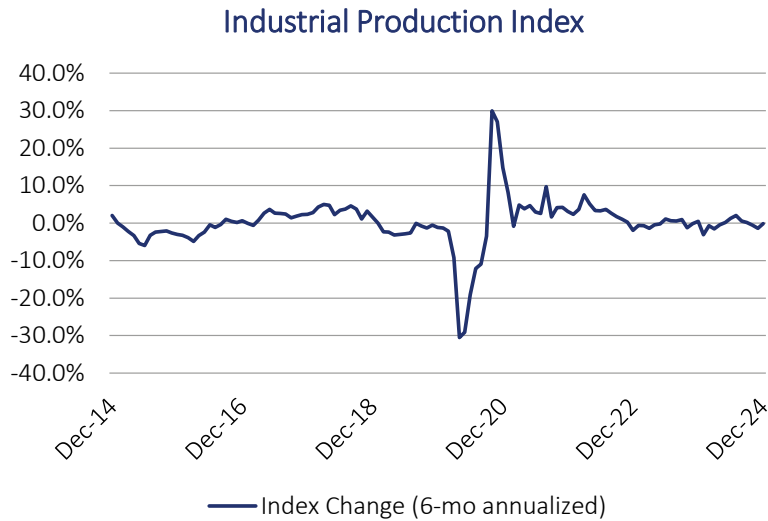
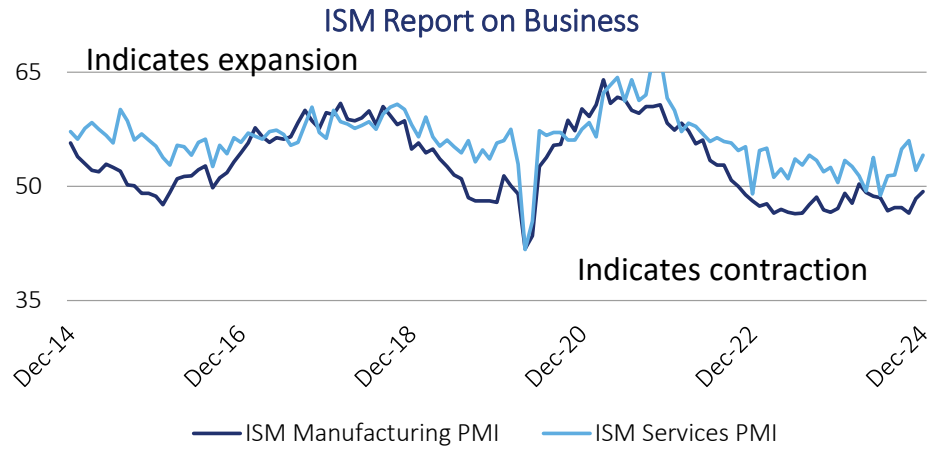


Average Hourly Earnings



Data Source: Bloomberg

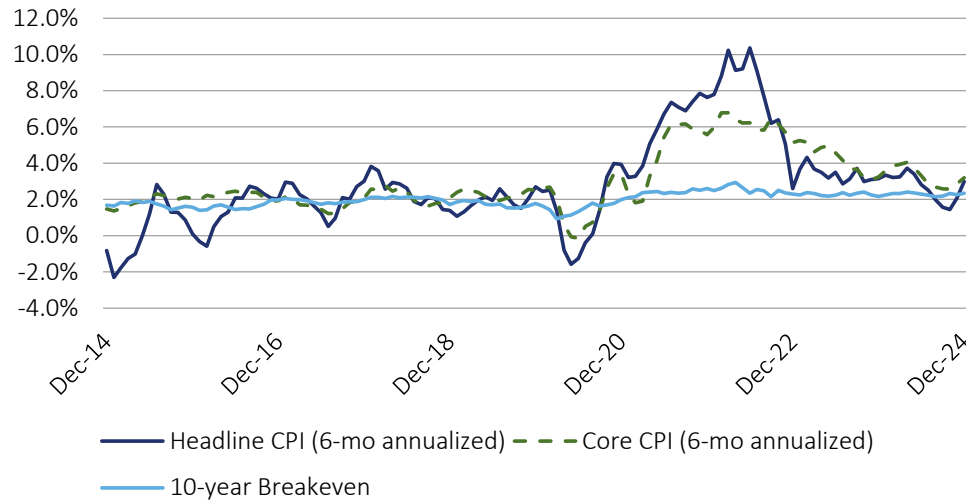
## Business Activity



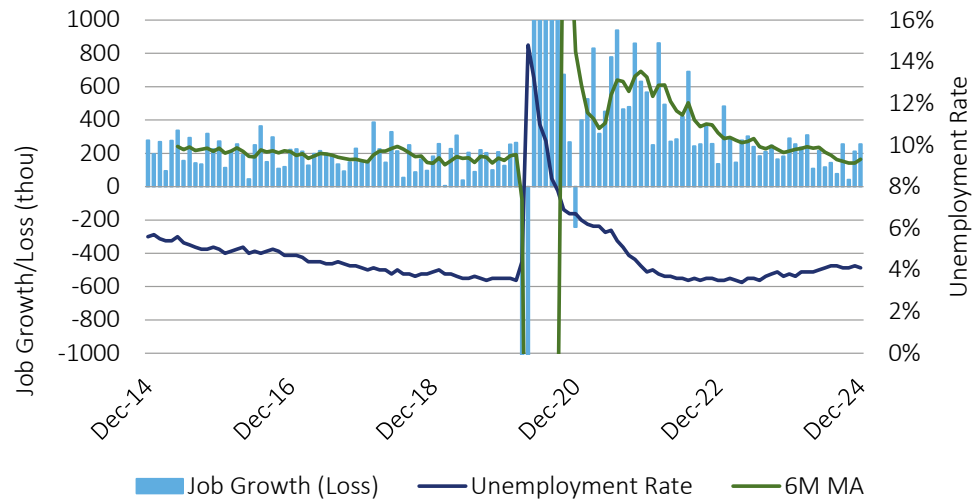
Data Source: Bloomberg

# Inflation and Employment

Inflation: Actual & Expected



Employment Gains/Losses

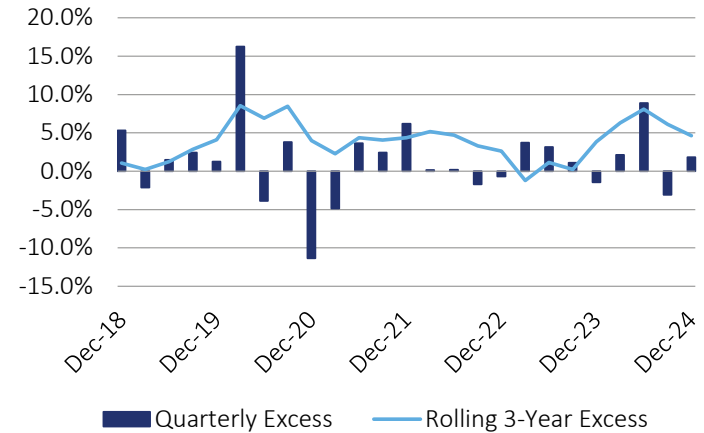


Data Source: Bloomberg

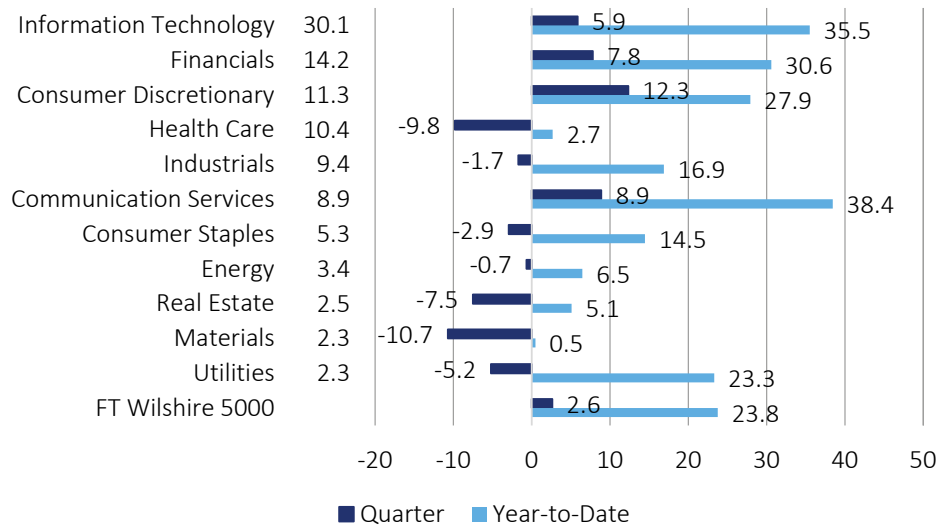
## U.S. Equity Market

As of 12/31/2024	Quarter	YTD	1 Year	3 Year	5 Year	10 Year
FT Wilshire 5000	2.6	23.8	23.8	8.1	14.1	12.7
FT Wilshire U.S. Large Cap	2.8	25.2	25.2	8.8	14.8	13.1
FT Wilshire U.S. Small Cap	1.0	14.1	14.1	4.0	9.5	9.2
FT Wilshire U.S. Large Growth	7.2	35.5	35.5	10.9	19.4	n/a
FT Wilshire U.S. Large Value	-1.7	15.2	15.2	6.4	9.8	n/a
FT Wilshire U.S. Small Growth	2.4	15.5	15.5	2.2	8.8	n/a
FT Wilshire U.S. Small Value	-0.4	12.7	12.7	5.6	9.9	n/a
Wilshire REIT Index	-5.0	9.1	9.1	-2.5	4.5	5.7
MSCI USA Min. Vol. Index	-2.3	16.0	16.0	5.0	8.2	10.4
FTSE RAFI U.S. 1000 Index	-0.3	17.1	17.1	8.0	12.3	10.9

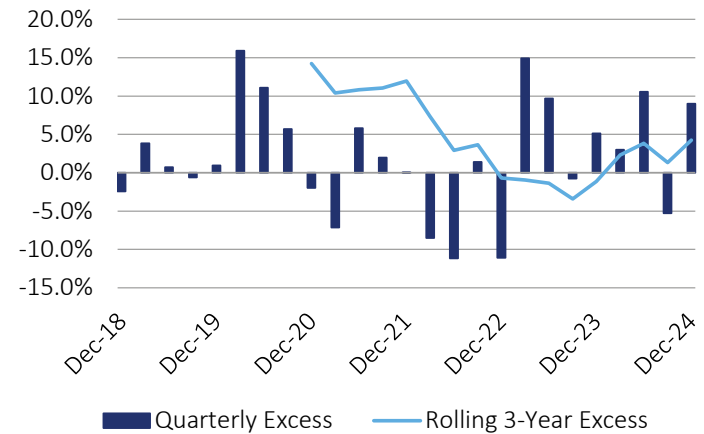
Large Cap vs. Small Cap



U.S. Sector Weight and Return (%)



Large Growth vs Large Value

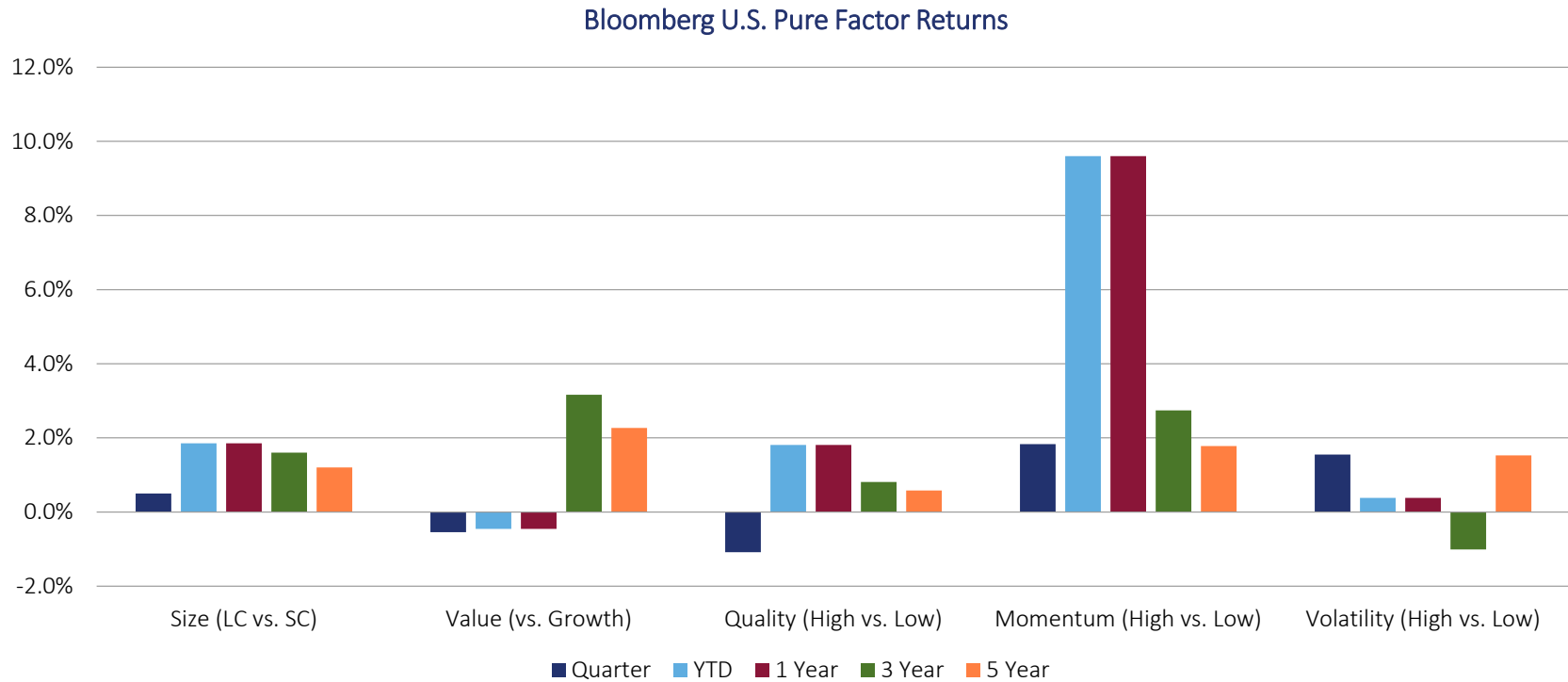


Data Sources: Bloomberg, Wilshire Atlas

## U.S. Factor Returns

Factor returns represent the contribution from large cap, value, etc. stocks within Bloomberg's Portfolio & Risk Analytics module

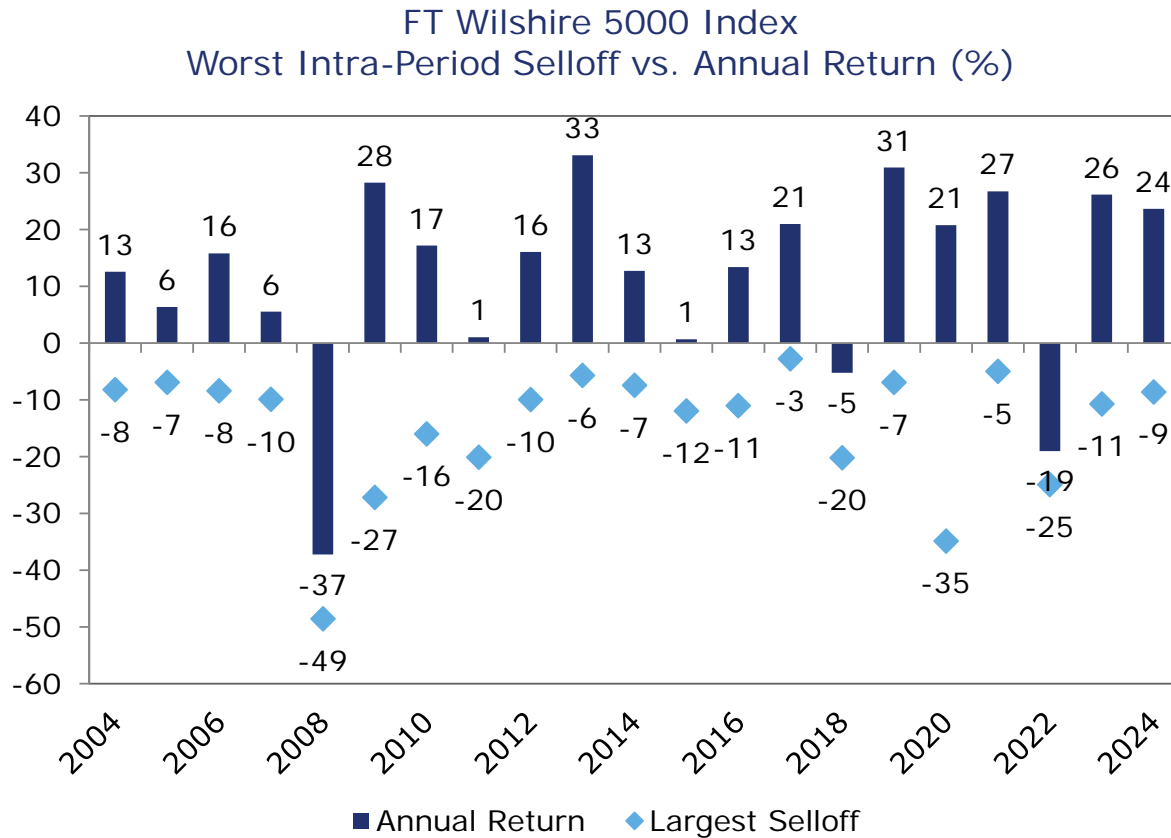
Value detracted from returns for the year while momentum was a meaningful contributor



Data Source: Bloomberg

## Annual Equity Market Selloffs

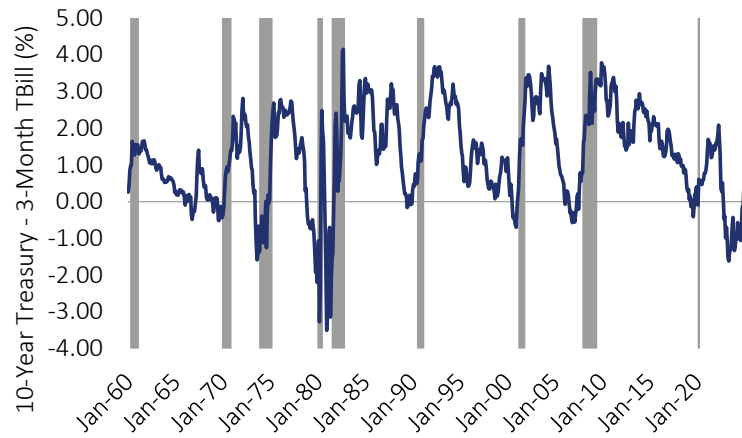
U.S. equity during 2024 was similar to 2023 – a roughly 25% gain with a modest sell-off during the year



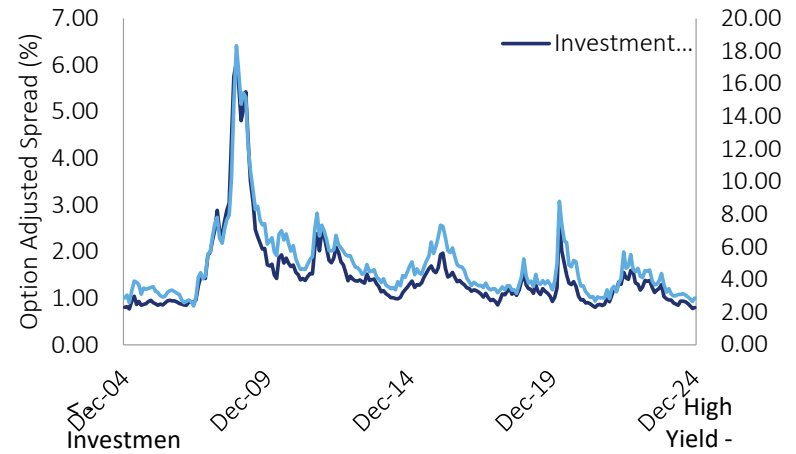
Data Sources: Wilshire Web, Bloomberg

# Risk Monitor

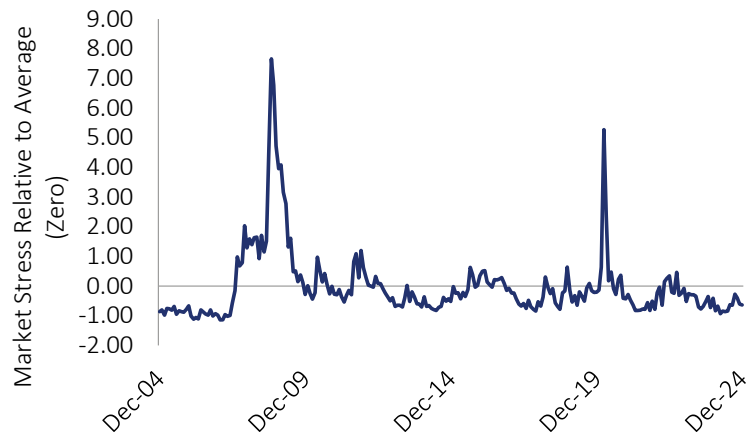
Yield Curve Slope vs Recessions (IN GRAY)



Bloomberg Credit Indexes

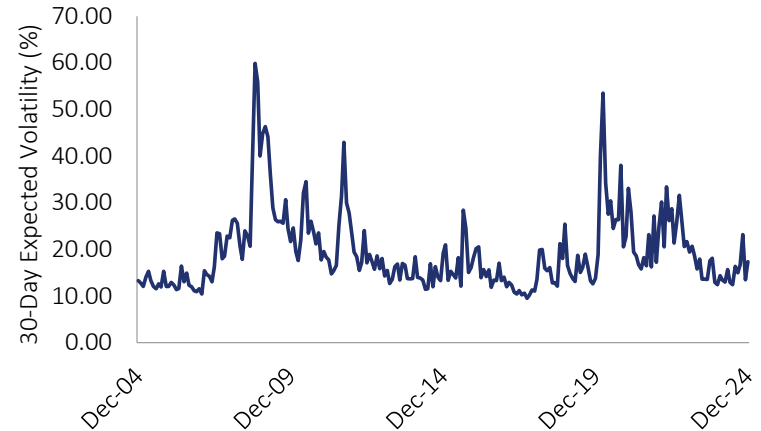


St. Louis Fed. Financial Stress Index



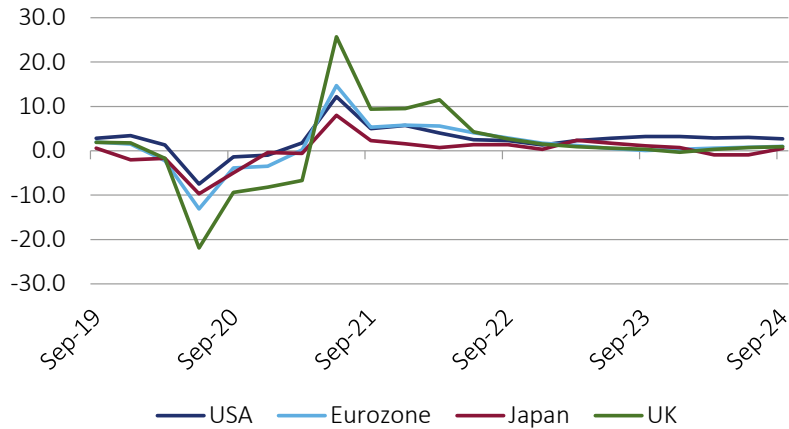
Data Source: Bloomberg

CBOE Volatility Index

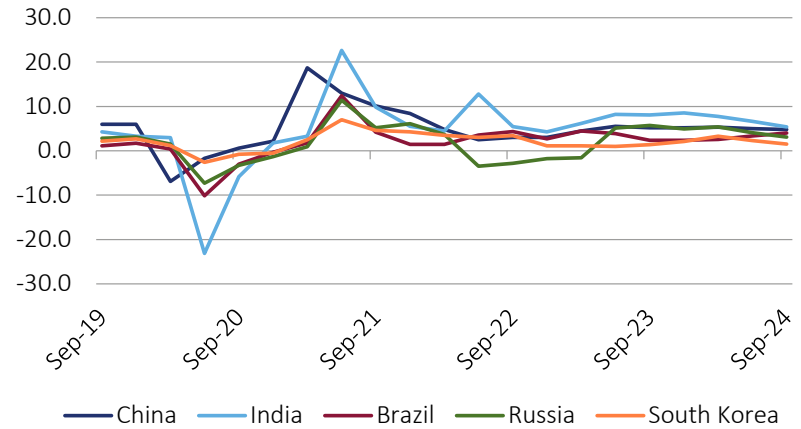


## Non-U.S. Growth and Inflation

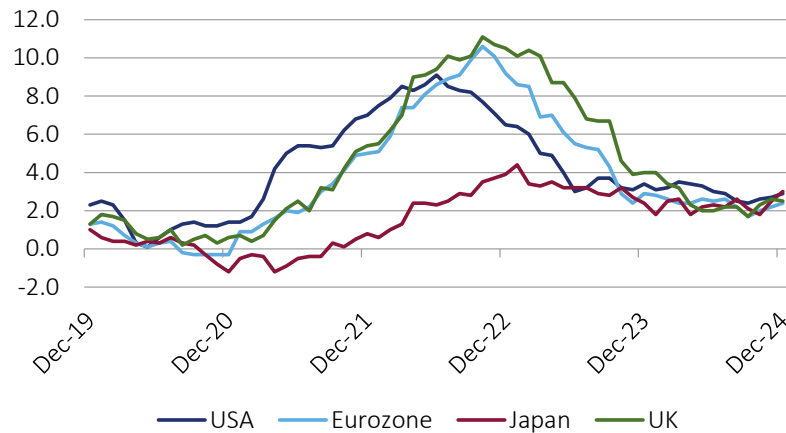
Developed Markets Real GDP Growth YoY (%)



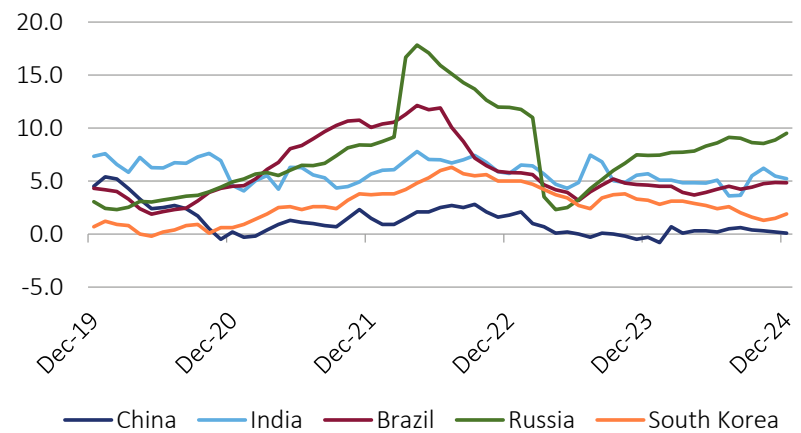
Emerging Markets Real GDP Growth YoY (%)



Developed Markets CPI Growth YoY (%)



Emerging Markets CPI Growth YoY (%)



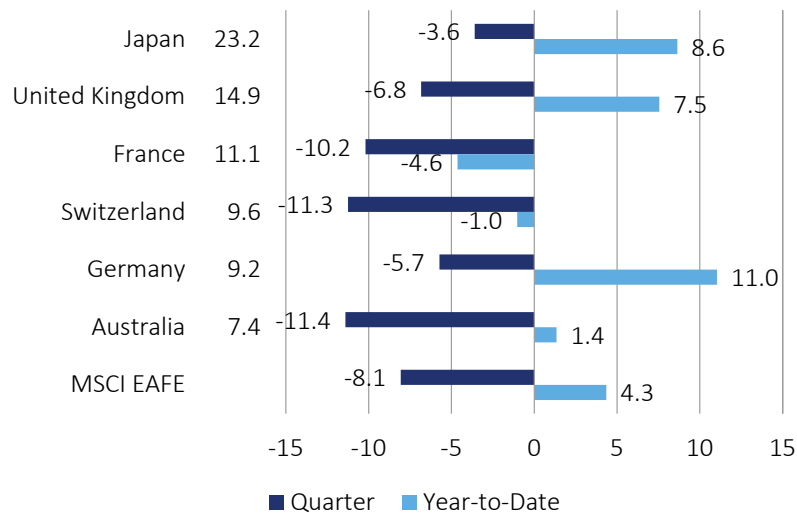
Data Source: Bloomberg



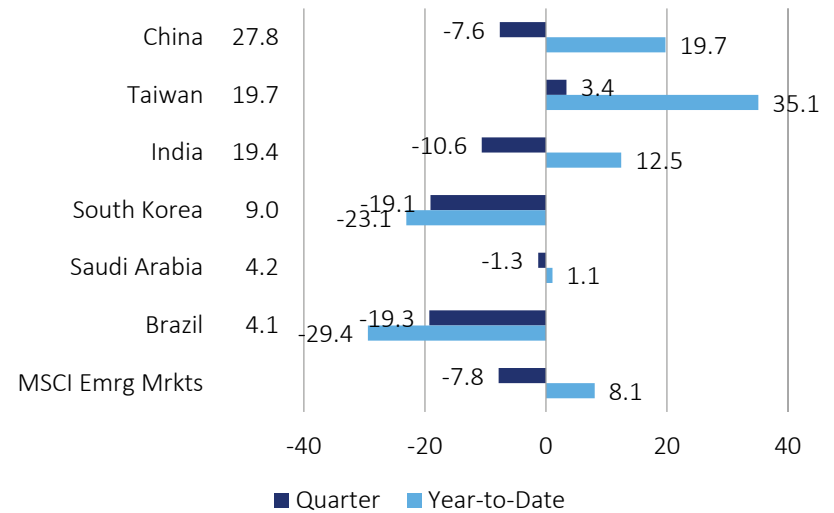
## Non-U.S. Equity Market

As of 12/31/2024	Quarter	YTD	1 Year	3 Year	5 Year	10 Year
MSCI ACWI ex-US (\$G)	-7.5	6.1	6.1	1.3	4.6	5.3
MSCI EAFE (\$G)	-8.1	4.3	4.3	2.2	5.2	5.7
MSCI Emerging Markets (\$G)	-7.8	8.1	8.1	-1.5	2.1	4.0
MSCI Frontier Markets (\$G)	-5.0	6.8	6.8	-0.4	0.2	0.8
MSCI ACWI ex-US Growth (\$G)	-7.8	5.4	5.4	-2.4	3.7	5.7
MSCI ACWI ex-US Value (\$G)	-7.3	6.5	6.5	4.7	5.2	4.9
MSCI ACWI ex-US Small (\$G)	-7.6	3.9	3.9	-1.0	4.8	6.1
MSCI ACWI Minimum Volatility	-3.4	12.0	12.0	3.1	5.3	7.6
MSCI EAFE Minimum Volatility	-6.8	6.0	6.0	0.6	2.0	4.8
FTSE RAFI Developed ex-US	-7.3	4.6	4.6	4.3	6.2	5.5
MSCI EAFE LC (G)	-0.6	11.8	11.8	6.9	8.1	7.7
MSCI Emerging Markets LC (G)	-4.2	13.7	13.7	2.1	4.9	6.4

Developed Markets Weight and Return (%)



Emerging Markets Weight and Return (%)

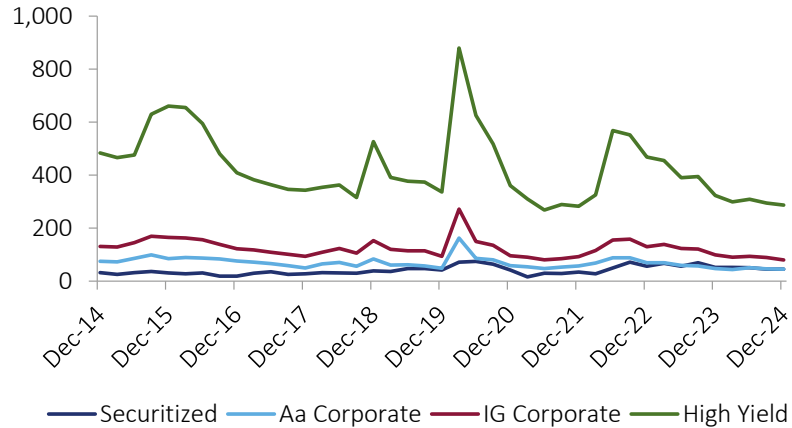


Data Source: Bloomberg

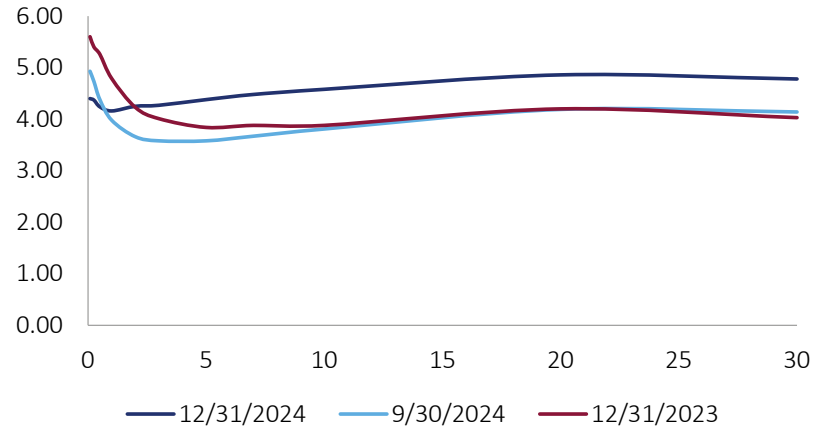
## U.S. Fixed Income

As of 12/31/2024	YTW	Dur.	QTR	YTD	1 YR	3 YR	5 YR	10 YR
Bloomberg Aggregate	4.9	6.1	-3.1	1.3	1.3	-2.4	-0.3	1.3
Bloomberg Treasury	4.5	5.8	-3.1	0.6	0.6	-2.9	-0.7	0.8
Bloomberg Gov't-Rel.	4.9	5.2	-2.7	1.7	1.7	-1.5	0.0	1.5
Bloomberg Securitized	5.3	6.0	-3.0	1.5	1.5	-2.0	-0.6	1.0
Bloomberg Corporate	5.3	6.8	-3.0	2.1	2.1	-2.3	0.3	2.4
Bloomberg LT Gov't/Credit	5.3	13.6	-7.4	-4.2	-4.2	-9.2	-3.3	1.0
Bloomberg LT Treasury	4.9	14.7	-8.6	-6.4	-6.4	-12.0	-5.2	-0.6
Bloomberg LT Gov't-Rel.	5.9	11.4	-6.7	-2.5	-2.5	-6.4	-2.4	1.5
Bloomberg LT Corporate	5.8	12.5	-6.2	-1.9	-1.9	-6.8	-1.8	2.2
Bloomberg U.S. TIPS*	4.5	7.1	-2.9	1.8	1.8	-2.3	1.9	2.2
Bloomberg High Yield	7.5	3.1	0.2	8.2	8.2	2.9	4.2	5.2
S&P/LSTA Leveraged Loan	8.0	0.3	2.3	9.0	9.0	7.0	5.9	5.1
Treasury Bills	4.3	0.3	1.2	5.3	5.3	3.9	2.5	1.8

Fixed Income Option Adjusted Spread (bps)



Treasury Yield Curve (%)



\*Yield and Duration statistics are for a proxy index based on similar maturity, the Bloomberg Barclays U.S. Treasury 7-10 Year Index.

Data Source: Bloomberg

## Federal Reserve

The Federal Open Market Committee decreased their overnight rate by 0.50% during Q4 and 1% in six months

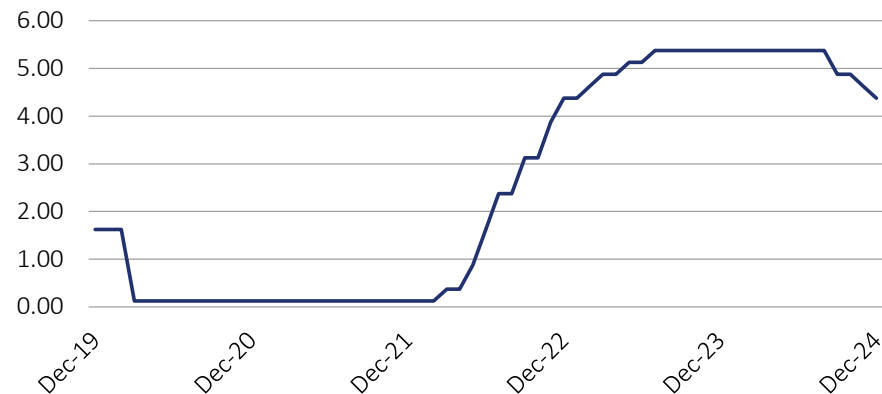
QE4 was larger than the 3 phases of quantitative easing – combined – following the global financial crisis

The Fed’s balance sheet is roughly equal to its level following the COVID spike

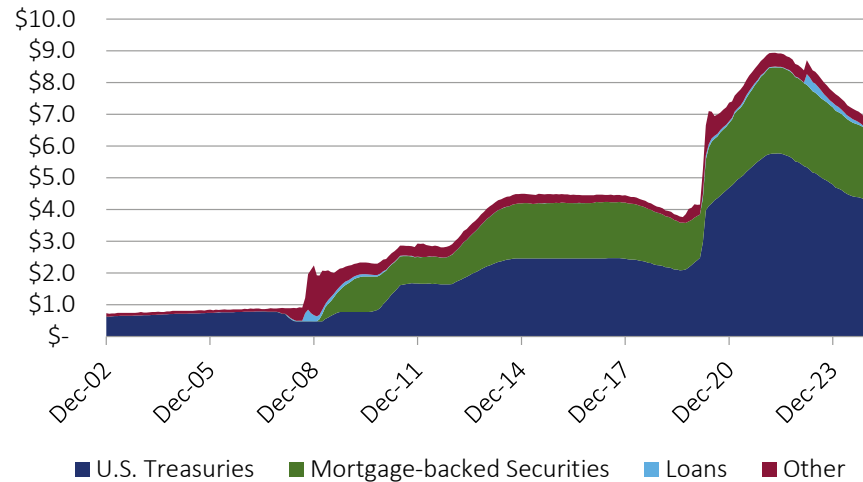
	Announced	Closed	Amount (bil)
QE1	11/25/2008	3/31/2010	\$1,403
QE2	11/3/2010	6/29/2012	\$568
QE3	9/13/2012	10/29/2014	\$1,674
QE4	3/23/2020	3/15/2022	\$4,779

Data Source: Bloomberg

Federal Funds Rate (Mid %)

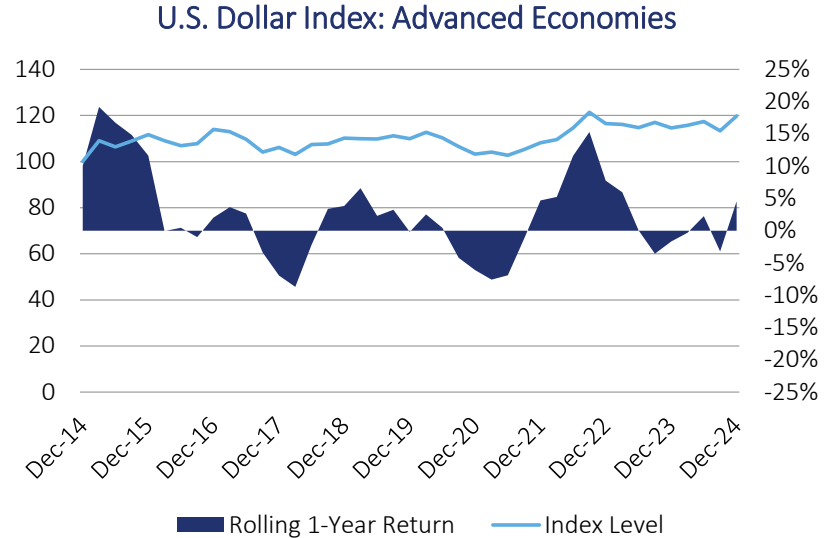
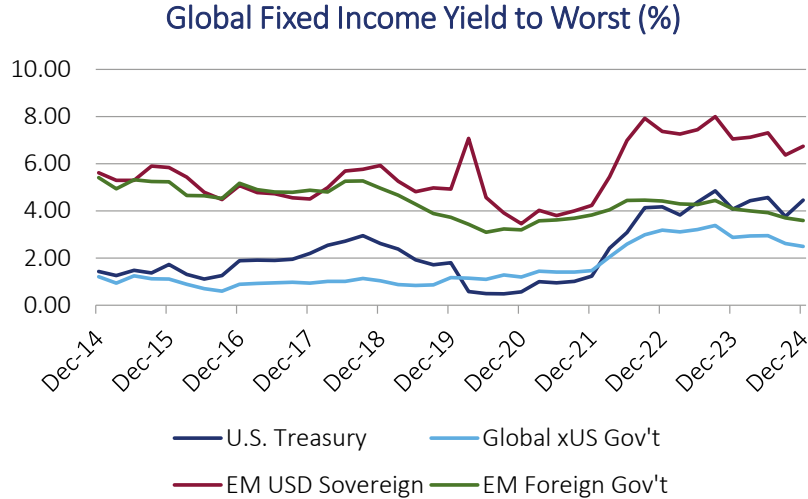


Federal Reserve Balance Sheet (\$T)



## Non-U.S. Fixed Income

As of 12/31/2024	Quarter	YTD	1 Year	3 Year	5 Year	10 Year
<b>Developed Markets</b>						
Bloomberg Global Aggregate xUS	-6.8	-4.2	-4.2	-6.3	-3.4	-0.9
Bloomberg Global Aggregate xUS*	0.7	5.0	5.0	0.9	1.0	2.4
Bloomberg Global Inflation Linked xUS	-9.9	-8.3	-8.3	-11.5	-4.6	-1.4
Bloomberg Global Inflation Linked xUS*	-2.6	-2.6	-2.6	-6.8	-1.6	1.8
<b>Emerging Markets (Hard Currency)</b>						
Bloomberg EM USD Aggregate	-1.5	6.6	6.6	-0.5	0.6	3.2
<b>Emerging Markets (Foreign Currency)</b>						
Bloomberg EM Local Currency Gov't	-3.8	1.7	1.7	-0.2	0.6	1.7
Bloomberg EM Local Currency Gov't*	2.2	9.3	9.3	4.9	3.3	3.4
Euro vs. Dollar	-7.0	-6.2	-6.2	-3.1	-1.6	-1.5
Yen vs. Dollar	-8.6	-10.3	-10.3	-9.9	-7.1	-2.7
Pound vs. Dollar	-6.4	-1.7	-1.7	-2.6	-1.1	-2.2

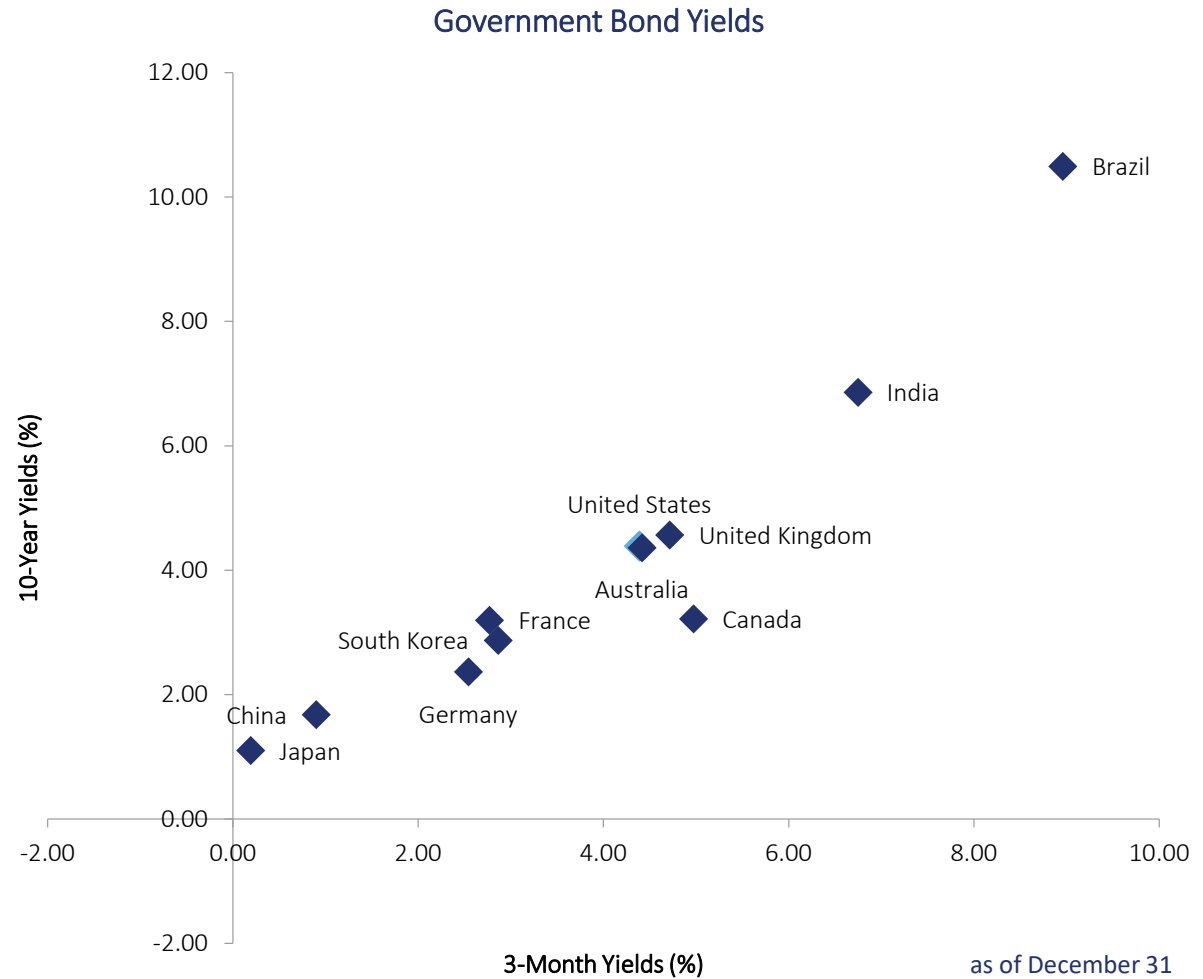


\*Returns are reported in terms of local market investors, which removes currency effects.

