



**County Employees Retirement System  
Board of Trustees – Regular Meeting  
March 16, 2022 at 2:00 pm ET (1:00 pm CT)  
Live Video Conference/Facebook Live**

**AGENDA**

- |     |  |                             |
|-----|--|-----------------------------|
| 1.  | Call to Order  | Betty Pendergrass           |
| 2.  | Opening Statement  | Betty Pendergrass           |
| 3.  | Roll Call  | Sherry Rankin               |
| 4.  | Public Comment   | Sherry Rankin               |
| 5.  | Approval of Minutes*<br>January 26, 2022, January 31, 2022, & February 7, 2022 | Betty Pendergrass           |
| 6.  | CERS Strategic Plan  | Betty Pendergrass           |
| 7.  | Actuarial Committee Report*  | Mike Foster                 |
| 8.  | Finance Committee Report   | Bill O'Mara                 |
|     | a. YTD Financial Reports   | Rebecca Adkins              |
|     | b. Administrative Expense to Budget  | Rebecca Adkins              |
|     | c. Contribution Report   | Rebecca Adkins              |
|     | d. Outstanding Invoice Report  | Connie Davis                |
|     | e. Penalty Waiver Report   | Connie Davis                |
|     | f. Hazardous Duty Requests*  | D'Juan Surratt              |
| 9.  | Investment Committee Report  | Dr. Merl Hackbart           |
|     | a. Investment Policy Statement*  | Dr. Merl Hackbart           |
|     | b. CERS Administrative Policies*   | Steven Herbert              |
|     | c. CERS Quarterly Investment Reports   | Steven Herbert              |
|     | d. Wilshire Quarterly Investment Report  | David Lindberg/Craig Morton |
| 10. | Joint Audit Committee Report   | Betty Pendergrass           |
|     | a. Employer Proportionate Share Audit*   | Betty Pendergrass           |
|     | b. Internal Audit Reports*   | Kristen Coffey              |
|     | c. CERS Election Policy*   | Kristen Coffey              |
| 11. | Joint Retiree Health Care Committee Report                                     | Jerry Powell                |
| 12. | Administrative   |                             |
|     | a. Department Spotlight—Member Services  | Shauna Miller               |
|     | b. CERS Trustee Per Diem Policy*   | Ed Owens                    |
|     | c. Upcoming Trustee Education Session – CFA Code of Conduct                    | Betty Pendergrass           |
|     | d. KPPA Update   | Dave Eager                  |
|     | e. CEO Report  | Ed Owens, III               |
| 13. | Closed Session*  | Joe Bowman                  |
| 14. | Adjourn  | Betty Pendergrass           |

\*Board May Take Action

**MINUTES OF MEETING  
COUNTY EMPLOYEES RETIREMENT SYSTEM  
SPECIAL CALLED BOARD OF TRUSTEES MEETING  
JANUARY 26, 2022 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 January 26, 2022 the following members were present: Betty Pendergrass (Chair), Dr. Patricia Carver, George Cheatham, JT Fulkerson, Dr. Merl Hackbart, Dr. Martin Milkman, William O'Mara, and Jerry Powell. The following members of the Kentucky Retirement Systems were present: Bruce Brown, John Cheshire, Joseph Grossman, Lynn Hampton, Prewitt Lane, and Pamela Thompson. Staff members present was CERS CEO Ed Owens, III, David Eager, Rebecca Adkins, Erin Surratt, Michael Board, Steven Herbert, Vicki Hale, Ashley Gabbard, Shaun Case, Phillip Cook, and Sherry Rankin. Others present included Joseph Bowman and Eric Branco with Johnson Bowman and Branco.

Ms. Pendergrass called the meeting to order and read the Legal Opening Statement.

Ms. Rankin took Roll Call. There was no public comment received.

Ms. Pendergrass introduced agenda item *Open Meeting/Open Records Training*. Joseph Bowman and Eric Branco with Johnson Bowman and Branco presented a Trustee Education Session on Open Records and the Open Meetings Act as it pertains to their various roles as Trustees.

After the education session ended, all of the Kentucky Retirement System Trustees left the meeting in order that the County Employees Retirement Systems Trustee could continue with the remainder of the agenda.

Ms. Pendergrass introduced agenda item *Closed Session*. Mr. Milkman made a motion and was seconded by Mr. Powell to go into closed session for the purpose of litigation. The motion passed unanimously.

Ms. Pendergrass 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 close 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".

Mr. Fulkerson, Mr. Eager, and Ms. Hale left the meeting prior to the beginning of the Closed Session due to conflicts of interest.

After the Board returned from Closed Session, Ms. Pendergrass stated that there was no action taken on the discussions from closed session.

Mr. Powell made a motion and was seconded by Dr. Milkman to adjourn the meeting. The motion passed unanimously.

Copies of all documents presented are incorporated as part of the Minutes of the Board of Trustees held January 26, 2022 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 January 26, 2022 were approved on March 16, 2022.

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Chair of the Board of Trustees

I have reviewed the Minutes of the January 26, 2022 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  
BOARD OF TRUSTEES SPECIAL CALLED MEETING  
JANUARY 31, 2022 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 January 31, 2022 the following members were present: Betty Pendergrass (Chair), George Cheatham, Michael Foster, JT Fulkerson, Dr. Merl Hackbart, and Dr. Martin Milkman. Staff members present was CERS CEO Ed Owens, III, Erin Surratt, Michael Board, Steven Herbert, Vicki Hale, Connie Davis, Jared Crawford, D’Juan Surratt, Ashley Gabbard, Shaun Case, Phillip Cook, Glenna Frasher and Sherry Rankin. Others present included Eric Branco with Johnson Bowman and Branco.

Ms. Pendergrass called the meeting to order and read the Legal Opening Statement.

Ms. Rankin took Roll Call. There was no public comment received.

Ms. Pendergrass introduced agenda item *Proposed Revisions to HB 297*. Ms. Pendergrass stated that House Bill 297 is a Bill that Kentucky Public Pensions Authority has requested in order to address some changes that are needed to the governing Statutes. The Kentucky League of Cities has requested some additional items to be included in this Bill, prompting the sponsor of the Bill to seek feedback from the Kentucky Public Pensions Authority Board on its position regarding these additions. Mr. Percy, Chair of the Kentucky Public Pensions Authority Board, asked for a response regarding the position of the Board of the County Employees Retirement System on these proposed revisions, and is the basis for today’s special meeting of the Board.

Ms. Pendergrass indicated that the first proposed change relates to the new investment staff positions that are outside of the 18A category. Kentucky League of Cities is requesting that Kentucky Public Pensions Authority approve these positions, identify the specific job descriptions and set the compensation prior to the hiring of those positions. Mr. Cheatham expressed his approval and stated that it will provide good oversight. Dr. Hackbart asked where the Board would seek the information needed for the job descriptions and compensation ranges and if there would

be available staff to assist in generating these. Ms. Pendergrass stated that in the past, an outside firm was hired to conduct an administrative study to provide insight on the administrative structure of the former Kentucky Retirement Systems. It was suggested that a new management study may be needed to see how the systems are managed now, since there has been a split in the governance structure.

Ms. Pendergrass indicated that the second proposed revision pertains to the CERS separation costs. Kentucky League of Cities has suggested a cutoff of three (3) fiscal years after the effective date of House Bill 484, which provided for the new governance structure. This would include determining additional separation costs, identifying those costs, and CERS would pay those costs the first three (3) years, and then afterwards a new allocation methodology would be set in place. Ms. Pendergrass stated that Mr. O'Mara is currently working with Mr. Lane and the KPPA Staff to develop an administrative cost allocation plan and more information on this will be forthcoming in the near future.

Ms. Pendergrass stated that the final proposed revision is seeking the addition of a specific statutory provision that will require the Kentucky Public Pensions Authority Board to review and approve the biennial budget, otherwise known as the Administrative Budget for KPPA, prior to submission to the Governor's office. Kentucky League of Cities suggests that if a statutory requirement is in place, then that may alleviate some of the confusion of who is responsible and who has the authority to submit the budget to the Governor's office. Dr. Hackbart and Mr. Cheatham both expressed their approval for the Boards oversight on the administrative budget proposal.

Dr. Hackbart made a motion and seconded by Mr. Cheatham to adjourn the meeting. The motion passed unanimously.

Copies of all documents presented are incorporated as part of the Minutes of the Board of Trustees held January 31, 2022 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**

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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 January 31, 2022 were approved on March 16, 2022.

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Chair of the Board of Trustees

I have reviewed the Minutes of the January 31, 2022 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  
BOARD OF TRUSTEES MEETING  
February 7, 2022 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 7, 2022 the following members were present: Betty Pendergrass (Chair), Dr. Patricia Carver, George Cheatham, Michael Foster, JT Fulkerson, Dr. Martin Milkman, William O'Mara, and Jerry Powell. Staff members present was Ed Owens, III, CERS CEO, David Eager, Rebecca Adkins, Erin Surratt, Michael Board, Steven Herbert, Vicki Hale, Connie Davis, Jaren Crawford, D'Juan Surratt, Connie Pettyjohn, Kristen Coffey, Ashley Gabbard, Shaun Case, Glenna Frasher and Sherry Rankin. Others present included Eric Branco with Johnson Bowman and Branco.

Ms. Pendergrass called the meeting to order and read the Legal Opening Statement.

Ms. Rankin took Roll Call. There was no public comment received.

Ms. Pendergrass introduced agenda item *Approval of Minutes of December 1, 2021 meeting*. Dr. Milkman made a motion and was seconded by Mr. Powell to approve the minutes as presented. The motion passed unanimously.

Ms. Pendergrass introduced agenda item *Bylaws Revision*. Ms. Pendergrass stated that this will be the second reading of the items that were changed in the CERS Bylaws, as the first reading occurred at the December 1, 2021 meeting. Mr. Powell made a motion and was seconded by Mr. Foster to approve the Bylaws Amendments as presented. The motion passed unanimously.

Ms. Pendergrass stated that additional changes may be necessary to the previously approved 2022 Meeting Calendar and revisited the approved calendar for further discussions. In the March 2022 calendar, the CERS Actuarial Committee Meeting is set to meet after the CERS Board Meeting. Suggestions were made to either switch the meetings so that the CERS Board meeting is after the Actuarial Committee meeting or move the CERS Board meeting to a date after the Actuarial Committee meeting. Mr. Powell made a motion and was seconded by Dr. Milkman to move the



CERS Actuarial Committee Meeting to be held on March 14, 2022 and the CERS Board Meeting to be held on March 16, 2022. The motion passed unanimously.

Another calendar issue is that the November 8, 2022 CERS Board Meeting falls on Election Day. Dr. Milkman made a motion and was seconded by Mr. Powell to change the November 8, 2022 CERS Board Meeting to be held on November 9, 2022. The motion passed unanimously.

Ms. Pendergrass introduced agenda item *Legislative Update*. Mr. Foster summarized House Bill 297 and its impacts that would affect the County Employees Retirement System. Ms. Surratt explained that some of the necessary changes found in House Bill 297 were the result of the passage of previous legislation in House Bill 9 and Senate Bill 169. Ms. Surratt further stated that additional changes were needed to ensure that the language used the statutes created during the separation mirrored the language in the current statutes. Mr. Cheatham questioned the exclusion of language concerning the issues of Trustee liability and lack of quorum on the KPPA Board due to recusals in House Bill 297. Mr. Eager suggested that Mr. Board draft language regarding Trustee liability to present to the bill sponsor for inclusion by amendment before the February 28, 2022 deadline.

Ms. Pendergrass introduced agenda item *Closed Session*. Mr. Foster made a motion and was seconded by Mr. Cheatham to go into closed session for the purpose of litigation. The motion passed unanimously.

Ms. Pendergrass 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 close 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”.

Mr. Fulkerson and Mr. Eager left the meeting prior to the beginning of the Closed Session due to a conflict of interest.

After the Board returned from Closed Session, Ms. Pendergrass opened the floor for a motion regarding the River City FOP litigation. Mr. Powell made a motion and was seconded by Dr.

Milkman to approve the settlement as discussed in closed session. The motion passed unanimously.

Mr. Powell made a motion and was seconded by Mr. Cheatham to adjourn the meeting. The motion passed unanimously.

Copies of all documents presented are incorporated as part of the Minutes of the Board of Trustees held February 7, 2022 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**

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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 February 7, 2022 were approved on March 16, 2022.

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Chair of the Board of Trustees

I have reviewed the Minutes of the February 7, 2022 Board of Trustees Meeting for content, form, and legality.

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Executive Director  
Office of Legal Services



## **KENTUCKY COUNTY EMPLOYEES RETIREMENT SYSTEM STRATEGIC PLAN 2022-2026**



**KENTUCKY COUNTY EMPLOYEES’ RETIREMENT SYSTEM  
STRATEGIC PLAN 2022-2026**

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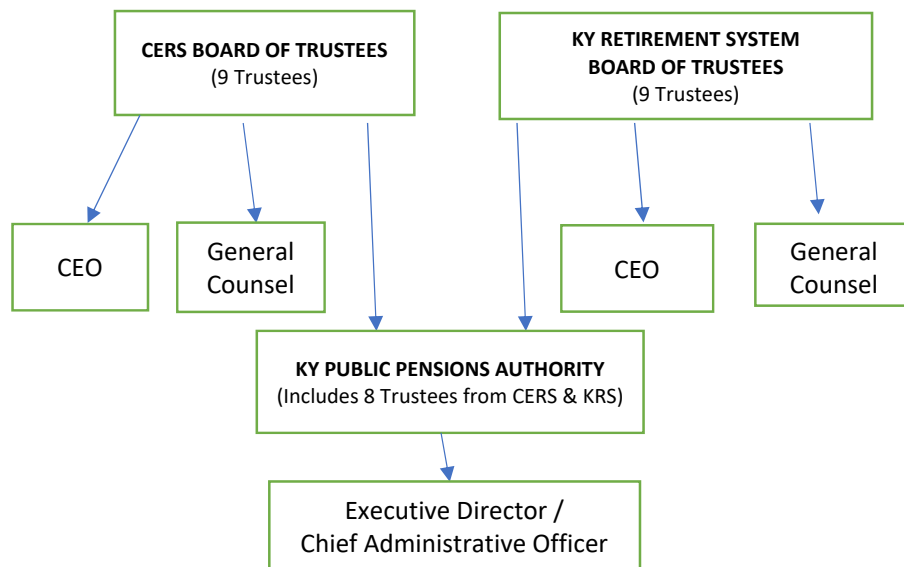
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## EXECUTIVE SUMMARY

### 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

*2022 – 2026 CERS Strategic Plan  
Executive Summary (continued)*

administration for CERS. The Kentucky General Assembly has the authority to establish and amend benefit provisions.

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.

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## STRATEGIC GOALS

Now that CERS has completed its organizational first year and adopted Board administrative and governance policies, the focus of the 2022 – 2026 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**     *Audit* **Support the internal audit process to enhance ongoing operational process improvement.**
- Goal 4**     *Finance* **Collaborate with Kentucky Retirement Systems to develop a cost-effective administrative cost budget, financial management, and cost allocation policies.**
- Goal 5**     *Healthcare* **Support ongoing improvements to the healthcare benefit structure that improve the quality of life for retirees.**
- Goal 6**     *Administrative* **Finalize structure to support efficient governance for CERS post-retirement plans.**

The Strategic Goals section outlines the goals, expands the discussion of objectives for each goal, including targets and measurement principles, and describes how the 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.



<b>GOALS, OBJECTIVES, MEASURES AND TARGETS</b>
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**Goal 1**     *Actuarial* Strengthen actuarial administration to achieve full funding of the CERS plans.

<b>Objective A. Identify key benchmarks for evaluating funded status.</b>	
1)	<b>Measure:</b> Actuarial discount rate reflects historical earnings in investment performance. <b>Target:</b> Increase discount in gradual increments through 2024.
2)	<b>Measure:</b> Payroll growth rate parallels local government employment trends. <b>Target:</b> Experience studies conducted every 3 years, beginning in 2022.
3)	<b>Measure:</b> Inflation analysis in periodic actuarial experience study. <b>Target:</b> Initial CERS experience study in 2023 after actuarial bids for 2022 valuation are accepted.
<b>Objective B.</b>	
1)	<b>Measure:</b> <b>Target:</b>
2)	<b>Measure:</b> <b>Target:</b>
3)	<b>Measure:</b> <b>Target:</b>
<b>Objective C.</b>	
1)	<b>Measure:</b> <b>Target:</b>
2)	<b>Measure:</b> <b>Target:</b>
3)	<b>Measure:</b> <b>Target:</b>

<b>Goal 1. How Will the CERS Board Evaluate Success</b>
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- |    |  |
|----|--|
| 1) | Employer contributions are consistent across the five years 2022 – 2027. |
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## 2022 – 2026 CERS Strategic Plan

## Goals, Objectives, Measures, &amp; Targets (continued)

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|--|
| <ul style="list-style-type: none"> <li>2) Differences between actual results and actuarial assumptions are declining over the five valuations from 2022 – 2027.</li> <li>3) Funded status continues to improve.</li> </ul> |
|--|

**Goal 2** *Investment* Enhance investment management to support prudent portfolio performance and compliance oversight.

<b>Objective A. Define quarterly investment performance and compliance reporting to the CERS Investment committee.</b>	
1)	<p><b>Measure:</b> Quarterly reports include both short-term (10 years or less) and long-term (20-year &amp; since inception) performances by asset class and CERS plan (Haz, NonHaz, pension &amp; insurance).</p> <p><b>Target:</b> Resume investment performance reports in March 2022 and provide historical reports for 3/31/2021, 6/30/2021, 9/30/2021, and 12/31/2021 to Investment Committee by May 25, 2022.</p>
2)	<p><b>Measure:</b> Investment compliance reports include comparisons of actual allocations vs IPS target allocations, manager performance vs benchmarks, portfolio performance vs benchmarks.</p> <p><b>Target:</b> Resume investment compliance reporting to CERS Investment Committee in May 2022.</p>
3)	<p><b>Measure:</b> CERS investment performance compares favorably with peer statewide defined benefit plans.</p> <p><b>Target:</b> Resume Wilshire reporting to CERS Investment Committee in May 2022.</p>
<b>Objective B.</b>	
1)	<p><b>Measure:</b></p> <p><b>Target:</b></p>
2)	<p><b>Measure:</b></p> <p><b>Target:</b></p>
3)	<p><b>Measure:</b></p> <p><b>Target:</b></p>
<b>Objective C.</b>	
1)	<p><b>Measure:</b></p> <p><b>Target:</b></p>
2)	<p><b>Measure:</b></p>

## 2022 – 2026 CERS Strategic Plan

## Goals, Objectives, Measures, &amp; Targets (continued)

<p><b>Target:</b></p> <p>3) <b>Measure:</b></p> <p><b>Target:</b></p>
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<b>Goal 2. How Will the CERS Board Evaluate Success</b>
<p>1) Performance and compliance reports provide key information for CERS Investment Committee and Board of Trustees oversight.</p> <p>2) Performance and compliance reports are readily available to stakeholders on the KPPA website.</p>

**Goal 3** *Audit Support the internal audit process to enhance ongoing operational process improvement.*

<b>Objective A. Evaluate system risks and identify potential internal audit projects to assess controls designed to manage risks.</b>
<p>1) <b>Measure:</b> COSO (Committee of Sponsoring Organizations) Internal Control Framework principles are mapped to key administrative process.</p> <p><b>Target:</b> By September 30, 2022</p> <p>2) <b>Measure:</b> Internal Audit project plan identifies type of risk that will be assessed during fieldwork.</p> <p><b>Target:</b> FY 2023 Internal Audit Plan</p>
<b>Objective B. Review Internal Audit project plans and recommend topics for consideration.</b>
<p>1) <b>Measure:</b> Agency risk assessments identifies key processes that merit inclusion on Internal Audit plan.</p> <p><b>Target:</b> Ongoing</p> <p>2) <b>Measure:</b> External audit offers recommendations for administrative improvements to address internal control risks.</p> <p><b>Target:</b> January 2023</p>
<b>Objective C. Develop Trustee education sessions to highlight governing board's responsibility for internal controls and risk management.</b>
<p>1) <b>Measure:</b> Trustee training on COSO Framework</p> <p><b>Target:</b> October 2022</p>

## 2022 – 2026 CERS Strategic Plan

## Goals, Objectives, Measures, &amp; Targets (continued)

<b>Goal 3. How Will the CERS Board Evaluate Success</b>	
1)	Increased analysis of internal control risks for key administrative processes are outlined in Internal Audit reports.
2)	Internal Audit reports provide insights for continued improvements in governance.
3)	Trustee Education plan is expanded to include discussion of governing board's responsibilities for internal controls.

**Goal 4** *Finance* **Collaborate with Kentucky Retirement Systems to develop a cost-effective administrative cost budget, financial management, and cost allocation policies.**

<b>Objective A. Adopt Administrative Cost Allocation plan to outline policy for accounting allocations to specific plans.</b>	
1)	<b>Measure:</b> KPPA adopts recommended allocation plan. <b>Target:</b> By March 24, 2022
2)	<b>Measure:</b> Quarterly administrative reports include cost allocations for each CERS plan. <b>Target:</b> May 2022
<b>Objective B. Establish framework for budget development and Board approval prior to submission to Governor's State Budget Director.</b>	
1)	<b>Measure:</b> CERS Finance Committee reviews proposed administrative budget prior to CERS & KPPA Board discussions. <b>Target:</b> August 2023
2)	<b>Measure:</b> <b>Target:</b>
3)	<b>Measure:</b> <b>Target:</b>
<b>Objective C.</b>	
1)	<b>Measure:</b> <b>Target:</b>
2)	<b>Measure:</b>

## 2022 – 2026 CERS Strategic Plan

## Goals, Objectives, Measures, &amp; Targets (continued)

<b>Target:</b> 3) <b>Measure:</b> <b>Target:</b>
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<b>Goal 4. How Will the CERS Board Evaluate Success</b>
1) KPPA approves administrative budget prior to submission to Governor's State Budget Director. 2) CERS is able to provide input for managing administrative costs.

**Goal 5** *Healthcare* Support ongoing improvements to the healthcare benefit structure that improves the quality of life for retirees.

<b>Objective A. Evaluate health insurance plan performance.</b>
1) <b>Measure:</b> Annual reviews by plan administrator <b>Target:</b> Ongoing 2) <b>Measure:</b> <b>Target:</b> 3) <b>Measure:</b> <b>Target:</b>
<b>Objective B. Evaluate potential for expanding dental and vision benefits.</b>
1) <b>Measure:</b> Cost analysis of expanded benefits outlines impact of benefit changes. <b>Target:</b> 2023 2) <b>Measure:</b> Actuarial funded status of CERS Insurance Plans remains stable or improves. <b>Target:</b> 2022 - 2027 3) <b>Measure:</b> <b>Target:</b>
<b>Objective C.</b>
1) <b>Measure:</b> <b>Target:</b> 2) <b>Measure:</b>

## 2022 – 2026 CERS Strategic Plan

## Goals, Objectives, Measures, &amp; Targets (continued)

<b>Target:</b> 3) <b>Measure:</b> <b>Target:</b>
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Goal 5. How Will the CERS Board Evaluate Success	
1)	Benefits are expanded with cost-effective changes to premiums and contributions.
2)	Actuarial funded status remains stable or improves.

**Goal 6** *Administrative* **Finalize structure to support efficient governance for CERS post-retirement plans.**

Objective A. Establish Personnel Committee and develop framework for CERS staff evaluations, professional development, and succession planning.	
1)	<b>Measure:</b> Evaluation criteria reflect expectations for CEO performance. <b>Target:</b> June 2022
2)	<b>Measure:</b> Initial CEO performance evaluation is completed. <b>Target:</b> July 2022
3)	<b>Measure:</b> Professional development plan for CEO is adopted. <b>Target:</b> September 2022
Objective B. Enhance communications with stakeholders.	
1)	<b>Measure:</b> Periodic articles in association newsletters. <b>Target:</b> 2022 and ongoing
2)	<b>Measure:</b> Host webinars to highlight key retirement management issues. <b>Target:</b> September 2022
3)	<b>Measure:</b> Periodic testimony to Public Pension Oversight Board to highlight CERS performance and governance. <b>Target:</b> April 2022
Objective C. Formalize annual planning for Trustee Education.	
1)	<b>Measure:</b> Quarterly educational sessions provide a minimum of 6 hours of CERS-sponsored education.

## 2022 – 2026 CERS Strategic Plan

## Goals, Objectives, Measures, &amp; Targets (continued)

<p><b>Target:</b> 2022 and ongoing</p> <p>2) <b>Measure:</b> Education catalog of videos provide Trustees with additional resources for training hours, including specific training for New Trustee Orientation sessions.</p> <p><b>Target:</b> January 2023</p> <p>3) <b>Measure:</b> All Trustees meet the statutory requirements for 12 hours of annual training.</p> <p><b>Target:</b> May 2022 and annually thereafter</p>
<b>Objective D. Establish methodology to evaluate effectiveness of Board governance.</b>
<p>1) <b>Measure:</b> Independent analysis of CERS Board governance</p> <p><b>Target:</b> 2023</p>
<b>Objective E. Evaluate CERS By-Laws and administrative policies to improve Board's effectiveness and enhance transparency.</b>
<p>1) <b>Measure:</b> By-laws updated to incorporate recommendations from consultant.</p> <p><b>Target:</b> 2024</p> <p>2) <b>Measure:</b> Administrative policies updated to incorporate recommendations from consultant.</p> <p><b>Target:</b> 2024</p>
<b>Objective F. Initiate planning process to update CERS Strategic Plan.</b>
<p>1) <b>Measure:</b> Ad-Hoc Committee appointed to review and update Strategic Plan.</p> <p><b>Target:</b> 2026</p> <p>2) <b>Measure:</b> Administrative policies updated to incorporate recommendations from consultant.</p> <p><b>Target:</b> 2024</p>
<b>Goal 6. How Will the CERS Board Evaluate Success</b>
<p>1) Timetable and criteria are established for CEO evaluation.</p> <p>2) Stakeholders' feedback provides insights for additional improvements for system governance.</p>

*2022 – 2026 CERS Strategic Plan*

*Goals, Objectives, Measures, & Targets (continued)*

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| <ul style="list-style-type: none"><li>3) Timetable and criteria are outlined for evaluation of CERS Board governance.</li><li>4) By-laws and administrative policies are updated or confirmed as effective guidance for governance and accountability.</li><li>5) Process established for updating the CERS Strategic Plan.</li></ul> |
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<b>2022 – 2026 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 Board and its Committees, with requests for assistance as needed from the KPPA administrative staff.

GOAL/OBJECTIVE	2022	2023	2024	2025	2026
<b>Goal 1. Actuarial Strengthen the actuarial administration to achieve full funding of the CERS plans.</b>					
1) Identify key benchmarks for evaluating funded status.					
2)					
3)					
4)					

GOAL/OBJECTIVE	2022	2023	2024	2025	2026
<b>Goal 2. Investment Enhance investment management to support prudent portfolio performance and compliance oversight.</b>					
1) Define quarterly investment performance and compliance reporting to the CERS Investment committee					
2)					
3)					
4)					

GOAL/OBJECTIVE	2022	2023	2024	2025	2026
<b>Goal 3. Audit Support the internal audit process to enhance ongoing operational process improvement.</b>					
1) Evaluate system risks and identify potential internal audit projects to assess controls designed to manage risks.					
2) Review Internal Audit project plans and recommend topics for consideration.					
3) Develop Trustee education sessions to highlight governing board's responsibility for internal controls and risk management.					

2022 – 2026 CERS Strategic Plan  
 Timetable (continued)

GOAL/OBJECTIVE	2022	2023	2024	2025	2026
<b>Goal 4. Finance Collaborate with Kentucky Retirement Systems to develop a cost-effective administrative cost budget, financial management, and cost allocation policies.</b>					
1) Adopt Administrative Cost Allocation plan to outline policy for accounting allocations to specific plans.					
2) Establish framework for budget development and Board approval prior to submission Governor's State Budget director					
3)					
4)					

GOAL/OBJECTIVE	2022	2023	2024	2025	2026
<b>Goal 5. Healthcare Support ongoing improvements to the healthcare benefit structure that improves the quality of life for retirees.</b>					
1) Evaluate health insurance plan performance.					
2) Evaluate potential for expanding dental and vision benefits.					
3)					
4)					

GOAL/OBJECTIVE	2022	2023	2024	2025	2026
<b>Goal 6. Administrative Finalize structure to support efficient governance for CERS post-retirement plans..</b>					
1) Establish Personnel Committee and develop framework for CERS staff evaluations, professional development, and succession planning.					
2) Enhance communications with stakeholders.					
3) Formalize annual planning for Trustee education.					
4) Establish methodology to evaluate effectiveness of Board governance.					

*2022 – 2026 CERS Strategic Plan  
Timetable (continued)*

5) Evaluate CERS By-Laws and administrative policies to improve Board's effectiveness and enhance transparency.					
6) Initiate planning process to update CERS Strategic Plan.					

# Colorado PERA Strategic Plan 2019 - 2023

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Adopted January 18, 2019



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## Introduction

In 1931, Colorado's leaders established Colorado PERA ("PERA") to provide retirement and other benefits to the employees of government agencies and public entities who provide valuable services to all of Colorado. Today, after almost 90 years, PERA is an essential element to the retirement security of Colorado's public servants and their beneficiaries, a recruitment and retention tool for public employers, and an integral part of the State's economy. Offered to the majority of Colorado public employees in lieu of Social Security coverage, PERA's membership is more than 560,000 strong. A steadfast commitment to providing a bright future for our membership - the current and former teachers, State Troopers, snow plow drivers, corrections officers, and other public employees we serve - energizes our Board of Trustees ("Board") and staff and challenges us to set and deliver on increasingly higher standards of performance expectations.

PERA's 2019 – 2023 Strategic Plan ("Strategic Plan") describes PERA's aspirational goals — as a financial steward, as a partner to our membership, Colorado employers, the General Assembly, Colorado's business leaders and citizens, and as an advocate for the retirement security outcomes of our membership. It is a blueprint for achieving these aspirational goals, while also elevating organizational health and performance to support sustained stability and growth. PERA's Strategic Plan cascades throughout the organization to make strategy everyone's job. From Board agendas and the operating budget, through annual business plans and performance appraisals, the Strategic Plan will align the organization with our desired future.

The Strategic Plan builds on a previous plan approved by the PERA Board in 2013, meant to guide the organization into 2018. With marked achievements against the 2014 – 2018 Strategic Plan and significant developments since its adoption, PERA initiated a new strategic planning process. The Board, staff, and PERA's consultants contributed to a comprehensive assessment of PERA's internal and external operating environment. The Board and its executive staff ("Executive Staff") met to explore issues vital to the organization's continued sustainability and relevance. Through work completed by the Board and staff, including an Environmental Scan, SWOT Analysis, and visioning exercises, PERA developed a framework for the 2019 – 2023 Strategic Plan.

As we look to the future with pragmatism and vision, we will build upon our rich Colorado history with our strengths of financial stability, unwavering fiduciary governance, talented and highly skilled staff, effective internal asset management, and high-quality, low-cost customer service to our membership.

## **Mission**

To promote long-term financial security for our membership while maintaining the stability of the fund.

## **Vision**

To become the retirement plan of choice for all Colorado public employees.

## **Core Values**

We deliver quality customer service, sound investment decisions, operational efficiency, educational programs, competitive plan design, and actively participate in legislative issues that affect our organization.

All activities undertaken will adhere to the guiding principles of customer focus, ethical conduct, accountability, excellence, fiduciary duty and ongoing process improvement.

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## Strategic Goals

PERA's 2019-2023 Strategic Plan ("Strategic Plan") is organized around committed focus to the following Goals:

**Goal 1. Fortify PERA's financial resilience and adaptability.**

**Goal 2. Elevate PERA's identity among stakeholders to that of a partner in providing valued retirement security outcomes.**

**Goal 3. Strengthen organizational health and performance.**

**Goal 4. Improve retirement security outcomes through "best fit" products, services, and education.**

Further information on how PERA intends to achieve these Goals and what success under the Strategic Plan will look like for each Goal is delineated on the following pages.

## Goal 1. Fortify PERA's financial resilience and adaptability.

### Objective A. Establish and implement a framework to monitor and mitigate funding risk to the System.

- i. **Measure:** Full-funding of the defined benefit program  
**Target:** All Divisions fully funded by 2048
- ii. **Measure:** Updated framework and monitoring process ("Signal Light Report 2.0") to ensure effective and appropriate reporting of progress toward full funding, including applicable implementation and reporting of effectiveness of auto adjust mechanism  
**Target:** By 2019
- iii. **Measure:** Improved awareness of the framework by key stakeholders  
**Targets:** Distributed educational materials to 100% of legislators  
Conducted briefings with leadership and members of key PERA committees by 2020  
Established baseline for consumption of materials (via PERA digital platforms) and improvement targets by 2020

### Objective B. Solidify a position on environmental, social, and governance matters.

- i. **Measure:** Updated Proxy Voting Policy  
**Target:** By 2021
- ii. **Measure:** Increased overall awareness of PERA's Stewardship Report and PERA's approach to seeking financial sustainability through investment stewardship  
**Target:** Adopted a stakeholder awareness measurement methodology by 2019; established a baseline and awareness targets

### Objective C. Explore and implement appropriate down-market strategies to protect the portfolio.

- i. **Measure:** PERA's asset allocation reflects the updated risk tolerance of the Board  
**Target:** Completed Asset/Liability Study by 2019
- ii. **Measure:** Completed Board evaluation of and discussion about downside risk as part of the Asset/Liability Study  
**Target:** By 2019
- iii. **Measure:** Board consensus on downside risk principles codified in Statement of Investment Policy  
**Target:** By 2020
- iv. **Measure:** The Board better understands the trade-offs of risk versus return and is able to effectively communicate the active decision(s) incorporated in the updated strategic asset allocation  
**Target:** By 2021, upon self-evaluation, the majority of Board members agree that they have an enhanced understanding of the impact of down-markets



**Objective D. Explore new ways to leverage investment program strengths to enhance performance and reduce costs.**

- i. **Measure:** Board consensus on the level of direct investing in private asset classes  
**Target:** By 2020
- ii. **Measure:** Refreshed organizational Mission and Vision<sup>1</sup>  
**Target:** By 2020

## Goal 1. What will success look like?

1. PERA is on the path toward 30-year funding as gauged by the collection of legislative actions and not just any one particular action.
2. The Board has more clarity and expectations as to how it knows that PERA is on track, including the following: the information staff will provide, reporting frequency, and what conditions trigger action.
3. PERA's investment strategy balances costs, nimbleness, and long-term performance.
4. Continued good governance has led to the achievement of the Mission, Vision, policy objectives, and high standards of excellence.
5. The Board comprises engaged, committed, and appropriately skilled trustees.
6. The Board and Executive Staff relationship is constructive, cohesive, informed, productive, and harmonious.
7. PERA adapts to and flexes with the realities of the political environment.

<sup>1</sup> Research activities implemented under Goal 4 will also support this measure.

## Goal 2. Elevate PERA's identity among stakeholders to that of a partner in providing valued retirement security outcomes.

### Objective A. Clarify role and value to members, retirees and beneficiaries, and related constituency groups.

- i. **Measure:** Increased overall reputation as captured by Net Promoter Score (NPS) among the membership  
**Target:** Adopted an NPS measurement methodology by 2019; established a baseline and improvement targets<sup>2</sup>
- ii. **Measure:** Increased overall awareness of PERA as a trustworthy steward of public retirement plans in Colorado  
**Target:** Adopted an awareness measurement methodology by 2019; established a baseline and improvement targets
- iii. **Measure:** Demonstrated preference for contacting PERA with any questions or concerns about the retirement plan  
**Target:** Adopted a preference measurement methodology by 2019; established a baseline and improvement targets
- iv. **Measure:** Refreshed organizational Mission and Vision  
**Target:** By 2020

### Objective B. Deepen employer relationships.

- i. **Measure:** Increased overall reputation as captured by NPS among employers  
**Target:** Adopted an NPS measurement methodology by 2020; established a baseline and improvement targets<sup>3</sup>
- ii. **Measure:** Improved quality of service interactions  
**Target:** 5% improvement on quality of service interactions by 2020
- iii. **Measure:** Increased number of employers that believe that PERA is an effective recruitment and retention tool  
**Target:** Adopted a methodology to capture employer sentiment by 2020; established a baseline and improvement targets
- iv. **Measure:** Increased number of employers that view PERA as a partner  
**Target:** Adopted an NPS measurement methodology by 2020; established a baseline and improvement targets

<sup>2</sup> Improvement targets to be considered include a specific percentage increase in understanding of PERA's role and value by target group.

<sup>3</sup> Customized metrics to be developed based on satisfaction drivers among employers to align with what matters most to this stakeholder group.

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**Objective C. Become a retirement security thought leader and collaborative partner to the policy-making community.**

- i. **Measure:** Enhanced overall PERA reputation among policy-makers and staff  
**Targets:** 100% on-time delivery of materials, information, and meetings requested on an annual basis  
Qualitative reputation insights provided by the legislative team indicate, by 2021, recognition of PERA as a collaborative partner
- ii. **Measure:** Increased inbound requests for PERA participation in relevant legislation  
**Target:** PERA is engaged on 75% of the total bills introduced that are relevant to PERA
- iii. **Measure:** Sustained legislative outcomes aligned with Board priorities  
**Target:** 70% of the Board's positions are achieved in legislative outcomes

**Objective D. Elevate role and value to the Colorado business community and general public.**

- i. **Measure:** Increased awareness of PERA within the business community  
**Target:** Adopted an engagement and reach measurement methodology by 2019; established a baseline and target<sup>4</sup>
- ii. **Measure:** Increased inbound requests for PERA participation in relevant legislative and business matters, events, and activities  
**Target:** PERA is engaged on 50% of PERA-related issues raised by the business community
- iii. **Measure:** Increased positive media exposure among business publications  
**Target:** 10% improvement in positive media sentiment among business publications by 2021

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<sup>4</sup> Targets could include a specific percentage of engagement on relevant issues facing the business community, and the amount of business community members reached through PERA messaging, among others.

## **Goal 2. What will success look like?**

1. PERA has sustained itself as a mission-driven, focused organization with a dedicated, authentic and validated commitment to the membership.
2. PERA is an integral driver in promoting and facilitating the purpose and desirability of public service.
3. PERA has successfully increased the understanding, relevance, and importance of the value of PERA to its stakeholder base, including Colorado as a community.
4. Members and employers understand, value, and take ownership of the shared responsibility in funding retirement security.