Data Source: Bloomberg

## Global Interest Rates

Short-term rates have turned positive across the globe; longer-term rates above 4.0% in the U.S., U.K. and Australia

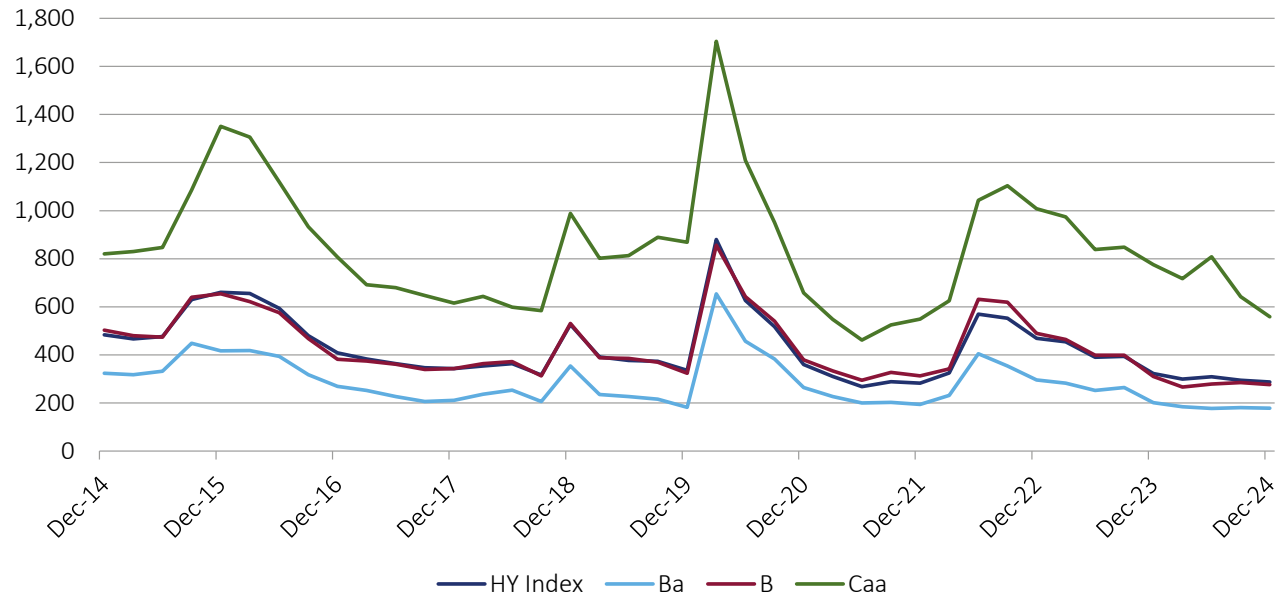


Data Source: Bloomberg

## High Yield Bond Market

As of 12/31/2024	Weight	YTW	QTR	YTD	1 YR	3 YR	5 YR	10 YR
Bloomberg High Yield		7.5	0.2	8.2	8.2	2.9	4.2	5.2
S&P LSTA Leveraged Loan		8.0	2.5	8.7	8.7	6.9	5.4	4.8
<b>High Yield Quality Distribution</b>								
Ba U.S. High Yield	50.8%	6.4	-0.5	6.3	6.3	1.9	4.1	5.1
B U.S. High Yield	35.2%	7.4	0.3	7.4	7.4	3.1	3.8	4.8
Caa U.S. High Yield	12.1%	10.2	2.3	15.1	15.1	4.9	5.1	5.6
Ca to D U.S. High Yield	2.0%	20.2	2.2	48.3	48.3	15.6	12.3	4.9

Fixed Income Option Adjusted Spread (bps)



Data Source: Bloomberg

## Asset Class Performance

Asset Class Returns - Best to Worst						Annualized 5-Year as of 12/24
2019	2020	2021	2022	2023	2024 YTD	
U.S. Equity 31.0%	U.S. Equity 20.8%	REITs 46.2%	Commodities 16.1%	U.S. Equity 26.1%	U.S. Equity 23.8%	U.S. Equity 14.1%
REITs 25.8%	Emrg Mrkts 18.7%	Commodities 27.1%	T-Bills 1.3%	Developed 18.9%	REITs 9.1%	Commodities 6.8%
Developed 22.7%	U.S. TIPS 11.0%	U.S. Equity 26.7%	High Yield -11.2%	REITs 16.1%	High Yield 8.2%	Developed 5.2%
Emrg Mrkts 18.9%	Developed 8.3%	Developed 11.8%	U.S. TIPS -11.8%	High Yield 13.4%	Emrg Mrkts 8.1%	REITs 4.5%
High Yield 14.3%	Core Bond 7.5%	U.S. TIPS 6.0%	Core Bond -13.0%	Emrg Mrkts 10.3%	Commodities 5.4%	High Yield 4.2%
Core Bond 8.7%	High Yield 7.1%	High Yield 5.3%	Developed -14.0%	Core Bond 5.5%	T-Bills 5.3%	T-Bills 2.5%
U.S. TIPS 8.4%	T-Bills 0.7%	T-Bills 0.0%	U.S. Equity -19.0%	T-Bills 5.1%	Developed 4.3%	Emrg Mrkts 2.1%
Commodities 7.7%	Commodities -3.1%	Core Bond -1.5%	Emrg Mrkts -19.7%	U.S. TIPS 3.9%	U.S. TIPS 1.8%	U.S. TIPS 1.9%
T-Bills 2.3%	REITs -7.9%	Emrg Mrkts -2.2%	REITs -26.8%	Commodities -1.3%	Core Bond 1.3%	Core Bond -0.3%

Data Sources: Bloomberg

Note: Developed asset class is developed equity markets ex-U.S., ex-Canada

County Employees Retirement System

# Performance and Asset Allocations

Quarter Ending: December 31, 2024





# CERS Quarterly Performance Update

December 2024


## Pension Portfolios Performance

CERS & CERS-HAZ - PENSION FUND PLAN NET RETURNS - 12/31/24											
Plan	Market Value	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
CERS	9,963,205,049.62	-1.49	-0.34	4.54	10.84	4.94	7.75	7.49	6.65	8.11	8.92
KY Ret. CERS Plan IPS Index		-1.05	0.06	4.83	13.38	5.58	7.92	7.39	6.69	8.12	9.00
CERS- H	3,560,186,611.67	-1.51	-0.35	4.56	10.91	4.97	7.72	7.48	6.64	8.11	8.92
KY Ret. CERS Haz Plan IPS Index		-1.05	0.06	4.83	13.38	5.58	7.92	7.39	6.69	8.12	9.00
KPPA PENSION FUND UNIT - NET RETURNS - 12/31/24 - PROXY PLAN ASSET PERFORMANCE											
Structure		Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
<b>PUBLIC EQUITY</b>		-3.09	-1.55	5.04	15.22	4.43	9.28	8.86	7.40	9.16	10.37
MSCI ACWI		-2.37	-0.99	5.56	17.49	5.41	9.71	9.00	7.37	9.02	10.28
<b>PRIVATE EQUITY</b>		0.88	1.02	3.23	4.07	3.83	11.58	11.61	10.26		11.33
Russell 3000 + 3%(Qtr Lag)		2.38	7.00	11.34	38.19	13.36	18.31	15.97	12.84		12.92
<b>SPECIALTY CREDIT</b>		1.01	2.23	5.39	11.06	7.30	7.12				6.86
50% BB US HY / 50% Morningstar LSTA Lev'd Ln		0.07	1.22	4.92	8.59	5.00	5.07				5.06
<b>CORE FIXED INCOME</b>		-1.62	-2.92	2.06	1.76	0.93	1.85	2.46			2.70
Bloomberg US Aggregate		-1.64	-3.06	1.98	1.25	-2.41	-0.33	1.35			1.72
<b>CASH</b>		0.39	1.20	2.55	5.33	3.82	2.41	1.92	1.98	2.76	3.39
FTSE Treasury Bill-3 Month		0.39	1.23	2.61	5.45	4.05	2.54	1.79	1.63	2.41	3.02
<b>REAL ESTATE</b>		-0.80	-0.89	0.81	-4.52	0.33	5.05	7.58	6.88	5.99	6.14
NCREIF NFI-ODCE Net 1 Qtr in Arrears Index^		0.02	0.02	-0.64	-8.04	-1.04	2.05	5.16	5.65	7.01	5.87
<b>REAL RETURN</b>		-2.81	3.73	10.67	18.90	12.20	9.90	6.79			6.11
US CPI +3%		0.19	0.95	1.94	5.75	6.61	6.58	4.63			4.28


# Insurance Portfolios Performance

CERS INS & CERS HAZ INS - INSURANCE FUND - PLAN NET RETURNS - 12/31/24											
Plan	Market Value	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
<b>CERS INS</b>	<b>3,684,942,417.55</b>	-1.45	-0.42	4.38	10.70	5.11	7.64	7.49	6.37	7.31	7.50
KY Ins. CERS Plan IPS Index		-1.05	0.06	4.83	13.38	5.58	7.72	7.35	6.47	7.61	7.76
<b>CERS - H INS</b>	<b>1,761,315,460.10</b>	-1.42	-0.35	4.34	10.71	5.09	7.69	7.55	6.40	7.33	7.52
KY Ins. CERS Haz Plan IPS Index		-1.05	0.06	4.83	13.38	5.58	7.72	7.35	6.47	7.61	7.76
KPPA INSURANCE FUND UNIT - NET RETURNS - 12/31/24 - PROXY PLAN ASSET PERFORMANCE											
Structure		Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
<b>PUBLIC EQUITY</b>		-3.10	-1.64	4.89	14.95	4.35	9.22	8.87	7.30		8.84
MSCI ACWI		-2.37	-0.99	5.56	17.49	5.41	9.69	9.00	7.23		8.74
<b>PRIVATE EQUITY</b>		0.72	0.87	2.52	5.16	6.80	11.85	12.70	10.62		10.63
Russell 3000 + 3%(Qtr Lag)		2.38	7.00	11.34	38.19	13.36	18.31	15.97	12.54		12.51
<b>SPECIALTY CREDIT</b>		1.01	2.26	5.39	11.22	7.56	7.18				6.78
50% BB US HY / 50% Morningstar LSTA Lev'd Ln		0.07	1.22	4.92	8.59	5.00	5.07				5.06
<b>CORE FIXED INCOME</b>		-1.63	-2.94	2.02	1.66	0.72	1.65	2.37			2.44
Bloomberg US Aggregate		-1.64	-3.06	1.98	1.25	-2.41	-0.33	1.35			1.72
<b>CASH</b>		0.39	1.20	2.54	5.34	3.81	2.39	1.78	1.82	2.51	2.58
FTSE Treasury Bill-3 Month		0.39	1.23	2.61	5.45	4.05	2.54	1.79	1.63	2.41	2.50
<b>REAL ESTATE</b>		-0.74	-0.83	0.84	-4.63	0.16	4.92	7.59			7.98
NCREIF NFI-ODCE Net 1 Qtr in Arrears Index^		0.02	0.02	-0.64	-8.04	-1.04	2.05	5.16			4.67
<b>REAL RETURN</b>		-2.02	3.59	10.48	17.24	10.70	9.25	6.34			5.73
US CPI +3%		0.19	0.95	1.94	5.75	6.19	6.55	4.67			4.33

# Internal Portfolios Performance

 Kentucky Retirement Systems Pension Monthly Internally Managed Portfolio Performance (Net of Fee) As of Date: 12/31/2024												
Structure	Market Value	% of Total	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	ITD	Inception Date
<b>PUBLIC EQUITY</b>												
S&P 500 INDEX	3,430,106,718.16	17.28	-2.35	2.44	8.47	25.02	9.03	14.75	13.23	10.60	9.33	2001-07-01
<i>KY Ret. S&amp;P Blend</i>			-2.38	2.41	8.44	25.02	8.94	14.53	13.10	10.52		
Internal US Mid Cap	240,955,123.41	1.21	-7.13	0.44	7.42	14.43	5.61	11.05	10.18		10.43	2014-08-01
<i>S&amp;P MidCap 400 Index</i>			-7.12	0.34		13.93	4.87	10.34	9.68			
Scientific Beta	279,193,536.38	1.41	-5.78	-0.61	7.38	15.77	4.60	9.50			10.82	2016-07-01
<i>S&amp;P 500 Index</i>			-2.38	2.41		25.02	8.94	14.53				
<b>PRIVATE EQUITY</b>												
INTERNAL PRIVATE EQ	89,385,893.97	0.45	-1.91	2.04	7.27	18.31					17.30	2023-12-01
<b>CORE FI</b>												
INTERNAL CORE FI	998,575,671.19	5.03	-1.68	-3.08	2.04	1.34					4.23	2023-09-01
<i>Bloomberg US Aggregate Bond Index</i>			-1.64	-3.06	1.98	1.25					4.03	
<b>REAL ESTATE</b>												
INTERNAL REAL ESTATE	47,021,710.79	0.24	-8.17	-8.36	7.32	4.69					5.35	2023-12-01
<i>NCREIF NFI-ODCE Net 1 Qtr in Arrears Index<sup>h</sup></i>			0.02	0.02	-0.64	-8.04						
<b>REAL RETURN</b>												
INTERNAL REAL RETURN	241,695,452.41	1.22	-8.39	-4.90	7.40	13.11					11.60	2023-12-01
<i>KRS CPI + 300 bpts</i>			0.19	0.95	1.94	5.75					5.34	
INTERNAL TIPS	144,047.17	0.00	0.39	1.20	2.54	5.31	4.03	2.55	2.47	3.41	4.25	2002-05-01
<i>KR2 Internal US TIPS Blend</i>			-0.81	-1.60	1.77	3.25	-0.06	2.75	2.56	3.41	4.25	
CASH ACCOUNT	522,394,476.29	2.63	0.39	1.20	2.55	5.33	3.82	2.41	1.92	1.98	3.39	1988-01-01
<i>FTSE Treasury Bill-3 Month</i>			0.39	1.23		5.45	4.05	2.54	1.79	1.63	3.02	

# Pension Portfolios Asset Class Gross Performance

 <span style="float: right;">Reporting Currency:BASE</span>										
Pension Board Asset Class Performance										
As of Date:12/31/2024										
Structure	Market Value	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	ITD	Inception Date	
<b>CERS</b>										
TOTAL GROSS OF FEES	9,966,567,529.90	-1.43	-0.22	4.86	11.49	5.62	8.56	9.13	4/1/1984	
EQUITIES	4,762,655,034.67	-3.09	-1.52	5.08	15.25	4.50	9.41	98.67	7/1/2013	
FIXED INCOME	3,337,308,433.10	0.25	0.49	4.56	8.85	6.04	6.02	91.65	7/1/2013	
REAL ESTATE	519,234,684.71	-0.26	-0.32	0.80	-4.62	0.75	4.97	46.60	7/1/2013	
ALTERNATIVE INVESTMENTS	1,090,497,927.25	0.27	3.49	6.70	10.41	8.37	11.76	81.39	7/1/2013	
OTHER	4,799,318.06	14.03	-10.59	-6.68	-15.68	-25.58	-17.81	35.86	7/1/2013	
CASH & TEMPORARY	252,072,132.11	0.39	1.20	2.55	5.33	3.67	2.33	33.10	7/1/2013	
TOTAL NET OF FEES	9,963,205,049.62	-1.49	-0.34	4.54	10.84	4.94	7.75	8.92	4/1/1984	
<b>CERS- H</b>										
TOTAL GROSS OF FEES	3,561,411,002.91	-1.45	-0.23	4.87	11.55	5.63	8.51	9.13	4/1/1984	
EQUITIES	1,697,728,811.12	-3.10	-1.51	5.08	15.27	4.54	9.43	98.69	7/1/2013	
FIXED INCOME	1,183,350,657.08	0.18	0.40	4.48	8.64	5.91	5.92	91.55	7/1/2013	
REAL ESTATE	163,992,859.66	-0.26	-0.32	0.79	-4.61	0.77	4.99	45.78	7/1/2013	
ALTERNATIVE INVESTMENTS	389,092,631.82	0.25	3.52	6.94	11.15	8.54	11.72	79.02	7/1/2013	
OTHER	2,968,602.25	8.08	-5.92	-0.01	-5.26	-10.08	-5.85	30.80	7/1/2013	
CASH & TEMPORARY	124,277,440.98	0.39	1.20	2.55	5.33	3.74	2.37	25.15	7/1/2013	
TOTAL NET OF FEES	3,560,186,611.67	-1.51	-0.35	4.56	10.91	4.97	7.72	8.92	4/1/1984	

# Insurance Portfolios Asset Class Gross Performance



## Insurance Board Asset Class Performance As of Date:12/31/2024

Reporting Currency:BASE

Structure	Market Value	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	ITD	Inception Date
<b>CERS INS</b>									
TOTAL GROSS OF FEES	3,686,301,491.25	-1.37	-0.28	4.68	11.35	5.78	8.47	7.88	4/1/1987
EQUITIES	1,757,321,808.09	-3.09	-1.59	4.94	15.06	4.52	9.37	9.44	7/1/2013
FIXED INCOME	1,246,858,958.83	0.19	0.45	4.53	8.79	5.91	5.97	5.03	7/1/2013
REAL ESTATE	188,688,940.08	-0.18	-0.26	0.92	-4.44	0.73	4.87	7.26	7/1/2013
ALTERNATIVE INVESTMENTS	408,765,264.88	0.82	3.14	5.75	9.92	8.83	11.82	9.12	7/1/2013
OTHER	1,219,081.15	21.54	-23.28	-22.16	-42.07				8/1/2013
CASH & TEMPORARY	83,447,438.22	0.39	1.20	2.54	5.34	4.15	2.59	1.68	7/1/2013
TOTAL NET OF FEES	3,684,942,417.55	-1.45	-0.42	4.38	10.70	5.11	7.64	7.50	4/1/1987
<b>CERS - H INS</b>									
TOTAL GROSS OF FEES	1,761,935,591.20	-1.34	-0.20	4.66	11.41	5.81	8.58	7.90	4/1/1987
EQUITIES	833,941,075.93	-3.12	-1.57	4.96	15.03	4.47	9.39	9.45	7/1/2013
FIXED INCOME	587,684,909.29	0.35	0.67	4.64	9.38	6.25	6.17	5.11	7/1/2013
REAL ESTATE	103,544,773.93	-0.18	-0.26	0.92	-4.43	0.73	4.87	7.26	7/1/2013
ALTERNATIVE INVESTMENTS	215,017,948.77	0.80	3.05	5.23	9.41	8.58	11.71	9.11	7/1/2013
OTHER	553,120.30	18.78	-25.14	-21.61	-45.24				8/1/2013
CASH & TEMPORARY	21,193,762.98	0.39	1.20	2.54	5.34	4.08	2.54	1.68	7/1/2013
TOTAL NET OF FEES	1,761,315,460.10	-1.42	-0.35	4.34	10.71	5.09	7.69	7.52	4/1/1987

# Allocations

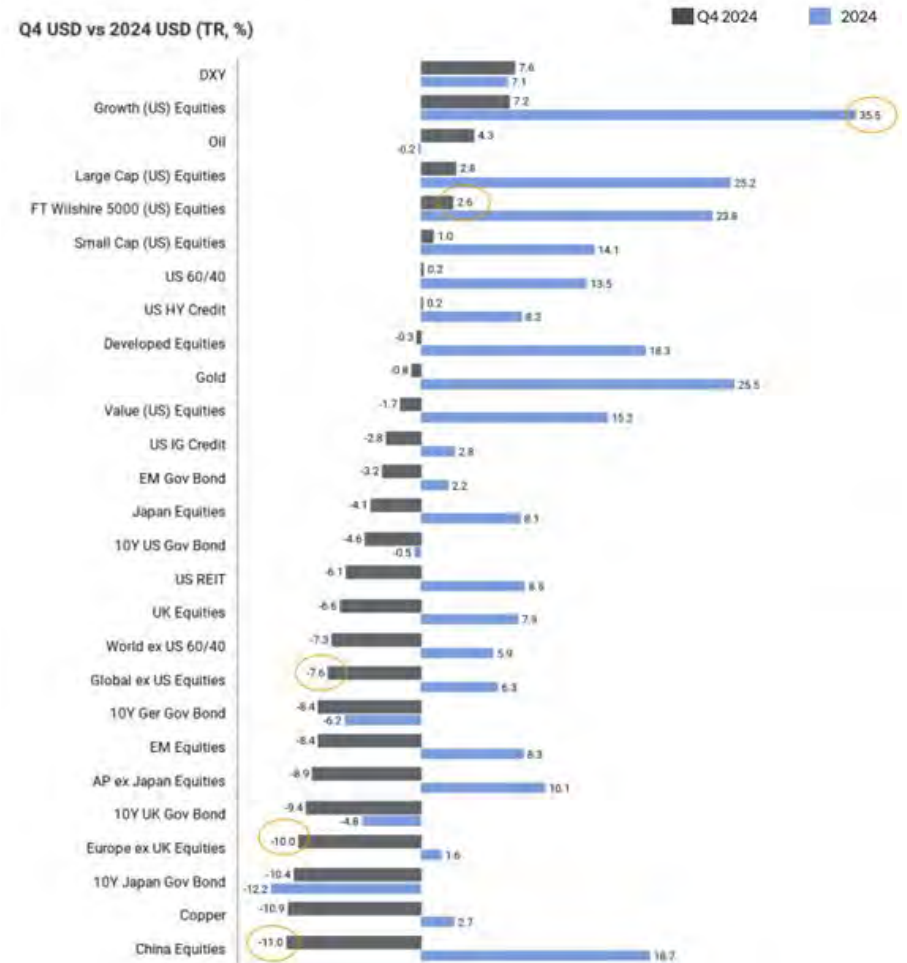


# Performance Highlights

- The CERS Pension Composite produced a return of -0.34% while the CERS Insurance Composite returned -0.40% for the quarter versus the benchmark return of 0.06%.

**CERS Pension** -0.34%  
**CERSH Pension** -0.35%  
**CERS Insurance** -0.42%  
**CERSH Insurance** -0.35%  
**Benchmark** 0.06%

- Across portfolios, the largest contributors to outperformance were the relative outperformance in the Specialty Credit portfolio as managers produced positive excess performance across the board and the strong performance in the Real Return portfolio.
- Relative underperformance in the Public Equity portfolio as well as the underperformance of the Private Equity portfolio versus the public equity benchmark were the biggest drivers of underperformance during the quarter.
- Fiscal year to date, the CERS Pension Composite produced a return of 4.54% underperforming the benchmark by 29bps while the CERS Insurance Composite produced a return of 4.36% versus the benchmark return of 4.83%.
- Fiscal year to date drivers of performance were similar to those for the quarter with Specialty Credit and Real Return contributing positive relative performance which were offset by underperformance in the Public Equity and Private Equity portfolios.

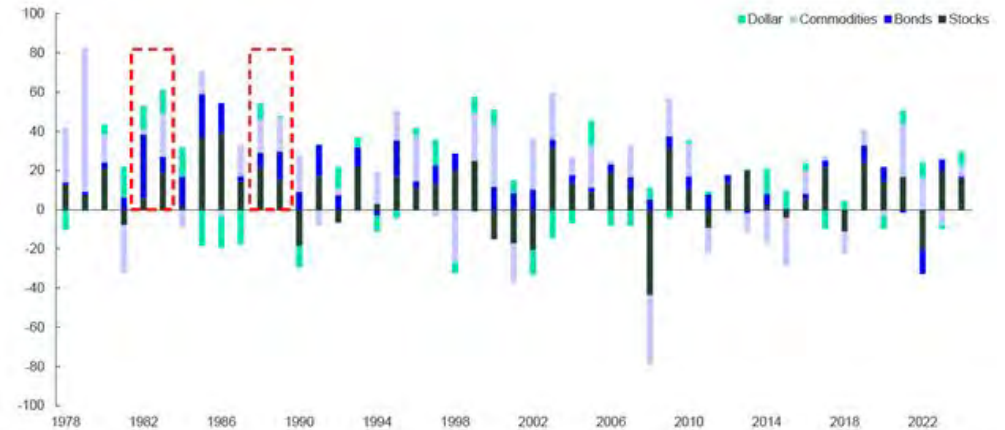




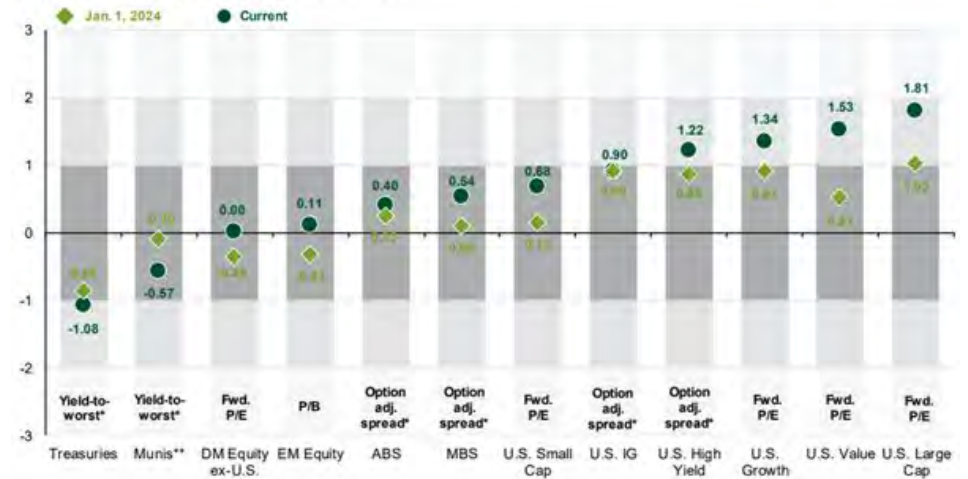
# Performance Highlights

- Risk markets struggled in December, failing to build on the “Trump bump” following the US election that saw markets surge especially segments seen as beneficiaries of lower taxes, regulatory rollbacks and protectionism.
- Despite the pullback late in the quarter, US Public Equities ended the quarter in the black as one of the few bright spots with NonUS Public Equities, Core Fixed Income, Real Estate and broad Commodities all falling during the quarter.
- For the calendar year, US public equities, bonds, commodities and the dollar all rallied which has only happened twice in the last 50 years.
- Markets grappled with numerous headwinds and unknowns in 2024; elections, geopolitical, uncertain fiscal policies and the uneven normalization of inflation and the labor markets all of which combined to keep fears of recession and stagflation elevated. Despite the uncertainty and volatility, markets were resilient with cross-asset volatility remaining extremely low.
- Uncertainty should remain high in 2025 with risks seemingly asymmetric as markets react to policy shifts and economic data underscoring the reality of a new macro environment with a wider range of possible outcomes and persistently high volatility.

Calendar Year Return (%)



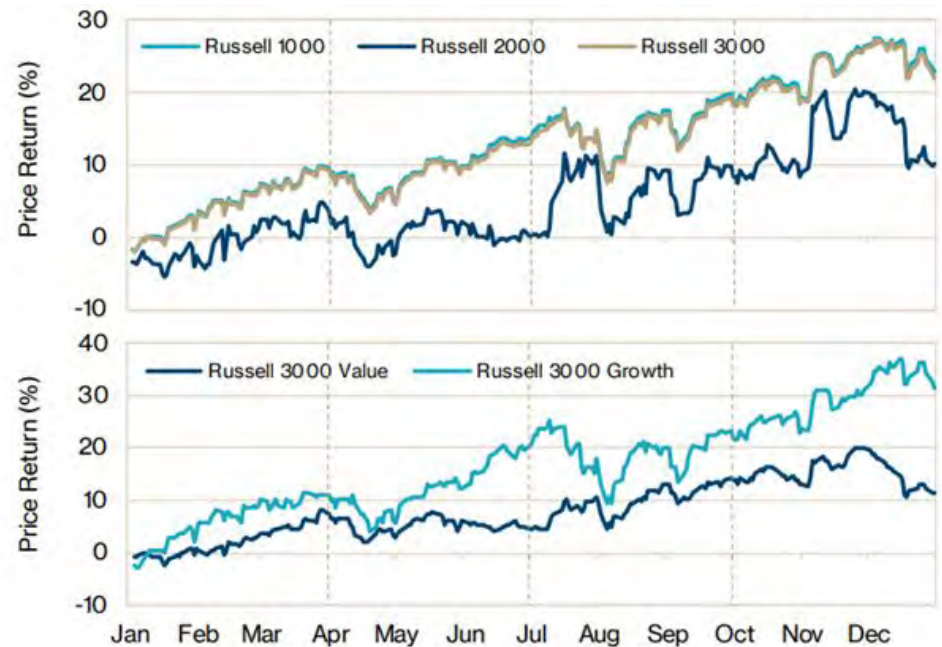
Asset class valuations  
Z-scores based on 25-year average valuation measures



# Performance Highlights

## Public Equities

- Global equity markets had a heterogeneous performance during the fourth quarter as US equity markets reacted positively to President Trump's election in November, driven mostly by a positive sentiment regarding optimism of a lower regulatory burden under his presidency while European equity investors were more bearish on the news due to growing concerns about the region's trade relationships with the US.
- While the global rate-cutting cycle was broadly perceived as a tailwind for equities, valuations remain highly elevated and numerous global geopolitical risks remain, which could potentially be a trigger for a sharp correction in equity markets.
- The 4<sup>th</sup> quarter saw a continuation of style and market cap leadership in US Equity markets
  - Growth outpaced value by nearly 9% (R3000G: 6.82% vs R3000V: -1.94%)
  - Large cap extended dominance (SP500: 2.41% vs Midcap: 0.34% vs R2000: 0.33%)
  - Trump's election win drove a strong rally in response to optimism surrounding deregulation and fiscal reforms (tax cuts & pro-business policies)



# Performance Highlights

## Public Equities

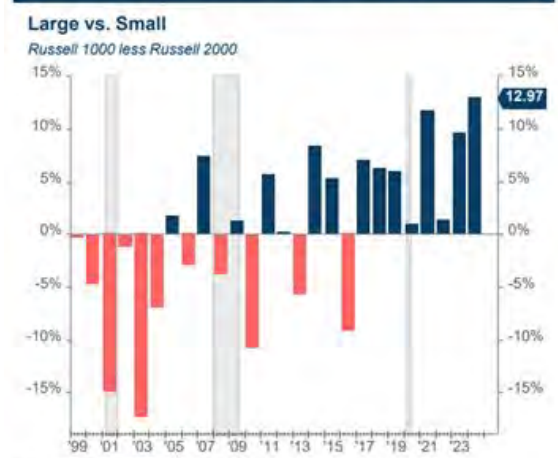
- During calendar 2024, the S&P 500 hit 57 record highs and has delivered over 20% annualized for the past 2 years.
  - The economy exceeded expectations, inflation moved lower, large impact from AI-enthusiasm
  - Fed signaled a more accommodative policy (first cut in September)
  - Market was incredibly narrow, led by mega cap growth
    - Growth outpaced value (best 2-year stretch in history)
    - Small caps significantly lagged large caps (last 8 calendar years)
  
- In contrast, performance in International Public Equity markets was extremely negative for the quarter as growth weakened and political uncertainty persisted with meaningful losses from weakening foreign currencies exacerbating the losses.
  - Growth in Europe weakened
    - Germany faces higher energy costs and increased competition from China
    - Manufacturing and trade slowed in France
    - United Kingdom continued its growth due to a strong service sector leading to higher wages

Larger Growth Drove the Gains in '24



Source: Data Center as of 12/11/2024

Worst Year for Small vs. Large Since 1998



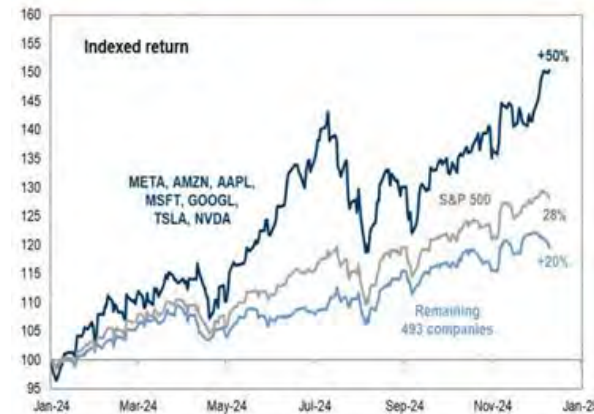
Source: FactSet as of 01/06/2025

# Performance Highlights

## Public Equities

- Japan was one of the top performers
    - Exited deflationary spiral – nominal GDP has increased (inflation), price increases and wage growth
    - Improvements in corporate governance (efficiency and balance sheet restructuring) has led to higher ROE's
  - China has outperformed recently driven by policy initiatives to stabilize the economy
    - Growth is weak (structural overcapacity and weak real estate market) but government providing stimulus
    - Tariffs from US a looming threat to exports
  - India continues to demonstrate strong growth with significant investment in infrastructure and manufacturing, though investors must be cognizant of higher valuations
- 
- International markets have been difficult to consistently add value actively due to higher intra stock correlations and lower correlations between EPS estimates and stock prices
    - This appears to be reverting providing a better market backdrop for stock picking
  - Growth continues to trade at a premium versus value at a discount with the spread consolidating to a degree over the past couple years but expanded in the last quarter.

Magnificent 7 Stocks More Than Doubled the Return of the 493



Source: Goldman Sachs Global Investment Research, 'Good Rubies', as of 12/12/24.

## Relative Valuations of Value vs. Growth at Extreme Levels



Value Equity Data as of 12/31/2024. Source: I/B/E/S, MSCI. This slide does not represent the composition of any I/SV portfolio.

# Performance Highlights

## Public Equities

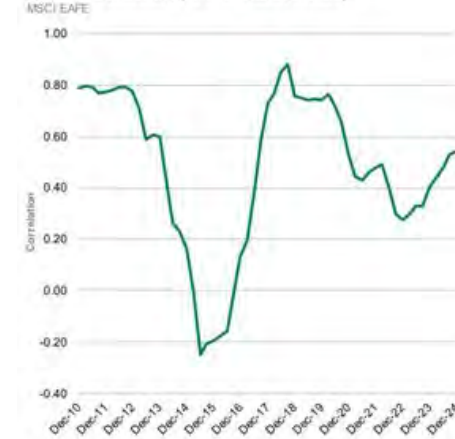
- The Global Public Equity portfolio returned -1.55% during the quarter versus its benchmark return of -0.99%.
  - The portfolio's NonUS Equity tilt drove underperformance as these markets underperformed the US markets by over 10%
  - Performance was also hampered by the overweight to small caps relative to the benchmark
- For the quarter, the US Public Equity portfolio returned 2.50% versus its benchmark return of 2.63%.
  - Persistent style and size headwind hampered relative performance
  - Individual mandate performance remained strong with 5 of 7 mandates outperforming
- The NonUS Public Equity portfolio returned -7.80% versus the MSCI ACWI Ex-US index's return of -7.61%.
- For the LTM the Global Public Equity portfolio returned 15.22% versus its benchmark return of 17.49% while the US Public Equity portfolio returned 23.00% versus its benchmark return of 23.81% and the NonUS Public Equity portfolio returned 3.76% versus the benchmark's return of 5.23.



Date from: 12/31/2010 to 12/31/2024

Source: Bloomberg

Rolling Five-Year Correlation: Index Price Level to EPS  
Consensus Estimates (12-M Blended Forward)



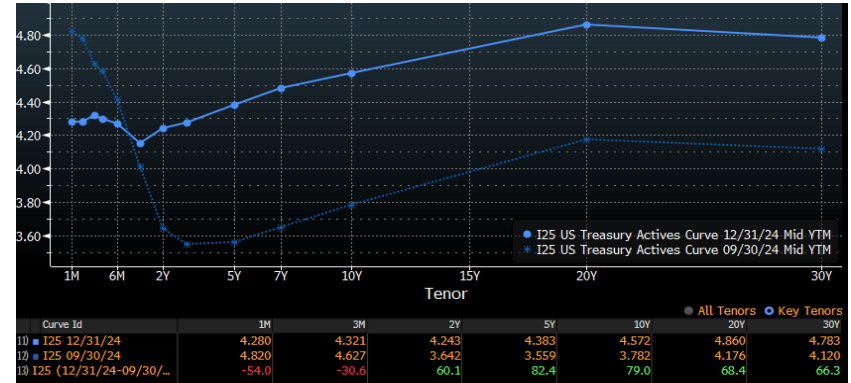
Date from: 12/31/2010 to 12/31/2024. Data in USD using Forward Consensus EPS Estimates

Source: FactSet

# Performance Highlights

## Core Fixed Income

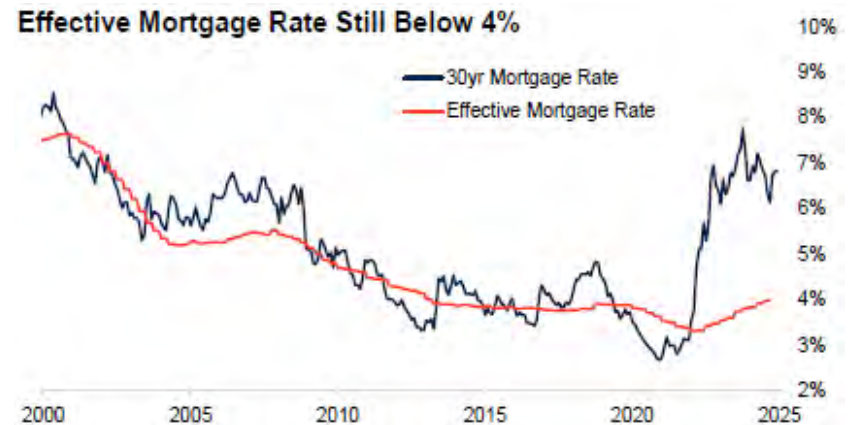
- Despite two 25 basis point rate cuts from the Fed, the U.S. Treasury yield curve was up across most of the maturity spectrum during the quarter.
- The 2YR and 5YR US Treasury yields rose 60 basis points and 82 basis points to close at 4.24% and 4.38%, respectively. The 10YR yield was 79 basis points higher to close at 4.57%. The 20YR and 30YR yields were higher 68 basis points and 66 basis points to finish the quarter at 4.86% and 4.78%, respectively.
- Yields on 10YR and 30YR Treasuries approached 2024 highs in December as investors begin demanding compensation for the risks associated with a potentially higher long-term neutral fed funds rate and the bond-bearish implications of expected upcoming federal policy.
- The closely watched 2-10YR curve finished the quarter with a spread of 33 basis points, continuing the healthy step towards normalcy after nearly two years of curve inversion which ended in September.



# Performance Highlights

## Core Fixed Income

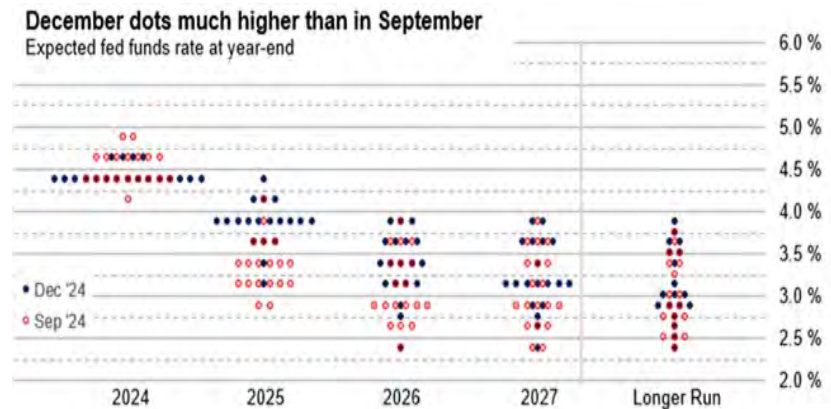
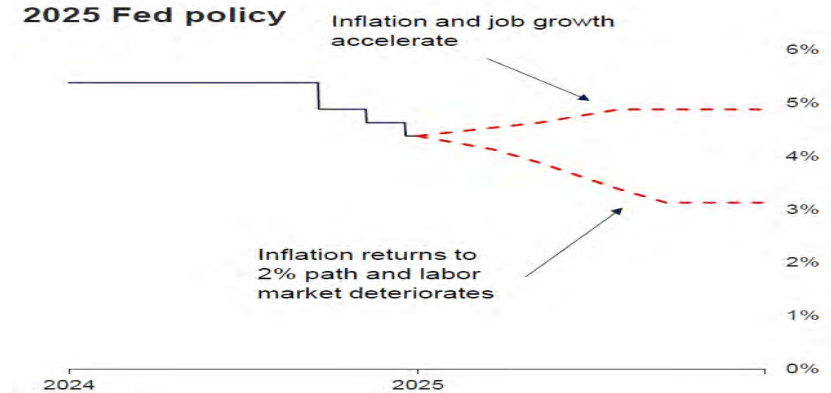
- The Core Fixed Income Portfolio produced a return of -2.92% for the quarter and 2.06% fiscal year-to-date, slightly outperforming the benchmark by 14 and 8 basis points, respectively.
- The portfolio’s relative outperformance was driven by ABS allocation as the sector’s excess return was 0.61%, losing only 0.05% in total return for the quarter.
- In addition, CMBS produced 0.66% excess returns with total return of -1.48% for the quarter with the MBS sector performing the worst with total return of -3.16%.
- The Corporate index OAS (Option Adjusted Spread) closed 9 basis points tighter at 80 during the quarter even though total return was negative 3.04% as rates rose.
- Although 30-year mortgage rates have hovered near 7% for 2 years, the effective mortgage rate has yet to surpass 4%, reflecting many homeowners locked into low rates since the pandemic housing boom.



# Performance Highlights

## Liquidity

- After reducing the target range for the federal funds rate by 100 basis points over the last three meetings of 2024, updated economic projections from the FOMC point to just two rate cuts in 2025.
- Cash produced a return of 1.20% for the 3-month period ending December 31<sup>st</sup>, slightly underperforming the 3-Month Treasury Bill benchmark which returned 1.23%.
- In the FOMC's updated Summary of Economic Projections (SEP), the most significant change was the inflation outlook. The 2025 PCE forecast rose from 2.1% to 2.5%. As a result, the committee now forecasts a 2025 median federal funds rate of 3.9%.
- Persistently strong growth and inflation readings materially reset market expectations for Fed easing over the coming year, with approximately four 25 basis point cuts removed from year-end 2025 pricing forecasts over the quarter.

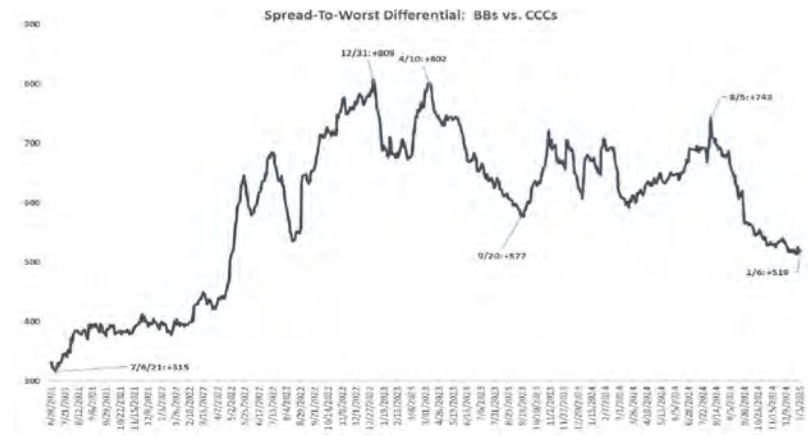
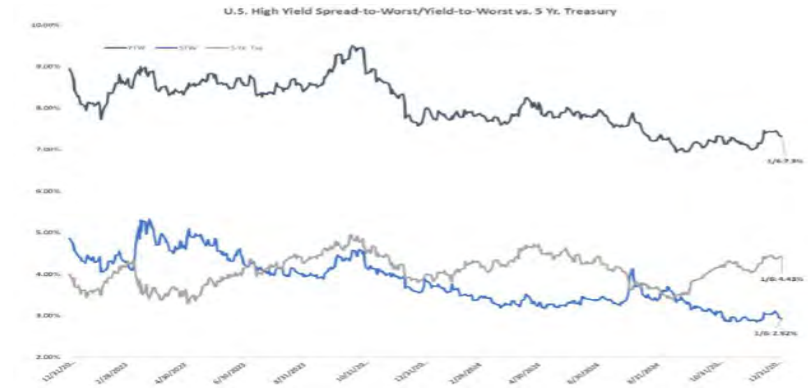




# Performance Highlights

## Specialty Credit Fixed Income

- The Specialty Credit portfolio produced a return of 2.23% for the quarter and 5.39% fiscal year-to-date, outperforming the custom benchmark which returned 1.22% and 4.92%, respectively.
- Valuation on a spread basis remain near eighteen-year tights. With interest rates resuming their post-election move higher, absolute yields of 7.31% remain at levels only seen approximately 30% of the time over the last ten years.
- Lower quality issuers outperformed for the sixth consecutive month in December. Over the quarter, BB, B and CCC rated issues returned -0.51%, 0.31% and 2.17%, respectively.
- Over longer periods the portfolio has contributed significant outperformance, beating the benchmark by 230 and 205 basis points over three- and five-year periods respectively.
- The High Yield option adjusted spread (OAS) tightened 8 basis points for the quarter to 287.

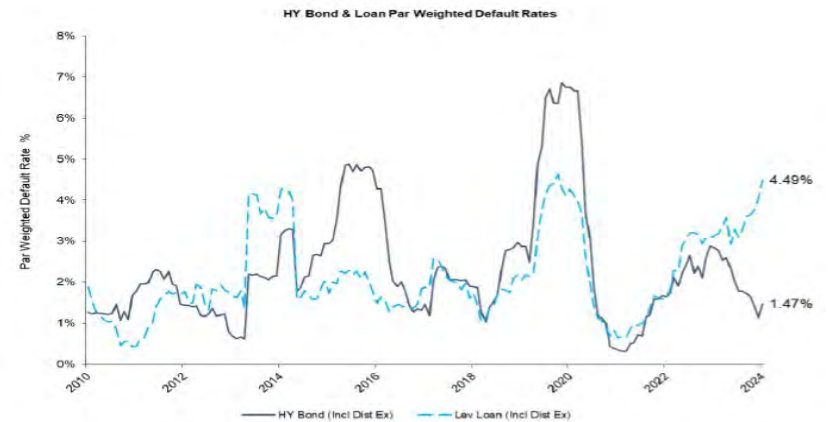
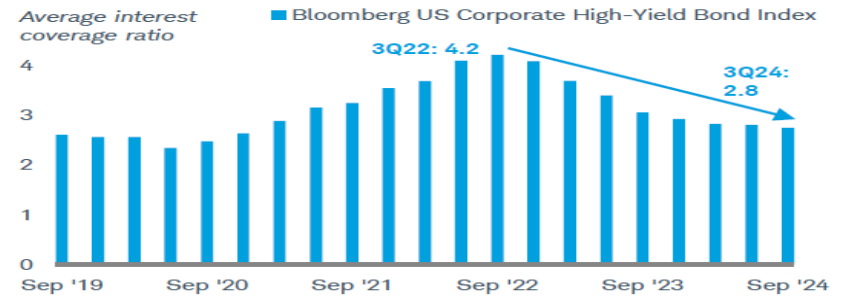


# Performance Highlights

## Specialty Credit Fixed Income

- Earnings season surprised to the upside, with high yield issuers' operating earnings rising 3.0% quarter over quarter and 1.2% year over year helping keep interest coverage favorable even with the recent decline.
- For the quarter, new issuance totaled \$49.5 billion with 64% representing refinancing, 23% for M&A and 6% accounted for dividends.
- The high yield bond default and distressed exchange activity remained moderate for the quarter. The LTM par-weighted default rate including distressed exchanges increased to 1.47%.
- Default and distressed exchange activity remains concentrated in the leveraged loan market, where the par-weighted default rate including distressed exchange increased to 4.49%.
- The over 300 basis point spread between high yield bond and leveraged loan default activity is at a 24-year high.

Interest coverage ratios for high-yield issuers have generally been declining

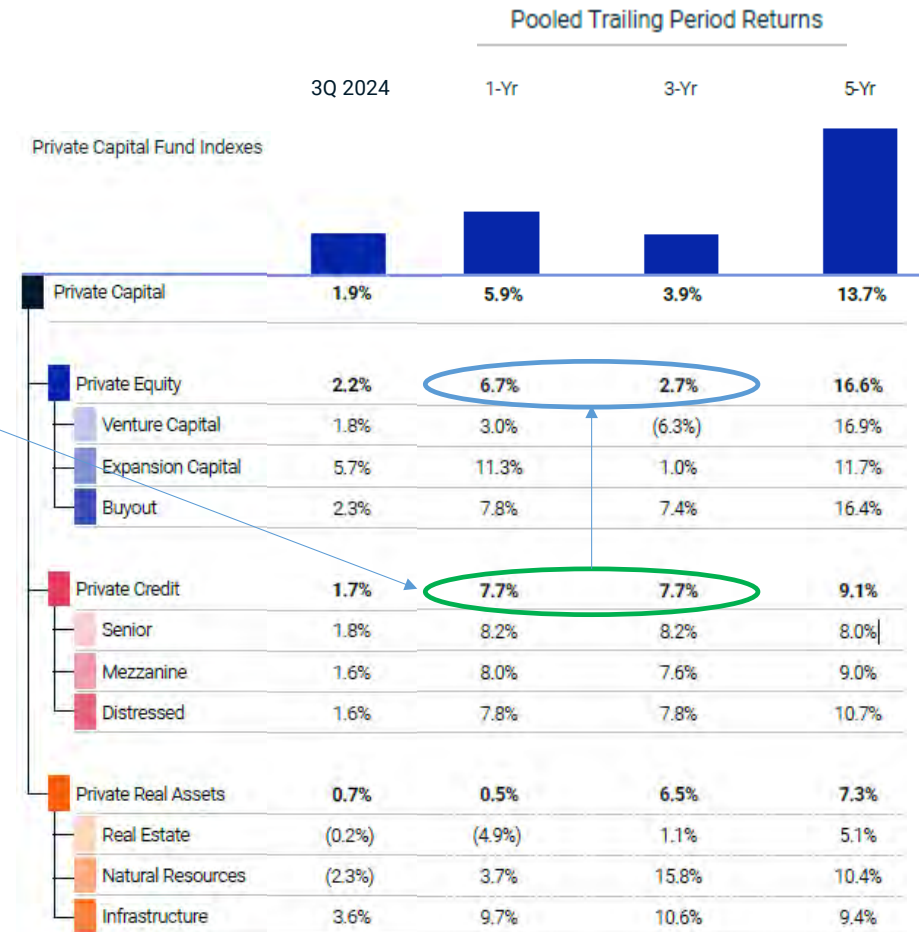


# Performance Highlights

## Private Capital (as of 9/30/24 - 1 quarter lag)

- Like public equity markets, private markets were broadly positive during the quarter. However, short-term returns for all alternative asset classes continued to lag a sharply rising US equity market, with the S&P 500 and Russell 3000 both gaining over 35% for the trailing 1 year ending 9/30/2024.
- Even though it is senior in the capital structure, private credit's 7-8% returns have outpaced those from private equity over the trailing 1 and 3 years.
- Given its ample liquidity position, KPPA maintains a long term focus in private markets and prefers that its managers continue to manage their investments if an attractive exit is not attainable in the current market environment.
- The Investment Team continues to find and evaluate attractive opportunities that have arisen from higher interest rates and lower liquidity pressuring current holders of attractive assets.

## MSCI Private Capital Benchmarks – US

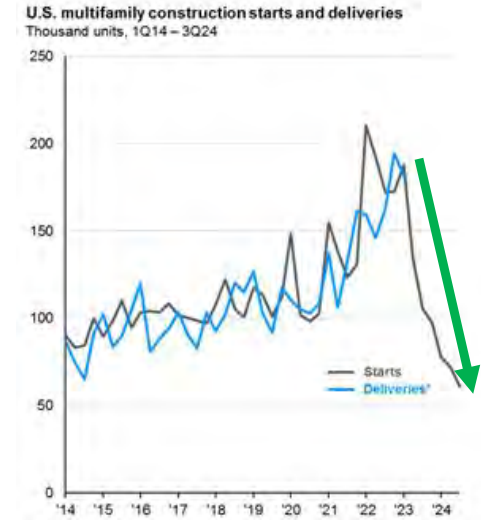
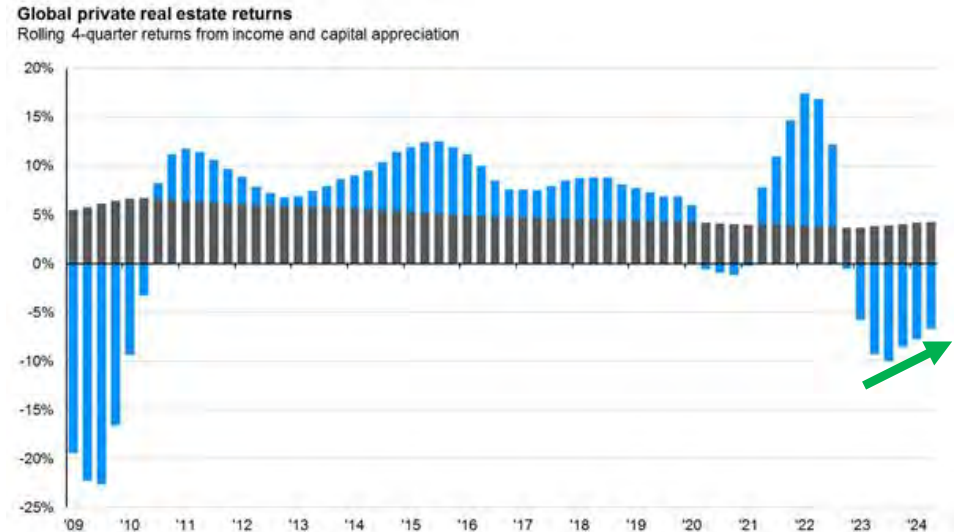


Source: MSCI Private Capital Benchmarks Report (data through calendar 3Q 2024)

# Performance Highlights

## Real Estate (as of 9/30/24 - 1 quarter lag)

- Real Estate markets and sentiment have begun to turn, with the Open End Diversified Core Equity (NFI-ODCE) index posting its first positive quarter since 3Q 2022.
- The Real Estate portfolio's value fell -0.9% during the quarter, slightly less than the benchmark's flat 0.0% return.
- The portfolio's open-end Core strategies all produced positive returns during the third quarter. While valuation markdowns persist, they diminished enough to be more than offset by steady income returns.
- Construction starts continued to fall sharply from their peak in 2022, even in more favored sectors like industrial and multifamily. The decline in deliveries that will result over the next several quarters should improve rent growth and supply dynamics.
- During the second half of 2024, the three Core equity funds that make up the portfolio's largest positions collectively raised over a billion dollars, largely cleared their redemption queues, and called capital from their contribution queues to start playing offense.



Source: JP Morgan

# Performance Highlights

## Real Return

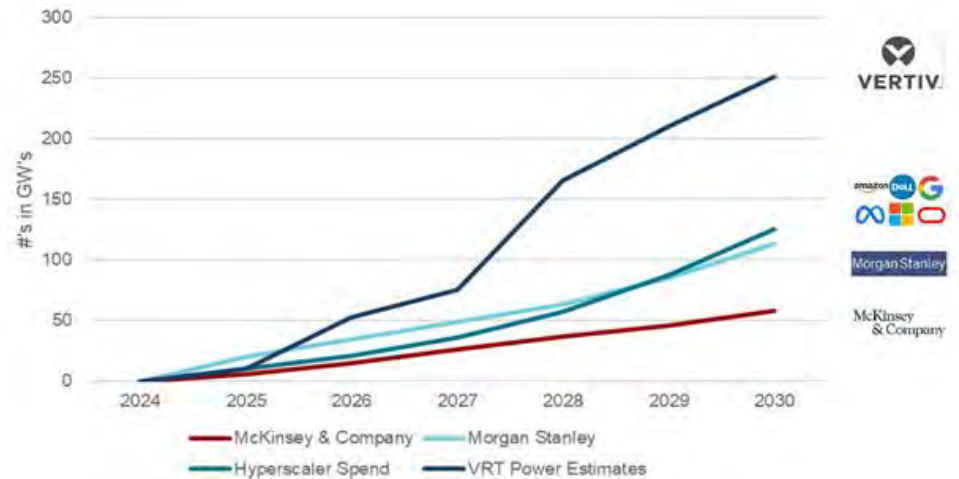
- The Real Return portfolio continued to perform well during the quarter, posting a return of 3.7% that outpaced the 1.0% return of its benchmark.
- A second-order effect of the current AI and technology boom is the significant increase in demand for power and the energy needed to supply it. One key beneficiary in 2024 was utility stocks, as its index nearly matched the S&P 500 with a 23.4% gain.
- Even after declining nearly 7% in December, the portfolio's MLP exposure gained 13.7% for the quarter versus its benchmark return of 4.9%. The account was up more than 46% for calendar year 2024 as strong cash flows, disciplined capex, and consolidation continued to benefit the industry.
- Infrastructure debt, marine transportation, and sports investments also contributed to the portfolio's outperformance.
- The portfolio's farmland mandate was funded in 4Q 2024 along with a toll road continuation vehicle investment with an existing private equity manager.

US data center energy demand: Need to add three NYCs to the power grid by 2030



Source: Apollo Global

## AI driving significant US incremental power demand



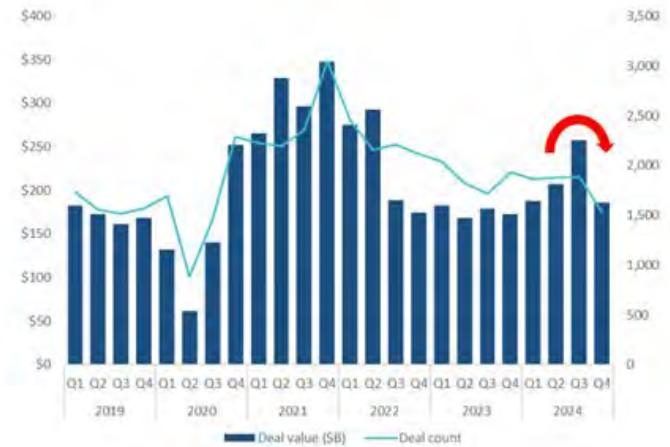
Source: Tortoise Capital

# Performance Highlights

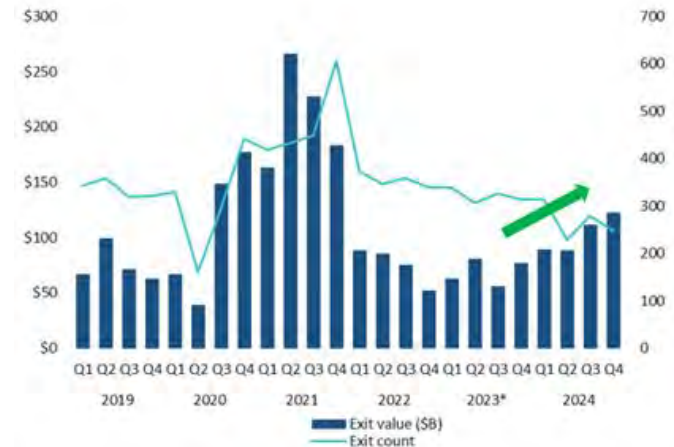
## Private Equity

- The Private Equity portfolio produced a return of 1.0% for the quarter, underperforming the benchmark’s return of 7.0%.
- Performance relative to the benchmark (Russell 3000 + 3%, lagged one quarter) has continued to trail due to a robust equity market that has gained more than 35% over the past year through 9/30/2024.
- Deal activity and exits have picked up in recent quarters, but the slow pace of distributions remains a concern for many investors in private equity funds. While distributions from mature funds have been muted for the past 2-3 years, more recently raised funds continue to call capital, which is straining investor liquidity.

PE Deal Activity by Quarter



Exit Activity by Quarter



Source: Pitchbook, Geography; US, As of 12/31/2024

# Performance Highlights

## Private Equity

- Given these factors, managers continue to face a difficult fundraising environment. This has contributed to private equity management fees falling to their lowest level in two decades.