### Goal 3. Strengthen organizational health and performance.

#### Objective A. Enhance the organization's ability to manage change.

- i. **Measure:** Improved employee engagement against a benchmark  
**Target:** Adopted an engagement study measurement methodology by 2019; established a baseline and improvement targets
- ii. **Measure:** Improved effectiveness of the organization's shared services areas  
**Target:** Adopted an engagement study measurement methodology by 2019; established a baseline and improvement targets<sup>5</sup>
- iii. **Measure:** Completed succession and leadership development plan and refreshed Board policy  
**Target:** By 2020
- iv. **Measure:** Improved leader development and readiness  
**Target:** 100% of identified staff have a specific development plan by 2021
- v. **Measure:** Transition plans developed for senior leaders and critical staff positions  
**Target:** 100% by 2022
- vi. **Measure:** Improved internal communications  
**Target:** Refreshed internal communications plan and methodology to gauge effectiveness by 2020

#### Objective B. Create a culture of collaboration, continuous learning, improvement, and risk awareness.

- i. **Measure:** Improved employee collaboration and engagement against a benchmark  
**Target:** Adopted an engagement study measurement methodology by 2019; established a baseline and improvement targets<sup>6</sup>
- ii. **Measure:** Enhanced reputation as an employer  
**Target:** Adopted an engagement study measurement methodology by 2019; established a baseline and improvement targets
- iii. **Measure:** Board-adopted organization-wide risk management program  
**Target:** By 2021
- iv. **Measure:** Board-adopted organization-wide compliance program  
**Target:** By 2023

<sup>5</sup> Targets could include a specific percentage of positive ratings by surveyed PERA staff of shared services departments' (e.g., human resources, technology, finance, communications, legal, etc.) performance

<sup>6</sup> Targets could include percentage increases in engagement ratings overall and by category (e.g., effectiveness of teams and managers, trust in leadership, feeling valued, compensation, benefits, etc.)

### Goal 3, Objective B: Continued Measures and Targets

- v. **Measure:** Improved overall employee satisfaction with learning opportunities  
**Target:** Adopted an appropriate measurement methodology by 2019; established a baseline and improvement targets
- vi. **Measure:** Completed crisis communication plan  
**Target:** By 2020

### Objective C. Advance technology and information security infrastructure.

- i. **Measure:** Maintained low-cost, high-service distinction among peers as reflected by the CEM Benchmarking Study  
**Targets:** Total pension administration cost continuously below the peer average  
Total service score above the peer average  
Back office activities adjusted cost per member for IT strategy, database and applications is at least \$10 below peer average
- ii. **Measure:** Maintained cyber security program in alignment with best practice  
**Targets:** Updated annual incident response plan  
Management team has completed annual cyber risk tabletop training exercises<sup>7</sup>
- iii. **Measure:** Refreshed technology roadmap  
**Target:** By 2021
- iv. **Measure:** Refreshed disaster recovery and business continuity plans  
**Target:** By 2022

### Objective D. Protect and sustain the quality of Board governance.

- i. **Measure:** Sustained overall satisfaction with Board effectiveness  
**Target:** Through annual Board self-evaluation, sustained or improved overall results from prior year
- ii. **Measure:** Sustained overall satisfaction with new trustee orientation  
**Target:** Most Board Members who participate agree that orientation provided is useful and relevant
- iii. **Measure:** Sustained compliance with Board Education Policy requirements  
**Target:** 100% of Board Members and designees are compliant
- iv. **Measure:** Enhanced alignment of Committees and Board Governance to strategic initiatives  
**Target:** Refreshed Governance Manual by 2020

<sup>7</sup> A tabletop training exercise simulates a real-world cybersecurity incident within a classroom setting to evaluate an organization's preparedness and strategies to manage risk.

### Goal 3. What will success look like?

**PERA:**

1. Reflects a self-aware, adaptable, contemporary, and professional organizational culture.
2. Is a valiant protector of confidential organizational data.
3. Has built and cultivates a workforce that is its primary asset in a technologically - modernized environment.
4. Has successfully blended employees of all types and career stages to create continuity for PERA.
5. Has optimized its operations (makes sound decisions for building in-house and when/where to outsource).
6. Continued good governance has led to the achievement of the Mission, Vision, policy objectives, and high standards of excellence.
7. The Board comprises engaged, committed, and appropriately skilled trustees.
8. The Board and Executive Staff relationship is constructive, cohesive, informed, productive, and harmonious.

## Goal 4. Improve retirement security outcomes through “best fit” products, services, and education.

### Objective A. Align education, products, and services to respond to member and employer needs.

- i. **Measure:** Increased understanding of member and employer needs, including unmet needs  
**Target:** Implemented a member and employer research methodology by 2019
- ii. **Measure:** Completed feasibility study and Board discussion to explore education, product, and service offerings to address members' unmet needs  
**Target:** By 2019
- iii. **Measure:** Refreshed organizational Mission and Vision  
**Target:** By 2020
- iv. **Measure:** Developed and launched new services and products based on refreshed organizational Mission and Vision  
**Target:** By 2021
- v. **Measure:** Increased overall awareness and utilization of new product offerings  
**Target:** Adopted an awareness measurement methodology by 2022; established a baseline and improvement targets

### Objective B. Enhance defined contribution product and service offerings.

- i. **Measure:** Improved alignment of participant preferences and product and service offerings  
**Target:** Adopted a participant preferences measurement methodology by 2019; established a baseline and improvement targets
- ii. **Measure:** Improved participant awareness of retirement income needs  
**Targets:** Developed a methodology to measure participants' retirement income replacement ratio by 2020; established a baseline and awareness improvement targets  
Delivered two individualized touchpoints to participants per year starting in 2020
- iii. **Measure:** Increased growth in total participation  
**Target:** Adopted a total participation measurement methodology by 2019; established a baseline and improvement targets

### Objective C. Adapt service delivery model to member and employer preferences.

- i. **Measure:** Increased service channel awareness  
**Target:** Adopted a channel awareness and utilization measurement methodology by 2020; established a baseline and improvement targets
- ii. **Measure:** Enhanced understanding of member and employer service satisfaction as reflected by improvement in customer service satisfaction scores  
**Target:** Adopted a customer service satisfaction measurement methodology by 2019; established a baseline and improvement targets



#### Goal 4, Objective C: Continued Measures and Targets

- iii. **Measure:** Sustained superior performance versus peers as reflected by the CEM Benchmarking Study  
**Target:** Increased CEM Benchmarking Study total service score to 93 by 2023

#### Objective D. Explore the feasibility of expanding capabilities to other Colorado public and private sector entities.

- i. **Measure:** Increased understanding of needs of other Colorado public and private sector entities, including unmet needs  
**Target:** Adopted and implemented a research methodology by 2019
- ii. **Measure:** Completed feasibility study and Board discussion to explore product and service offerings to non-PERA affiliated employers and private sector entities  
**Target:** By 2019
- iii. Refreshed organizational Mission and Vision  
**Target:** By 2020

### Goal 4. What will success look like?

1. Members and employers understand, value, and take ownership of the shared responsibility in funding retirement security.
2. An optimized mix of DB and DC plans and associated features, benefits, and services, including health care, contributes to stronger retirement and financial security outcomes for members.
3. Products, services, and delivery engage all generations of members and drive adoption.
4. A clear PERA Mission and Vision drive member-centric, aligned decisions.

## 2019 – 2023 Strategic Plan Prioritization Map

The following pages reflect an approximate schedule for initiating implementation activities for each Goal and Objective of the Strategic Plan. The timing depicts when various activities will be undertaken by Executive Staff and potentially the Board and its Committees, not necessarily when they will be completed.

GOAL/OBJECTIVE	2019	2020	2021	2022	2023
<b>Goal 1. Fortify PERA's financial resilience and adaptability.</b>					
A. Establish and implement a framework to monitor and mitigate funding risk to the System.					
B. Solidify a position on environmental, social, and governance matters.					
C. Explore and implement appropriate down-market strategies to protect the portfolio.					
D. Explore new ways to leverage investment program strengths to enhance performance and reduce costs.					

GOAL/OBJECTIVE	2019	2020	2021	2022	2023
<b>Goal 2. Elevate PERA's identity among stakeholders to that of a partner in providing valued retirement security outcomes.<sup>8</sup></b>					
A. Clarify role and value to members, retirees and beneficiaries, and related constituency groups.					
B. Deepen employer relationships.					
C. Become a retirement security thought leader and collaborative partner to the policy-making community.					
D. Elevate role and value to the Colorado business community and general public.					

<sup>8</sup> For this Goal, the designated priority years reflect the first wave of benchmark setting and measurement. Subsequent years will focus on measuring impact of the programs that will be underway, and program enhancement. In other words, these programs will not officially conclude once the initial benchmarking work is done but will shift focus toward achieving their designated targets.

GOAL/OBJECTIVE	2019	2020	2021	2022	2023
<b>Goal 3. Strengthen organizational health and performance.</b>					
A. Enhance the organization's ability to manage change.					
B. Create a culture of collaboration, continuous learning, improvement, and risk awareness.					
C. Advance technology and information security infrastructure.					
D. Protect and sustain the quality of Board governance.					

GOAL/OBJECTIVE	2019	2020	2021	2022	2023
<b>Goal 4. Improve retirement security outcomes through “best fit” products, services, education.<sup>9</sup></b>					
A. Align education, products, and services to member and employer needs.					
B. Enhance defined contribution product and service offerings.					
C. Adapt service delivery model to member and employer preferences.					
D. Explore the feasibility of expanding capabilities to other Colorado public and private sector entities.					

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<sup>9</sup> Ibid. See prior reference to priority years designated for benchmarking purposes.

**Colorado Public Employees' Retirement Association**

**1301 Pennsylvania Street**

**Denver, CO 80203**

**1-800-759-7372**

**[www.copera.org](http://www.copera.org)**



## MEMORANDUM

**DATE:** March 14, 2022

**TO:** CERS Board of Trustees

**FROM:** Mike Foster, Chair, CERS Actuarial Committee

**SUBJECT:** Summary of Quarterly CERS Actuarial Committee Meeting, March 14, 2022

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The CERS Actuarial Committee met for their quarterly committee meeting on March 14, 2022 and reviewed actuarial demographic information from Gabriel, Roeder, Smith & Company, KPPA actuarial consulting firm. GRS provided a brief overview of key economic assumptions—price inflation, investment return, and payroll growth. This interim summary was based on short-term trends since the last experience study in 2020.

**The CERS Actuarial Committee reviewed the GRS recommendations and voted to recommend the following assumptions for use in the 2022 Actuarial Valuation to the CERS Board of Trustees for approval:**

- **Price inflation** 2.30%
- **Investment return** 6.25%
- **Payroll growth** 2.00%

**The CERS Actuarial Committee requests the Board's ratification of these recommendations.**

Erin Surratt and Cassandra Weiss provided a brief overview of the current RFP process for obtaining actuarial services for the 2022 Valuation.



## MEMORANDUM

**DATE:** March 8, 2022

**TO:** Mike Foster, Chair  
CERS Actuarial Committee

**FROM:** Betty Pendergrass, Chair, CERS Board of Trustees

**RE:** Historical Summary of Investment Earnings & Actuarial Discount Rate

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Each year, the CERS Board of Trustees will evaluate key economic assumptions for the upcoming annual actuarial valuation. GRS has provided an excellent summary of the assumptions that can be evaluated between experience studies that provide a more detailed look at changes in a plan's demographic information.

The actuarial discount rate is the rate we expect to achieve on the underlying investment portfolio over the next 30 – 40 years. This rate includes a “real return” plus anticipated inflation for investment returns. Recently, Trustees were advised that using a 10-year yield was more relevant than a longer term, such as 20 – 30 years. Fortunately, the “since inception yield” that has been tracked since 1984 for the CERS plans offers an historical view of the long-term actual earnings. While historical yields do not guarantee future earnings, an historical analysis can outline the trends in 10-yr, actuarial rates, and “since inception” earnings. This analysis can also help frame the potential variances in earnings and the range for potential gains/losses between actual earnings and the actuarial assumption.

Earnings in the attached summary were reported in either the Annual Comprehensive Financial Report (2012 & 2013) or the Summary Annual Financial Report (2014 – 2021). The actuarial discount rate was also reported in the Annual Comprehensive Financial Report. In addition, for 2012 & 2013, earnings for CERS nonhazardous and CERS hazardous were not separately reported, so the performance reflects the total investment earnings of Kentucky Retirement System.

# CERS Board Meeting - Actuarial Committee Report

## CERS PENSION & OPEB EARNINGS ANALYSIS FY2012 - FY2021

NONHAZARDOUS PENSION			
Fiscal Year Ended June 30	10-year returns	Actuarial Discount Rate	Since Inception Returns
2012 *	5.99%	7.75%	9.36%
2013 *	6.60%	7.75%	9.40%
2014	6.84%	7.75%	9.62%
2015	6.04%	7.50%	9.34%
2016	5.01%	7.50%	9.02%
2017	4.88%	6.25%	9.16%
2018	6.22%	6.25%	9.15%
2019	8.86%	6.25%	9.05%
2020	7.37%	6.25%	8.82%
2021	8.00%	6.25%	9.20%

\* Returns for CERS Haz and CERS NHaz were not reported separately.

NONHAZARDOUS INSURANCE			
Fiscal Year Ended June 30	10-year returns	Actuarial Discount Rate	Since Inception Returns
2012 *	5.86%	7.75%	7.53%
2013 *	6.18%	7.75%	7.42%
2014	6.33%	7.75%	7.89%
2015	5.54%	7.50%	7.48%
2016	4.31%	7.50%	7.22%
2017	3.81%	6.25%	7.42%
2018	5.59%	6.25%	7.48%
2019	9.01%	6.25%	7.43%
2020	7.50%	6.25%	7.21%
2021	7.60%	6.25%	7.70%

\* Returns for CERS Haz and CERS NHaz were not reported separately.

HAZARDOUS PENSION			
Fiscal Year Ended June 30	10-year returns	Actuarial Discount Rate	Since Inception Returns
2012 *	5.99%	7.75%	9.36%
2013 *	6.60%	7.75%	9.40%
2014	6.83%	7.75%	9.61%
2015	6.04%	7.50%	9.34%
2016	5.03%	7.50%	9.03%
2017	4.89%	6.25%	9.17%
2018	6.23%	6.25%	9.15%
2019	8.87%	6.25%	9.06%
2020	7.36%	6.25%	8.82%
2021	8.00%	6.25%	9.20%

\* Returns for CERS Haz and CERS NHaz were not reported separately.

HAZARDOUS INSURANCE			
Fiscal Year Ended June 30	10-year returns	Actuarial Discount Rate	Since Inception Returns
2012 *	5.86%	7.75%	7.53%
2013 *	6.18%	7.75%	7.42%
2014	6.33%	7.75%	7.89%
2015	5.54%	7.50%	7.48%
2016	4.32%	7.50%	7.22%
2017	3.82%	6.25%	7.43%
2018	5.61%	6.25%	7.49%
2019	9.05%	6.25%	7.44%
2020	7.52%	6.25%	7.21%
2021	7.70%	6.25%	7.70%

\* Returns for CERS Haz and CERS NHaz were not reported separately.



October 29, 2021

Board of Trustees  
County Employees Retirement System  
Perimeter Park West  
1260 Louisville Road  
Frankfort, KY 40601

**Re: Additional Sensitivity Scenarios Based on Results of the June 30, 2021 Actuarial Valuation**

Dear Members of the Board:

As requested, we are providing this additional information regarding the sensitivity of the valuation results for the **County Employees Retirement System (CERS)** to changes in the investment return assumption.

**Background**

The investment return assumption is used to discount future expected benefit payments to the valuation date in order to determine the liabilities of the plans. The lower the investment return assumption, the less the benefit payments are discounted and the higher the valuation liability. The current investment return assumption is 6.25% for the CERS non-hazardous and hazardous retirement and insurance funds. The sensitivity analysis shows the financial impact of a 0.25% increase, a 0.25% decrease, a 0.50% increase, and a 0.50% decrease in the investment return assumption. For purposes of this sensitivity analysis, the inflation assumption and payroll growth assumption remain unchanged from the valuation assumption.

**Basis of Calculations**

The information provided in this letter compliments the information provided in the June 30, 2021 actuarial valuation report. Please refer to the June 30, 2021 actuarial valuation report for additional discussion of the actuarial valuation, including the nature of actuarial calculations and more information related to participant data, economic and demographic assumptions, and benefit provisions. Additionally, please refer to the sensitivity analysis letter provided with the June 30, 2021 actuarial valuation report that provides additional sensitivity scenarios under additional economic assumptions. The scenarios provided in that letter are required per Kentucky State Statute 61.670



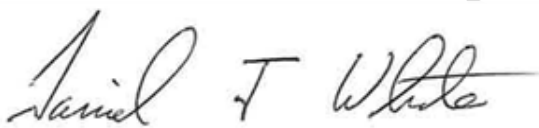
Board of Trustees  
October 29, 2021  
Page 2

Actual results can, and almost certainly will, differ as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rate, and funding periods. The actuarial calculations are intended to provide information for rational decision making. The purpose of this information is to provide stakeholders the financial sensitivity of the unfunded liability and contribution rates to changes in the assumed rate of return.

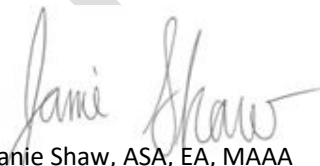
The undersigned are independent actuaries and consultants. Both of the undersigned are Enrolled Actuaries, Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. Both of the undersigned are experienced in performing valuations for large public retirement systems. This communication shall not be construed to provide tax advice, legal advice or investment advice.

Sincerely,

**Gabriel, Roeder, Smith & Company**



Daniel J. White, FSA, EA, MAAA  
Senior Consultant



Janie Shaw, ASA, EA, MAAA  
Consultant



**Sensitivity Analysis - Discount Rate  $\pm$  0.25%****Non-Hazardous Members****(Dollar amounts expressed in thousands)**

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
(1)	(2)	(3)	(4)
Payroll Growth Rate	2.00%	2.00%	2.00%
Inflation Rate	2.30%	2.30%	2.30%
Discount Rate - Retirement	6.00%	6.25%	6.50%
Discount Rate - Insurance	6.00%	6.25%	6.50%
<b>Retirement</b>			
Actuarial Accrued Liability	\$ 15,312,127	\$ 14,894,906	\$ 14,497,248
Actuarial Value of Assets	7,715,881	7,715,881	7,715,881
Unfunded Actuarial Accrued Liability	7,596,246	7,179,025	6,781,367
Funded Ratio	50.4%	51.8%	53.2%
Actuarially Determined Contribution Rate	24.77%	23.40%	22.07%
<b>Insurance</b>			
Actuarial Accrued Liability	\$ 3,562,118	\$ 3,450,484	\$ 3,344,299
Actuarial Value of Assets	2,947,312	2,947,312	2,947,312
Unfunded Actuarial Accrued Liability	614,806	503,172	396,987
Funded Ratio	82.7%	85.4%	88.1%
Actuarially Determined Contribution Rate	3.92%	3.39%	2.87%
<b>Combined</b>			
Actuarial Accrued Liability	\$ 18,874,245	\$ 18,345,390	\$ 17,841,547
Actuarial Value of Assets	10,663,193	10,663,193	10,663,193
Unfunded Actuarial Accrued Liability	8,211,052	7,682,197	7,178,354
Funded Ratio	56.5%	58.1%	59.8%
Actuarially Determined Contribution Rate	28.69%	26.79%	24.94%



**Sensitivity Analysis - Discount Rate  $\pm$  0.50%****Non-Hazardous Members****(Dollar amounts expressed in thousands)**

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
(1)	(2)	(3)	(4)
Payroll Growth Rate	2.00%	2.00%	2.00%
Inflation Rate	2.30%	2.30%	2.30%
Discount Rate - Retirement	5.75%	6.25%	6.75%
Discount Rate - Insurance	5.75%	6.25%	6.75%
<b>Retirement</b>			
Actuarial Accrued Liability	\$ 15,749,553	\$ 14,894,906	\$ 14,117,539
Actuarial Value of Assets	7,715,881	7,715,881	7,715,881
Unfunded Actuarial Accrued Liability	8,033,672	7,179,025	6,401,658
Funded Ratio	49.0%	51.8%	54.7%
Actuarially Determined Contribution Rate	26.23%	23.40%	20.80%
<b>Insurance</b>			
Actuarial Accrued Liability	\$ 3,679,570	\$ 3,450,484	\$ 3,243,220
Actuarial Value of Assets	2,947,312	2,947,312	2,947,312
Unfunded Actuarial Accrued Liability	732,258	503,172	295,908
Funded Ratio	80.1%	85.4%	90.9%
Actuarially Determined Contribution Rate	4.47%	3.39%	2.38%
<b>Combined</b>			
Actuarial Accrued Liability	\$ 19,429,123	\$ 18,345,390	\$ 17,360,759
Actuarial Value of Assets	10,663,193	10,663,193	10,663,193
Unfunded Actuarial Accrued Liability	8,765,930	7,682,197	6,697,566
Funded Ratio	54.9%	58.1%	61.4%
Actuarially Determined Contribution Rate	30.70%	26.79%	23.18%



**Sensitivity Analysis - Discount Rate  $\pm$  0.25%****Hazardous Members****(Dollar amounts expressed in thousands)**

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
(1)	(2)	(3)	(4)
Payroll Growth Rate	2.00%	2.00%	2.00%
Inflation Rate	2.30%	2.30%	2.30%
Discount Rate - Retirement	6.00%	6.25%	6.50%
Discount Rate - Insurance	6.00%	6.25%	6.50%
<b>Retirement</b>			
Actuarial Accrued Liability	\$ 5,799,604	\$ 5,629,458	\$ 5,467,573
Actuarial Value of Assets	2,628,621	2,628,621	2,628,621
Unfunded Actuarial Accrued Liability	3,170,983	3,000,837	2,838,952
Funded Ratio	45.3%	46.7%	48.1%
Actuarially Determined Contribution Rate	45.25%	42.81%	40.46%
<b>Insurance</b>			
Actuarial Accrued Liability	\$ 1,805,341	\$ 1,751,203	\$ 1,699,848
Actuarial Value of Assets	1,475,635	1,475,635	1,475,635
Unfunded Actuarial Accrued Liability	329,706	275,568	224,213
Funded Ratio	81.7%	84.3%	86.8%
Actuarially Determined Contribution Rate	7.77%	6.78%	5.81%
<b>Combined</b>			
Actuarial Accrued Liability	\$ 7,604,945	\$ 7,380,661	\$ 7,167,421
Actuarial Value of Assets	4,104,256	4,104,256	4,104,256
Unfunded Actuarial Accrued Liability	3,500,689	3,276,405	3,063,165
Funded Ratio	54.0%	55.6%	57.3%
Actuarially Determined Contribution Rate	53.02%	49.59%	46.27%



**Sensitivity Analysis - Discount Rate  $\pm$  0.50%****Hazardous Members****(Dollar amounts expressed in thousands)**

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
(1)	(2)	(3)	(4)
Payroll Growth Rate	2.00%	2.00%	2.00%
Inflation Rate	2.30%	2.30%	2.30%
Discount Rate - Retirement	5.75%	6.25%	6.75%
Discount Rate - Insurance	5.75%	6.25%	6.75%
<b>Retirement</b>			
Actuarial Accrued Liability	\$ 5,978,810	\$ 5,629,458	\$ 5,313,349
Actuarial Value of Assets	2,628,621	2,628,621	2,628,621
Unfunded Actuarial Accrued Liability	3,350,189	3,000,837	2,684,728
Funded Ratio	44.0%	46.7%	49.5%
Actuarially Determined Contribution Rate	47.81%	42.81%	38.21%
<b>Insurance</b>			
Actuarial Accrued Liability	\$ 1,862,454	\$ 1,751,203	\$ 1,651,082
Actuarial Value of Assets	1,475,635	1,475,635	1,475,635
Unfunded Actuarial Accrued Liability	386,819	275,568	175,447
Funded Ratio	79.2%	84.3%	89.4%
Actuarially Determined Contribution Rate	8.80%	6.78%	4.88%
<b>Combined</b>			
Actuarial Accrued Liability	\$ 7,841,264	\$ 7,380,661	\$ 6,964,431
Actuarial Value of Assets	4,104,256	4,104,256	4,104,256
Unfunded Actuarial Accrued Liability	3,737,008	3,276,405	2,860,175
Funded Ratio	52.3%	55.6%	58.9%
Actuarially Determined Contribution Rate	56.61%	49.59%	43.09%





March 14, 2022

Board of Trustees  
County Employees Retirement System  
Perimeter Park West  
1260 Louisville Road  
Frankfort, KY 40601

**Re: Economic Assumptions for Use in the Upcoming June 30, 2022 Actuarial Valuation**

Dear Trustees of the Board:

Each year the actuarial committee reviews the principal economic assumptions (i.e. price inflation, investment return assumption, and payroll growth) for use in the actuarial valuation. Economic and demographic assumptions used in an actuarial valuation should be representative of the System's expected long-term experience. These assumptions are not intended to consistently model short-term (e.g. the next two to five years) experience, but are supposed to be representative of expected long-term trends. As a result, short-term experience may differ significantly from the long-term assumption used in an actuarial valuation.

The three primary economic assumptions used in an actuarial valuation include the price inflation, investment return, and payroll growth assumption. The following analysis and exhibits provide our recommended assumptions to be adopted by the Board for use in the June 30, 2022 actuarial valuation and rationale for each recommendation.

Assumption	June 30, 2021 Valuation Adopted Assumption	June 30, 2022 Valuation Recommended Assumption
Price Inflation	2.30%	2.30%
Investment Return	6.25%	6.25%
Payroll Growth <sup>1</sup>	2.00%	2.00%

<sup>1</sup> The recommended payroll growth assumption includes an underlying assumption that future active membership will remain relatively unchanged.

### **Price Inflation Assumption**

Benefits provided to members in CERS are not explicitly impacted by the actual change in price inflation. The current price inflation assumption is 2.30%. We reviewed several sources that provide various perspectives of forward-looking inflation expectations and recommend the continued use of a 2.30% inflation assumption in the 2022 actuarial valuation.

We recognized that actual inflation as measured by CPI has been much higher than the current 2.30% assumption during the last 12 months. Additionally, many professional forecasters and economists expect that inflation will continue to be elevated above historical levels for the next two to three years. However, but given the long-time horizon of an actuarial valuation, and the relative immateriality of this assumption in the actuarial valuation, we believe a 2.30% inflation assumption continues to be reasonable for this purpose. Please see Exhibit 1 for more information on the comparison of future inflation expectations.

### **Investment Return Assumption**

The investment return assumption is perhaps the most important and most subjective assumption used in an actuarial valuation. It represents the expected long-term return on plan assets and is used to discount future expected benefit payments to the valuation date in order to determine the liabilities of the plan.

We believe the most appropriate approach in identifying a reasonable investment return assumption is to understand forward-looking expectations developed by professional investment consulting firms. To do this, we have analyzed CERS's investment policy with the capital market assumptions from five nationally recognized investment consultants, including Wilshire Advisors which is CERS's investment consultant. Some of these assumptions are based on a seven- to ten-year time horizon, while others are based on a longer 20- to 30-year time horizon. Since investment consultants update their assumptions on at least an annual basis, we also compared their expectations developed in 2022, to their prior year assumptions to better understand changes in their expectations. Attached is Exhibit 2 that provides this comparison for each investment consulting firm for 2021 and 2022.

It is our recommendation that the CERS Board adopt the continued use of a 6.25% investment return assumption for the valuation of the pension and insurance funds at June 30, 2022. Given the methodology used by the investment consultants to develop their expectations, it is possible their expectations for the shorter term revert higher as the economy enters an expected increasing interest rate setting.



### **Payroll Growth Assumption**

The payroll growth assumption is only used in development of the amortization cost component of the contribution rate. When emerging membership payroll changes are consistent with the payroll growth assumption, the amortization cost will remain relatively constant as a percentage of payroll (assuming there are no other gains or losses). However, if the future change in payroll is consistently less than assumed, then the amortization cost will gradually increase as a percentage of membership payroll.

The change in membership payroll is primarily driven by underlying changes in salary increases for individual members as well as the number of members earning benefits in the System. There are many external and economic factors that can influence the change in pay provided to individual members as well as the number of employees that participating employers maintain and provide with retirement and health benefits in the CERS Funds. The assumed rate of salary increases individuals receive are based on long-term expectations of average increases across all economic cycles that include times of expansion and contraction. Similarly, when reviewing the change in active membership headcount, our analysis considers the inherent long-term nature of this assumption across all economic cycles.

The current payroll growth assumption is 2.00% of pay for the Non-Hazardous and Hazardous funds (pension and insurance). In other words, the actuarial valuation assumes that total membership payroll will grow by 2% each year. Underlying this assumption is an implicit assumption that the active membership headcount will remain relatively unchanged in future years. Note, that in any given year, active headcount could increase or decrease but as long as membership payroll continues to change as assumed, the amortization cost as a percentage of pay will not change due to changes in payroll.

Exhibit three provides a ten-year historical experience of the change in membership headcount and membership payroll. Based on conversations with KPPA associates and our observation of the economy, we believe the recent decrease in the number of active members in the CERS Non-Hazardous plan is temporary and driven by economic conditions as a result of the COVID-19 pandemic. Therefore, we believe it is reasonable to continue to assume that active membership headcount will remain relatively constant in future years for both the Non-Hazardous and Hazardous funds and that the 2.00% payroll growth assumption remains within a reasonable range of appropriate assumptions. We recommend the Board adopt a 2.00% payroll growth assumption for use in the June 30, 2022 actuarial valuation for both the Non-Hazardous and Hazardous plans.




### Closing Comments

This analysis was conducted in accordance with generally accepted actuarial principles and practices. We believe these recommended assumptions comply with Actuarial Standard of Practice No. 27, Selection of Economic Assumptions for Measuring Pension Obligations.

Both of the undersigned are members of the American Academy of Actuaries and meet all of the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. In addition, all of the undersigned are experienced in performing valuations for large public retirement systems.

Sincerely,



Daniel J. White, FSA, MAAA, EA  
Senior Consultant

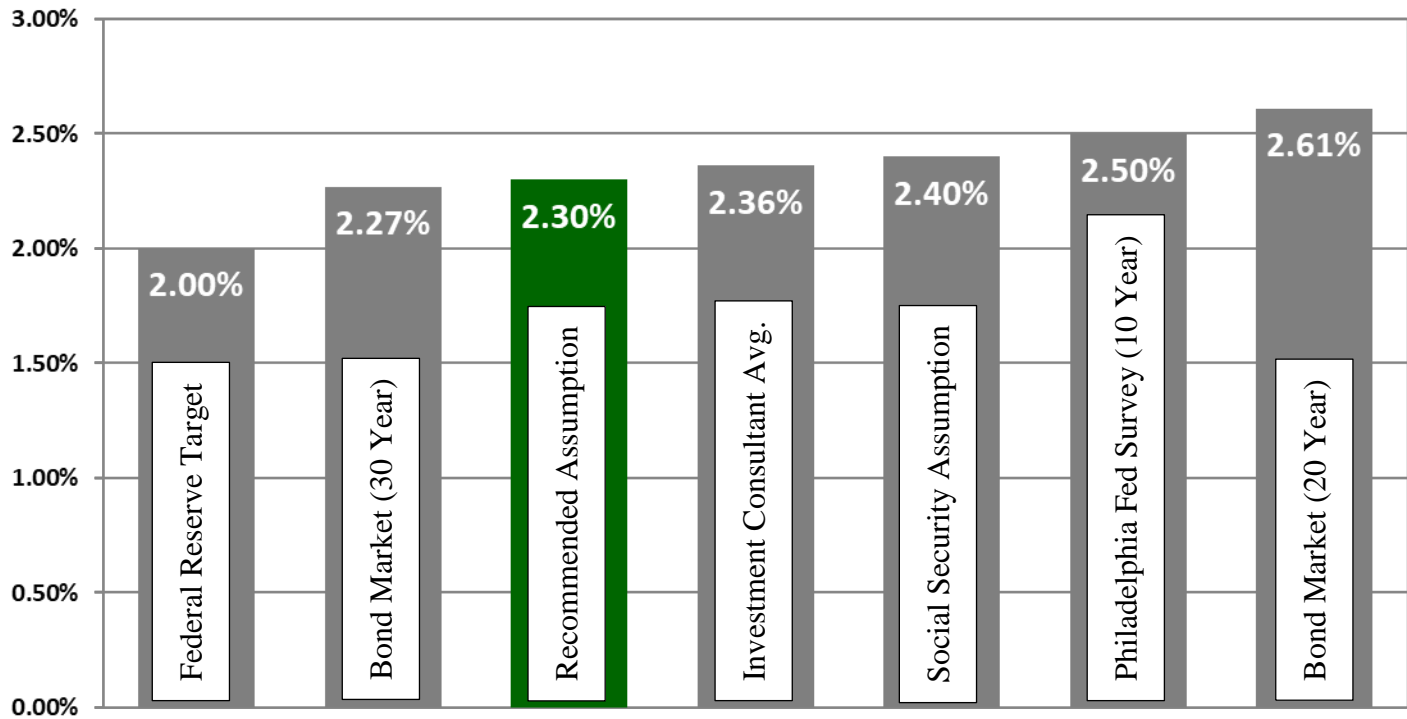


Janie Shaw, ASA, MAAA, EA  
Consultant

Enclosure

# Exhibit 1.

## Comparison of Price Inflation Assumption to Sources of Forward-Looking Expectations



## Exhibit 2.

### Review of Forward-Looking Capital Market Expectations Mapped CERS's Investment Policy

	Investment Consultant	50th Percentile Expected Return (Geometric)		Probability of Exceeding 6.25%	
		2022	2021	2022	2021
	(1)	(2)	(3)	(4)	(5)
<b>7 to 10 Year Expectations</b>	1	4.8%	5.3%	28%	35%
	2	4.9%	5.1%	33%	35%
	3	5.2%	5.3%	35%	37%
	4	5.3%	5.3%	35%	35%
	5	5.4%	5.3%	38%	36%
<b>20 to 30 Year Expectations</b>	1	6.2%	6.2%	50%	49%
	2	6.5%	6.4%	53%	52%
7-10 Year Expectation Avg:		5.1%	5.3%	34%	36%
20-30 Year Expectation Avg:		6.4%	6.3%	52%	51%

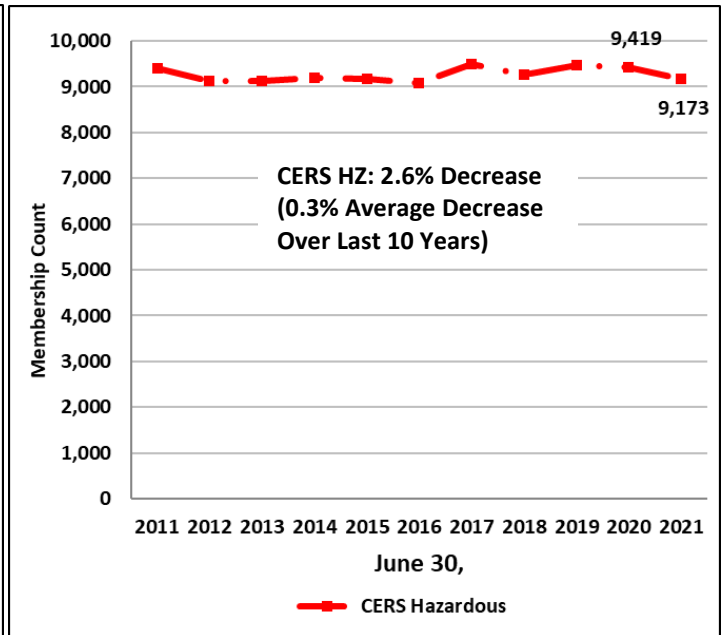
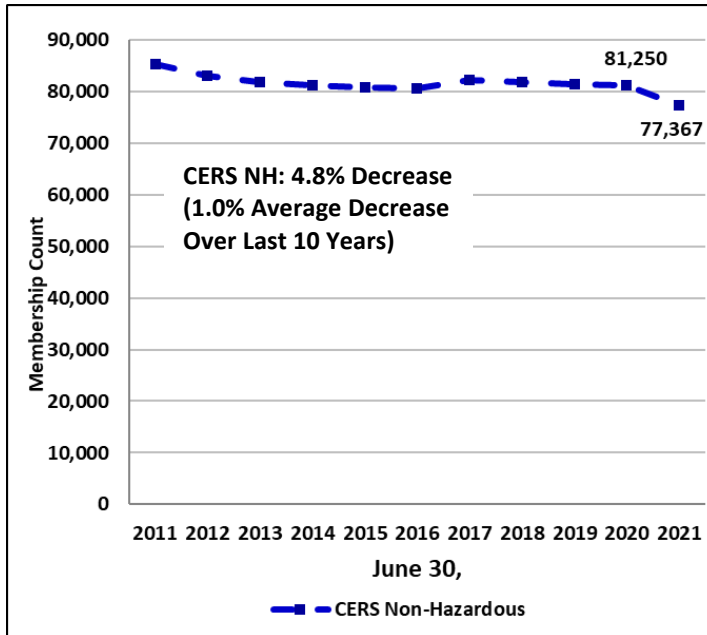
The primary purpose of performing this analysis using multiple investment consulting firms is to quantify the possible difference in forward looking return expectations within the professional investment community. Additionally, we have provided this analysis based on information from the following investment consulting firms:

- BNY Mellon
- J.P. Morgan
- Mercer
- NEPC
- Wilshire Associates

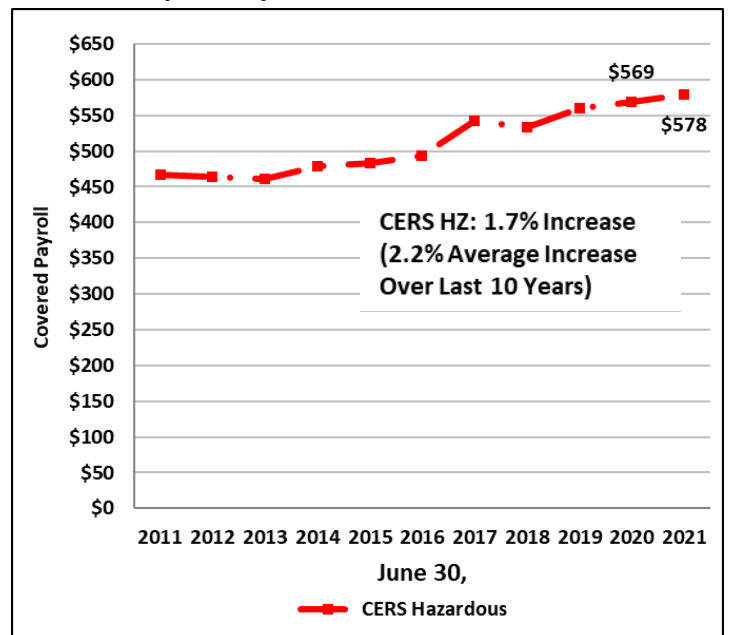
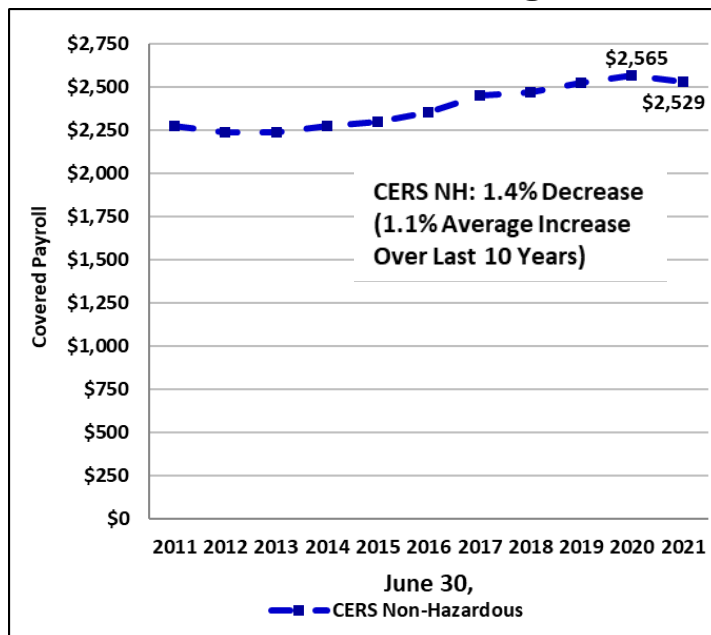


# Exhibit 3. Review of Historical Change in Active Membership Headcount and Payroll

## Change in Active Membership Headcount



## Change in Membership Payroll





## MEMORANDUM

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

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

**Date:** March 16, 2022

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

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The County Employees Retirement System held a regularly scheduled quarterly meeting on February 24, 2022.

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 eleven (11) 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.

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

2. The following items were also discussed during the Finance Committee meeting:
  - a. KPPA staff presented quarterly financial reports consisting of:
    - a. YTD Financial Spreadsheet
    - b. Administration Expense to Budget
    - c. Contribution Report
    - d. Outstanding Invoice Report
    - e. Penalty Waiver Report

- b. There was a brief discussion of the work being done by the Joint Work Group on administrative cost allocation. It was determined that the work group had finalized their work and the recommendations would be made to the KPPA Board of Trustees at their regular meeting on March 24, 2022.

**\*Board of Trustees Action Required**



## Combining Statement of Fiduciary Net Position - Pension Funds

As of December 31, 2021, with Comparative Totals as of December 31, 2020 (\$ in Thousands)

	CERS		TOTAL		Percentage of Change	Notes
ASSETS	Non-Hazardous	Hazardous	2022	2021		
CASH AND SHORT-TERM INVESTMENTS						
Cash Deposits	\$199	\$44	\$243	\$639	-61.96%	1
Short-term Investments	361,412	139,545	500,957	348,420	43.78%	2
Total Cash and Short-term Investments	361,611	139,589	501,200	349,059	43.59%	
RECEIVABLES						
Accounts Receivable	67,028	30,215	97,243	80,967	20.10%	3
Accounts Receivable - Investments	91,192	31,328	122,520	292,505	-58.11%	4
Total Receivables	158,220	61,544	219,763	373,472	-41.16%	
INVESTMENTS, AT FAIR VALUE						
Core Fixed Income	1,046,376	360,222	1,406,598	1,448,435	-2.89%	
Public Equities	4,161,913	1,402,123	5,564,036	4,850,805	14.70%	5
Private Equities	730,453	244,872	975,325	882,153	10.56%	6
Specialty Credit	1,473,307	503,555	1,976,862	1,743,347	13.39%	7
Derivatives	(767)	(265)	(1,032)	2,903	-135.53%	8
Absolute Return	-	-	-	105,645	-100.00%	9
Real Return	535,104	180,738	715,842	646,167	10.78%	10
Opportunistic	255,392	84,429	339,821	282,049	20.48%	11
Real Estate	438,492	139,686	578,178	436,364	32.50%	12
Total Investments, at Fair Value	8,640,271	2,915,360	11,555,631	10,397,867	11.13%	
Securities Lending Collateral Invested	261,773	88,859	350,632	288,373	21.59%	13
CAPITAL/INTANGIBLE ASSETS						
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)	(1,842)	0.67%	
Accumulated Amortization	(9,612)	(819)	(10,431)	(10,140)	2.87%	
Total Capital Assets	349	8	357	660	-45.97%	
Total Assets	9,422,223	3,205,360	12,627,583	11,409,431	10.68%	
LIABILITIES						
Accounts Payable	3,563	681	4,244	4,506	-5.80%	
Investment Accounts Payable	169,551	57,996	227,547	405,932	-43.94%	14
Securities Lending Collateral	261,773	88,859	350,632	288,373	21.59%	15
Total Liabilities	434,887	147,536	582,423	698,810	-16.66%	
Total Fiduciary Net Position Restricted for Pension Benefits						
	\$8,987,336	\$3,057,824	\$12,045,160	\$10,710,621	12.46%	

### NOTE - Variance Explanation

### Differences due to rounding

- 1) Variance is a result of continuous fluctuation of deposits and transactions that flow through the cash account.
- 2) Short Term Investments is primarily comprised of the cash on hand with the custodial bank along with any small amounts of cash managers and brokers may have; therefore, the variance is driven by cash flow.
- 3) The increase in Accounts Receivable is due to an increase in the month-end employer contributions accrual (increase in covered payroll and contribution rates).
- 4) The variance in Investment Accounts Receivable is due to pending trades.
- 5) The increase in Public Equities is due to positive market conditions resulting in increased market values.
- 6) The increase in Private Equities is a result of additional funding and positive market conditions resulting in increased market values.
- 7) The increase in Specialty Credit is due to additional funding and positive market conditions resulting in increased market values.
- 8) Variance is a result of hedging and arbitration of risk within the portfolios.
- 9) The decline in Absolute Return is a result of the merging of the Absolute Return asset class with the Real Return asset class.
- 10) The increase in Real Return is a result of the merging of the Absolute Return asset class with the Real Return asset class and positive market conditions resulting in increased market values.
- 11) The increase in Opportunistic is due to additional funding and positive market conditions resulting in increased market values.
- 12) The increase in Real Estate is due to additional funding and positive market conditions resulting in increased market values.
- 13) Variance is a result of the demands of the Securities Lending Program.

NOTE - Variance Explanation continued on next page.

- 14) *The variance in Investment Accounts Payable is due to pending trades.*
- 15) *Variance is a result of the demands of the Securities Lending Program.*





## Combining Statement of Changes In Fiduciary Net Position - Pension Funds

For the six month period ending December 31, 2021, with Comparative Totals as of December 31, 2020 (\$ in Thousands)

	CERS		Total		Percentage of Change	Notes
	Non-Hazardous	Hazardous	2022	2021		
ADDITIONS						
Member Contributions	\$88,222	\$35,629	\$123,851	\$110,800	11.78%	1
Employer Contributions	270,101	107,105	377,206	315,712	19.48%	2
General Fund Appropriations	-	-	-	-		
Pension Spiking Contributions	29	33	62	83	-25.49%	3
Health Insurance Contributions (HB1)	(1)	1	-	1		
Employer Cessation Contributions	-	-	-	-		
Total Contributions	358,351	142,769	501,120	426,596	17.47%	
INVESTMENT INCOME						
From Investing Activities						
Net Appreciation (Depreciation) in FV of Investments	338,334	111,843	450,178	1,270,277	-64.56%	4
Interest/Dividends	124,563	42,108	166,671	126,148	32.12%	5
Total Investing Activities Income	462,897	153,951	616,848	1,396,426		
Less: Investment Expense	23,279	6,659	29,937	23,348	28.22%	6
Less: Performance Fees	35,221	11,541	46,762	21,416	118.35%	7
Net Income from Investing Activities	404,398	135,751	540,149	1,351,661		
From Securities Lending Activities						
Securities Lending Income	275	95	370	337		
Less: Securities Lending Borrower Rebates (Income)/Expense	(479)	(163)	(642)	(231)		
Less: Securities Lending Agent Fees	113	39	152	85		
Net Income from Securities Lending	641	219	860	482	78.32%	8
Net Investment Income	405,039	135,971	541,009	1,352,144	-59.99%	
Total Additions	763,390	278,739	1,042,129	1,778,740	-41.41%	
DEDUCTIONS						
Benefit Payments	425,838	151,804	577,642	553,311	4.40%	
Refunds	9,785	2,548	12,333	9,984	23.53%	9
Administrative Expenses	11,098	984	12,082	11,402	5.97%	
Total Deductions	446,721	155,336	602,057	574,697	4.76%	
Net Increase (Decrease) in Fiduciary Net Position Restricted for Pension Benefits	316,668	123,403	440,072	1,204,043		
Total Fiduciary Net Position Restricted for Pension Benefits						
Beginning of Period	8,670,667	2,934,421	11,605,088	9,506,578	22.07%	
End of Period	\$8,987,336	\$3,057,824	\$12,045,160	\$10,710,621	12.46%	

### NOTE - Variance Explanation Differences due to rounding

- 1) Member Contributions increased due to an increase in covered payroll.
- 2) Employer Contributions increased due to an increase in covered payroll as well as an increase in the Employer Contribution rates.
- 3) Pension Spiking contributions decreased due to a change in statute. Pension spiking is now the member's responsibility.
- 4) The decrease in Net Appreciation in Fair Value of Investments is a result of less favorable market conditions resulting in unrealized losses in public equity for the first half of FY22 when compared to the first half of FY21.
- 5) The increase in Interest/Dividends is due to increased income from Private Equity, Core Fixed Income, and Specialty Credit asset classes.
- 6) The increase in Investment Expense is a result of an increase in assets due to additional contributions and increase in market values.
- 7) The increase in Performance fees is due to realized and unrealized gains resulting in higher performance fees primarily within private equity.
- 8) Variance is a result of the demand of the Securities Lending Program.
- 9) The increase in Refunds was due to an increase in refunds taken by CERS non-haz members who terminated employment and were not eligible for a retirement benefit.



## Combining Statement of Fiduciary Net Position - Insurance Fund

As of December 31, 2021, with Comparative Totals as of December 31, 2020 (\$ In Thousands)

	CERS		TOTAL		Percentage of	
ASSETS	Non-Hazardous	Hazardous	2022	2021	Change	Notes
CASH AND SHORT-TERM INVESTMENTS						
Cash Deposits	\$48	\$57	\$105	\$198	-46.73%	1
Short-term Investments	270,552	96,577	367,129	173,435	111.68%	2
Total Cash and Short-term Investments	270,600	96,634	367,234	173,632	111.50%	
RECEIVABLES						
Accounts Receivable	18,592	7,859	26,451	20,142	31.32%	3
Investment Accounts Receivable	33,231	16,972	50,202	121,696	-58.75%	4
Total Receivables	51,822	24,831	76,653	141,839	-45.96%	
INVESTMENTS, AT FAIR VALUE						
Core Fixed Income	371,036	195,341	566,377	572,263	-1.03%	
Public Equities	1,423,930	732,251	2,156,181	1,893,902	13.85%	5
Specialty Credit	550,144	273,680	823,824	723,913	13.80%	6
Private Equities	281,560	158,263	439,823	409,488	7.41%	
Derivatives	(202)	(106)	(308)	1,236	-124.90%	7
Absolute Return	-	-	-	40,315	-100.00%	8
Real Return	182,361	95,616	277,977	255,233	8.91%	
Opportunistic	103,122	56,180	159,302	132,219	20.48%	9
Real Estate	151,537	83,047	234,584	175,211	33.89%	10
Total Investments, at Fair Value	3,063,489	1,594,270	4,657,760	4,203,781	10.80%	
Securities Lending Collateral Invested	88,366	44,868	133,234	101,940	30.70%	11
Total Assets	3,474,277	1,760,603	5,234,880	4,621,191	13.28%	
LIABILITIES						
Accounts Payable	221	68	289	320	-9.85%	
Investment Accounts Payable	60,550	31,283	91,833	168,274	-45.43%	12
Securities Lending Collateral	88,366	44,868	133,234	101,940	30.70%	13
Total Liabilities	149,137	76,218	225,356	270,534	-16.70%	
Total Fiduciary Net Position Restricted for OPEB	\$3,325,140	\$1,684,385	\$5,009,524	\$4,350,658	15.14%	

### NOTE - Variance Explanation Differences due to rounding

- 1) Variance is a result of continuous fluctuation of deposits and transactions that flow through the cash account.
- 2) Short Term Investments is primarily comprised of the cash on hand with the custodial bank along with any small amounts of cash managers and brokers may have; therefore, the variance is driven by cash flow.
- 3) The increase in Accounts Receivable is due to an increase in the month-end employer contributions accrual (increase in covered payroll and contribution rates).
- 4) The variance in Investment Accounts Receivable is due to pending trades.
- 5) The increase in Public Equities is due to additional funding and positive market conditions resulting in increased market values.
- 6) The increase in Specialty Credit is due to additional funding and positive market conditions increasing market values.
- 7) Variance is a result of hedging and arbitration of risk within the portfolios.
- 8) The decline in Absolute Return is a result of the merging of the Absolute Return asset class with the Real Return asset class.
- 9) The increase in Opportunistic is due to additional funding and positive market conditions increasing market values.
- 10) The increase in Real Estate is due to additional funding and positive market conditions increasing market values.
- 11) Variance is a result of the demands of the Securities Lending Program.
- 12) The variance in Investment Accounts Payable is due to pending trades.
- 13) Variance is a result of the demands of the Securities Lending Program.



### Combining Statement of Changes In Fiduciary Net Position - Insurance Fund

For the six month period ending December 31, 2021, with Comparative Totals as of December 31, 2020 (\$ In Thousands)

	CERS		TOTAL		Percentage of Change	Notes
	Non-Hazardous	Hazardous	2022	2021		
ADDITIONS						
Employer Contributions	\$78,695	\$35,546	\$114,242	\$90,015	26.91%	1
Medicare Drug Reimbursement	1	-	1	1	4.56%	
Insurance Premiums	267	4	272	267	1.60%	
Humana Gain Share Payment	8,912	1,259	10,171	23,666	-57.02%	2
Retired Re-employed Healthcare	2,409	711	3,120	3,338	-6.54%	
Health Insurance Contributions (HB1)	7,530	1,827	9,357	7,965	17.48%	3
Employer Cessation Contributions	-	-	-	-		
Total Contributions	97,815	39,347	137,162	125,252	9.51%	
INVESTMENT INCOME						
From Investing Activities						
Net Appreciation (Depreciation) in FV of Investments	130,326	70,607	200,933	509,235	-60.54%	4
Interest/Dividends	42,592	22,295	64,887	50,202	29.25%	5
Total Investing Activities Income	172,918	92,902	265,820	559,437		
Less: Investment Expense	7,563	4,007	11,570	10,276	12.59%	6
Less: Performance Fees	13,648	7,670	21,318	11,326	88.23%	7
Net Income from Investing Activities	151,707	81,224	232,932	537,835		
From Securities Lending Activities						
Securities Lending Income	96	48	144	130		
Less: Securities Lending Borrower Rebates (Income)/Expense	(151)	(77)	(228)	(93)		
Less: Securities Lending Agent Fees	37	19	56	33		
Net Income from Securities Lending	210	106	316	189	67.26%	8
Net Investment Income	151,917	81,331	233,248	538,025	-56.65%	
Total Additions	249,732	120,678	370,410	663,276	-44.15%	
Healthcare Premiums Subsidies	64,117	43,727	107,844	113,370	-4.87%	
Administrative Expenses	471	248	719	644	11.57%	9
Self-Funded Healthcare Costs	1,785	129	1,913	1,788	7.04%	
Excise Tax Insurance	6	-	6	-		
Total Deductions	66,378	44,104	110,483	115,802	-4.59%	
Net Increase (Decrease) in Fiduciary Net Position Restricted for OPEB	183,354	76,574	259,927	547,474		
Total Fiduciary Net Position Restricted for OPEB						
Beginning of Period	3,141,786	1,607,811	4,749,597	3,803,183	24.88%	
End of Period	\$3,325,140	\$1,684,385	\$5,009,524	\$4,350,658	15.14%	

**NOTE - Variance Explanation****Differences due to rounding**

- 1) Employer Contributions increased due to an increase in covered payroll as well as an increase in the Employer Contribution rates.
- 2) Humana Gain Share payments will fluctuate based on timing and actual claims paid.
- 3) Health Insurance Contributions will continue to rise as Tier 3 members increase.
- 4) The decrease in Net Appreciation in Fair Value of Investments is a result of less favorable market conditions resulting in unrealized losses in public equity for the first half of FY22 when compared to the first half of FY21.
- 5) The increase in Interest/Dividends is due to increased income from Private Equity, Core Fixed Income, and Specialty Credit asset classes.
- 6) The increase in Investment Expense is a result of an increase in assets due to additional contributions and increase in market values.
- 7) The increase in Performance fees is due to realized and unrealized gains resulting in higher performance fees primarily within private equity.
- 8) Variance is a result of the demand of the Securities Lending Program.
- 9) Administrative Expenses increased due to an increase in admin fees paid to the Department of Employee Insurance (under 65 retirees).

**KPPA ADMINISTRATIVE BUDGET FY 2021-2022**  
**BUDGET-TO-ACTUAL ANALYSIS**  
**As of December 31, 2021**

Account Name	Budgeted	Actual Expense	Remaining	Percent Remaining	CERS NHZ Actual Expense	CHAZ Actual Expense	Total CERS Actual Expense
<b>PERSONNEL</b>					59.75%	5.29%	
<b>Staff</b>							
Salaries	\$16,900,000	\$8,048,638	\$8,851,362	52.37%	\$4,809,061	\$425,773	\$5,234,834
Wages (Overtime)	342,000	107,186	234,814	68.66%	64,044	5,670	69,714
Emp Paid Retirement	14,478,107	6,422,459	8,055,649	55.64%	3,837,419	339,748	4,177,167
Emp Paid Health Ins	2,500,000	1,296,865	1,203,135	48.13%	774,877	68,604	843,481
Emp Paid Sick Leave	115,650	800	114,850	99.31%	478	42	520
Workers Compensation	77,100	75,163	1,937	2.51%	44,910	3,976	48,886
Unemployment	3,600	-	3,600	100.00%	-	-	-
Other Personnel	1,130,250	573,531	556,719	49.26%	342,685	30,340	373,025
Employee Training	18,400	4,843	13,557	73.68%	2,894	256	3,150
Bonds	-	41	(41)	-	24	2	27
<b>Staff Subtotal</b>	<b>35,565,107</b>	<b>16,529,526</b>	<b>19,035,582</b>	<b>53.52%</b>	<b>9,876,392</b>	<b>874,412</b>	<b>10,750,804</b>
<b>LEGAL &amp; AUDITING SERVICES</b>							
Legal Hearing Officers	84,600	32,314	52,286	61.80%	19,308	1,709	21,017
Legal (Stoll, Keenon)	180,000	60,445	119,556	66.42%	36,116	3,198	39,313
Frost Brown (Tax Advisor)	173,000	1,464	171,536	99.15%	875	77	952
Reinhart	24,000	-	24,000	100.00%	-	-	-
Ice Miller	336,000	21,533	314,467	93.59%	12,866	1,139	14,005
Johnson, Bowman, Branco LLC	150,000	43,225	106,775	71.18%	25,827	2,287	28,114
Denton	150,000	-	150,000	100.00%	-	-	-
Legal Expense	12,000	-	12,000	100.00%	-	-	-
Auditing	118,350	85,655	32,695	27.63%	51,179	4,531	55,710
<b>CONSULTING SERVICES</b>							
Medical Reviewers	1,200,000	625,666	574,334	47.86%	373,835	33,098	406,933
Escrow for Actuary Fees	12,000	-	12,000	100.00%	-	-	-
<b>CONTRACTUAL SERVICES</b>							
Miscellaneous Contracts	22,750	12,079	10,671	46.91%	7,217	639	7,856
Human Resources Consulting	6,600	5,794	806	12.21%	3,462	307	3,768
Actuarial Services	700,000	147,747	552,253	78.89%	88,279	7,816	96,095
Facility Security Charges	112,000	38,862	73,138	65.30%	23,220	2,056	25,276
<b>PERSONNEL SUBTOTAL</b>	<b>\$38,846,407</b>	<b>\$17,604,310</b>	<b>\$21,242,099</b>	<b>54.68%</b>	<b>\$10,518,575</b>	<b>\$931,268</b>	<b>\$11,449,843</b>
<b>OPERATIONAL</b>							
Natural Gas	\$25,200	\$7,144	\$18,056	71.65%	\$4,269	\$378	\$4,646
Electric	138,000	55,442	82,558	59.82%	33,127	2,933	36,059
Rent-NonState Building	52,000	25,321	26,679	51.31%	15,129	1,339	16,469
Building Rental - PPW	1,100,000	481,016	618,984	56.27%	287,407	25,446	312,853
Copier Rental	122,587	31,247	91,340	74.51%	18,670	1,653	20,323
Rental Carpool	4,800	1,940	2,860	59.58%	1,159	103	1,262
Vehicle/Equip. Mainten.	1,350	249	1,101	81.56%	149	13	162
Postage	610,000	150,771	459,229	75.28%	90,086	7,976	98,061
Freight	600	155	445	74.17%	93	8	101
Printing (State)	6,000	4,548	1,452	24.20%	2,717	241	2,958
Printing (non-state)	112,500	30,002	82,498	73.33%	17,926	1,587	19,513

Account Name	Budgeted	Actual Expense	Remaining	Percent Remaining	CERS NHZ Actual Expense	CHAZ Actual Expense	Total CERS Actual Expense
Insurance	6,000	5,422	578	9.63%	3,240	287	3,526
Garbage Collection	6,000	2,647	3,353	55.88%	1,582	140	1,722
Conference Expense	25,750	9,052	16,699	64.85%	5,409	479	5,887
MARS Usage	52,800	13,550	39,250	74.34%	8,096	717	8,813
COVID-19 Expenses	168,000	6,171	161,829	96.33%	3,687	326	4,014
Office Supplies	42,600	25,767	16,833	39.51%	15,396	1,363	16,759
Furniture & Office Equipment	9,600	-	9,600	100.00%	-	-	-
Travel (In-State)	12,600	3,611	8,989	71.34%	2,158	191	2,349
Travel (Out of State)	45,150	382	44,768	99.15%	228	20	248
Dues & Subscriptions	61,600	32,839	28,761	46.69%	19,621	1,737	21,358
Miscellaneous	1,600	31,063	(29,463)	-1841.44%	18,560	1,643	20,203
COT Charges	24,000	9,850	14,150	58.96%	5,885	521	6,406
Telephone - Wireless	5,400	2,817	2,583	47.83%	1,683	149	1,832
Telephone - Other	120,000	62,180	57,820	48.18%	37,153	3,289	40,442
Computer Equip./Software	2,640,000	1,397,212	1,242,788	47.08%	834,834	73,913	908,747
<b>OPERATIONAL SUBTOTAL</b>	<b>\$5,394,137</b>	<b>\$2,390,397</b>	<b>\$3,003,740</b>	<b>55.69%</b>	<b>\$1,428,263</b>	<b>\$126,452</b>	<b>\$1,554,715</b>
<b>SUBTOTAL</b>	<b>\$44,240,544</b>	<b>\$19,994,706</b>	<b>\$24,245,838</b>	<b>54.80%</b>	<b>\$11,946,838</b>	<b>\$1,057,720</b>	<b>\$13,004,558</b>
<b>Major Legislative Implementation</b>	<b>3,764,956</b>	<b>-</b>	<b>3,764,956</b>	<b>100.00%</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>TOTALS</b>	<b>\$48,005,500</b>	<b>\$19,994,706</b>	<b>\$28,010,794</b>	<b>58.35%</b>	<b>\$11,946,837</b>	<b>\$1,057,720</b>	<b>\$13,004,557</b>

Differences due to rounding

Fund	Budgeted	Actual Expense	% of Total CERS Actual Expense
<b>CERS Non-Hazardous</b>	<b>\$28,683,286</b>	<b>\$11,946,837</b>	<b>59.75%</b>
<b>CHAZ</b>	<b>\$2,539,491</b>	<b>\$1,057,720</b>	<b>5.29%</b>
<b>TOTAL</b>	<b>\$31,222,777</b>	<b>\$13,004,557</b>	

Fund - Specific Expenses	CERS	CERS	Amount
	Non-Haz	Hazardous	
CERS Adjustment	\$-	\$-	\$57,097
CERS Actual	-	-	
KERS Adjustment	-	-	61,550
KERS Legal Actual	-	-	
Subtotal Plan Specific	-	-	118,647
<b>Total Expenses</b>	<b>\$11,946,837</b>	<b>\$1,057,720</b>	

**Pension Fund Contribution Report**

For the six month period ending December 31, 2021, with Comparative Totals as of December 31, 2020 (\$ in Millions)



	<b>County Employees Retirement System</b>			
	<b>Non-Hazardous</b>		<b>Hazardous</b>	
	<b>FY22</b>	<b>FY21</b>	<b>FY22</b>	<b>FY21</b>
Member Contributions	\$88.2	\$79.0	\$35.6	\$31.8
Employer Contributions	270.1	226.9	107.1	88.9
Net Investment Income	66.7	61.3	24.1	20.6
<b>Total Inflows</b>	<b>425.0</b>	<b>367.2</b>	<b>166.8</b>	<b>141.3</b>
Benefit Payments/Refunds	435.6	417.2	154.4	146.1
Administrative Expenses	11.1	10.5	1.0	0.9
<b>Total Outflows</b>	<b>446.7</b>	<b>427.7</b>	<b>155.4</b>	<b>147.0</b>
<b>NET Contributions</b>	<b>(21.7)</b>	<b>(60.5)</b>	<b>11.4</b>	<b>(5.7)</b>
Realized Gain/(Loss)	282.7	100.0	95.4	34.2
Unrealized Gain/(Loss)	55.6	849.5	16.4	286.6
<b>Change in Net Position</b>	<b>316.6</b>	<b>889.0</b>	<b>123.2</b>	<b>315.1</b>
<b>Beginning of Period</b>	<b>8,670.7</b>	<b>7,110.9</b>	<b>2,934.4</b>	<b>2,395.7</b>
<b>End of Period</b>	<b>\$8,987.3</b>	<b>\$7,999.9</b>	<b>\$3,057.6</b>	<b>\$2,710.8</b>

*Differences due to rounding.***Insurance Fund Contribution Report**

For the six month period ending December 31, 2021, with Comparative Totals as of December 31, 2020 (\$ in Millions)



	<b>County Employees Retirement System</b>			
	<b>Non-Hazardous</b>		<b>Hazardous</b>	
	<b>FY22</b>	<b>FY21</b>	<b>FY22</b>	<b>FY21</b>
Employer Contributions	\$78.7	\$59.8	\$35.5	\$30.2
Insurance Premiums	9.2	21.0	1.3	3.0
Retired Reemployed Healthcare	2.4	2.7	0.7	0.6
Health Insurance Contributions	7.5	6.4	1.8	1.6
Net Investment Income	21.6	19.3	10.7	9.5
<b>Total Inflows</b>	<b>119.4</b>	<b>109.2</b>	<b>50.0</b>	<b>44.9</b>
Healthcare Premiums	65.9	73.0	43.9	42.1
Administrative Expenses	0.5	0.4	0.2	0.2
<b>Total Outflows</b>	<b>66.4</b>	<b>73.4</b>	<b>44.1</b>	<b>42.3</b>
<b>NET Contributions</b>	<b>53.0</b>	<b>35.8</b>	<b>5.9</b>	<b>2.6</b>
Realized Gain/(Loss)	97.8	34.2	52.0	18.1
Unrealized Gain/(Loss)	32.6	300.6	18.6	156.4
<b>Change in Net Position</b>	<b>183.4</b>	<b>370.6</b>	<b>76.5</b>	<b>177.1</b>
<b>Beginning of Period</b>	<b>3,141.7</b>	<b>2,498.1</b>	<b>1,607.8</b>	<b>1,305.1</b>
<b>End of Period</b>	<b>\$3,325.1</b>	<b>\$2,868.7</b>	<b>\$1,684.3</b>	<b>\$1,482.2</b>

*Differences due to rounding.*



## KENTUCKY PUBLIC PENSIONS AUTHORITY

### Outstanding Invoices by Type and Employer

Invoice Type	12/31/2021	9/30/2021	Change H/(L)
Averaging Refund to Employer	\$(404,226)	\$(431,762)	-6%
Employer Free Military and Decompression Service	241,111	280,778	-14%
Member Pension Spiking Refund	(28,852)	(28,486)	1%
Monthly Reporting Invoice	448,761	(50,017)	-997%
Penalty – Monthly Reporting	263,726	249,807	6%
Reinstatement	173,602	275,235	-37%
Actuarially Accrued Liability Contribution	785,053	428,570	83%
<b>Total</b>	<b>\$1,479,175</b>	<b>\$724,125</b>	<b>-104%</b>
Health Insurance Reimbursement	1,425,649	1,484,849	-4%
Omitted Employer	1,666,624	1,658,929	0%
Employer Pension Spiking*	1,370,393	1,371,944	0%
Standard Sick Leave	8,427,680	8,578,095	-2%
<b>Total</b>	<b>12,890,346</b>	<b>13,093,817</b>	<b>-2%</b>
<b>Grand Total</b>	<b>\$14,369,521</b>	<b>\$13,817,941</b>	<b>4%</b>

\*Pension Spiking invoices on this report are Employer Pension Spiking. By statute these invoices are due 12 months from 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..

Employer Name (Top Ten)	12/31/2021	9/30/2021	Change H/(L)
Kentucky State Police	\$7,719,865	\$7,398,671	4%
Kentucky River Regional Jail	979,925	979,925	0%
Kentucky River Community Care	724,328	361,582	100%
City of Covington	378,930	375,368	1%
Department for Community Based Services	336,126	370,767	-9%
Kenton County Airport Board	330,008	329,030	0%
City of Fort Thomas	228,635	224,422	2%
TARC - Transit Authority River City	213,106	209,713	2%
Henry County Fiscal Court	206,389	206,088	0%
Livingston County Fiscal Court	\$161,058	\$143	112876%

	Total Unpaid Balance	Number of Invoices
CERS	\$2,475,968	1,976
CERH	1,554,454	303
KERS	3,162,305	1,029
KERH	806,471	245
SPRS	6,364,310	139
<b>Grand Total:</b>	<b>\$14,363,508</b>	<b>3,692</b>

	Total Unpaid Balance	Number of Invoices
CERS/CERH	\$4,030,422	2,279
KERS/KERH	3,968,776	1,274
SPRS	6,364,310	139
<b>Grand Total:</b>	<b>\$14,363,508</b>	<b>3,692</b>





## County Employees Retirement System

## Penalty Invoices Report

From: 10/1/2021 To: 12/31/2021

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	\$-	\$-	10/21/2021	8/25/2021	CANC	Libraries	New Employer Reporting Official
1,000	-	-	10/26/2021	10/22/2021	CANC	Cities	New Employer Reporting Official
1,000	-	-	10/4/2021	10/30/2021	CANC	Cities	New Employer Reporting Official
1,000	-	-	10/4/2021	10/31/2021	CANC	Cities	New Employer Reporting Official
1,000	-	-	11/12/2021	11/26/2021	CANC	Conservation Districts	New Employer Reporting Official
1,000	-	-	11/12/2021	12/9/2021	CANC	Conservation Districts	New Employer Reporting Official
1,000	-	-	12/6/2021	12/17/2021	CANC	Parks and Recreation	Agency in good standing with KPPA
1,000	-	-	12/10/2021	1/2/2022	CANC	Airport Boards	New Employer Reporting Official
<b>Total</b>	<b>\$8,000</b>						
\$1,000	\$1,000	\$-	10/5/2021	11/4/2021	CRTD	Libraries	
1,000	1,000	-	10/8/2021	11/7/2021	CRTD	Fiscal Courts	
1,000	1,000	-	10/8/2021	11/7/2021	CRTD	Cities	
1,000	1,000	-	10/8/2021	11/7/2021	CRTD	Cities	
1,000	1,000	-	10/18/2021	11/17/2021	CRTD	Boards of Education	
1,000	1,000	-	11/4/2021	12/4/2021	CRTD	Conservation Districts	
1,000	1,000	-	11/15/2021	12/15/2021	CRTD	Conservation Districts	
1,000	1,000	-	11/15/2021	12/15/2021	CRTD	Conservation Districts	
1,000	1,000	-	11/17/2021	12/17/2021	CRTD	Libraries	
1,000	1,000	-	11/18/2021	12/18/2021	CRTD	Conservation Districts	
1,000	1,000	-	12/3/2021	1/2/2022	CRTD	County Attorneys	
1,000	1,000	-	12/3/2021	1/2/2022	CRTD	County Attorneys	
1,000	1,000	-	12/3/2021	1/2/2022	CRTD	County Attorneys	
1,000	1,000	-	12/3/2021	1/2/2022	CRTD	County Attorneys	
1,000	1,000	-	12/3/2021	1/2/2022	CRTD	County Attorneys	
1,000	1,000	-	12/9/2021	1/8/2022	CRTD	Conservation Districts	
1,000	1,000	-	12/10/2021	1/9/2022	CRTD	Utility Boards	
1,000	1,000	-	12/16/2021	1/15/2022	CRTD	Utility Boards	
2,280	2,280	-	12/22/2021	1/21/2022	CRTD	Boards of Education	
1,000	1,000	-	12/28/2021	1/27/2022	CRTD	County Attorneys	
<b>Total</b>	<b>\$22,280</b>						



CERS Board Meeting - Finance Committee Report

Invoice Amount	Invoice Remaining Balance	Delinquent Interest	Invoice Status Date	Invoice Due Date	Invoice Status	Employer Classification	Comments
\$1,000	\$-	\$-	10/27/2021	10/8/2016	PAID	Libraries	
1,000	-	-	11/5/2021	2/22/2018	PAID	Housing Authorities	
1,000	-	-	10/21/2021	3/7/2018	PAID	Fiscal Courts	
1,000	-	-	10/21/2021	5/30/2018	PAID	Fiscal Courts	
1,000	-	-	10/21/2021	5/30/2018	PAID	Fiscal Courts	
1,000	-	-	10/7/2021	2/1/2020	PAID	Housing Authorities	
1,000	-	-	10/4/2021	1/3/2021	PAID	Libraries	
1,000	-	-	12/29/2021	4/15/2021	PAID	Cities	
1,000	-	-	12/29/2021	4/15/2021	PAID	Cities	
1,000	-	-	12/29/2021	4/15/2021	PAID	Cities	
1,360	-	-	11/11/2021	10/23/2021	PAID	Cities	
1,000	-	-	10/18/2021	10/24/2021	PAID	Community Action Agencies	
1,000	-	-	10/5/2021	11/3/2021	PAID	Fiscal Courts	
1,000	-	-	10/26/2021	11/10/2021	PAID	Cities	
1,000	-	-	10/20/2021	11/18/2021	PAID	Fiscal Courts	
1,000	-	-	11/2/2021	11/21/2021	PAID	Fiscal Courts	
1,000	-	-	11/2/2021	11/25/2021	PAID	Cities	
1,000	-	-	12/15/2021	12/11/2021	PAID	Cities	
1,000	-	-	12/1/2021	12/12/2021	PAID	Cities	
1,012	-	-	12/8/2021	12/23/2021	PAID	Fiscal Courts	
<b>Total</b>	<b>\$20,372</b>						

**Notes:**

**Invoice Status:**

CANC - Cancelled

CRTD - Created

PAID - Paid



# KENTUCKY PUBLIC PENSIONS AUTHORITY

David L. Eager, Executive Director

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



Kentucky Public  
Pensions Authority

To: CERS Finance Committee

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

Date: February 24, 2022

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 Catlettsburg	Fire Chief	3/1/2022
City of Catlettsburg	Deputy Fire Chief	3/1/2022
City of Shelbyville	Firefighter Recruit	3/1/2022
Alexandria Fire District	Major	3/1/2022
Independence Fire District	Apparatus Operator	3/1/2022
Independence Fire District	Paramedic only	3/1/2022
City of Newport	Paramedic	3/1/2022
City of Newport	EMT	3/1/2022
City of Horse Cave	Chief of Police	3/1/2022
City of Horse Cave	Patrol Sergeant	3/1/2022
City of Horse Cave	Patrol Officer	3/1/2022

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.



## MEMORANDUM

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

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

**Date:** March 16, 2022

**Subject:** Summary of Investment Committee Regular Meeting

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The County Employees Retirement System held a regularly schedule Investment Committee meeting on February 16, 2022.

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. Approval of several Administrative Investment Policy Statements – The Investment Committee approved several Administrative Policies by unanimous vote of the Committee. Those Administrative Policies include:
    - i. Brokerage Policy
    - ii. Investment Transaction Procedures Policy
    - iii. Securities Trading Policy
    - iv. Investment Proxy Voting Policy
    - v. Real Estate Policy
    - vi. Securities Litigation Policy
    - vii. Investment Securities Lending Guidelines; and
    - viii. Manager and Placement Agent Statement of Disclosure

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

2. The following items were also discussed during the Investment Committee meeting:

- a. Pooling Language to be included in the Investment Policy Statement IPS). Steven Herbert presented suggested language for inclusion into the IPS which would provide assurance that the practice currently employed by BNY Mellon on our behalf had clear authorization. After hearing the presentation, the Committee decided to table the language until Steven was able to provide a training session for Trustees concerning the mechanics of pooling.
- b. A presentation on how management fees are calculated and reported was presented to the Committee by the Investment Operations group.
- c. The Investment Office presented rationale for the redemption of the Putnam Dynamic Asset Allocation. In July 2020, KPPA funded this allocation with \$700 million. It has been determined that the allocation is no longer appropriate for the Real Return allocation and actually resulted in a phantom overweight to public equity and fixed-income. This presentation was informational, as the Investment Committee Chairs had already given the go-ahead to redeem the allocation.
- d. The Committee was also informed about transaction reporting requirements of KRS 61.645 and KRS 78.782. Per those statutes, each plan must post to the website results on an individual manager level. The Investment Office discussed its plan to bring our reporting into compliance with the statutes.