US Private Equity Fundraising Activity  
2014-24



Source: Pitchbook, Geography; US, As of 12/31/2024

The mean buyout fund management fee is at its lowest in two decades of data

Average global buyout fund management fee rates, by vintage year (%)



FINANCIAL TIMES

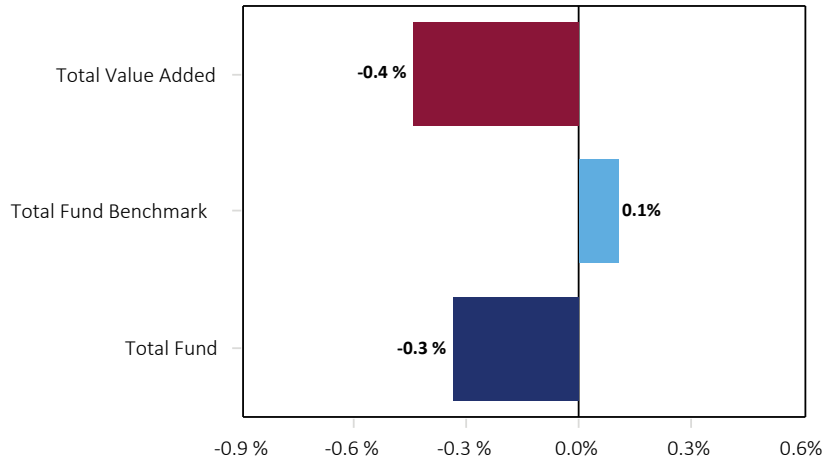
Source: Preqin Pro

# Total Fund Attribution

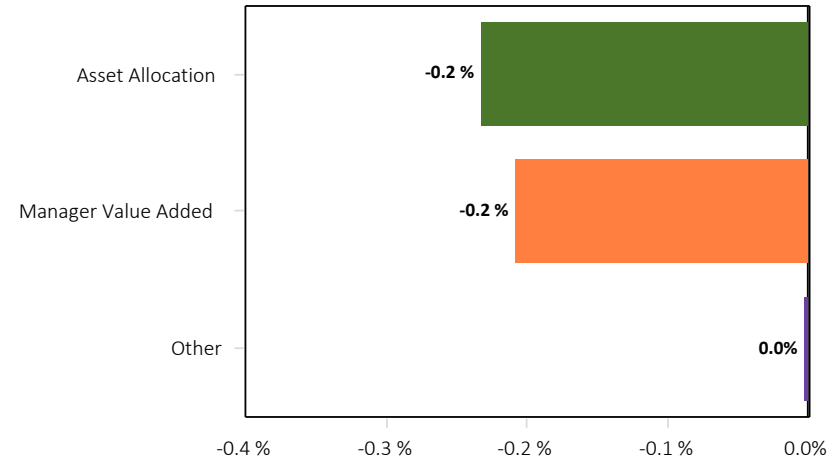
CERS Pension Plan

Periods Ended 1 Quarter Ending December 31, 2024

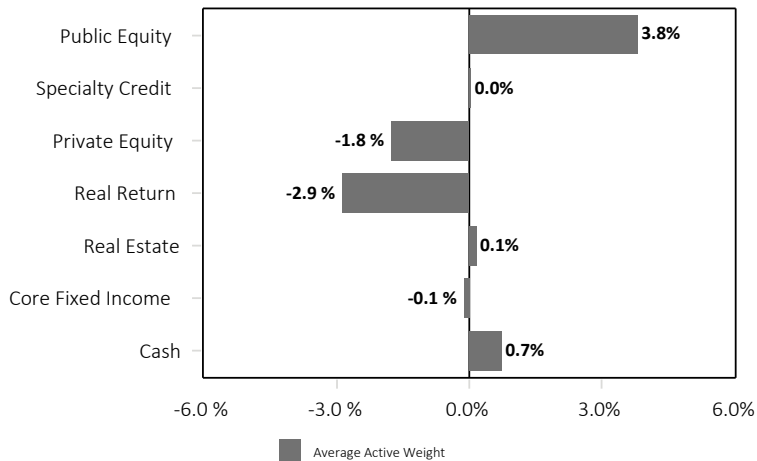
## Total Fund Performance



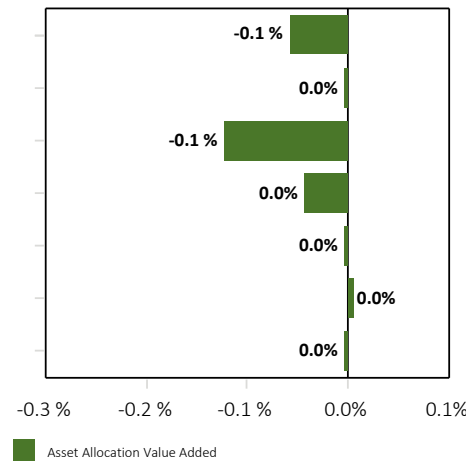
## Total Value Added:-0.4 %



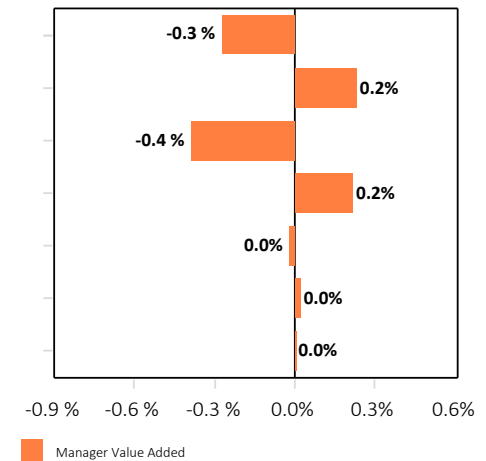
## Total Asset Allocation:-0.2 %



## Asset Allocation Value Added:-0.2 %



## Total Manager Value Added:-0.2 %



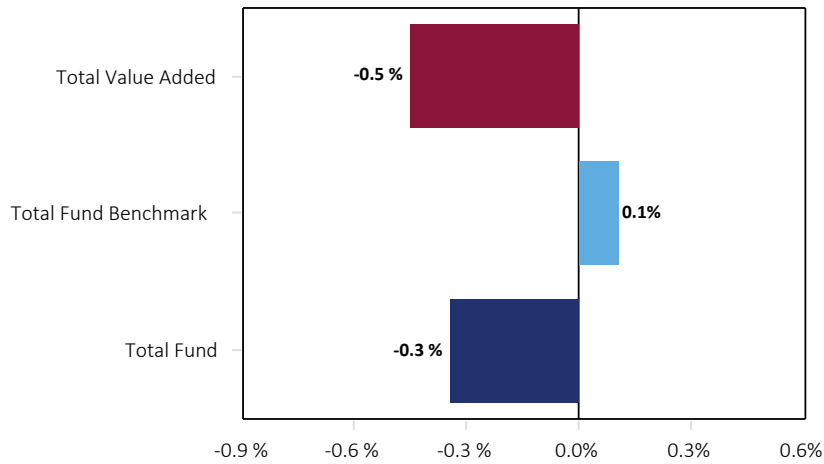


# Total Fund Attribution

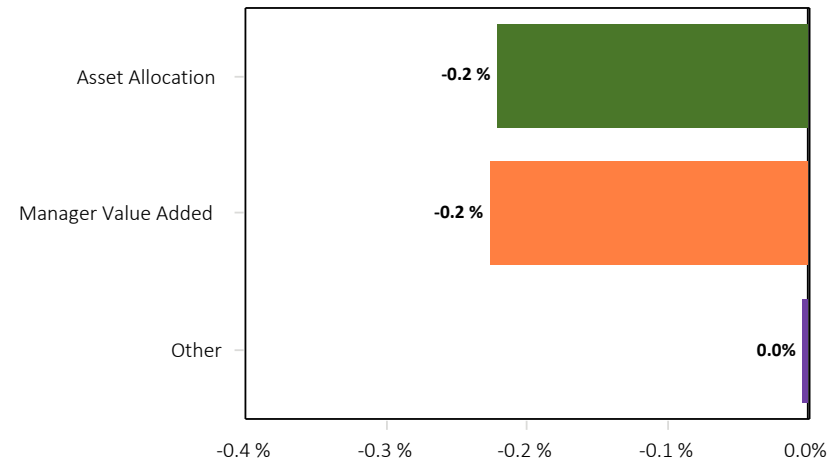
CERS (H) Pension Plan

Periods Ended 1 Quarter Ending December 31, 2024

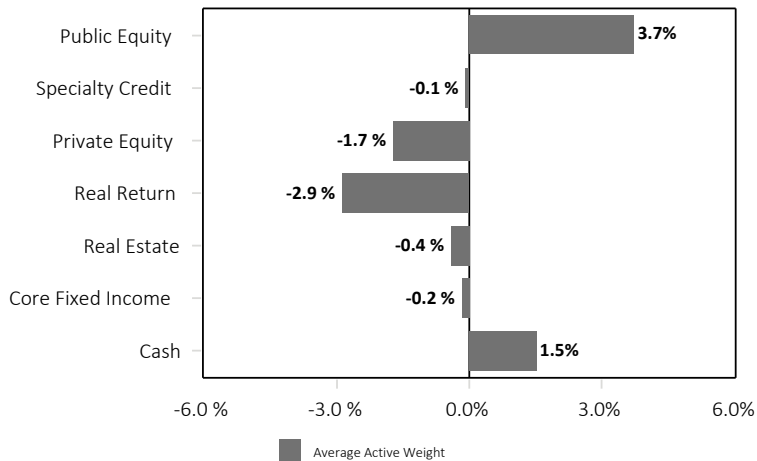
## Total Fund Performance



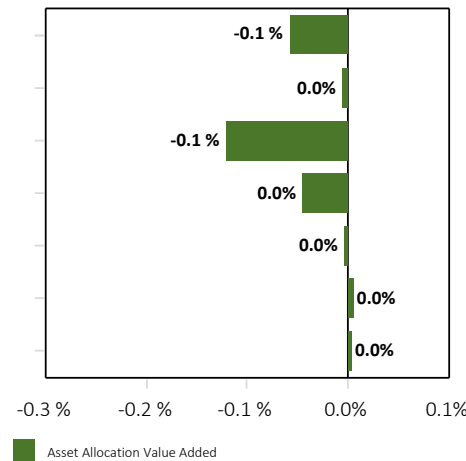
## Total Value Added:-0.5 %



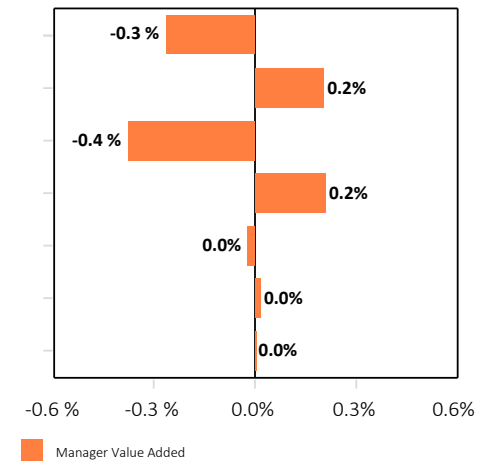
## Total Asset Allocation:-0.2 %



## Asset Allocation Value Added:-0.2 %



## Total Manager Value Added:-0.2 %

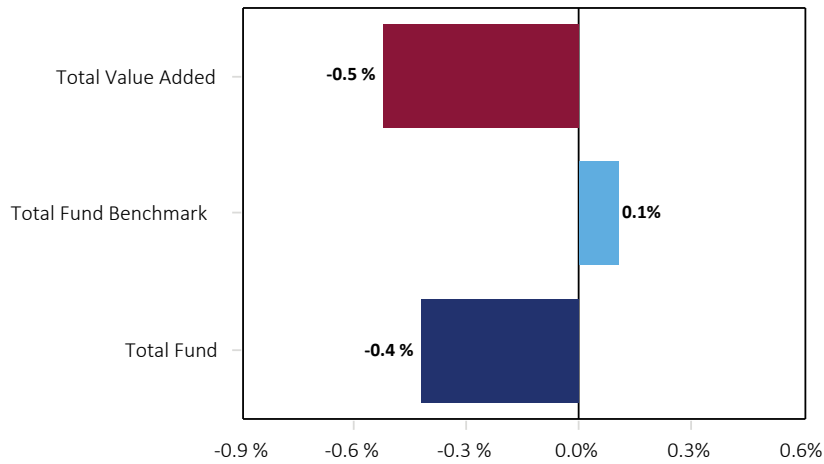


# Total Fund Attribution

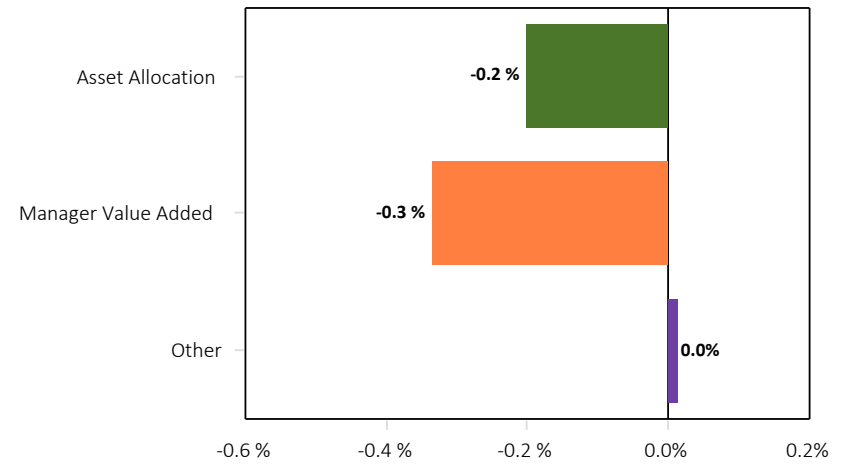
CERS Insurance Plan

Periods Ended 1 Quarter Ending December 31, 2024

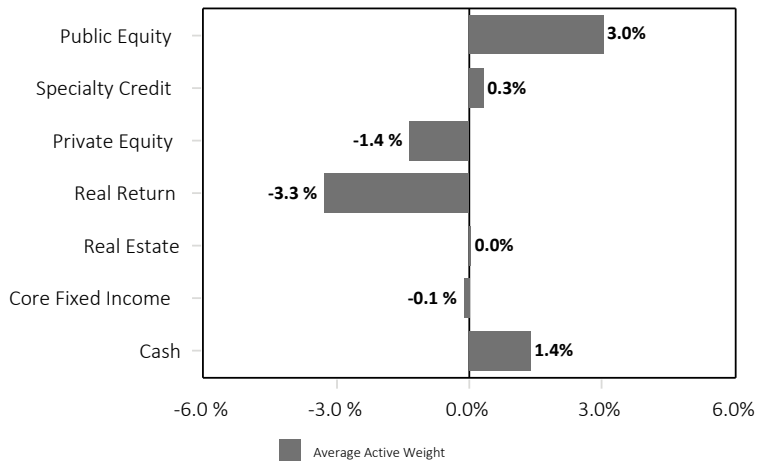
## Total Fund Performance



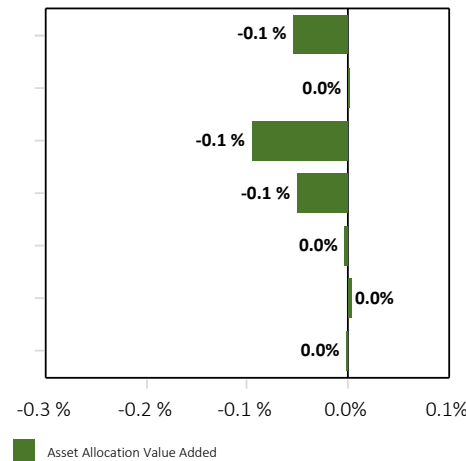
## Total Value Added:-0.5 %



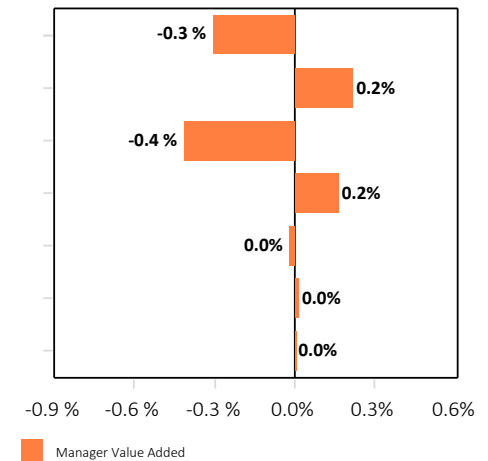
## Total Asset Allocation:-0.2 %



## Asset Allocation Value Added:-0.2 %



## Total Manager Value Added:-0.3 %

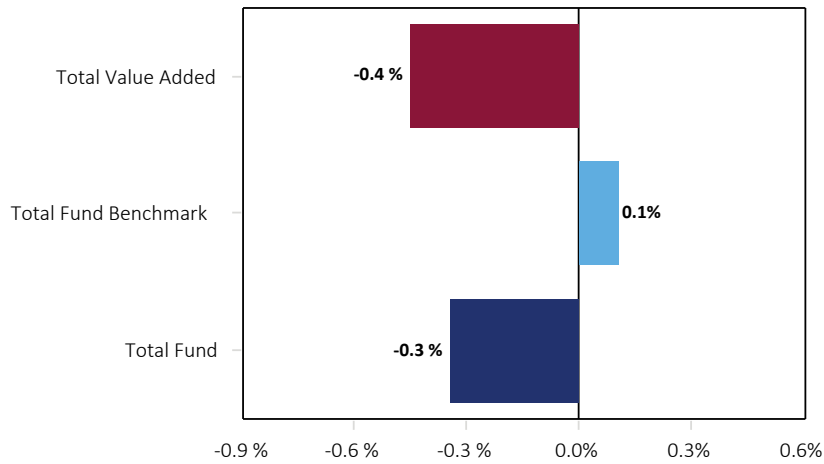


# Total Fund Attribution

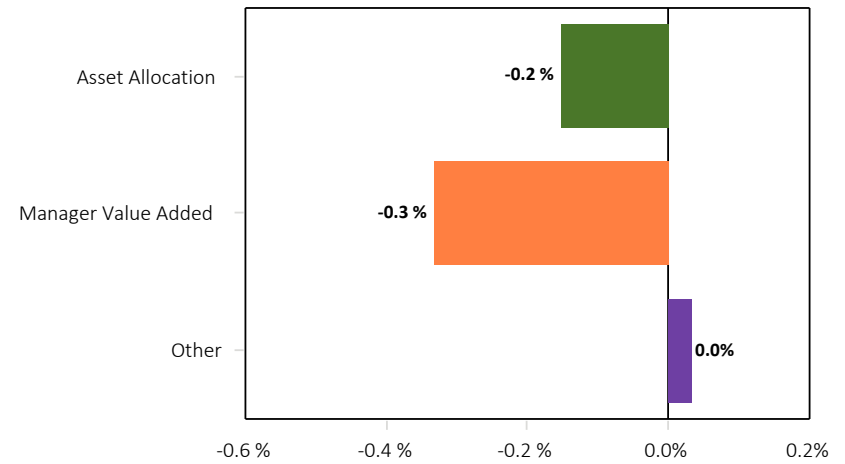
CERS (H) Insurance Plan

Periods Ended 1 Quarter Ending December 31, 2024

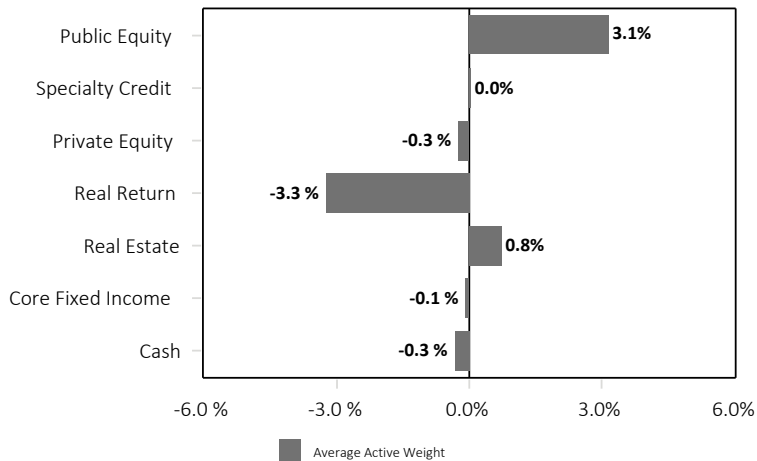
## Total Fund Performance



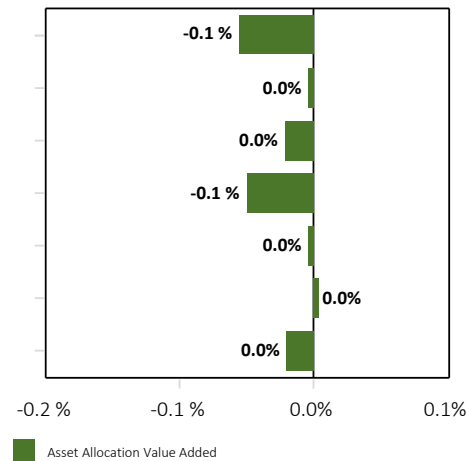
## Total Value Added:-0.4 %



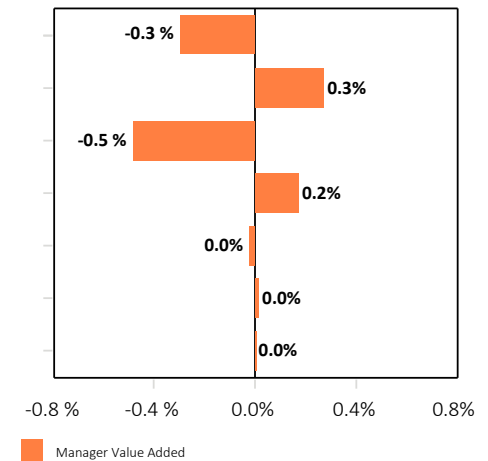
## Total Asset Allocation:-0.2 %



## Asset Allocation Value Added:-0.2 %



## Total Manager Value Added:-0.3 %

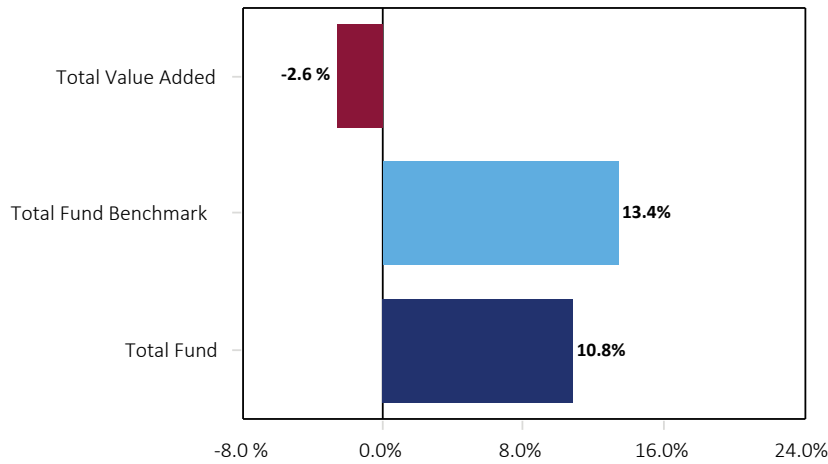


# Total Fund Attribution

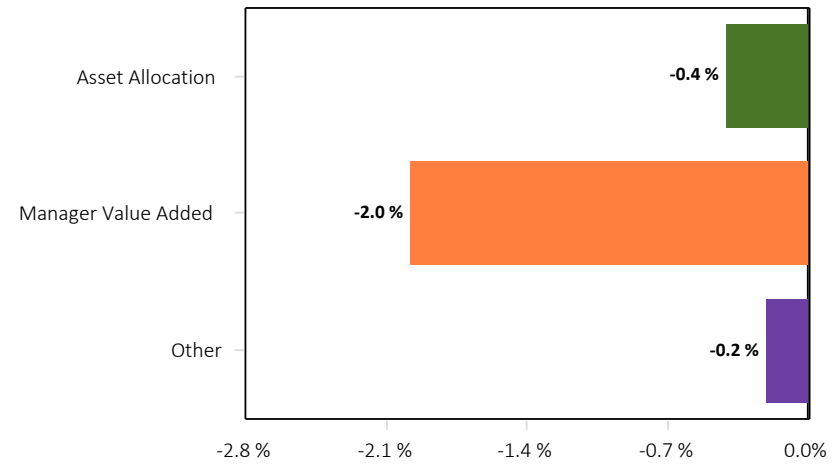
CERS Pension Plan

Periods Ended 1 Year Ending December 31, 2024

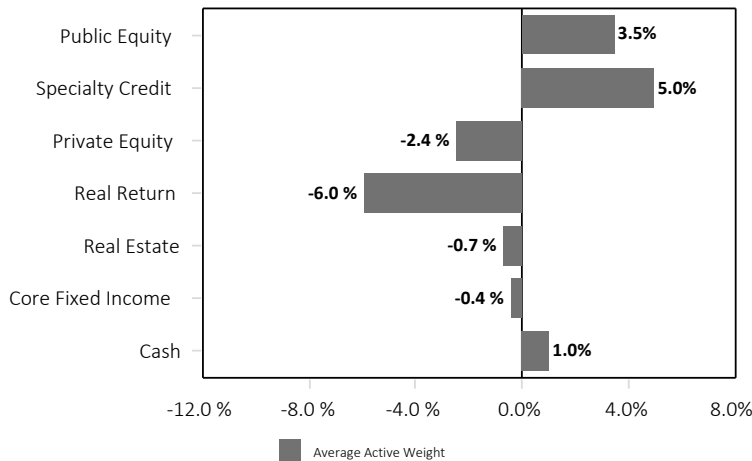
## Total Fund Performance



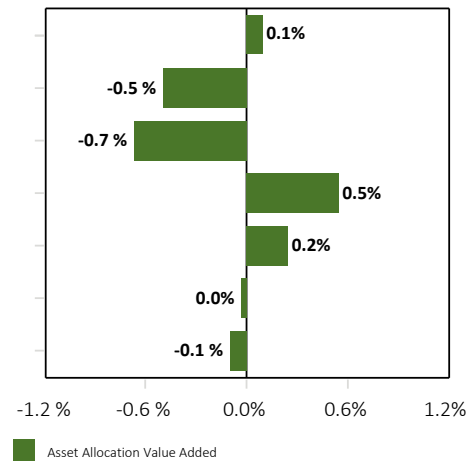
## Total Value Added:-2.6 %



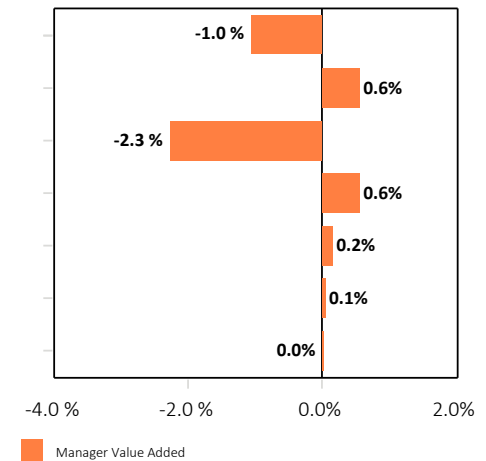
## Total Asset Allocation:-0.4 %



## Asset Allocation Value Added:-0.4 %



## Total Manager Value Added:-2.0 %

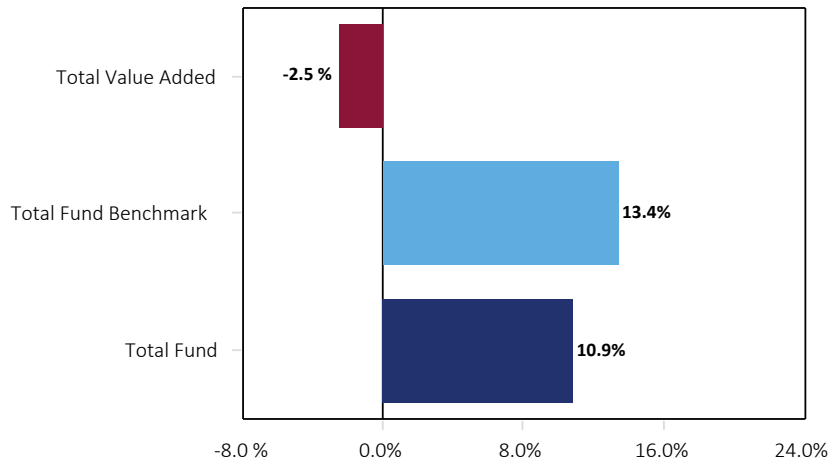


# Total Fund Attribution

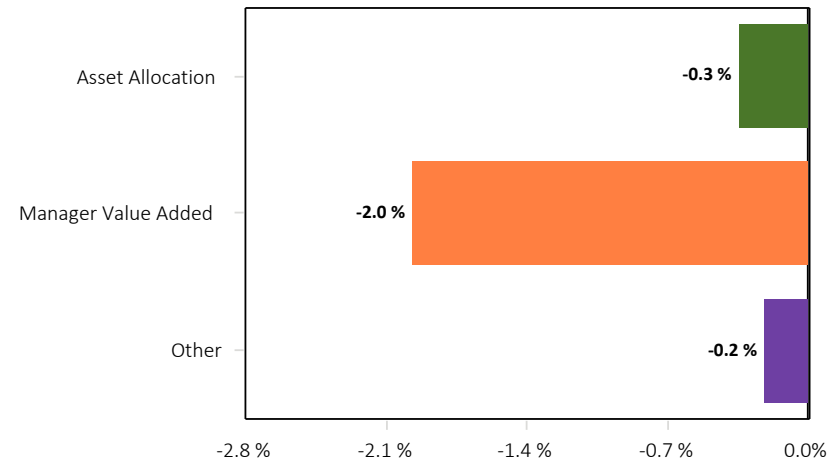
CERS (H) Pension Plan

Periods Ended 1 Year Ending December 31, 2024

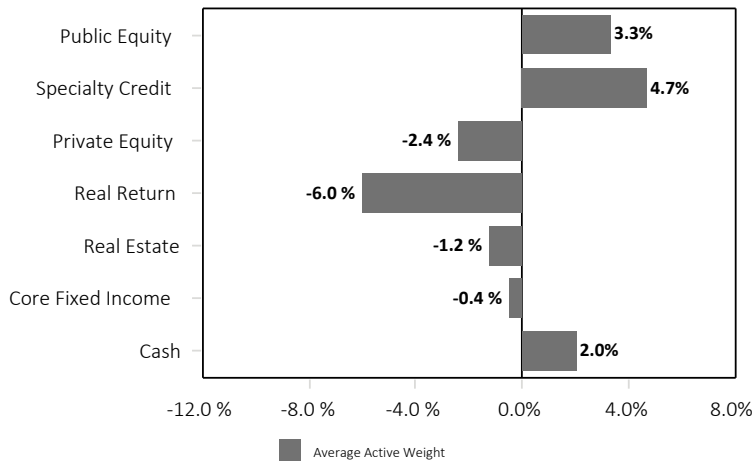
## Total Fund Performance



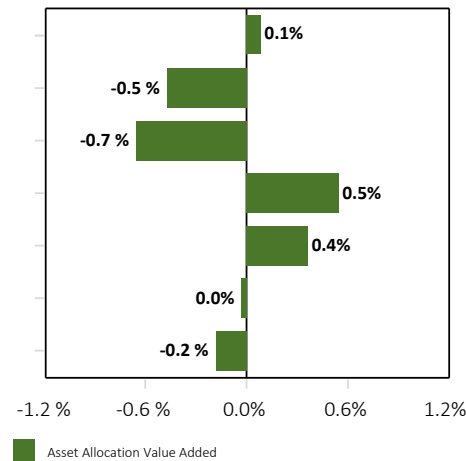
## Total Value Added:-2.5 %



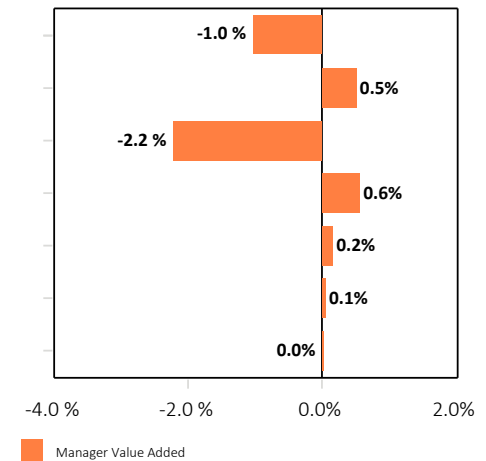
## Total Asset Allocation:-0.3 %



## Asset Allocation Value Added:-0.3 %



## Total Manager Value Added:-2.0 %

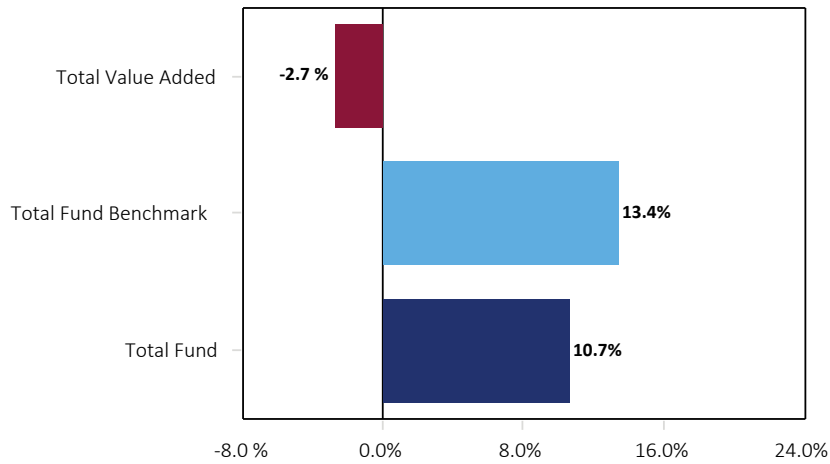


# Total Fund Attribution

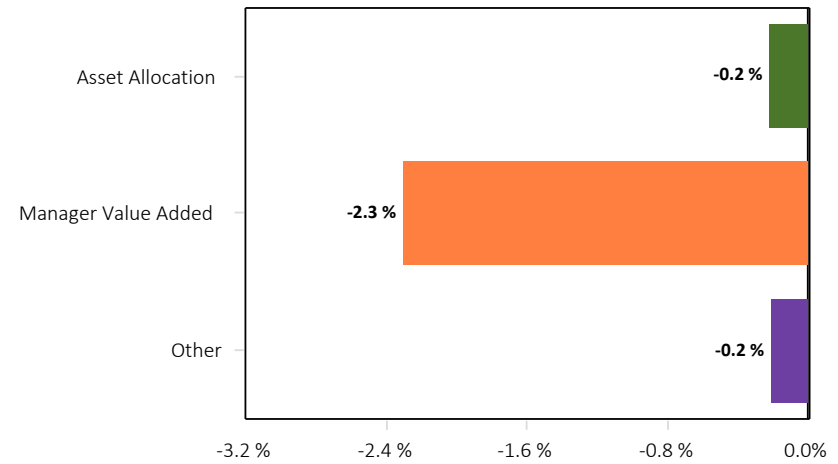
CERS Insurance Plan

Periods Ended 1 Year Ending December 31, 2024

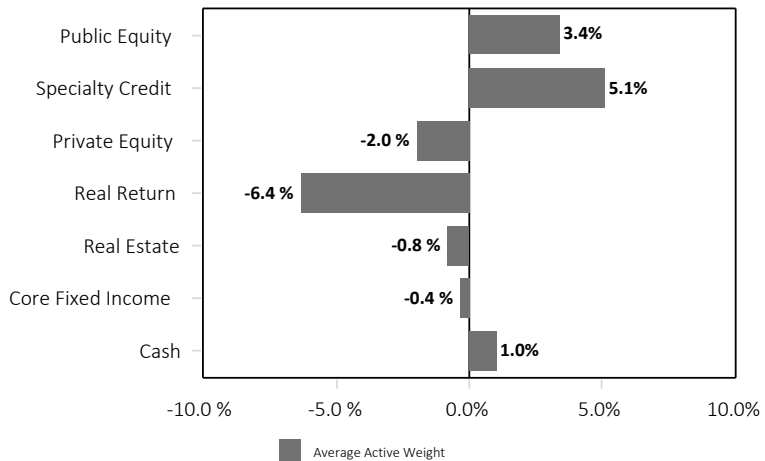
## Total Fund Performance



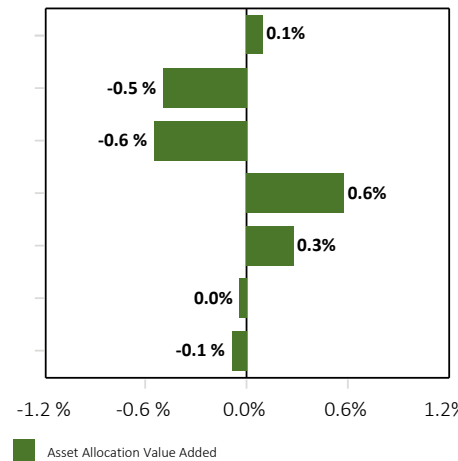
## Total Value Added:-2.7 %



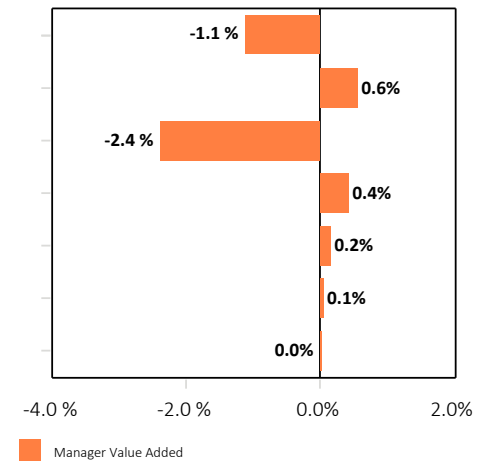
## Total Asset Allocation:-0.2 %



## Asset Allocation Value Added:-0.2 %



## Total Manager Value Added:-2.3 %

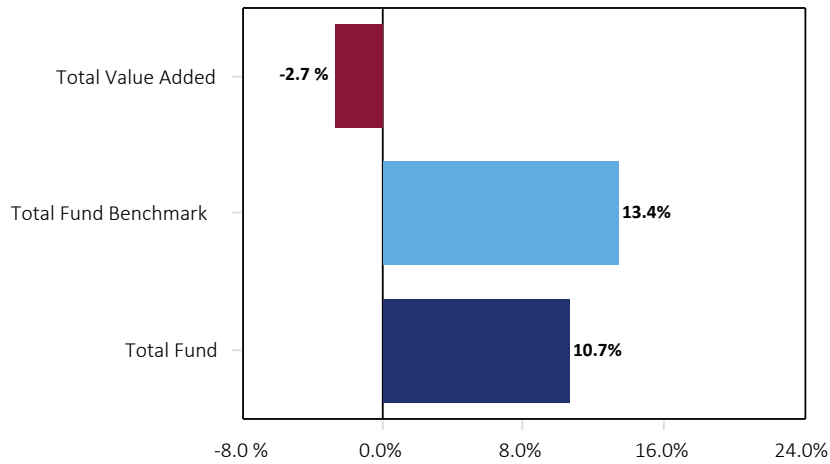


# Total Fund Attribution

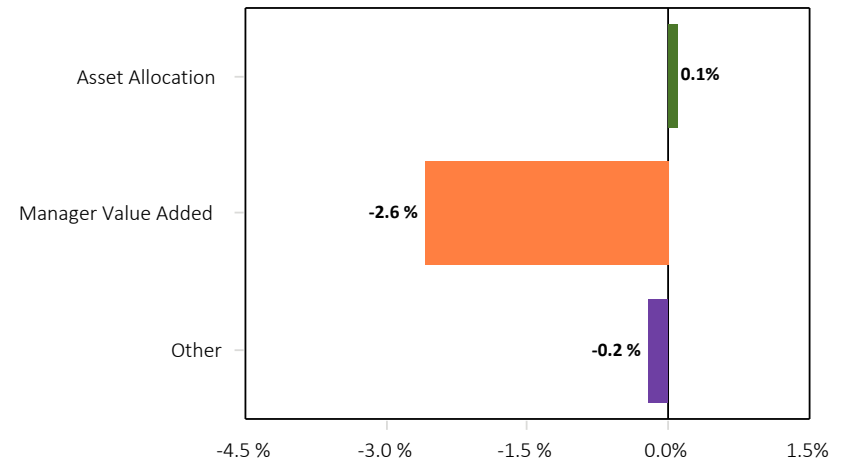
CERS (H) Insurance Plan

Periods Ended 1 Year Ending December 31, 2024

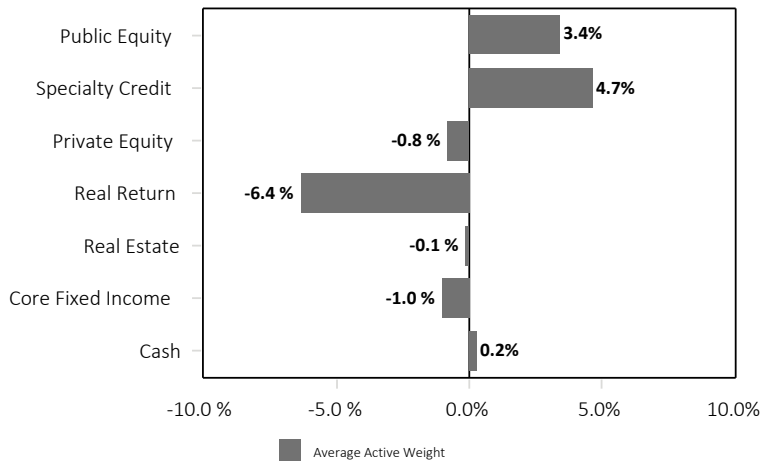
## Total Fund Performance



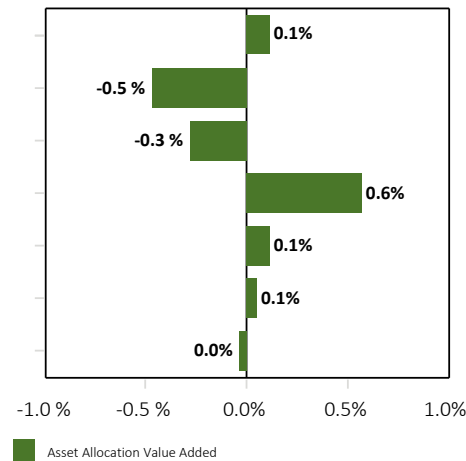
## Total Value Added:-2.7 %



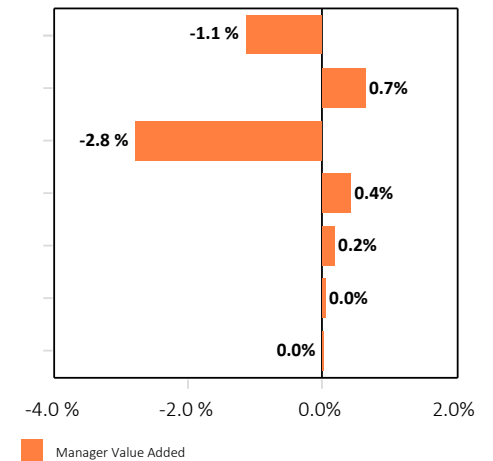
## Total Asset Allocation:0.1%



## Asset Allocation Value Added:0.1%



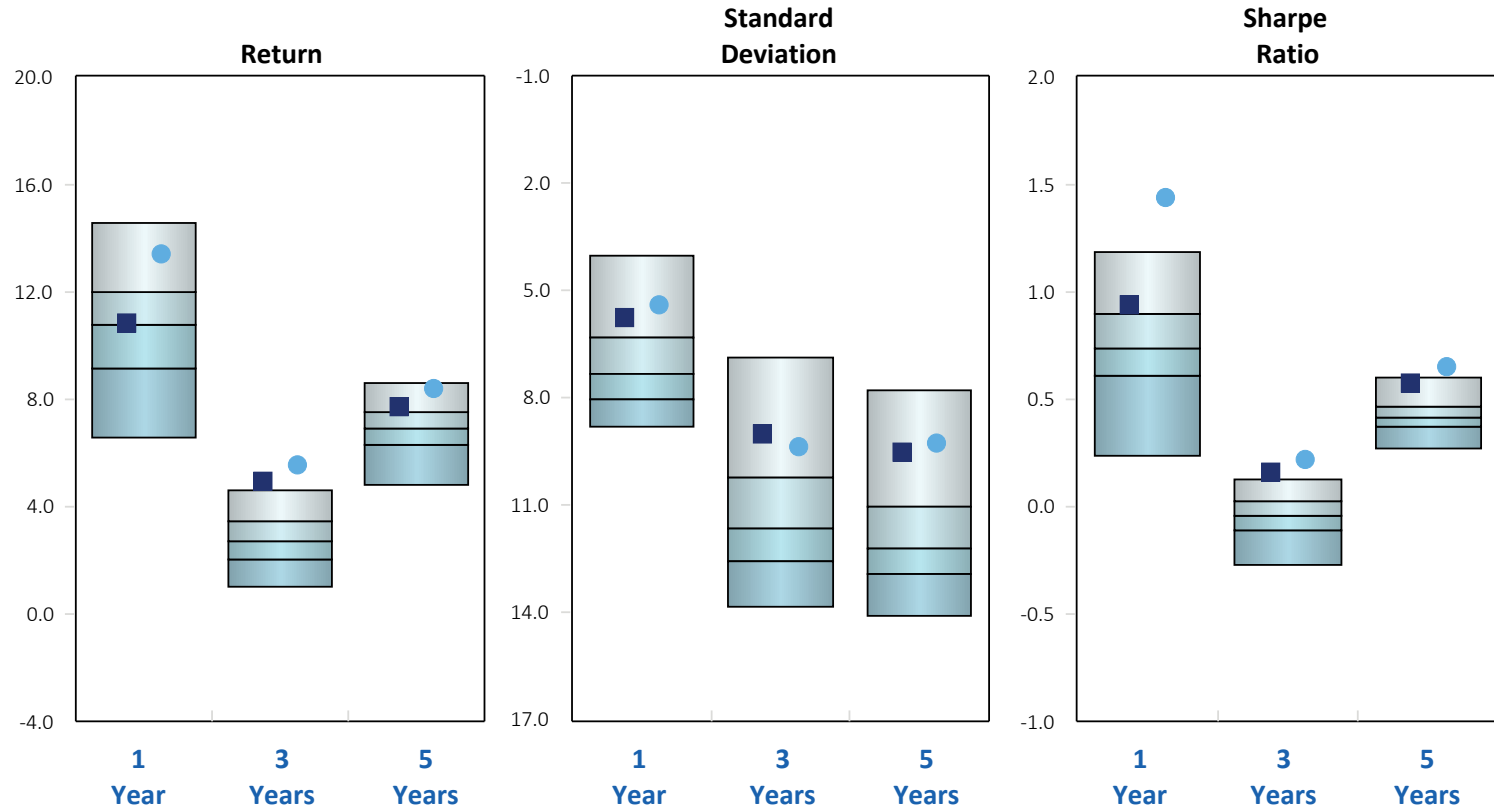
## Total Manager Value Added:-2.6 %



# Plan Sponsor Peer Group Analysis - Multi Statistics

CERS Pension Plan vs All Public Plans-Total Fund

Periods Ended December 31, 2024



	1 Year	3 Years	5 Years	1 Year	3 Years	5 Years	1 Year	3 Years	5 Years
■ CERS Pension Plan	10.84 (50)	4.94 (3)	7.74 (21)	5.75 (18)	8.99 (14)	9.52 (12)	0.94 (21)	0.16 (4)	0.57 (7)
● CERS Pension IPS Index	13.43 (11)	5.59 (3)	8.38 (8)	5.39 (15)	9.37 (16)	9.26 (11)	1.44 (1)	0.22 (2)	0.65 (3)
5th Percentile	14.55	4.58	8.64	4.01	6.88	7.81	1.19	0.13	0.60
1st Quartile	11.98	3.46	7.55	6.31	10.25	11.03	0.90	0.03	0.47
Median	10.77	2.70	6.90	7.32	11.66	12.20	0.74	-0.05	0.41
3rd Quartile	9.17	2.00	6.29	8.05	12.56	12.92	0.61	-0.11	0.37
95th Percentile	6.56	1.02	4.84	8.83	13.82	14.10	0.24	-0.27	0.27

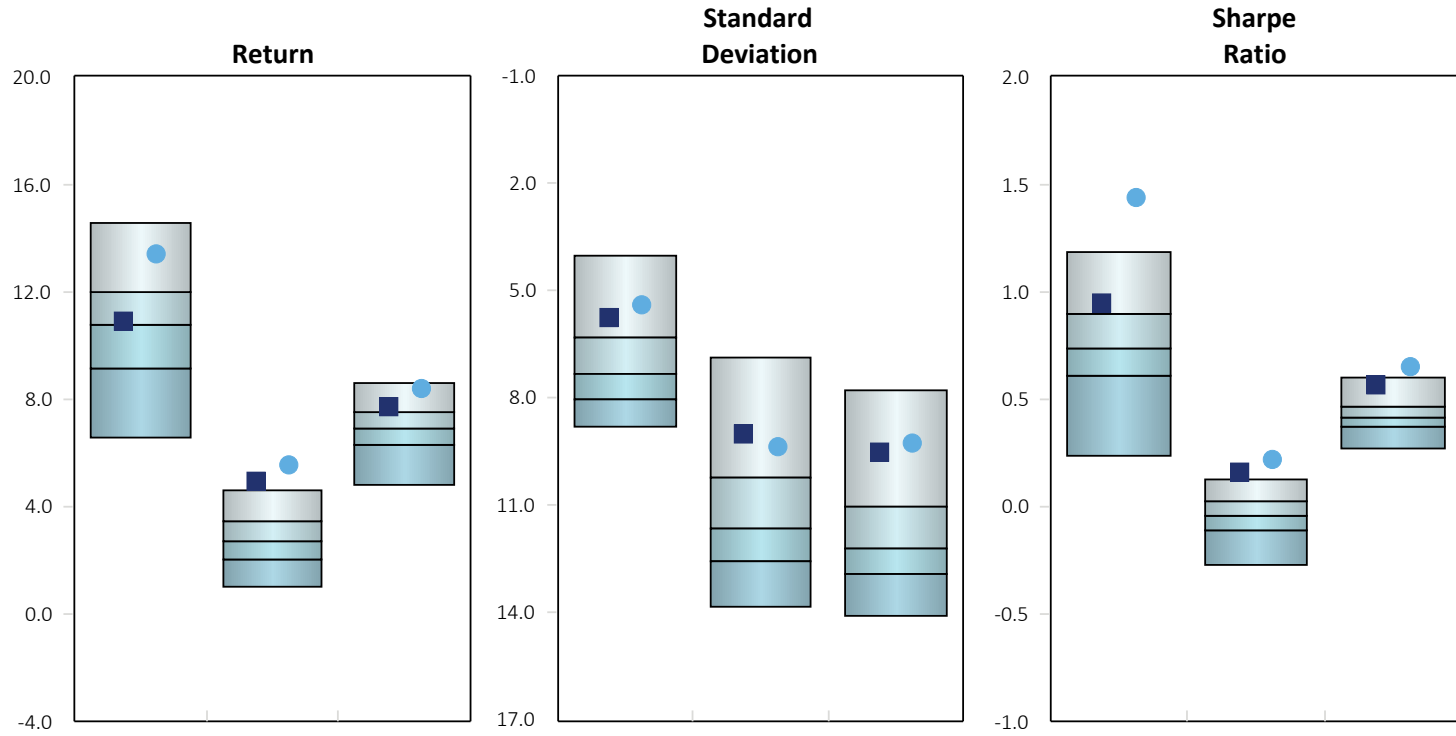
Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.