**\*Board of Trustees Action Required**



## **County Employees Retirement Systems**

Investment Policy Statement

Adopted March 16, 2022

This Investment Policy Statement (IPS) is issued by the CERS Board of Trustees (CERS Board or CERS Trustees) of the County Employees Retirement System (CERS) in connection with investing in the pension and insurance trust funds (Funds) of CERS.

### **I. Introduction**

#### **A. Purpose**

The purpose of this IPS is to define the framework for investing the assets of CERS. This IPS is intended to provide general principles for establishing the goals of CERS, the allocation of assets, employment of outside asset management, and monitoring the results of the respective Funds.

The pension plans administered by the County Employees Retirement System (CERS) are Qualified Pension Plans under Section 401(a) of the Internal Revenue Code. Additionally, Kentucky Revised Statutes 61.701 establishes health insurance benefits to recipients of CERS. Kentucky Revised Statutes 61.702 provides that all amounts necessary to provide for insurance benefits shall be paid to the insurance fund. The CERS Board shall administer the insurance fund in the same manner as the pension funds.

#### **B. Philosophy**

The CERS Trustees recognize their fiduciary duty not only to invest CERS funds in formal compliance with the Prudent Person Rule, but also to manage those assets in continued recognition of the basic long-term nature of CERS. The CERS Trustees interpret this to mean, in addition to the specific guidelines and restrictions set forth in the law and this document, that the assets of CERS shall be proactively managed—that is, investment decisions regarding the particular asset classes, strategies, and securities to be purchased or sold shall be the result of a long-term investment strategy. Being a long-term investor means that CERS Trustees are willing to accept a certain amount of risk in pursuit of potentially higher reward and that the Trustees can afford to be patient for a longer period of time.

The CERS Trustees recognize that asset allocation is the primary driver of long-term investment performance, and will therefore review asset allocation and asset-liability studies on a regular basis as outlined in Section III of this document. The Asset Allocation Guidelines represents a strategic decision, with the primary aim that CERS meet their performance objectives in the long-term, but understanding that this may not necessarily occur every year.

The CERS Trustees recognize that there is generally an inverse relationship between market efficiency and the ability for active management to produce excess returns. Therefore, investments in efficient markets will be made using index or index-like investments with the goal of replicating, or

exceeding, index returns with low management fees and low tracking errors. Active management will be pursued in less efficient markets accepting higher tracking error and paying higher management fees with the expectation of producing excess returns over the long term. This allows the KPPA Office of Investments staff (KPPA Investment Staff) and consultant(s) to focus their efforts on identifying, selecting, and monitoring managers, as well as the overall management of fees paid, in the areas of the market most likely to produce excess returns.

The CERS Trustees recognize that, commensurate with their overall objective of maximizing long-term return given the appropriate level of risk, it is necessary that proper diversification of assets be maintained both across and within the classes of securities held to minimize/mitigate overall portfolio risk. Consistent with carrying out their fiduciary Responsibilities and the concept of Modern Portfolio Theory, the CERS Trustees will not systematically exclude any investments in companies, industries, countries, or geographic areas unless required to do so by statute. Within this context of proactive management and the necessity for adherence to proper diversification, the CERS Trustees rely upon appropriate professional advice from staff and service providers.

The CERS Trustees recognize the importance of responsible investing. Accordingly, the Trustees acknowledge that integrating Environment, Social, and Governance (ESG) policy principles that engages the issue from a risk, opportunity and fiduciary duty perspective will enhance investment results. The overriding consideration for the Trustees will continue to be investing to maximize the long-term returns for plan beneficiaries.

## II. Responsibilities

The CERS Trustees and other fiduciaries shall discharge their duties with respect to CERS: (1) solely in the interest of the participants and beneficiaries; (2) for the exclusive purpose of providing benefits to participants and beneficiaries; (3) with the care, skill and caution under the circumstances then prevailing which a prudent person acting in a like capacity and familiar with those matters would use in the conduct of an activity of like character and purpose; (4) impartially; (5) incurring and paying appropriate and reasonable expenses of administration which may not necessarily be the lowest and (6) in accordance with a good faith interpretation of the laws, regulations, and other instruments governing CERS.

Additionally, the Trustees and other fiduciaries shall not engage in any transaction which results in a substantial diversion of CERS income or assets. Every fiduciary shall provide adequate security and a reasonable rate of return to a disqualified person or in any other prohibited transaction described in Internal Revenue Code Section 503(b).

### A. CERS Board of Trustees

The CERS Investment Committee is created by Kentucky Revised Statutes 78.790(1)(b) and the CERS Board as set forth in the CERS Board's Statement of Bylaws and Committee Organization (Section 2.2(e)). The Chair authorizes and directs the appointment of a CERS Investment Committee with full power to act for the CERS Board in the acquisition, sale and management of the securities and funds of CERS in accordance with the provisions of any applicable statutes, and policies of the CERS Board. The CERS Investment Committee has the power to act on behalf of the CERS Board on all investment related matters, including the acquisition, sale, safeguarding, monitoring and management of the assets, securities and funds of CERS. The CERS Board shall require a vote of six (6) Trustees to ratify the actions of the CERS Investment Committee at the CERS Board meeting following the CERS Investment Committee meeting where such action was taken.

## **B. CERS Investment Committee**

The CERS Board of Trustees shall establish an investment committee as required by KRS 78.790(b). The CERS Investment Committee shall consist of five members of the CERS Board and shall be specifically composed as follows: The three (3) members with investment experience appointed by the Governor under KRS 78.782(1)(b); one (1) elected member to be appointed by the CERS Board Chair; and one (1) member appointed by the Governor under KRS 78.782(1)(b) with retirement experience, to be appointed by the CERS Board Chair. The CERS Investment Committee has the authority to implement the investment policies adopted by the CERS Board and to act on behalf of the CERS Board on all investment related matters.

The CERS Investment Committee has the following oversight responsibilities:

1. Assure compliance with this IPS and all applicable laws and regulations.
2. Approve the selection and termination of service providers. If the need arises to terminate a manager between CERS Board meetings, the KPPA Executive Director, Office of Investments, (CIO) will have discretion to do so after receiving approval from either the CERS Board Chair or the CERS Investment Committee Chair, with concurrence by the CERS CEO. The CERS Investment Committee and the CERS Board must be notified of the manager termination at the next scheduled CERS Investment Committee and CERS Board meetings.
3. Meet no less than quarterly to evaluate whether this IPS, the investment activities and management controls and processes continue to be consistent in meeting CERS goals. Mandate actions necessary to maintain the overall effectiveness of the investment program.
4. Review assessment of investment program management processes and procedures, and this IPS relative to meeting stated goals.

## **C. KPPA Investment Staff**

The CIO, is responsible for the administration of investment assets of CERS consistent with the policies, guidelines and limits established by the federal and state laws, the CERS Board, and the CERS Investment Committee.

The CIO receives direction from and reports to the KPPA Executive Director. The CIO shall provide information to the CERS Investment Committee on all investment matters, including but not limited to the following:

- i. Maintaining the diversification and risk exposure of the Funds consistent with policies and guidelines.
- ii. Assessing and reporting on the performance and risk exposure of the overall investment program relative to goals, objectives, policies and guidelines.
- iii. Monitoring and assessing service providers to assure that they meet expectations and conform to policies and guidelines.
- iv. Recommending changes to service providers, statutes, policies or guidelines as needed to maintain a productive relationship between the investment program and its goals; and acting as liaison on all investment related matters.
- v. Identifying issues for consideration by the CERS Investment Committee and preparing recommendations or reports regarding such matters.
- vi. Preparing a memo for the CERS Investment Committee for each proposed investment which shall cover the pertinent details of the investment, which should include, but not be limited to: the amount of the investment, type of investment, purpose, opportunity/goal, risks, volatility assumptions, liquidity, structure, fees, background of investment firm with reasons for selection, list of other firms considered, which CERS funds will invest, and the specific

- reasons, if any, why a CERS plan may be excluded from the investment.
- vii. Engaging in a monthly meeting with the CERS Investment Committee Chair and the CERS CEO to discuss market trends and all things relevant to the CERS plans positioning.

The CIO or designee is authorized to execute trades on fixed income and equity securities (including exchange-traded funds (ETFs) and to execute proxies for the CERS Board consistent with this IPS.

To carry out this IPS and any investment related decisions of the CERS Board, the CERS Chief Executive Officer (CEO), and the CIO or designee are authorized to execute agreements and other necessary or proper documents pertaining to investment managers, consultants, investment related transactions, or other investment functions. All investment decisions of the CEO and/or the CIO not addressed in this IPS will be ratified by the Investment Committee and the Board of CERS.

#### **D. Investment Managers**

In instances where the CERS Investment Committee, in consultation with the CIO, has determined it is desirable to employ the services of an external Investment Manager, the following shall be applicable:

- i. Investment Managers shall be qualified and agree to serve as a fiduciary to CERS and should be of institutional quality as deemed by KPPA Investment Staff in collaboration with the investment consultant(s).
- ii. Notwithstanding the CIO responsibilities when selecting a new investment, when the KPPA Investment Staff seeks a new external Investment Manager, the Investment Committee shall interview the top three candidates identified and considered by KPPA Investment Staff and the Investment Committee will participate in the selection of the Manager.
- iii. Investment Managers shall manage assets in accordance with this IPS and any additional guidelines established by contract, as may be modified in writing from time to time.
- iv. Total assets assigned to the selected manager shall not exceed 25% of that firm's total assets under management and shall not exceed 25% of a firm's total assets under management in a commingled product. Separate accounts or funds of one are not included in this 25% limitation for commingled products.
- v. 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.
- vi. All investment management services will be contracted according to the CERS Investment Procurement Policy established by the CERS Board.

#### **E. Custody Bank**

KPPA shall hire custodians and other agents who will be fiduciaries to CERS and who will assume responsibility for the safekeeping and accounting of all assets held on behalf of CERS and other duties as agreed to by contract.

A process shall implement portfolio accounting system that includes plan accounting and unitization methods. An investment related service provider(s) may be selected to execute the



process in accordance with the Boards' selection process. The following is a brief description of our plan accounting processing:

Within the plan accounting structure there are two primary types of accounts Plan Accounts and Pool Accounts. Plan Accounts are the owners of the investment pool. An account is established for each plan and these accounts hold Units of Participation that represent the plan's/fund's invested value of the investment pool. Pool Accounts are accounts that hold the assets of the investment pool where all investment related activity and earnings occur. These accounts are the investment strategies of the pool. Units of Participation are bought and sold as each plan/fund contributes or withdraws cash or assets from the investment pool. The investment pool earnings are then allocated to plans utilizing a cost distribution method that allows for fluctuating prices experienced in capital markets. This involves earnings allocated to the plan accounts with an increase or decrease in cost on the Unit of Participation Holdings of the Plan Accounts. Correspondingly, the price of the Unit of Participation Holdings is updated to reflect change in market value in the investment pool. Earnings are allocated based on the daily weighted average of Master Trust Units held by each plan/fund account during the monthly earnings period. This method is commonly used when plans make multiple contributions or withdrawals from the investment pool throughout the month as it eliminates allocation distortion due to large end of month cash flows.

An institutional accounting system shall support a method for determining the amount of monthly earnings are allocated to each plan account.

## **F. Investment Consultants**

Qualified independent investment consultants may be retained by the CERS Investment Committee for asset allocation studies, asset allocation recommendations, performance reviews, manager searches, and other investment related consulting functions and duties as set forth by contract.

## **G. Selection**

Qualified investment managers, investment consultants, and other investment related service providers shall be selected by the CERS Investment Committee in accordance with the IPS. The selection shall be based upon the demonstrated ability of the professional(s) to provide the required expertise or assistance described in the Request For Proposals (RFP) or Request For Information (RFI), if utilized. In order to create an efficient and effective process, the CERS Investment Committee or CIO may, in their sole discretion, utilize an RFI, an RFP, third party proprietary software or database, review of existing service provider capabilities, or any combination of these or other methods to select a service provider.

## **III. Asset Allocation Guidelines**

In establishing asset allocation guidelines, the CERS Board recognizes that each CERS plan has its own capacity to tolerate investment volatility, or risk. Therefore, each CERS plan has been studied and asset allocation guidelines have been established on a plan by plan basis. The CERS Board will ensure the asset allocation guidelines of each plan are reviewed annually. The CERS Board will provide the CERS Investment Committee with the results of any asset liability valuation

study and guidance for determining the needs of any particular CERS plan.

This asset allocation is the result of an update to the Investment Policy enacted on January 1, 2021. The changes to the asset allocation were arrived upon after the Asset Allocation study of November 2020 and an Efficient Frontier analysis conducted in November 2021. The CERS Board has established the following Asset Allocation Guidelines, effective November 10, 2021.

Asset Class	Target	Minimum	Maximum
<b>Equity</b>			
Public Equity	<b>50%</b>	35%	65%
Private Equity	<b>10%</b>	7%	13%
<b>Fixed Income</b>			
Core Fixed Income	<b>10%</b>	8%	12%
Specialty Credit*	<b>10%</b>	7%	13%
Cash	<b>0%</b>	0%	3%
<b>Inflation Protected</b>			
Real Estate	<b>7%</b>	5%	9%
Absolute Return	<b>13%</b>	9%	17%

\*includes High Yield Fixed Income

The intent of the CERS Board in allocating funds to the investment managers is for the investment managers to fully invest the funds. However, the CERS Board is aware that from time to time the investment manager will require a portion of the allocated funds to be held in cash provided the cash holdings do not exceed five percent (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.

The individual CERS plan level asset allocations will be reviewed monthly by KPPA Investment Staff relative to its target asset class allocation taking into account any tactical asset allocation shift directed by the CERS Investment Committee.

Regarding individual investment manager initial allocations, KPPA Investment Staff will get approval at the CERS Investment Committee meeting for a specific dollar amount intended to be committed to a closed-end fund such as private equity or real estate funds and will get approval for a percent of the appropriate asset class target for open-end investments such as public equity, public fixed income, and Diversifying Strategies managers. For those open-end funds where assets can be added or subtracted, the CIO will have discretion to reduce or increase an investment manager's allocation between 50% and 150% of the approved target. The target will not be raised prior to the one-year anniversary of the amount approved by the CERS Investment Committee, and must be reported to the CERS Investment Committee at the next scheduled meeting. If the need arises to terminate a manager between CERS Board meetings, the CIO will have discretion to do so after receiving approval from either the CERS Board Chair or the CERS Investment Committee Chair with concurrence by the CERS CEO. The CERS Investment Committee and the CERS Board must be notified of the manager termination at the next scheduled CERS Investment Committee and Board meetings.

Short-term market shifts may cause the asset mix to drift from the allocation targets. Should the target percentage fall out of the indicated range for a particular asset class, KPPA Investment Staff shall direct rebalancing transactions to reallocate assets from the over-allocated asset class to the under-allocated asset class. Within the allowable ranges, KPPA Investment Staff should use regular cash flows to rebalance toward targets to avoid incurring additional trading costs to correct minor deviations from asset allocation targets. Except when there is a perceived extraordinary downside risk in a particular asset class, movement outside the normal ranges should be avoided.

Investments in private assets are generally less liquid than investments in public markets securities and are typically implemented via periodic commitments to funds with limited partnership structures. As a result, actual allocations to these asset classes may deviate from their strategic targets for extended periods. Actual vs. target deviations for these asset classes shall not be considered in violation of the Asset Allocation Guidelines. However, when identified by the KPPA Investment Staff the deviation must be reported to the CERS Investment Committee Chair within ten (10) business days and at the next Quarterly CERS Investment Committee meeting and each Investment Committee meeting thereafter until the allocation is in compliance with the target. Under/overweights to these asset classes shall be invested in public markets securities with the most similar risk/return characteristics as a short-term proxy for the private asset classes.

In keeping with its responsibility as a CERS Board and wherever consistent with its fiduciary responsibility, the CERS Board encourages the investment of the fund's assets in investments, funds, and securities of corporations which provide a positive contribution to the economy of the Commonwealth of Kentucky. However, where any security is not a prohibited investment under the governing laws and policies, discretion will be granted to the appointed investment managers in the selection of such securities and timing of transactions consistent with the following guidelines and restrictions.

## **A. Growth**

### **US Equity**

Investments may be made in common stock, securities convertible into common stock, preferred stock of publicly traded companies on stock markets, asset class relevant ETFs or any other type of security contained in a manager's benchmark. Each individual domestic equity account shall have a comprehensive set of investment guidelines prepared by the CIO, which contains a listing of permissible investments, portfolio restrictions, and standards of performance for the account.

The KPPA Investment Staff internally manages approximately fifteen (15%) percent of US equity index funds that are intended, consistent with the governing Plan documents, to gain exposure to a broad asset sector to replicate the characteristics of the asset class, to minimize administrative expenses and to help achieve overall portfolio objectives. The KPPA Investment Staff may passively manage up to twenty (20%) percent of the overall portfolio dedicated to these efficient markets. Beyond this level the CIO shall seek the approval of the Investment Committee by explaining how further passive management would help achieve the overall portfolio objectives. These objectives can be achieved through several management techniques, including, but not limited to, portfolio optimization, non-reinvestment of index dividends, and other management techniques intended to help achieve the investment objectives of CERS.

### **Non-US Equity**

Investments may be made in common stock, securities convertible into common stock, preferred stock of publicly traded companies on stock markets, asset class relevant ETFs or any other type of security contained in a manager's benchmark. Each individual Non-US equity account shall have a comprehensive set of investment guidelines prepared by the CIO which shall contain a listing of permissible investments, portfolio restrictions, and standards of performance for the account.

### **Specialty Credit**

Each individual Specialty Credit account shall have a comprehensive set of investment guidelines prepared by the CIO which contains a listing of permissible investments, portfolio restrictions, risk parameters, and standards of performance for the account.

### **Private Equity Investments**

Subject to specific approval of the CERS Investment Committee, investments may be made for the purpose of creating a diversified portfolio of alternative investments. Private equity investments are expected to achieve attractive risk-adjusted returns and, by definition, possess a higher degree of risk with a higher return potential than traditional investments. Accordingly, total rates of return from private equity investments are expected to be greater than those that might be obtained from conventional public equity or debt investments. Examples of such investments include, but are not limited to: private investments into venture capital; leveraged buyouts; special situations; distressed debt; private debt; timberland, oil and gas partnerships; infrastructure; commodities; and private placements. While it is expected that the majority of these assets will be invested within the United States, a portion has been allocated to non-US investments. These non-U.S. investments are not restricted by geography.

The private equity market is highly sophisticated and specialized with respect to variety and types of investment structures. There exists major competition for deal flow on the part of both investor and general partners. To a great extent, market forces drive the bargaining of economic terms. Most investment vehicles are structured as commingled vehicles and often blind pool investment partnerships. The most common offering forms are equity private placements where the governing laws of the partnership impose a passive role of the limited partner investor. These contractual arrangements are long-term in nature and provide the general partner or sponsors a reasonable time horizon to wisely invest capital, add value through intensive operational management, then realize the proceeds of such an investment. Moreover, terms of the partnership are proposed by the general partner and are critical to the economic incentives and ultimate net performance of the partnership.

### **Investment Strategy and Plan Guidelines**

To strengthen the diversification of the investments, several guidelines will be utilized in KPPA Investment Staff's formulation and recommended annual investment strategy and plan for private equity investments. These guidelines encompass annual commitment levels to the asset class, types of investment vehicles that can be utilized, controlling financing stage risks, industry,

manager and geography concentration/diversification limits, acceptable contract negotiations, appropriate sizes for investments, and the preferred alignment of interests.

Investment Vehicles: CERS plans will gain exposure to private equity investments by hiring external investment managers either directly or through participation in secondary private equity markets. Typically, CERS plans will subscribe as a Limited Partner (LP) to limited partnership vehicles sponsored by such specialty external investment managers. CERS will also at times structure separately managed accounts with specific investment objectives to be implemented by external investment managers. CERS plans may also gain private equity exposure by utilizing the following vehicles: limited liability companies and co-investments alongside CERS existing or potential limited partnerships.

Investment Timing Risks: KPPA Investment Staff should limit the potential for any one investment to negatively impact the long-term results of the portfolio by investing across business cycles. Moreover, the portfolio must gain exposure to the array of financing stages by opportunistically exploiting the best investments at different stages of the business cycle. KPPA Investment Staff may also consider purchasing secondary partnership interests to shorten the effective life of the partnership interest and therefore positively impacting the current and long-term net return of the portfolio. Should KPPA Investment Staff anticipate the need of entering a secondary partnership such agreement would need the approval of CERS Investment Committee and ratification by the CERS Board. In addition, mindful of vintage year diversification, CERS should seek to identify attractive commitments annually, further ensuring the portfolio invests across business cycles.

General Partner Diversification: KPPA Investment Staff will seek to work with a variety of general partners due to their specialized expertise in particular segments of the private equity market and source of their deal flow. No more than fifteen (15) percent of CERS Pension or Insurance total allocation to private equity investments may be committed to any one partnership.

Total Exposure to Private Equity: Given the illiquid nature of the asset and the complexity of each private equity transaction, it is important that the CIO actively manage the maximum amount of CERS Plan assets allocated to this asset class. The asset allocation authorizes a maximum of thirteen (13%) percent of total CERS Plan assets to this asset class. Should circumstances arise and the allocation go beyond the maximum allocation, the CIO will inform the Investment Committee Chair as soon as possible and report to the Investment Committee Chair and the CEO at the next monthly strategic planning meeting and all subsequent quarterly CERS Investment Committee meetings until the allocation is back in compliance.

## **B. Fixed Income/Liquidity**

### **Core Fixed Income**

The core fixed income accounts may include, but are not limited to the following fixed income securities: U.S. Government and Agency bonds; investment grade U.S. corporate credit; investment grade non-U.S. corporate credit; municipal bonds; Non-U.S. sovereign debt; mortgages including residential mortgage backed securities; commercial mortgage backed securities; and whole loans, asset-backed securities, and asset class relevant ETFs.

The high yield fixed income accounts may include, but are not limited to, the following fixed income securities: non-investment grade U.S. corporate credit including both bonds and bank loans; non-

investment grade non-U.S. corporate credit including bonds and bank loans; municipal bonds; non-U.S. sovereign debt; mortgages including residential mortgage backed securities, commercial mortgage backed securities, and whole loans, asset-backed securities; and emerging market debt (EMD) including both sovereign EMD and corporate EMD and asset class relevant ETFs.

Each individual core fixed income account shall have a comprehensive set of investment guidelines prepared by the CIO which contains a listing of permissible investments, portfolio restrictions, risk parameters, and standards of performance for the account.

### **Cash Equivalent Securities**

Selection of particular short-term instruments, whether viewed as liquidity reserves or as investment vehicles, should be determined primarily by the safety and liquidity of the investment and only secondarily by the available yield. The following short-term investment vehicles are considered acceptable: Publicly traded investment grade corporate bonds; variable rate demand notes; government and agency bonds; mortgages, municipal bonds, and collective short-term investment funds (STIFs), money market funds or instruments (including, but not limited to, certificates of deposit, bank notes, deposit notes, bankers' acceptances and commercial paper) and repurchase agreements relating to the above instruments. Instruments may be selected from among those having an investment grade rating at the time of purchase by at least one recognized bond rating service. In cases where the instrument has a split rating, the lower of the two ratings shall prevail. All instruments shall have a maturity at the time of purchase that does not exceed 397 days. Repurchase agreements shall be deemed to have a maturity equal to the period remaining until the date on which the repurchase of the underlying securities is scheduled to occur. Variable rate securities shall be deemed to have a maturity equal to the time left until the next interest rate reset occurs, but in no case will any security have a stated final maturity of more than three years.

CERS fixed income managers that utilize cash equivalent securities as an integral part of their investment strategy are exempt from the permissible investments contained in the preceding paragraph. Permissible short-term investments for fixed income managers shall be included in the investment manager's investment guidelines.

## **C. Diversifying Strategies**

### **Real Estate**

Investments are made in equity and debt real estate for the purpose of achieving the highest total rate of return possible consistent with a prudent level of risk. Allowable real estate investments include open-end and closed-end commingled real estate funds, joint venture investments, public and private real estate investment trusts (REITs), public real estate operating companies, and real estate related debt. CERS has determined that the primary role of the real estate asset class is to provide for the following:

- Attractive risk adjusted returns through active management and ability to access managers with the expertise and capabilities to exploit market inefficiencies in the asset class. The illiquid nature of real estate investments combined with the complexity of investments makes it difficult for casual investors to effectively access the asset class effectively. It is our belief that through active management and by investing in top tier

managers with interests aligned through co-investment and incentive-based compensation, CERS can maximize their risk adjusted returns. This active management approach will be pursued.

- Diversification benefits through low correlations with other asset classes, primarily the U.S. equity markets.
- Provide a hedge against unanticipated inflation, which real estate has historically provided due to lease structures and the increases in material and labor costs during inflationary periods.
- Permit CERS to invest in unique opportunities that arise due to dislocations in markets that occur from time to time.

## Real Return

The purpose of the Real Return Portfolio is to identify strategies that provide both favorable stand-alone risk-adjusted returns as well as the benefit of hedging inflation for the broader plans. Real Return strategies are not necessarily a separate asset class but may include real assets, such as infrastructure, real estate, commodities, and natural resources among others, as well as financial assets that have a positive correlation to inflation. This can include real bonds such as Treasury Inflation-Protected Securities (TIPs) (and other inflation linkers) or real stocks such as REITs, Master Limited Partnerships (MLPs), and oil & gas stocks. Additionally, Real Return managers may attempt to add value by tactically allocating to various asset classes according to how each asset class performs across an economic cycle and the manager's perception of where we are in the cycle. The goal is to invest in inflation sensitive assets during inflationary periods, and avoid those assets in deflationary periods, thus providing a positive real return across the cycle.

The real return opportunity set may include numerous vehicles to access a wide variety of investment styles and strategies. These investment vehicles may include mutual funds, ETFs, separately managed accounts as well as hedge funds (open-end limited partnerships) and private equity (close-end limited partnerships). The list of strategies that CERS' Real Return Portfolio may use includes, but is not limited to, the following:

- Global Tactical Asset Allocation (GTAA)/Global Macro: GTAA or macro strategies are those that make directional bets on major markets or asset classes instead of individual securities. GTAA and macro strategies typically invest in all major assets classes including equity markets, credit and debt instruments, currencies/interest rates, and commodities. These strategies tend to focus on economic factors that would suggest an opportune time to invest in a given asset class, and will change their allocations actively over time. These strategies may use inflation as the economic factor to gain exposure to and will target a real rate of return over time.
- Inflation Linked Securities are securities that directly tie coupon payments or principal increases to an inflation index, such as Consumer Price Index (CPI). These strategies could include not only US TIPS, but also global sovereign inflation linked bonds, corporate or infrastructure inflation linked bonds, and possibly short duration floating rate bonds.
- Inflation Sensitive Equities include publicly traded equity and equity related securities in companies which have a high sensitivity to inflation in their profit margins via the nature of

their operating assets, such as energy companies, basic materials and miners, natural resource stocks, and listed infrastructure. This category can also include, but are not limited to, REITs, MLPs as well as ETFs and index products on REITs, MLPs, and natural resource stocks.

- **Commodities:** Commodities are the raw materials that are physical inputs into the production process. Managers that invest in liquid commodity strategies using exchange traded futures can span from simple indexing (matching a long-only commodities index), to enhanced indexing or active long (selecting positions that vary from the index but within fairly tight ranges), as well as unconstrained long-short managers.
- **Private Property:** For the purposes of this IPS, private property refers to the ownership of an idiosyncratic, physical asset that is predominately fixed and/or permanent or at least substantially long-lived. This includes real estate, such as land and any improvements to or on the land, as well as timberland and farmland. Timberland investing involves the institutional ownership of forest for the purpose of growing and harvesting the timber. The timber may be used for furniture, housing lumber, flooring, pulp for paper, woodchips, and charcoal, among other things. Farmland investing entails ownership of land used primarily, if not exclusively, for agricultural production both for crops, including row crops and permanent crops, as well as livestock. Private property can also include infrastructure investing, which refers to financing the manufacture or development of the underlying fundamental assets and basic core infrastructure that are necessary for an economy whereby such assets are largely fixed and long-lived. These tend to be high cost, capital-intensive investments that are vital to a society's prosperity and facilitate the transfer, distribution, or production of basic goods and services.
- **Natural Resources:** Natural resources can include investing in the financing, development, extraction, and production of minerals, basic materials, petroleum products, and water as well as renewable resources such as agricultural commodities and solar energy. As opposed to property, the returns generated in these investment strategies come more from the actual production of the resource itself. Further, these are depleting and/or consumable assets that are also portable and fungible and which in the aggregate comprise a majority of the inputs into most measurements of inflation.
- **Private Assets:** Private assets can include tangible or intangible assets that are not easily sold in the regular course of a business' operations for cash, and which are held for their role in contributing directly to the business' ability to generate profit. As the useful life of the asset tends to extend across many years and the assets tend to be capital intensive as well, they have some similarity to private infrastructure. Further, given that the assets contribute directly to the production process as well as often retaining intrinsic value, there is a fundamental link to inflation somewhat similar to natural resources.
- **Other (Opportunistic Inflation Hedge):** Other/opportunistic strategies include those that have a propensity to provide a positive real return or positive correlation with inflation over time. Liquid strategies such as inflation swaps, diversified inflation hedging mutual funds, or nominal bonds backed by inflation sensitive assets may be included in this allocation, while other illiquid strategies that may provide the same real profile can include private equity in inflation sensitive companies, hard asset-backed private credit, and structured inflation-linked products among others.



## Portfolio Guidelines

No more than 50% of the total net assets of the Real Return portfolio may be invested in any one registered investment vehicle, mutual fund, or separately managed account.

No more than 20% of the total net assets of the Real Return portfolio may be invested in any single closed-end or open-end limited partnership or other unregistered investment vehicle.

The relative allocations to the liquid and illiquid portfolios will be determined according to each individual System's liquidity needs, funding status, and allocation targets on an investment by investment basis.

## Opportunistic

Opportunistic investments are intended to capitalize on opportunities outside of the asset classes targeted in the Asset Allocation Guidelines. These allocations are intended to take advantage of market dislocations and unique opportunities and can be short to medium-term in nature. Opportunistic investments may be implemented through targeted portfolios or multi-asset approaches. Initial allocations are to be made following the same policies and procedures as all other investments as outlined previously in this IPS.

## D. Co-Investment Policy

The CIO has discretion to make direct co-investments in companies alongside of current general partners. Any co-investment opportunity must also be part of the main account or fund into which CERS has already invested before it can be considered. For purposes of this IPS, a direct co-investment is defined as a direct investment in a portfolio company alongside an existing CERS' partnership deemed in good standing.

The maximum investment in any co-investment vehicle shall not exceed 50 percent of the total capital committed by all partners at the time of the final closing. The maximum investment in any single direct co-investment shall not exceed 20 percent of the original partnership commitment. Total investment in direct co-investments shall not exceed 20 percent of the asset class portfolio on a cost basis at the time of investment.

## IV. Monitoring

### Performance Measurement

CERS overall fund performance is measured relative to CERS Pension or Insurance Total Fund Benchmark. The benchmark is calculated by means of a weighted average methodology. This method is consistent with the CFA Institute Global Investment Performance Standards (GIPS®), a set of standardized, industry-wide ethical principles that guide investment managers and asset owners on how to fairly calculate and present their investment results, with the goal of promoting performance transparency and comparability. It is the product of the various component weights (i.e., asset classes' percentages) by their respective performance (returns). Due to market fluctuations and acceptable divergence, the asset classes' weights (percentages) are often not equivalent to the benchmark's weights. Therefore, the performance may indicate that the Funds have outperformed (underperformed) relative to their respective benchmarks, even when the preponderance of lesser weighted categories have underperformed (outperformed) their indices.

CERS measures its asset classes, sub-asset classes, sectors, strategies, portfolios, and instruments (investment) performance with indices that are recognized and published). These indices are determined to be appropriate measures of investments and composites of investments with identical or similar investments profiles, characteristics, and strategies. The benchmarks and indexes are intended to be objective, investable, replicable, representative and measurable of the investment mandate and, developed from publicly available information that is acceptable to CERS and the investment manager/advisor as the neutral position consistent with the underlying investor status. The CERS investment consultant and KPPA Investment staff recommend the benchmarks and indexes. These measures shall be subject to the review and approval of the CERS Investment Committee with ratification by the CERS Board when asset allocation studies are performed, or when a change to existing benchmarks is recommended by KPPA Investment Staff and the CERS investment consultant. The current asset class benchmarks, effective as of November 10, 2021 with the adoption of the asset allocation, are as follows:

Asset Class	Benchmark
<b>Growth</b>	
US Equity	Russell 3000
Non-US Equity	MSCI ACWI ex US IMI
Private Equity	Russell 3000 + 300 bps (lagged)
Specialty Credit	S&P LSTA Leveraged Loan
<b>Liquidity</b>	
Core Fixed Income	Bloomberg Barclays US Aggregate
Cash	Citi Grp 3-mos Treasury Bill
<b>Diversifying</b>	
Real Assets	50% NCREIF ODCE+50% US CPI + 3%
Absolute Return	HFRI Diversified Fund of Fund Composite
Opportunistic	Highest Assumed Discount Rate of Participating Plans

The following descriptions represent general standards of measurement that will be used as guidelines for the various classes of investments and managers of CERS. They are to be computed and expressed on a time-weighted total return basis:

Total Public Asset Class Allocations

Short-term

- For periods less than five years or a full market cycle, the Asset Class Allocation should exceed the returns of the appropriate Index.

Intermediate & Long-term

- For periods greater than five years or a full market cycle, the Asset Class Allocation should exceed the appropriate Index, compare favorably on a risk-adjusted basis, and generate returns that rank above the median return of a relevant peer group. Volatility, as measured by the standard deviation of monthly returns, should be comparable to the Index.

Individual Public Security Portfolios: Individual portfolios shall be assigned a market goal or benchmark that is representative of the style or market capitalization of the assignment.

Individual accounts should be monitored using the following Standards:

**Short-term**

- For periods less than five years or a full market cycle, individual portfolios should exceed the returns of their market goal or benchmark.

**Intermediate & Long-term**

- For periods greater than five years or a full market cycle, individual portfolios should exceed the return of their market goal or benchmark, compare favorably on a risk-adjusted basis, and generate returns that rank above the median return of a relevant peer group. Volatility, as measured by the standard deviation of monthly returns, should be comparable to the benchmark.

## **Alternative Assets:**

### **Private Equity**

The Private Equity portfolio should also seek to achieve both short-term and intermediate/long term Net Internal Rate of Returns (IRR) that provide yields in excess of core equity investments. The KPPA Investment Staff shall quarterly complete a comparison of performance between equity portfolio performance and Private Equity portfolio returns. The KPPA Investment Staff will report to the Investment Committee the following:

**Short-term**

- Alternative investments should earn a Net Internal Rate of Return (IRR) that place the investment above the median Net IRR of other similar funds, of the same vintage year, as reported by industry benchmarks.

**Intermediate & Long-term**

- The private equity portfolio should earn a return that meets or exceeds CERS Private Equity Index. Individual private equity investments should earn a Net IRR above the median Net IRR of other similar funds, of the same vintage year, as reported by industry benchmarks.

## **Real Assets**

Real Assets shall consist of private real estate and other investments that produce real returns - return over inflation.

Private Real Estate investments are unique and can be illiquid and long term in nature. Given that this may lead to large short-term performance discrepancies versus public benchmarks, CERS more appropriately measures its real estate investments based on both relative return and absolute return methodologies:

**Relative Return:** The Real Estate portfolio is expected to generate returns, net of all fees and expenses, in excess of the National Council of Real Estate Investment Fiduciaries Open End Diversified Core Equity Index (NCREIF ODCE) lagged 1 calendar quarter.

**Absolute Return:** The long-term real return objective (returns adjusted for inflation) for

CERS' Real Estate portfolio is five percent (5%) over the Barclays Capital U.S. 7-10 Year Treasury Bond Index, net of investment management fees. This return shall be calculated on a time-weighted basis using industry standard reporting methodologies.

The total real return investments shall seek to:

1. Short-term benchmark: For periods less than five (5) years or a full market cycle, the allocation should achieve an annual rate of return that exceeds the appropriate benchmark (the weighted average return of the underlying investment benchmarks) annually over a complete market cycle, net of all investment management fees.
2. Strategic objective: For periods greater than five (5) years or a full market cycle, the allocation should not only outperform the short-term benchmark, but also achieve a rate of return that exceeds (CPI + 300 basis points) as well.
3. Achieve a positive risk/reward trade-off when compared to similar style Real Return Investment Managers.

### **Opportunistic**

The total Opportunistic allocation shall seek to:

1. Short-term benchmark: For periods less than five (5) years or a full market cycle, the allocation should achieve an annual rate of return that exceeds the highest assumed rate of return of the participating plans.
2. Strategic benchmark: For periods greater than five (5) years or a full market cycle, the allocation should achieve an annual rate of return that exceeds the highest assumed rate of return of the participating plans.

### **Performance Review**

On a timely basis, but not less than quarterly, the CERS Investment Committee will review the performance of the portfolio for determination of compliance with this IPS. This will include a quarterly performance peer review analysis comparing CERS with other public pension plans. On an annual basis, a comprehensive review of each asset class and underlying portfolios shall be conducted by the KPPA Investment staff and presented to the CERS Investment Committee. The review shall consist of an organizational, performance and compliance assessment.

The Compliance Officer shall perform tests at least monthly to assure compliance with the restrictions imposed by this IPS. These tests shall be performed at the asset class and total fund level. Quarterly, the Compliance Officer shall prepare a report to the CERS Investment Committee detailing the restrictions tested, exceptions, the cause of the exception and the subsequent resolution. The CERS Investment Committee shall report the findings to the CERS Board at the next regularly scheduled meeting. Internal Audit will schedule periodic reviews/audits of this function to ensure compliance with this IPS.

The following restrictions shall be tested at least monthly:

1. 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.
2. The amount of stock held in the domestic or international equity allocation shall not exceed 3% of the outstanding shares of any single corporation.

3. Investment in frontier markets (those countries not included in the MSCI EM Index) shall not exceed 5% of CERS' international equity assets.
4. The duration of the core fixed income portfolios combined shall not vary from that of CERS' Fixed Income Index by more than +/- 25% duration as measured by effective duration, modified duration, or dollar duration except when the CERS Investment Committee has determined a target duration to be used for an interim basis.
5. 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 same), and derivative securities used for exposure, cost efficiency, or risk management purposes in compliance with Section VII of this policy.
6. 50% of the core fixed income assets must have stated liquidity that is trade date plus three days or better.

The CIO shall develop a comprehensive set of investment guidelines for each externally managed account. These guidelines should ensure, at the total fund and asset class level, that the restrictions set forth above are preserved.

Under the CIO's direction, KPPA Investment Staff shall perform site visits with all current CERS investment managers over 3-year rolling market cycles, with at least 1/3 of all current managers occurring on a yearly basis.

## V Additional Items

### **Derivatives Permitted Use:**

CERS permits external managers and KPPA Investment Staff to invest in derivative securities, or strategies which make use of derivative investments, for exposure, cost efficiency and risk management purposes, if such investments do not cause the portfolio to be leveraged beyond a 100% invested position. Any derivative security shall be sufficiently liquid that it can be expected to be sold at, or near, its most recently quoted market price. Typical uses of derivatives in the portfolio are broadly defined below:

#### **Exposure:**

Derivatives are an effective way for a portfolio manager to gain exposure to a security that the manager does not want to purchase in the cash market. Reasons for gaining exposure to a security through the use of derivatives may include cheaper transactions costs, liquidity/lack of supply in the underlying market, and the flexibility to implement investment views with minimum portfolio disruption. An example is a cash equitization program.

#### **Cost Efficiency:**

Derivatives are often used due to the cost efficiency associated with the contract properties. Given the fact that derivatives can be used as a form of insurance, upfront trading costs must be sufficiently low for investors to purchase the contract and insure their portfolios efficiently.

Furthermore, due to properties associated with derivatives and cash outlay characteristics (minimal cash outlay at inception of the contract) derivatives are generally a vehicle of gaining cost efficient exposure. An example is the cost (zero) to purchase a futures contract.

### **Risk Management:**

Derivatives can be used for mitigating risk in the portfolio. When used as a risk management tool, derivatives can significantly reduce an identified financial risk or involuntary risk from investment areas by providing changes in fair values or cash flows that substantially offset the changes in fair values or cash flows of the associated item being hedged. An example is the use of currency forwards to offset periods of dollar strength when international equity markets increase in value, thereby protecting foreign asset gains in the portfolio.

### **Derivatives Restricted Use:**

#### **Settlement:**

Investments in futures contracts are to be cash settled unless physically settled and stored by external managers. At no time shall CERS plans agree to take physical delivery on a futures contract.

#### **Position Limits:**

Futures and options positions entered into by CERS, or on its behalf, will comply with all position and aggregate limits established by the local governing authorities within each jurisdiction.

#### **Over-the-Counter (OTC):**

Investments in securities not traded on public exchanges that are deemed OTC in nature are allowed provided that a counterparty risk monitoring component is delineated in the manager's guideline section of the manager's contract. All counterparties must have a short-term credit rating of at least BBB (Standard and Poor's or Fitch) or Baa2 (Moody's).

All OTC derivative transactions, including those managed through Agency Agreements, must be subject to established International Swaps and Derivatives Association, Inc. (ISDA) Master Agreements and have full documentation of all legal obligations of CERS under the transactions. All ISDA Master Agreements entered into by or on behalf of CERS by the KPPA Investment Staff and external manager pursuant to an Agency Agreement shall provide that netting applies (netting allows the parties to an ISDA Master Agreement to aggregate the amounts owed by each of them under all of the transactions outstanding under that ISDA Master Agreement and replace them with a single net amount payable by one party to the other.) The KPPA Investment Staff and external managers may also use collateral arrangements to mitigate counterparty credit or performance risk. If an external manager utilizes a collateral arrangement to mitigate counterparty credit or performance risk the arrangement shall be delineated in the manager's guideline section of the manager's contract.

### **Derivatives Applications Not Permitted:**

**Speculation:**

Except for investments in Alternative, Opportunistic Diversifying Strategies investments, and Real Return investments, derivatives may not be used for any activity for which the primary purpose is speculation or to profit while materially increasing risk to CERS. Derivatives are considered speculative if their uses have no material relation to objectives and strategies specified by the CERS IPS or applicable to the CERS portfolio. Derivatives may not be used for circumventing any limitations or restrictions imposed by the CERS IPS or applicable regulatory requirements.

**Leverage:**

Leverage is inherent in derivative contracts since only a small cash deposit is required to establish a much larger economic impact position. Thus, relative to the cash markets, where in most cases the cash outlay is equal to the asset acquired, derivative investments offer the possibility of establishing substantially larger market risk exposures with the same amount of cash as a traditional cash market portfolio. Therefore, risk management and control processes must focus on the total risk, i.e. the net notional value, assumed in a derivative investment.

*The above is not intended to limit CERS from borrowing to cover short-term cash flow needs nor prohibit CERS from loaning securities in accordance with a securities lending agreement.*

The CERS Board recognizes that the voting of proxies is an important responsibility in assuring the overall performance over a longtime horizon. The CERS Board has delegated the responsibility of voting all proxies to an outside Proxy Voting service provider or contracted external investment manager. The CERS Board expects that the proxy voting service will execute all proxies in a timely fashion, and in accordance with the voting policy which has been formally adopted.

The CERS Board has adopted the ISS U.S. Proxy Voting Guidelines as the CERS approved Proxy Voting Policy for all internally voted items. This policy is updated at least annually by ISS and hereby incorporated by this reference. The policy can be found publicly using the following link:

[ISS U.S. Proxy Voting Guidelines.com](https://www.iss.com/ISS-USA/ISS-USA-Proxy-Voting-Guidelines.aspx)

**Additional CERS Investment Administrative Policies**

- A. Investment Procurement Policy as amended and the as amended are hereby incorporated by reference.
- B. **CERS** Investment Brokerage Policy as amended is hereby incorporated by reference.
- C. **CERS** Transactions Procedures Policy as amended is hereby incorporated by reference.
- D. **CERS** Securities Litigation Policy and Procedures as amended is hereby incorporated by reference.
- E. **CERS** Investment Securities Lending Guidelines as amended is hereby incorporated by reference.
- F. **CERS** Securities Trading Policy for Trustees and Employees as amended is hereby incorporated by reference.
- G. **CERS** Manager and Placement Agent Statement of Disclosure Policy as amended is

- hereby incorporated by reference.
- H. **CERS** Real Estate Policy as amended and hereby incorporated by reference.
  - I. CERS Conflict of Interest and Confidentiality Policy as amended and hereby incorporated by reference.
  - J. **CERS** Proxy Voting Policy as amended and hereby incorporated by reference.

Signatories

As Adopted by the CERS Investment Committee

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Dr. Merl Hackbart

Chair, CERS Investment Committee

As Adopted by the CERS Board of Trustees

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Ms. Betty Pendergrass

Chair, CERS Board of Trustees





County Employees Retirement System  
Brokerage Policy for Trustees and Employees  
Approved: March 16, 2022

**Statement of Intent**

This policy documents the intent of the Investment Committee of the County Employees Retirement System (CERS) related to brokerage direction.

**A. Objectives**

Brokerage direction shall result from a competitive process, with the objective of achieving the best execution by minimizing commission and market impact costs while maximizing value to KRS. The competitive bids/offers received should be documented on buy/sell orders.

Brokerage shall never be awarded on the basis of repayment for personal advice, favors or political patronage. Any attempts to solicit or direct business based upon these considerations shall be reported to the Investment Committee immediately.

**B. Criteria for Selecting Brokers**

Investment Directors shall be responsible for selecting brokers to execute their transactions. Investment Directors are also responsible for assuring the financial soundness in order to protect the Systems from failed trades or other liabilities.

Prior to executing the first trade, all of the appropriate documents must be executed and on file with the broker and the investment manager.

It is the desire of the Investment Committee that, whenever it is in the best interest of the Funds, brokerage will be directed within the Commonwealth of Kentucky, or full or partial credit will be assigned to a Kentucky-based broker.

**C. Monitoring**

Investment Staff shall monitor the brokerage and report findings periodically to the Investment Committee. Investment Directors shall report brokerage information to staff in a format acceptable to CERS.

The Investment Committee shall periodically monitor market impact and commission cost for stock trades versus the trading Universe maintained by a third party vendor.

Signatories

As Adopted by the Investment Committee

As Adopted by the Board of Directors

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

Dr. Merl Hackbart  
Chair, Investment Committee

Ms. Betty Pendergrass  
Chair, Board of Trustees



County Employees Retirement System  
Investment Transaction Procedures Policy  
Approved: March 16, 2022

This document is intended to identify the communications and procedures that are necessary to properly execute investment transactions for the County Employees Retirement System (CERS).

The Kentucky Public Pensions Authority (KPPA) Executive Director of the Office of Investments is responsible for keeping a record of all official Investment Committee meetings. This record shall identify those subjects discussed during the meeting and shall make specific note of any formal action taken by the Investment Committee. This record will be retained by CERS as further documentation of Investment Committee actions.

Procedures for specific transaction classifications are discussed in the following paragraphs.

#### Equity Transactions

Equity transactions must be in compliance with the current Investment Policy Statement (IPS) and their written guidelines, therefore; approval of individual purchase and sale recommendations are not required as long as they are in conformance with the Investment Director's role, function and present strategy.

Investment Directors shall have discretion in implementing a trading strategy which may include, but is not limited to, utilizing: primary, secondary, over-the-counter, third or fourth markets; crossing networks, and; intermarket trading systems. It shall be the responsibility of the Director to ensure any necessary federal or state regulatory filing and document retention of the filings associated with the activities in which the Director chooses to engage.

It shall be the responsibility of the Directors to ascertain that funds will be available on settlement date before securities are purchased.

#### Fixed Income Transactions

Fixed income transactions must be in compliance with the current IPS and their written guidelines, therefore, approval of individual purchase and sale recommendations are not required as long as they are in conformance with the Investment Director's role function and present bond market strategy.

Directors may execute transactions through primary, secondary, over-the-counter, third or fourth markets. It shall be the responsibility of the Director to ensure any necessary federal or state regulatory filing and document retention of the filings associated with the securities activities in which the Director chooses to engage.

It shall be the responsibility of the Directors to ascertain that funds will be available on settlement date before securities are purchased.

### Repurchase Agreements

Short-term cash reserves are to be invested daily by the Division. Repurchase Agreements may be initiated only with those firms that have been approved by the Investment Committee and invested in compliance with the current Statement of Investment Policy.

### Investment Manager Selection, Due Diligence and Disclosure

All Investment Managers will be selected utilizing the procedures outlined in the IPS. All Investment Managers will be Registered Investment Advisors with the SEC or qualify for one of the exemptions spelled out in the Dodd-Frank Act and specifically discussed at the approving investment committee meeting and approved by the Investment Committee.

#### Selection Criteria

- Experience of the firm in the management of institutional portfolios operated under the prudent person standard;
- Verifiable historical performance record of at least three years in the desired strategy (may be shortened or waived depending on the strategy considered);
- Qualifications and depth of the investment professionals;
- Soundness of the firm's investment philosophy and process;
- Adequacy of the firm's trading, back office, accounting, reporting and client service capabilities;
- Fees and other economic terms;
- Legal structure and terms; and
- Fit within the asset class.

#### Due Diligence

- 1) When a prospective General Partner has been identified, Investment Staff shall have at least one meeting at KPPA offices and one on-site at the prospective General Partner's offices. The General Partner's presentation to the Investment Committee at the time of prospective approval may serve as the meeting at KPPA offices if at no other time could it be arranged to have a meeting at KPPA.
- 2) Investment Staff shall document any and all formal meetings with the prospective general partner and make that documentation available upon request.
- 3) Investment Staff shall retain its consultant to perform due diligence on any investments that go before the Investment Committee for approval. A formal write-up of the due diligence process shall be prepared and distributed to Investment Committee members prior to the date of prospective Investment Committee approval. This write-up shall generally detail the following components of the decision-making process:
  - a. Overview of the Firm
  - b. Investment Strategy
  - c. Organizational Structure and Key Personnel
  - d. Summary of Investment Performance
  - e. Investment Rationale
  - f. Investment Terms

- g. Whether any principles of the firm have been involved in any regulatory proceedings and, if so, the details concerning same,
  - h. Whether a placement agent has been involved and, if so, the identity of the agent and the details of the agreement, in accordance with the CERS Statement of Disclosure, Placement Agents.
- 4) Investment Staff and Consultant shall make themselves available for questioning by the Investment Committee regarding any prospective investment. This time shall generally be made available to the Investment Committee at such a time a prospective investment is before the Investment Committee for approval. However, should additional time or materials be requested of knowledgeable parties, it shall be provided to the Investment Committee expeditiously.

#### Investment IMA, Guidelines, Side Letters

- Staff shall work with either approved outside legal counsel or internal KPPA legal counsel on all Investment Management Agreements, Limited Partnership Agreements, and Side Letters.
- Alignment of Interests: Staff shall actively negotiate partnership agreements on behalf of CERS to ensure that the interests of the general partner are aligned with those of CERS. Staff shall endeavor to ensure that the majority of senior investment professionals within each general partner firm make substantial investments of their own personal net worth within the partnerships in which CERS invests, and that the mix of management fees and carried interest is consistent with CERS objectives of maximizing long-term returns from the asset class.
- Special Services: Due to the complex nature of alternative investment structures and partnership agreements, Staff will retain expert legal counsel on an as-needed basis. From time-to-time, during the due diligence process private investigators may be engaged to investigate general partner principals for integrity, ethical standards, tax-related issues, etc. prior to an investment commitment. Staff may retain a post-venture distribution manager to manage common stock and other public securities distributed by its general partners, consistent with the long-term objectives of the CERS.

#### Disclosure Policy

- Subject to the procedures and any other restrictions applicable under the Open Records Act and Kentucky Revised Statutes 61.650, the Executive Director of the Office of Investments or designee will disclose information such as the name of the funds, limited partnership investments, investment managers, and general partners that have been selected by the CERS to manage alternative investments. Additionally, aggregate portfolio returns will also be disclosed.
- In order to comply with the prohibition on disclosure of records that contain real estate appraisals, feasibility estimates, and evaluations relative to the investment in the Open Records Act, Kentucky Revised Statutes 61.650 and certain partnership agreements, CERS will not disclose the individual underlying investments and their performance.
- KPPA will make available to the public the management fee, performance fee or carried interest rate if applicable, and hurdle rates or preferred returns if applicable of all investment managers. It will be shown as a percentage rate and it will be based on the rate that was disclosed at the investment committee when the investment manager was approved. If staff is able to negotiate a better fee rate than what was approved at the investment committee meeting that rate

will not be shown.

Signatories

As Adopted by the Investment Committee

As Adopted by the Board of Directors

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

Dr. Merl Hackbart  
Chair, Investment Committee

Ms. Betty Pendergrass  
Chair, Board of Trustees



County Employees Retirement System  
Manager and Placement Agent Statement of Disclosure  
Approved: March 16, 2022

A. Purpose

This Manager Statement of Disclosure (Policy) sets forth the disclosure requirements which must be satisfied prior to any County Employees Retirement System (CERS) investment. This policy requires disclosure of conflicts of interest and/or political contributions with any new CERS investment. CERS shall require the disclosure of detailed information regarding any manager used, their services, and payments and fees in connection with all CERS investments. This Policy is intended to apply broadly to all of the types of investment advisors with whom CERS conducts or potentially conducts business with including general partners, managers, investment managers and sponsors of hedge funds, private equity funds, real estate funds, as well as investment managers retained pursuant to a contract.

The goal of this Policy is to bring transparency to our investment management relationships in connection with CERS' investments and to help ensure that CERS' investment decisions are made based solely on the merits of the investment opportunity and in a manner consistent with the responsibilities of the Board of Trustees and individuals who owe a fiduciary duty to CERS.

B. Objectives

The objectives of CERS' policy are:

1. To ensure that CERS' investment decisions are consistent with CERS' overall Investment Policy Statements;
2. To supplement the due diligence and information available to CERS' Board members, staff, and consultants when evaluating an investment opportunity;
3. To prevent impropriety and/or the appearance of improprieties and to disclose conflicts of interest and/or the appearances of conflicts of interest;
4. Provide transparency and confidence in CERS investment decision-making and process; and
5. Establish procedures to comply with state and federal law.

C. Application

This Policy applies to all agreements with managers that are entered into after-March 10, 2017. This Policy also applies to existing agreements with managers if, after the date this Policy is adopted, the term of the agreement is extended; there is any increased commitment of funds by CERS pursuant to the existing agreement; or there is a material amendment to the substantive terms of an existing agreement, including the fees or compensation payable to the manager.

D. Definitions

## CERS Investment Committee Meeting - Administrative Investment Policy Statements\*

1. "KRS vehicle" means a partnership, limited liability company, account or other investment vehicle in which CERS is the investor.
2. "Consultant" refers to individuals or firms, and includes key personnel of consultant firms, who are contractually retained or have been contracted by CERS to provide investment advice to CERS but who do not exercise investment discretion.
3. "Manager" means an asset management firm that is seeking to be, or has been, retained by CERS or by a KRS vehicle to manage a portfolio of assets (including securities and or contracts, etc.) for a fee. The manager usually has full discretion to manage CERS assets, consistent with investment management guidelines provided by CERS and fiduciary responsibility.
4. "Executive Agency Lobbyist (EAL)" means any person engaged to influence executive agency decisions or to conduct executive agency lobbying activity as one of his main purposes on a substantial basis. An EAL does not include an elected or appointed officer or employee of a federal or state agency, state college, state university, or political subdivision who attempts to influence or affect executive agency decisions in his fiduciary capacity as a representative of his agency, college, university, or political subdivision.
5. "Executive Agency Lobbying Activity" includes any contact made to promote, oppose, or otherwise influence the outcome of an executive agency decision by direct communication with an elected executive official, the secretary of any cabinet listed in Kentucky Revised Statutes 12.250, any executive agency official, or a member of the staff of any one of the officials listed in this paragraph.
6. "Real Party-In-Interest (RPI)" is a person or organization on whose behalf the executive agency lobbyist is acting, if that person is not the employer. For example, if the ABC Corporation engages XYZ Consulting Company which, in turn, hires John Smith to influence decisions or conducts executive agency lobbying on behalf of ABC Corporation: (a) John Smith is the EAL; (b) XYZ Consulting Company is the employer; and (c) ABC Corporation is the "real party in interest".

#### E. Responsibilities

##### Manager's Responsibilities

Prior to CERS investing with any manager, KPPA Staff shall obtain a signed Manager Disclosure Questionnaire from the investment manager. This form includes a statement as to whether or not the investment manager has used a placement agent in connection with the proposed KRS investment opportunity. It also includes conflict of interest disclosures and political contribution disclosures among other required information including but not limited to:

- The name of the placement agent;
- The fee paid or payable to the placement agent;
- Representation that the fee is the sole obligation of the investment manager and not that of CERS or the limited partnership;
- Current or former Kentucky officials (federal, state, and local government), CERS Board of Trustees members, CERS employees or consultants to KRS that are receiving any fees or compensation from the manager and/or placement agent;
- The names of any current or former Kentucky elected or appointed government officials (federal, state, and local government) CERS Board of Trustees members, employees, or



CERS Investment Committee Meeting - Administrative Investment Policy Statements\*

- consultants of CERS, or any other person, if any, who suggested the retention of the placement agent;
- 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), Financial Regulatory Agency (FINRA), or any similar regulatory agency;
- A résumé for each officer, partner or principal of the placement agent detailing the person's education, professional designations, regulatory licenses and investment and work experience;
- A description of the services to be performed by the placement agent;
- A statement whether the placement agent, or any of its affiliates, is registered as a lobbyist with any and all Kentucky state and local (county) governments; and
- A statement by the manager and/or placement agent representing and warranting the accuracy of the information provided to CERS regarding the Statement of Disclosure in any final written agreement with a continuing obligation to update any such information within 10 business days of any change in the information.

The manager shall notify the placement agent of his or her obligations under Kentucky Revised Statutes Chapter 11A.

Compliance with the following procedures is the responsibility of the manager, the EAL and the placement agent. KPPA staff is not responsible for ensuring compliance with the following procedures as staff is not a party to the process.

The following is a description of the process external persons must follow to comply with Kentucky's EAL registration procedures:

1. Prior to contact with KPPA personnel the placement agent, employer, and, if applicable, the RPI, is required to file jointly, the Initial Registration Statement Form\* with the Kentucky Executive Branch Ethics Commission (EBEC) and furnish a copy to KPPA.

Questions as to the process or applicability should be addressed to:

Executive Branch Ethics Commission (502) 564-7954.

2. After Initial Registration, the placement agent, employer, and, if applicable, the RPI, is required to abide by the EBEC *Requirements After Registration* by filing an Updated Registration Statement\*\* annually (Due by July 31) with the EBEC and furnish a copy to KPPA.
3. If the placement agent, employer, and, if applicable, the RPI, wishes to terminate their lobbying effort they must notify the EBEC within 30 days after the termination of engagement by filling out the Termination Notification Form\*\*\* attaching it to the EAL's final Updated Registration Statement form\*\* and furnishing a copy to KPPA.

\* Initial Registration Statement Form is available at:  
<http://ethics.ky.gov/lobbying/Pages/Registration.aspx>

\*\* Updated Registration Statement Forms are available at:  
<http://ethics.ky.gov/lobbying/Pages/RequirementsAfterRegistration.aspx>

\*\*\* Termination Notification Form is Available at:

<http://ethics.ky.gov/lobbying/Pages/howToTerminate.aspx>

In the event a placement agent is expected to receive remuneration for a KRS investment, ~~KRS~~ KPPA staff will notify the Investment Committee in the memorandum discussing the recommended/approved investment. If a manager breaches this policy, staff will notify the Investment Committee as soon as practicable.

#### KPPA Staff Responsibilities

KPPA staff are responsible for:

- Providing the public with disclosure by posting a copy of this policy on KPPA website;
- Implementing this policy on behalf of KRS with each Investment Director responsible for their specific asset class; and
- Providing regular disclosure updates to the KRS Investment Committee and the Board of Trustees.

All parties responsible for implementing, monitoring and complying with this Policy shall consider the spirit as well as the literal expression of the Policy.

#### F. Conflict of Interest

All persons and entities contracting with CERS shall certify that:

- they are legally capable of entering into a binding contract and authorized to do so;
- that they are not, nor shall be, in violation of any Kentucky law, statute or regulation pertaining to a conflict of interest including, but not limited to, Kentucky Revised Statutes 121.056; and
- that they are not, nor shall be, in violation of any provision of Kentucky Revised Statutes Chapter 11A or any regulation promulgated there under, or any law or regulation pertaining to the Kentucky Registry of Election Finance and the reporting requirements thereof.

All persons and entities seeking to or actually contracting with KRS shall disclose all relationships and potential conflicts of interest with any KPPA staff, committee or Board Member. Any disclosed conflicts of interest will be discussed at the Investment Committee as to the severity of the conflict and the appropriate resolution. Options the Investment Committee might recommend include but are not limited to: no action required; conflicted party abstention; and refusal to invest. Subsequent discovery of any undisclosed conflict may be considered a breach of contract and may result in immediate termination of any agreements without penalty or fee to CERS.

#### Signatories

As Adopted by the Investment Committee

As Adopted by the Board of Directors

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

Dr. Merl Hackbart  
Chair, Investment Committee

Ms. Betty Pendergrass  
Chair, Board of Trustees



County Employees Retirement System  
Securities Trading Policy for Trustees and Employees  
Approved: March 16, 2022

The County Employees Retirement System (CERS) is charged with the administration of pension and group health insurance funds held in trust for active, inactive and retired CERS members and their beneficiaries. Accordingly, its Trustees and Employees have fiduciary duties commonly associated with pension and other trusts. The principal purpose of the Securities Trading Policy (Policy) is to prevent an intentional or inadvertent violation of Federal securities laws as well as Kentucky's fiduciary and ethics standards. Further, this policy serves to act as an ethical guideline to ensure that CERS' Trustees and Employees conduct themselves in a manner that fosters public confidence. Since CERS is described by statute as a state agency, CERS Trustees and Employees have special responsibilities for honesty and integrity applicable to public servants. This Policy acknowledges certain standards of conduct expected of Trustees and Employees in view of these responsibilities.

Although many of the provisions of this Policy are based upon legal and fiduciary concepts, this Policy should not be interpreted as an exclusive and complete statement of legal and fiduciary responsibilities. The primary source of laws governing the legal and fiduciary conduct of Trustees and Employees are set forth in Kentucky Revised Statutes Chapter 11A, et seq., and KRS 61.505 and KRS 78.782. This Policy does not limit or expand the scope of those laws.

This Policy is intended to provide specific requirements to Trustees and Employees regarding personal securities trading for CERS accounts and compliance with legal and fiduciary responsibilities as governed by the Commonwealth of Kentucky and CERS Board of Trustees. Personal securities trading and transactions in accordance with this policy should create a presumption of compliance with legal and fiduciary responsibilities by Trustees and Employees. Willful disregard of this Policy could result in disciplinary actions which include formal reprimands, adverse performance reviews, disgorgement of profits, removal from office, or termination of employment.

#### A. Definitions

In this Policy, the following definitions apply unless the context requires otherwise:

1. "CERS" means the County Employees Retirement System.
2. "Board" means the Board of Trustees of CERS.
3. "Employee" means a person working for CERS or Kentucky Public Pensions Authority (KPPA) in an employer/employee relationship.
4. "Trustee" means a member of the Board of CERS.
5. "Covered Persons" are defined as Employees and Trustees with access to material, non-public information about proposed trading, trading strategies, or holdings and the other investment funds held by CERS. This includes individuals involved in recommending or making investment decisions or who have access to systems containing investment

information. It also includes those working with or in close proximity to persons involved in decision making who regularly have the opportunity to see written information or hear discussions relating to investments. The following employees are, by virtue of their positions, conclusively presumed to be Covered Persons: CERS Chief Executive Officer, KPPA Executive Director, KPPA Executive Director of Operations, KPPA Executive Director Office of Investments, KPPA Executive Director Office of Legal Services, KPPA Executive Director Office of Benefits, General Counsel, Assistant General Counsel, all KPPA Investment Division staff, all KPPA Accounting Division staff, all KPPA Internal Audit Division staff, select KPPA Division Directors, and select positions within the Information Technology Division at KPPA.

6. "Personal securities transactions" means a discretionary transaction involving the purchase or sale of a security in which a person, or any member of such person's immediate family, had or gained directly or indirectly a financial interest and in which the person or any member of such person's immediate family had influence or control, directly or indirectly, over the timing of the trade of the security or derivative on a security.
7. "Family" means the Trustee's or Employee's spouse, their children under the age of 18, adult children financially dependent upon them or living in the same household and any other person(s) living in their household. This policy also applies to any relative of a Trustee or Employee, even if not living in their household, over whose investments the Trustee or Employee has discretionary authority.
8. "Federal Securities Laws" shall mean the Securities Act of 1933, the Securities Exchange Act of 1934, the Investment Company Act of 1940, the Investment Advisers Act of 1940, Title V of the Gramm-Leach-Bliley Act, the Sarbanes-Oxley Act of 2002 Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, Jumpstart Our Business Startups Act of 2012 along with any rules adopted by the U.S. Securities and Exchange Commission ("SEC") and any rules adopted by the U.S. Department of the Treasury including sanction programs enforced by the Office of Foreign Assets Control (OFAC).
9. "Policy" means this Securities Trading Policy.
10. "Knowingly" means to do so with knowledge or awareness of the facts or situation, and not because of mistake, accident or some other innocent reason. An individual acts "knowingly" when he or she acts with awareness of the nature of his conduct and of probable consequences.

## B. General Ethical Standards

All Trustees and Employees must comply with all applicable state and federal laws and ethical principles. They should specifically be aware of the following statutes and rules: KRS 11A, et seq., KRS 61.505 and KRS 78.782, 15 U.S.C. 78j, Section 10 of the Securities Exchange Act of 1934 (including rules 10b-5, 10b5-1, 10b5-2) and the Kentucky Retirement Systems Personnel and Investment Policies. The omission of any applicable statute from this list does not excuse violation of its provisions.

Federal securities laws also prohibit persons, including Trustees and Employees, from trading securities or commodities using any manipulative or deceptive device or scheme to defraud. This includes misstating or omitting any material fact. Moreover, trading securities or commodities on the basis of material non-public information is prohibited. This prohibition covers both "insiders"

(persons who acquire material, non-public information in the context of their employment or a relationship of trust such as a fiduciary relationship) and “Tippees” (persons who misappropriate material, non-public information obtained from an insider). This Policy is designed to prevent Trustees and Employees from misusing material, non-public information in a manner that might violate Federal securities laws or from otherwise engaging in inappropriate securities transactions such as front-running in CERS accounts as well as their personal and family accounts.

Accordingly, all Trustees or Employees are prohibited from trading on material, inside and non-public information whether obtained in the course of their CERS duties or otherwise. Material, inside information is non-public information that a reasonable investor is likely to consider important in determining whether to purchase or sell a security. It is also information that, if made public, would likely affect the market price of a security. Information may be considered material even if it relates to future, speculative or contingent events and even if it is significant only when considered in combination with publically available information. Information is considered non-public unless it has been publically disclosed and adequate time has passed for securities markets to digest the information. Any instances or questions regarding possible inside information must be immediately brought to the attention of the KPPA Compliance Officer.

Federal laws also prohibit Trustees, Employees or Investment Managers from transacting securities issued in countries subject to economic sanctions by the U. S. Department of Treasury OFAC. Additionally, Trustees, Employees and Investment Managers should not conduct business or invest with individuals or entities connected with sanction targets or Specially Designated Nationals (SDNs).

### C. Personal Securities Transactions

#### Prohibited Transactions

All Trustees or Employees are prohibited from engaging in the following personal securities transactions:

1. **Knowingly** conducting any securities transaction in any instrument CERS is actively trading until three (3) trading days after the buy/sell orders have been completed or canceled.
2. Purchasing stock in any Initial Public Offering (IPO) in order to prevent quid pro quo activity or conflicts of interest. Employees may accept IPO shares derived from a stock dividend on shares previously owned, from demutualization of an insurance company in which they are a policy holder or as the result of a Family member’s employment by an IPO issuer.
3. Front-running, which is defined as buying or selling a security in advance of the time such a transaction would be blocked by the pre-clearance procedure. Trustees and Employees who have actual knowledge of transactions that are being considered for implementation in CERS portfolios, even in securities exempted by this policy, are prohibited from acting in advance thereof even if such purchase or sale would not otherwise be barred by the pre-clearance procedure below.

#### Covered Accounts, Securities and Assets

Personal securities transactions covered by this policy include transactions in:

- Individual equity or equity-related instruments, including but not limited to stocks, convertibles, preferred stock, options and futures on individual stocks, warrants, rights, etc., for domestic and foreign securities, whether publicly traded or privately placed.
- Individual bonds, options and financial futures on individual bonds.
- Investments in real estate involving more than one individual or entity with a fiduciary duty to CERS, or otherwise subject to the requirements of this policy, must be disclosed thirty (30) days PRIOR to transaction consummation even if it falls under an exemption listed below.

### **Exempted Accounts, Securities and Assets**

The following are exempt trades: (1) trades in units of open ended mutual funds, segregated funds, or pooled trust funds; (2) purchases made under automatic dividend reinvestment or share purchase plans, but not sales from these made at the direction of those covered under this Policy; (3) trades that result from corporation actions without any voluntary action by the person holding the security; and (4) trades in index products (ETF securities, options, futures, or other derivatives that track published indices). Exempt trade examples include the following:

- Stock splits,
- Stock dividends,
- Mutual funds,
- Index funds,
- Unit Investment Trusts,
- Master trusts,
- Covered call writing or protective put purchases on securities already owned by the Trustee or Employee,
- Real estate used for personal or recreational residence,
- Agricultural or real property with a value of less than \$250,000 and bona fide rental properties with two (2) or fewer units,
- Real estate held through a real estate investment trust for which the Trustee or Employee is not making individual property selections,
- Dividend Reinvestment Plans (DRIP) or Direct Stock Plans (DSP) purchases, and
- Discretionary, fee-based accounts where the account owner is not making individual security selections.
- Annuity or insurance contracts,
- Tangible personal property and hard assets,
- Money market instruments,
- Certificates of deposit,
- Commercial paper,
- Options and futures on indices.

### **Pre-Clearance**

Covered Persons shall not enter into a non-exempt personal securities transaction without first complying with the pre-clearance process defined herein and receiving approval or clearance from the KPPA Compliance Officer or the KPPA Executive Director Office of Investments. The KPPA

Compliance Officer shall be responsible for implementation of this policy and for establishing procedures to track Trustee and Employee compliance with this Policy.

A. Open Orders/Options

If a Covered person wants to place a “good until canceled” limit, which is the equivalent of an open order that specifies certain execution limits, or writing a covered call in a security that has not been defined as exempt in this policy, they must indicate the order type on their request for approval. If the order request is approved in accordance with pre-clearance procedures in this policy, a transactional disclosure form must be completed and submitted to the KPPA Compliance Officer within ten (10) calendar days of the order being executed. **If at any time between approval by the KPPA Compliance Officer and trade execution the Covered Person obtains actual knowledge of CERS or its external managers transacting in that security, then transacting in that option or open order is no longer approved.**

Employees may obtain pre-clearance for personal securities transactions by sending an e-mail to the KPPA Compliance Officer requesting a determination as to whether trading is allowed and must wait for approval from the KPPA Compliance Officer **before entering into the transaction**. In the absence of the KPPA Compliance Officer, the KPPA Executive Director Office of Investments may also consider the pre-clearance request of an Employee pursuant to the same procedure. In consultation with CERS investment managers and staff, the KPPA Compliance Officer may approve or deny pre-clearance approval or denial based on reasonable discretion that the transaction does not conflict with federal or Kentucky law or CERS policies.

Pre-clearance for Trustees and Employees will be documented in a personal securities transaction log, which will provide a record of all requests for approval of personal securities transactions. The KPPA Compliance Officer will provide pre-clearance and maintain the log. Unless otherwise noted by the Compliance Officer, pre-clearance approval for personal securities transactions is effective until market close on the first trading day following communication of pre-clearance approval, unless the Trustee or Employee has been approved for an open order. **Under no circumstances shall an employee approve or clear their own transaction.**

A transactional disclosure form must be completed for personal securities transactions, except for those described above which are exempted from the disclosure requirement. Transactional disclosure forms must be fully completed and given to the KPPA Compliance Officer along with the trade confirmation from the broker (unless the transaction only involved real estate) within ten calendar days of the personal transaction trade date. A sample of the required form is attached to this policy.

The transactional disclosure form must be fully completed and contain information including:

- The name and amount of the security involved. If the asset is real estate not exempted by this policy, then the address of the property should also be included.
- The date and nature of the transaction.
- The price at which the transaction was effected.
- The name of the broker through whom the transaction was effected.

#### D. Certifications

##### 1. Annual

Each year, at the request of the KPPA Compliance Officer, all Covered and Deemed Covered Persons shall submit to the KPPA Compliance Officer a certification of their understanding of the requirements of this policy. Additionally, unless they are a Trustee, all Covered and Deemed Covered persons should submit a brokerage statement disclosing the account title, their securities holdings and securities transactions for personal and family accounts where any non-exempt securities transactions may occur for the period ending the preceding December 31<sup>st</sup>.

##### 2. New Hire/Appointment

All Covered Persons or Deemed Covered persons shall also be required to file with the KPPA Compliance Officer, in such a format as the KPPA Compliance Officer may require, a certification of their understanding of the requirements of this policy. Additionally, unless they are a Trustee, all Covered and Deemed Covered persons should disclose the account name and account for all personal and family accounts where non-exempt securities transactions may occur within fifteen business (15) days of becoming a Covered Person.

#### E. Violations and Remediation

CERS takes violations of securities laws and this policy very seriously. As mentioned previously, willful disregard of this Policy could result in disciplinary actions which include formal reprimands, adverse performance reviews, disgorgement of profits and termination of employment or removal from office. Failure to pre-clear non-exempt personal securities transactions shall be considered a willful violation of this policy and will subject that Covered Person to appropriate sanctions.

As such, Trustees and Employees should promptly report any suspected violation of securities laws or this policy to the KPPA Compliance Officer. If any violation of this policy is determined to have occurred, the KPPA Compliance Officer will escalate the situation to the KPPA Executive Director and Chair of the Board of Trustees for action. No Trustee or Employee shall participate in a determination of whether he or she has committed a violation of this policy or in the imposition of any sanction against himself or herself.

#### Signatories

As Adopted by the Investment Committee

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Dr. Merl Hackbart  
Chair, Investment Committee

As Adopted by the Board of Directors

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Ms. Betty Pendergrass  
Chair, Board of Trustees





County Employees Retirement System  
Investment Securities Lending Guidelines  
Approved: March 16, 2022

This document sets forth the investment policy for the securities lending program.

A. Objectives

To generate incremental income by lending securities to qualified borrowers. Borrowers provide collateral in exchange for the right to borrow securities. Collateral should follow the system's guidelines as set forth in the Securities Lending Authorization Agreement. Total return from securities lending should meet or exceed Risk Management Association's (RMA) Lending Composite on an annual basis.

B. Responsibilities and Delegations

The CERS Investment Committee have the following responsibilities and duties:

1. Approving the securities lending guidelines.
2. Reviewing the securities lending program performance annually with the Kentucky Public Pensions Authority (KPPA) Executive Director, Office of Investments, and KPPA staff.