# Plan Sponsor Peer Group Analysis - Multi Statistics

CERS (H) Pension Plan vs All Public Plans-Total Fund

Periods Ended December 31, 2024



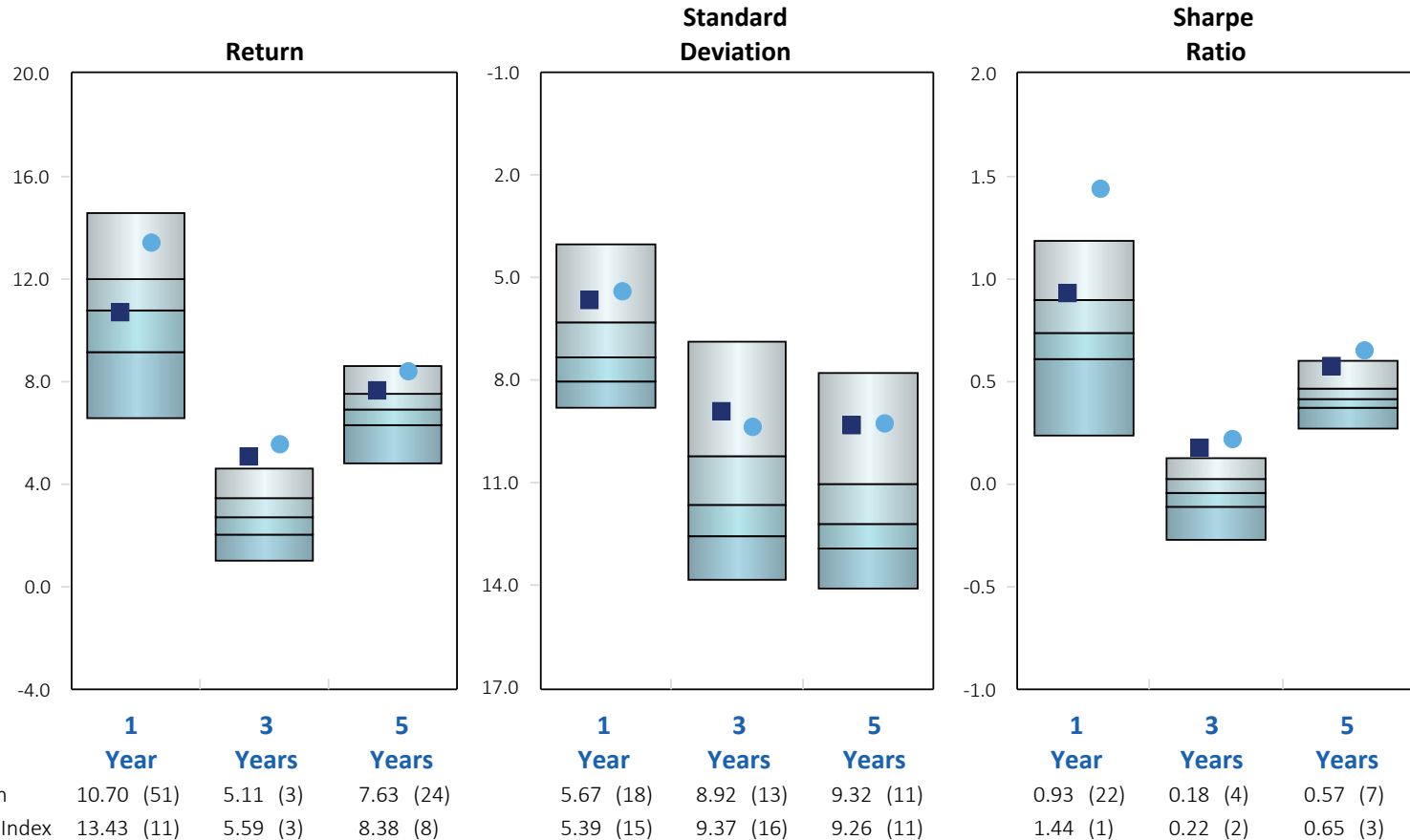
	1 Year	3 Years	5 Years	1 Year	3 Years	5 Years	1 Year	3 Years	5 Years
■ CERS (H) Pension Plan	10.91 (49)	4.97 (3)	7.72 (21)	5.77 (18)	9.04 (14)	9.53 (12)	0.95 (21)	0.16 (4)	0.57 (7)
● CERS (H) Pension IPS Index	13.43 (11)	5.59 (3)	8.38 (8)	5.39 (15)	9.37 (16)	9.26 (11)	1.44 (1)	0.22 (2)	0.65 (3)
5th Percentile	14.55	4.58	8.64	4.01	6.88	7.81	1.19	0.13	0.60
1st Quartile	11.98	3.46	7.55	6.31	10.25	11.03	0.90	0.03	0.47
Median	10.77	2.70	6.90	7.32	11.66	12.20	0.74	-0.05	0.41
3rd Quartile	9.17	2.00	6.29	8.05	12.56	12.92	0.61	-0.11	0.37
95th Percentile	6.56	1.02	4.84	8.83	13.82	14.10	0.24	-0.27	0.27

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

# Plan Sponsor Peer Group Analysis - Multi Statistics

CERS Insurance Plan vs All Public Plans-Total Fund

Periods Ended December 31, 2024



	1 Year	3 Years	5 Years
5th Percentile	14.55	4.58	8.64
1st Quartile	11.98	3.46	7.55
Median	10.77	2.70	6.90
3rd Quartile	9.17	2.00	6.29
95th Percentile	6.56	1.02	4.84

	1 Year	3 Years	5 Years
5th Percentile	4.01	6.88	7.81
1st Quartile	6.31	10.25	11.03
Median	7.32	11.66	12.20
3rd Quartile	8.05	12.56	12.92
95th Percentile	8.83	13.82	14.10

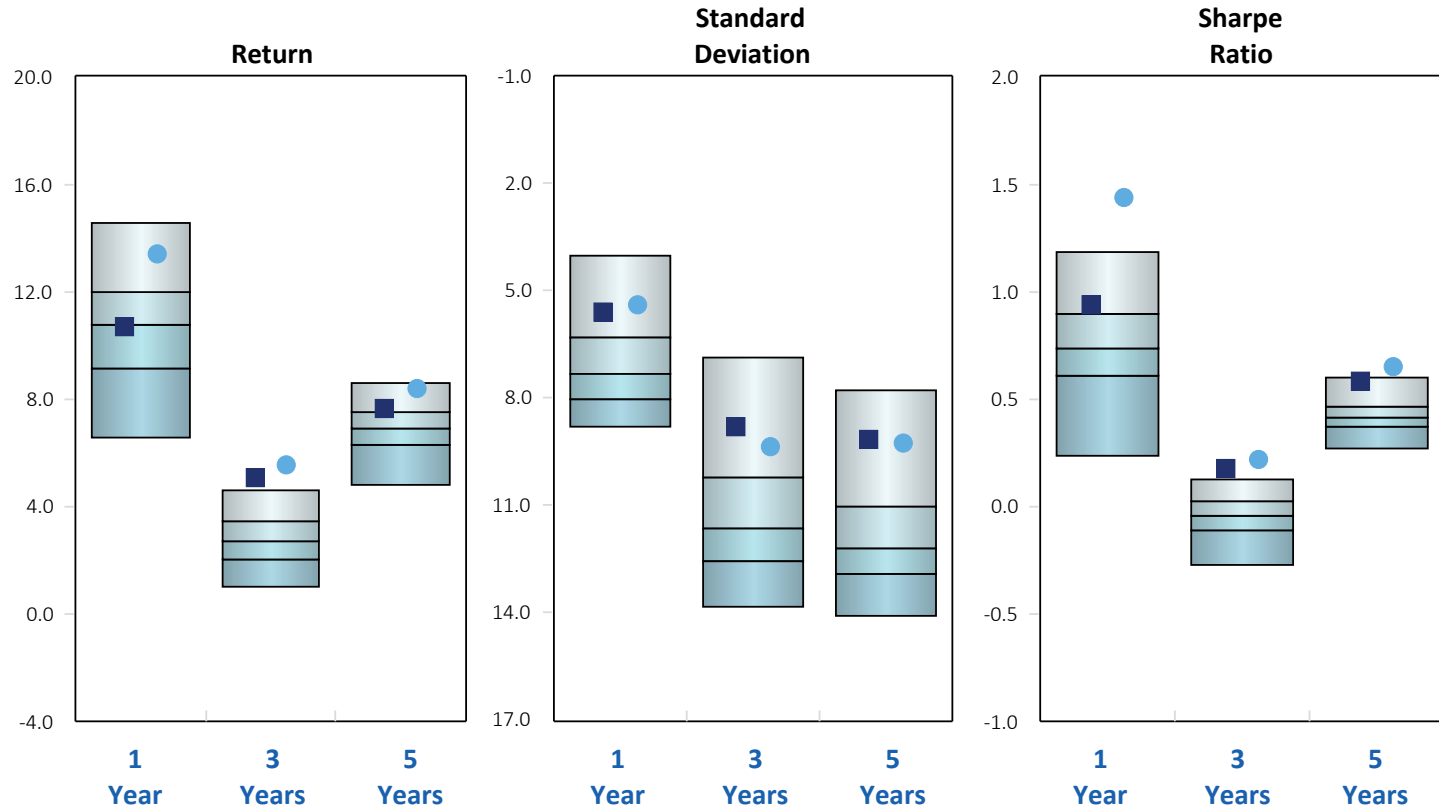
	1 Year	3 Years	5 Years
5th Percentile	1.19	0.13	0.60
1st Quartile	0.90	0.03	0.47
Median	0.74	-0.05	0.41
3rd Quartile	0.61	-0.11	0.37
95th Percentile	0.24	-0.27	0.27

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

# Plan Sponsor Peer Group Analysis - Multi Statistics

CERS (H) Insurance Plan vs All Public Plans-Total Fund

Periods Ended December 31, 2024



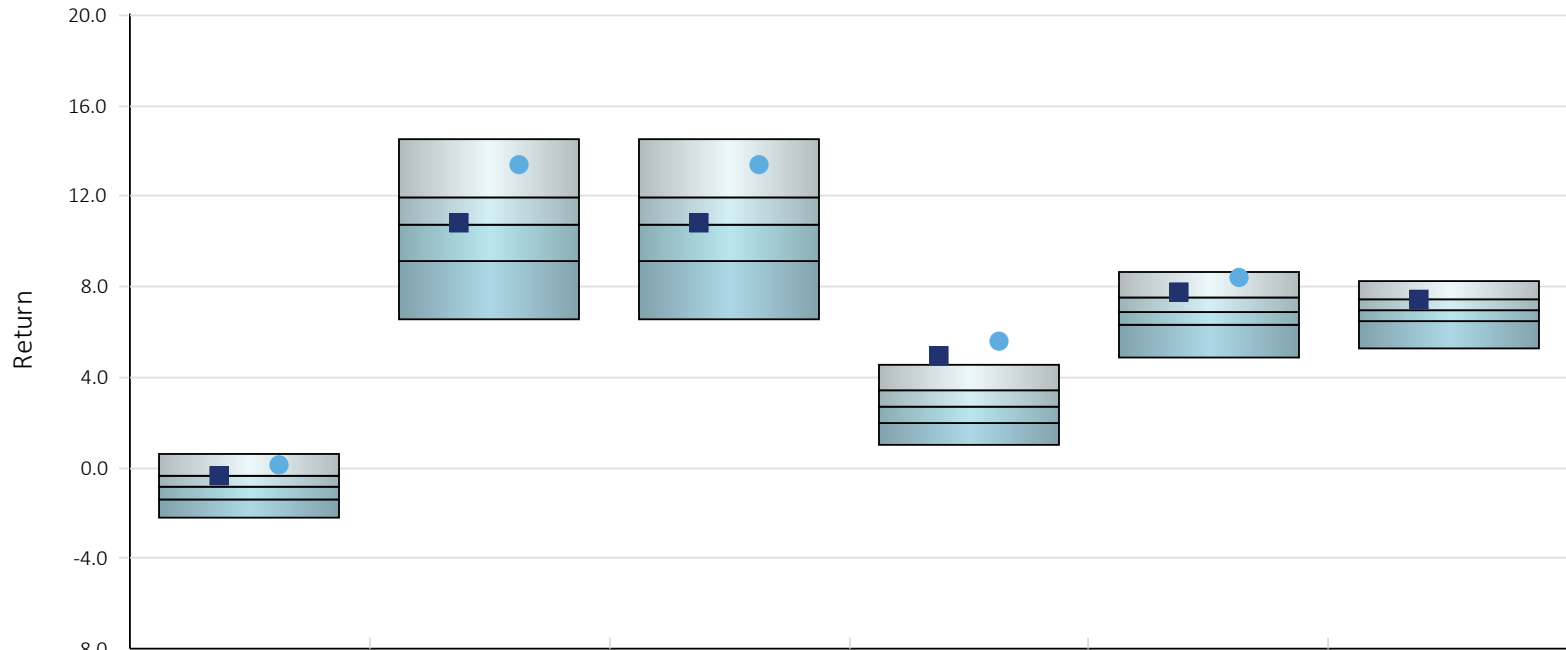
	1 Year	3 Years	5 Years	1 Year	3 Years	5 Years	1 Year	3 Years	5 Years
■ CERS (H) Insurance Plan	10.71 (51)	5.09 (3)	7.68 (22)	5.61 (17)	8.80 (13)	9.18 (10)	0.94 (21)	0.18 (4)	0.59 (6)
● CERS (H) Insurance IPS Index	13.43 (11)	5.59 (3)	8.38 (8)	5.39 (15)	9.37 (16)	9.26 (11)	1.44 (1)	0.22 (2)	0.65 (3)
5th Percentile	14.55	4.58	8.64	4.01	6.88	7.81	1.19	0.13	0.60
1st Quartile	11.98	3.46	7.55	6.31	10.25	11.03	0.90	0.03	0.47
Median	10.77	2.70	6.90	7.32	11.66	12.20	0.74	-0.05	0.41
3rd Quartile	9.17	2.00	6.29	8.05	12.56	12.92	0.61	-0.11	0.37
95th Percentile	6.56	1.02	4.84	8.83	13.82	14.10	0.24	-0.27	0.27

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

# Plan Sponsor Peer Group Analysis

CERS Pension Plan vs All Public Plans-Total Fund

Periods Ended December 31, 2024



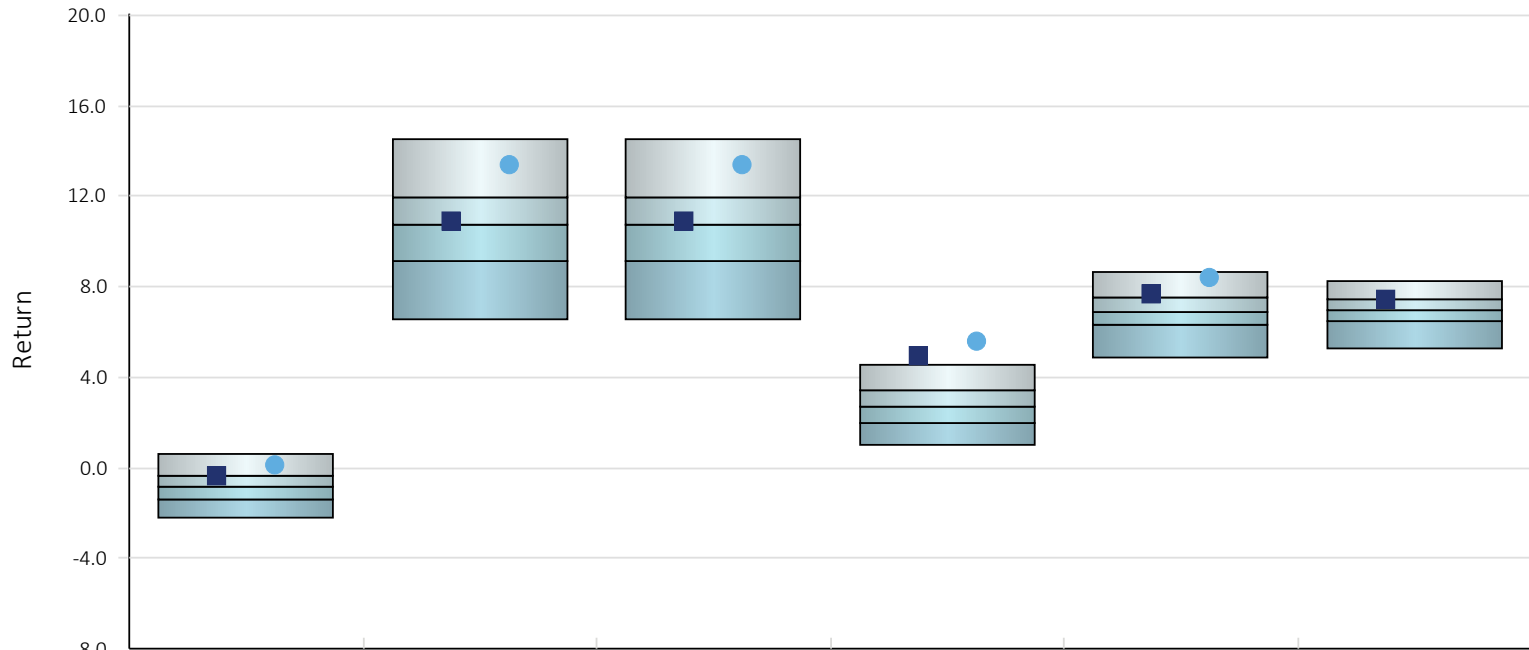
	<b>QTD</b>	<b>YTD</b>	<b>1 Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>
■ CERS Pension Plan	-0.34 (27)	10.84 (50)	10.84 (50)	4.94 (3)	7.74 (21)	7.48 (25)
● CERS Pension IPS Index	0.10 (13)	13.43 (11)	13.43 (11)	5.59 (3)	8.38 (8)	
5th Percentile	0.64	14.55	14.55	4.58	8.64	8.28
1st Quartile	-0.32	11.98	11.98	3.46	7.55	7.45
Median	-0.84	10.77	10.77	2.70	6.90	6.97
3rd Quartile	-1.37	9.17	9.17	2.00	6.29	6.47
95th Percentile	-2.24	6.56	6.56	1.02	4.84	5.31
Population	695	681	681	657	635	540

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

# Plan Sponsor Peer Group Analysis

CERS (H) Pension Plan vs All Public Plans-Total Fund

Periods Ended December 31, 2024



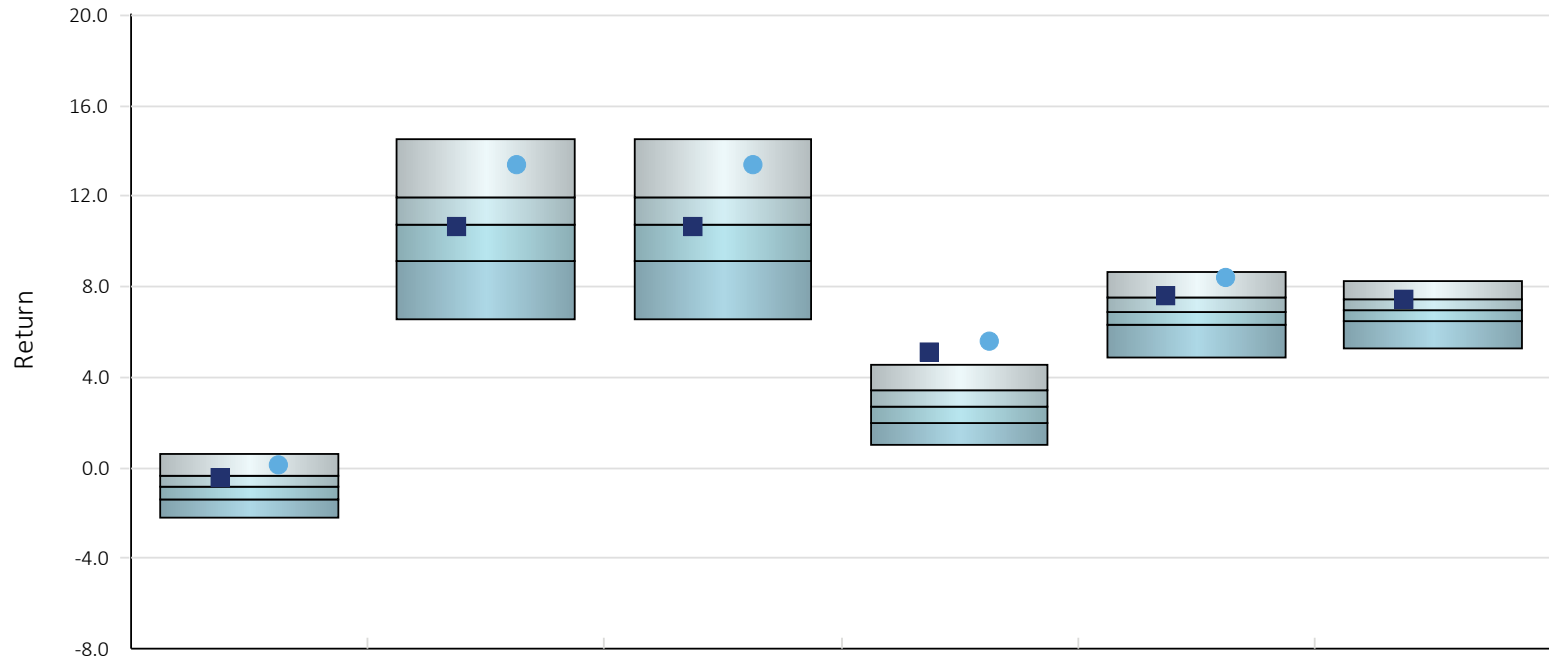
	QTD	YTD	1 Year	3 Years	5 Years	10 Years
■ CERS (H) Pension Plan	-0.35 (27)	10.91 (49)	10.91 (49)	4.97 (3)	7.72 (21)	7.48 (25)
● CERS (H) Pension IPS Index	0.10 (13)	13.43 (11)	13.43 (11)	5.59 (3)	8.38 (8)	
5th Percentile	0.64	14.55	14.55	4.58	8.64	8.28
1st Quartile	-0.32	11.98	11.98	3.46	7.55	7.45
Median	-0.84	10.77	10.77	2.70	6.90	6.97
3rd Quartile	-1.37	9.17	9.17	2.00	6.29	6.47
95th Percentile	-2.24	6.56	6.56	1.02	4.84	5.31
Population	695	681	681	657	635	540

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

# Plan Sponsor Peer Group Analysis

CERS Insurance Plan vs All Public Plans-Total Fund

Periods Ended December 31, 2024



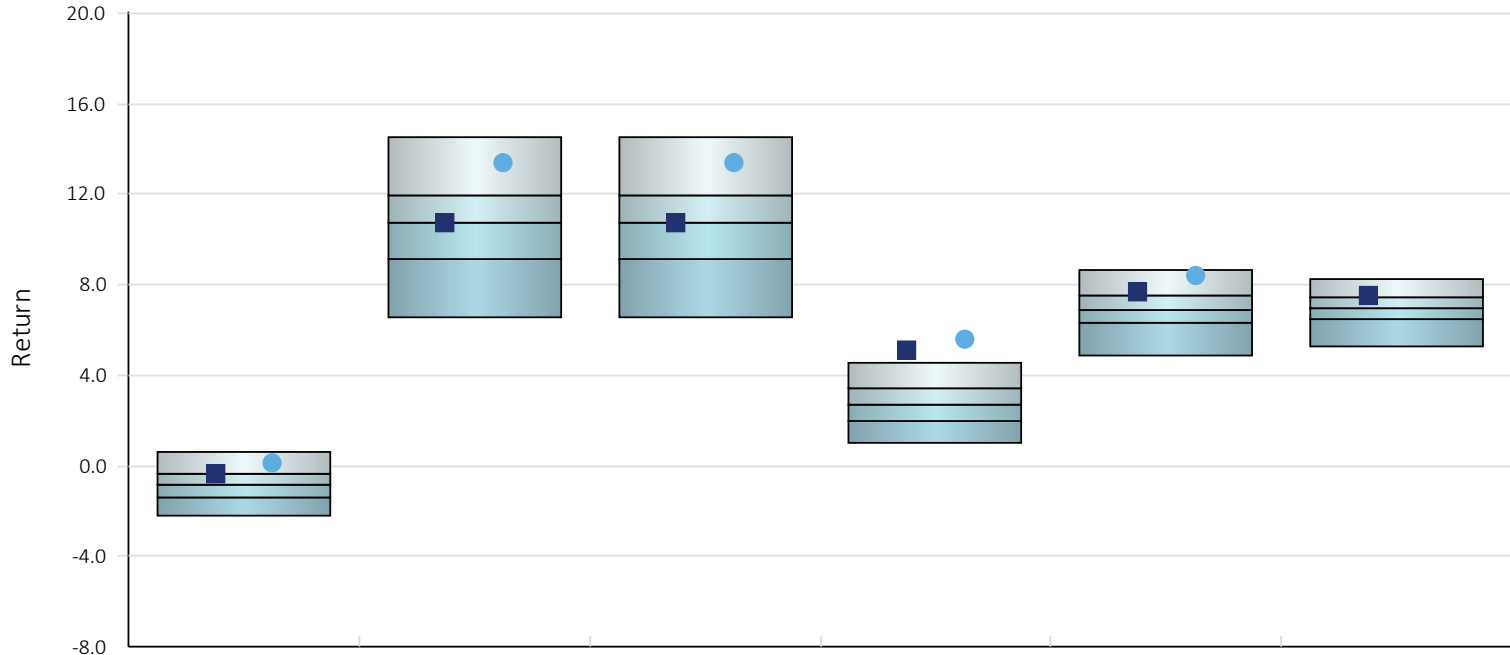
	QTD	YTD	1 Year	3 Years	5 Years	10 Years
■ CERS Insurance Plan	-0.42 (32)	10.70 (51)	10.70 (51)	5.11 (3)	7.63 (24)	7.49 (25)
● CERS Insurance IPS Index	0.10 (13)	13.43 (11)	13.43 (11)	5.59 (3)	8.38 (8)	
5th Percentile	0.64	14.55	14.55	4.58	8.64	8.28
1st Quartile	-0.32	11.98	11.98	3.46	7.55	7.45
Median	-0.84	10.77	10.77	2.70	6.90	6.97
3rd Quartile	-1.37	9.17	9.17	2.00	6.29	6.47
95th Percentile	-2.24	6.56	6.56	1.02	4.84	5.31
Population	695	681	681	657	635	540

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

# Plan Sponsor Peer Group Analysis

## CERS (H) Insurance Plan vs All Public Plans-Total Fund

Periods Ended December 31, 2024



	<b>QTD</b>	<b>YTD</b>	<b>1 Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>
■ CERS (H) Insurance Plan	-0.35 (27)	10.71 (51)	10.71 (51)	5.09 (3)	7.68 (22)	7.55 (22)
● CERS (H) Insurance IPS Index	0.10 (13)	13.43 (11)	13.43 (11)	5.59 (3)	8.38 (8)	
5th Percentile	0.64	14.55	14.55	4.58	8.64	8.28
1st Quartile	-0.32	11.98	11.98	3.46	7.55	7.45
Median	-0.84	10.77	10.77	2.70	6.90	6.97
3rd Quartile	-1.37	9.17	9.17	2.00	6.29	6.47
95th Percentile	-2.24	6.56	6.56	1.02	4.84	5.31
Population	695	681	681	657	635	540

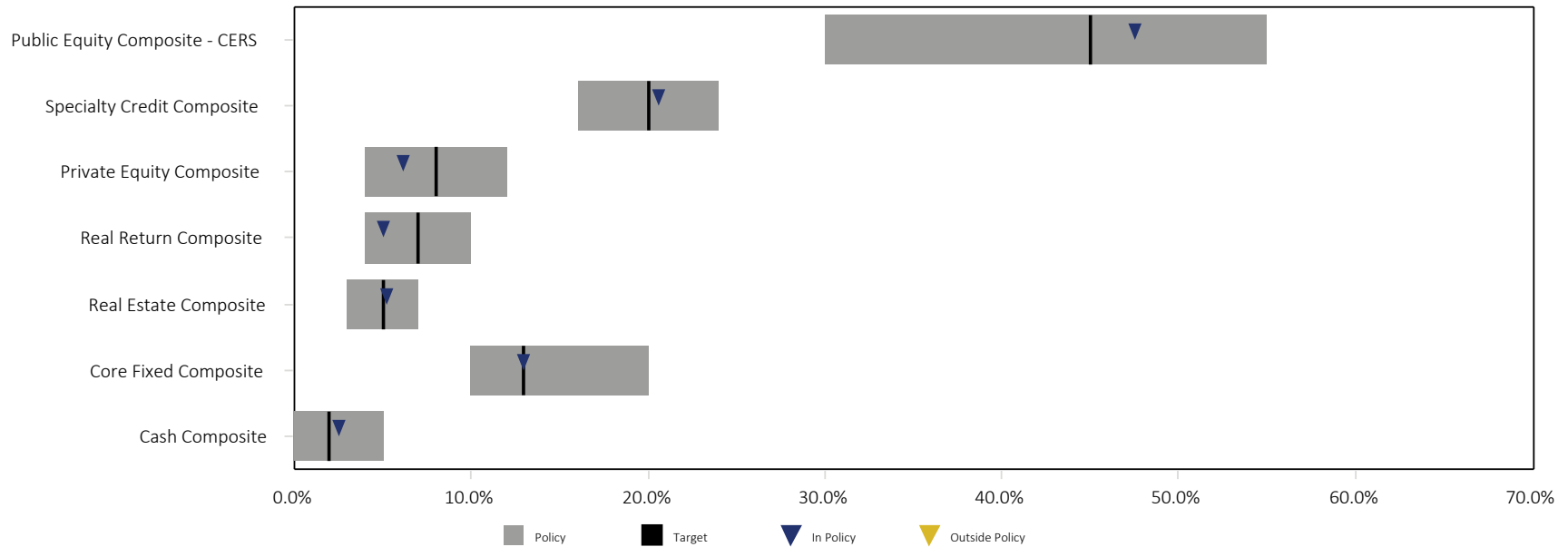
Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

# Asset Allocation Compliance

CERS Pension Plan

Periods Ended As of December 31, 2024

## Executive Summary



	Asset Allocation \$	Asset Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)	Target Rebalance \$
CERS Pension Plan	9,963,205,050	100.00			100.00	
Public Equity Composite - CERS	4,738,159,656	47.56	30.00	55.00	45.00	-254,717,383
Specialty Credit Composite	2,048,528,929	20.56	16.00	24.00	20.00	-55,887,919
Private Equity Composite	616,509,636	6.19	4.00	12.00	8.00	180,546,767
Real Return Composite	498,483,670	5.00	4.00	10.00	7.00	198,940,684
Real Estate Composite	520,917,234	5.23	3.00	7.00	5.00	-22,756,982
Core Fixed Composite	1,288,779,504	12.94	10.00	20.00	13.00	6,437,152
Cash Composite	251,826,420	2.53	0.00	5.00	2.00	-52,562,319

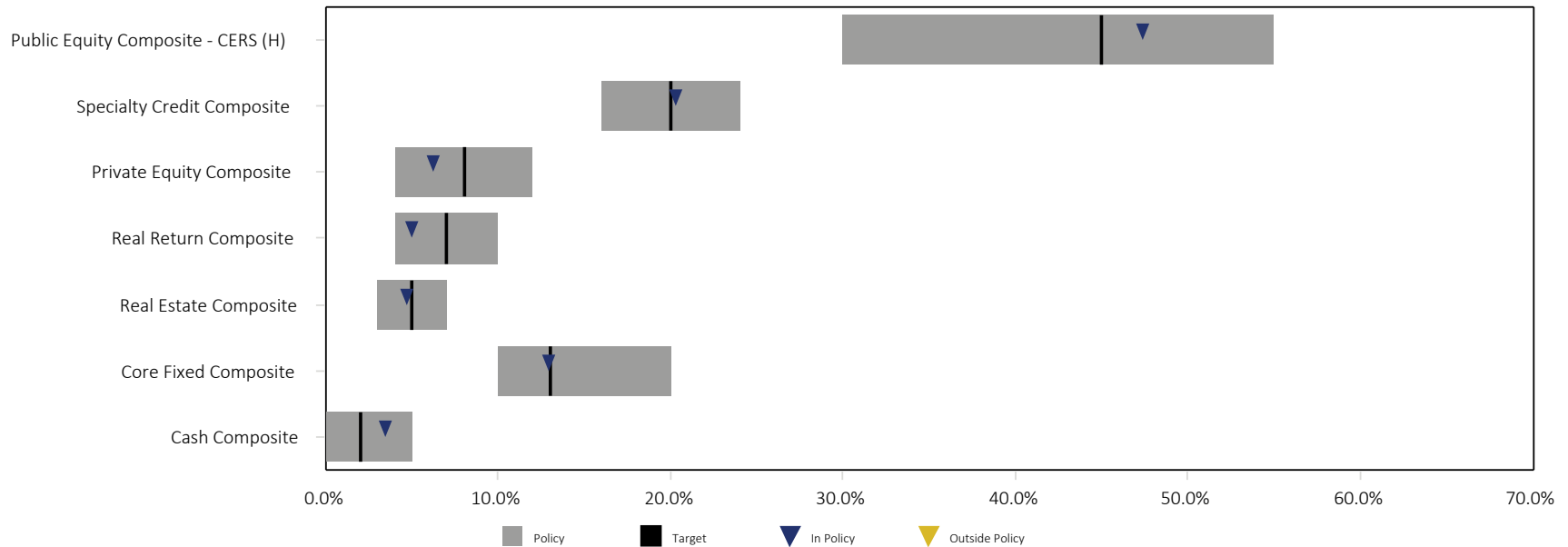


# Asset Allocation Compliance

CERS (H) Pension Plan

Periods Ended As of December 31, 2024

## Executive Summary



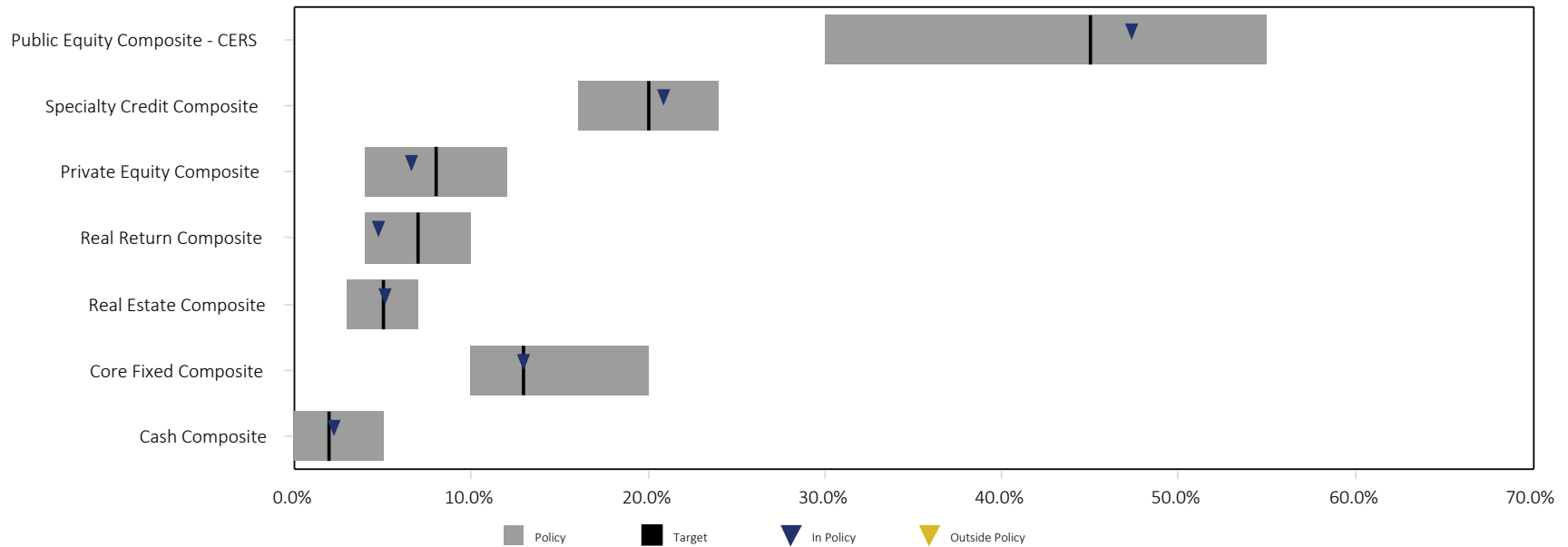
	Asset Allocation \$	Asset Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)	Target Rebalance \$
CERS (H) Pension Plan	3,560,186,612	100.00			100.00	
Public Equity Composite - CERS (H)	1,688,747,172	47.43	30.00	55.00	45.00	-86,663,197
Specialty Credit Composite	724,131,173	20.34	16.00	24.00	20.00	-12,093,850
Private Equity Composite	220,932,468	6.21	4.00	12.00	8.00	63,882,461
Real Return Composite	177,141,803	4.98	4.00	10.00	7.00	72,071,260
Real Estate Composite	165,824,658	4.66	3.00	7.00	5.00	12,184,672
Core Fixed Composite	459,219,485	12.90	10.00	20.00	13.00	3,604,775
Cash Composite	124,189,853	3.49	0.00	5.00	2.00	-52,986,121

# Asset Allocation Compliance

## CERS Insurance Plan

Periods Ended As of December 31, 2024

### Executive Summary



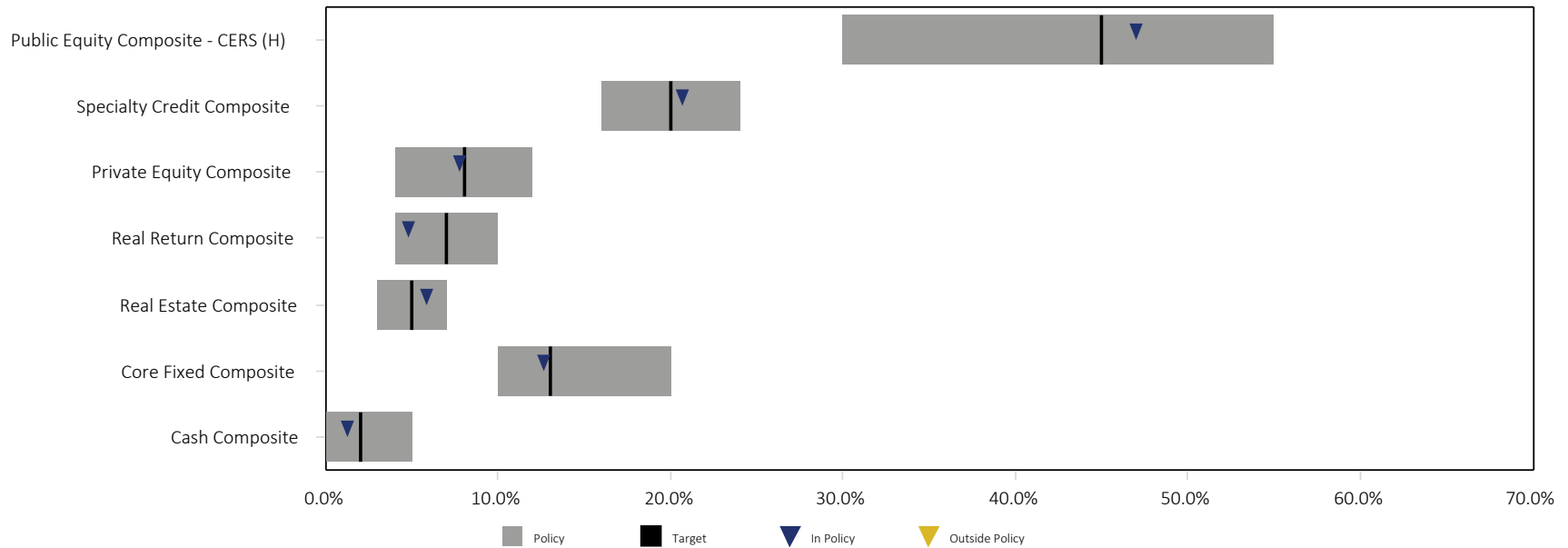
	Asset Allocation \$	Asset Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)	Target Rebalance \$
CERS Insurance Plan	3,684,942,418	100.00			100.00	
Public Equity Composite - CERS	1,746,016,249	47.38	30.00	55.00	45.00	-87,792,161
Specialty Credit Composite	769,177,844	20.87	16.00	24.00	20.00	-32,189,360
Private Equity Composite	244,809,399	6.64	4.00	12.00	8.00	49,985,994
Real Return Composite	175,261,425	4.76	4.00	10.00	7.00	82,684,544
Real Estate Composite	188,688,940	5.12	3.00	7.00	5.00	-4,441,819
Core Fixed Composite	477,681,115	12.96	10.00	20.00	13.00	1,361,399
Cash Composite	83,307,446	2.26	0.00	5.00	2.00	-9,608,597

# Asset Allocation Compliance

CERS (H) Insurance Plan

Periods Ended As of December 31, 2024

## Executive Summary



	Asset Allocation \$	Asset Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)	Target Rebalance \$
CERS (H) Insurance Plan	1,761,315,460	100.00			100.00	
Public Equity Composite - CERS (H)	828,539,531	47.04	30.00	55.00	45.00	-35,947,574
Specialty Credit Composite	364,572,591	20.70	16.00	24.00	20.00	-12,309,499
Private Equity Composite	136,693,654	7.76	4.00	12.00	8.00	4,211,582
Real Return Composite	83,725,840	4.75	4.00	10.00	7.00	39,566,243
Real Estate Composite	103,544,774	5.88	3.00	7.00	5.00	-15,479,001
Core Fixed Composite	223,112,319	12.67	10.00	20.00	13.00	5,858,691
Cash Composite	21,126,752	1.20	0.00	5.00	2.00	14,099,557

# Asset Allocation & Performance

## Total Fund

Periods Ended December 31, 2024

	Market Value \$	Performance (%) net of fees										
		QTD	YTD	FYTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	Since Inception	Inception Date
<b>CERS Pension Plan</b>	<b>9,963,205,050</b>	<b>-0.34</b>	<b>10.84</b>	<b>4.54</b>	<b>10.84</b>	<b>4.94</b>	<b>7.74</b>	<b>11.10</b>	<b>6.65</b>	<b>8.11</b>	<b>8.92</b>	<b>4/1/1984</b>
CERS Pension IPS Index		0.10	13.43	4.90	13.43	5.59	8.38					
Value Added		-0.44	-2.60	-0.36	-2.60	-0.65	-0.64					
Assumed Rate 6.50%		1.59	6.50	3.20	6.50	6.50	6.50					
Value Added		-1.92	4.34	1.34	4.34	-1.56	1.24					
<b>CERS Insurance Plan</b>	<b>3,684,942,418</b>	<b>-0.42</b>	<b>10.70</b>	<b>4.38</b>	<b>10.70</b>	<b>5.11</b>	<b>7.63</b>	<b>9.23</b>	<b>6.37</b>	<b>7.31</b>	<b>7.50</b>	<b>4/1/1987</b>
CERS Insurance IPS Index		0.10	13.43	4.90	13.43	5.59	8.38					
Value Added		-0.53	-2.73	-0.53	-2.73	-0.48	-0.74					
Assumed Rate 6.50%		1.59	6.50	3.20	6.50	6.50	6.50					
Value Added		-2.01	4.20	1.18	4.20	-1.39	1.13					
<b>CERS (H) Pension Plan</b>	<b>3,560,186,612</b>	<b>-0.35</b>	<b>10.91</b>	<b>4.56</b>	<b>10.91</b>	<b>4.97</b>	<b>7.72</b>	<b>11.10</b>	<b>6.64</b>	<b>8.11</b>	<b>8.92</b>	<b>4/1/1984</b>
CERS (H) Pension IPS Index		0.10	13.43	4.90	13.43	5.59	8.38					
Value Added		-0.45	-2.53	-0.34	-2.53	-0.62	-0.66					
Assumed Rate 6.50%		1.59	6.50	3.20	6.50	6.50	6.50					
Value Added		-1.93	4.41	1.36	4.41	-1.53	1.22					
<b>CERS (H) Insurance Plan</b>	<b>1,761,315,460</b>	<b>-0.35</b>	<b>10.71</b>	<b>4.34</b>	<b>10.71</b>	<b>5.09</b>	<b>7.68</b>	<b>9.23</b>	<b>6.39</b>	<b>7.33</b>	<b>7.52</b>	<b>4/1/1987</b>
CERS (H) Insurance IPS Index		0.10	13.43	4.90	13.43	5.59	8.38					
Value Added		-0.45	-2.72	-0.56	-2.72	-0.50	-0.70					
Assumed Rate 6.50%		1.59	6.50	3.20	6.50	6.50	6.50					
Value Added		-1.93	4.21	1.14	4.21	-1.41	1.18					

# Asset Allocation & Performance

## Insurance Plan Accounts

Periods Ended December 31, 2024

	Performance (%) net of fees								
	1 Month	QTD	YTD	FYTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
<b>Public Equity</b>	<b>-3.10</b>	<b>-1.63</b>	<b>14.95</b>	<b>4.87</b>	<b>14.95</b>	<b>4.29</b>		<b>5.54</b>	<b>12/1/2021</b>
Public Equity Policy Index	-2.37	-0.99	17.49	5.56	17.49	5.44		6.63	
Value Added	-0.73	-0.64	-2.54	-0.69	-2.54	-1.15		-1.09	
<b>US Equity Composite</b>	<b>-3.30</b>	<b>2.51</b>	<b>22.85</b>	<b>8.77</b>	<b>22.85</b>	<b>7.68</b>	<b>13.36</b>	<b>10.40</b>	<b>7/1/1992</b>
Russell 3000 Index	-3.06	2.63	23.81	9.03	23.81	8.01	13.86	10.64	
Value Added	-0.24	-0.12	-0.96	-0.26	-0.96	-0.32	-0.50	-0.24	
<b>S&amp;P 500 Index</b>	<b>-2.34</b>	<b>2.45</b>	<b>25.05</b>	<b>8.52</b>	<b>25.05</b>	<b>9.03</b>	<b>14.74</b>	<b>9.37</b>	<b>7/1/2001</b>
S&P 500 Index	-2.38	2.41	25.02	8.44	25.02	8.94	14.53	8.97	
value added	0.04	0.04	0.03	0.09	0.03	0.09	0.22	0.40	
<b>Scientific Beta</b>	<b>-5.78</b>	<b>-0.61</b>	<b>15.77</b>	<b>7.38</b>	<b>15.77</b>	<b>4.54</b>	<b>9.50</b>	<b>10.65</b>	<b>7/1/2016</b>
S&P 500 Index	-2.38	2.41	25.02	8.44	25.02	8.94	14.53	14.89	
Value Added	-3.40	-3.02	-9.25	-1.06	-9.25	-4.40	-5.02	-4.24	
<b>River Road FAV</b>	<b>-5.45</b>	<b>0.28</b>	<b>18.56</b>	<b>11.83</b>	<b>18.56</b>	<b>3.50</b>	<b>5.12</b>	<b>10.01</b>	<b>7/1/2016</b>
Russell 3000 Value Index	-6.91	-1.94	13.98	7.35	13.98	5.41	8.60	9.71	
Value Added	1.46	2.22	4.58	4.49	4.58	-1.90	-3.48	0.30	
<b>Westfield Capital</b>	<b>0.47</b>	<b>7.65</b>	<b>33.87</b>	<b>10.98</b>	<b>33.87</b>	<b>11.56</b>	<b>18.29</b>	<b>15.60</b>	<b>7/1/2011</b>
Russell 3000 Growth Index	0.45	6.82	32.46	10.48	32.46	9.93	18.25	16.06	
Value Added	0.03	0.83	1.41	0.50	1.41	1.62	0.05	-0.46	
<b>Internal US Mid Cap</b>	<b>-7.13</b>	<b>0.44</b>	<b>14.05</b>	<b>7.21</b>	<b>14.05</b>	<b>5.48</b>	<b>10.88</b>	<b>10.43</b>	<b>8/1/2014</b>
S&P MidCap 400 Index	-7.12	0.34	13.93	7.31	13.93	4.87	10.34	9.96	
Value Added	-0.01	0.10	0.13	-0.10	0.13	0.61	0.55	0.47	
<b>NTGI Structured</b>	<b>-8.05</b>	<b>-1.09</b>	<b>11.39</b>	<b>7.49</b>	<b>11.39</b>	<b>3.38</b>	<b>9.18</b>	<b>10.39</b>	<b>7/1/2011</b>
Russell 2000 Index	-8.26	0.33	11.54	9.64	11.54	1.24	7.40	9.11	
Value Added	0.20	-1.43	-0.15	-2.14	-0.15	2.14	1.77	1.28	

# Asset Allocation & Performance

## Insurance Plan Accounts

Periods Ended December 31, 2024

	Performance (%) net of fees								
	1 Month	QTD	YTD	FYTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
<b>Next Century Growth</b>	<b>-6.35</b>	<b>12.94</b>	<b>24.03</b>	<b>16.90</b>	<b>24.03</b>	<b>-0.96</b>	<b>20.52</b>	<b>21.58</b>	<b>11/1/2019</b>
Russell Microcap Growth Index	-4.28	11.55	21.91	21.11	21.91	-2.24	5.72	8.41	
Value Added	-2.07	1.39	2.12	-4.20	2.12	1.27	14.79	13.18	
<b>Non-US Equity Composite</b>	<b>-2.76</b>	<b>-7.88</b>	<b>3.63</b>	<b>-0.99</b>	<b>3.63</b>	<b>-0.49</b>	<b>4.04</b>	<b>2.96</b>	<b>4/1/2000</b>
MSCI ACWI ex US IMI (10/17)	-1.97	-7.61	5.23	-0.05	5.23	0.50	4.12	3.11	
Value Added	-0.79	-0.27	-1.60	-0.95	-1.60	-0.99	-0.08	-0.15	
<b>BlackRock World Ex US</b>	<b>-2.93</b>	<b>-7.62</b>	<b>4.56</b>	<b>-0.45</b>	<b>4.56</b>	<b>2.04</b>	<b>5.23</b>	<b>6.64</b>	<b>6/1/2012</b>
MSCI World ex US (11/19)	-2.68	-7.43	4.70	-0.24	4.70	1.91	5.10	6.54	
value added	-0.24	-0.19	-0.14	-0.21	-0.14	0.13	0.13	0.09	
<b>American Century</b>	<b>-2.94</b>	<b>-7.90</b>	<b>5.27</b>	<b>-1.44</b>	<b>5.27</b>	<b>-5.32</b>	<b>4.27</b>	<b>5.35</b>	<b>7/1/2014</b>
MSCI ACWI ex US IMI (10/17)	-1.97	-7.61	5.23	-0.05	5.23	0.50	4.12	3.76	
Value Added	-0.97	-0.29	0.04	-1.39	0.04	-5.82	0.15	1.59	
<b>Franklin Templeton</b>	<b>-4.43</b>	<b>-7.59</b>	<b>-1.28</b>	<b>-2.40</b>	<b>-1.28</b>	<b>-8.06</b>	<b>-0.62</b>	<b>3.69</b>	<b>7/1/2014</b>
MSCI ACWI ex US IMI (10/17)	-1.97	-7.61	5.23	-0.05	5.23	0.50	4.12	3.76	
Value Added	-2.46	0.02	-6.52	-2.35	-6.52	-8.56	-4.74	-0.07	
<b>Lazard Asset Mgmt</b>	<b>-3.17</b>	<b>-8.86</b>	<b>2.21</b>	<b>-2.64</b>	<b>2.21</b>	<b>0.87</b>	<b>3.82</b>	<b>4.22</b>	<b>7/1/2014</b>
MSCI ACWI ex US IMI (10/17)	-1.97	-7.61	5.23	-0.05	5.23	0.50	4.12	3.76	
Value Added	-1.20	-1.25	-3.02	-2.60	-3.02	0.38	-0.30	0.46	
<b>LSV Asset Mgmt</b>	<b>-1.98</b>	<b>-8.27</b>	<b>3.38</b>	<b>-0.75</b>	<b>3.38</b>	<b>3.95</b>	<b>4.57</b>	<b>3.95</b>	<b>7/1/2014</b>
MSCI ACWI ex US IMI (10/17)	-1.97	-7.61	5.23	-0.05	5.23	0.50	4.12	3.76	
Value Added	-0.01	-0.67	-1.85	-0.70	-1.85	3.46	0.44	0.19	
<b>Axiom</b>	<b>-0.65</b>	<b>-3.00</b>	<b>13.08</b>	<b>5.22</b>	<b>13.08</b>	<b>-5.90</b>		<b>-4.37</b>	<b>12/1/2021</b>
MSCI AC World ex USA Small Cap (Net)	-2.13	-7.66	3.36	0.56	3.36	-1.47		-0.09	
Value Added	1.48	4.65	9.72	4.66	9.72	-4.43		-4.27	

# Asset Allocation & Performance

## Insurance Plan Accounts

Periods Ended December 31, 2024

	Performance (%) net of fees								
	1 Month	QTD	YTD	FYTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
<b>JP Morgan Emerging Markets</b>	<b>-0.86</b>	<b>-6.71</b>	<b>1.12</b>	<b>-1.71</b>	<b>1.12</b>	<b>-7.54</b>	<b>0.60</b>	<b>1.72</b>	<b>11/1/2019</b>
MSCI Emerging Markets IMI Index	-0.22	-7.73	7.62	0.01	7.62	-0.95	2.93	4.22	
Value Added	-0.64	1.03	-6.50	-1.72	-6.50	-6.60	-2.33	-2.50	
<b>Pzena Emerging Markets</b>	<b>-2.23</b>	<b>-9.82</b>	<b>6.83</b>	<b>0.59</b>	<b>6.83</b>	<b>6.99</b>	<b>7.27</b>	<b>8.36</b>	<b>11/1/2019</b>
MSCI Emerging Markets (Net)	-0.14	-8.01	7.50	0.02	7.50	-1.92	1.70	3.04	
Value Added	-2.09	-1.81	-0.67	0.58	-0.67	8.92	5.58	5.32	
<b>Private Equity Composite</b>	<b>0.72</b>	<b>0.87</b>	<b>5.17</b>	<b>2.51</b>	<b>5.17</b>	<b>6.81</b>	<b>11.87</b>	<b>10.64</b>	<b>7/1/2002</b>
Russell 3000 +3% 1 Quarter Lag	2.32	7.02	39.25	11.28	39.25	13.60	18.72	12.83	
Value Added	-1.60	-6.15	-34.08	-8.76	-34.08	-6.79	-6.85	-2.19	
<b>Core Fixed Income Composite</b>	<b>-1.63</b>	<b>-2.94</b>	<b>1.66</b>	<b>2.04</b>	<b>1.66</b>	<b>0.73</b>	<b>1.64</b>	<b>2.67</b>	<b>10/1/2018</b>
Blmbg. U.S. Aggregate Index	-1.64	-3.06	1.25	1.98	1.25	-2.41	-0.33	1.34	
Value Added	0.00	0.12	0.41	0.06	0.41	3.13	1.97	1.33	
<b>NISA</b>	<b>-1.59</b>	<b>-2.92</b>	<b>1.63</b>	<b>1.94</b>	<b>1.63</b>	<b>-1.94</b>	<b>-0.10</b>	<b>2.13</b>	<b>7/1/2011</b>
Blmbg. U.S. Aggregate Index	-1.64	-3.06	1.25	1.98	1.25	-2.41	-0.33	1.95	
Value Added	0.04	0.14	0.38	-0.03	0.38	0.47	0.23	0.18	
<b>Loomis Sayles</b>	<b>-1.62</b>	<b>-2.82</b>	<b>1.95</b>	<b>2.15</b>	<b>1.95</b>	<b>-0.84</b>	<b>0.68</b>	<b>1.57</b>	<b>2/1/2019</b>
Blmbg. U.S. Aggregate Index (Since 8/1/23)	-1.64	-3.06	1.25	1.98	1.25	-6.97	-2.03	0.99	
Value Added	0.01	0.24	0.70	0.18	0.70	6.13	2.71	0.58	
<b>Lord Abbett</b>	<b>0.56</b>	<b>1.58</b>	<b>8.81</b>	<b>3.48</b>	<b>8.81</b>	<b>2.81</b>	<b>2.53</b>	<b>3.07</b>	<b>10/1/2018</b>
ICE BofA 1-3 Year U.S. Corporate Index	0.22	0.21	5.40	3.37	5.40	2.22	2.15	2.71	
Value Added	0.34	1.37	3.41	0.11	3.41	0.59	0.38	0.35	
<b>Internal Core Fixed Income</b>	<b>-1.69</b>	<b>-3.10</b>	<b>1.30</b>	<b>2.02</b>	<b>1.30</b>			<b>4.19</b>	<b>9/1/2023</b>
Blmbg. U.S. Aggregate Index	-1.64	-3.06	1.25	1.98	1.25			4.03	
value added	-0.05	-0.04	0.05	0.04	0.05			0.17	