The KPPA investment staff duties include, but are not limited to, the following:

1. Reporting to the Investment Committee annually about the performance and compliance of the securities lending program.
2. Recommending guideline changes to the Investment Committee as needed.
3. Reviewing monthly reports from the Lending Agent.
4. Reviewing and evaluating quarterly reports from the Lending Agent. Furnishing the quarterly reports to the Investment Committee.
5. Monitoring the Lending Agent's compliance with the securities lending guidelines.

The Lending Agent's duties include:

1. At least annually, or more frequently if requested by CERS, the Lending Agent must present the Executive Director of the Office of Investments, with a list of potential borrowers and the applicable credit exposure.
2. The Lending Agent must immediately notify the KPPA Executive Director of the Office of Investments and KPPA staff of any violation of the securities lending guidelines.
3. The Lending Agent must provide a quarterly report showing: historical net earnings; volume on loan, loanable base, percentage of loan, gross spread, net earnings and gross basis point return by class; comparable gross basis point return by class with the RMA Lending Composite, BNY Mellon and CERS; detailed performance comparison with RMA, BNY Mellon and CERS of percentage on loan, spread and gross basis point return by class, and; other information as reasonably requested by CERS.

### C. Lending and Collateral Guidelines

The collateral guidelines are set forth in the Securities Lending Authorization Agreement. The Lending Agent shall follow these guidelines explicitly in conjunction with these policies. If, at anytime, a violation occurs, the Lending Agent shall immediately notify the Executive Director of the Office of Investments and KPPA staff by e-mail; together all parties shall determine the action or actions needed to bring the portfolio back into compliance.

#### Signatories

As Adopted by the Investment Committee

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Dr. Merl Hackbart  
Chair, Investment Committee

As Adopted by the Board of Directors

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Ms. Betty Pendergrass  
Chair, Board of Trustees



County Employees Retirement System  
Investment Proxy Voting Policy  
Approved: March 16, 2022

The County Employees Retirement System (CERS) Board of Trustees (Board) appoints an Investment Committee with full authority to act for the Board in the acquisition, sale and management of the securities and funds of the Retirement Systems. The Board also authorizes the Investment Committee or designee, custodian, investment manager or agent to execute stock proxies for the Board. Said delegate(s) shall maintain detailed records of its performance of its duty and provide such records to the Board as may be requested by the Board from time to time.

This position paper is hereby adopted by the Investment Committee to provide a set of guidelines to be followed in order to execute proxies. The following statement reflects the general policy that shall be applied as proxy issues are considered:

To support management if management's position appears reasonable, is not detrimental to the long term equity ownership of the corporation and reflects consideration of the impact of societal values and attitudes on the long-term liability of the corporation and is in the best interest of the plan participants.

The following paragraphs shall be applied when considering the more specific proxy issues that are likely to be encountered on a more routine basis.

A. Routine Business or Financial Matters

Election of Directors

FOR

In a majority of instances, election of directors is a routine voting issue. Unless there is a proxy fight for seats on the Board, CERS will usually vote in favor of the Management-proposed slate of directors.

Appointment of Auditors

FOR

The selection of independent accountants to audit the company's financial records is a routine business matter and in most instances is submitted to shareholders for public relations reasons. Since the accounting firm selected to do the audit has no effect on the investment value of the company's securities, CERS will support Management's recommendation.

Increase Authorized Common Stock

FOR \*

CERS will support an increase in authorized common stock needed to implement a stock split when coupled with intent to immediately effect the split, or aid in a restructuring or acquisition or provide a sufficient number of shares for employee savings plans, stock option or executive compensation plans.

A satisfactory explanation for a company's plans for the stock must be disclosed in the proxy statement.

\* CERS will oppose increases in authorized common stock if we suspect that the shares are to be used to implement a poison pill or another form of anti-takeover device, or if the issuance of new shares could excessively dilute the value of the outstanding shares upon issuance.

Changes in Board Structure

FOR \*

Companies may propose various provisions related to the structure of the Board of Directors. These provisions may include changing the way Board vacancies are filled, directors are nominated or the number of directors. These provisions may include Majority Vote Director Elections and the Separation of the CEO and Chairman of Board. These proposals may be proposed amendments to the Charter or by-laws and need to be reviewed by the shareholders prior to voting. In most instances these proposals are not controversial nor an anti-takeover device. Therefore, CERS generally votes in favor of the proposal.

\* However, CERS is opposed to cumulative voting for members of the Board and attempts to limit term of Board of Directors based on tenure or age.

## B. Non-Routine Business or Financial Matters

Considering Non-Financial Effects of a Merger Proposal

AGAINST

CERS will oppose proposals that require the Board of Directors to consider what impact a merger would have on certain groups other than a company's shareholders, such as employees, consumers, business partners, and the communities in which the company is located. We expect that a company's Board of Directors will act in the best interest of its shareholders at all times.

Director Liability and Indemnification

FOR \*

The Investment Committee believes that proposals concerning Liability and Indemnification, which limit the personal liability of directors for breaches of fiduciary duty of care and provisions for payment of expenses incurred by officials, directors and other representatives who become defendants in lawsuits, should be evaluated on a case by case basis with reasonable measures supported and extreme measures opposed.

Executive Compensation

FOR \*

Executive compensation can take various forms but should provide adequate compensation and incentives to management consistent with the long term interests of the shareholders of the company.

\* Management should have some assurance that they will not, in the event of a takeover, be terminated without motive and compensation. However, CERS is concerned that some compensation agreements provide excessive compensation in the event of a takeover. CERS does not oppose agreements which provide executives with a reasonable period of compensation after termination; however, they will oppose compensation plans which are excessive.

Stock Splits

FOR

CERS will vote in favor of a proposal to split the company's stock if there is an immediate intent to effect the split.

Employment Relations

FOR \*

The Board of Directors and Corporate Management have the responsibility for harmonious labor relations. This responsibility also includes conducting labor negotiations within the appropriate laws of the jurisdiction.

- \* Where efficient operation of the corporation requires plant closings or relocations, the corporation should give as much notice as possible and assist its employees in relocating or in seeking other employment. Resolutions of shareholders which seek to impose requirements on management in this regard will not be supported automatically. Support will be contingent upon whether or not managers can demonstrate that efforts have been made to retain good employment relations subject to the constraints encountered in the particular circumstances.

## C. Anti-Takeover Issues

Blank Check Preferred Stock

AGAINST

A Blank Check Preferred Stock proposal is one that authorizes the issuance of certain preferred stock at some future point in time and allows the Board of Directors to establish voting, dividend, conversion, and other rights at the time of issuance. While Blank Check Preferred Stock can provide a corporation with the flexibility needed to meet changing financial conditions, it also may be used as the vehicle for implementing a poison pill defense, or it may be placed in friendly hands to help block a takeover bid. CERS' concern is that once this stock has been authorized, shareholders have no further power to determine how or when it will be allocated.

Classified Boards

AGAINST

A Classified Board is typically divided into three separate classes, each class to hold office for a term of two or three years. Only a portion of the Board of Directors can be elected or replaced each year. Since this type of proposal has fundamental anti-takeover implications, CERS opposes the adoption of Classified Boards.

Fair Price Provisions

AGAINST

A Fair Price provision in the company's charter or by-laws is designed to assure that, if the Corporation is acquired under a plan not agreed to by the Board of Directors, each shareholder's securities will be purchased at the same price. In most instances the provision requires that any tender offer made by a third party be made to all shareholders at the same price.

Fair pricing provisions attempt to limit the "two-tiered" pricing systems in which the interested party or would-be acquirer of the company initially offers a premium for a sufficient number of shares of the company to garner control. Thereafter, an offer at a much lower price is made to the remaining shareholders who have no choice at all but to accept the offer. The "two-tiered" approach is coercive in that it makes it easier for an outsider to gain control of a company because it provides an incentive to the shareholder to sell his shares immediately in order to receive the benefits of a higher price per share and avoid falling into the second tier, if the offer is successful. The coercive pressures associated with these offers have caused many states to adopt controlled share acquisition statutes which restrict this practice by law.

In theory this type of provision is acceptable standing alone, however, given the fact that the practice is in most aspects prohibited by law, and the fact that Fair Price Provisions are invariably linked with other

anti-takeover measures, such as supermajority voting requirements to approve certain transactions, CERS will vote against most Fair Price Provisions.

Limiting Shareholders' Right to Call Special Meetings

AGAINST

Companies contend that such limitations are necessary to prevent minority shareholders from taking control of the company's agenda. However, such limits also have anti-takeover implications such as preventing a shareholder who has acquired a significant stake in the company from forcing management to address the potential sale of the company. Additionally, a limitation on shareholder action makes it difficult for a large shareholder or group of shareholders to use this facility to force management to address issues that may be of urgent or utmost importance. Since, in most instances, state law prohibits shareholders from abusing or using this facility in certain manners, CERS sees no justifiable reason for management to eliminate this facility. CERS will oppose the elimination of this fundamental shareholder right.

Limiting Shareholders' Right to Act by Written Consent

AGAINST

Action by written consent enables a large shareholder or group of shareholders of a company to initiate and vote on corporate matters without having to wait until the date of the next annual meeting. CERS believes this is a fundamental shareholder right that is inherent in the concept of stock ownership and will oppose any proposals which may limit.

Supermajority Vote Requirements

AGAINST

A Supermajority Vote Requirement is a charter or by-law requirement that, when implemented, raises the percentage of shareholder votes needed to approve certain proposals such as mergers, changes of control, or proposals to amend or repeal a portion of the Articles of Incorporation.

Re-incorporation

AGAINST

For various reasons, a corporation may choose to reincorporate under the laws of a different state. Their reasoning may include taxation, the state's General Business Law and the level of corporate experience the state's court may have. However, in a majority of instances a re-incorporation proposal has its foundation in the corporation's desire to incorporate in another state in order to take advantage of that state's laws governing corporations and corporate control and the state courts' views in interpreting laws that make it more difficult for unsolicited takeovers to occur. In such cases, CERS will oppose proposals for reincorporation.

Issuance of Stock with Unequal Voting Rights

AGAINST

Proposals of this nature are generally anti-takeover schemes which result in unequal voting rights among different classes of shareholders. The most frequent proposal of this type is a dual class capitalization plan which establishes two classes of stock. As an incentive to encourage shareholders to approve plans designed to concentrate voting power in the hands of insiders, some plans give higher dividends to shareholders willing to exchange shares with superior voting rights for shares with inferior voting rights.

Unequal voting rights plans are designed to reduce the voting power of existing shareholders and concentrate a significant amount of voting power in the hands of management. In the majority of instances, they serve as an effective safeguard against hostile takeovers. For these reasons, CERS deems these plans unacceptable and in most instances will vote against these proposals.

Elimination of Preemptive Rights

AGAINST

Preemptive Rights allow the shareholders of the company to buy newly issued shares before they are offered to the public in order to retain their then current percentage of ownership as well as to avoid ownership dilution by the issuance of additional stock. CERS believes this is fundamental right of a shareholder and barring a compelling reason should not be eliminated by management. CERS will oppose management proposals requesting eliminating these rights and will support shareholder proposals which request the restoration of Preemptive Rights.

## D. Corporate Governance Shareholder Proposals

Submit Company's Shareholder Rights Plan Shareholder Vote

FOR \*

Most Shareholder Rights Plans (sometimes called poison pills) permit the shareholders of a target company involved in a hostile takeover to acquire shares of that company, the acquiring company, or both, at a substantial discount once a triggering event occurs. A triggering event is usually a hostile tender offer or the acquisition by an outside party of a certain percentage of the company's stock. Since most plans exclude the hostile bidder from the purchase, the effect in most instances, is to dilute the equity interest and the voting rights of the potential acquirer once the plan is triggered. Shareholder Rights Plans are designed to be so disadvantageous to potential acquirers that merely their existence could deter possible acquirers from making a hostile bid.

\* CERS will support shareholder proposals asking that the company submit their Shareholder Rights Plan to a shareholder vote. CERS will vote case-by-case on proposals to completely redeem Rights Plans.

Anti-Greenmail Proposal

FOR

Greenmail payments generally result when a potential hostile acquirer has accumulated a significant percentage of the company's stock and the company acquires the raider's stock at an aggregate price usually above the then current market value usually in exchange for an agreement that the raider would not attempt to acquire control within a certain number of years. The proposal that has been proposed most often to prevent greenmail is the adoption of charter amendments severely limiting the board's ability to acquire blocks of the company's stock in these situations and at above market prices. CERS will vote in favor of an anti-greenmail proposal standing alone provided the proposal has no other management initiated anti-takeover attributes.

## E. Social and Policy Issues

We believe that most decisions of a policy nature, having either a direct or an indirect effect on the conduct of business and on corporate profitability should remain management responsibilities. As such, they should be subject only to their Board of Director's approval; therefore, we would support the position taken by management.

Signatories

As Adopted by the Investment Committee

As Adopted by the Board of Directors

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

Dr. Merl Hackbart  
Chair, Investment Committee

Ms. Betty Pendergrass  
Chair, Board of Trustees





County Employees Retirement System  
Real Estate Policy  
Approved: March 16, 2022

A. Role of Real Estate

CERS has determined that the primary role of the Real Estate asset class is to provide for the following:

- Invest in top tier, attractive risk adjusted returns through active management.
- Utilize access to managers with the expertise and capabilities to exploit market inefficiencies in the asset class.
- Manage interests through co-investment and incentive based compensation and maximize risk adjusted returns.
- Diversify benefits through low correlations with other asset classes, primarily the U.S. equity markets.
- Provide a hedge against unanticipated inflation, which real estate has historically provided due to lease structures and increases in material and labor costs during inflationary periods.
- Permit CERS to invest in unique opportunities that arise due to dislocations in markets that occur from time to time.

B. Allocation to Real Estate Asset Class

CERS has approved a target Real Estate allocation of seven percent (7%) of the total fund for real estate investments. CERS will endeavor to achieve the target allocation over a three to five-year period by averaging into the market and avoiding any concentrated vintage year risks.

C. Investment Policies

For purposes of this Investment Policy, the real estate investment universe is divided into the following sectors, with descriptive attributes to follow:

1. Core Properties

- Operating, substantially leased office, retail, industrial or apartment properties. Several alternative property types may be included in Core such as self-storage, medical office, ground leases, senior housing and triple net leased properties to the extent they exhibit similar risk and return attributes to the traditional Core property types.
- Generally, have institutional qualities for size, physical attributes, and location.
- Target total returns of 7%-9% per year (net of fees and promoted interest), with a high proportion of the total return to be generated from current income and a small proportion of the total return generated from appreciation.

Commented [HS(1)]: Might need a consultant to update return assumption

- Leverage for core properties is moderate with an upper limit of 50% loan to value.

## 2. Value Added Properties

- Office, retail, industrial or apartment properties that have moderate risk associated with their investment. Several alternative property types may be included in Value-Added such as self-storage, medical office, senior housing and triple netleased properties to the extent they exhibit similar risk and return attributes for Value-Added investments.
- Value-Added investments are targeted to capitalize on defects with specific properties that can be identifiable and correctable through leasing, re-development, management, and/or recapitalization.   
 per year (net of fees)
- Target returns for value added investments are 9% to 12% and promoted interest).
- Leverage for value added investments is generally limited to approximately 65% loan to value.

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## 3. Opportunistic Investments

- Opportunistic investments can be comprised of any property sector. Opportunistic investments can include office, retail, industrial, and apartments with high-risk attributes. In addition, hotels, operating companies, development, land and distressed properties are all examples of opportunistic investments
- Leverage for opportunistic investments can be 75% loan to value or higher in certain cases.
- Opportunistic investments will generate returns in excess of 12% (net of fees and promoted interest) in order to compensate for the additional risk commensurate with the increased risk compared to core property investments.

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## 4. Public Securities

- Real estate public securities ("Public Securities") do not allow control over the assets or management.
- Public Securities generally have higher risk and return characteristics than Core properties due to higher leverage and operating company risks. In addition, the daily pricing of securities result in additional reported volatility of returns.
- Daily pricing and public market trading provide liquidity. However, due to small float and limited market capitalization of Public Securities, improved liquidity may come at a price.
- The emergence of the international Public Securities market has broadened the universe to include Asia, European, Australian and North American property companies.
- Expected returns are approximately 9%-11% (net of fees) over a 10-year period and 11-13% (net of fees) for non-U.S.

Commented [HS(4)]: Might need a consultant to update return assumption

Public Securities.

CERS will seek to limit investments by sector diversification using the following limits:

	Target	Range
Core:	70%	50% to 90% of the total allocation
Value Added:	20%	10% to 30% of the total allocation
Opportunistic:	10%	0% to 20% of the total allocation
Public Securities:	0%	0% to 100% of the total allocation

CERS seeks to maintain the flexibility to overweight or underweight any sector in order to capitalize on market opportunities.

#### D. Investment Vehicles

Due to the size of CERS' portfolio, the preferred investment structure is commingled funds. Exceptions may be for public equity accounts which may be efficiently invested through a separate account or single property investments. Single property investments shall be limited to no more than 5% of the total real estate allocation.

CERS may also consider co-investment opportunities in cases where discounted fees and appropriate diversification can be achieved for a particular investment opportunity.

#### E. Property Type Diversification

CERS will seek to control risk in its real estate investment program by diversifying its investments by investment manager, property type and location diversification. CERS will limit the amount committed to one investment manager to the larger of thirty percent (30%) of the total allocation for real estate investments or 1% of the total funds value at the time of commitment.

CERS will seek to limit investments by property type diversification

using the following limits: Office: 0% to 40% of the total allocation

Retail: 0% to 40% of the total allocation

Apartment:	0% to 40% of the total allocation
Industrial:	0% to 40% of the total allocation
Other:	0% to 40% of the total allocation

## F. Total Leverage

All portfolio leverage will be secured through the individual fund investments. There will be no recourse debt permitted.

As Adopted by the Investment Committee    As Adopted by the Board of Directors

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Ms. Betty Pendergrass  
Chair, Board of Trustees



County Employees Retirement System  
Securities Litigation Policy  
Approved: March 16, 2022

A. Statement of Intent

This Securities Litigation Policy (Policy) is issued by the Investment Committee of the Board of Trustees of the County Employees Retirement System (CERS) in connection with monitoring pending actions in which CERS is a named party or otherwise directly impacted.

CERS acknowledges that it has a duty to monitor and evaluate actions in which it may potentially be a member or participant. While CERS will take reasonable steps to monitor and evaluate the actions, it is also cognizant that most, if not all, of these claims will be prosecuted by securities lawyers specializing in representing investors, regardless of whether or not CERS takes an active role. Therefore, the decision regarding the degree of CERS direct involvement in a claim requires evaluating the potential of CERS to add value.

B. Identifying and Evaluating Potential Claims

Periodically, the Kentucky Public Pensions Authority (KPPA) Executive Director of the Office of Investments or other staff will identify actions that are filed in which CERS is a named party or otherwise directly impacted. A variety of sources may be used to identify the actions including, without limitation, a retained third party securities class action monitoring service, portfolio managers, the Internet, and the class action bar.

Upon identification of a potential claim, CERS trading activity will be examined by the retained securities class action monitoring firm to estimate the potential damages utilizing the average results of the two damage calculation methodologies recommended by the National Association of Public Pension Attorneys (NAPPA) in their working document *Calculation of Securities Litigation Damages* dated June 16, 2005, which is hereby incorporated by reference, or such other references and methods which may have particular application to a particular security and/or transaction.

If the potential damages are less than \$10 million, the KPPA Executive Director of the Office of Investments, or designee, shall monitor the class action suit and file a claim upon its conclusion to participate in the class settlement, unless unique circumstances warrant consideration of alternative approaches. If the potential damages exceed \$10 million, then the claim will be screened for more in-depth evaluation.

If further evaluation is warranted, the Executive Director of the Office of Investments shall, in conjunction with the Executive Director of Office of Legal Services and an external legal firm ("evaluation counsel") that has a demonstrated expertise in securities class action legal matters, perform additional due diligence on the claim. The Executive Director of the Office of Investments

shall confer with the General Counsel and may utilize internal legal resources, along with the evaluation counsel, when appropriate. Additional due diligence may include, without limitation: assessment of the complaint; SEC filings and company disclosures; contacts with other investors; consideration of non-litigation alternatives; staffing, resources and other issues; impact of active claim management and; potential conflicts with other class members. If, based upon this additional due diligence it appears that CERS may add significant value by more active participation, then the Executive Director of the Office of Investments shall present this recommendation to the Investment Committee. Any firm, or its partners, that has been selected as evaluation counsel for a particular case is precluded, by this policy, from representing the Systems in any securities litigation matter for a period of three years upon completion of their assignment.

Recommendations to the Investment Committee shall take one of the three following forms:

1. Monitor the course of the class action suit and file a claim upon its conclusion to participate in the class settlement, giving appropriate consideration to objecting to one or more terms of the settlement including, but not limited to, the amount of attorneys' fees to be paid.
2. Seek to control a class action by seeking designation as lead plaintiff, either singly or with others.
3. Opting out of a class action suit and filing a separate suit, either singly or with others.

Based on the review of the potential claim, the Investment Committee will determine whether active involvement is warranted by CERS and the nature of such involvement, if any. If active involvement is deemed to be warranted, appropriate outside counsel will be sought at that time by the Investment Committee.

Notwithstanding the foregoing, managers delegated monitoring responsibilities may utilize their existing monitoring system. The manager shall prepare records, and from time to time, shall furnish information CERS may require in the discharge of its duties. CERS shall continue to monitor the claim notwithstanding the nature of its involvement.

### C. Monitoring Claims

The KPPA Executive Director of the Office of Investments shall recommend the retention of an independent third-party securities class action monitoring firm to assist in the monitoring, filing and claims collection processes. The services of the retained firm shall be evaluated on a periodic basis and the results of the evaluation communicated to the Investment Committee. Any firm providing such monitoring services shall be precluded from representing the Systems in any litigation efforts undertaken by the Investment Committee.



Signatories

As Adopted by the Investment Committee

As Adopted by the Board of Trustees

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

Dr. Merl Hackbart  
Chair, Investment Committee

Ms. Betty Pendergrass  
Chair, Board of Trustees



## KENTUCKY PUBLIC PENSIONS AUTHORITY

David L. Eager, Executive Director

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



Kentucky Public  
Pensions Authority

### MEMORANDUM

TO: Dr. Merl Hackbart, CERS Investment Committee Chair  
C. Prewitt Lane, KRS Investment Committee Chair

FROM: Anthony Chiu, CFA  
Director, Office of Investments

DATE: January 24, 2022

SUBJECT: Investment Update - Redemption of Putnam Dynamic Asset Allocation

As per the Investment Policy Statements, KPPA Investment Staff is requesting permission from the Investment Committee Chairs to redeem the investment in Putnam's Dynamic Asset Allocation strategy ("Putnam") and terminate the associated strategy. An allocation to this strategy was approved in May 2020 as a full replacement for tactical asset allocation strategies from PIMCO and Nuveen, which totaled around 4% of plan assets. KPPA funded the strategy with \$700 million in July 2020. It is determined that this allocation is not appropriate for the Real Return IPS/Beta allocation and actually results in a phantom overweight to public equity and fixed income.

KPPA's investment is in Putnam's "Balanced" strategy, which targeted a similar allocation to the traditional 60% equity / 40% fixed income portfolio. Specifically, its benchmark was a blend of the Russell 3000 Index (50%), Bloomberg Barclays U.S. Aggregate Bond Index (35%), MSCI EAFE Index (10%), and the JPMorgan Developed High Yield Index (5%).

Based on the Putnam Global Macro team's market views, allocations are moved a few percentage points above or below benchmark weights. Within each asset class, dedicated teams make active implementation decisions at the security level. For illustration, below is the allocation and "active" weights for KPPA's investment at the end of December 2021.

<b>KRS Balanced Allocations</b>			
	KRS Custom		
As of 12/31/2021	Benchmark	KRS Balanced	Active Weight
US Large Cap	44%	44%	0%
US Small & Mid Cap	6%	6%	0%
International Equity	10%	11%	1%
US Investment Grade Bonds	35%	30%	-5%
US High Yield Bonds	5%	4%	-1%
Emerging Market Bonds	0%	0%	0%
Emerging Market Equity	0%	0%	0%
Commodities	0%	0%	0%
Cash	0%	4%	4%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>

As shown, at an underlying level this investment is primarily additional public equity and fixed income exposure, but under a different label.

Additionally, in practice Putnam's active weights are not material enough to warrant its current allocation to the Real Return IPS/Beta allocation and are duplicative of rebalances and tilts made by the Investment team and the KPPA Investment Committees at the larger portfolio level. These include being underweight duration and overweight non-US equity.

Finally, this strategy's returns have historically been highly correlated with public equity markets and thus providing dampened equity risk (0.95 with the S&P 500). This has continued during our investment period. Although the sample size is small, our investment has had a 0.97 monthly correlation with the S&P 500.

**Conclusion:** KPPA Office of Investments plans to provide the contractually obligated 30 days' notice for redemption and termination upon your approval. Since the investment is comprised mostly of liquid securities, we expect to have proceeds returned before the end of 1Q 2022. This will increase our current underweight to Real Return.

The cash generated from this transaction will be folded into rebalancing and other liquid securities in the shorter term to get closer to target policy weights. Meanwhile, we will continue to search for longer dated investments in the private markets that we believe will provide attractive net returns, sensitivity to inflation, and portfolio diversification.



**KPPA Statutory Compliance Checklist: Website Postings**

**Per KRS 61.645 and 78.782**

"In order to improve public transparency regarding the administration of the system," the following materials for each fund shall be updated on the KPPA website on a quarterly basis for fiscal years beginning on or after July 1, 2021:

- ☐ The dollar value of fees and commissions paid to each individual manager or partnership;
- ☐ The dollar value of any profit sharing, carried interest, or any other partnership incentive arrangements, partnership agreements, or any other partnership expenses received by or paid to each manager or partnership;
- ☐ As applicable, report each fee or commission by manager or partnership consistent with standards established by the Institutional Limited Partners Association (ILPA);
- ☐ Disclose the name and address of all individual underlying managers or partners in any fund of funds in which system assets are invested;
- ☐ An update of net of fees investment returns, asset allocations, and the performance of the funds against benchmarks adopted by the board for each fund, for each asset class administered by the board, and for each manager.

**Note:**

*"(19) Notwithstanding the requirements of subsection (18) of this section, the system shall not be required to furnish information that is protected under KRS 61.661, exempt under KRS 61.878, or that, if disclosed, would compromise the system's ability to competitively invest in real estate or other asset classes, except that no provision of this section or KRS 61.878 shall exclude disclosure and review of all contracts, including investment contracts, by the board, the Auditor of Public Accounts, and the Government Contract Review Committee established pursuant to KRS 45A.705 or the disclosure of investment fees and commissions as provided by this section. If any public record contains material which is not excepted under this section, the system shall separate the excepted material by removal, segregation, or redaction, and make the nonexcepted material available for examination."*



## Kentucky Retirement Systems - Plan Performance

Reporting Currency: BASE

As of Date: 1/31/2022

Structure	Account/Security Id	Market Value	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD	1 Year - IRR
CERS	KR2F00030002	8,691,365,369.51	-2.63	-1.68	1.98	11.85	10.71	9.58	8.38	6.94	8.13	9.15	11.93
CERS Pension IPS Policy Index	KR2GXCERS000		-2.11	-1.69	2.00	11.39	10.38	9.20	8.28	6.93	8.03	9.20	11.39
CERS- H	KR2F00040002	2,953,560,728.67	-2.62	-1.71	1.93	11.69	10.61	9.52	8.36	6.93	8.13	9.14	11.75
CERS-H Pension IPS Policy Indx	KR2GXCHAZ000		-2.11	-1.69	2.00	11.39	10.38	9.20	8.28	6.93	8.03	9.20	11.39



## Combined CERS-NH & CERS-H Pension

### Investment Return Summary

As of December 31, 2021

	Market Value (\$USD)	% of Portfolio	MTD	QTD	FYTD	1 Year	3 Year	5 Year
<b>Total Portfolio</b>	<b>\$ 11,951,561,544</b>	<b>100.0%</b>	<b>2.7%</b>	<b>3.4%</b>	<b>4.7%</b>	<b>15.0%</b>	<b>13.2%</b>	<b>10.5%</b>
<i>CERS - NH Pension IPS Policy Index</i>			2.2%	3.0%	4.2%	14.0%	12.8%	10.1%
<b>Equity</b>	<b>\$ 6,605,667,954</b>	<b>55.3%</b>	<b>3.9%</b>	<b>5.0%</b>	<b>5.8%</b>	<b>20.8%</b>	<b>19.7%</b>	<b>14.9%</b>
<i>Equity Custom Benchmark</i>			2.7%	5.7%	6.4%	21.4%	20.7%	15.7%
<b>Fixed Income</b>	<b>\$ 4,012,697,647</b>	<b>33.6%</b>	<b>0.8%</b>	<b>0.7%</b>	<b>1.9%</b>	<b>5.3%</b>	<b>6.0%</b>	<b>5.1%</b>
<i>Fixed Income Custom Benchmark</i>			0.5%	0.4%	0.9%	1.8%	6.1%	4.1%
<b>Inflation Protected</b>	<b>\$ 1,333,746,595</b>	<b>11.2%</b>	<b>2.0%</b>	<b>4.0%</b>	<b>6.9%</b>	<b>17.0%</b>	<b>9.3%</b>	<b>7.2%</b>
<i>Inflation Protected Custom Benchmark</i>			2.7%	3.8%	5.9%	8.7%	4.5%	4.4%



## Combined CERS-NH & CERS-H Pension

### Asset Class Performance

As of December 31, 2021

	Market Value (\$USD)	% of Portfolio	MTD	QTD	FYTD	1 Year	3 Year	5 Year
<b>Total Portfolio</b>	<b>\$ 11,951,561,544</b>	<b>100.0%</b>	<b>2.7%</b>	<b>3.4%</b>	<b>4.7%</b>	<b>15.0%</b>	<b>13.2%</b>	<b>10.5%</b>
<i>CERS - NH Pension IPS Policy Index</i>			2.2%	3.0%	4.2%	14.0%	12.8%	10.1%
<b>Equity</b>	<b>\$ 6,605,667,954</b>	<b>55.3%</b>	<b>3.9%</b>	<b>5.0%</b>	<b>5.8%</b>	<b>20.8%</b>	<b>19.7%</b>	<b>14.9%</b>
<i>Equity Custom Benchmark</i>			2.7%	5.7%	6.4%	21.4%	20.7%	15.7%
<b>Public Equity</b>	<b>\$ 5,630,342,538</b>	<b>47.1%</b>	<b>4.1%</b>	<b>5.2%</b>	<b>4.1%</b>	<b>17.3%</b>	<b>20.3%</b>	<b>14.2%</b>
<i>MSCI All Country World Net Index</i>			4.0%	6.7%	5.6%	18.5%	20.4%	14.4%
<b>Private Equity</b>	<b>\$ 975,325,415</b>	<b>8.2%</b>	<b>2.6%</b>	<b>4.0%</b>	<b>15.6%</b>	<b>43.0%</b>	<b>18.6%</b>	<b>17.9%</b>
<i>Russell 3000 + Hurdle (Qtr Lag)</i>			-4.1%	0.7%	9.7%	34.9%	19.0%	19.8%
<b>Fixed Income</b>	<b>\$ 4,012,697,647</b>	<b>33.6%</b>	<b>0.8%</b>	<b>0.7%</b>	<b>1.9%</b>	<b>5.3%</b>	<b>6.0%</b>	<b>5.1%</b>
<i>Fixed Income Custom Benchmark</i>			0.5%	0.4%	0.9%	1.8%	6.1%	4.1%
<b>Cash</b>	<b>\$ 227,666,738</b>	<b>1.9%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>1.1%</b>	<b>1.3%</b>
<i>FTSE Treasury Bill-3 Month</i>			0.0%	0.0%	0.0%	0.0%	1.0%	1.1%
<b>Core Fixed Income</b>	<b>\$ 1,463,519,983</b>	<b>12.2%</b>	<b>0.0%</b>	<b>-0.4%</b>	<b>-0.2%</b>	<b>0.5%</b>	<b>4.7%</b>	<b>3.6%</b>
<i>Bloomberg Barclays U.S. Aggregate Bond Index</i>			-0.3%	0.0%	0.1%	-1.5%	4.8%	3.6%
<b>Specialty Credit</b>	<b>\$ 2,321,510,926</b>	<b>19.4%</b>	<b>1.3%</b>	<b>1.5%</b>	<b>3.5%</b>	<b>9.6%</b>	<b>7.6%</b>	<b>6.7%</b>
<i>High Yield Custom Benchmark</i>			1.3%	0.7%	1.7%	5.2%	7.2%	
<b>Inflation Protected</b>	<b>\$ 1,333,746,595</b>	<b>11.2%</b>	<b>2.0%</b>	<b>4.0%</b>	<b>6.9%</b>	<b>17.0%</b>	<b>9.3%</b>	<b>7.2%</b>
<i>Inflation Protected Custom Benchmark</i>			2.7%	3.8%	5.9%	8.7%	4.5%	4.4%
<b>Real Return</b>	<b>\$ 755,568,969</b>	<b>6.3%</b>	<b>2.0%</b>	<b>3.0%</b>	<b>3.4%</b>	<b>14.7%</b>	<b>8.2%</b>	<b>5.6%</b>
<i>KRS CPI + 300 bpts</i>			0.7%	2.3%	3.5%	6.1%	3.5%	3.2%
<b>Real Estate</b>	<b>\$ 578,177,625</b>	<b>4.8%</b>	<b>2.0%</b>	<b>5.0%</b>	<b>12.0%</b>	<b>19.4%</b>	<b>11.9%</b>	<b>11.5%</b>
<i>NCREIF NFI ODCE Net 1Qtr in Arrears Index</i>			6.4%	6.4%	10.3%	13.6%	6.1%	6.6%

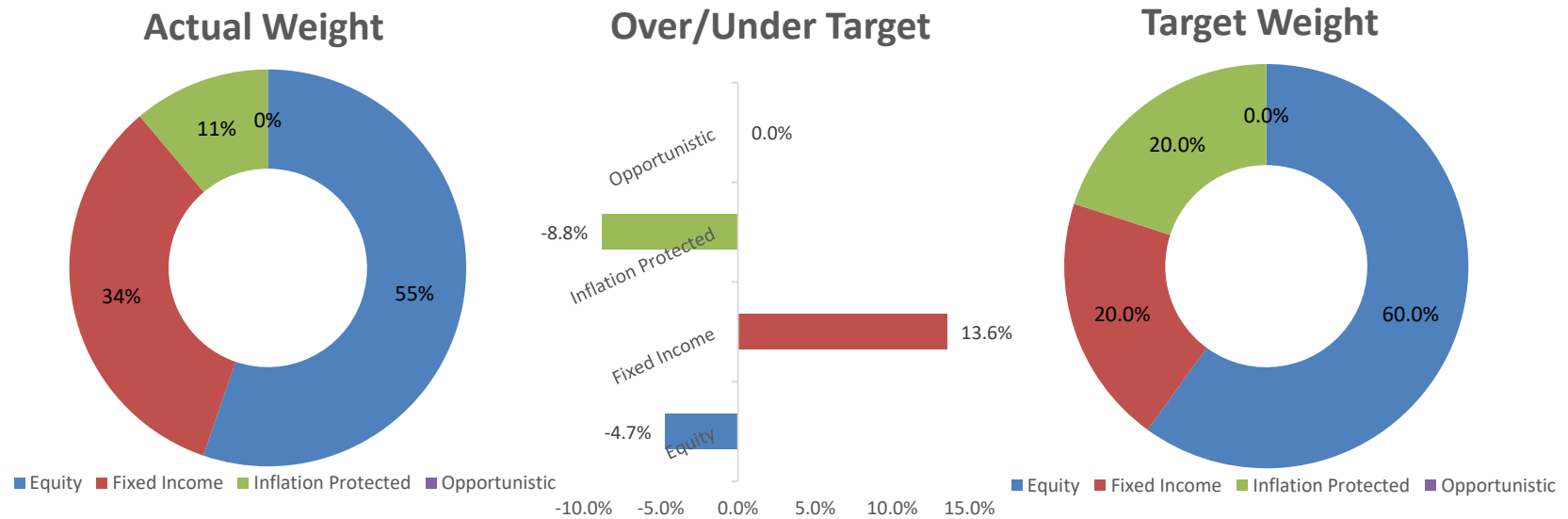


## Combined CERS-NH & CERS-H Pension

Asset Allocation vs Targets

As of December 31, 2021

### Actual vs Target Weights



Asset Allocation	Ending Market Value (\$USD)	Actual Weight	Target Weight	Relative
Equity	\$6,605,667,954	55.3%	60.0%	-4.7%
Fixed Income	\$4,012,697,647	33.6%	20.0%	13.6%
Inflation Protected	\$1,333,746,595	11.2%	20.0%	-8.8%
Opportunistic	\$0	0.0%	0.0%	0.0%



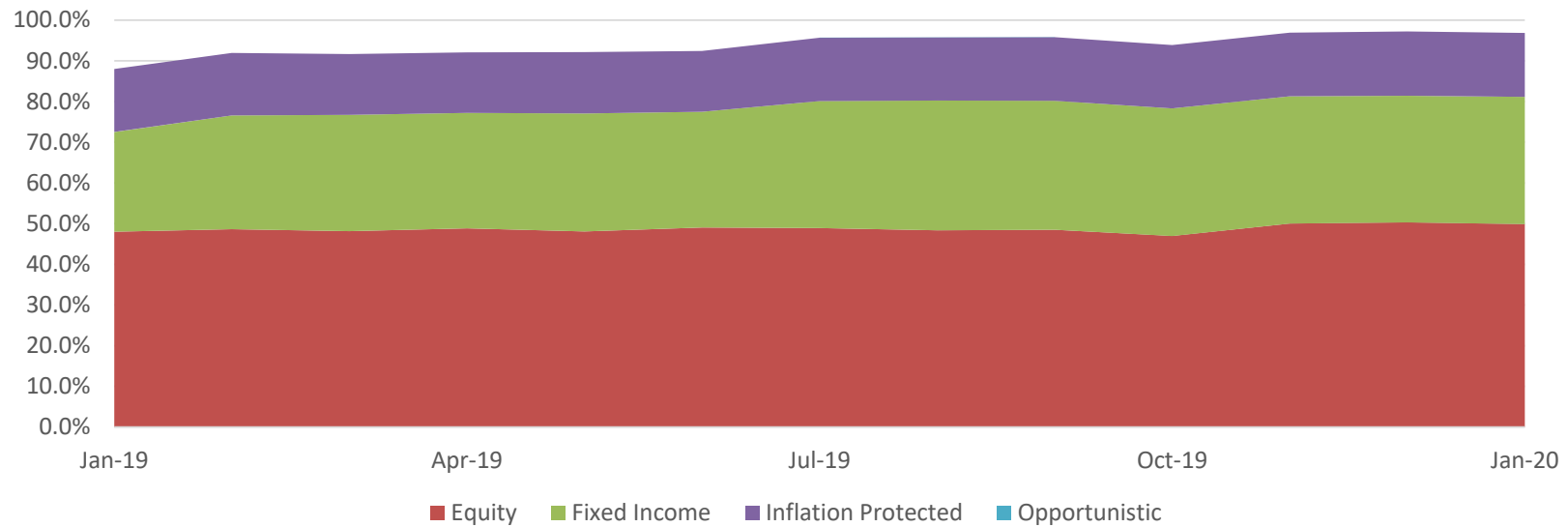


## Combined CERS-NH & CERS-H Pension

Asset Allocation Over Time

As of December 31, 2021

Asset Allocation Over time



Asset Allocation	July 2021	August 2021	September 2021	October 2021	November 2021	December 2021
Equity	55.26%	55.71%	54.97%	55.28%	54.71%	55.27%
Fixed Income	31.21%	31.11%	31.38%	30.57%	31.08%	33.57%
Inflation Protected	10.84%	10.59%	10.81%	11.34%	11.33%	11.16%
Opportunistic	2.69%	2.60%	2.84%	2.81%	2.88%	0.00%

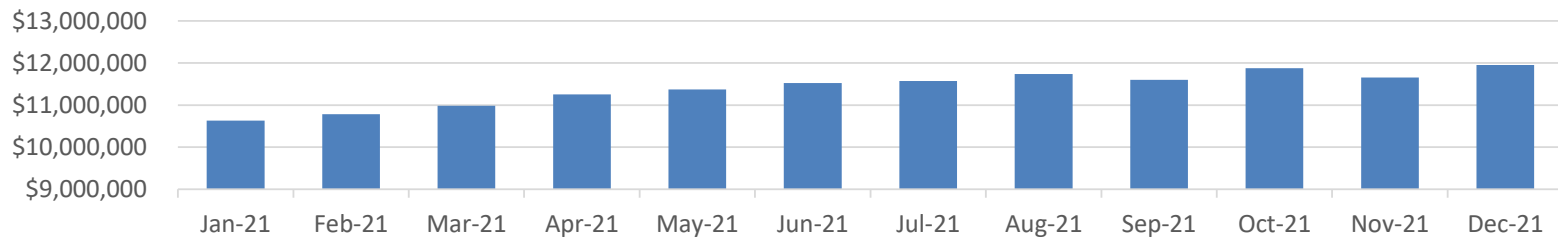


## Combined CERS-NH & CERS-H Pension

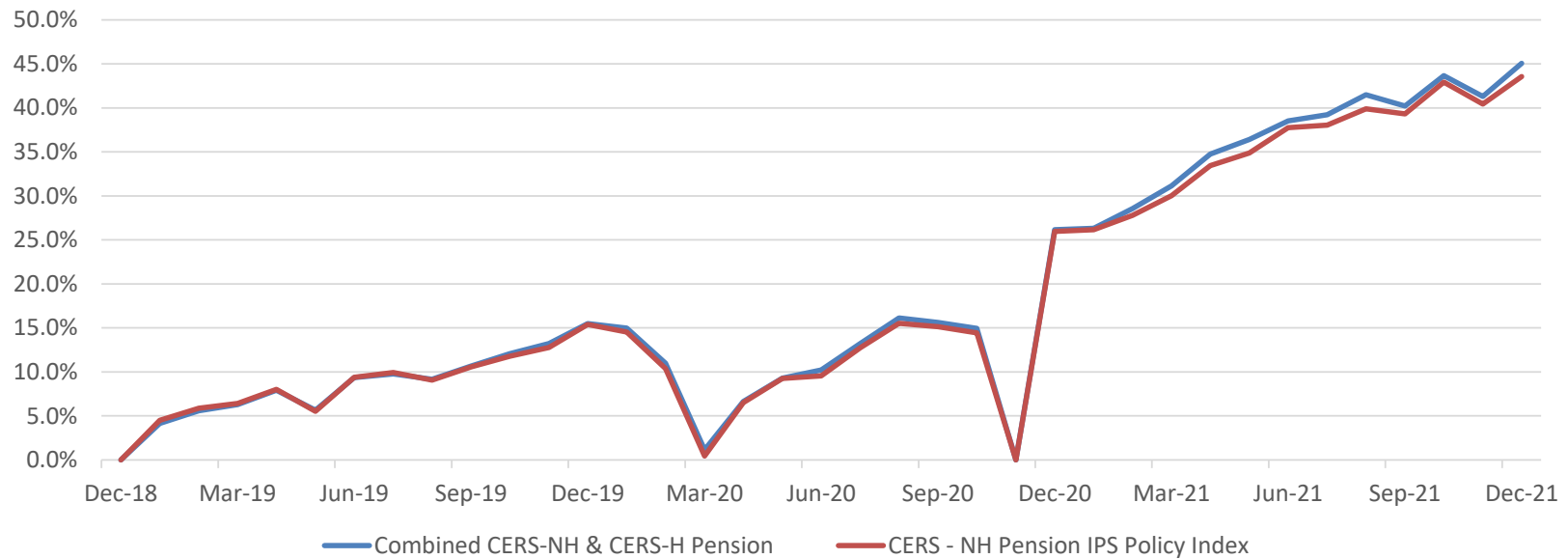
Summary

As of December 31, 2021

Market Value Over Time (\$USD 000)



Cumulative Performance Over 1 Year





## Combined CERS-NH & CERS-H Pension

### Funds Investment Return Summary

As of December 31, 2021

	Market Value (\$USD)	% of Portfolio	MTD	QTD	FYTD	1 Year	3 Year	5 Year
<b>Total Investment Summary</b>	<b>\$ 11,951,561,544</b>	<b>100.0%</b>	<b>2.7%</b>	<b>3.4%</b>	<b>4.7%</b>	<b>15.0%</b>	<b>13.2%</b>	<b>10.5%</b>
<i>CERS - NH Pension IPS Policy Index</i>			2.2%	3.0%	4.2%	14.0%	12.8%	10.1%
<b>CERS - NH</b>	<b>\$ 8,923,323,682</b>	<b>74.7%</b>	<b>2.7%</b>	<b>3.5%</b>	<b>4.7%</b>	<b>15.0%</b>	<b>13.2%</b>	<b>10.5%</b>
<i>CERS - NH Pension IPS Policy Index</i>			2.2%	3.0%	4.2%	14.0%	12.8%	10.1%
<b>CERS - H</b>	<b>\$ 3,028,237,862</b>	<b>25.3%</b>	<b>2.6%</b>	<b>3.4%</b>	<b>4.7%</b>	<b>14.8%</b>	<b>13.1%</b>	<b>10.5%</b>
<i>CERS-H Pension IPS Policy Index</i>			2.2%	3.0%	4.2%	14.0%	12.8%	10.1%



## CERS-NH Pension

### Investment Return Summary

#### As of December 31, 2021

	Market Value (\$USD)	% of Portfolio	MTD	QTD	FYTD	1 Year	3 Year	5 Year
<b>Total Portfolio</b>	<b>\$ 8,923,323,682</b>	<b>100.0%</b>	<b>2.7%</b>	<b>3.5%</b>	<b>4.7%</b>	<b>15.0%</b>	<b>13.2%</b>	<b>10.5%</b>
<i>CERS - NH Pension IPS Policy Index</i>			2.2%	3.0%	4.2%	14.0%	12.8%	10.1%
<b>Equity</b>	<b>\$ 4,941,957,265</b>	<b>55.4%</b>	<b>3.9%</b>	<b>5.0%</b>	<b>5.8%</b>	<b>20.8%</b>	<b>19.7%</b>	<b>14.9%</b>
<i>Equity Custom Benchmark</i>			2.7%	5.7%	6.4%	21.4%	20.7%	15.7%
<b>Fixed Income</b>	<b>\$ 2,978,612,770</b>	<b>33.4%</b>	<b>0.8%</b>	<b>0.7%</b>	<b>1.9%</b>	<b>5.3%</b>	<b>6.0%</b>	<b>5.1%</b>
<i>Fixed Income Custom Benchmark</i>			0.5%	0.4%	0.9%	1.8%	6.1%	4.1%
<b>Inflation Protected</b>	<b>\$ 1,003,164,749</b>	<b>11.2%</b>	<b>2.0%</b>	<b>4.0%</b>	<b>6.9%</b>	<b>17.0%</b>	<b>9.4%</b>	<b>7.2%</b>
<i>Inflation Protected Custom Benchmark</i>			2.7%	3.8%	5.9%	8.7%	4.5%	4.4%



## CERS-NH Pension

### Asset Class Performance

### As of December 31, 2021

	Market Value (\$USD)	% of Portfolio	MTD	QTD	FYTD	1 Year	3 Year	5 Year
<b>Total Portfolio</b>	<b>\$ 8,923,323,682</b>	<b>100.0%</b>	<b>2.7%</b>	<b>3.5%</b>	<b>4.7%</b>	<b>15.0%</b>	<b>13.2%</b>	<b>10.5%</b>
<i>CERS - NH Pension IPS Policy Index</i>			2.2%	3.0%	4.2%	14.0%	12.8%	10.1%
<b>Equity</b>	<b>\$ 4,941,957,265</b>	<b>55.4%</b>	<b>3.9%</b>	<b>5.0%</b>	<b>5.8%</b>	<b>20.8%</b>	<b>19.7%</b>	<b>14.9%</b>
<i>Equity Custom Benchmark</i>			2.7%	5.7%	6.4%	21.4%	20.7%	15.7%
<b>Public Equity</b>	<b>\$ 4,211,504,122</b>	<b>47.2%</b>	<b>4.1%</b>	<b>5.2%</b>	<b>4.1%</b>	<b>17.3%</b>	<b>20.3%</b>	<b>14.2%</b>
<i>MSCI All Country World Net Index</i>			4.0%	6.7%	5.6%	18.5%	20.4%	14.4%
<b>Private Equity</b>	<b>\$ 730,453,144</b>	<b>8.2%</b>	<b>2.6%</b>	<b>4.0%</b>	<b>15.6%</b>	<b>43.0%</b>	<b>18.6%</b>	<b>17.9%</b>
<i>Russell 3000 + Hurdle (Qtr Lag)</i>			-4.1%	0.7%	9.7%	34.9%	19.0%	19.8%
<b>Fixed Income</b>	<b>\$ 2,978,612,770</b>	<b>33.4%</b>	<b>0.8%</b>	<b>0.7%</b>	<b>1.9%</b>	<b>5.3%</b>	<b>6.0%</b>	<b>5.1%</b>
<i>Fixed Income Custom Benchmark</i>			0.5%	0.4%	0.9%	1.8%	6.1%	4.1%
<b>Cash</b>	<b>\$ 157,957,386</b>	<b>1.8%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>1.1%</b>	<b>1.3%</b>
<i>FTSE Treasury Bill-3 Month</i>			0.0%	0.0%	0.0%	0.0%	1.0%	1.1%
<b>Core Fixed Income</b>	<b>\$ 1,088,720,808</b>	<b>12.2%</b>	<b>0.0%</b>	<b>-0.4%</b>	<b>-0.2%</b>	<b>0.5%</b>	<b>4.7%</b>	<b>3.6%</b>
<i>Bloomberg Barclays U.S. Aggregate Bond Index</i>			-0.3%	0.0%	0.1%	-1.5%	4.8%	3.6%
<b>Specialty Credit</b>	<b>\$ 1,731,934,577</b>	<b>19.4%</b>	<b>1.3%</b>	<b>1.5%</b>	<b>3.5%</b>	<b>9.6%</b>	<b>7.6%</b>	<b>6.7%</b>
<i>High Yield Custom Benchmark</i>			1.3%	0.7%	1.7%	5.2%	7.2%	
<b>Inflation Protected</b>	<b>\$ 1,003,164,749</b>	<b>11.2%</b>	<b>2.0%</b>	<b>4.0%</b>	<b>6.9%</b>	<b>17.0%</b>	<b>9.4%</b>	<b>7.2%</b>
<i>Inflation Protected Custom Benchmark</i>			2.7%	3.8%	5.9%	8.7%	4.5%	4.4%
<b>Real Return</b>	<b>\$ 564,672,958</b>	<b>6.3%</b>	<b>2.0%</b>	<b>3.0%</b>	<b>3.4%</b>	<b>14.7%</b>	<b>8.2%</b>	<b>5.6%</b>
<i>KRS CPI + 300 bpts</i>			0.7%	2.3%	3.5%	6.1%	3.5%	3.2%
<b>Real Estate</b>	<b>\$ 438,491,791</b>	<b>4.9%</b>	<b>2.0%</b>	<b>5.0%</b>	<b>12.0%</b>	<b>19.4%</b>	<b>11.9%</b>	<b>11.5%</b>
<i>NCREIF NFI ODCE Net 1Qtr in Arrears Index</i>			6.4%	6.4%	10.3%	13.6%	6.1%	6.6%

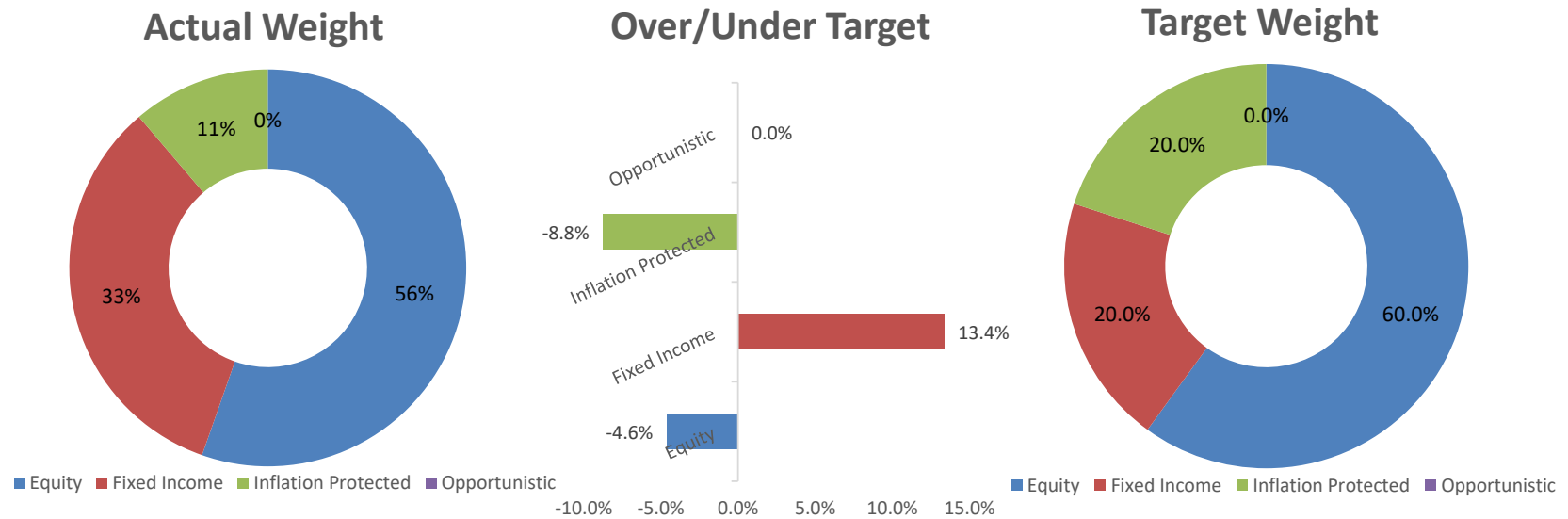


## CERS-NH Pension

### Asset Allocation vs Targets

As of December 31, 2021

#### Actual vs Target Weights



Asset Allocation	Ending Market Value (\$USD)	Actual Weight	Target Weight	Relative
Equity	\$4,941,957,265	55.4%	60.0%	-4.6%
Fixed Income	\$2,978,612,770	33.4%	20.0%	13.4%
Inflation Protected	\$1,003,164,749	11.2%	20.0%	-8.8%
Opportunistic	\$0	0.0%	0.0%	0.0%

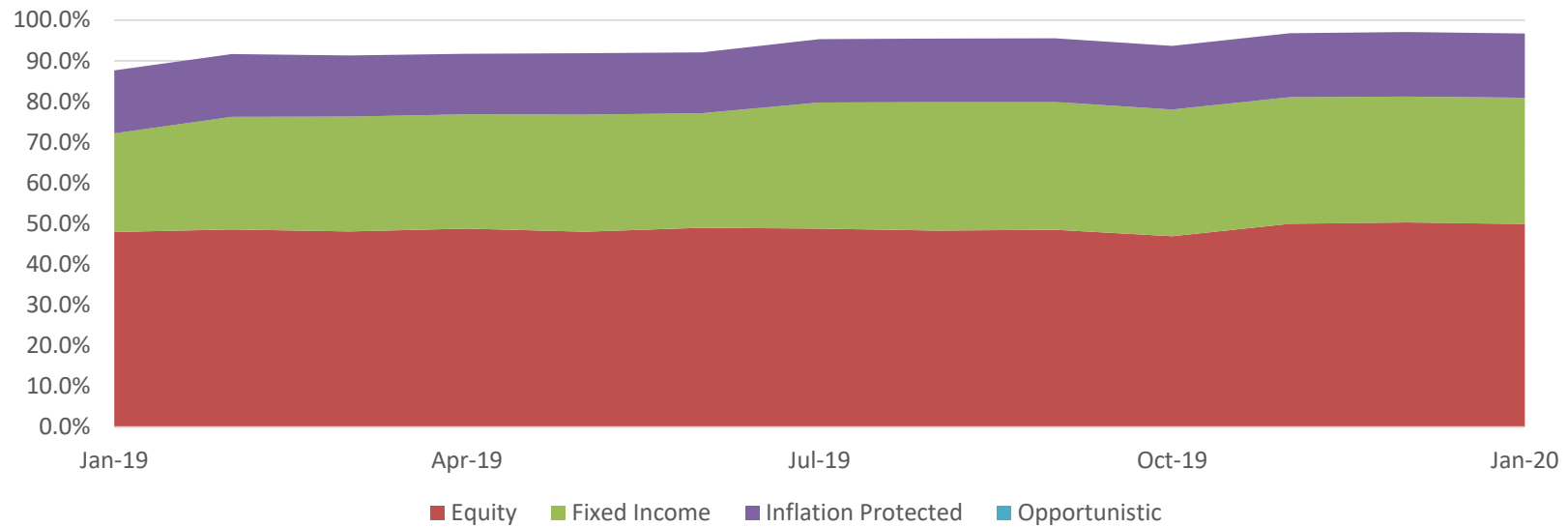


## CERS-NH Pension

### Asset Allocation Over Time

As of December 31, 2021

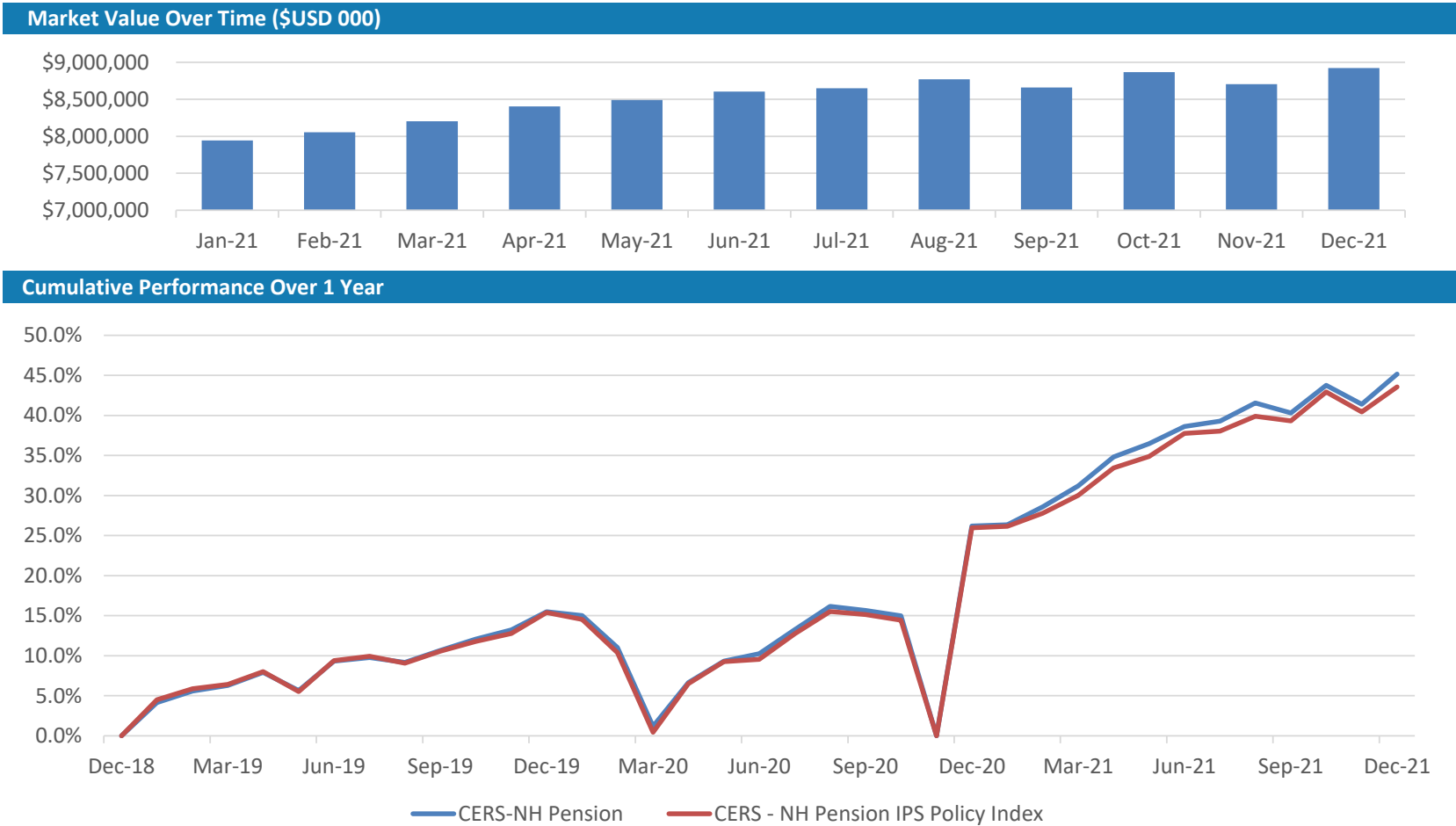
Asset Allocation Over time



Asset Allocation	July 2021	August 2021	September 2021	October 2021	November 2021	December 2021
Equity	55.32%	55.81%	55.09%	55.38%	54.82%	55.38%
Fixed Income	31.07%	30.93%	31.18%	30.37%	30.86%	33.38%
Inflation Protected	10.91%	10.66%	10.88%	11.43%	11.42%	11.24%
Opportunistic	2.70%	2.61%	2.86%	2.83%	2.90%	0.00%



CERS-NH Pension  
Summary  
As of December 31, 2021







## CERS-H Pension

### Investment Return Summary

#### As of December 31, 2021

	Market Value (\$USD)	% of Portfolio	MTD	QTD	FYTD	1 Year	3 Year	5 Year
<b>Total Portfolio</b>	<b>\$ 3,028,237,862</b>	<b>100.0%</b>	<b>2.6%</b>	<b>3.4%</b>	<b>4.7%</b>	<b>14.8%</b>	<b>13.1%</b>	<b>10.5%</b>
<i>CERS-H Pension IPS Policy Index</i>			2.2%	3.0%	4.2%	14.0%	12.8%	10.1%
<b>Equity</b>	<b>\$ 1,663,710,688</b>	<b>54.9%</b>	<b>3.9%</b>	<b>5.0%</b>	<b>5.8%</b>	<b>20.8%</b>	<b>19.7%</b>	<b>14.9%</b>
<i>Equity Custom Benchmark</i>			2.7%	5.7%	6.4%	21.4%	20.7%	15.7%
<b>Fixed Income</b>	<b>\$ 1,034,084,877</b>	<b>34.1%</b>	<b>0.8%</b>	<b>0.7%</b>	<b>1.9%</b>	<b>5.3%</b>	<b>5.9%</b>	<b>5.1%</b>
<i>Fixed Income Custom Benchmark</i>			0.5%	0.4%	0.9%	1.8%	6.1%	4.1%
<b>Inflation Protected</b>	<b>\$ 330,581,845</b>	<b>10.9%</b>	<b>2.0%</b>	<b>4.0%</b>	<b>6.8%</b>	<b>17.0%</b>	<b>9.3%</b>	<b>7.2%</b>
<i>Inflation Protected Custom Benchmark</i>			2.7%	3.8%	5.9%	8.7%	4.5%	4.4%



## CERS-H Pension

### Asset Class Performance

### As of December 31, 2021

	Market Value (\$USD)	% of Portfolio	MTD	QTD	FYTD	1 Year	3 Year	5 Year
<b>Total Portfolio</b>	<b>\$ 3,028,237,862</b>	<b>100.0%</b>	<b>2.6%</b>	<b>3.4%</b>	<b>4.7%</b>	<b>14.8%</b>	<b>13.1%</b>	<b>10.5%</b>
<i>CERS-H Pension IPS Policy Index</i>			2.2%	3.0%	4.2%	14.0%	12.8%	10.1%
<b>Equity</b>	<b>\$ 1,663,710,688</b>	<b>54.9%</b>	<b>3.9%</b>	<b>5.0%</b>	<b>5.8%</b>	<b>20.8%</b>	<b>19.7%</b>	<b>14.9%</b>
<i>Equity Custom Benchmark</i>			2.7%	5.7%	6.4%	21.4%	20.7%	15.7%
<b>Public Equity</b>	<b>\$ 1,418,838,417</b>	<b>46.9%</b>	<b>4.1%</b>	<b>5.2%</b>	<b>4.1%</b>	<b>17.3%</b>	<b>20.3%</b>	<b>14.2%</b>
<i>MSCI All Country World Net Index</i>			4.0%	6.7%	5.6%	18.5%	20.4%	14.4%
<b>Private Equity</b>	<b>\$ 244,872,272</b>	<b>8.1%</b>	<b>2.6%</b>	<b>4.0%</b>	<b>15.6%</b>	<b>43.0%</b>	<b>18.6%</b>	<b>17.9%</b>
<i>Russell 3000 + Hurdle (Qtr Lag)</i>			-4.1%	0.7%	9.7%	34.9%	19.0%	19.8%
<b>Fixed Income</b>	<b>\$ 1,034,084,877</b>	<b>34.1%</b>	<b>0.8%</b>	<b>0.7%</b>	<b>1.9%</b>	<b>5.3%</b>	<b>5.9%</b>	<b>5.1%</b>
<i>Fixed Income Custom Benchmark</i>			0.5%	0.4%	0.9%	1.8%	6.1%	4.1%
<b>Cash</b>	<b>\$ 69,709,352</b>	<b>2.3%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>1.1%</b>	<b>1.3%</b>
<i>FTSE Treasury Bill-3 Month</i>			0.0%	0.0%	0.0%	0.0%	1.0%	1.1%
<b>Core Fixed Income</b>	<b>\$ 374,799,176</b>	<b>12.4%</b>	<b>0.0%</b>	<b>-0.4%</b>	<b>-0.2%</b>	<b>0.5%</b>	<b>4.7%</b>	<b>3.6%</b>
<i>Bloomberg Barclays U.S. Aggregate Bond Index</i>			-0.3%	0.0%	0.1%	-1.5%	4.8%	3.6%
<b>Specialty Credit</b>	<b>\$ 589,576,349</b>	<b>19.5%</b>	<b>1.3%</b>	<b>1.5%</b>	<b>3.5%</b>	<b>9.6%</b>	<b>7.6%</b>	<b>6.7%</b>
<i>High Yield Custom Benchmark</i>			1.3%	0.7%	1.7%	5.2%	7.2%	
<b>Inflation Protected</b>	<b>\$ 330,581,845</b>	<b>10.9%</b>	<b>2.0%</b>	<b>4.0%</b>	<b>6.8%</b>	<b>17.0%</b>	<b>9.3%</b>	<b>7.2%</b>
<i>Inflation Protected Custom Benchmark</i>			2.7%	3.8%	5.9%	8.7%	4.5%	4.4%
<b>Real Return</b>	<b>\$ 190,896,011</b>	<b>6.3%</b>	<b>2.0%</b>	<b>3.0%</b>	<b>3.4%</b>	<b>14.7%</b>	<b>8.2%</b>	<b>5.6%</b>
<i>KRS CPI + 300 bpts</i>			0.7%	2.3%	3.5%	6.1%	3.5%	3.2%
<b>Real Estate</b>	<b>\$ 139,685,834</b>	<b>4.6%</b>	<b>2.0%</b>	<b>5.0%</b>	<b>12.0%</b>	<b>19.4%</b>	<b>11.9%</b>	<b>11.5%</b>
<i>NCREIF NFI ODCE Net 1Qtr in Arrears Index</i>			6.4%	6.4%	10.3%	13.6%	6.1%	6.6%

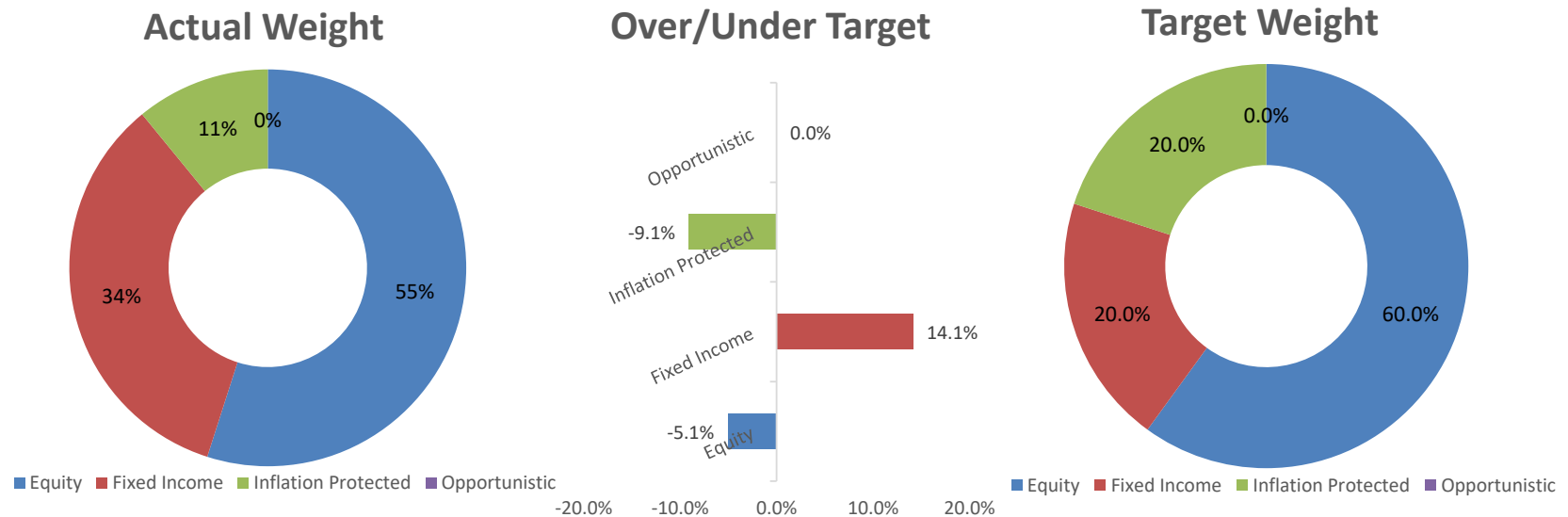


## CERS-H Pension

### Asset Allocation vs Targets

As of December 31, 2021

#### Actual vs Target Weights



Asset Allocation	Ending Market Value (\$USD)	Actual Weight	Target Weight	Relative
Equity	\$1,663,710,688	54.9%	60.0%	-5.1%
Fixed Income	\$1,034,084,877	34.1%	20.0%	14.1%
Inflation Protected	\$330,581,845	10.9%	20.0%	-9.1%
Opportunistic	\$0	0.0%	0.0%	0.0%

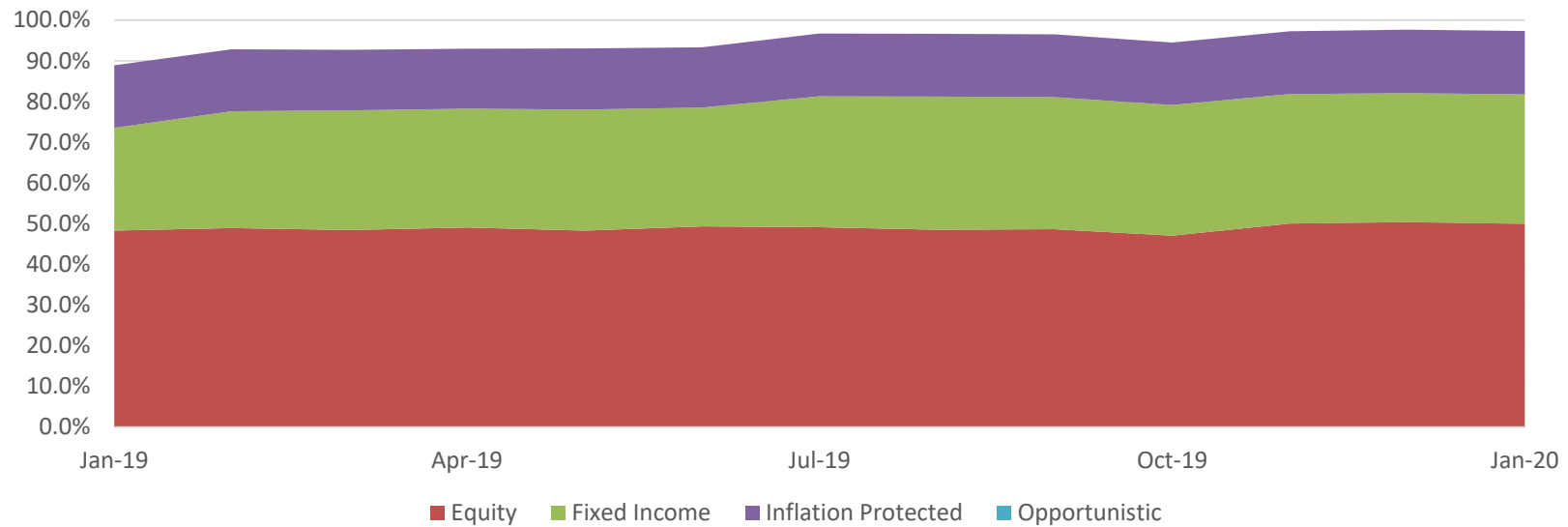


## CERS-H Pension

### Asset Allocation Over Time

As of December 31, 2021

Asset Allocation Over time

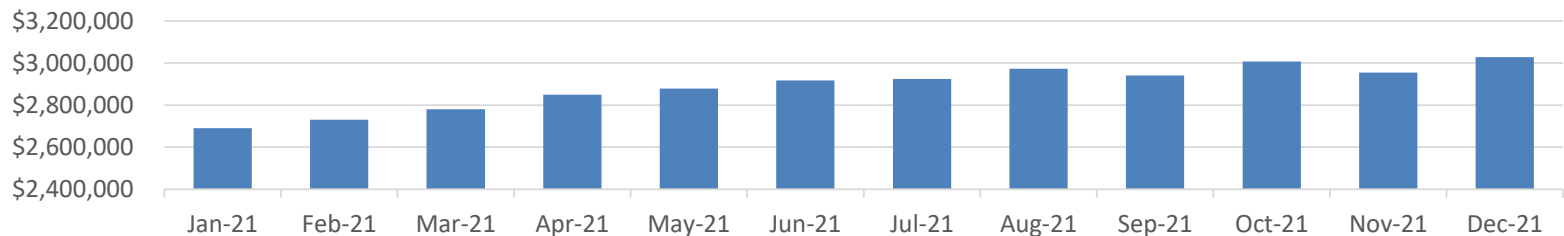


Asset Allocation	July 2021	August 2021	September 2021	October 2021	November 2021	December 2021
Equity	55.10%	55.42%	54.64%	54.99%	54.39%	54.94%
Fixed Income	31.61%	31.64%	32.00%	31.16%	31.70%	34.15%
Inflation Protected	10.66%	10.39%	10.58%	11.10%	11.08%	10.92%
Opportunistic	2.64%	2.55%	2.79%	2.76%	2.82%	0.00%

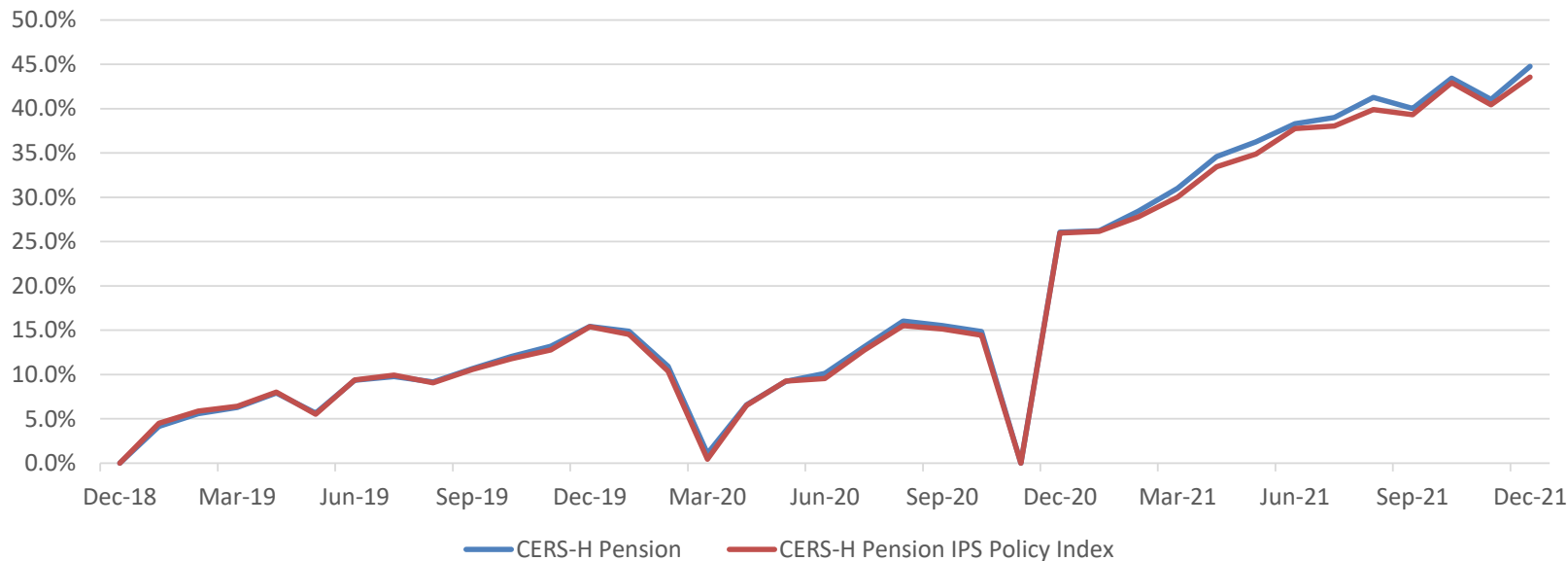


CERS-H Pension  
Summary  
As of December 31, 2021

Market Value Over Time (\$USD 000)