# Asset Allocation & Performance

## Insurance Plan Accounts

Periods Ended December 31, 2024

	Performance (%) net of fees								
	1 Month	QTD	YTD	FYTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
<b>Cash Composite</b>	<b>0.39</b>	<b>1.21</b>	<b>5.36</b>	<b>2.55</b>	<b>5.36</b>	<b>3.82</b>	<b>2.41</b>	<b>2.60</b>	<b>7/1/1992</b>
FTSE 3 Month T-Bill	0.39	1.23	5.45	2.61	5.45	4.05	2.54	2.50	
Value Added	0.00	-0.02	-0.08	-0.06	-0.08	-0.23	-0.13	0.10	
<b>Specialty Credit Composite</b>	<b>1.01</b>	<b>2.26</b>	<b>11.22</b>	<b>5.40</b>	<b>11.22</b>	<b>7.56</b>	<b>7.18</b>	<b>7.06</b>	<b>10/1/2018</b>
Specialty Credit Policy Index	0.07	1.22	8.59	4.92	8.59	5.00	5.07	5.17	
Value Added	0.94	1.04	2.64	0.48	2.64	2.57	2.11	1.89	
<b>Cerberus Capital Mgmt</b>	<b>0.48</b>	<b>0.88</b>	<b>6.06</b>	<b>2.13</b>	<b>6.06</b>	<b>8.00</b>	<b>9.83</b>	<b>9.14</b>	<b>9/1/2014</b>
Morningstar LSTA U.S. Leveraged Loan	0.57	2.27	8.96	4.36	8.96	7.00	5.86	4.87	
Value Added	-0.08	-1.39	-2.90	-2.23	-2.90	1.00	3.97	4.27	
<b>Columbia</b>	<b>-0.38</b>	<b>0.15</b>	<b>7.95</b>	<b>4.79</b>	<b>7.95</b>	<b>3.26</b>	<b>3.76</b>	<b>5.92</b>	<b>11/1/2011</b>
Blmbg. U.S. Corp: High Yield Index	-0.43	0.17	8.19	5.47	8.19	2.92	4.21	5.87	
Value Added	0.05	-0.03	-0.25	-0.68	-0.25	0.35	-0.46	0.05	
<b>Manulife Asset Mgmt</b>	<b>-0.24</b>	<b>-0.26</b>	<b>5.79</b>	<b>4.21</b>	<b>5.79</b>	<b>1.86</b>	<b>3.72</b>	<b>4.06</b>	<b>12/1/2011</b>
Policy Index	-1.51	-2.73	2.04	2.32	2.04	-1.95	0.06	1.32	
Value Added	1.27	2.47	3.75	1.89	3.75	3.81	3.66	2.75	
<b>Marathon Bluegrass</b>	<b>0.51</b>	<b>3.70</b>	<b>13.17</b>	<b>6.80</b>	<b>13.17</b>	<b>3.54</b>	<b>6.11</b>	<b>6.23</b>	<b>1/1/2016</b>
Blmbg. U.S. Corp: High Yield Index	-0.43	0.17	8.19	5.47	8.19	2.92	4.21	6.30	
Value Added	0.93	3.53	4.98	1.33	4.98	0.62	1.89	-0.07	
<b>Shenkman Capital</b>	<b>-0.46</b>	<b>1.81</b>	<b>8.10</b>	<b>4.42</b>	<b>8.10</b>	<b>6.10</b>	<b>5.08</b>	<b>4.53</b>	<b>7/1/2011</b>
Morningstar LSTA U.S. Leveraged Loan	0.57	2.27	8.96	4.36	8.96	7.00	5.86	4.94	
Value Added	-1.02	-0.46	-0.86	0.06	-0.86	-0.90	-0.78	-0.41	
<b>Waterfall</b>	<b>0.93</b>	<b>2.64</b>	<b>12.79</b>	<b>4.35</b>	<b>12.79</b>	<b>7.20</b>	<b>5.40</b>	<b>8.22</b>	<b>7/1/2011</b>
Policy Index	-0.10	0.79	8.05	4.67	8.05	4.04	4.19	4.49	
Value Added	1.03	1.85	4.74	-0.32	4.74	3.17	1.22	3.73	



# Asset Allocation & Performance

## Insurance Plan Accounts

Periods Ended December 31, 2024

	Performance (%) net of fees								
	1 Month	QTD	YTD	FYTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
<b>Arrowmark</b>	<b>1.73</b>	<b>3.20</b>	<b>15.13</b>	<b>7.04</b>	<b>15.13</b>	<b>13.39</b>	<b>11.55</b>	<b>11.16</b>	<b>6/1/2018</b>
Morningstar LSTA U.S. Leveraged Loan	0.57	2.27	8.96	4.36	8.96	7.00	5.86	5.49	
Value Added	1.16	0.93	6.18	2.68	6.18	6.38	5.69	5.68	
<b>Real Estate Composite</b>	<b>-0.74</b>	<b>-0.83</b>	<b>-4.63</b>	<b>0.84</b>	<b>-4.63</b>	<b>0.18</b>	<b>4.94</b>	<b>7.78</b>	<b>5/1/2009</b>
NCREIF ODCE NOF 1 Quarter Lag	0.02	0.02	-8.04	-0.64	-8.04	-1.04	2.05		
Value Added	-0.76	-0.85	3.41	1.48	3.41	1.23	2.89		
<b>Internal Real Estate</b>	<b>-8.17</b>	<b>-8.27</b>	<b>4.79</b>	<b>7.43</b>	<b>4.79</b>			<b>5.44</b>	<b>12/1/2023</b>
<b>Baring</b>	<b>1.19</b>	<b>-4.23</b>	<b>-25.40</b>	<b>-5.38</b>	<b>-25.40</b>	<b>-22.10</b>	<b>-8.21</b>	<b>-2.55</b>	<b>1/1/2019</b>
<b>Barings Euro RE II</b>	<b>-7.31</b>	<b>-12.22</b>	<b>-5.89</b>	<b>-1.37</b>	<b>-5.89</b>	<b>-18.19</b>		<b>-20.55</b>	<b>12/1/2020</b>
<b>Divcowest IV</b>	<b>-15.22</b>	<b>-15.22</b>	<b>-17.33</b>	<b>-13.57</b>	<b>-17.33</b>	<b>-0.87</b>	<b>3.28</b>	<b>12.71</b>	<b>3/1/2014</b>
<b>Fundamental Partners III</b>	<b>0.35</b>	<b>0.35</b>	<b>0.09</b>	<b>1.15</b>	<b>0.09</b>	<b>5.39</b>	<b>11.12</b>	<b>10.62</b>	<b>5/1/2017</b>
<b>Greenfield Acq VII</b>	<b>0.17</b>	<b>0.17</b>	<b>-0.67</b>	<b>7.87</b>	<b>-0.67</b>	<b>7.53</b>	<b>11.53</b>	<b>12.14</b>	<b>7/1/2014</b>
<b>Lubert Adler VII</b>	<b>-0.61</b>	<b>-0.61</b>	<b>-19.24</b>	<b>-1.73</b>	<b>-19.24</b>	<b>-10.70</b>	<b>-9.77</b>	<b>-4.49</b>	<b>7/1/2014</b>
<b>Lubert Adler VII B</b>	<b>4.41</b>	<b>4.41</b>	<b>4.00</b>	<b>-0.18</b>	<b>4.00</b>	<b>11.26</b>	<b>17.58</b>	<b>13.16</b>	<b>7/1/2017</b>
<b>Harrison Street</b>	<b>0.00</b>	<b>0.21</b>	<b>-4.40</b>	<b>0.66</b>	<b>-4.40</b>	<b>2.08</b>	<b>3.74</b>	<b>6.31</b>	<b>5/1/2012</b>
<b>Mesa West Core Lend</b>	<b>1.27</b>	<b>1.27</b>	<b>-6.31</b>	<b>2.20</b>	<b>-6.31</b>	<b>-2.06</b>	<b>0.80</b>	<b>4.16</b>	<b>5/1/2013</b>
<b>Mesa West IV</b>	<b>-1.32</b>	<b>-1.32</b>	<b>-13.85</b>	<b>-5.83</b>	<b>-13.85</b>	<b>-10.79</b>	<b>-3.57</b>	<b>-0.39</b>	<b>3/1/2017</b>
<b>Patron Capital</b>	<b>0.62</b>	<b>-4.81</b>	<b>-5.21</b>	<b>-1.12</b>	<b>-5.21</b>	<b>-3.68</b>	<b>0.48</b>	<b>1.60</b>	<b>8/1/2016</b>
<b>Prologis Targeted US</b>	<b>0.00</b>	<b>1.49</b>	<b>-2.89</b>	<b>2.59</b>	<b>-2.89</b>	<b>4.94</b>	<b>11.61</b>	<b>13.57</b>	<b>10/1/2014</b>
<b>Rubenstein PF II</b>	<b>-5.77</b>	<b>-5.77</b>	<b>-47.10</b>	<b>-18.53</b>	<b>-47.10</b>	<b>-40.08</b>	<b>-27.56</b>	<b>-7.14</b>	<b>7/1/2013</b>
<b>Stockbridge Sm/Mkts</b>	<b>0.17</b>	<b>0.17</b>	<b>0.01</b>	<b>0.80</b>	<b>0.01</b>	<b>1.60</b>	<b>4.75</b>	<b>6.97</b>	<b>5/1/2014</b>

# Asset Allocation & Performance

## Insurance Plan Accounts

Periods Ended December 31, 2024

	Performance (%) net of fees								
	1 Month	QTD	YTD	FYTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
Walton St RE VI	0.20	0.20	-5.39	-4.16	-5.39	7.12	3.82	-9.93	5/1/2009
Walton St RE VII	0.13	0.13	-5.62	-6.87	-5.62	-6.72	-5.59	2.56	7/1/2013
<b>Real Return Composite</b>	<b>-2.02</b>	<b>3.59</b>	<b>17.21</b>	<b>10.47</b>	<b>17.21</b>	<b>10.73</b>	<b>9.26</b>	<b>5.74</b>	<b>7/1/2011</b>
US CPI +3%	0.61	1.62	5.96	2.94	5.96	7.32	7.30	5.66	
Value Added	-2.64	1.96	11.25	7.53	11.25	3.42	1.96	0.07	
<b>Tortoise Capital</b>	<b>-6.72</b>	<b>13.63</b>	<b>46.80</b>	<b>20.47</b>	<b>46.80</b>	<b>33.16</b>	<b>18.76</b>	<b>12.19</b>	<b>8/1/2009</b>
Alerian MLP Index	-7.19	4.94	24.41	5.70	24.41	27.27	15.56	8.81	
Value Added	0.46	8.69	22.39	14.77	22.39	5.90	3.21	3.39	
<b>Internal TIPS</b>	<b>0.39</b>	<b>1.20</b>	<b>5.31</b>	<b>2.54</b>	<b>5.31</b>	<b>4.03</b>	<b>2.36</b>	<b>3.74</b>	<b>10/1/2003</b>
Blmbg. U.S. TIPS 1-10 Year	-0.88	-1.75	3.09	1.69	3.09	-0.10	2.69	3.31	
Value Added	1.27	2.95	2.21	0.85	2.21	4.14	-0.33	0.43	
<b>Internal Real Return</b>	<b>-8.38</b>	<b>-4.92</b>	<b>12.56</b>	<b>7.21</b>	<b>12.56</b>			<b>11.10</b>	<b>12/1/2023</b>
<b>Amerra AGRI Fund II</b>	<b>0.19</b>	<b>0.19</b>	<b>-14.31</b>	<b>-2.76</b>	<b>-14.31</b>	<b>1.42</b>	<b>2.94</b>	<b>4.10</b>	<b>12/1/2012</b>
<b>Amerra AGRI Holdings</b>	<b>-1.40</b>	<b>-1.40</b>	<b>-7.34</b>	<b>-2.21</b>	<b>-7.34</b>	<b>-6.65</b>	<b>-5.03</b>	<b>-3.19</b>	<b>8/1/2015</b>
<b>BTG Pactual</b>	<b>35.73</b>	<b>35.73</b>	<b>28.69</b>	<b>25.59</b>	<b>28.69</b>	<b>20.13</b>	<b>12.36</b>	<b>2.23</b>	<b>12/1/2014</b>
<b>IFM Infrastructure</b>	<b>3.98</b>	<b>3.98</b>	<b>3.27</b>	<b>3.98</b>	<b>3.27</b>	<b>5.92</b>	<b>5.15</b>	<b>5.13</b>	<b>7/1/2019</b>
<b>Blackstone Strat Opp</b>	<b>0.03</b>	<b>-3.38</b>	<b>-1.70</b>	<b>-2.42</b>	<b>-1.70</b>	<b>-2.57</b>	<b>-4.37</b>	<b>-2.66</b>	<b>8/1/2017</b>
<b>CERS Ceres Farms</b>	<b>0.00</b>							<b>0.00</b>	<b>12/1/2024</b>
<b>Magnetar MTP EOF II</b>	<b>0.00</b>	<b>27.09</b>	<b>194.76</b>	<b>104.81</b>	<b>194.76</b>	<b>117.78</b>	<b>76.35</b>	<b>37.41</b>	<b>8/1/2015</b>
<b>Maritime Partners</b>	<b>1.04</b>	<b>1.04</b>	<b>9.04</b>	<b>4.57</b>	<b>9.04</b>			<b>7.17</b>	<b>10/1/2023</b>
<b>Oberland Capital</b>	<b>4.06</b>	<b>4.06</b>	<b>58.36</b>	<b>50.89</b>	<b>58.36</b>	<b>24.33</b>	<b>21.35</b>	<b>17.23</b>	<b>10/1/2014</b>
<b>Taurus Mine Finance</b>	<b>1.33</b>	<b>1.33</b>	<b>14.32</b>	<b>3.01</b>	<b>14.32</b>	<b>29.58</b>	<b>14.41</b>	<b>8.45</b>	<b>1/1/2009</b>

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## Asset Allocation & Performance

### Insurance Plan Accounts

*Periods Ended December 31, 2024*

	Performance (%) net of fees								
	1 Month	QTD	YTD	FYTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
Tricadia Select	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-3.43	9/1/2017
TPF II	-0.42	-0.42	26.89	-1.53	26.89	15.83	6.48	0.50	10/1/2008
Luxor Capital	-0.02	1.05	3.79	1.00	3.79	1.54	-1.13	0.07	4/1/2014
Pine River	0.00	0.00	21.93	9.48	21.93	0.63	1.94	3.30	5/1/2014
PRISMA Capital	0.37	1.19	5.13	2.49	5.13	2.85	1.82	2.72	9/1/2011
SABA Capital	-4.18	-2.19		4.73				11.59	4/1/2024
SVP Project Spurs	0.00							0.00	12/1/2024

County Employees Retirement System

# Capital Calls and Distributions

Quarter Ending: December 31, 2024

CERS Board Meeting - Investment Committee

Kentucky Public Pensions Authority  
Capital Calls and Distributions  
For the period October 1, 2024 thru December 31, 2024

Pension Funds Managers	Total Pension Fund Commitment	County Employees Retirement System					County Employees Hazardous Retirement System				
		Commitment	Beginning Valuation	Period Contributions	Period Distributions	Ending Valuation	Commitment	Beginning Valuation	Period Contributions	Period Distributions	Ending Valuation
Adams Street SPC I A1	175,000,000	97,124,912	82,750,484	0	3,073,271	79,677,213	32,749,407	27,902,515	0	1,036,272	26,866,243
Adams Street SPC II B1	175,000,000	97,124,911	77,204,564	0	2,344,473	74,860,091	32,749,407	26,032,495	0	790,530	25,241,965
Adams Street SPC III A1	174,750,000	88,004,101	14,485,438	11,544,595	1,883,200	18,837,200	32,241,316	5,306,907	4,229,495	2,635,177	6,901,225
Adams Street SPC III B1	174,750,000	88,004,098	5,143,082	13,657,371	5,003,359	13,797,095	32,241,314	1,884,227	5,003,535	1,833,038	5,054,724
AMERRA Agri Fund II, LP	40,100,000	27,641,371	10,886,813	16,909	939,757	9,763,966	3,374,176	3,374,176	5,339	296,712	3,082,803
AMERRA-KRS Agri Holding Company, LP	65,000,000	44,805,214	22,604,390	0	2,229,115	20,375,275	14,146,472	7,136,945	0	703,805	6,433,141
Arcano KRS Fund I, L.P.	36,000,000	15,587,717	5,482,076	0	0	5,482,076	4,852,329	1,706,525	0	0	1,706,525
Arctos Sports Partners Fund II	85,000,000	42,000,000	9,771,816	5,707,267	540,271	14,938,812	18,000,000	4,187,921	2,445,972	231,545	6,402,348
Arctos Sports Partners Fund II Co-Investments LP	85,000,000	42,000,000	27,212,068	4,784,796	0	31,996,865	18,000,000	11,662,315	2,050,627	0	13,712,942
Ares Special Situations Fund IV, L.P.	26,192,000	17,935,797	13,698,609	0	1,322,277	12,376,332	6,121,833	4,675,599	0	451,319	4,224,281
Barings Euro Real Estate II	154,030,625	86,657,631	25,500,847	14,714,436	0	37,971,134	27,402,043	8,063,633	4,652,857	0	12,006,867
Barings Real Estate European Value Add I SCSp	108,727,500	61,170,093	20,885,991	989,118	0	20,351,289	19,342,618	6,604,367	312,769	0	6,435,289
Bay Hills Capital I, L.P.	67,500,000	29,226,970	2,663,692	0	0	2,663,692	9,098,116	829,185	0	0	829,185
Bay Hills Capital III, L.P.	51,250,000	35,095,051	33,995,161	0	0	33,995,161	11,978,618	11,603,204	0	0	11,603,204
Bay Hills Emerging Partners II LP	45,000,000	19,484,647	19,484,647	0	0	38,549,737	6,065,411	12,000,217	0	0	12,000,217
Bay Hills Emerging Partners II-8 LP	45,000,000	19,484,647	25,232,684	0	0	25,232,684	6,065,411	7,854,728	0	0	7,854,728
BDCM Opportunity Fund IV, L.P.	35,580,000	24,364,534	39,066,121	0	44,944	39,021,177	8,316,082	13,334,020	0	15,340	13,318,680
Blackstone Capital Partners V, L.P.	47,174,735	20,426,290	0	8,747	0	8,747	6,358,537	2,723	0	0	2,723
Blackstone Capital Partners VI, L.P.	60,000,000	38,220,311	9,123,383	0	147,343	8,976,039	18,479,695	4,411,197	0	71,241	4,339,956
Blue Torch Credit Opportunities Fund II LP	140,000,000	77,659,705	89,145,495	0	0	89,145,495	26,221,374	30,099,488	0	0	30,099,488
BSP Co-Invest Vehicle K LP	37,262,028	21,962,420	23,677,331	0	614,180	22,853,151	7,274,035	7,772,468	0	203,419	7,569,049
BSP Private Credit Fund	100,000,000	58,940,485	59,127,627	0	1,342,383	50,855,245	19,521,309	17,288,049	0	444,602	16,843,447
BTG Pactual Brazil Timberland Fund I	34,500,000	23,847,150	13,869,546	0	828,479	13,041,067	7,642,335	4,444,796	0	265,504	4,179,292
Cerberus KRS Levered Loan Opportunities Fund, L.P.	140,000,000	82,516,679	118,441,057	0	0	119,766,676	27,329,832	39,228,120	0	0	39,667,170
CERS Ceres Farms	50,000,000	0	0	37,000,000	0	37,000,000	13,000,000	0	13,000,000	0	13,000,000
Columbia Capital Equity Partners IV, L.P.	27,000,000	11,690,788	1,439,638	0	611,375	828,263	3,639,247	448,147	0	190,316	257,831
Crestview Partners II, L.P.	67,500,000	29,226,970	12,088,340	95,129	2,767,885	9,415,649	9,098,116	3,763,001	29,633	861,620	2,931,015
Crestview Partners III, L.P.	39,000,000	26,706,479	17,358,961	632,228	1,050,929	16,940,260	9,115,436	5,924,948	215,792	358,702	5,782,037
CS Adjacent Investment Partners Parallel LP	140,000,000	82,516,679	79,119,768	0	2,401,202	76,718,567	27,329,832	26,204,763	0	795,287	25,409,476
CVC European Equity Partners VI, L.P.	22,698,957	15,543,826	15,401,460	255,563	1,415,204	13,191,394	5,305,407	5,256,815	87,229	483,036	4,502,477
DAG Ventures II, L.P.	27,000,000	11,690,788	475,054	0	0	475,054	3,639,247	147,880	0	0	147,880
DAG Ventures III, L.P.	27,000,000	11,690,788	66,314	0	0	66,314	3,639,247	20,643	0	0	20,643
DAG Ventures IV, L.P.	90,000,000	38,969,294	11,762,690	0	11,762,690	12,130,822	3,661,629	0	0	0	3,661,629
DAG Ventures V, L.P.	8,000,000	5,096,042	14,880	0	10,652	4,228	2,463,959	7,195	0	5,150	2,094
DCM VI, L.P.	13,500,000	6,845,394	8,819,393	0	0	8,819,393	1,819,623	255,070	0	0	255,070
DivcoWest Fund IV	20,800,000	14,568,740	602,434	0	48,908	553,527	4,539,761	187,724	0	15,240	172,484
Eids River Opportunities Fund II	37,500,000	19,256,300	19,245	0	114,358	4,886	6,088,953	37,706	0	36,161	1,545
Fundamental Partners III LP	70,000,000	39,382,001	27,914,160	0	1,388,088	26,526,072	12,452,997	8,826,747	0	438,828	8,387,819
Green Equity Investors V, L.P.	90,000,000	38,969,294	144,930	0	0	144,930	12,130,822	45,116	0	0	45,116
Green Equity Investors VI, L.P.	32,000,000	20,384,166	21,035,140	0	1,561,328	19,473,812	9,855,837	10,170,586	0	754,909	9,415,677
Green Equity Investors VII LP	25,000,000	17,900,000	12,606,817	0	511,701	12,095,117	5,575,000	3,926,425	0	159,371	3,767,055
Greenfield Acquisition Partners VII, L.P.	27,800,000	19,471,678	1,087,717	0	0	1,087,717	6,067,572	338,944	0	0	338,944
H.I.G. HealthBridge Capital Partners I, L.P.	13,500,000	8,599,570	4,338,461	0	0	4,338,461	4,157,931	2,097,666	0	0	2,097,666
H.I.G. Capital Partner V, L.P.	13,100,000	8,970,638	4,934,348	44,387	1,339,139	3,639,597	3,061,852	1,684,188	15,150	457,074	1,242,265
H.I.G. Ventures II, L.P.	18,000,000	7,793,859	4,875,510	0	0	4,875,510	2,426,164	151,758	0	0	151,758
H&F Speck I LP	3,250,153	1,407,291	4,191,546	0	0	4,191,546	438,078	1,304,794	0	0	1,304,794
Harvest Partners VI, L.P.	28,400,000	20,768,921	2,280,787	0	0	2,280,787	5,782,239	634,990	0	0	634,990
Harvest Partners VII LP	20,000,000	14,320,000	17,744,414	0	0	17,744,414	4,460,000	5,526,543	0	0	5,526,543
Horsley Bridge International Fund V, L.P.	45,000,000	19,484,647	35,249,915	0	2,071,210	33,178,705	6,065,411	10,973,010	0	644,751	10,328,259
IFM US Infrastructure Debt Fund	70,000,000	39,669,146	42,117,968	9,756,390	9,756,390	43,092,422	13,660,943	14,504,248	3,359,827	3,359,827	14,839,823
Institutional Venture Partners XIII, L.P.	27,000,000	11,690,788	2,214	0	0	2,214	3,639,247	689	0	0	689
Kayne Anderson Energy Fund VII LP	50,000,000	35,800,000	18,331,313	0	642,773	17,688,541	11,150,000	5,709,334	0	200,193	5,509,141
KCP IV Co-Invest	12,281,030	8,409,821	1,446,141	0	295,495	1,047,295	2,870,434	493,596	0	100,858	357,462
Keyhaven Capital Partners Fund III, L.P.	26,127,934	11,313,190	3,897,452	0	0	3,816,156	3,521,703	1,213,245	0	0	1,125,880
Keyhaven Capital Partners IV LP	12,281,030	8,409,821	9,135,395	92,069	434,900	8,151,982	2,870,434	3,118,087	31,425	148,440	2,782,429
Levine Leichtman Capital Partners V, L.P.	46,000,000	31,499,949	1,343,754	0	0	1,343,754	10,751,540	458,649	0	0	458,649
Levine Leichtman Capital Partners VI LP	37,500,000	26,849,987	33,921,676	0	115,358	33,806,319	8,362,509	10,565,007	0	35,928	10,529,079
Libert Adler VII	34,750,000	24,338,900	8,233,451	0	931,228	7,892,223	7,585,925	2,750,085	0	290,244	2,459,841
Libert-Adler Real Estate Fund VII-8 LP	36,750,000	20,675,550	4,801,475	0	1,094,121	3,707,354	6,537,824	1,518,276	0	345,972	1,172,304
Maritime Partners LP	175,000,000	87,500,000	66,167,342	66,890,284	1,413,079	65,477,206	35,000,000	26,466,937	26,756,114	565,231	26,190,882
Mesa West Core Lending Fund, LP	57,500,000	36,357,250	33,713,808	301,332	301,332	33,713,808	11,459,750	10,626,541	94,979	94,979	10,626,541
Mesa West Real Estate Income Fund IV LP	36,000,000	15,587,717	6,966,058	0	0	6,966,058	4,852,329	2,168,477	0	0	2,168,477
MiddleGround Partners I LP	50,000,000	35,875,000	41,113,702	0	0	41,113,702	11,200,000	12,835,497	0	0	12,835,497
MiddleGround Partners II LP	50,000,000	27,301,556	34,707,725	0	383,775	34,286,950	9,256,264	11,754,692	0	130,114	11,624,578
MiddleGround Partners II-X LP	25,000,000	13,650,778	18,330,497	0	191,887	18,138,609	4,628,132	6,214,734	0	65,057	6,149,677
Mill Road Capital I, L.P.	27,000,000	11,690,788	696,348	0	0	696,348	3,639,247	216,768	0	0	216,768
New Mountain Partners III, L.P.	32,337,197	14,001,752	574,997	0	0	574,997	4,358,631	178,992	0	0	178,992
New Mountain Partners IV, L.P.	32,800,000	22,460,833	4,934,887	0	0	4,934,887	7,666,315	1,684,372	0	0	1,684,372
New State Capital Partners Fund III LP	17,500,000	9,555,545	6,943,676	0	0	6,943,676	3,239,692	2,354,170	0	0	2,354,170
Oberland Capital Healthcare LP	3,450,000	2,475,375	942,525	0	110,449	832,076	772,800	294,252	0	34,482	259,770
Patron Capital V LP	37,278,000	20,972,603	8,985,681	0	180,772	8,163,421	6,631,755	2,841,366	0	57,162	2,581,358
Riverside Capital Appreciation Fund VI, L.P.	35,500,000	25,961,146	8,467,881	0	119,936	8,347,945	7,227,806	2,357,531	0	33,391	2,324,139
Rubenstein Properties Fund II	20,800,000	14,568,738	3,084,210	0	0	3,084,210	4,539,767	961,071	0	0	961,071

CERS Board Meeting - Investment Committee

Kentucky Public Pensions Authority  
Capital Calls and Distributions  
For the period October 1, 2024 thru December 31, 2024

Pension Funds Managers	Total Pension Fund Commitment	County Employees Retirement System					County Employees Hazardous Retirement System				
		Commitment	Beginning Valuation	Period Contributions	Period Distributions	Ending Valuation	Commitment	Beginning Valuation	Period Contributions	Period Distributions	Ending Valuation
Secondary Opportunities Fund III, L.P.	25,000,000	19,411,552	3,479,407	0	0	3,479,407	5,588,448	1,001,697	0	0	1,001,697
Strategic Value SH 130 C2	65,000,000	29,250,000	0	22,096,579	0	22,096,579	10,725,000	0	8,102,079	0	8,102,079
Strategic Value Special Situations Fund IV LP	43,300,000	31,067,750	32,648,166	0	5,768,858	26,879,308	9,699,200	10,192,598	0	1,801,009	8,391,589
Strategic Value Special Situations Fund V LP	70,000,000	38,222,178	34,108,991	1,882,442	0	35,991,433	12,958,769	11,564,243	638,219	0	12,202,462
Tauska Mining Finance Fund LLC	45,100,000	30,883,643	2,144,145	0	72,366	2,071,779	10,541,186	731,838	0	24,700	707,138
Tenaska Power Fund II, L.P.	27,000,000	12,131,225	43,636	0	0	43,636	4,055,317	14,587	0	0	14,587
Triton Fund IV, L.P.	26,052,064	17,839,971	15,062,444	0	0	13,975,325	6,089,126	5,141,103	0	0	4,770,048
VantagePoint Venture Partners 2006, L.P.	27,000,000	11,690,788	1,690,903	0	0	1,690,903	3,639,247	526,364	0	0	526,364
VantagePoint Venture Partners IV, L.P.	36,000,000	15,587,717	24,768	0	0	24,768	4,852,329	7,710	0	0	7,710
Vista Equity Partners III, L.P.	45,000,000	19,484,647	957,997	0	0	957,997	6,065,411	298,217	0	0	298,217
Vista Equity Partners IV, L.P.	27,000,000	17,199,140	12,282,495	0	0	12,282,495	8,315,863	5,938,642	0	0	5,938,642
Vista Equity Partners VI LP	25,000,000	17,900,000	18,199,373	0	1,694,377	16,504,978	5,575,000	5,668,241	0	527,718	5,140,517
Walton Street Real Estate Fund VI, LP	36,000,000	17,056,796	6,530,129	0	543,020	5,987,109	6,030,018	2,308,569	0	191,971	2,116,598
Walton Street Real Estate Fund VII, LP	38,120,000	26,700,008	2,801,854	0	313,328	2,488,526	8,319,997	873,087	0	97,636	775,450
Warburg, Pincus Private Equity IX, L.P.	50,000,000	21,649,608	24,213	0	0	24,213	6,739,345	7,537	0	0	7,537
Warburg, Pincus Private Equity X, L.P.	38,750,000	16,778,446	389,223	0	64,647	324,576	5,222,993	121,162	0	20,124	101,938
Wayzata Opportunities Fund III, L.P.	35,500,000	25,961,146	753,072	0	150,469	602,603	7,227,806	209,662	0	41,892	167,770
White Oak Yield Spectrum Parallel Fund LP	50,000,000	22,344,255	35,351,678	0	471,892	34,979,886	12,186,342	19,280,574	0	257,365	19,023,209
<b>TOTAL</b>	<b>4,721,543,253</b>	<b>2,597,313,980</b>	<b>1,558,376,554</b>	<b>190,460,962</b>	<b>65,965,115</b>	<b>1,611,432,884</b>	<b>894,462,775</b>	<b>534,174,555</b>	<b>71,031,042</b>	<b>22,603,345</b>	<b>554,444,549</b>

CERS Board Meeting - Investment Committee

Kentucky Public Pensions Authority  
Capital Calls and Distributions  
For the period October 1, 2024 thru December 31, 2024

Insurance Funds Managers	Total Pension Fund Commitment	County Employees Retirement System					County Employees Hazardous Retirement System				
		Commitment	Beginning Valuation	Period Contributions	Period Distributions	Ending Valuation	Commitment	Beginning Valuation	Period Contributions	Period Distributions	Ending Valuation
Adams Street SPC II A1	75,000,000	34,007,112	28,974,080	0	1,076,068	27,898,011	17,965,829	15,306,897	0	568,483	14,738,414
Adams Street SPC II B1	75,000,000	34,007,113	27,032,244	0	820,889	26,211,355	17,965,828	14,281,032	0	433,672	13,847,359
Adams Street SPC III A1	75,250,000	36,247,874	5,966,385	4,755,085	2,962,645	7,758,825	3,044,501	2,426,404	2,426,404	1,511,766	3,959,140
Adams Street SPC III B1	75,250,000	36,247,867	2,118,375	5,625,313	2,060,826	5,682,863	18,496,406	1,080,956	2,870,461	1,051,589	2,899,827
AMERRA Agri Fund II, LP	16,200,000	7,502,182	2,895,577	4,581	254,626	2,645,533	4,141,562	1,598,497	2,529	140,566	1,460,460
AMERRA-KRS Agri Holding Company, LP	35,000,000	16,208,417	8,177,204	0	806,389	7,370,815	8,947,820	4,514,207	0	445,165	4,069,042
Arcano KRS Fund I, L.P.	4,000,000	1,611,501	566,752	0	566,752	0	862,625	303,379	0	0	303,379
Arctos Sports Partners Fund II	40,000,000	20,500,000	4,769,579	2,785,690	263,704	7,291,565	7,000,000	1,628,637	951,211	90,045	2,489,802
Arctos Sports Partners Fund II Co-Investments LP	40,000,000	20,500,000	13,282,081	2,335,436	0	15,617,517	7,000,000	0	797,466	0	5,332,810
Ares Special Situations Fund IV, L.P.	13,808,000	7,867,793	6,009,091	0	580,036	5,429,055	4,255,629	3,250,271	0	313,737	2,936,534
Barings Euro Real Estate II	66,013,125	30,313,229	8,920,311	5,147,176	0	13,282,474	16,635,304	4,895,291	2,824,669	0	7,289,160
Barings Real Estate European Value Add I SCSp	46,597,500	21,397,574	7,306,014	345,998	0	7,118,972	11,742,567	4,009,397	189,877	0	3,906,752
Bay Hills Capital I, L.P.	75,000,000	30,215,638	0	275,380	0	275,380	16,174,225	147,409	0	147,409	0
Bay Hills Capital III, L.P.	48,750,000	24,202,576	0	0	24,202,576	0	15,024,764	13,090,990	0	0	13,090,990
Bay Hills Emerging Partners II LP	5,000,000	2,014,376	3,985,377	0	0	3,985,377	1,078,282	2,133,345	0	0	2,133,345
Bay Hills Emerging Partners II-B LP	5,000,000	2,070,000	2,680,657	0	0	2,680,657	1,250,000	1,618,754	0	0	1,618,754
BDCM Opportunity Fund IV, L.P.	24,420,000	13,914,506	22,310,552	0	25,667	22,284,884	7,526,253	12,067,612	0	13,883	12,053,729
Blackstone Capital Partners V, L.P.	12,414,403	5,001,455	2,048	0	2,048	2,677,245	1,096	0	0	0	1,096
Blackstone Capital Partners VI, L.P.	40,000,000	21,919,994	5,232,430	0	84,518	5,147,912	13,120,008	3,131,822	0	50,587	3,081,235
Blue Torch Credit Opportunities Fund II LP	60,000,000	27,169,450	31,187,785	0	0	31,187,785	16,393,251	0	0	0	16,393,251
BSP Co-Invest Vehicle K LP	17,252,566	7,709,915	8,174,705	0	213,817	7,960,888	4,204,913	4,458,405	0	116,614	4,341,792
BSP Private Credit Fund	50,000,000	22,344,255	19,788,047	0	508,895	19,279,152	12,866,342	10,792,210	0	277,547	10,514,664
BTG Pactual Brazil Timberland Fund I	15,500,000	7,016,381	4,080,740	0	243,758	3,836,983	3,855,131	2,242,151	0	133,932	2,108,219
Cerberus KRS Levered Loan Opportunities Fund, L.P.	60,000,000	26,813,106	38,486,433	0	0	38,917,182	14,623,610	20,990,130	0	0	14,225,056
CERS Ceres Farms	25,000,000	0	0	16,750,000	0	25,000,000	8,250,000	0	8,250,000	0	8,250,000
Columbia Capital Equity Partners IV, L.P.	3,000,000	1,208,626	148,835	0	63,205	85,629	646,969	79,670	0	33,833	45,837
Crestview Partners II, L.P.	7,500,000	3,021,564	1,249,717	9,841	286,152	973,406	1,617,422	668,965	5,268	153,175	521,058
Crestview Partners III, L.P.	21,000,000	11,965,793	7,777,647	283,268	470,868	7,590,047	6,472,206	4,206,870	153,218	254,689	4,105,399
CS Adjacent Investment Partners Parallel LP	60,000,000	26,813,106	25,709,309	0	780,251	24,929,058	14,623,610	14,021,609	0	425,541	13,596,068
CVC European Equity Partners VI, L.P.	12,529,757	7,139,450	6,771,625	112,364	622,229	5,799,916	3,861,675	3,662,721	60,777	336,559	3,137,131
DAG Ventures II, L.P.	3,000,000	1,208,626	49,108	0	0	49,108	646,969	26,287	0	0	26,287
DAG Ventures III, L.P.	3,000,000	1,208,626	6,850	0	0	6,850	646,969	3,657	0	0	3,657
DAG Ventures IV, L.P.	10,000,000	4,028,752	0	0	1,216,059	0	2,156,563	650,948	0	0	650,948
DAG Ventures V, L.P.	7,000,000	3,835,999	11,196	0	8,018	3,178	2,296,001	6,701	0	4,799	1,902
DCM VI, L.P.	1,500,000	604,313	84,711	0	0	84,711	323,484	45,345	0	0	45,345
DivcoWest Fund IV	9,200,000	4,244,869	175,534	0	14,250	161,283	2,306,449	95,376	0	7,743	87,633
Elda River Opportunities Fund II	12,500,000	5,764,633	35,697	0	34,235	1,462	3,188,725	19,746	0	18,937	809
Fundamental Partners III LP	30,000,000	13,776,001	9,764,501	0	485,559	9,278,941	7,559,998	5,358,566	0	266,465	5,092,100
Green Equity Investors V, L.P.	10,000,000	4,028,752	14,983	0	14,983	2,156,563	8,020	0	0	0	8,020
Green Equity Investors VI, L.P.	28,000,000	15,343,995	15,834,020	0	1,175,276	14,658,744	9,184,005	9,477,305	0	703,451	8,773,854
Green Equity Investors VII LP	25,000,000	10,349,999	7,289,416	0	295,872	6,993,545	6,250,000	4,401,822	0	178,667	4,223,155
Greenfield Acquisition Partners VII, L.P.	12,200,000	5,628,527	314,419	0	0	314,419	3,058,186	170,835	0	0	170,835
H.I.G. HealthBridge Capital Partners I, L.P.	11,500,000	6,301,998	0	0	0	0	3,179,342	0	0	0	0
H.I.G. Capital Partner II, L.P.	6,900,000	3,931,617	2,162,608	19,454	586,912	1,595,149	2,126,582	1,169,738	10,523	317,456	862,804
H.I.G. Ventures II, L.P.	2,000,000	805,750	50,400	0	50,400	431,313	50,400	26,979	0	26,979	0
H&F Spock I LP	1,794,672	723,029	1,462,499	0	1,462,499	387,032	782,866	0	0	0	782,866
Harvest Partners VI, L.P.	11,600,000	6,609,681	725,859	0	0	725,859	3,575,121	392,611	0	0	392,611
Harvest Partners VII LP	20,000,000	8,279,999	10,260,038	0	0	10,260,038	5,000,000	6,195,676	0	0	6,195,676
Horsley Bridge International Fund V, L.P.	5,000,000	2,014,376	3,644,224	0	214,127	3,430,097	1,078,282	1,950,728	0	114,620	1,836,108
IFM US Infrastructure Debt Fund	30,000,000	13,890,494	14,747,970	3,416,284	3,416,284	15,089,184	7,156,853	7,598,653	1,760,185	1,760,185	7,774,458
Institutional Venture Partners XII, L.P.	3,000,000	1,208,626	229	0	229	0	646,969	122	0	0	122
Kayne Anderson Energy Fund VII LP	50,000,000	20,699,998	10,599,390	0	371,659	10,227,731	12,500,001	6,400,599	0	234,432	6,176,167
KCP IV Co-Invest	8,438,970	4,802,824	825,886	0	168,756	598,107	2,597,812	446,715	0	91,279	323,511
Keyhaven Capital Partners Fund III, L.P.	2,899,400	1,168,096	402,930	0	0	373,848	625,274	215,685	0	0	200,119
Keyhaven Capital Partners IV LP	8,438,970	4,802,824	5,217,196	52,581	248,370	4,655,571	2,597,812	2,821,943	28,440	134,341	2,518,164
Levine Leichtman Capital Partners V, L.P.	24,000,000	13,675,190	583,371	0	583,371	7,396,807	3,155,441	3,155,441	0	0	3,155,441
Levine Leichtman Capital Partners VI LP	37,500,000	15,525,007	19,613,948	0	66,701	19,547,246	9,374,983	11,844,145	0	40,278	11,803,866
Lubert Adler VII	15,250,000	7,036,350	2,550,849	0	269,217	2,281,632	3,823,174	1,385,995	0	146,278	1,239,716
Lubert-Adler Real Estate Fund VII-B LP	15,750,000	7,232,401	1,679,578	0	382,729	1,296,849	3,968,999	921,719	0	210,034	711,685
Maritime Partners LP	75,000,000	37,500,000	28,357,432	0	386,801	27,970,632	15,000,000	11,342,973	0	154,720	11,188,253
Mesa West Core Lending Fund, LP	29,600,000	13,790,640	18,919,581	169,109	169,109	18,919,581	7,619,040	10,452,672	93,429	93,429	10,452,672
Mesa West Real Estate Income Fund IV LP	14,000,000	6,428,800	2,872,993	0	2,872,993	3,527,999	3,527,999	1,576,642	0	0	1,576,642
MiddleGround Partners I LP	25,000,000	3,750,000	4,297,601	0	0	4,297,601	1,999,999	2,292,053	0	0	2,292,053
MiddleGround Partners II LP	25,000,000	11,262,207	14,302,075	0	158,311	14,143,763	5,794,817	7,358,940	0	81,457	7,277,483
MiddleGround Partners II-X LP	12,500,000	5,631,103	7,561,539	0	79,156	7,482,384	2,897,408	3,890,688	0	40,729	3,849,960
Mill Road Capital I, L.P.	3,000,000	1,208,626	71,990	0	71,990	646,969	38,536	0	0	0	38,536
New Mountain Partners III, L.P.	7,186,045	2,895,079	118,889	0	0	118,889	1,549,716	63,640	0	0	63,640
New Mountain Partners IV, L.P.	17,200,000	9,800,553	2,153,283	0	0	2,153,283	5,301,045	1,164,694	0	0	1,164,694
New State Capital Partners Fund III LP	7,500,000	3,378,662	2,455,155	0	2,455,155	2,455,155	1,739,445	1,263,267	0	0	1,263,267
Oberland Capital Healthcare LP	15,500,000	4,840,652	184,313	0	21,598	162,714	2,631,898	100,212	0	11,743	88,469
Patron Capital V LP	14,497,000	6,657,023	2,852,246	0	57,380	2,591,244	3,653,243	1,565,256	0	31,489	1,422,024
Riverside Capital Appreciation Fund VI, L.P.	18,712,500	10,748,972	3,506,012	0	49,659	3,456,354	5,705,349	1,860,924	0	26,358	1,834,566
Rubenstein Properties Fund II	9,200,000	4,244,871	898,641	0	0	898,641	2,306,445	488,276	0	0	488,276

CERS Board Meeting - Investment Committee

Kentucky Public Pensions Authority  
Capital Calls and Distributions  
For the period October 1, 2024 thru December 31, 2024

Insurance Funds Managers	Total Pension Fund Commitment	County Employees Retirement System					County Employees Hazardous Retirement System				
		Commitment	Beginning Valuation	Period Contributions	Period Distributions	Ending Valuation	Commitment	Beginning Valuation	Period Contributions	Period Distributions	Ending Valuation
Secondary Opportunities Fund III, L.P.	75,000,000	34,884,827	6,252,902	0	0	6,252,902	18,849,301	3,378,627	0	0	3,378,627
Strategic Value SH 130 C2	30,000,000	13,500,000	0	10,103,390	0	10,103,390	6,450,000	0	8,102,079	0	8,102,079
Strategic Value Special Situations Fund IV LP	21,700,000	6,776,910	7,121,641	0	1,258,380	5,863,261	3,684,660	0	4,827,175	0	4,827,175
Strategic Value Special Situations Fund V LP	30,000,000	13,514,648	12,730,899	665,596	0	13,396,496	6,953,780	6,550,512	342,474	0	6,892,986
Taurus Mining Finance Fund LLC	19,900,000	11,339,013	787,228	0	26,570	760,659	6,133,188	425,806	0	14,371	411,435
Tenaska Power Fund II, L.P.	3,000,000	1,278,755	4,600	0	0	4,600	678,044	2,439	0	0	2,439
Triton Fund IV, L.P.	13,403,512	7,637,316	6,606,577	0	0	6,129,752	4,130,966	3,573,448	0	0	3,315,537
VantagePoint Venture Partners 2006, L.P.	3,000,000	1,208,626	174,810	0	0	174,810	646,969	93,575	0	0	93,575
VantagePoint Venture Partners IV, L.P.	4,000,000	1,611,501	2,561	0	0	2,561	862,625	1,371	0	0	1,371
Vista Equity Partners III, L.P.	5,000,000	2,014,376	99,042	0	0	99,042	1,078,282	53,017	0	0	53,017
Vista Equity Partners IV, L.P.	23,000,000	12,603,996	9,000,943	0	0	9,000,943	7,544,005	5,387,430	0	0	5,387,430
Vista Equity Partners VI LP	25,000,000	10,349,999	10,523,100	0	979,715	9,543,381	6,250,000	6,354,530	0	591,615	5,762,912
Walton Street Real Estate Fund VI, LP	4,000,000	1,712,019	655,440	0	54,504	600,937	917,457	351,245	0	29,208	322,037
Walton Street Real Estate Fund VII, LP	16,755,000	7,730,005	811,173	0	90,713	720,461	4,199,996	440,740	0	49,287	391,453
Warburg, Pincus Private Equity IX, L.P.	10,000,000	4,028,752	4,506	0	0	4,506	2,156,563	2,412	0	0	2,412
Warburg, Pincus Private Equity X, L.P.	7,500,000	3,021,564	70,069	0	11,642	58,427	1,617,422	37,507	0	6,232	31,276
Wayzata Opportunities Fund III, L.P.	18,712,500	10,748,972	311,803	0	62,301	249,502	5,705,349	165,499	0	33,068	132,431
White Oak Yield Spectrum Parallel Fund LP	50,000,000	22,344,255	35,351,878	0	471,892	34,879,986	12,186,342	19,280,574	0	257,365	19,023,209
<b>TOTAL</b>	<b>2,143,803,920</b>	<b>987,700,074</b>	<b>609,645,286</b>	<b>52,581,168</b>	<b>23,740,237</b>	<b>641,414,549</b>	<b>531,641,314</b>	<b>315,911,916</b>	<b>33,696,185</b>	<b>11,991,423</b>	<b>340,974,597</b>



Kentucky Public Pensions Authority

## CERS & CERS-Hazardous Unit Holdings

Quarter Ending: December 31, 2024

CERS Board Meeting - Investment Committee

Kentucky Public Pensions Authority								
Pension: CERS & CERS-H Unit Holdings								
Quarter Ended December 31, 2024								
UNIT OF PARTICIPATION	CERS				CERS-H			
	Shares/Par	Base Cost	Base Market Value	Base Market Unrealized G/L	Shares/Par	Base Cost	Base Market Value	Base Market Unrealized G/L
<b>Grand Total</b>	<b>47,625,123.746</b>	<b>7,737,204,254.830</b>	<b>9,922,987,485.970</b>	<b>2,185,783,231.140</b>	<b>17,256,339.476</b>	<b>2,810,345,683.050</b>	<b>3,546,388,592.310</b>	<b>736,042,909.260</b>
KRS ABSOLUTE RETURN UNIT	463,537.835	57,844,307.48	61,365,055.33	3,520,747.85	146,832.107	18,389,391.45	19,438,241.48	1,048,850.03
KRS ADAMS STREET A1 UNIT	402,632.979	70,356,358.97	77,264,130.43	6,907,771.46	135,763.228	23,723,357.48	26,052,579.65	2,329,222.17
KRS ADAMS STREET B1 UNIT	468,043.350	70,070,850.99	72,882,961.59	2,812,110.60	157,818.856	23,627,086.56	24,575,299.75	948,213.19
KRS ADAMS STREET III A1 UNIT	169,828.179	17,658,899.50	18,322,540.78	663,641.28	62,218.504	6,469,540.83	6,712,673.26	243,132.43
KRS ADAMS STREET III B1 UNIT	188,453.427	13,185,558.45	13,590,711.81	405,153.36	69,042.081	4,830,681.11	4,979,113.62	148,432.51
KRS AMERRA AGRI UNIT	277,586.361	27,899,435.49	20,664,309.29	-7,235,126.20	87,643.096	8,808,763.53	6,524,398.52	-2,284,365.01
KRS AMERRA UNIT	58,914.146	10,456,074.09	9,745,530.77	-710,543.32	18,601.122	3,301,326.69	3,076,982.67	-224,344.02
KRS ARCTOS SPORTS II UNIT	232,391.506	35,055,943.85	45,153,874.35	10,097,930.50	99,596.358	15,051,189.05	19,351,660.10	4,300,471.05
KRS ARROWMARK UNIT	1,387,072.461	178,568,799.89	365,992,485.99	187,423,686.10	458,544.662	59,031,794.80	120,991,444.57	61,959,649.77
KRS BLACKROCK UNIT	2,571,921.954	290,376,669.10	490,765,539.04	200,388,869.94	923,368.674	112,024,188.14	176,194,119.86	64,169,931.72
KRS BLUE TORCH UNIT	483,961.906	92,589,426.95	86,772,870.92	-5,816,556.03	163,407.083	31,262,311.23	29,298,383.91	-1,963,927.32
KRS BNYM CUSTODY FEE UNIT	-362,360.726	-362,360.73	-362,360.73	0.00	-128,921.914	-128,921.91	-128,921.91	0.00
KRS BTG UNIT	100,612.736	4,761,889.54	9,474,574.38	4,712,684.84	32,243.529	1,526,049.70	3,036,332.43	1,510,282.73
KRS CASH UNIT	2,619,360.645	273,487,987.94	276,407,076.00	2,919,088.06	1,262,365.928	133,331,756.58	133,210,703.79	-121,052.79
KRS CERS CERES FARMS UNIT	370,000.000	37,000,000.00	37,000,000.00	0.00	130,000.000	13,000,000.00	13,000,000.00	0.00
KRS DB PRIVATE EQ UNIT	14,017.547	5,552,598.16	3,794,343.21	-1,758,254.95	4,035.553	1,598,553.98	1,092,364.67	-506,189.31
KRS DIVCOWEST IV UNIT	1,246.435	0.00	652,939.48	652,939.48	388.401	0.00	203,462.15	203,462.15
KRS DOMESTIC EQUITY UNIT	2,787,602.433	718,760,476.35	962,837,286.50	244,076,810.15	1,007,099.661	261,962,542.92	347,852,008.40	85,889,465.48
KRS GLOBAL FIXED UNIT	1,293,418.552	198,691,729.60	191,835,722.68	-6,856,006.92	504,938.362	75,651,768.35	74,890,850.63	-760,917.72
KRS GREENFIELD VII UNIT	3,565.631	1,294,546.63	1,085,826.20	-208,720.43	1,111.088	403,393.54	338,354.83	-65,038.71
KRS HARRISON UNIT	639,390.832	128,599,885.90	136,435,076.36	7,835,190.46	199,992.765	40,227,133.10	42,675,038.17	2,447,905.07
KRS IFM INFRAST DEBT UNIT	267,825.438	44,760,129.45	41,442,700.58	-3,317,428.87	92,231.578	15,414,137.53	14,271,705.11	-1,142,432.42
KRS INTERNAL EQUITY UNIT	4,701,864.780	1,115,461,564.79	2,038,799,312.95	923,337,748.16	1,663,712.893	408,667,271.44	721,410,942.63	312,743,671.19
KRS INTERNAL PRIVATE EQUITY	14,851.990	1,569,555.07	1,771,093.64	201,538.57	126,241.912	13,341,224.28	15,054,295.62	1,713,071.34
KRS INTERNATIONAL EQUITY UNIT	6,683,273.593	1,119,780,079.74	1,244,877,960.54	125,097,880.80	2,378,188.185	402,783,762.71	442,979,629.12	40,195,866.41
KRS L-A VII UNIT	127,635.903	11,238,872.70	7,944,727.67	-3,294,145.03	39,781.439	3,502,921.39	2,476,205.30	-1,026,716.09
KRS LIQUID CORE FIXED UNIT	9,631,704.128	1,298,123,907.79	1,288,722,012.33	-9,401,895.46	3,431,980.561	461,966,318.11	459,198,999.06	-2,767,319.05
KRS LIQUID HY FI UNIT	1,171,304.441	220,535,545.18	213,083,865.55	-7,451,679.63	509,278.328	95,217,641.65	92,647,967.34	-2,569,674.31
KRS MAGNETAR MTP UNIT	0.514	18,155.80	0.51	-18,155.29	0.163	5,742.13	0.16	-5,741.97
KRS MARITIME PARTNERS UNIT	597,891.705	62,014,176.61	64,582,225.55	2,568,048.94	239,156.682	24,805,671.24	25,832,890.22	1,027,218.98
KRS MESA WEST CORE UNIT	205,495.934	42,109,893.53	33,291,918.90	-8,817,974.63	64,772.004	13,272,976.00	10,493,561.90	-2,779,414.10
KRS MESA WEST IV UNIT	132,628.510	13,144,551.38	9,171,853.65	-3,972,697.73	41,938.511	4,156,444.20	2,900,235.29	-1,256,208.91
KRS MULTI SECTOR CREDIT FI	1,492,072.539	168,702,877.31	281,320,763.77	112,617,886.46	490,250.072	55,425,587.03	92,433,525.24	37,007,938.21
KRS OBERLAND UNIT	6,020.062	0.00	799,635.22	799,635.22	1,879.433	0.00	249,642.08	249,642.08
KRS PE 2010 UNIT	463,659.675	104,478,495.89	137,674,234.54	33,195,738.65	144,333.462	32,524,224.38	42,856,862.42	10,332,638.04
KRS PE 2011 UNIT	131,855.281	30,352,361.91	44,258,519.89	13,906,157.98	63,752.631	14,674,038.72	21,399,196.65	6,725,157.93
KRS PE 2012 A UNIT	6,847.095	3,083,701.26	2,602,132.58	-481,568.68	1,906.288	858,527.05	724,455.28	-134,071.77
KRS PE 2012 B UNIT	50,615.918	7,159,411.29	9,353,075.37	2,193,664.08	14,091.904	1,993,241.59	2,603,976.09	610,734.50
KRS PE 2013 UNIT	169,864.535	50,929,640.49	69,613,193.23	18,683,552.74	57,978.042	17,373,888.95	23,760,325.49	6,386,436.54
KRS PE 2014 UNIT	236,592.639	23,241,221.73	29,422,802.31	6,181,580.58	80,753.628	7,932,679.04	10,042,569.55	2,109,890.51
KRS PE 2015 UNIT	131,070.039	18,612,770.59	47,363,333.24	28,750,562.65	44,736.730	6,352,898.48	16,166,018.32	9,813,119.84
KRS PE 2016 UNIT	250,085.078	26,791,681.11	64,814,057.25	38,022,376.14	77,889.630	8,344,336.19	20,186,502.04	11,842,165.85
KRS PE 2017 UNIT	145,070.696	17,600,986.84	31,895,412.08	14,294,425.24	45,182.702	5,481,880.52	9,933,921.45	4,452,040.93
KRS PE 2018 UNIT	153,528.244	24,980,936.30	30,303,467.59	5,322,531.29	47,930.770	7,798,927.05	9,460,594.99	1,661,667.94
KRS PE 2019 UNIT	172,436.585	25,416,917.78	43,513,390.54	18,096,472.76	53,833.861	7,935,037.55	13,584,668.35	5,649,630.80
KRS PE 2021 UNIT	627,793.317	66,401,392.50	93,803,928.20	27,402,535.70	212,845.768	22,512,594.04	31,803,092.83	9,290,498.79
KRS PERIMETER PARK UNIT	15,181.379	2,200,095.59	1,682,549.53	-517,546.06	16,528.029	2,395,252.22	1,831,798.51	-563,453.71
KRS POST-2015 REAL ESTATE UNIT	854,642.397	74,182,919.46	97,732,960.35	23,550,040.89	270,246.803	23,459,860.08	30,904,177.20	7,444,317.12
KRS PRIVATE CREDIT FI UNIT	1,555,325.605	346,138,878.46	359,818,236.10	13,679,357.64	515,129.648	114,635,891.77	119,173,143.37	4,537,251.60
KRS PROLOGIS UNIT	741,098.600	95,228,317.68	165,043,123.63	69,814,805.95	234,343.128	30,112,188.74	52,188,361.77	22,076,173.03
KRS REAL RETURN UNIT	581,538.452	103,102,319.85	174,037,363.78	70,935,043.93	200,265.557	35,355,416.98	59,933,594.20	24,578,177.22
KRS RUBENSTEIN PF II UNIT	72,479.805	12,404,371.76	3,273,149.29	-9,131,222.47	22,585.445	3,865,327.07	1,019,946.64	-2,845,380.43
KRS SHENKMAN UNIT	826,958.701	151,397,921.68	152,628,904.51	1,230,982.83	327,830.343	59,984,706.25	60,506,511.46	521,805.21
KRS STOCKBRIDGE UNIT	280,090.753	51,288,312.35	57,080,616.89	5,792,304.54	89,313.398	16,354,461.68	18,201,471.49	1,847,009.81
KRS TAURUS UNIT	5,680.455	169,226.51	2,043,974.87	1,874,748.36	1,938.849	57,759.49	697,648.10	639,888.61
KRS TPF II UNIT	351.766	3,993,888.24	43,815.74	-3,950,072.50	117.591	1,335,110.03	14,647.06	-1,320,462.97
KRS WALTON VI UNIT	32,319.454	6,589,920.17	5,975,045.68	-614,874.49	11,425.762	2,329,705.94	2,112,333.02	-217,372.92
KRS WALTON VII UNIT	18,709.364	7,635,167.57	2,485,415.36	-5,149,752.21	5,830.030	2,379,196.01	774,480.95	-1,604,715.06
KRS WATERFALL UNIT	897,560.187	154,515,010.32	189,036,218.18	34,521,202.86	300,048.662	51,646,928.39	63,193,605.46	11,546,677.07

CERS Board Meeting - Investment Committee

Kentucky Public Pensions Authority									
Insurance: CERS & CERS-H Unit Holdings									
Quarter Ended December 31, 2024									
UNIT OF PARTICIPATION	CERS INS				CERS-H INS				
	Shares/Par	Base Cost	Base Market Value	Base Market Unrealized G/L	Shares/Par	Base Cost	Base Market Value	Base Market Unrealized G/L	
<b>Grand Total</b>	<b>19,092,048.375</b>	<b>2,875,525,861.490</b>	<b>3,669,833,656.320</b>	<b>794,307,794.830</b>	<b>9,012,663.271</b>	<b>1,346,564,317.150</b>	<b>1,753,349,181.880</b>	<b>406,784,864.730</b>	
KRS INS ABSOLUTE RETURN UNIT	150,825.727	15,620,835.87	19,993,436.65	4,372,600.78	84,502.687	8,946,879.40	11,201,664.02	2,254,784.62	
KRS INS ADAMS STREET A1 UNIT	140,977.060	24,634,428.68	27,053,099.69	2,418,671.01	74,477.650	13,014,275.93	14,292,050.71	1,277,774.78	
KRS INS ADAMS STREET B1 UNIT	163,857.037	24,534,460.56	25,519,087.08	984,626.52	86,565.050	12,961,461.62	13,481,636.73	520,175.11	
KRS INS ADAMS STREET III A1	69,950.266	7,273,496.13	7,546,842.07	273,345.94	35,693.918	3,711,488.01	3,850,969.80	139,481.79	
KRS INS ADAMS STREET III B1	77,622.315	5,430,979.89	5,597,856.67	166,876.78	39,608.780	2,771,295.88	2,856,450.15	85,154.27	
KRS INS AMERRA AGRY UNIT	100,408.398	10,092,703.24	7,475,374.81	-2,617,328.43	55,430.225	5,571,653.49	4,126,763.46	-1,444,890.03	
KRS INS AMERRA UNIT	15,814.163	2,819,568.75	2,640,538.71	-179,030.04	8,730.174	1,556,535.98	1,457,703.60	-98,832.38	
KRS INS ARCTOS SPORTS II UNIT	112,830.564	17,111,751.81	22,039,389.94	4,927,638.13	38,527.507	5,853,241.18	7,525,644.83	1,672,403.65	
KR3 ARROWMARK UNIT	554,115.798	72,091,938.85	147,779,966.50	75,688,027.65	301,875.792	39,275,018.59	80,508,793.63	41,233,775.04	
KRS INS BLACKROCK UNIT	2,623,893.313	136,232,637.63	198,877,783.75	62,645,146.12	1,292,376.856	64,959,129.38	97,955,600.41	32,996,471.03	
KRS INS BLUE TORCH UNIT	169,315.339	32,392,651.99	30,357,716.08	-2,034,935.91	88,997.305	17,026,567.42	15,956,941.25	-1,069,626.17	
KRS INS BNYM CUSTODY FEE UNIT	-202,590.917	-202,590.92	-202,590.92	0.00	-97,087.910	-97,087.91	-97,087.91	0.00	
KRS INS BTG UNIT	29,602.586	1,401,057.37	2,787,638.14	1,386,580.77	16,265.057	769,807.25	1,531,659.87	761,852.62	
KRS INS CASH UNIT	835,615.441	92,727,571.16	94,726,959.05	1,999,387.89	234,328.147	27,561,006.20	26,563,885.38	-997,120.82	
KRS INS CERS CERES FARMS UNIT	167,500.000	16,750,000.00	16,750,000.00	0.00	82,500.000	8,250,000.00	8,250,000.00	0.00	
KRS INS DB PRIVATE EQ UNIT	25,211.823	10,779,544.54	6,818,878.85	-3,960,665.69	13,622.690	5,824,503.38	3,684,440.93	-2,140,062.45	
KRS INS DIVCOWEST IV UNIT	361.116	0.00	190,247.99	190,247.99	196.212	0.00	103,371.05	103,371.05	
KRS INS DOMESTIC EQUITY UNIT	1,004,546.740	254,861,097.47	347,685,172.97	92,824,075.50	519,412.118	131,034,588.59	179,774,504.16	48,739,915.57	
KRS INS GLOBAL FIXED UNIT	414,702.370	61,372,892.86	60,289,778.90	-1,083,113.96	130,437.082	20,686,042.61	18,963,052.55	-1,722,990.06	
KRS INS GREENFIELD VII UNIT	1,030.644	547,744.10	313,872.76	-233,871.34	559.987	297,609.04	170,538.68	-127,070.36	
KRS INS HARRISON UNIT	244,840.322	48,884,930.57	51,136,456.72	2,251,526.15	133,920.349	26,733,139.31	27,970,115.68	1,236,976.37	
KRS INS IFM INFRAST DEBT UNIT	94,964.510	15,673,146.99	14,511,519.75	-1,161,627.24	48,928.929	8,075,335.06	7,476,826.02	-598,509.04	
KRS INS INTERNAL EQUITY UNIT	1,718,501.113	416,627,885.86	746,504,214.70	329,876,328.84	783,935.584	178,393,729.59	340,535,838.52	162,142,108.93	
KRS INS INTL EQ UNIT	2,459,042.730	409,005,316.15	452,682,119.58	43,676,803.43	1,141,617.699	185,756,904.59	210,158,983.18	24,402,078.59	
KRS INS L-A-VII UNIT	36,890.604	3,249,144.99	2,296,811.14	-952,333.85	20,044.372	1,765,410.75	1,247,963.76	-517,446.99	
KRS INS LIQUID CORE FIXED UNIT	3,610,635.743	480,721,590.10	477,698,370.37	-3,023,219.73	1,686,433.244	226,261,058.36	223,120,378.17	-3,140,680.19	
KRS INS LIQUID HY FI UNIT	577,737.253	102,922,027.56	102,334,653.04	-587,376.52	133,236.916	24,819,176.85	23,600,266.79	-1,218,910.06	
KRS INS MAGNETAR MTP	0.449	6,360.01	0.45	-6,359.56	0.248	3,516.22	0.25	-3,515.97	
KRS INS MARITIME PARTNERS UNIT	256,517.545	26,577,505.73	27,678,097.15	1,100,591.42	102,607.018	10,631,001.90	11,071,238.86	440,236.96	
KRS INS MESA WEST CORE UNIT	117,798.214	23,799,238.15	18,682,820.77	-5,116,417.38	65,081.046	13,149,871.51	10,321,867.17	-2,828,004.34	
KRS INS MESA WEST IV UNIT	43,546.676	4,153,144.95	2,911,285.33	-1,241,859.62	23,897.561	2,279,166.33	1,597,656.24	-681,510.09	
KRS INS MULTI SECTOR CREDIT FI	531,206.774	59,287,017.72	98,797,448.57	39,510,430.85	290,366.710	32,362,164.20	54,004,375.51	21,642,211.31	
KRS INS OBERLAND UNIT	1,139.897	0.00	156,370.54	156,370.54	619.770	0.00	85,019.76	85,019.76	
KRS INS PE 2010 UNIT	53,823.074	12,689,816.36	15,585,625.74	2,895,809.38	28,811.122	6,792,664.36	8,342,878.46	1,550,214.10	
KRS INS PE 2011 UNIT	91,426.440	20,014,350.76	31,409,774.62	11,395,423.86	54,722.447	11,979,843.99	18,800,029.04	6,820,185.05	
KRS INS PE 2012 A UNIT	2,171.980	891,168.32	828,126.96	-63,041.36	1,174.806	482,026.21	447,927.02	-34,099.19	
KRS INS PE 2012 B UNIT	20,859.197	2,914,341.74	3,872,519.54	958,177.80	11,071.662	1,546,555.40	2,055,459.15	508,903.75	
KRS INS PE 2013 UNIT	99,247.878	28,983,199.46	39,820,242.05	10,837,042.59	53,682.425	15,676,796.13	21,538,467.12	5,861,670.99	
KRS INS PE 2014 UNIT	105,293.560	10,378,887.68	13,068,307.19	2,689,419.51	56,952.482	5,613,859.69	7,068,547.50	1,454,687.81	
KRS INS PE 2015 UNIT	75,334.113	10,786,246.60	27,049,062.67	16,262,816.07	40,747.665	5,834,199.84	14,630,638.11	8,796,438.27	
KRS INS PE 2016 UNIT	144,607.801	17,489,579.68	37,476,281.07	19,986,701.39	87,323.564	10,561,342.36	22,630,607.80	12,069,265.44	
KRS INS PE 2017 UNIT	84,337.976	13,005,752.32	18,442,335.92	5,436,583.60	50,928.618	7,853,698.24	11,136,651.91	3,282,953.67	
KRS INS PE 2018 UNIT	32,549.452	2,706,223.12	6,610,184.21	3,903,961.09	17,697.399	1,471,395.03	3,594,010.35	2,122,615.32	
KRS INS PE 2019 UNIT	18,024.740	2,567,087.34	4,548,439.01	1,981,351.67	9,613.191	1,369,113.42	2,425,833.21	1,056,719.79	
KRS INS PE 2021 UNIT	242,272.496	25,675,387.28	36,181,562.06	10,506,174.78	124,658.048	13,210,924.40	18,616,735.18	5,405,810.78	
KRS INS POST-2015 REAL ESTATE	297,968.830	25,713,135.20	33,929,847.74	8,216,712.54	163,519.435	14,112,698.94	18,620,033.28	4,507,334.34	
KRS INS PRIVATE CREDIT FI UNIT	542,601.305	119,047,771.74	123,183,285.89	4,135,514.15	295,929.527	64,920,748.55	67,182,977.98	2,262,229.43	
KRS INS PROLOGIS UNIT	150,318.422	31,334,744.91	53,276,335.69	21,941,590.78	82,491.818	17,195,897.94	29,237,013.86	12,041,115.92	
KRS INS REAL RETURN UNIT	154,762.626	27,505,903.66	46,405,644.60	18,899,740.94	79,755.558	14,218,650.70	23,914,740.75	9,696,090.05	
KRS INS RUBENSTEIN PF II UNIT	21,246.598	3,614,243.72	953,692.90	-2,660,550.82	11,544.310	1,963,792.18	518,187.73	-1,445,604.45	
KRS INS SHENKMAN UNIT	327,592.538	59,743,330.20	60,274,008.23	530,678.03	149,521.940	27,323,921.82	27,510,659.12	186,737.30	
KRS INS STOCKBRIDGE UNIT	117,767.220	21,939,542.90	23,896,579.99	1,957,037.09	64,874.850	12,085,914.58	13,163,994.55	1,078,079.97	
KRS INS TAURUS UNIT	2,081.500	187,361.13	750,448.56	563,087.43	1,125.867	108,148.09	405,911.73	297,763.64	
KRS INS TPF II UNIT	37.089	83,170.56	4,619.29	-78,551.27	19.666	44,100.17	2,449.32	-41,650.85	
KRS INS WALTON VI UNIT	3,263.427	661,440.82	599,724.86	-61,715.96	1,748.845	354,458.83	321,387.86	-33,070.97	
KRS INS WALTON VII UNIT	5,416.610	2,206,003.86	719,561.32	-1,486,442.54	2,943.043	1,198,601.28	390,964.07	-807,637.21	
KRS INS WATERFALL UNIT	350,631.890	58,007,093.37	71,316,230.41	13,309,137.04	184,096.210	30,440,474.29	37,443,963.57	7,003,489.28	

Kentucky Public Pensions Authority

# Proxy Voting Report

Quarter Ending: December 31, 2024

**Report can be found:**

<https://www.kyret.ky.gov/Investments/Investments-Library/Pages/Proxy-Voting-Reports.aspx>

Kentucky Public Pensions Authority

# Security Litigation Report

Quarter Ending: December 31, 2024

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Claims Filed during the Quarter (pg 3):

**13**

Proceeds Received during the Quarter (pg 4):

**\$279,203.61**

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<b>Kentucky Retirement Systems</b>	
Quarterly Securities Litigation Report	
Quarter Ended 12/31/24	
<b>Total Claims Filed</b>	
No Claim on File	9
Fiscal Year 1997	1
Fiscal Year 1998	2
Fiscal Year 1999	5
Fiscal Year 2000	9
Fiscal Year 2001	8
Fiscal Year 2002	33
Fiscal Year 2003	45
Fiscal Year 2004	38
Fiscal Year 2005	89
Fiscal Year 2006	150
Fiscal Year 2007	70
Fiscal Year 2008	73
Fiscal Year 2009	85
Fiscal Year 2010	65
Fiscal Year 2011	69
Fiscal Year 2012	54
Fiscal Year 2013	48
Fiscal Year 2014	65
Fiscal Year 2015	80
Fiscal Year 2016	224
Fiscal Year 2017	140
Fiscal Year 2018	74
Fiscal Year 2019	55
Fiscal Year 2020	42
Fiscal Year 2021	43
Fiscal Year 2022	49
Fiscal Year 2023	49
Fiscal Year 2024	46
Fiscal Year 2025	22
<b>Total Filed</b>	<b>1,742</b>
<b>Proceeds Received</b>	
Fiscal Year 1998	\$67,682
Fiscal Year 1999	\$233,370
Fiscal Year 2000	\$303,918
Fiscal Year 2001	\$415,502
Fiscal Year 2002	\$387,318
Fiscal Year 2003	\$519,059
Fiscal Year 2004	\$1,080,920
Fiscal Year 2005	\$1,645,440
Fiscal Year 2006	\$797,535
Fiscal Year 2007	\$5,398,363
Fiscal Year 2008	\$5,402,336
Fiscal Year 2009	\$3,504,682
Fiscal Year 2010	\$2,776,544
Fiscal Year 2011	\$1,292,484
Fiscal Year 2012	\$468,657
Fiscal Year 2013	\$1,070,427
Fiscal Year 2014	\$308,704
Fiscal Year 2015	\$23,639,565
Fiscal Year 2016	\$2,417,957
Fiscal Year 2017	\$1,886,532
Fiscal Year 2018	\$2,247,966
Fiscal Year 2019	\$1,702,272
Fiscal Year 2020	\$1,743,474
Fiscal Year 2021	\$286,420
Fiscal Year 2022	\$616,557
Fiscal Year 2023	\$259,261
Fiscal Year 2024	\$456,301
Fiscal Year 2025	\$330,060
<b>Total Proceeds</b>	<b>\$61,259,308</b>

CERS Board Meeting - Investment Committee

Class Action Name	TNT Status Code	Status as of Date	Class Period Start Date	Class Period End Date	Class Account Id	Claimed Account Name
The Boeing Company FAIR FUND	FILED	10/1/2024	11/28/2018	10/17/2019	956596	KRS KRS INTERNAL EQUITY
The Boeing Company FAIR FUND	FILED	10/1/2024	11/28/2018	10/17/2019	956591	KRS WESTFIELD CAPITAL
The Boeing Company FAIR FUND	FILED	10/1/2024	11/28/2018	10/17/2019	956599	KRS S P 500 INDEX
The Boeing Company FAIR FUND	FILED	10/1/2024	11/28/2018	10/17/2019	956768	KRS INS WESTFIELD CAPITAL
The Boeing Company FAIR FUND	FILED	10/1/2024	11/28/2018	10/17/2019	956774	KRS INS S P 500 INDEX
The Boeing Company FAIR FUND	FILED	10/1/2024	11/28/2018	10/17/2019	956772	KRS INS KRS INTERNAL EQUITY
APPLE INC. Securities Litigation	FILED	10/2/2024	11/2/2018	1/2/2019	956597	KRS RIVER ROAD FAV
APPLE INC. Securities Litigation	FILED	10/2/2024	11/2/2018	1/2/2019	956768	KRS INS WESTFIELD CAPITAL
APPLE INC. Securities Litigation	FILED	10/2/2024	11/2/2018	1/2/2019	956591	KRS WESTFIELD CAPITAL
APPLE INC. Securities Litigation	FILED	10/2/2024	11/2/2018	1/2/2019	909181	KRS INS RIVER ROAD FAV
APPLE INC. Securities Litigation	FILED	10/2/2024	11/2/2018	1/2/2019	956774	KRS INS S P 500 INDEX
APPLE INC. Securities Litigation	FILED	10/2/2024	11/2/2018	1/2/2019	956599	KRS S P 500 INDEX
Y-mAbs Therapeutics securities litigation	FILED	10/7/2024	10/6/2020	10/28/2022	956588	KRS NTGI STRUCTURED
Y-mAbs Therapeutics securities litigation	FILED	10/7/2024	10/6/2020	10/28/2022	956765	KRS INS NTGI STRUCTURED
OKTA INC. Securities Litigation	FILED	10/28/2024	3/3/2022	8/31/2022	956768	KRS INS WESTFIELD CAPITAL
OKTA INC. Securities Litigation	FILED	10/28/2024	3/3/2022	8/31/2022	956591	KRS WESTFIELD CAPITAL
Eagle Bancorp, Inc FairFund	FILED	10/30/2024	3/2/2015	7/17/2019	956588	KRS NTGI STRUCTURED
Eagle Bancorp, Inc FairFund	FILED	10/30/2024	3/2/2015	7/17/2019	956765	KRS INS NTGI STRUCTURED
QUALCOMM INCORPORATED (2017)	FILED	11/6/2024	1/31/2012	4/20/2017	2672591	ZKRS PEN WESTFIELD CAPITAL-SL
QUALCOMM INCORPORATED (2017)	FILED	11/6/2024	1/31/2012	4/20/2017	2672597	ZKRS INS WESTFIELD CAPITAL-SL
QUALCOMM INCORPORATED (2017)	FILED	11/6/2024	1/31/2012	4/20/2017	2672606	ZKRS PEN WESTWOOD MANAGEMEN-S
QUALCOMM INCORPORATED (2017)	FILED	11/6/2024	1/31/2012	4/20/2017	2672607	ZKRS INS WESTWOOD MANAGEMEN-S
QUALCOMM INCORPORATED Securities Litigation	FILED	11/6/2024	2/1/2012	1/20/2017	KR3F1006002	WESTFIELD CAPITAL
QUALCOMM INCORPORATED Securities Litigation	FILED	11/6/2024	2/1/2012	1/20/2017	KR2F1901002	STATE STREET TRANSITION
QUALCOMM INCORPORATED Securities Litigation	FILED	11/6/2024	2/1/2012	1/20/2017	KR3F1008002	WESTWOOD MGMT
QUALCOMM INCORPORATED Securities Litigation	FILED	11/6/2024	2/1/2012	1/20/2017	956596	KRS KRS INTERNAL EQUITY
QUALCOMM INCORPORATED Securities Litigation	FILED	11/6/2024	2/1/2012	1/20/2017	KR2F1009002	INVESCO
QUALCOMM INCORPORATED Securities Litigation	FILED	11/6/2024	2/1/2012	1/20/2017	KR3F1901002	STATE STREET TRANSITION
QUALCOMM INCORPORATED Securities Litigation	FILED	11/6/2024	2/1/2012	1/20/2017	956592	KRS RIVER ROAD
QUALCOMM INCORPORATED Securities Litigation	FILED	11/6/2024	2/1/2012	1/20/2017	956599	KRS S P 500 INDEX
QUALCOMM INCORPORATED Securities Litigation	FILED	11/6/2024	2/1/2012	1/20/2017	956774	KRS INS S P 500 INDEX
QUALCOMM INCORPORATED Securities Litigation	FILED	11/6/2024	2/1/2012	1/20/2017	KR2F1006002	WESTFIELD CAPITAL
QUALCOMM INCORPORATED Securities Litigation	FILED	11/6/2024	2/1/2012	1/20/2017	KR2F1008002	WESTWOOD MGMT
QUALCOMM INCORPORATED Securities Litigation	FILED	11/6/2024	2/1/2012	1/20/2017	956772	KRS INS KRS INTERNAL EQUITY
QUALCOMM INCORPORATED Securities Litigation	FILED	11/6/2024	2/1/2012	1/20/2017	956769	KRS INS RIVER ROAD
CABOT OIL & GAS CORPORATION Securities Litigation	FILED	11/13/2024	2/22/2016	6/12/2020	956596	KRS KRS INTERNAL EQUITY
CABOT OIL & GAS CORPORATION Securities Litigation	FILED	11/13/2024	2/22/2016	6/12/2020	956774	KRS INS S P 500 INDEX
CABOT OIL & GAS CORPORATION Securities Litigation	FILED	11/13/2024	2/22/2016	6/12/2020	956772	KRS INS KRS INTERNAL EQUITY
CABOT OIL & GAS CORPORATION Securities Litigation	FILED	11/13/2024	2/22/2016	6/12/2020	140455	KRS INS ABEL NOSER TRANSITION
CABOT OIL & GAS CORPORATION Securities Litigation	FILED	11/13/2024	2/22/2016	6/12/2020	140454	KRS ABEL NOSER TRANSITION
UNDER ARMOUR INC. Securities Litigation	FILED	11/13/2024	9/16/2015	11/1/2019	KR3F1011002	KRS INTERNAL EQUITY
UNDER ARMOUR INC. Securities Litigation	FILED	11/13/2024	9/16/2015	11/1/2019	956599	KRS S P 500 INDEX
GINKGO BIOWORKS HOLDINGS, INC. Securities Litigation	FILED	11/20/2024	5/11/2021	11/15/2021	904032	KRS PUTNAM
GINKGO BIOWORKS HOLDINGS, INC. Securities Litigation	FILED	11/20/2024	5/11/2021	11/15/2021	904033	KRS INS PUTNAM
UBER TECHNOLOGIES INC. Securities Litigation	FILED	11/20/2024	4/11/2019	11/5/2019	956772	KRS INS KRS INTERNAL EQUITY
UBER TECHNOLOGIES INC. Securities Litigation	FILED	11/20/2024	4/11/2019	11/5/2019	904033	KRS INS PUTNAM
UBER TECHNOLOGIES INC. Securities Litigation	FILED	11/20/2024	4/11/2019	11/5/2019	904032	KRS PUTNAM
UBER TECHNOLOGIES INC. Securities Litigation	FILED	11/20/2024	4/11/2019	11/5/2019	956768	KRS INS WESTFIELD CAPITAL
UBER TECHNOLOGIES INC. Securities Litigation	FILED	11/20/2024	4/11/2019	11/5/2019	956774	KRS INS S P 500 INDEX
UBER TECHNOLOGIES INC. Securities Litigation	FILED	11/20/2024	4/11/2019	11/5/2019	956591	KRS WESTFIELD CAPITAL
UBER TECHNOLOGIES INC. Securities Litigation	FILED	11/20/2024	4/11/2019	11/5/2019	956599	KRS S P 500 INDEX
UBER TECHNOLOGIES INC. Securities Litigation	FILED	11/20/2024	4/11/2019	11/5/2019	956596	KRS KRS INTERNAL EQUITY
Bioventus Securities Litigation	FILED	11/29/2024	2/11/2021	11/21/2022	956588	KRS NTGI STRUCTURED
Bioventus Securities Litigation	FILED	11/29/2024	2/11/2021	11/21/2022	956765	KRS INS NTGI STRUCTURED
Fluor Corporation FAIR FUND	FILED	12/30/2024	5/6/2016	2/17/2020	956596	KRS KRS INTERNAL EQUITY
Fluor Corporation FAIR FUND	FILED	12/30/2024	5/6/2016	2/17/2020	956599	KRS S P 500 INDEX
Fluor Corporation FAIR FUND	FILED	12/30/2024	5/6/2016	2/17/2020	956772	KRS INS KRS INTERNAL EQUITY



**Transaction Detail**  
**Reported By Transaction Category**

Report ID: IACS0008  
 Base Currency: USD

KR2G00000000 - TOTAL FUND

9/30/2024 - 12/31/2024

Status: REVISED

Trans Code	Shares/Par	Description	Trade Date	Price	Cost	Amount	Net Gain/Loss
Link Ref	Security Id	Broker	C. Settle Date	Local/Base	Local/Base	Local/Base	Local/Base
		Transaction No./Client Ref No.	Reported Date				
<b>CLASS ACTIONS</b>							
<b>CASH &amp; CASH EQUIVALENTS</b>							
<b>U.S. DOLLAR</b>							
CD	0.000	BNYM-20274NIELSEN HOLDINGS PLC	10/8/2024	0.000000	124.47	124.47	124.47
	NA9123459	, Securities Litigation Distri		0.000000	124.47	124.47	124.47
		20241008S000030 / 000000000002	10/8/2024				Gain/Loss Local Amounts: 124.47 Long
		KR2F10110002 : KRS INTERNAL EQUITY					Gain/Loss Base Amounts: 124.47 Long
CD	0.000	BNYM-20274NIELSEN HOLDINGS PLC	10/8/2024	0.000000	1,794.48	1,794.48	1,794.48
	NA9123459	, Securities Litigation Distri		0.000000	1,794.48	1,794.48	1,794.48
		20241008S000040 / 000000000000	10/8/2024				Gain/Loss Local Amounts: 1,794.48 Long
		KR2F10110002 : KRS INTERNAL EQUITY					Gain/Loss Base Amounts: 1,794.48 Long
CD	0.000	3-17-CV-2616-MBSSCAN A Corporat	10/9/2024	0.000000	27.44	27.44	27.44
	NA9123459	ion (2017)(D.S.C) Distribution		0.000000	27.44	27.44	27.44
		20241009S000090 / 0000000000034	10/9/2024				Gain/Loss Local Amounts: 27.44 Long
		KR2F19020002 : S&P 500 INDEX					Gain/Loss Base Amounts: 27.44 Long
CD	0.000	14-CV-09662 (JSR)PETROBRAS - P	10/11/2024	0.000000	564.47	564.47	564.47
	NA9123459	ETROLEO BRASILEIRO S.A (2014)		0.000000	564.47	564.47	564.47
		20241011S000010 / 0000000000000	10/11/2024				Gain/Loss Local Amounts: 564.47 Long
		KR2F90010002 : CASH ACCOUNT KR2					Gain/Loss Base Amounts: 564.47 Long
CD	0.000	24874HRG GROUP Securities Liti	10/11/2024	0.000000	62.72	62.72	62.72
	NA9123459	gation Distribution 2ND DISTR		0.000000	62.72	62.72	62.72
		20241011S000240 / 0000000000001	10/11/2024				Gain/Loss Local Amounts: 62.72 Long
		KR2F10020002 : NTGI STRUCTURED					Gain/Loss Base Amounts: 62.72 Long
CD	0.000	26815OCLARO INC Securities Lit	10/15/2024	0.000000	1,278.24	1,278.24	1,278.24
	NA9123459	igation Distribution 1ST DISTR		0.000000	1,278.24	1,278.24	1,278.24
		20241015S000580 / 0000000000000	10/15/2024				Gain/Loss Local Amounts: 1,278.24 Long
		KR2F10020002 : NTGI STRUCTURED					Gain/Loss Base Amounts: 1,278.24 Long





**Transaction Detail**  
**Reported By Transaction Category**

Report ID: IACS0008  
 Base Currency: USD

KR2G00000000 - TOTAL FUND

9/30/2024 - 12/31/2024

Status: REVISED

Trans Code	Shares/Par	Description	Trade Date	Price	Cost	Amount	Net Gain/Loss
Link Ref	Security Id	Broker	C. Settle Date	Local/Base	Local/Base	Local/Base	Local/Base
		Transaction No./Client Ref No.	Reported Date				
CD	0.000	3-17-CV-2616-MBSSCANA Corporat	10/17/2024	0.000000	174.75	174.75	174.75
	NA9123459	ion (2017)(D.S.C) Distribution		0.000000	174.75	174.75	174.75
		20241017S000030 / 000000000002	10/17/2024				
		KR2F10110002 : KRS INTERNAL EQUITY					Gain/Loss Local Amounts: 174.75 Long Gain/Loss Base Amounts: 174.75 Long
CD	0.000	SIGNET SECURITIES LITIGATION S	10/21/2024	0.000000	95.03	95.03	95.03
	NA9123459	ETTLEMENT FUND		0.000000	95.03	95.03	95.03
		20241022S000040 / D4BD4532E729	10/21/2024				
		KR2F20080002 : LAZARD ASSET MGMT					Gain/Loss Local Amounts: 95.03 Long Gain/Loss Base Amounts: 95.03 Long
CD	0.000	3535COMMUNITY HEALTH SYSTEMS,	10/23/2024	0.000000	102.71	102.71	102.71
	NA9123459	INC. (2011) Distribution 2ND D		0.000000	102.71	102.71	102.71
		20241023S000080 / 0000000000023	10/23/2024				
		KR2F19020002 : S&P 500 INDEX					Gain/Loss Local Amounts: 102.71 Long Gain/Loss Base Amounts: 102.71 Long
CD	0.000	23815INTERFACE, INC., Securiti	10/28/2024	0.000000	31.07	31.07	31.07
	NA9123459	es Litigation Distribution 1ST		0.000000	31.07	31.07	31.07
		20241028S000120 / 0000000000000	10/28/2024				
		KR2F10020002 : NTGI STRUCTURED					Gain/Loss Local Amounts: 31.07 Long Gain/Loss Base Amounts: 31.07 Long
CD	0.000	23716PRECIGEN INC., Securities	10/30/2024	0.000000	1,440.19	1,440.19	1,440.19
	NA9123459	Litigation Distribution 1ST D		0.000000	1,440.19	1,440.19	1,440.19
		20241030S000130 / 0000000006373	10/30/2024				
		KR2F10020002 : NTGI STRUCTURED					Gain/Loss Local Amounts: 1,440.19 Long Gain/Loss Base Amounts: 1,440.19 Long
CD	0.000	1-17-cv-00241-WMRTHE SOUTHERN	10/31/2024	0.000000	32.72	32.72	32.72
	NA9123459	COMPANY Distribution 2ND DISTR		0.000000	32.72	32.72	32.72
		20241031S000010 / 0000000000008	10/31/2024				
		KR2F19010002 : STATE STREET TRANSIT					Gain/Loss Local Amounts: 32.72 Long Gain/Loss Base Amounts: 32.72 Long
CD	0.000	26513WELLS FARGO & COMPANY Sec	10/31/2024	0.000000	21,844.69	21,844.69	21,844.69
	NA9123459	urities Litigation Distributio		0.000000	21,844.69	21,844.69	21,844.69
		20241031S000180 / 0000000000000	10/31/2024				
		KR2F10110002 : KRS INTERNAL EQUITY					Gain/Loss Local Amounts: 21,844.69 Long Gain/Loss Base Amounts: 21,844.69 Long



**Transaction Detail**  
**Reported By Transaction Category**

Report ID: IACS0008  
 Base Currency: USD

KR2G00000000 - TOTAL FUND

9/30/2024 - 12/31/2024

Status: REVISED

Trans Code	Shares/Par	Description	Trade Date	Price	Cost	Amount	Net Gain/Loss
Link Ref	Security Id	Broker	C. Settle Date	Local/Base	Local/Base	Local/Base	Local/Base
		Transaction No./Client Ref No.	Reported Date				
CD	0.000	26513WELLS FARGO & COMPANY Sec	10/31/2024	0.000000	45,412.60	45,412.60	45,412.60
	NA9123459	urities Litigation Distributio		0.000000	45,412.60	45,412.60	45,412.60
		20241031S000220 / 000000000000	10/31/2024				Gain/Loss Local Amounts: 45,412.60 Long
		KR2F19020002 : S&P 500 INDEX					Gain/Loss Base Amounts: 45,412.60 Long
CD	0.000	HARBORVIEW MORTGAGE LOAN TRUST	11/1/2024	0.000000	24.76	24.76	24.76
	NA9123459	LITIGATION SEC LIT PROCEEDS		0.000000	24.76	24.76	24.76
		20241104S000050 / ACDCEED19AD8	11/1/2024				Gain/Loss Local Amounts: 24.76 Long
		KR2F90010002 : CASH ACCOUNT KR2					Gain/Loss Base Amounts: 24.76 Long
CD	0.000	WILMINGTON TRUST (SEC) DISTRIB	11/1/2024	0.000000	178.74	178.74	178.74
	NA9123459	UTION SEC LIT PROCEEDS		0.000000	178.74	178.74	178.74
		20241104S000300 / ACDCEED19AD8	11/1/2024				Gain/Loss Local Amounts: 178.74 Long
		KR2F10020002 : NTGI STRUCTURED					Gain/Loss Base Amounts: 178.74 Long
CD	0.000	1-16-cv-01031-TSE-MSNORBITAL A	11/5/2024	0.000000	27.75	27.75	27.75
	NA9123459	TK, INC. (2016) Distribution 2		0.000000	27.75	27.75	27.75
		20241105S000120 / 000000000005	11/5/2024				Gain/Loss Local Amounts: 27.75 Long
		KR2F10020002 : NTGI STRUCTURED					Gain/Loss Base Amounts: 27.75 Long
CD	0.000	23703TACTILE SYSTEMS TECHNOLOG	11/15/2024	0.000000	8,603.25	8,603.25	8,603.25
	NA9123459	Y. INC, Securities Litigation		0.000000	8,603.25	8,603.25	8,603.25
		20241115S000080 / 000000000000	11/15/2024				Gain/Loss Local Amounts: 8,603.25 Long
		KR2F10130002 : NEXT CENTURY GROWTH					Gain/Loss Base Amounts: 8,603.25 Long
CD	0.000	23703TACTILE SYSTEMS TECHNOLOG	11/15/2024	0.000000	232.05	232.05	232.05
	NA9123459	Y. INC, Securities Litigation		0.000000	232.05	232.05	232.05
		20241115S000770 / 000000000000	11/15/2024				Gain/Loss Local Amounts: 232.05 Long
		KR2F10020002 : NTGI STRUCTURED					Gain/Loss Base Amounts: 232.05 Long
CD	0.000	4 14-CV-11191GENERAL MOTORS CO	11/19/2024	0.000000	139.35	139.35	139.35
	NA9123459	MPANY Distribution 3RD DISTRIB		0.000000	139.35	139.35	139.35
		20241119S000010 / 000000000007	11/19/2024				Gain/Loss Local Amounts: 139.35 Long
		KR2F19010002 : STATE STREET TRANSIT					Gain/Loss Base Amounts: 139.35 Long



**Transaction Detail**  
**Reported By Transaction Category**

Report ID: IACS0008  
 Base Currency: USD

KR2G00000000 - TOTAL FUND

9/30/2024 - 12/31/2024

Status: REVISED

Trans Code	Shares/Par	Description	Trade Date	Price	Cost	Amount	Net Gain/Loss
Link Ref	Security Id	Broker	C. Settle Date	Local/Base	Local/Base	Local/Base	Local/Base
		Transaction No./Client Ref No.	Reported Date				
CD	0.000	20417J.P. MORGAN CHASE BANK, N	11/26/2024	0.000000	3.16	3.16	3.16
	NA9123459	.A. ADR-FX Distribution 1ST DI		0.000000	3.16	3.16	3.16
		20241126S000020 / 000000000919	11/26/2024				Gain/Loss Local Amounts: 3.16 Long
		KR2F10120002 : RIVER ROAD FAV					Gain/Loss Base Amounts: 3.16 Long
CD	0.000	17473DAVITA INC. Distribution	11/29/2024	0.000000	672.22	672.22	672.22
	NA9123459	2ND DISTRIBUTION PROCEEDS FOR		0.000000	672.22	672.22	672.22
		20241129S000030 / 000000000001	11/29/2024				Gain/Loss Local Amounts: 672.22 Long
		KR2F10120002 : RIVER ROAD FAV					Gain/Loss Base Amounts: 672.22 Long
CD	0.000	24906CLOOPEN GROUP HOLDING LIM	11/29/2024	0.000000	91,478.03	91,478.03	91,478.03
	NA9123459	ITED Securities Litigation Dis		0.000000	91,478.03	91,478.03	91,478.03
		20241129S000100 / 000000006377	11/29/2024				Gain/Loss Local Amounts: 91,478.03 Long
		KR2F25050002 : JP MORGAN EMERG MKTS					Gain/Loss Base Amounts: 91,478.03 Long
CD	0.000	17473DAVITA INC. Distribution	11/29/2024	0.000000	1,741.80	1,741.80	1,741.80
	NA9123459	2ND DISTRIBUTION PROCEEDS FOR		0.000000	1,741.80	1,741.80	1,741.80
		20241129S000200 / 000000000001	11/29/2024				Gain/Loss Local Amounts: 1,741.80 Long
		KR2F10110002 : KRS INTERNAL EQUITY					Gain/Loss Base Amounts: 1,741.80 Long
CD	0.000	17473DAVITA INC. Distribution	11/29/2024	0.000000	214.27	214.27	214.27
	NA9123459	2ND DISTRIBUTION PROCEEDS FOR		0.000000	214.27	214.27	214.27
		20241129S000250 / 000000000001	11/29/2024				Gain/Loss Local Amounts: 214.27 Long
		KR2F19020002 : S&P 500 INDEX					Gain/Loss Base Amounts: 214.27 Long
CD	0.000	20603MCKESSON CORPORATION, Sec	12/5/2024	0.000000	1,192.93	1,192.93	1,192.93
	NA9123459	urities Litigation Distributio		0.000000	1,192.93	1,192.93	1,192.93
		20241205S000080 / 000000000011	12/5/2024				Gain/Loss Local Amounts: 1,192.93 Long
		KR2F10110002 : KRS INTERNAL EQUITY					Gain/Loss Base Amounts: 1,192.93 Long
CD	0.000	20603MCKESSON CORPORATION, Sec	12/5/2024	0.000000	4,801.80	4,801.80	4,801.80
	NA9123459	urities Litigation Distributio		0.000000	4,801.80	4,801.80	4,801.80
		20241205S000140 / 000000000011	12/5/2024				Gain/Loss Local Amounts: 4,801.80 Long
		KR2F19020002 : S&P 500 INDEX					Gain/Loss Base Amounts: 4,801.80 Long



**Transaction Detail**  
**Reported By Transaction Category**

Report ID: IACS0008  
 Base Currency: USD

KR2G00000000 - TOTAL FUND

9/30/2024 - 12/31/2024

Status: REVISED

Trans Code	Shares/Par	Description	Trade Date	Price	Cost	Amount	Net Gain/Loss
Link Ref	Security Id	Broker	C. Settle Date	Local/Base	Local/Base	Local/Base	Local/Base
		Transaction No./Client Ref No.	Reported Date				
CD	0.000	2-12-cv-00555-DGCFIRST SOLAR, NA9123459 INC. Distribution 2ND DISTRIBU 20241205S000150 / 000000000003 KR2F19020002 : S&P 500 INDEX	12/5/2024  12/5/2024	0.000000 0.000000	154.33 154.33	154.33 154.33	154.33 154.33
						Gain/Loss Local Amounts: 154.33 Long Gain/Loss Base Amounts: 154.33 Long	
CD	0.000	21639AAC HOLDINGS, INC., Secur NA9123459 ities Litigation Distribution 20241205S000200 / 000000000000 KR2F10020002 : NTGI STRUCTURED	12/5/2024  12/5/2024	0.000000 0.000000	1,697.60 1,697.60	1,697.60 1,697.60	1,697.60 1,697.60
						Gain/Loss Local Amounts: 1,697.60 Long Gain/Loss Base Amounts: 1,697.60 Long	
CD	0.000	16943PRECISION CASTPARTS CORP. NA9123459 (2016) (ACQUISITION) Distribu 20241210S000230 / 000000000001 KR2F19020002 : S&P 500 INDEX	12/10/2024  12/10/2024	0.000000 0.000000	15.03 15.03	15.03 15.03	15.03 15.03
						Gain/Loss Local Amounts: 15.03 Long Gain/Loss Base Amounts: 15.03 Long	
CD	0.000	10 Civ. 2515 (DAB)FUQI INTERNA NA9123459 TIONAL, INC. Distribution 2ND 20241211S000170 / 000000000002 KR2F10020002 : NTGI STRUCTURED	12/11/2024  12/11/2024	0.000000 0.000000	87.56 87.56	87.56 87.56	87.56 87.56
						Gain/Loss Local Amounts: 87.56 Long Gain/Loss Base Amounts: 87.56 Long	
CD	0.000	20584CITI SPONSORED AMERICAN D NA9123459 EPOSITARY RECEIPTS (CITIBANK N 20241216S000010 / 000000002412 KR2F20050002 : AMERICAN CENTURY	12/16/2024  12/16/2024	0.000000 0.000000	1.66 1.66	1.66 1.66	1.66 1.66
						Gain/Loss Local Amounts: 1.66 Long Gain/Loss Base Amounts: 1.66 Long	
CD	0.000	FIRST SOLAR, INC SEC LIT NA9123459 20241223S000090 / AE78D4160193 KR2F19020002 : S&P 500 INDEX	12/20/2024  12/20/2024	0.000000 0.000000	75.04 75.04	75.04 75.04	75.04 75.04
						Gain/Loss Local Amounts: 75.04 Long Gain/Loss Base Amounts: 75.04 Long	
CD	0.000	20274NIELSEN HOLDINGS PLC, Sec NA9123459 urities Litigation Distributio 20241224S000010 / 000000000002 KR2F10120002 : RIVER ROAD FAV	12/24/2024  12/24/2024	0.000000 0.000000	160.19 160.19	160.19 160.19	160.19 160.19
						Gain/Loss Local Amounts: 160.19 Long Gain/Loss Base Amounts: 160.19 Long	



**Transaction Detail**  
**Reported By Transaction Category**

Report ID: IACS0008  
Base Currency: USD

KR2G00000000 - TOTAL FUND

9/30/2024 - 12/31/2024

Status: REVISED

Trans Code	Shares/Par	Description	Trade Date	Price	Cost	Amount	Net Gain/Loss
Link Ref	Security Id	Broker	C. Settle Date	Local/Base	Local/Base	Local/Base	Local/Base
		Transaction No./Client Ref No.	Reported Date				
CD	0.000	17319ALEXION PHARMACEUTICALS, NA9123459 INC. Securities Litigation Dis	12/31/2024	0.000000	7,269.58	7,269.58	7,269.58
		20241231S000440 / 000000000003	12/31/2024	0.000000	7,269.58	7,269.58	7,269.58
		KR2F19020002 : S&P 500 INDEX					Gain/Loss Local Amounts: 7,269.58 Long Gain/Loss Base Amounts: 7,269.58 Long
<b>TOTAL U.S. DOLLAR CASH &amp; CASH EQUIVALENTS:</b>					<b>191,756.68</b>	<b>191,756.68</b>	<b>191,756.68</b>
					<b>191,756.68</b>	<b>191,756.68</b>	<b>191,756.68</b>
<b>TOTAL CASH &amp; CASH EQUIVALENTS CLASS ACTIONS:</b>					<b>191,756.68</b>	<b>191,756.68</b>	<b>191,756.68</b>
<b>EQUITY</b>							
<b>CANADIAN DOLLAR</b>							
CD	0.000	ORD INST: BSDTUS33GBL THE BANK NCB63VJ03 OF NEW YORK MELLON 02149,MA,U	12/4/2024	0.000000	109.30	109.30	109.30
		20241205S000010 / 0469334	12/4/2024	0.000000	77.71	77.71	77.71
		KR2F20010002 : KRS NONUS ACWI-EX US					Gain/Loss Local Amounts: 109.30 Long Gain/Loss Base Amounts: 77.71 Long
<b>U.S. DOLLAR</b>							
CD	0.000	4-17-CV-0449-ALMADEPTUS HEALTH 006855100 CSDRADJ:RAF-ERU-IAS-19371791	10/22/2024	0.000000	7.59	7.59	7.59
		20241023S000080	10/22/2024	0.000000	7.59	7.59	7.59
		KR2F10020002 : NTGI STRUCTURED					Gain/Loss Local Amounts: 7.59 Long Gain/Loss Base Amounts: 7.59 Long
CD	0.000	18849ENDO INTERNATIONAL PLC, S G30401106 CSDRADJ:RAF-ERU-IAS-21498490	12/30/2024	0.000000	1,010.87	1,010.87	1,010.87
		20241231S000010	12/30/2024	0.000000	1,010.87	1,010.87	1,010.87
		KR2F90010002 : CASH ACCOUNT KR2					Gain/Loss Local Amounts: 1,010.87 Long Gain/Loss Base Amounts: 1,010.87 Long
CD	0.000	18849ENDO INTERNATIONAL PLC, S G30401106 CSDRADJ:RAF-ERU-IAS-21497976	12/30/2024	0.000000	356.05	356.05	356.05
		20241231S000430	12/30/2024	0.000000	356.05	356.05	356.05
		KR2F19020002 : S&P 500 INDEX					Gain/Loss Local Amounts: 356.05 Long Gain/Loss Base Amounts: 356.05 Long
CD	0.000	16915SIGNET JEWELERS LIMITED ( G81276100 CSDRADJ:RAF-ERU-IAS-19105015	10/10/2024	0.000000	34.95	34.95	34.95
		20241011S000160	10/10/2024	0.000000	34.95	34.95	34.95
		KR2F19020002 : S&P 500 INDEX					Gain/Loss Local Amounts: 34.95 Long Gain/Loss Base Amounts: 34.95 Long



**Transaction Detail**  
**Reported By Transaction Category**

Report ID: IACS0008  
 Base Currency: USD

KR2G00000000 - TOTAL FUND

9/30/2024 - 12/31/2024

Status: REVISED

Trans Code	Shares/Par	Description	Trade Date	Price	Cost	Amount	Net Gain/Loss
Link Ref	Security Id	Broker	C. Settle Date	Local/Base	Local/Base	Local/Base	Local/Base
Transaction No./Client Ref No.			Reported Date				
TOTAL U.S. DOLLAR EQUITY:					1,409.46	1,409.46	1,409.46
					1,409.46	1,409.46	1,409.46
TOTAL EQUITY CLASS ACTIONS:					1,487.17	1,487.17	1,487.17
TOTAL CLASS ACTIONS:					193,243.85	193,243.85	193,243.85
TOTAL TRANSACTIONS BASE:					193,243.85	193,243.85	193,243.85



**Transaction Detail**  
**Reported By Transaction Category**

Report ID: IACS0008  
 Base Currency: USD

KR3G00000000 - TOTAL FUND

9/30/2024 - 12/31/2024

Status: REVISED

Trans Code	Shares/Par	Description	Trade Date	Price	Cost	Amount	Net Gain/Loss
Link Ref	Security Id	Broker	C. Settle Date	Local/Base	Local/Base	Local/Base	Local/Base
		Transaction No./Client Ref No.	Reported Date				
<b>CLASS ACTIONS</b>							
<b>CASH &amp; CASH EQUIVALENTS</b>							
<b>U.S. DOLLAR</b>							
CD	0.000	16915SIGNET JEWELERS LIMITED (NA9123459 2016) Distribution 3RD DISTRIB	10/10/2024	0.000000	21.18	21.18	21.18
		20241010S000130 / 000000000004	10/10/2024	0.000000	21.18	21.18	21.18
		KR3F10110002 : KRS INTERNAL EQUITY					Gain/Loss Local Amounts: 21.18 Long Gain/Loss Base Amounts: 21.18 Long
CD	0.000	14-CV-09662 (JSR)PETROBRAS - P (NA9123459 ETROLEO BRASILEIRO S.A (2014)	10/11/2024	0.000000	209.12	209.12	209.12
		20241011S000010 / 000000000000	10/11/2024	0.000000	209.12	209.12	209.12
		KR3F29010002 : NON-US TRANS ACCT					Gain/Loss Local Amounts: 209.12 Long Gain/Loss Base Amounts: 209.12 Long
CD	0.000	24874HRG GROUP Securities Liti (NA9123459 gation Distribution 2ND DISTR	10/11/2024	0.000000	27.95	27.95	27.95
		20241011S000230 / 000000000001	10/11/2024	0.000000	27.95	27.95	27.95
		KR3F10020002 : NTGI STRUCTURED					Gain/Loss Local Amounts: 27.95 Long Gain/Loss Base Amounts: 27.95 Long
CD	0.000	26815OCLARO INC Securities Lit (NA9123459 igation Distribution 1ST DISTR	10/15/2024	0.000000	545.11	545.11	545.11
		20241015S000590 / 000000000000	10/15/2024	0.000000	545.11	545.11	545.11
		KR3F10020002 : NTGI STRUCTURED					Gain/Loss Local Amounts: 545.11 Long Gain/Loss Base Amounts: 545.11 Long
CD	0.000	3-17-CV-2616-MBSSCANNA Corporat (NA9123459 ion (2017)(D.S.C) Distribution	10/17/2024	0.000000	91.96	91.96	91.96
		20241017S000030 / 000000000002	10/17/2024	0.000000	91.96	91.96	91.96
		KR3F10110002 : KRS INTERNAL EQUITY					Gain/Loss Local Amounts: 91.96 Long Gain/Loss Base Amounts: 91.96 Long
CD	0.000	23548Wells Fargo & Company (SE (NA9123459 C) Distribution 3RD DISTRIBUTI	10/28/2024	0.000000	1,119.61	1,119.61	1,119.61
		20241028S000040 / 000000000299	10/28/2024	0.000000	1,119.61	1,119.61	1,119.61
		KR3F90010002 : CASH ACCOUNT KR3					Gain/Loss Local Amounts: 1,119.61 Long Gain/Loss Base Amounts: 1,119.61 Long



**Transaction Detail**  
**Reported By Transaction Category**

Report ID: IACS0008  
 Base Currency: USD

KR3G00000000 - TOTAL FUND

9/30/2024 - 12/31/2024

Status: REVISED

Trans Code	Shares/Par	Description	Trade Date	Price	Cost	Amount	Net Gain/Loss
Link Ref	Security Id	Broker	C. Settle Date	Local/Base	Local/Base	Local/Base	Local/Base
		Transaction No./Client Ref No.	Reported Date				
CD	0.000	26513WELLS FARGO & COMPANY Sec	10/30/2024	0.000000	9,622.82	9,622.82	9,622.82
	NA9123459	urities Litigation Distributio		0.000000	9,622.82	9,622.82	9,622.82
		20241030S000040 / 000000000000	10/30/2024				Gain/Loss Local Amounts: 9,622.82 Long
		KR3F10110002 : KRS INTERNAL EQUITY					Gain/Loss Base Amounts: 9,622.82 Long
CD	0.000	23716PRECIGEN INC., Securities	10/30/2024	0.000000	629.11	629.11	629.11
	NA9123459	Litigation Distribution 1ST D		0.000000	629.11	629.11	629.11
		20241030S000130 / 000000006373	10/30/2024				Gain/Loss Local Amounts: 629.11 Long
		KR3F10020002 : NTGI STRUCTURED					Gain/Loss Base Amounts: 629.11 Long
CD	0.000	26513WELLS FARGO & COMPANY Sec	10/31/2024	0.000000	20,590.06	20,590.06	20,590.06
	NA9123459	urities Litigation Distributio		0.000000	20,590.06	20,590.06	20,590.06
		20241031S000220 / 000000000000	10/31/2024				Gain/Loss Local Amounts: 20,590.06 Long
		KR3F19020002 : S&P 500 INDEX					Gain/Loss Base Amounts: 20,590.06 Long
CD	0.000	1-16-cv-01031-TSE-MSNORBITAL A	11/5/2024	0.000000	13.10	13.10	13.10
	NA9123459	TK, INC. (2016) Distribution 2		0.000000	13.10	13.10	13.10
		20241105S000140 / 000000000055	11/5/2024				Gain/Loss Local Amounts: 13.10 Long
		KR3F10020002 : NTGI STRUCTURED					Gain/Loss Base Amounts: 13.10 Long
CD	0.000	23703TACTILE SYSTEMS TECHNOLOG	11/15/2024	0.000000	3,910.20	3,910.20	3,910.20
	NA9123459	Y. INC, Securities Litigation		0.000000	3,910.20	3,910.20	3,910.20
		20241115S000080 / 000000000000	11/15/2024				Gain/Loss Local Amounts: 3,910.20 Long
		KR3F10130002 : NEXT CENTURY GROWTH					Gain/Loss Base Amounts: 3,910.20 Long
CD	0.000	23703TACTILE SYSTEMS TECHNOLOG	11/15/2024	0.000000	93.66	93.66	93.66
	NA9123459	Y. INC, Securities Litigation		0.000000	93.66	93.66	93.66
		20241115S000740 / 000000000000	11/15/2024				Gain/Loss Local Amounts: 93.66 Long
		KR3F10020002 : NTGI STRUCTURED					Gain/Loss Base Amounts: 93.66 Long
CD	0.000	4 14-CV-11191GENERAL MOTORS CO	11/19/2024	0.000000	58.59	58.59	58.59
	NA9123459	MPANY Distribution 3RD DISTRIB		0.000000	58.59	58.59	58.59
		20241119S000060 / 000000000007	11/19/2024				Gain/Loss Local Amounts: 58.59 Long
		KR3F19020002 : S&P 500 INDEX					Gain/Loss Base Amounts: 58.59 Long





**Transaction Detail  
Reported By Transaction Category**

Report ID: IACS0008  
Base Currency: USD

KR3G00000000 - TOTAL FUND

9/30/2024 - 12/31/2024

Status: REVISED

Trans Code Link Ref	Shares/Par Security Id	Description Broker Transaction No./Client Ref No.	Trade Date C. Settle Date Reported Date	Price Local/Base	Cost Local/Base	Amount Local/Base	Net Gain/Loss Local/Base
CD	0.000	17473DAVITA INC. Distribution NA9123459 2ND DISTRIBUTION PROCEEDS FOR 20241129S000030 / 000000000001 KR3F10120002 : RIVER ROAD FAV	11/29/2024 11/29/2024	0.000000 0.000000	286.06 286.06	286.06 286.06	286.06 286.06 Gain/Loss Local Amounts: 286.06 Long Gain/Loss Base Amounts: 286.06 Long
CD	0.000	24906CLOOPEN GROUP HOLDING LIM NA9123459 ITED Securities Litigation Dis 20241129S000090 / 000000006377 KR3F25050002 : JP MORGAN EMERG MKTS	11/29/2024 11/29/2024	0.000000 0.000000	40,874.56 40,874.56	40,874.56 40,874.56	40,874.56 40,874.56 Gain/Loss Local Amounts: 40,874.56 Long Gain/Loss Base Amounts: 40,874.56 Long
CD	0.000	17473DAVITA INC. Distribution NA9123459 2ND DISTRIBUTION PROCEEDS FOR 20241129S000200 / 000000000001 KR3F10110002 : KRS INTERNAL EQUITY	11/29/2024 11/29/2024	0.000000 0.000000	774.52 774.52	774.52 774.52	774.52 774.52 Gain/Loss Local Amounts: 774.52 Long Gain/Loss Base Amounts: 774.52 Long
CD	0.000	20603MCKESSON CORPORATION, Sec NA9123459 urities Litigation Distributio 20241205S000140 / 000000000011 KR3F19020002 : S&P 500 INDEX	12/5/2024 12/5/2024	0.000000 0.000000	2,863.62 2,863.62	2,863.62 2,863.62	2,863.62 2,863.62 Gain/Loss Local Amounts: 2,863.62 Long Gain/Loss Base Amounts: 2,863.62 Long
CD	0.000	17319ALEXION PHARMACEUTICALS, NA9123459 INC. Securities Litigation Dis 20241231S000370 / 000000000003 KR3F10110002 : KRS INTERNAL EQUITY	12/31/2024 12/31/2024	0.000000 0.000000	3,628.20 3,628.20	3,628.20 3,628.20	3,628.20 3,628.20 Gain/Loss Local Amounts: 3,628.20 Long Gain/Loss Base Amounts: 3,628.20 Long
<b>TOTAL U.S. DOLLAR CASH &amp; CASH EQUIVALENTS:</b>					<b>85,359.43</b>	<b>85,359.43</b>	<b>85,359.43</b>
<b>TOTAL CASH &amp; CASH EQUIVALENTS CLASS ACTIONS:</b>					<b>85,359.43</b>	<b>85,359.43</b>	<b>85,359.43</b>
<b>EQUITY</b>							
<b>U.S. DOLLAR</b>							
CD	0.000	4-17-CV-0449-ALMADEPTUS HEALTH 006855100 CSDRADJ:RAF-ERU-IAS-19371792 20241023S000070 KR3F10020002 : NTGI STRUCTURED	10/22/2024 10/22/2024	0.000000 0.000000	7.60 7.60	7.60 7.60	7.60 7.60 Gain/Loss Local Amounts: 7.60 Long Gain/Loss Base Amounts: 7.60 Long



**Transaction Detail  
Reported By Transaction Category**

Report ID: IACS0008  
Base Currency: USD

KR3G00000000 - TOTAL FUND

9/30/2024 - 12/31/2024

Status: REVISED

Trans Code Link Ref	Shares/Par Security Id	Description Broker	Trade Date C. Settle Date Reported Date	Price Local/Base	Cost Local/Base	Amount Local/Base	Net Gain/Loss Local/Base
CD	0.000	18849ENDO INTERNATIONAL PLC, S	12/30/2024	0.000000	417.17	417.17	417.17
	G30401106	CSDRADJ:RAF-ERU-IAS-21498076		0.000000	417.17	417.17	417.17
		20241231S000010	12/30/2024				
		KR3F90010002 : CASH ACCOUNT KR3					
						Gain/Loss Local Amounts: 417.17 Long	Gain/Loss Base Amounts: 417.17 Long
CD	0.000	18849ENDO INTERNATIONAL PLC, S	12/30/2024	0.000000	175.56	175.56	175.56
	G30401106	CSDRADJ:RAF-ERU-IAS-21498077		0.000000	175.56	175.56	175.56
		20241231S000360	12/30/2024				
		KR3F10110002 : KRS INTERNAL EQUITY					
						Gain/Loss Local Amounts: 175.56 Long	Gain/Loss Base Amounts: 175.56 Long
<b>TOTAL U.S. DOLLAR EQUITY:</b>					<u>600.33</u>	<u>600.33</u>	<u>600.33</u>
					<b>600.33</b>	<b>600.33</b>	<b>600.33</b>
<b>TOTAL EQUITY CLASS ACTIONS:</b>					<u>600.33</u>	<u>600.33</u>	<u>600.33</u>
<b>TOTAL CLASS ACTIONS:</b>					<u>85,959.76</u>	<u>85,959.76</u>	<u>85,959.76</u>
<b>TOTAL TRANSACTIONS BASE:</b>					<u>85,959.76</u>	<u>85,959.76</u>	<u>85,959.76</u>

Kentucky Public Pensions Authority

# Internal Asset Holdings Report & Internal Asset Transaction Report

Quarter Ending: December 31, 2024

**Reports can be found:**

<https://kyret.ky.gov/Investments/Investments-Library/Pages/Internal-Reports.aspx>

Kentucky Public Pensions Authority

# Commissions Report

Quarter Ending: December 31, 2024

**Reports can be found:**

<https://kyret.ky.gov/Investments/Investments-Library/Pages/Commissions-Reports.aspx>

County Employees Retirement System

# Investment Budget Update

Quarter Ending: December 31, 2024

KENTUCKY PUBLIC PENSIONS AUTHORITY										
Investment Budget										
For the six month period ending December 31, 2024										
Account Name	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Trust Budget FY 2025	FY25 Expenditures	Remaining	Percentage Spent
<b>CONSULTING SERVICES</b>										
Wilshire Associates	\$ 1,021,799	\$ 1,238,170	\$ 1,225,671	\$ 1,021,175	\$ 838,172	\$ 1,130,417	\$ 1,250,000	\$ 580,311	\$ 669,689	46%
Albourne	-	-	-	-	306,750	270,000	275,000	135,000	140,000	49%
MercerInsight	-	-	-	-	153,548	160,000	165,000	80,000	85,000	48%
New Private Markets Consultant	-	-	-	-	153,548	160,000	250,000	-	250,000	0%
<b>SUBTOTAL</b>	<b>1,021,799</b>	<b>1,238,170</b>	<b>1,225,671</b>	<b>1,021,175</b>	<b>1,452,019</b>	<b>1,720,417</b>	<b>1,940,000</b>	<b>795,311</b>	<b>1,144,689</b>	<b>41%</b>
<b>LEGAL &amp; AUDITING SERVICES</b>										
Faegre Drinker	-	-	96,039	202,502	16,428	18,519	375,000	1,000	374,000	0%
Intelligent Management Solutions (IMS)	620,001	202,140	155,700	69,884	81,880	8,061	700,000	1,289,110	(589,110)	184%
McClain/Goldberg	-	-	891	-	-	312	25,000	-	25,000	0%
Reinhart	317,909	671,269	663,689	619,509	109,508	619,420	3,000,000	1,097,884	1,902,116	37%
Stoll-Keenon-Ogder	10,314	135,353	254,211	463,560	750,438	210,475	875,000	184,180	690,820	21%
Haystack	-	-	-	-	120,175	209,490	200,000	148,650	51,350	74%
Umberg Zipser	-	-	289,100	498,058	606,701	738,483	750,000	61,669	688,331	8%
Fiduciary Legal Expenses	-	-	-	-	5,288	400,872	850,000	431,098	418,902	51%
Miscellaneous	-	-	-	-	-	3,160	50,000	-	50,000	0%
<b>SUBTOTAL</b>	<b>948,225</b>	<b>1,008,762</b>	<b>1,459,630</b>	<b>1,853,513</b>	<b>1,690,417</b>	<b>2,208,791</b>	<b>6,825,000</b>	<b>3,213,591</b>	<b>3,611,409</b>	<b>47%</b>
<b>CONTRACTURAL SERVICES</b>										
Bloomberg	68,722	71,810	98,163	102,243	104,153	110,823	160,000	56,393	103,607	35%
BNYM Custodial Fees	2,056,390	2,088,475	2,379,838	2,565,169	2,333,981	2,752,592	2,700,000	1,499,863	1,200,137	56%
eVestment (Solovis RMS)	-	-	-	30,000	33,800	39,422	35,000	-	35,000	0%
Solovis (Reporting & Analytics)	-	-	-	245,000	266,017	306,319	300,000	319,744	(19,744)	107%
FactSet	222,476	162,295	109,662	140,098	146,411	151,431	150,000	66,840	83,160	45%
Russell Index Subscription	1,075	1,250	1,000	1,000	750	1,000	30,000	750	29,250	3%
S&P Global	-	94,500	26,250	68,250	27,563	-	47,500	20,672	26,828	44%
TradeWeb	-	-	-	6,000	7,700	2,800	-	-	-	-
State Street/Elkins McSherry	10,000	5,000	15,000	10,000	10,000	-	10,000	-	10,000	0%
ISS	32,050	32,050	28,288	35,813	39,875	62,875	60,000	8,500	51,500	14%
MSCI	1,000	1,000	1,000	1,000	1,000	1,000	1,000	-	1,000	0%
KPMG Tax Guarantor Services	-	7,606	22,050	7,350	-	9,450	10,000	9,450	550	95%
Jayant Ghevaria and CO	-	10,050	-	52,085	-	-	55,000	-	55,000	0%
India Renewal Fee (SEBI)	-	-	-	3,000	-	2,950	3,000	-	3,000	0%
With Intelligence	-	-	-	-	9,520	9,520	10,000	10,150	(150)	-
<b>SUBTOTAL</b>	<b>2,391,713</b>	<b>2,474,036</b>	<b>2,681,251</b>	<b>3,267,008</b>	<b>2,980,769</b>	<b>3,450,182</b>	<b>3,571,500</b>	<b>1,992,363</b>	<b>1,579,137</b>	<b>56%</b>

CERS Board Meeting - Investment Committee

KENTUCKY PUBLIC PENSIONS AUTHORITY										
Investment Budget										
For the six month period ending December 31, 2024										
Account Name	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Trust Budget FY 2025	FY25 Expenditures	Remaining	Percentage Spent
<b>MISCELLANEOUS SERVICES</b>										
Miscellaneous Services							250,000		250,000	0%
Morningstar						2,500	2,500	2,500	-	100%
Oxford						19,500	20,000	20,475	(475)	102%
Pension Real Estate Association						330	350	330	20	94%
Reimbursement of Pzena	-	-	-	-	-	12,923			-	
<b>SUBTOTAL</b>	-	-	-	-	-	<b>35,253</b>	<b>272,850</b>	<b>23,305</b>	<b>249,545</b>	<b>9%</b>
<b>INACTIVE CONTRACTURAL SERVICES</b>										
Dean Dorton	9,719		-	-	250	-	-	-	-	
Hirschler		4,794	-	-	-	-	-	-	-	
INFORMA	12,904		-	-	-	-	-	-	-	
Lighthouse Solutions	3,093		-	-	-	-	-	-	-	
London Stock Exchange GBP (GREAT BRITISH POUNDS)	6,467	3,544	-	-	-	-	-	-	-	
Deutsche Bank Trust	3,000		3,000	-	-	-	-	-	-	
Morris James LLP	94,192	20,154	-	-	-	-	-	-	-	
Calcaterra Pollack			1,200,000	-	-	-	-	-	-	
Manatt		90,798	30,757	-	-	-	-	-	-	
ORG	162,344		-	-	-	162,344	-	-	-	
<b>SUBTOTAL</b>	<b>291,718</b>	<b>119,290</b>	<b>1,233,757</b>	-	<b>250</b>	-	-	-	-	
<b>TOTAL</b>	<b>\$ 4,653,455</b>	<b>\$ 4,840,258</b>	<b>\$ 6,600,309</b>	<b>\$ 6,141,696</b>	<b>\$ 6,123,455</b>	<b>\$ 7,414,644</b>	<b>\$ 12,609,350</b>	<b>\$ 6,024,570</b>	<b>\$ 6,584,780</b>	<b>48%</b>

CERS Board Meeting - Investment Committee

<b>INVESTMENT BUDGET</b>	
<b>CONSULTING SERVICES</b>	
Wilshire Associates	General Investment Consulting Services, Manager Research and Due Dilligence, Reporting, Asset Allocation
Albourne	Investment Consultant Research database - Private Markets Manager Research, Private Markets Research, Pension Markets Research
MercerInsight	Investment Consultant Research database - Public Markets Manager Research, Public Markets Research, Pension Markets Research
<b>LEGAL &amp; AUDITING SERVICES</b>	
Faegre Drinker	Delaware litigation counsel
Intelligent Management Solutions (IMS)	IMS is an expert witness in the Bay Hills case.
McClain/Goldberg	Blackstone litigation counsel for the Trustees and Officers
Reinhart	Bay Hills counsel and investment counsel for contract negotiations
Stoll-Keenon-Ogden	Mayberry counsel
Haystack	Conduct Mayberry eDiscovery
Umberg Zipser	PAAMCO-Prisma (California litigation)
Frost Brown Todd	Currently has no investment-related cases
Swansburg & Smith	Reimbursement of Fiduciary Legal Expenses (KKR)
Eddins Domine	Reimbursement of Fiduciary Legal Expenses (KKR)
Taft	Reimbursement of Fiduciary Legal Expenses (Calcaterra Pollack)
<b>CONTRACTURAL SERVICES</b>	
Bloomberg	Bloomberg Professional Services, Data Analytics and Tools, Market Information and News, Research Portal
BNYM Custodial Fees	Full Service Custodial Services, Investment Accounting, Investment Operations, Transaction Services, Performance and Attribution, Reporting
eVestment (Solovis RMS)	Research Management Program organizing internal and external research
Solovis (Reporting & Analytics)	Portfolio and Risk Analytics, Performance Measurement and Attribution, Reporting
FactSet	Workstation and Quant/Risk Applications for managing Public Equity Portfolios
Russell Index Subscription	Access to Russell Indexes for Portfolio Management, Reporting and Performance
S&P Global	Data on the S & P US Index / License to 10,000 Identifiers for Portfolio Management, Reporting and Performance
TradeWeb	Electronic Trading Platform for Internal Management
State Street/Elkins McSherry	Public Equity Trade Cost Analysis
ISS	Portfolio Monitoring and Proxy Voting Services
MSCI	International Public Equity Data Package
KPMG Tax Guarantor Services	Tax Accounting Services - Taiwan
Jayant Ghevaria and CO	Tax Accounting Services - India
India Renewal Fee (SEBI)	Registration of India Local Market Accounts
Oxford Economics	Global macroeconomics and markets research
Morningstar	Access to Morningstar Indexes for Portfolio Management, Reporting and Performance
Pension Real Estate Association	Industry Association for News and Research
With Intelligence	Portfolio Management Research provider



KENTUCKY PUBLIC PENSIONS AUTHORITY											
Investment Fees and Expenses											
For the six month periods ending December 31											
Pension											
	2025			2024		2023		2022		2021	
	FYTD Fees	Annualized Fee Rate	Market Value	FYTD Fees	Market Value	FYTD Fees	Market Value	FYTD Fees	Market Value	FYTD Fees	Market Value
<b>Core Fixed Income</b>	<b>1,375,134</b>	<b>0.08%</b>	<b>3,285,258,604</b>	<b>1,014,583</b>	<b>2,287,704,103</b>	<b>1,412,142</b>	<b>1,982,992,065</b>	<b>1,591,391</b>	<b>2,344,396,966</b>	<b>1,401,242</b>	<b>2,282,848,163</b>
<i>Investment Advisory Fees</i>	1,038,999	0.06%		989,977		1,073,446		1,558,075		1,375,451	
<i>Performance Fees</i>						313,985					
<i>Miscellaneous Fees and Expenses</i>	336,134			24,606		24,711		33,316		25,791	
<b>Public Equity</b>	<b>8,629,831</b>	<b>0.20%</b>	<b>8,515,176,300</b>	<b>7,003,749</b>	<b>8,229,412,149</b>	<b>6,326,122</b>	<b>6,860,008,005</b>	<b>7,390,244</b>	<b>7,258,279,054</b>	<b>5,850,570</b>	<b>6,295,655,905</b>
<i>Investment Advisory Fees</i>	8,520,390	0.20%		6,885,398		6,216,244		7,204,226		5,712,166	
<i>Miscellaneous Fees and Expenses</i>	109,441			118,350		109,877		186,018		138,403	
<b>Specialty Credit Fixed Income</b>	<b>52,553,330</b>	<b>2.56%</b>	<b>4,113,638,760</b>	<b>43,867,219</b>	<b>3,449,111,420</b>	<b>26,763,395</b>	<b>3,169,416,226</b>	<b>25,775,685</b>	<b>3,159,992,882</b>	<b>18,397,660</b>	<b>2,806,670,599</b>
<i>Investment Advisory Fees</i>	11,557,737	0.56%		9,314,024		8,272,318		8,375,883		7,320,545	
<i>Performance Fees</i>	20,324,723			15,712,746		7,246,973		12,762,781		9,592,140	
<i>Miscellaneous Fees and Expenses</i>	20,670,870			18,840,449		11,244,103		4,637,021		1,484,975	
<b>Real Estate</b>	<b>9,542,076</b>	<b>1.89%</b>	<b>1,007,605,718</b>	<b>2,347,363</b>	<b>1,007,031,285</b>	<b>5,120,746</b>	<b>980,167,711</b>	<b>16,451,186</b>	<b>780,082,609</b>	<b>980,198</b>	<b>584,165,093</b>
<i>Investment Advisory Fees</i>	3,855,993	0.77%		3,803,771		4,590,896		2,401,864		2,545,408	
<i>Performance Fees</i>	(133,705)			(3,707,401)		(380,882)		12,653,860		(2,070,445)	
<i>Miscellaneous Fees and Expenses</i>	5,819,788			2,250,993		910,732		1,395,462		505,235	
<b>Real Return</b>	<b>5,957,053</b>	<b>0.94%</b>	<b>1,267,368,609</b>	<b>2,496,799</b>	<b>873,036,117</b>	<b>2,108,571</b>	<b>451,152,401</b>	<b>2,632,576</b>	<b>1,021,821,360</b>	<b>3,478,904</b>	<b>989,625,601</b>
<i>Investment Advisory Fees</i>	3,154,358	0.50%		2,099,651		1,176,185		2,001,915		2,247,532	
<i>Performance Fees</i>	1,922,510			147,085		493,101		679,897		1,259,862	
<i>Miscellaneous Fees and Expenses</i>	880,185			250,063		439,285		(49,236)		(28,490)	
<b>Private Equity</b>	<b>7,362,364</b>	<b>1.30%</b>	<b>1,134,713,109</b>	<b>8,028,455</b>	<b>1,162,891,960</b>	<b>(1,217,614)</b>	<b>1,143,362,622</b>	<b>39,968,415</b>	<b>1,262,539,645</b>	<b>24,365,092</b>	<b>1,139,236,934</b>
<i>Investment Advisory Fees</i>	2,225,737	0.39%		2,925,557		3,652,032		3,928,841		4,294,168	
<i>Performance Fees</i>	3,539,722			2,310,867		(6,838,180)		33,350,556		17,523,541	
<i>Miscellaneous Fees and Expenses</i>	1,596,905			2,792,031		1,968,535		2,689,018		2,547,383	
<b>Administrative Expense/Cash</b>	<b>4,140,838</b>	<b>0.04%</b>	<b>521,905,734</b>	<b>2,118,142</b>	<b>737,649,280</b>	<b>1,574,490</b>	<b>813,973,145</b>	<b>1,878,932</b>	<b>612,903,688</b>	<b>1,435,169</b>	<b>266,674,138</b>
<b>Total Investment Mgmt Fees</b>	<b>89,560,626</b>	<b>0.90%</b>	<b>19,845,666,834</b>	<b>66,876,308</b>	<b>17,746,836,314</b>	<b>42,087,852</b>	<b>15,401,072,174</b>	<b>95,688,429</b>	<b>16,440,016,204</b>	<b>55,908,834</b>	<b>14,364,876,433</b>

CERS Board Meeting - Investment Committee

KENTUCKY PUBLIC PENSIONS AUTHORITY											
Investment Fees and Expenses											
For the six month periods ending December 31											
Insurance											
	2025			2024		2023		2022		2021	
	FYTD Fees	Annualized Fee Rate	Market Value	FYTD Fees	Market Value	FYTD Fees	Market Value	FYTD Fees	Market Value	FYTD Fees	Market Value
<b>Core Fixed Income</b>	<b>439,114</b>	<b>0.09%</b>	<b>990,094,610</b>	<b>342,823</b>	<b>780,518,762</b>	<b>526,658</b>	<b>755,273,150</b>	<b>587,743</b>	<b>855,261,654</b>	<b>568,510</b>	<b>873,074,122</b>
<i>Investment Advisory Fees</i>	329,665	0.07%		334,225		406,870		457,920		558,897	
<i>Performance Fees</i>						112,040		117,337			
<i>Miscellaneous Fees and Expenses</i>	109,449			8,598		7,748		12,486		9,613	
<b>Public Equity</b>	<b>3,845,123</b>	<b>0.21%</b>	<b>3,693,351,775</b>	<b>3,225,651</b>	<b>3,720,705,634</b>	<b>2,916,264</b>	<b>3,159,950,145</b>	<b>3,221,274</b>	<b>3,246,444,061</b>	<b>2,616,659</b>	<b>2,840,620,347</b>
<i>Investment Advisory Fees</i>	3,799,141	0.21%		3,171,832		2,866,269		3,161,508		2,557,467	
<i>Miscellaneous Fees and Expenses</i>	45,982			53,819		49,995		59,766		59,192	
<b>Specialty Credit Fixed Income</b>	<b>23,290,434</b>	<b>2.57%</b>	<b>1,812,349,655</b>	<b>19,604,727</b>	<b>1,527,908,553</b>	<b>12,006,819</b>	<b>1,440,474,508</b>	<b>11,449,880</b>	<b>1,449,432,096</b>	<b>7,816,436</b>	<b>1,274,181,212</b>
<i>Investment Advisory Fees</i>	4,988,056	0.55%		4,026,821		3,715,203		3,748,168		3,373,550	
<i>Performance Fees</i>	9,193,232			7,206,526		3,460,460		5,702,991		3,921,732	
<i>Miscellaneous Fees and Expenses</i>	9,109,146			8,371,380		4,831,156		1,998,721		521,154	
<b>Real Estate</b>	<b>4,188,889</b>	<b>1.85%</b>	<b>451,763,858</b>	<b>1,223,228</b>	<b>451,520,869</b>	<b>2,141,670</b>	<b>414,400,346</b>	<b>6,801,703</b>	<b>330,413,444</b>	<b>536,259</b>	<b>246,753,396</b>
<i>Investment Advisory Fees</i>	1,751,779	0.78%		1,719,862		1,913,144		1,021,218		1,015,005	
<i>Performance Fees</i>	(57,415)			(1,461,607)		(161,966)		5,182,012		(795,199)	
<i>Miscellaneous Fees and Expenses</i>	2,494,525			964,973		390,492		598,473		316,453	
<b>Real Return</b>	<b>2,553,520</b>	<b>1.08%</b>	<b>474,001,894</b>	<b>1,116,868</b>	<b>342,016,500</b>	<b>938,266</b>	<b>175,390,319</b>	<b>1,140,159</b>	<b>432,244,515</b>	<b>1,350,465</b>	<b>419,707,299</b>
<i>Investment Advisory Fees</i>	1,316,466	0.56%		936,352		530,992		889,226		948,395	
<i>Performance Fees</i>	854,844			64,072		201,933		266,344		419,601	
<i>Miscellaneous Fees and Expenses</i>	382,210			116,444		205,341		(15,411)		(17,531)	
<b>Private Equity</b>	<b>3,588,563</b>	<b>1.26%</b>	<b>569,856,320</b>	<b>4,902,486</b>	<b>587,662,239</b>	<b>275,237</b>	<b>573,107,746</b>	<b>22,563,618</b>	<b>595,876,977</b>	<b>16,438,473</b>	<b>548,052,248</b>
<i>Investment Advisory Fees</i>	1,393,540	0.49%		1,826,381		2,427,153		2,772,848		2,892,530	
<i>Performance Fees</i>	1,400,678			1,205,986		(3,062,207)		18,845,205		12,027,941	
<i>Miscellaneous Fees and Expenses</i>	794,345			1,870,119		910,292		945,565		1,518,002	
<b>Administrative Expense/Cash</b>	<b>1,939,536</b>	<b>0.05%</b>	<b>162,008,178</b>	<b>1,050,278</b>	<b>142,324,349</b>	<b>821,924</b>	<b>223,048,022</b>	<b>963,210</b>	<b>401,003,570</b>	<b>842,635</b>	<b>108,497,980</b>
<b>Total Investment Mgmt Fees</b>	<b>\$ 39,845,179</b>	<b>0.98%</b>	<b>\$ 8,153,426,289</b>	<b>\$ 31,466,061</b>	<b>\$ 7,552,656,905</b>	<b>\$ 19,626,840</b>	<b>\$ 6,741,644,236</b>	<b>\$ 46,727,587</b>	<b>\$ 7,310,676,317</b>	<b>\$ 30,169,437</b>	<b>\$ 6,310,886,604</b>

<b>KENTUCKY PUBLIC PENSIONS AUTHORITY</b>				
<b>Investment Fees and Expenses</b>				
<b>For the six month period ending December 31, 2024</b>				
<b>Pension</b>				
	<b>CERS</b>		<b>CERS Hazardous</b>	
	<b>FYTD Fees</b>	<b>Market Value</b>	<b>FYTD Fees</b>	<b>Market Value</b>
<b>Core Fixed Income</b>	<b>537,992</b>	<b>1,288,779,503</b>	<b>191,031</b>	<b>459,219,484</b>
<i>Investment Advisory Fees</i>	405,689		143,897	
<i>Performance Fees</i>				
<i>Miscellaneous Fees and Expenses</i>	132,304		47,133	
<b>Public Equity</b>	<b>4,842,737</b>	<b>4,738,159,654</b>	<b>1,721,605</b>	<b>1,688,747,171</b>
<i>Investment Advisory Fees</i>	4,781,284		1,699,950	
<i>Miscellaneous Fees and Expenses</i>	61,453		21,655	
<b>Specialty Credit Fixed Income</b>	<b>28,471,477</b>	<b>2,048,528,928</b>	<b>9,663,748</b>	<b>724,131,172</b>
<i>Investment Advisory Fees</i>	6,028,361		2,074,165	
<i>Performance Fees</i>	11,199,960		3,710,869	
<i>Miscellaneous Fees and Expenses</i>	11,243,156		3,878,714	
<b>Real Estate</b>	<b>5,321,688</b>	<b>520,917,234</b>	<b>1,681,158</b>	<b>165,824,658</b>
<i>Investment Advisory Fees</i>	2,118,403		668,345	
<i>Performance Fees</i>	(75,374)		(23,830)	
<i>Miscellaneous Fees and Expenses</i>	3,278,658		1,036,643	
<b>Real Return</b>	<b>3,016,895</b>	<b>498,483,669</b>	<b>1,145,770</b>	<b>177,141,802</b>
<i>Investment Advisory Fees</i>	1,586,969		584,461	
<i>Performance Fees</i>	963,587		392,532	
<i>Miscellaneous Fees and Expenses</i>	466,339		168,777	
<b>Private Equity</b>	<b>4,129,052</b>	<b>616,509,637</b>	<b>1,385,120</b>	<b>220,932,468</b>
<i>Investment Advisory Fees</i>	1,416,743		470,164	
<i>Performance Fees</i>	1,750,302		593,272	
<i>Miscellaneous Fees and Expenses</i>	962,007		321,684	
<b>Administrative Expenses/Cash</b>	<b>2,088,745</b>	<b>251,826,421</b>	<b>742,955</b>	<b>124,189,854</b>
<b>Total Investment Mgmt Fees</b>	<b>48,408,587</b>	<b>9,963,205,045</b>	<b>16,531,386</b>	<b>3,560,186,610</b>

<b>KENTUCKY PUBLIC PENSIONS AUTHORITY</b>				
<b>Investment Fees and Expenses</b>				
<b>For the six month period ending December 31, 2024</b>				
<b>Insurance</b>				
	<b>CERS</b>		<b>CERS Hazardous</b>	
	<b>FYTD Fees</b>	<b>Market Value</b>	<b>FYTD Fees</b>	<b>Market Value</b>
<b>Core Fixed Income</b>	<b>208,798</b>	<b>477,681,114</b>	<b>97,829</b>	<b>223,112,318</b>
<i>Investment Advisory Fees</i>	156,124		73,079	
<i>Performance Fees</i>				
<i>Miscellaneous Fees and Expenses</i>	52,674		24,750	
<b>Public Equity</b>	<b>1,767,353</b>	<b>1,746,014,718</b>	<b>858,909</b>	<b>828,538,833</b>
<i>Investment Advisory Fees</i>	1,745,458		848,602	
<i>Miscellaneous Fees and Expenses</i>	21,895		10,307	
<b>Specialty Credit Fixed Income</b>	<b>10,475,380</b>	<b>769,177,844</b>	<b>5,520,846</b>	<b>364,572,591</b>
<i>Investment Advisory Fees</i>	2,152,778		1,077,332	
<i>Performance Fees</i>	4,120,888		2,236,159	
<i>Miscellaneous Fees and Expenses</i>	4,201,713		2,207,355	
<b>Real Estate</b>	<b>1,890,305</b>	<b>188,688,940</b>	<b>1,037,293</b>	<b>103,544,774</b>
<i>Investment Advisory Fees</i>	771,154		423,159	
<i>Performance Fees</i>	(26,367)		(14,468)	
<i>Miscellaneous Fees and Expenses</i>	1,145,517		628,602	
<b>Real Return</b>	<b>1,199,824</b>	<b>175,261,425</b>	<b>507,403</b>	<b>83,725,839</b>
<i>Investment Advisory Fees</i>	600,107		265,974	
<i>Performance Fees</i>	423,192		159,763	
<i>Miscellaneous Fees and Expenses</i>	176,525		81,666	
<b>Private Equity</b>	<b>1,636,044</b>	<b>244,809,399</b>	<b>896,310</b>	<b>136,693,654</b>
<i>Investment Advisory Fees</i>	658,673		366,983	
<i>Performance Fees</i>	563,296		304,373	
<i>Miscellaneous Fees and Expenses</i>	414,075		224,954	
<b>Administrative Expenses/Cash</b>	<b>875,547</b>	<b>83,308,976</b>	<b>419,971</b>	<b>21,127,450</b>
<b>Total Investment Mgmt Fees</b>	<b>\$ 18,053,250</b>	<b>\$ 3,684,942,416</b>	<b>\$ 9,338,560</b>	<b>\$ 1,761,315,460</b>

# Quarterly Investment Compliance Report

Quarter Ending December 31, 2024



# Investment Guideline Compliance Review

Quarterly Investment Compliance Report Quarter Ending  
12/31/2024

2

19 Guidelines In Compliance

0 Guidelines Not In Compliance

Guideline Category	Guideline	Compliance Status
General	The assets managed by any one active or passive investment manager shall not exceed 15% of the overall assets in the Pension and Insurance funds.*	In Compliance
	Total assets assigned to a selected manager shall not exceed 25% of the management firm's total assets under management.	In Compliance
	Total assets assigned to a selected manager shall not exceed 25% of the management firm's total assets under management in a commingled product.	In Compliance
	Derivative investments shall not cause the portfolio to be leveraged beyond a 100% invested position.	In Compliance
	The maximum investment in any co-investment vehicle shall not exceed 50% of the total capital committed by all partners at the time of the final closing.	In Compliance
	The maximum investment in any single direct co-investment shall not exceed 20% of the original partnership commitment.	In Compliance
	Total investment in direct co-investments shall not exceed 20% of the asset class portfolio on a cost basis at the time of investment.	In Compliance
	An external investment manager's cash holdings shall not exceed 5% of the manager's allocation for any given quarter, unless such cash holdings are an integral part of a fixed income manager's investment strategy.	In Compliance
	Externally and internally managed portfolio investment guidelines shall be met.	In Compliance
Equity	The amount of stock in the domestic or international equity allocation in any single corporation shall not exceed 5% of the aggregate market value of CERS' assets.	In Compliance
	The amount of stock held in the domestic or international equity allocation shall not exceed 3% of the outstanding shares of any single corporation.	In Compliance
	Investment in "frontier" markets shall not exceed 5% of CERS' international equity assets.	In Compliance
	No more than 15% of the Pension or Insurance total allocation to private equity investments may be committed to any one partnership.	In Compliance
Fixed Income	The duration of the core fixed income portfolios combined shall not vary from that of CERS' Fixed Income Index by more than +/- 25% as measured by effective duration, modified duration, or dollar duration except when the Investment Committee has determined a target duration to be used for an interim basis.	In Compliance
	The amount invested in the debt of a single issuer shall not exceed 5% of the total market value of CERS' fixed income assets, with the exception of U.S. Government issued, guaranteed, or agency obligations (or securities collateralized by the same).	In Compliance
	50% of the core fixed income assets shall have stated liquidity that is trade date plus three (3) days or better.	In Compliance
Real Return	No more than 20% of the total net assets of the Real Return portfolios shall be invested in any single closed-end or open-end limited partnership or other unregistered investment vehicle.	In Compliance
	No more than 20% of the total net assets of the Real Return portfolio shall be invested in any one registered investment vehicle, mutual fund, or separately managed account.	In Compliance
Cash Equivalent Securities	All instruments in the liquidity allocation shall have a maturity at the time of purchase that does not exceed 397 days.	In Compliance

\*Only applies to external managers and not to assets managed by KPPA Investment Staff.

Quarterly Investment Compliance Report Quarter Ending  
12/31/2024



# Guideline Compliance Overview

- Guidelines included are those “yes/no” requirements stated in CERS’ Investment Policy Statement and the Investment Guidelines of external and internally managed portfolios.
- Guideline compliance reviews will look at the entire quarter.
- When there is an “out of compliance” finding for one (1) or more guidelines, the Quarterly Investment Compliance Report will include an “Exception Report.” The “Exception Report” will include the following information for each guideline for which an “out of compliance” finding is noted:
  - Guideline
  - Date exception began
  - Cause of exception
  - Date of resolution
  - Description of resolution
- Continued work with BNY to enhance reporting on compliance with investment guidelines.

# Asset Allocation Compliance Review (Exceptions Only)

Quarterly Investment Compliance Report Quarter Ending  
12/31/2024

6

# Exception Report

None – All asset classes in range.

# Asset Allocation Compliance Report Overview

- If one (1) or more asset class falls outside the allowable range for that asset class as stated in CERS' Investment Policy Statement, it will be noted in the Asset Allocation Compliance Review.
- Asset Allocation Compliance Report will look at the entire quarter.
- Reporting will include exceptions only.
- When an asset class exceeds or is less than the allowable range, the Quarterly Investment Compliance Report will include the following information for each asset class outside of the allowable range:
  - Asset class
  - Allowable range
  - Date exception began
  - Cause of exception
  - Date of resolution
  - Description of resolution



## MEMORANDUM

**DATE:** February 18, 2025  
**TO:** CERS Board of Trustees  
**FROM:** Betty Pendergrass  
**SUBJECT:** Final Edits to CERS Board's Strategic Plan

---

I have attached a final *DRAFT* of the CERS Board's Strategic Plan for 2025 – 2029. The following notes summarize the planning and discussion process for this project.

1. The CERS Board of Trustees adopted this format/model for a strategic plan on March 16, 2022. The model and approval included the following primary features:
  - a. Executive Summary with a mission, vision, and core values for the CERS Board of Trustees outlines the purpose and background for the CERS plan.
  - b. Strategic Goals for each of the primary standing committees and administrative operations were approved by the CERS Board with the adoption of the format/model. (The Personnel Committee was included in the Administrative section.)
  - c. Objectives, measures, targets, and timelines provide more detail, discussion, and plans for monitoring compliance or identifying areas for improvements.
2. Each committee developed the objectives, measures, targets, and timelines based on what the committee's Trustees wanted to accomplish for their area of responsibility and their view of the fiduciary roles for their committee. These objectives, measures, targets, and timelines were also based on the respective primary strategic goal for the committee approved by the Board on March 16, 2022.
3. The "joint" committees for audit, healthcare, and administrative appeals have been omitted from the CERS Strategic Plan since these functions are under the jurisdiction of KPPA.
4. I developed objectives, measures, and targets within the Administrative section while I was Board Chair (prior to 4/8/2024) that are not specifically designated to the Personnel Committee. However, each of these items were also included on the CEO's Performance Plan for 2021, 2022, 2023, and 2024. The Personnel Committee approved the CEO's Performance Plan in 2023 and 2024, including these strategic objectives and timelines. The CERS Board of Trustees ratified all the Personnel Committee recommendations related to the Strategic Plan and CEO performance.
5. This format/model was based on a Strategic Plan used by the Colorado Public Employees Retirement Association (Colorado PERA). I have also attached a copy of their 2019-2023 plan for reference.

We can finalize any additional questions during our CERS Board review and adoption of this plan. Thanks for all the thoughtful ideas and collaboration on this project.



**KENTUCKY COUNTY EMPLOYEES' RETIREMENT SYSTEM  
STRATEGIC PLAN 2025-2029**

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DRAFT



**KENTUCKY COUNTY EMPLOYEES' RETIREMENT SYSTEM  
STRATEGIC PLAN 2025-2029**

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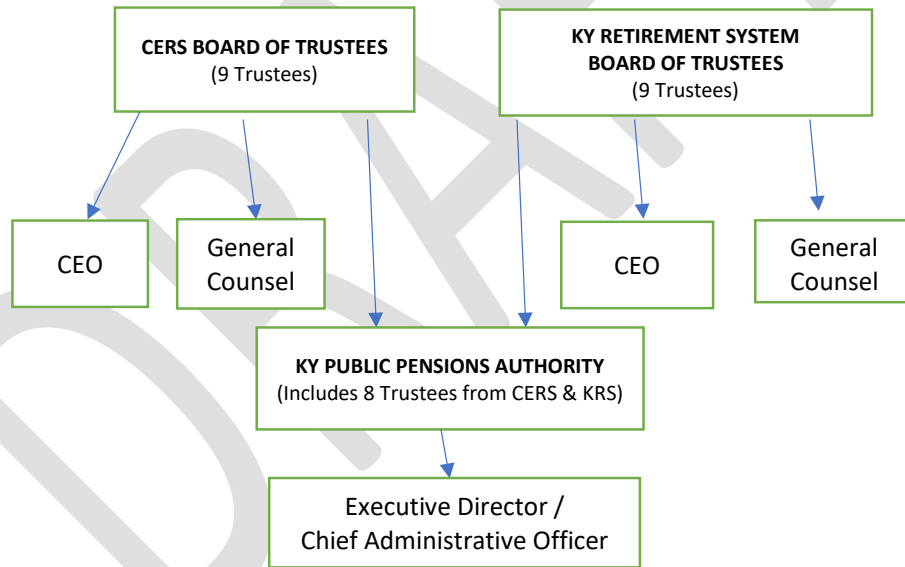
DRAFT

## EXECUTIVE SUMMARY

### INTRODUCTION

The Kentucky County Employees Retirement System (CERS) was established July 1, 1958, by the Kentucky General Assembly. Guidance for CERS is found in Chapter 78 of the Kentucky Revised Statutes (KRS). Chapter 78 outlines the governing board structure, postretirement plan design, membership, and authority for employee and employer contributions for both a Non-Hazardous plan and a Hazardous plan. In 2020, the Kentucky General Assembly created a separate governing board for CERS and effective April 1, 2021, the new governance structure was initiated.

Administrative support is provided by the Kentucky Public Pensions Authority (KPPA), also created effective April 1, 2021 (KRS 61.505). CERS is represented by four Trustees on the KPPA governing board along with four Trustees from the Kentucky Retirement Systems (Ky Retirement). Ky Retirement is the governing board for the Kentucky Employees Retirement Systems (KERS—hazardous and nonhazardous) and the State Police Retirement System (SPRS). The relationship among the three board is illustrated below.



Employees of cities, counties, and special purpose governments are covered by the CERS, a cost-sharing multiple-employer defined benefit pension plan administered by the Kentucky Public Pensions Authority (KPPA), an agency of the Commonwealth of Kentucky. In addition, employees of Kentucky school districts whose positions do not require a degree beyond a high school diploma also participate in CERS. As of April 1, 2021, Kentucky Revised Statute (“KRS”) Section 78.782 shifted the governance of CERS to a separate Board of Trustees of the County Employees Retirement System. The CERS Board manages the CERS trust, including investment management. KPPA provides the day-to-day administration (KRS 61.505) for accounting and benefit administration for CERS. The Kentucky General Assembly has the authority to establish and amend benefit provisions.

2025 – 2029 CERS Strategic Plan  
Executive Summary (continued)

CERS, KERS, and SPRS all provide defined benefit pension and other post-employment benefits for public employees. Retirement benefits to these retirees adds over \$2 billion to the Commonwealth's economy across 120 counties.

This inaugural Strategic Plan outlines the key goals and objectives that the CERS Board of Trustees hopes will provide a sustainable governing structure in compliance with the organizational guidance in Kentucky Revised Statutes, Chapter 78. The CERS Board of Trustees recognizes the importance of a partnership with key stakeholders in the Commonwealth, including public employees, employers, professional associations, and the citizens of the Commonwealth. These goals are focused on supporting the CERS organization, investment management, and support services to our membership. Postretirement benefits for both pension income and postretirement healthcare are critical for supporting all the public services to the citizens and the public employees who provide those services. These benefits provide financial security to CERS members and return an economic benefit to the citizens we serve.

The CERS Board of Trustees takes its fiduciary role very seriously. Governing statutes include specific guidance about our fiduciary roles and compliance with both the Kentucky Executive Branch Ethics Code and the CFA Pension Trustee Code of Conduct. In addition, Chapter 78 outlines the basic structures for investment management, Trustee education, as well as accountability and transparency. Goals in this Strategic Plan were selected based on the underlying guidance in Chapter 78 and the expectations of our stakeholders and the citizens of the Commonwealth.

#### **MISSION**

To deliver governance for the postretirement plans that support the financial security of our membership.

#### **VISION**

Provide a sustainable funding structure with an approach that is viable for all stakeholders.

#### **CORE VALUES**

We focus on supporting the KPPA delivery of quality customer service, providing a sound investment strategy, and communicating with our stakeholders to demonstrate transparency and accountability.

Our efforts will adhere to basic principles for quality customer service, ethical conduct, excellence, fiduciary duty, and ongoing operational improvement. We also commit to collaboration with the Kentucky Retirement System Board of Trustees to enhance the retirement programs for KERS and SPRS, as well as CERS.

#### **STRATEGIC GOALS**

Now that CERS has completed its organizational first year and adopted Board administrative and governance policies, the focus of the 2025 – 2029 Strategic Plan includes the following goals to strengthen the CERS retirement plans.

- Goal 1** *Actuarial* **Strengthen actuarial administration to achieve full funding of the CERS plans.**
- Goal 2** *Investment* **Enhance investment management to support prudent portfolio performance and compliance oversight.**
- Goal 3** *Finance* **Collaborate with Kentucky Retirement Systems to develop a cost-effective administrative cost budget, financial management, and cost allocation policies.**
- Goal 4** *Administrative* **Provide structure to support efficient governance for CERS post-retirement plans.**

2025 – 2029 CERS Strategic Plan  
Executive Summary (continued)

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The Strategic Goals section outlines the goals, expands the discussion of objectives for each goal, including targets and measurement principles, and describes how the CERS Board will identify success. The last section of the Plan summarizes a proposed timeline for working on the goals and objectives.

**FUTURE PLANNING**

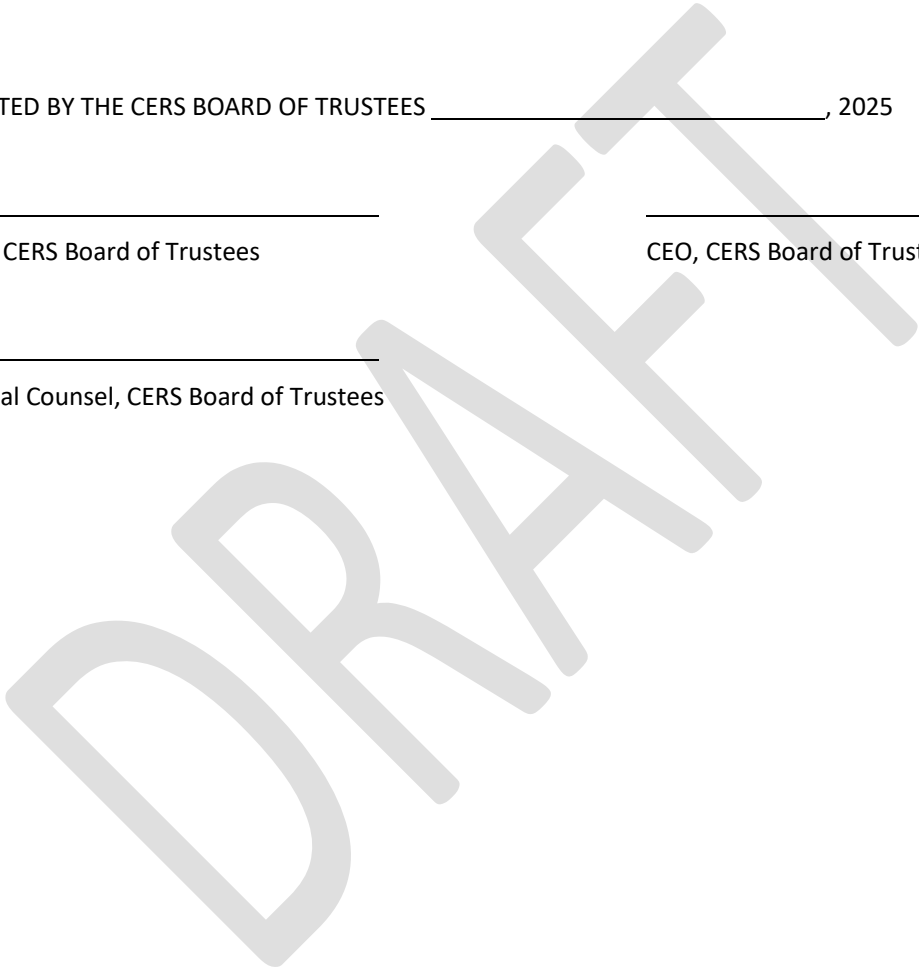
The CERS Board of Trustees has developed this first five-year strategic plan to set the stage for future improvements in managing the postretirement benefit plans for local government employees. We also plan to update this strategic plan in the future to maintain a dynamic governance and management structure for the CERS plans, members, stakeholders, and citizens.

ADOPTED BY THE CERS BOARD OF TRUSTEES \_\_\_\_\_, 2025

\_\_\_\_\_  
Chair, CERS Board of Trustees

\_\_\_\_\_  
CEO, CERS Board of Trustees

\_\_\_\_\_  
General Counsel, CERS Board of Trustees



<b>GOALS, OBJECTIVES, MEASURES AND TARGETS</b>
--

**Goal 1**     *Actuarial* **Strengthen actuarial administration to achieve full funding of the CERS plans. (Approved by Actuarial Committee on November 2, 2022.)**

<b>Objective A. Actuarial assumptions reflect actual trends.</b>
<p>1)    <b>Measure:</b> The CERS Board will require the actuary to use industry prevalent practices and methods for the analysis and recommendation of actuarial assumptions (economic and demographic) for use in the actuarial valuation.</p> <p>          <b>Target:</b> Annually in April.</p>
<b>Objective B. Avoid Negative Amortization.</b>
<p>1)    <b>Measure:</b> The CERS Board will work with the legislators on possible future changes to the funding policy that is in Statute such that any changes will not result in actuarial back loading (i.e. negative amortization of the unfunded actuarial accrued liability).</p> <p>          <b>Target:</b> Ongoing.</p>
<b>Objective C. Attain 100% funded status in reasonable period.</b>
<p>1)    <b>Measure:</b> The financial goal is for the Systems to attain a 100% funded ratio in a reasonable time period with the CERS Board-adopted contributions increasing or decreasing as appropriate.</p> <p>          <b>Target:</b> January 2038.</p>
<b>Objective D. Monitor financial and economic risks to plan.</b>
<p>1)    <b>Measure:</b> The CERS Board will request the actuary to perform a risk analysis or stress test from time to time to understand and quantify possible financial risks due to possible changing economic conditions or risks associated possible legislation that would result in materially lower contributions.</p> <p>          <b>Target:</b> January 2025.</p>

<b>Goal 1. How Will the CERS Board Evaluate Success</b>
<p>1)    Employer contributions are consistent across the five years 2025 – 2029.</p> <p>2)    Actuarial assumptions are consistent with actual experience.</p> <p>3)    Funded status continues to improve.</p>

2025 – 2029 CERS Strategic Plan  
Goals, Objectives, Measures, & Targets (continued)

**Goal 2** *Investments* Enhance investment management by providing prudent portfolio guidelines and compliance oversight.

**(Approved by Investment Committee on December 19, 2024.)**

<p><b>Objective A. Monitor the ratio of investment earnings versus contribution resources to evaluate the health of the CERS system.</b></p>	
<p>1)</p>	<p><b>Measure:</b> The 5-year geometric average net investment return (GANIR) calculation for Tier 3 interest credits shall be used to evaluate returns in the CERS portfolios (NonHaz, Haz, and Insurance).</p> <p><b>Target:</b> The GANIR should range from 6.25% to 10%.</p>
<p>2)</p>	<p><b>Measure:</b> Investment cash flow from realized gains, interest, and dividends, net of fees, compared to total benefits/expenses paid.</p> <p><b>Target:</b> Investment component, on a five-year rolling average should range between 45% and 65%.</p>
<p><b>Objective B. Investment Policy Statement (IPS) should meet Best Practices to ensure CERS meets its fiduciary responsibilities.</b></p>	
<p>1)</p>	<p><b>Measure:</b> Asset allocation in the IPS reflects the Board’s goals for investment performance.</p> <p><b>Target:</b> Projected return from IPS approved asset allocation should equal or exceed the discount rate for the actuarial valuation.</p>
<p>2)</p>	<p><b>Measure:</b> Quarterly investment reports include performance analysis that compares realized performance to investment goals established by CERS Investment Committee and Board of Trustees.</p> <p><b>Target:</b></p> <ul style="list-style-type: none"> <li>a) Realized total returns for CERS assets are compared to capital market assumptions utilized in asset allocation modelling .</li> <li>b) Returns for internally managed assets are reported separately.</li> <li>c) Compliance reporting highlight variances from IPS policies.</li> <li>d) Historical trend reporting (GANIR) is updated annually.</li> <li>e) Manager watch list that identifies managers with excellent performance or performance below expectations should be added to Compliance reporting.</li> </ul>
<p>3)</p>	<p><b>Measure:</b> Evaluate the asset allocation and identify a key timeline for asset liability studies and risk management issues to develop updates to the asset allocation.</p> <p><b>Target:</b> Conduct an asset liability study, including portfolio risk analysis, every 3 – 5 years.</p>

2025 – 2029 CERS Strategic Plan  
 Goals, Objectives, Measures, & Targets (continued)

**Objective C. Outline benchmarks to evaluate investment performance versus actuarial analysis and strengthen risk monitoring.**

- 1) **Measure:** CERS should use the actuarial discount rate, Total Fund Benchmark and a peer universe identified by Investment staff and investment consultant as benchmarks to evaluate returns and risk-adjusted returns over 5-year period on the CERS portfolio.  
  
**Target:** Realized returns over 5-year periods should always exceed the benchmarks.
- 2) **Measure:** Quarterly reporting provides analysis of manager performance by asset class.  
  
**Target:** Externally managed asset realized returns provide sufficient excess returns, net of management and performance fees. Periodic reporting should provide an opportunity for the Investment Committee to provide oversight of management fees.
- 3) **Measure:** Strengthen the role of the Investment Compliance Officer to monitor investment risk and report on investment risk.  
  
**Target:** Quarterly investment performance reports include:
  - a) Risk-adjusted returns for investment portfolio, by asset class
  - b) Identification of market, credit, concentration, liquidity, and volatility risk in CERS portfolio
  - c) Analysis of CERS portfolio market risk based on economic trends and industry sectors in the CERS portfolio

**Goal 2. How Will the CERS Board Evaluate Success**

- 1) Performance and compliance reports provide key information for CERS Investment Committee and Board of Trustees oversight.
- 2) Performance and compliance reports are readily available to stakeholders on the KPPA website.

2025 – 2029 CERS Strategic Plan  
 Goals, Objectives, Measures, & Targets (continued)

**Goal 3** *Finance* **Collaborate with Kentucky Retirement Systems to develop a cost-effective administrative cost budget, financial management, and cost allocation policies. (Finance Committee approved on 2/17/2025.)**

**Objective A. Work with Office of the CFO on CERS specific Annual Comprehensive Financial Report (ACFR) issues.**

- 1) **Measure:** Communications with the external audit firm (or the APA) regarding the CERS specific annual audit and ACFR are completed on a timely basis.  
**Target:** External Audit firm meets with Finance Committee annually in August at the start of the external audit and outlines key issues for annual audit.  
**Target:** External Audit firm meets with Finance Committee annually in November to present DRAFT ACFR and discuss other external audit findings and communications.  
**Target:** CERS Audit report and ACFR is delivered to Ky Finance & Administration by the due date established by Finance for inclusion in the Commonwealth’s ACFR.
- 2) **Measure:** Annual CERS ACFR is submitted to GFOA by December 31 each year for the Certificate of Achievement in Financial Reporting (COA) award. The CERS ACFR meets requirements for and achieves the GFOA COA award .  
**Target:** GFOA awards Certificate of Achievement for Excellence in Financial Reporting to the CERS ACFR, annually.  
**Target:** GFOA comments for improvements to the CERS ACFR demonstrate CERS compliance with generally accepted governmental accounting principles and governmental financial reporting best practices.



2025 – 2029 CERS Strategic Plan  
 Goals, Objectives, Measures, & Targets (continued)

**Goal 3 Finance Collaborate with Kentucky Retirement Systems to develop a cost-effective administrative cost budget, financial management, and cost allocation policies. (Finance Committee approved on 2/17/2025.) (Continued)**

<b>Objective B. Ensure CERS specific policies and procedures surrounding financial reporting are adequate.</b>	
1)	<p><b>Measure:</b> CERS annual and interim financial reporting provide essential information to assess accountability for CERS assets and pension management.</p> <p><b>Target:</b> CERS financial reporting provides key data to evaluate long-term financial trends and conduct historical analysis.</p> <p><b>Target:</b> CERS continues to achieve progress toward actuarial goals for full funding (See Goal 1 discussion).</p>
2)	<p><b>Measure:</b> Financial reporting metrics in annual and quarterly reports provide long-term trend analysis to evaluate CERS financial condition. Such metrics should include employer/employee contributions, administrative expenses, cash flow, and employer invoicing and collection.</p> <p><b>Target:</b> Monitors growth in employer and employee contributions.</p> <p><b>Target:</b> Monitors the increase/decrease in administrative expenses relative contribution growth.</p> <p><b>Target:</b> Establish an acceptable recovery percentage for legacy invoices beyond a Board approved threshold.</p> <p><b>Target:</b> Establish a total outstanding invoice dollar amount that the Committee deems prudent.</p>
3)	<p><b>Measure:</b> Clarify CERS representation during procurement process.</p> <p><b>Target:</b> Complete analysis of CERS procurement functions within a year.</p>

<b>Objective C. Establish an Escalation Policy for the Office of the CFO regarding policy decisions for the Committee</b>	
1)	<p><b>Measure:</b> KPPA CFO identifies financial metrics in quarterly reporting that may require special attention.</p> <p><b>Target:</b> Financial metrics that trigger reporting to the CERS Finance Committee for discussion of potential policy changes include:</p> <ul style="list-style-type: none"> <li>• Administrative budget categories that exceed 20% in a line-item of budget-to-actual summary or 10% of total administrative budget.</li> <li>• Critical issues related to annual audit or financial reporting.</li> <li>• Investment budget categories that exceed 20% in a line-item of budget-to-actual summary or 10% of total Investment budget.</li> </ul>

2025 – 2029 CERS Strategic Plan  
 Goals, Objectives, Measures, & Targets (continued)

**Goal 3 Finance Collaborate with Kentucky Retirement Systems to develop a cost-effective administrative cost budget, financial management, and cost allocation policies. (Finance Committee approved on 2/17/2025.) (Continued)**

<p><b>Objective D. Ensure that all regulations related to Participation of CERS Employers and Employer duties are updated and codified</b></p>
<p>2) <b>Measure:</b> ERCE and the legal ad-hoc regulation groups provide recommendations for updates to Ky Administrative Regulations that clearly identify employer participation and compliance requirements.</p> <p><b>Target:</b> Employer compliance and timely reporting continues to improve, outstanding receivables decrease, and administrative actions against employers decline.</p> <p><b>Target:</b> Annual survey of employers indicates employers’ satisfaction and understanding of KRS and KAR based on clarity of KPPA communications surrounding employer responsibilities.</p> <p>3) <b>Measure:</b> ERCE and KPPA communications department updates communication brochures that clearly highlight and explain changes in employer responsibility.</p> <p><b>Target:</b> Catalog of relevant employer communication material that is used as training tools for employer staff.</p> <p><b>Target:</b> New administrative policies are clearly explained in timely employer communications to employers and addressed in periodic employer training.</p>

<p><b>Goal 3. How Will the CERS Board Evaluate Success</b></p>
<p>1) CERS annual audit is completed timely with no material findings of noncompliance or material deficiencies in internal controls.</p> <p>2) CERS ACFR is presented in accordance with generally accepted governmental accounting principles established by the Governmental Accounting Standards Board.</p> <p>3) CERS ACFR achieves the GFOA Certificate of Achievement of Excellence in Financial reporting annually.</p> <p>4) CERS provides input for managing administrative costs prior to KPPA approval of administrative budget.</p> <p>5) KPPA approves administrative budget prior to submission to Governor’s State Budget Director.</p> <p>6) CERS interim and annual financial reporting provides key information to provide accountability for CERS assets and pension management.</p>

2025 – 2029 CERS Strategic Plan  
 Goals, Objectives, Measures, & Targets (continued)

**Goal 4** *Administrative* **Finalize structure to support efficient governance for CERS retirement plans.**  
**(Personnel Committee approved their section 1/9/2024.)**  
**(Betty Pendergrass developed remainder as Chair prior to 4/1/2024.)**

<b>Objective A. Enhance Personnel Committee framework for CERS staff evaluations, professional development, and succession planning.</b>	
1)	<b>Measure:</b> Adopt CEO Performance Plan. <b>Target:</b> Annually in January
2)	<b>Measure:</b> Evaluate CEO annually. <b>Target:</b> Annually in June
3)	<b>Measure:</b> Recruit Trustees for elected and appointed positions. <b>Target:</b> July 2025 (Elected Trustees) & 2025 (Appointed Trustees)
<b>Objective B. Enhance communications with stakeholders.</b>	
1)	<b>Measure:</b> Periodic articles in association newsletters. <b>Target:</b> Ongoing
2)	<b>Measure:</b> Host webinars to highlight key retirement management issues. <b>Target:</b> September 2025
3)	<b>Measure:</b> Periodic testimony to Public Pension Oversight Board to highlight CERS performance and governance. <b>Target:</b> Ongoing
<b>Objective C. Formalize annual planning for Trustee Education.</b>	
1)	<b>Measure:</b> Educational sessions (January, July, & October) to provide a minimum of 6 hours of CERS-sponsored education. <b>Target:</b> Ongoing
2)	<b>Measure:</b> Education catalog of videos provide Trustees with additional resources for training hours, including specific training for New Trustee Orientation sessions. <b>Target:</b> July 2025
3)	<b>Measure:</b> All Trustees meet the statutory requirements for 12 hours of annual training. <b>Target:</b> Ongoing
<b>Objective D. Risk Management</b>	
1)	<b>Measure:</b> Establish methodology to evaluate effectiveness of Board governance with an independent analysis of CERS Board governance. <b>Target:</b> September 2025 and ongoing

2025 – 2029 CERS Strategic Plan  
Goals, Objectives, Measures, & Targets (continued)

<b>Objective E. Evaluate CERS By-Laws and administrative policies to improve Board’s effectiveness and enhance transparency.</b>	
1)	<b>Measure:</b> By-laws updated to incorporate recommendations from governance evaluation consultant. <b>Target:</b> 2025
2)	<b>Measure:</b> Administrative policies updated to incorporate recommendations from governance evaluation consultant. <b>Target:</b> 2025
<b>Objective F. Initiate planning process to update CERS Strategic Plan.</b>	
1)	<b>Measure:</b> Ad-Hoc Committee appointed to review and update Strategic Plan. <b>Target:</b> 2029

<b>Goal 4. How Will the CERS Board Evaluate Success</b>	
1)	Timetable and criteria are established for CEO evaluation.
2)	Stakeholders’ feedback provides insights for additional improvements for system governance.
3)	Annual Trustee Education classes scheduled each year.
4)	Timetable and criteria are outlined for evaluation of CERS Board governance.
5)	By-laws and administrative policies are updated or confirmed as effective guidance for governance and accountability.
6)	Process established for updating the CERS Strategic Plan.

<b>2025 – 2029 CERS STRATEGIC PLAN TIMETABLE</b>
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This section outlines a proposed timetable for implementation activities for each Goal and Objective of the Strategic Plan. This timing establishes a proposed schedule for activities that will contribute toward the goals and objectives. Activities may be assigned to CERS Executive Staff, the CERS Board and its Committees, with requests for assistance as needed from the KPPA administrative staff.

GOAL/OBJECTIVE	2025	2025	2026	2027	2029
<b>Goal 1. Actuarial Strengthen the actuarial administration to achieve full funding of the CERS plans.</b>					
1) Actuarial assumptions reflect actual trends					Ongoing
2) Avoid negative amortization.					Ongoing
3) Attain 100% funded status (2040).					Reassess
4) Monitor economic & financial risks.					Ongoing

GOAL/OBJECTIVE	2025	2026	2027	2028	2029
<b>Goal 2. Investment Enhance investment management to support prudent portfolio performance and compliance oversight.</b>					
A) Monitor health of CERS					Ongoing
B) Update IPS	XX				XX
C) Benchmarks for investment performance					Ongoing

GOAL/OBJECTIVE	2025	2026	2027	2028	2029
<b>Goal 3. Finance Collaborate with Kentucky Retirement Systems to develop a cost-effective administrative cost budget, financial management, and cost allocation policies.</b>					
1) Annual Comprehensive Financial Report					Ongoing
2) CERS reporting policies		XX			
3) Escalation policy		XX			
4) Employer participation policies					Ongoing

2025 – 2029 CERS Strategic Plan  
 Timetable (continued)

GOAL/OBJECTIVE	2025	2026	2027	2028	2029
<b>Goal 4. Administrative Finalize structure to support efficient governance for CERS post-retirement plans.</b>					
1) CERS staff evaluations, professional development, and succession planning.	Ongoing				
2) Enhance communications with stakeholders.	Ongoing				
3) Formalize annual planning for Trustee education.	Ongoing				
4) Risk Management.	Ongoing				
5) Evaluate CERS By-Laws and administrative policies to improve Board’s effectiveness and enhance transparency.		XX		XX	
6) Initiate planning process to update CERS Strategic Plan.					XX

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**KENTUCKY COUNTY EMPLOYEES' RETIREMENT SYSTEM  
STRATEGIC PLAN 2025-2029**

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**KENTUCKY COUNTY EMPLOYEES' RETIREMENT SYSTEM  
STRATEGIC PLAN 2025-2029**

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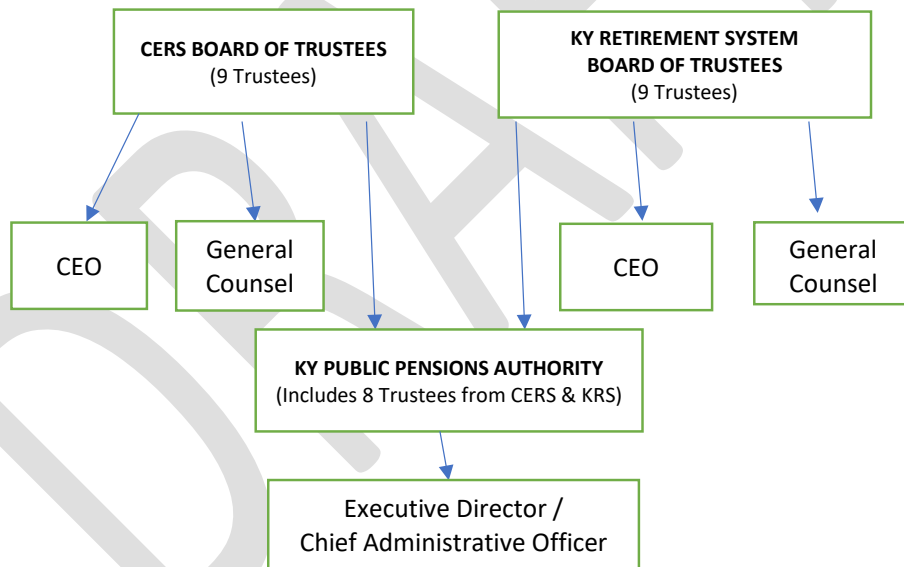
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## EXECUTIVE SUMMARY

### INTRODUCTION

The Kentucky County Employees Retirement System (CERS) was established July 1, 1958, by the Kentucky General Assembly. Guidance for CERS is found in Chapter 78 of the Kentucky Revised Statutes (KRS). Chapter 78 outlines the governing board structure, postretirement plan design, membership, and authority for employee and employer contributions for both a Non-Hazardous plan and a Hazardous plan. In 2020, the Kentucky General Assembly created a separate governing board for CERS and effective April 1, 2021, the new governance structure was initiated.

Administrative support is provided by the Kentucky Public Pensions Authority (KPPA), also created effective April 1, 2021 (KRS 61.505). CERS is represented by four Trustees on the KPPA governing board along with four Trustees from the Kentucky Retirement Systems (Ky Retirement). Ky Retirement is the governing board for the Kentucky Employees Retirement Systems (KERS—hazardous and nonhazardous) and the State Police Retirement System (SPRS). The relationship among the three board is illustrated below.



Employees of cities, counties, and special purpose governments are covered by the CERS, a cost-sharing multiple-employer defined benefit pension plan administered by the Kentucky Public Pensions Authority (KPPA), an agency of the Commonwealth of Kentucky. In addition, employees of Kentucky school districts whose positions do not require a degree beyond a high school diploma also participate in CERS. As of April 1, 2021, Kentucky Revised Statute (“KRS”) Section 78.782 shifted the governance of CERS to a separate Board of Trustees of the County Employees Retirement System. The CERS Board manages the CERS trust, including investment management. KPPA provides the day-to-day administration (KRS 61.505) for accounting and benefit administration for CERS. The Kentucky General Assembly has the authority to establish and amend benefit provisions.

2025 – 2029 CERS Strategic Plan  
Executive Summary (continued)

CERS, KERS, and SPRS all provide defined benefit pension and other post-employment benefits for public employees. Retirement benefits to these retirees adds over \$2 billion to the Commonwealth's economy across 120 counties.

This inaugural Strategic Plan outlines the key goals and objectives that the CERS Board of Trustees hopes will provide a sustainable governing structure in compliance with the organizational guidance in Kentucky Revised Statutes, Chapter 78. The CERS Board of Trustees recognizes the importance of a partnership with key stakeholders in the Commonwealth, including public employees, employers, professional associations, and the citizens of the Commonwealth. These goals are focused on supporting the CERS organization, investment management, and support services to our membership. Postretirement benefits for both pension income and postretirement healthcare are critical for supporting all the public services to the citizens and the public employees who provide those services. These benefits provide financial security to CERS members and return an economic benefit to the citizens we serve.

The CERS Board of Trustees takes its fiduciary role very seriously. Governing statutes include specific guidance about our fiduciary roles and compliance with both the Kentucky Executive Branch Ethics Code and the CFA Pension Trustee Code of Conduct. In addition, Chapter 78 outlines the basic structures for investment management, Trustee education, as well as accountability and transparency. Goals in this Strategic Plan were selected based on the underlying guidance in Chapter 78 and the expectations of our stakeholders and the citizens of the Commonwealth.

#### **MISSION**

To deliver governance for the postretirement plans that support the financial security of our membership.

#### **VISION**

Provide a sustainable funding structure with an approach that is viable for all stakeholders.

#### **CORE VALUES**

We focus on supporting the KPPA delivery of quality customer service, providing a sound investment strategy, and communicating with our stakeholders to demonstrate transparency and accountability.

Our efforts will adhere to basic principles for quality customer service, ethical conduct, excellence, fiduciary duty, and ongoing operational improvement. We also commit to collaboration with the Kentucky Retirement System Board of Trustees to enhance the retirement programs for KERS and SPRS, as well as CERS.

#### **STRATEGIC GOALS**

Now that CERS has completed its organizational first year and adopted Board administrative and governance policies, the focus of the 2025 – 2029 Strategic Plan includes the following goals to strengthen the CERS retirement plans.

- Goal 1** *Actuarial* **Strengthen actuarial administration to achieve full funding of the CERS plans.**
- Goal 2** *Investment* **Enhance investment management to support prudent portfolio performance and compliance oversight.**
- Goal 3** *Finance* **Collaborate with Kentucky Retirement Systems to develop a cost-effective administrative cost budget, financial management, and cost allocation policies.**
- Goal 4** *Administrative* **Provide structure to support efficient governance for CERS post-retirement plans.**

2025 – 2029 CERS Strategic Plan  
Executive Summary (continued)

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The Strategic Goals section outlines the goals, expands the discussion of objectives for each goal, including targets and measurement principles, and describes how the CERS Board will identify success. The last section of the Plan summarizes a proposed timeline for working on the goals and objectives.

**FUTURE PLANNING**

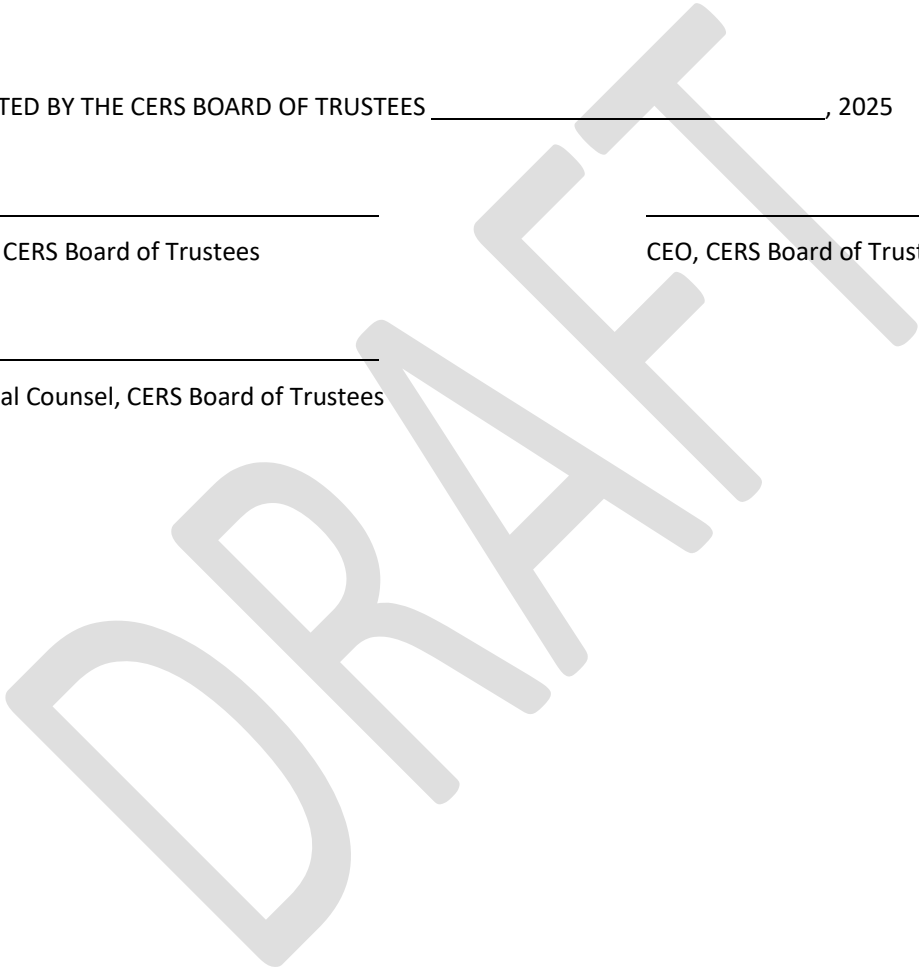
The CERS Board of Trustees has developed this first five-year strategic plan to set the stage for future improvements in managing the postretirement benefit plans for local government employees. We also plan to update this strategic plan in the future to maintain a dynamic governance and management structure for the CERS plans, members, stakeholders, and citizens.

ADOPTED BY THE CERS BOARD OF TRUSTEES \_\_\_\_\_, 2025

\_\_\_\_\_  
Chair, CERS Board of Trustees

\_\_\_\_\_  
CEO, CERS Board of Trustees

\_\_\_\_\_  
General Counsel, CERS Board of Trustees



<b>GOALS, OBJECTIVES, MEASURES AND TARGETS</b>
--

**Goal 1**     *Actuarial* Strengthen actuarial administration to achieve full funding of the CERS plans.  
 (Approved by Actuarial Committee on November 2, 2022.)

<b>Objective A. Actuarial assumptions reflect actual trends.</b>
<p>1)    <b>Measure:</b> The CERS Board will require the actuary to use industry prevalent practices and methods for the analysis and recommendation of actuarial assumptions (economic and demographic) for use in the actuarial valuation.</p> <p>          <b>Target:</b> Annually in April.</p>
<b>Objective B. Avoid Negative Amortization.</b>
<p>1)    <b>Measure:</b> The CERS Board will work with the legislators on possible future changes to the funding policy that is in Statute such that any changes will not result in actuarial back loading (i.e. negative amortization of the unfunded actuarial accrued liability).</p> <p>          <b>Target:</b> Ongoing.</p>
<b>Objective C. Attain 100% funded status in reasonable period.</b>
<p>1)    <b>Measure:</b> The financial goal is for the Systems to attain a 100% funded ratio in a reasonable time period with the CERS Board-adopted contributions increasing or decreasing as appropriate.</p> <p>          <b>Target:</b> January 2038.</p>
<b>Objective D. Monitor financial and economic risks to plan.</b>
<p>1)    <b>Measure:</b> The CERS Board will request the actuary to perform a risk analysis or stress test from time to time to understand and quantify possible financial risks due to possible changing economic conditions or risks associated possible legislation that would result in materially lower contributions.</p> <p>          <b>Target:</b> January 2025.</p>

<b>Goal 1. How Will the CERS Board Evaluate Success</b>
<p>1)    Employer contributions are consistent across the five years 2025 – 2029.</p> <p>2)    Actuarial assumptions are consistent with actual experience.</p> <p>3)    Funded status continues to improve.</p>

2025 – 2029 CERS Strategic Plan  
 Goals, Objectives, Measures, & Targets (continued)

**Goal 2** *Investments* Enhance investment management by providing prudent portfolio guidelines and compliance oversight.

**(Approved by Investment Committee on December 19, 2024.)**

<p><b>Objective A. Monitor the ratio of investment earnings versus contribution resources to evaluate the health of the CERS system.</b></p>	
<p>1)</p>	<p><b>Measure:</b> The 5-year geometric average net investment return (GANIR) calculation for Tier 3 interest credits shall be used to evaluate returns in the CERS portfolios (NonHaz, Haz, and Insurance).</p> <p><b>Target:</b> The GANIR should range from 6.25% to 10%.</p>
<p>2)</p>	<p><b>Measure:</b> Investment cash flow from realized gains, interest, and dividends, net of fees, compared to total benefits/expenses paid.</p> <p><b>Target:</b> Investment component, on a five-year rolling average should range between 45% and 65%.</p>
<p><b>Objective B. Investment Policy Statement (IPS) should meet Best Practices to ensure CERS meets its fiduciary responsibilities.</b></p>	
<p>1)</p>	<p><b>Measure:</b> Asset allocation in the IPS reflects the Board’s goals for investment performance.</p> <p><b>Target:</b> Projected return from IPS approved asset allocation should equal or exceed the discount rate for the actuarial valuation.</p>
<p>2)</p>	<p><b>Measure:</b> Quarterly investment reports include performance analysis that compares realized performance to investment goals established by CERS Investment Committee and Board of Trustees.</p> <p><b>Target:</b></p> <ul style="list-style-type: none"> <li>a) Realized total returns for CERS assets are compared to capital market assumptions utilized in asset allocation modelling .</li> <li>b) Returns for internally managed assets are reported separately.</li> <li>c) Compliance reporting highlight variances from IPS policies.</li> <li>d) Historical trend reporting (GANIR) is updated annually.</li> <li>e) Manager watch list that identifies managers with excellent performance or performance below expectations should be added to Compliance reporting.</li> </ul>
<p>3)</p>	<p><b>Measure:</b> Evaluate the asset allocation and identify a key timeline for asset liability studies and risk management issues to develop updates to the asset allocation.</p> <p><b>Target:</b> Conduct an asset liability study, including portfolio risk analysis, every 3 – 5 years.</p>

2025 – 2029 CERS Strategic Plan  
 Goals, Objectives, Measures, & Targets (continued)

**Objective C. Outline benchmarks to evaluate investment performance versus actuarial analysis and strengthen risk monitoring.**

- 1) **Measure:** CERS should use the actuarial discount rate, Total Fund Benchmark and a peer universe identified by Investment staff and investment consultant as benchmarks to evaluate returns and risk-adjusted returns over 5-year period on the CERS portfolio.  
  
**Target:** Realized returns over 5-year periods should always exceed the benchmarks.
- 2) **Measure:** Quarterly reporting provides analysis of manager performance by asset class.  
  
**Target:** Externally managed asset realized returns provide sufficient excess returns, net of management and performance fees. Periodic reporting should provide an opportunity for the Investment Committee to provide oversight of management fees.
- 3) **Measure:** Strengthen the role of the Investment Compliance Officer to monitor investment risk and report on investment risk.  
  
**Target:** Quarterly investment performance reports include:
  - a) Risk-adjusted returns for investment portfolio, by asset class
  - b) Identification of market, credit, concentration, liquidity, and volatility risk in CERS portfolio
  - c) Analysis of CERS portfolio market risk based on economic trends and industry sectors in the CERS portfolio

**Goal 2. How Will the CERS Board Evaluate Success**

- 1) Performance and compliance reports provide key information for CERS Investment Committee and Board of Trustees oversight.
- 2) Performance and compliance reports are readily available to stakeholders on the KPPA website.



2025 – 2029 CERS Strategic Plan  
 Goals, Objectives, Measures, & Targets (continued)

**Goal 3** *Finance* **Collaborate with Kentucky Retirement Systems to develop a cost-effective administrative cost budget, financial management, and cost allocation policies. (Finance Committee approved on 2/17/2025.)**

**Objective A. Work with Office of the CFO on CERS specific Annual Comprehensive Financial Report (ACFR) issues.**

- 1) **Measure:** Communications with the external audit firm (or the APA) regarding the CERS specific annual audit and ACFR are completed on a timely basis.  
**Target:** External Audit firm meets with Finance Committee annually in August at the start of the external audit and outlines key issues for annual audit.  
**Target:** External Audit firm meets with Finance Committee annually in November to present DRAFT ACFR and discuss other external audit findings and communications.  
**Target:** CERS Audit report and ACFR is delivered to Ky Finance & Administration by the due date established by Finance for inclusion in the Commonwealth’s ACFR.
- 2) **Measure:** Annual CERS ACFR is submitted to GFOA by December 31 each year for the Certificate of Achievement in Financial Reporting (COA) award. The CERS ACFR meets requirements for and achieves the GFOA COA award .  
**Target:** GFOA awards Certificate of Achievement for Excellence in Financial Reporting to the CERS ACFR, annually.  
**Target:** GFOA comments for improvements to the CERS ACFR demonstrate CERS compliance with generally accepted governmental accounting principles and governmental financial reporting best practices.

2025 – 2029 CERS Strategic Plan  
 Goals, Objectives, Measures, & Targets (continued)

**Goal 3 Finance Collaborate with Kentucky Retirement Systems to develop a cost-effective administrative cost budget, financial management, and cost allocation policies. (Finance Committee approved on 2/17/2025.) (Continued)**

<b>Objective B. Ensure CERS specific policies and procedures surrounding financial reporting are adequate.</b>	
1)	<p><b>Measure:</b> CERS annual and interim financial reporting provide essential information to assess accountability for CERS assets and pension management.</p> <p><b>Target:</b> CERS financial reporting provides key data to evaluate long-term financial trends and conduct historical analysis.</p> <p><b>Target:</b> CERS continues to achieve progress toward actuarial goals for full funding (See Goal 1 discussion).</p>
2)	<p><b>Measure:</b> Financial reporting metrics in annual and quarterly reports provide long-term trend analysis to evaluate CERS financial condition. Such metrics should include employer/employee contributions, administrative expenses, cash flow, and employer invoicing and collection.</p> <p><b>Target:</b> Monitors growth in employer and employee contributions.</p> <p><b>Target:</b> Monitors the increase/decrease in administrative expenses relative contribution growth.</p> <p><b>Target:</b> Establish an acceptable recovery percentage for legacy invoices beyond a Board approved threshold.</p> <p><b>Target:</b> Establish a total outstanding invoice dollar amount that the Committee deems prudent.</p>
3)	<p><b>Measure:</b> Clarify CERS representation during procurement process.</p> <p><b>Target:</b> Complete analysis of CERS procurement functions within a year.</p>

<b>Objective C. Establish an Escalation Policy for the Office of the CFO regarding policy decisions for the Committee</b>	
1)	<p><b>Measure:</b> KPPA CFO identifies financial metrics in quarterly reporting that may require special attention.</p> <p><b>Target:</b> Financial metrics that trigger reporting to the CERS Finance Committee for discussion of potential policy changes include:</p> <ul style="list-style-type: none"> <li>• Administrative budget categories that exceed 20% in a line-item of budget-to-actual summary or 10% of total administrative budget.</li> <li>• Critical issues related to annual audit or financial reporting.</li> <li>• Investment budget categories that exceed 20% in a line-item of budget-to-actual summary or 10% of total Investment budget.</li> </ul>

2025 – 2029 CERS Strategic Plan  
 Goals, Objectives, Measures, & Targets (continued)

**Goal 3 Finance Collaborate with Kentucky Retirement Systems to develop a cost-effective administrative cost budget, financial management, and cost allocation policies. (Finance Committee approved on 2/17/2025.) (Continued)**

<p><b>Objective D. Ensure that all regulations related to Participation of CERS Employers and Employer duties are updated and codified</b></p>
<p>2) <b>Measure:</b> ERCE and the legal ad-hoc regulation groups provide recommendations for updates to Ky Administrative Regulations that clearly identify employer participation and compliance requirements.</p> <p><b>Target:</b> Employer compliance and timely reporting continues to improve, outstanding receivables decrease, and administrative actions against employers decline.</p> <p><b>Target:</b> Annual survey of employers indicates employers’ satisfaction and understanding of KRS and KAR based on clarity of KPPA communications surrounding employer responsibilities.</p> <p>3) <b>Measure:</b> ERCE and KPPA communications department updates communication brochures that clearly highlight and explain changes in employer responsibility.</p> <p><b>Target:</b> Catalog of relevant employer communication material that is used as training tools for employer staff.</p> <p><b>Target:</b> New administrative policies are clearly explained in timely employer communications to employers and addressed in periodic employer training.</p>

<p><b>Goal 3. How Will the CERS Board Evaluate Success</b></p>
<p>1) CERS annual audit is completed timely with no material findings of noncompliance or material deficiencies in internal controls.</p> <p>2) CERS ACFR is presented in accordance with generally accepted governmental accounting principles established by the Governmental Accounting Standards Board.</p> <p>3) CERS ACFR achieves the GFOA Certificate of Achievement of Excellence in Financial reporting annually.</p> <p>4) CERS provides input for managing administrative costs prior to KPPA approval of administrative budget.</p> <p>5) KPPA approves administrative budget prior to submission to Governor’s State Budget Director.</p> <p>6) CERS interim and annual financial reporting provides key information to provide accountability for CERS assets and pension management.</p>

2025 – 2029 CERS Strategic Plan  
 Goals, Objectives, Measures, & Targets (continued)

**Goal 4**     *Administrative* **Finalize structure to support efficient governance for CERS retirement plans.**  
**(Personnel Committee approved their section 1/9/2024.)**  
**(Betty Pendergrass developed remainder as Chair prior to 4/1/2024.)**

<b>Objective A. Enhance Personnel Committee framework for CERS staff evaluations, professional development, and succession planning.</b>	
1)	<b>Measure:</b> Adopt CEO Performance Plan. <b>Target:</b> Annually in January
2)	<b>Measure:</b> Evaluate CEO annually. <b>Target:</b> Annually in June
3)	<b>Measure:</b> Recruit Trustees for elected and appointed positions. <b>Target:</b> July 2025 (Elected Trustees) & 2025 (Appointed Trustees)
<b>Objective B. Enhance communications with stakeholders.</b>	
1)	<b>Measure:</b> Periodic articles in association newsletters. <b>Target:</b> Ongoing
2)	<b>Measure:</b> Host webinars to highlight key retirement management issues. <b>Target:</b> September 2025
3)	<b>Measure:</b> Periodic testimony to Public Pension Oversight Board to highlight CERS performance and governance. <b>Target:</b> Ongoing
<b>Objective C. Formalize annual planning for Trustee Education.</b>	
1)	<b>Measure:</b> Educational sessions (January, July, & October) to provide a minimum of 6 hours of CERS-sponsored education. <b>Target:</b> Ongoing
2)	<b>Measure:</b> Education catalog of videos provide Trustees with additional resources for training hours, including specific training for New Trustee Orientation sessions. <b>Target:</b> July 2025
3)	<b>Measure:</b> All Trustees meet the statutory requirements for 12 hours of annual training. <b>Target:</b> Ongoing
<b>Objective D. Risk Management</b>	
1)	<b>Measure:</b> Establish methodology to evaluate effectiveness of Board governance with an independent analysis of CERS Board governance. <b>Target:</b> September 2025 and ongoing

2025 – 2029 CERS Strategic Plan  
 Goals, Objectives, Measures, & Targets (continued)

<b>Objective E. Evaluate CERS By-Laws and administrative policies to improve Board’s effectiveness and enhance transparency.</b>	
1)	<b>Measure:</b> By-laws updated to incorporate recommendations from governance evaluation consultant. <b>Target:</b> 2025
2)	<b>Measure:</b> Administrative policies updated to incorporate recommendations from governance evaluation consultant. <b>Target:</b> 2025
<b>Objective F. Initiate planning process to update CERS Strategic Plan.</b>	
1)	<b>Measure:</b> Ad-Hoc Committee appointed to review and update Strategic Plan. <b>Target:</b> 2029

<b>Goal 4. How Will the CERS Board Evaluate Success</b>	
1)	Timetable and criteria are established for CEO evaluation.
2)	Stakeholders’ feedback provides insights for additional improvements for system governance.
3)	Annual Trustee Education classes scheduled each year.
4)	Timetable and criteria are outlined for evaluation of CERS Board governance.
5)	By-laws and administrative policies are updated or confirmed as effective guidance for governance and accountability.
6)	Process established for updating the CERS Strategic Plan.

**2025 – 2029 CERS STRATEGIC PLAN TIMETABLE**

This section outlines a proposed timetable for implementation activities for each Goal and Objective of the Strategic Plan. This timing establishes a proposed schedule for activities that will contribute toward the goals and objectives. Activities may be assigned to CERS Executive Staff, the CERS Board and its Committees, with requests for assistance as needed from the KPPA administrative staff.

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2) Avoid negative amortization.					Ongoing
3) Attain 100% funded status (2040).					Reassess
4) Monitor economic & financial risks.					Ongoing

GOAL/OBJECTIVE	2025	2026	2027	2028	2029
<b>Goal 2. Investment Enhance investment management to support prudent portfolio performance and compliance oversight.</b>					
A) Monitor health of CERS					Ongoing
B) Update IPS	XX				XX
C) Benchmarks for investment performance					Ongoing

GOAL/OBJECTIVE	2025	2026	2027	2028	2029
<b>Goal 3. Finance Collaborate with Kentucky Retirement Systems to develop a cost-effective administrative cost budget, financial management, and cost allocation policies.</b>					
1) Annual Comprehensive Financial Report					Ongoing
2) CERS reporting policies		XX			
3) Escalation policy		XX			
4) Employer participation policies					Ongoing

2025 – 2029 CERS Strategic Plan  
 Timetable (continued)

GOAL/OBJECTIVE	2025	2026	2027	2028	2029
<b>Goal 4. Administrative Finalize structure to support efficient governance for CERS post-retirement plans.</b>					
1) CERS staff evaluations, professional development, and succession planning.	Ongoing				
2) Enhance communications with stakeholders.	Ongoing				
3) Formalize annual planning for Trustee education.	Ongoing				
4) Risk Management.	Ongoing				
5) Evaluate CERS By-Laws and administrative policies to improve Board’s effectiveness and enhance transparency.		XX		XX	
6) Initiate planning process to update CERS Strategic Plan.					XX

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**TO:** Members of the CERS Board of Trustees

**FROM:** Joint CERS & KRS Retiree Health Plan Committee

**DATE:** March 10, 2025

**SUBJECT:** Joint CERS & KRS Retiree Health Plan Committee Report

The Joint CERS & KRS Retiree Health Plan Committee met on Thursday, February 13, 2025. The Committee reviewed an informational presentation from Humana regarding the following items:

- 2024 Member Satisfaction Results
- 2024 CMS Call Notices
- Humana Updates
  - 2025 Implementation Review
  - CMS Notices
  - 2025 Value Added Services

Humana's annual member satisfaction survey – Plan usage and satisfaction, 92% were satisfied with their plan in 2024 and approximately the same number, 91%, said they would recommend Humana to a friend or family member. Most members used their Medicare plan in the past 3 months (86%) with more than nine in every 10 members reported scores of 7 or higher in terms of claims processing, timeliness, and accuracy.

Humana presented the Customer Care Experiences. The members calling customer care was low in 2024 and 2023 with only 12% having a reason to call compared to 2022. Members ability to get their issue resolved remained high at 79% resolution for a single incident. Members remained highly satisfied with their Customer Representative interactions. More than 80% of callers thought the hold times were satisfactory in 2024. Humana's Net Promoter Score (NPS) for 2024 was 74.68. NPS above 50 are considered to be excellent.

Humana reported on 2025 implementation review, advising that 7,000 KPPA members were moved to an incorrect contract for January 1, 2025. Humana discovered this error prior to the January 1, 2025 effective date and updated the members to the correct contract. An automated termination letter was sent causing concern to members with an increase in calls to KPPA and Humana. Humana worked with the team at KPPA to refine and align the messaging, outbound calls were made by Humana and a reinstatement notice was sent to all impacted members.



Humana reported the Centers for Medicare and Medicaid Services (CMS) released the Advanced Rate Notice for 2025. The notice indicates the expected impact of proposed policy changes on the Medicare Advantage (MA) plan payments relative to last year. There is a 60-day comment period. The Final Notice will be released on April 7, 2025. Humana will present information from this notice in the May 2025 Joint CERS KRS RHP Committee meeting.

Humana presented an update to the Value-Added Items and Services:

- Humana Dental – save up to 25%
- EyeMed Discounts
- Truhearing – save up to 60%
- Lifeline Alert System savings
- Mom’s Meals Savings
- RX Drug Discount Program
- Discount for Travel Insurance Coverage
- Discount for Pet Telehealth

KPPA staff presented Open Enrollment (October 1, 2024 – December 31, 2024) statistics. The statistics showed a similar number of retirees using the web enrollments (3,630 in 2025, 3,622 in 2024). Member email responses remained flat at 865 from 798 the previous year. The number of phone calls decreased with 14,417 taken from 18,846 in 2024. Virtual appointments grew from the previous year from 70 to 96 and the in-person appointments increase from the previous year from 66 to 97. KPPA staff attended ten (10) in-person Benefit Fairs and Seminars with Humana, the Department of Employee Insurance (DEI) and Retiree Group meetings during September 2024-October 2024 reaching slightly above five hundred (500) retirees. Webinars were offered and posted on the KPPA website for both the non-Medicare and Medicare plans.

All presentations were for informational purposes only and no actions were taken.



## Kentucky Public Pensions Authority

### Division of Internal Audit



To: County Employees Retirement System Board of Trustees

From: Kristen N. Coffey, CICA  
KPPA Chief Auditor

Date: March 10, 2025

Subject: Update on CERS 2025 Election

The term for the current elected CERS trustees expires on March 31, 2025.

#### Steps completed as of March 3, 2025

1. July 31, 2024 – Nine individuals submitted applications to be placed on the CERS Trustee ballot.
2. August 15, 2024 – Information meeting held with individuals who submitted an application.
3. September 9, 2024 – CERS Board voted to place all candidates who submitted an application on the official ballot.
4. September 19, 2024 – Background checks received on CERS Trustee candidates.
5. October 10, 2024 – CERS Trustee candidates invited to CERS Board meeting to give a presentation pertaining to why they would like to serve on the CERS Board of Trustees.
  - Note: At this time, one candidate chose to pull his name from the ballot.
6. November 18, 2024 – Attorney General provided an opinion on the constitutional compatibility of CERS Trustee candidates. All candidates were deemed to be constitutionally compatible.
7. December 4, 2024 – Candidate pictures and biographies were provided to vendor to be used in ballot preparation.
8. December 20, 2024 – First member file was provided to vendor. This file included all eligible voters as of November 30, 2024.
9. December 23, 2024 – KPPA staff approved the paper ballot.
10. January 7, 2025 – KPPA staff approved electronic ballot.
11. January 13, 2025 – Second member file provided to vendor. This file only included changes to eligible CERS members/voters that occurred during December 2024.
12. January 21, 2025 – Ballots provided to members.
13. January 21, 2025 to February 28, 2025 – Weekly emails sent each Monday reminding members of the election
14. March 1, 2025 – Election closed.

#### Remaining items to be completed

1. March 1, 2025 – March 14, 2025 – Vendor will continue scanning paper ballots that were postmarked by March 1, 2025.
2. March 15, 2025 – Vendor will provide results of the election.
3. April 1, 2025 – Term begins for new members; individuals are typically sworn in at the first CERS Board meeting that takes place after April 1.

#### Election Results as of March 5, 2025

A total of 6,750 votes have been received (2.38% voter turnout) – 5,362 electronic and 1,388 paper ballots. As a comparison, during the last election a total of 9,054 votes were cast (3.60% voter turnout) – 3,407 electronic and 5,647 paper.



## MEMORANDUM

**DATE:** March 10, 2025

**TO:** CERS Board of Trustees

**FROM:** Ed Owens, III  
CEO

**SUBJECT:** CEO Quarterly Report



A few of the issues I worked on during the quarter are as follows:

1. **Settlement Agreement in Bay Hills.** I worked with KPPA legal and outside counsel to negotiate a settlement of the seven-year-old Bay Hills litigation. The case was scheduled for trial in February of 2025. Judge Shepherd had ordered one final mediation prior to the trial date. The parties were able to come to a mutually satisfactory agreement. The FINAL ORDER in this matter should be filed with the court within the next month.
  
2. **Proposed Settlement Agreement in the Mayberry/AG action.** Our counsel, Eric Branco, and I have worked closely with KPPA legal, their outside counsel, and the counsel for KERS to negotiate a proposed settlement with counsel for the Attorney General, their outside counsel, and counsel for the Hedge Funds to end this seven-year-old litigation. Notably, only the Commonwealth and the Hedge Funds are parties to this litigation. Judge Wingate is set to hear the Commonwealth’s motion on the Settlement Agreement March 26, 2026. There are other interests that oppose the settlement agreement, and they will be heard on the 26<sup>th</sup> as well. The CERS Board, the KPPA Board, and the KERS Board all signed in support of the proposed settlement agreement.
  
3. **CERS Trustee Election.** I have worked with the KPPA Chief Auditor, Kristen Coffey, as she executed the CERS Trustee Election. As a result of the retirements of Betty Pendergrass and Jerry Powell, there will be at least two (2) new Trustees elected to the CERS Board. The voting was completed on March 1, 2025, and the results will be announced on March 15, 2025. At the time of this writing, only 2.38% of the CERS members voted, which is down significantly from the 3.60% of members who voted four years ago.

There were issues with the election process that caused us to look more closely at the procurement process that led to the selection of our vendor. We were able to overcome some significant challenges with the vendor to ensure a seamless election process. I am convinced; however, that the CERS CEO should be a technical advisor on any RFP that may impact the CERS Trust.

- 4. Quarterly Meeting with CERS Employers.** Lisle Cheatham and I conducted our quarterly meeting with the CERS employers. The agenda for the meeting was comprised of several issues: 1) updates on current litigation matters; 2) our position and support for current legislation before the Kentucky General Assembly; 3) discussion of a proposed new benefit option for CERS members; and 4) soliciting CERS employer participation in a planned CERS Trustee retreat to discuss the origin and purpose of RS20 HB 484.
- 5. Facilitated Meetings Between KPPA Senior Staff and CERS Employers.** During the quarter, I was able to facilitate separate meetings with Ryan Barrow and his executive team with the leadership of KLC and the leadership of KACo. The meetings served as an opportunity to get to know one another and to discuss the most pertinent legislative and operational issues facing their respective organizations. Both meetings were constructive and informative. All parties left the meeting agreeing to continue the dialogue that had begun and to preview important issues with one another in the future.
- 6. Public Pension Oversight Board.** In the most recent PPOB meeting, Co-Chairman Higdon previewed a Senate Bill he is sponsoring that would significantly increase the number of members on PPOB. In addition to asking that the number of House and Senate members be increased from eight (8) apiece to ten (10) members from both chambers, the bill would also add the State Treasurer and at least two additional members selected by leadership in the House and Senate. The rationale for the bill is to broaden the membership to increase the knowledge of pension related information across both chambers.
- 7. Outstanding Invoices.** I have continued to work with ERCE, KPPA legal and Accounting to reduce the total dollar amount of CERS outstanding invoices. The task force that was formed to address the issue has yielded significant results. At the end of the third quarter in 2024, CERS outstanding invoices stood at approximately \$3.6 million. By the end of the fourth quarter of 2024, the outstanding invoice number had been reduced to \$2.3 million resulting in a 31% decrease in outstanding invoices. The task force remains focused on continuing to reduce the outstanding amount over time.
- 8. Senate Bill 10.** Amend KRS 78.5536 to increase CERS non-HAZ and HAZ duty under age 65 retiree health subsidy to \$40 and \$50 per month for each year of service, respectively, for those members who meet the “career threshold” who began participating in the system on or after July 1, 2003, and who are eligible for a fixed-dollar subsidy not tied to the premium. The bill passed the Senate 35-0 and has been received in the House and referred to the Committee House Local Government.
- 9. Trustee Education.** I have worked with KPPA legal and the CEO of K to come up with a new 12 calendar month measurement for Trustee education. Currently, CERS utilizes two triggers. The first is March 31 and the second is June 30. On the KERS side of the ledger there are more than

two triggers. We have determined that beginning in January 2026 both systems would utilize the calendar year as the 12-month trigger. Accordingly, all CERS Trustees will complete their assigned training for March 31, 2025, and June 30, 2025. However, with the beginning of the new fiscal year we would utilize a Trustee Retreat to record the training needed for the end of the year and beginning in calendar year 2026, both CERS and KERS would be on calendar year Trustee training. The change will help KPPA administration with compliance surrounding Trustee education.

- 10. CERS Trustee Retreat.** Working with Ryan to coordinate a 3-Board retreat in the second half of 2025. Although each board would have topics and speakers in common, each board will also be able to schedule individual topics and speakers to address specific needs or concerns. The hope will be that the retreat will allow both CERS Trustees and KERS Trustees to fulfill their calendar year 2025 training requirements so we will start January 2026 with each Trustee needing to record 12 hours of training for the calendar year.
- 11. CERS Communications.** I was tasked by the Chairman to explore the options available to CERS to independently communicate to members, employers and interested persons some of the highlights/achievements of the CERS Board of Trustees and the administration of the Trust. I am in the early stages of that work but understand that better utilization of the KPPA Communications department will be part of the solution. We will explore the options of a separate CERS website or Facebook page. I'll have a more substantive update for the next quarterly report.

<b>CERS Trustee Education Hours Summary 2024-2025</b>			
<b>Name</b>	<b>Current Hours</b>	<b>Hours Needed</b>	<b>Due Date</b>
Merl Hackbart	6.5	5.5	3/31/2025
George Cheatham	11.5	0.5	3/31/2025
William O'Mara	10.5	1.5	3/31/2025
Jerry Wayne Powell	7	5	3/31/2025
Betty Pendergrass	15.5	-3.5	3/31/2025
Patricia P. Carver	16	-4	3/31/2025
J. Michael Foster	7.5	4.5	7/1/2025
J.T. Fulkerson	10	2	7/1/2025
Martin Milkman	0	12	7/1/2025



## KENTUCKY PUBLIC PENSIONS AUTHORITY

Ryan Barrow, Executive Director

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**To:** KPPA/CERS/KRS Board  
**From:** Ryan Barrow  
**Date:** March 2025  
**Subject:** KPPA Update

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### I. KPPA LEGISLATION:

Prior to the start of the 2025 Legislative Session, Erin Surratt and I testified before PPOB on the KPPA supported bills concerning our reorganization plans for the Office of Financial Management and pension spiking. Both bills have passed the House and are now under consideration in the Senate (HB71 & HB30).

Other notable legislation, SB10 addresses CERS non-Medicare health insurance benefits, while SB79, with an amendment, would prohibit telecommuting for executive branch agencies, including KPPA.

### II. SUMMARY ANNUAL FINANCIAL REPORT (SAFR):

The SAFR, one of KPPA's most widely distributed reports, is available on the KPPA webpage and has been sent to the printer for your copy. As this is the inaugural year of having separate ACFRs for each system, the SAFR will continue to be a valuable resource summarizing key information from both reports.

### III. STRATEGIC PLAN UPDATE:

The implementation of the Strategic Plan is ongoing. Under Customer Service Delivery, there are currently four teams working on separate strategic initiatives.

Active Teams:

- Quality Assurance is in the implementation stage of its recommendations regarding the account audit process.
- Survey has made recommendations and are under review.
- Member Presentations Team is poised to make its recommendations based on their research and analysis.

- Call Center AI is researching options and best practices regarding the after-call documentation process.

KPPA is working on a more thorough update for the KPPA Board at the next regularly scheduled meeting. Should any other board or committee find value in the team delivering the same level of detail, Sherry will add it to the agenda.

**IV. LOUISVILLE INVESTMENT OFFICE:**

This project is moving forward. We received the “last and final” bids for three properties in February. From those three options, our recommendation best meets our unique needs and aligns with the professional atmosphere we aim to continue in investments. The recommendation is now with the Secretary of Finance and Administration for final approval. While it has been a long journey, we have reached another key milestone in securing our new office space.

**V. STAFFING & LEADERSHIP TRAINING:**

As of the beginning of March, our full-time staff is at 262, with five departments participating in the Team KY Internship Program, and the interns will begin their orientation this May.

The new KPPA Leadership Academy was launched at the end of February. Fourteen participants from various divisions will attend monthly leadership training sessions, meet regularly with assigned mentors, and continue the leadership program through December 2025.

**VI. PERSONNEL CABINET STUDY:**

The Cabinet is currently conducting a statewide position description review. In the most recent round, the Information Technology (IT) job classifications across state government, including those utilized by KPPA, underwent significant changes. IT position descriptions have been or will be modified or reallocated. While this will not affect total staffing numbers, it will impact the budget. In some cases, employees may see a pay increase through reallocation, reclassification, a locality premium, and/or a special entrance rate. Some of these adjustments are permanent and others are temporary, and this will be reflected in the next KPPA personnel budget line items.

**VII. KENTUCKY EMPLOYEE CHARITABLE CAMPAIGN (KECC):**

The 2024 KECC Campaign ended strong and exceeded our goals. KPPA had 22% employee participation in payroll deduction, which was an increase from the previous year with



total funds raised in the amount of \$27k. Employees participated in over 12 special events that raised money for KECC while boosting employee morale, and we are already working on 2025.

**VIII. KPPA CONFERENCE REPRESENTATION:**

KPPA staff has represented the organization at various conferences and seminars, including the Kentucky Chamber of Commerce Supervising and Managing People seminar in December, the 2025 NCPERS Pension Communication Summit and NAPPA conference in January, and the NASRA Winter Meeting and National Institute on Retirement Security Conference in March. The information gathered at these conferences will be shared with others within the organization in various formats to ensure it is useful and accessible.

**IX. KPPA KUDOS (Spotlighting outstanding performance):**

**LEGAL** - Michael Board and his team have dedicated countless hours working with our CEOs, Boards, and outside counsel to achieve settlements in some of our most impactful legal cases. Their efforts have resulted in positive progress on some long-outstanding issues.

**HR** - Lori Casey, the KECC team, and KPPA have exceeded our agency goals through a highly successful campaign and outstanding coordination. Their collaboration has been instrumental in driving our success.

**INVESTMENTS/ACCOUNTING** - Mike Lamb, Steve Willer, and Carrie Bass have put significant effort into our Compliance function on reporting, policy review, and Board reports.

**ACCOUNTING/COMMUNICATIONS** - The team's work on the two inaugural ACFRs and the summary SAFR report deserves recognition. This monumental task was a huge undertaking, and we truly appreciate their hard work, dedication, and the associated awards they've earned.

**KPPA STAFF & BOARDS** - During the recent building closure several staff members played key roles in ensuring the Board's work continued without interruption. Leading the logistics were Sherry Rankin, Shaun Case, and Phillip Cook.

**Many thanks to everyone involved in maintaining and improving KPPA operations!**