Cumulative Performance Over 1 Year





## Kentucky Retirement Systems - Plan Performance

Reporting Currency: BASE

As of Date: 1/31/2022

Structure	Account/Security Id	Market Value	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD	1 Year - IRR
CERS INS	KR3F00030002	3,234,896,414.34	-2.38	-1.17	2.34	11.66	10.39	9.47	8.21	6.47	7.26	7.62	11.61
CERS Insurance IPS Policy Indx	KR3GXCERS000		-2.11	-1.33	2.21	10.96	10.03	9.02	8.22	6.62	7.54	7.86	10.96
CERS - H INS	KR3F00040002	1,637,299,338.70	-2.39	-1.13	2.57	12.05	10.50	9.58	8.27	6.50	7.28	7.64	12.08
CERS-H Insurance IPS Policy In	KR3GXCHAZ000		-2.11	-1.33	2.21	10.96	10.03	9.02	8.22	6.62	7.54	7.86	10.96



## Combined CERS-NH & CERS-H Insurance

### Investment Return Summary

As of December 31, 2021

	Market Value (\$USD)	% of Portfolio	MTD	QTD	FYTD	1 Year	3 Year	5 Year
<b>Total Portfolio</b>	<b>\$ 4,983,257,222</b>	<b>100.0%</b>	<b>2.7%</b>	<b>3.4%</b>	<b>4.9%</b>	<b>14.7%</b>	<b>12.8%</b>	<b>10.4%</b>
<i>CERS - NH Insurance IPS Policy Index</i>			2.2%	3.1%	4.4%	13.5%	12.4%	9.9%
<b>Equity</b>	<b>\$ 2,620,008,939</b>	<b>52.6%</b>	<b>4.3%</b>	<b>5.2%</b>	<b>6.6%</b>	<b>21.1%</b>	<b>19.0%</b>	<b>14.6%</b>
<i>Equity Custom Benchmark</i>			2.7%	5.7%	6.4%	21.4%	20.7%	15.7%
<b>Fixed Income</b>	<b>\$ 1,833,718,579</b>	<b>36.8%</b>	<b>0.8%</b>	<b>0.7%</b>	<b>1.8%</b>	<b>5.1%</b>	<b>5.6%</b>	<b>4.8%</b>
<i>Fixed Income Custom Benchmark</i>			0.5%	0.4%	0.9%	1.8%	6.1%	4.1%
<b>Inflation Protected</b>	<b>\$ 529,845,479</b>	<b>10.6%</b>	<b>1.6%</b>	<b>4.0%</b>	<b>6.9%</b>	<b>16.2%</b>	<b>9.5%</b>	<b>7.3%</b>
<i>Inflation Protected Custom Benchmark</i>			2.7%	3.8%	5.9%	8.7%	4.5%	4.4%



## Combined CERS-NH & CERS-H Insurance

### Asset Class Performance

As of December 31, 2021

	Market Value (\$USD)	% of Portfolio	MTD	QTD	FYTD	1 Year	3 Year	5 Year
<b>Total Portfolio</b>	<b>\$ 4,983,257,222</b>	<b>100.0%</b>	<b>2.7%</b>	<b>3.4%</b>	<b>4.9%</b>	<b>14.7%</b>	<b>12.8%</b>	<b>10.4%</b>
<i>CERS - NH Insurance IPS Policy Index</i>			2.2%	3.1%	4.4%	13.5%	12.4%	9.9%
<b>Equity</b>	<b>\$ 2,620,008,939</b>	<b>52.6%</b>	<b>4.3%</b>	<b>5.2%</b>	<b>6.6%</b>	<b>21.1%</b>	<b>19.0%</b>	<b>14.6%</b>
<i>Equity Custom Benchmark</i>			2.7%	5.7%	6.4%	21.4%	20.7%	15.7%
<b>Public Equity</b>	<b>\$ 2,180,185,983</b>	<b>43.8%</b>	<b>4.1%</b>	<b>5.1%</b>	<b>4.1%</b>	<b>17.3%</b>	<b>20.3%</b>	<b>14.1%</b>
<i>MSCI All Country World Net Index</i>			4.0%	6.7%	5.6%	18.5%	20.4%	14.4%
<b>Private Equity</b>	<b>\$ 439,822,956</b>	<b>8.8%</b>	<b>4.8%</b>	<b>5.6%</b>	<b>19.2%</b>	<b>41.0%</b>	<b>15.6%</b>	<b>16.6%</b>
<i>Russell 3000 + Hurdle (Qtr Lag)</i>			-4.1%	0.7%	9.7%	34.9%	19.0%	19.8%
<b>Fixed Income</b>	<b>\$ 1,833,718,579</b>	<b>36.8%</b>	<b>0.8%</b>	<b>0.7%</b>	<b>1.8%</b>	<b>5.1%</b>	<b>5.6%</b>	<b>4.8%</b>
<i>Fixed Income Custom Benchmark</i>			0.5%	0.4%	0.9%	1.8%	6.1%	4.1%
<b>Cash</b>	<b>\$ 264,931,518</b>	<b>5.3%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.9%</b>	<b>1.2%</b>
<i>FTSE Treasury Bill-3 Month</i>			0.0%	0.0%	0.0%	0.0%	1.0%	1.1%
<b>Core Fixed Income</b>	<b>\$ 578,715,516</b>	<b>11.6%</b>	<b>0.0%</b>	<b>-0.3%</b>	<b>-0.1%</b>	<b>0.5%</b>	<b>4.5%</b>	<b>3.6%</b>
<i>Bloomberg Barclays U.S. Aggregate Bond Index</i>			-0.3%	0.0%	0.1%	-1.5%	4.8%	3.6%
<b>Specialty Credit</b>	<b>\$ 990,071,545</b>	<b>19.9%</b>	<b>1.6%</b>	<b>1.5%</b>	<b>3.4%</b>	<b>9.4%</b>	<b>7.3%</b>	<b>6.4%</b>
<i>High Yield Custom Benchmark</i>			1.3%	0.7%	1.7%	5.2%	7.2%	
<b>Inflation Protected</b>	<b>\$ 529,845,479</b>	<b>10.6%</b>	<b>1.6%</b>	<b>4.0%</b>	<b>6.9%</b>	<b>16.2%</b>	<b>9.5%</b>	<b>7.3%</b>
<i>Inflation Protected Custom Benchmark</i>			2.7%	3.8%	5.9%	8.7%	4.5%	4.4%
<b>Real Return</b>	<b>\$ 295,261,525</b>	<b>5.9%</b>	<b>1.2%</b>	<b>3.2%</b>	<b>3.6%</b>	<b>13.7%</b>	<b>8.5%</b>	<b>5.8%</b>
<i>KRS CPI + 300 bpts</i>			0.7%	2.3%	3.5%	6.1%	3.5%	3.2%
<b>Real Estate</b>	<b>\$ 234,583,954</b>	<b>4.7%</b>	<b>2.0%</b>	<b>4.9%</b>	<b>11.8%</b>	<b>19.1%</b>	<b>11.9%</b>	<b>11.6%</b>
<i>NCREIF NFI ODCE Net 1Qtr in Arrears Index</i>			6.4%	6.4%	10.3%	13.6%	6.1%	6.6%



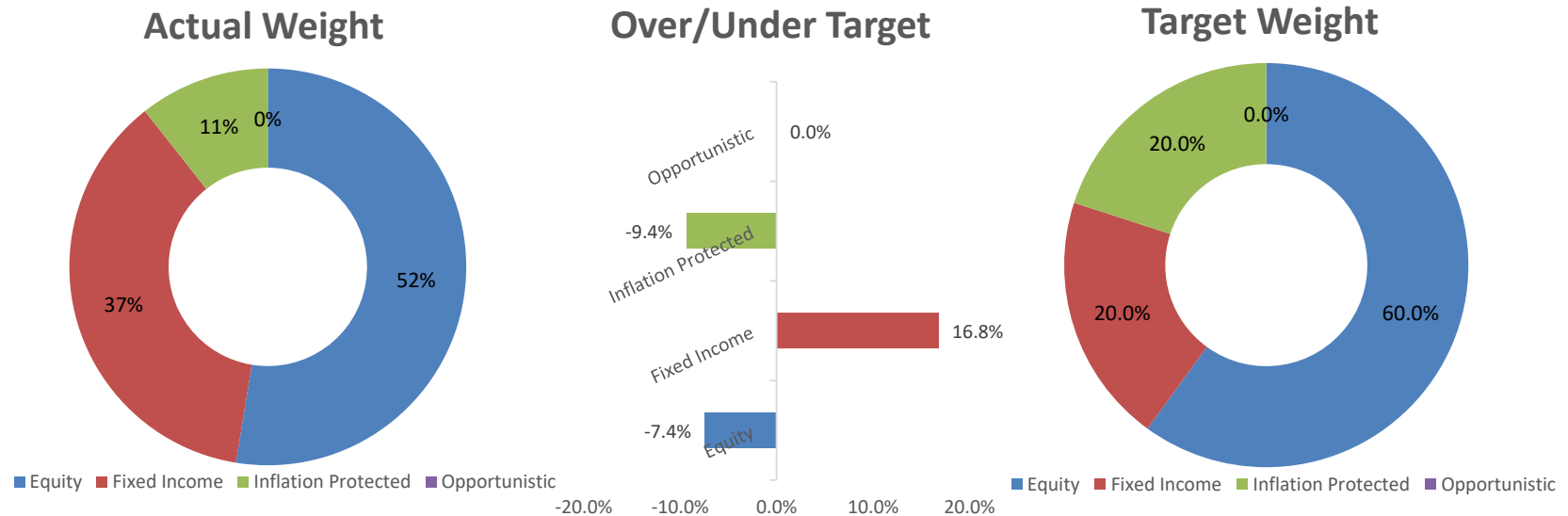


## Combined CERS-NH & CERS-H Insurance

Asset Allocation vs Targets

As of December 31, 2021

### Actual vs Target Weights



Asset Allocation	Ending Market Value (\$USD)	Actual Weight	Target Weight	Relative
Equity	\$2,620,008,939	52.6%	60.0%	-7.4%
Fixed Income	\$1,833,718,579	36.8%	20.0%	16.8%
Inflation Protected	\$529,845,479	10.6%	20.0%	-9.4%
Opportunistic	\$0	0.0%	0.0%	0.0%

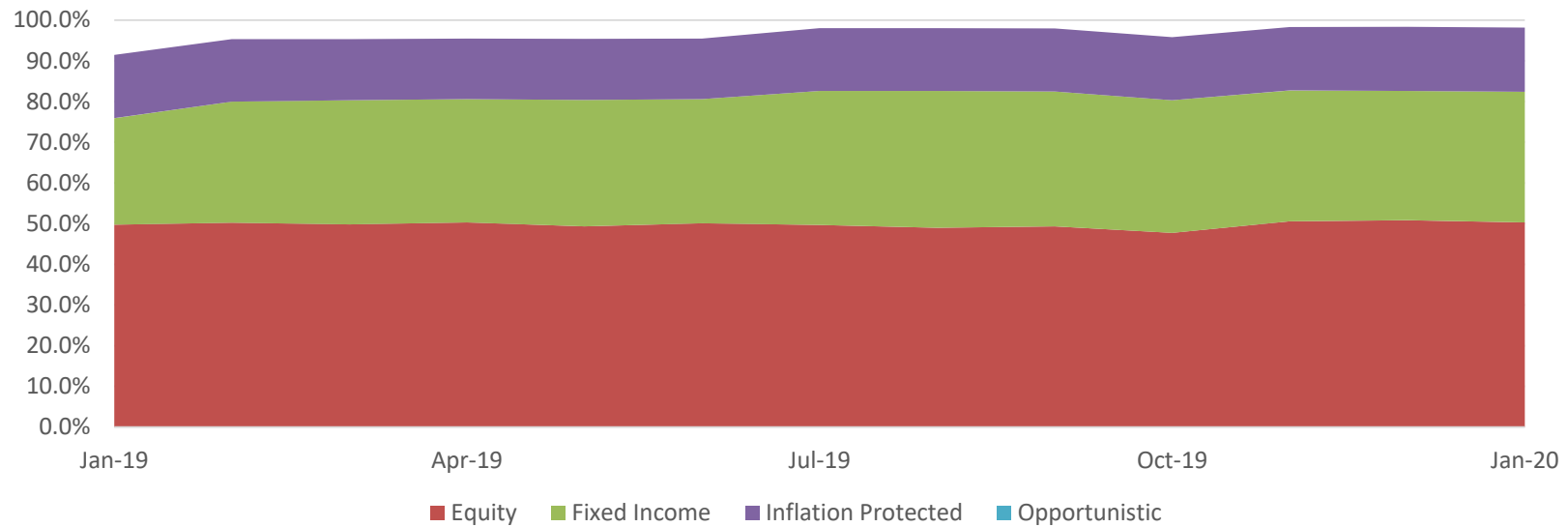


## Combined CERS-NH & CERS-H Insurance

Asset Allocation Over Time

As of December 31, 2021

Asset Allocation Over time



Asset Allocation	July 2021	August 2021	September 2021	October 2021	November 2021	December 2021
Equity	53.56%	53.80%	52.91%	53.05%	52.13%	52.58%
Fixed Income	32.93%	33.05%	33.56%	33.03%	33.77%	36.80%
Inflation Protected	10.45%	10.19%	10.32%	10.73%	10.86%	10.63%
Opportunistic	3.07%	2.96%	3.22%	3.19%	3.24%	0.00%

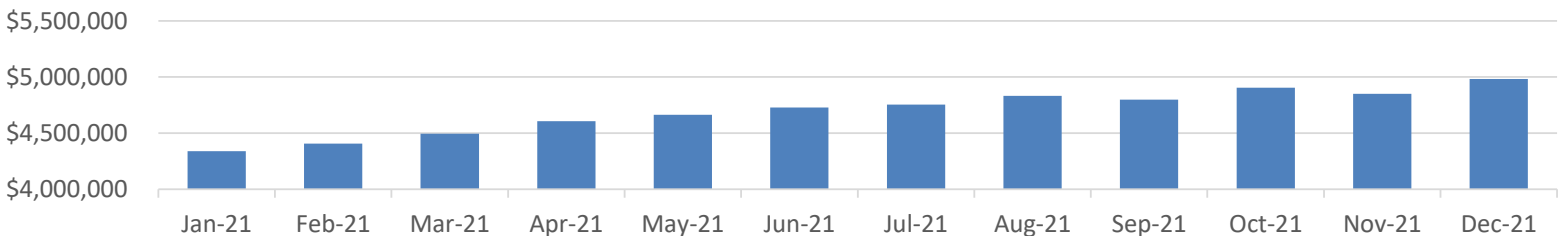


# Combined CERS-NH & CERS-H Insurance

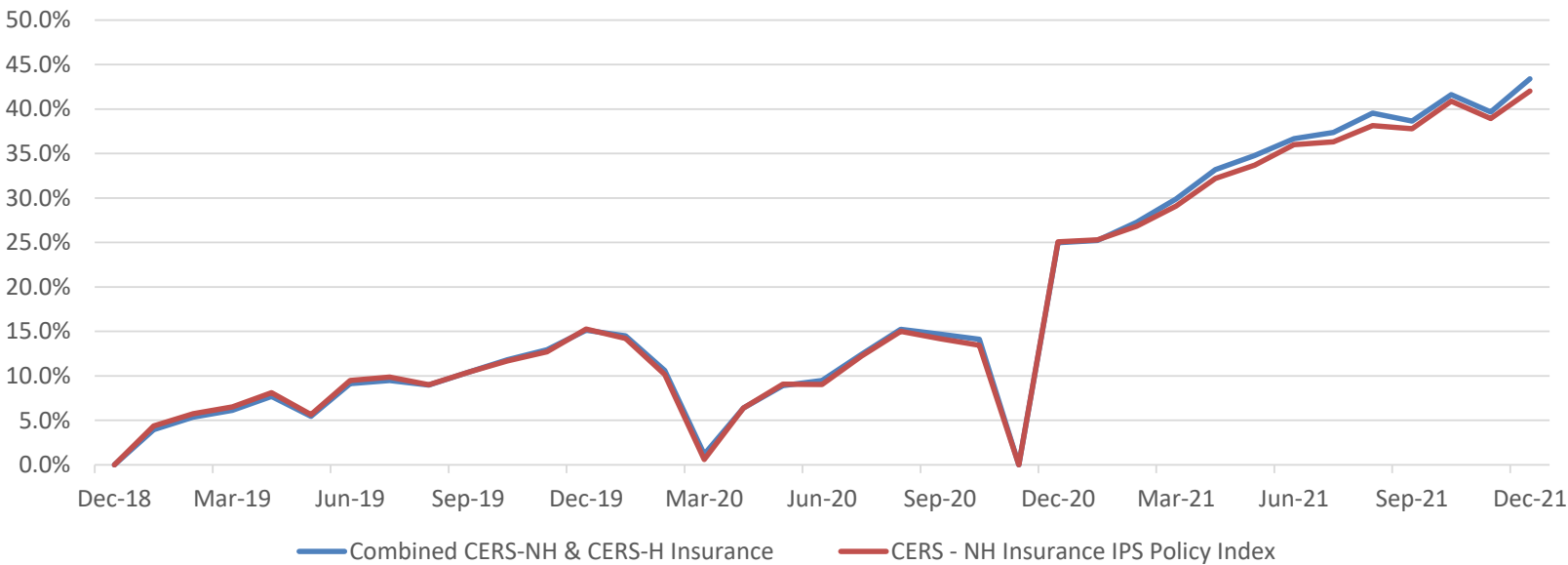
Summary

As of December 31, 2021

## Market Value Over Time (\$USD 000)



## Cumulative Performance Over 1 Year





## Combined CERS-NH & CERS-H Insurance

### Funds Investment Return Summary

As of December 31, 2021

	Market Value (\$USD)	% of Portfolio	MTD	QTD	FYTD	1 Year	3 Year	5 Year
<b>Total Investment Summary</b>	<b>\$ 4,983,257,222</b>	<b>100.0%</b>	<b>2.7%</b>	<b>3.4%</b>	<b>4.9%</b>	<b>14.7%</b>	<b>12.8%</b>	<b>10.4%</b>
<i>CERS - NH Insurance IPS Policy Index</i>			2.2%	3.1%	4.4%	13.5%	12.4%	9.9%
<b>CERS - NH INS</b>	<b>\$ 3,306,721,515</b>	<b>66.4%</b>	<b>2.6%</b>	<b>3.4%</b>	<b>4.8%</b>	<b>14.6%</b>	<b>12.7%</b>	<b>10.4%</b>
<i>CERS - NH Insurance IPS Policy Index</i>			2.2%	3.1%	4.4%	13.5%	12.4%	9.9%
<b>CERS - H INS</b>	<b>\$ 1,676,535,707</b>	<b>33.6%</b>	<b>2.7%</b>	<b>3.5%</b>	<b>5.1%</b>	<b>15.0%</b>	<b>12.8%</b>	<b>10.5%</b>
<i>CERS-H Insurance IPS Policy Index</i>			3.2%	4.0%	5.4%	14.6%	12.7%	10.1%



## CERS-NH Insurance

### Investment Return Summary

#### As of December 31, 2021

	Market Value (\$USD)	% of Portfolio	MTD	QTD	FYTD	1 Year	3 Year	5 Year
<b>Total Portfolio</b>	<b>\$ 3,306,721,515</b>	<b>100.0%</b>	<b>2.6%</b>	<b>3.4%</b>	<b>4.8%</b>	<b>14.6%</b>	<b>12.7%</b>	<b>10.4%</b>
<i>CERS - NH Insurance IPS Policy Index</i>			2.2%	3.1%	4.4%	13.5%	12.4%	9.9%
<b>Equity</b>	<b>\$ 1,721,332,640</b>	<b>52.1%</b>	<b>4.3%</b>	<b>5.2%</b>	<b>6.5%</b>	<b>21.0%</b>	<b>19.0%</b>	<b>14.6%</b>
<i>Equity Custom Benchmark</i>			2.7%	5.7%	6.4%	21.4%	20.7%	15.7%
<b>Fixed Income</b>	<b>\$ 1,240,301,619</b>	<b>37.5%</b>	<b>0.8%</b>	<b>0.7%</b>	<b>1.7%</b>	<b>5.1%</b>	<b>5.6%</b>	<b>4.7%</b>
<i>Fixed Income Custom Benchmark</i>			0.5%	0.4%	0.9%	1.8%	6.1%	4.1%
<b>Inflation Protected</b>	<b>\$ 345,296,690</b>	<b>10.4%</b>	<b>1.6%</b>	<b>4.0%</b>	<b>6.8%</b>	<b>16.2%</b>	<b>9.5%</b>	<b>7.3%</b>
<i>Inflation Protected Custom Benchmark</i>			2.7%	3.8%	6.7%	11.2%	6.3%	6.1%



## CERS-NH Insurance

### Asset Class Performance

### As of December 31, 2021

	Market Value (\$USD)	% of Portfolio	MTD	QTD	FYTD	1 Year	3 Year	5 Year
<b>Total Portfolio</b>	<b>\$ 3,306,721,515</b>	<b>100.0%</b>	<b>2.6%</b>	<b>3.4%</b>	<b>4.8%</b>	<b>14.6%</b>	<b>12.7%</b>	<b>10.4%</b>
<i>CERS - NH Insurance IPS Policy Index</i>			2.2%	3.1%	4.4%	13.5%	12.4%	9.9%
<b>Equity</b>	<b>\$ 1,721,332,640</b>	<b>52.1%</b>	<b>4.3%</b>	<b>5.2%</b>	<b>6.5%</b>	<b>21.0%</b>	<b>19.0%</b>	<b>14.6%</b>
<i>Equity Custom Benchmark</i>			2.7%	5.7%	6.4%	21.4%	20.7%	15.7%
<b>Public Equity</b>	<b>\$ 1,439,772,298</b>	<b>43.5%</b>	<b>4.2%</b>	<b>5.1%</b>	<b>4.1%</b>	<b>17.3%</b>	<b>20.3%</b>	<b>14.1%</b>
<i>MSCI All Country World Net Index</i>			4.0%	6.7%	5.6%	18.5%	20.4%	14.4%
<b>Private Equity</b>	<b>\$ 281,560,342</b>	<b>8.5%</b>	<b>4.8%</b>	<b>5.6%</b>	<b>19.2%</b>	<b>41.0%</b>	<b>15.6%</b>	<b>16.6%</b>
<i>Russell 3000 + Hurdle (Qtr Lag)</i>			-4.1%	0.7%	9.7%	34.9%	19.0%	19.8%
<b>Fixed Income</b>	<b>\$ 1,240,301,619</b>	<b>37.5%</b>	<b>0.8%</b>	<b>0.7%</b>	<b>1.7%</b>	<b>5.1%</b>	<b>5.6%</b>	<b>4.7%</b>
<i>Fixed Income Custom Benchmark</i>			0.5%	0.4%	0.9%	1.8%	6.1%	4.1%
<b>Cash</b>	<b>\$ 202,843,194</b>	<b>6.1%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.9%</b>	<b>1.2%</b>
<i>FTSE Treasury Bill-3 Month</i>			0.0%	0.0%	0.0%	0.0%	1.0%	1.1%
<b>Core Fixed Income</b>	<b>\$ 379,119,021</b>	<b>11.5%</b>	<b>0.0%</b>	<b>-0.3%</b>	<b>-0.1%</b>	<b>0.5%</b>	<b>4.5%</b>	<b>3.6%</b>
<i>Bloomberg Barclays U.S. Aggregate Bond Index</i>			-0.3%	0.0%	0.1%	-1.5%	4.8%	3.6%
<b>Specialty Credit</b>	<b>\$ 658,339,404</b>	<b>19.9%</b>	<b>1.6%</b>	<b>1.5%</b>	<b>3.4%</b>	<b>9.4%</b>	<b>7.3%</b>	<b>6.4%</b>
<i>High Yield Custom Benchmark</i>			1.3%	0.7%	1.7%	5.2%	7.2%	
<b>Inflation Protected</b>	<b>\$ 345,296,690</b>	<b>10.4%</b>	<b>1.6%</b>	<b>4.0%</b>	<b>6.8%</b>	<b>16.2%</b>	<b>9.5%</b>	<b>7.3%</b>
<i>Inflation Protected Custom Benchmark</i>			2.7%	3.8%	6.7%	11.2%	6.3%	6.1%
<b>Real Return</b>	<b>\$ 193,759,569</b>	<b>5.9%</b>	<b>1.2%</b>	<b>3.2%</b>	<b>3.6%</b>	<b>13.7%</b>	<b>8.5%</b>	<b>5.8%</b>
<i>KRS CPI + 300 bpts</i>			0.7%	2.3%	4.7%	9.8%	6.3%	5.9%
<b>Real Estate</b>	<b>\$ 151,537,120</b>	<b>4.6%</b>	<b>2.0%</b>	<b>4.9%</b>	<b>11.8%</b>	<b>19.1%</b>	<b>11.9%</b>	<b>11.6%</b>
<i>NCREIF NFI ODCE Net 1Qtr in Arrears Index</i>			6.4%	6.4%	10.3%	13.6%	6.1%	6.6%

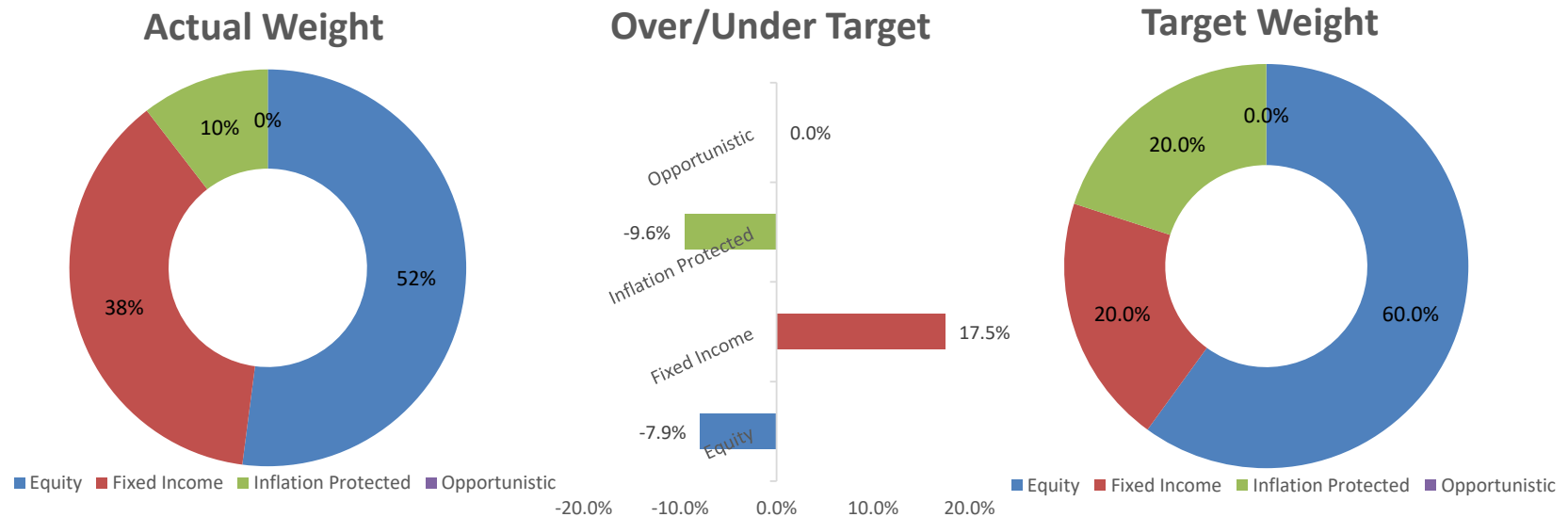


## CERS-NH Insurance

### Asset Allocation vs Targets

As of December 31, 2021

#### Actual vs Target Weights



Asset Allocation	Ending Market Value (\$USD)	Actual Weight	Target Weight	Relative
Equity	\$1,721,332,640	52.1%	60.0%	-7.9%
Fixed Income	\$1,240,301,619	37.5%	20.0%	17.5%
Inflation Protected	\$345,296,690	10.4%	20.0%	-9.6%
Opportunistic	\$0	0.0%	0.0%	0.0%

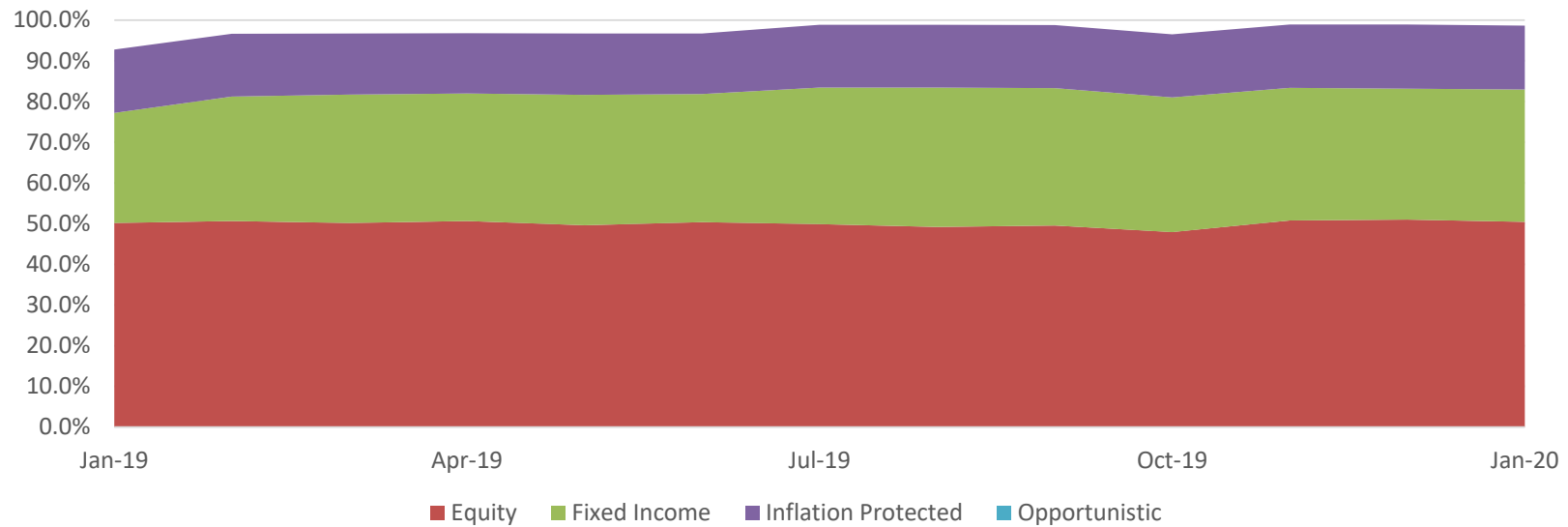


## CERS-NH Insurance

### Asset Allocation Over Time

As of December 31, 2021

Asset Allocation Over time

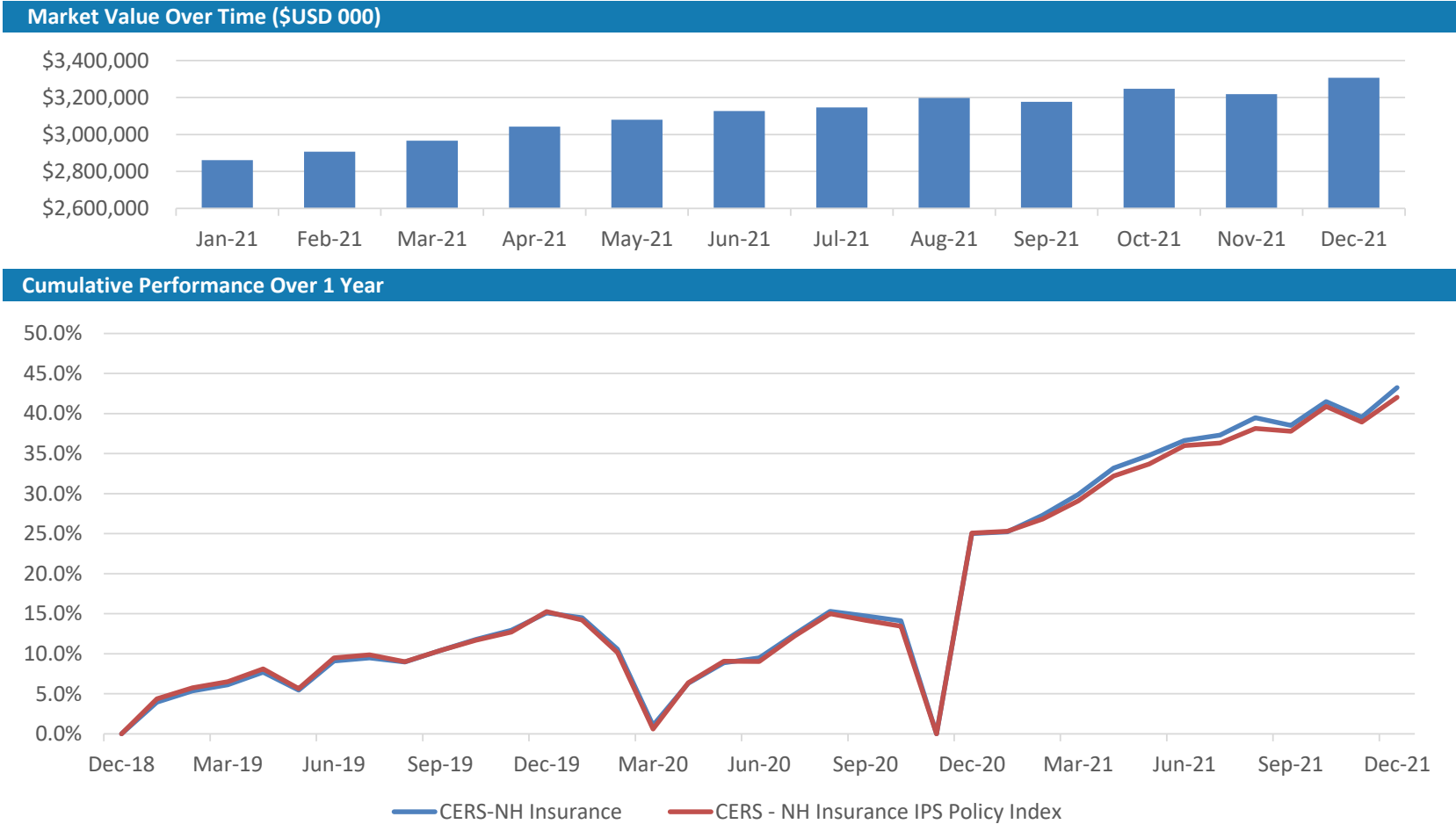


Asset Allocation	July 2021	August 2021	September 2021	October 2021	November 2021	December 2021
Equity	53.17%	53.42%	52.50%	52.63%	51.63%	52.06%
Fixed Income	33.54%	33.65%	34.19%	33.70%	34.53%	37.51%
Inflation Protected	10.30%	10.04%	10.17%	10.56%	10.67%	10.44%
Opportunistic	3.00%	2.89%	3.15%	3.12%	3.17%	0.00%





CERS-NH Insurance  
Summary  
As of December 31, 2021





## CERS-H Insurance

### Investment Return Summary

#### As of December 31, 2021

	Market Value (\$USD)	% of Portfolio	MTD	QTD	FYTD	1 Year	3 Year	5 Year
<b>Total Portfolio</b>	<b>\$ 1,676,535,707</b>	<b>100.0%</b>	<b>2.7%</b>	<b>3.5%</b>	<b>5.1%</b>	<b>15.0%</b>	<b>12.8%</b>	<b>10.5%</b>
<i>CERS-H Insurance IPS Policy Index</i>			3.2%	4.0%	5.4%	14.6%	12.7%	10.1%
<b>Equity</b>	<b>\$ 898,676,299</b>	<b>53.6%</b>	<b>4.3%</b>	<b>5.2%</b>	<b>6.7%</b>	<b>21.3%</b>	<b>18.9%</b>	<b>14.7%</b>
<i>Equity Custom Benchmark</i>			2.7%	5.7%	6.4%	21.4%	20.7%	15.7%
<b>Fixed Income</b>	<b>\$ 593,416,960</b>	<b>35.4%</b>	<b>0.9%</b>	<b>0.8%</b>	<b>1.8%</b>	<b>5.1%</b>	<b>5.7%</b>	<b>4.9%</b>
<i>Fixed Income Custom Benchmark</i>			0.5%	0.4%	0.9%	1.8%	6.1%	4.1%
<b>Inflation Protected</b>	<b>\$ 184,548,789</b>	<b>11.0%</b>	<b>1.6%</b>	<b>4.0%</b>	<b>6.9%</b>	<b>16.3%</b>	<b>9.5%</b>	<b>7.3%</b>
<i>Inflation Protected Custom Benchmark</i>			2.7%	3.8%	5.9%	8.7%	4.5%	4.4%



## CERS-H Insurance

### Asset Class Performance

#### As of December 31, 2021

	Market Value (\$USD)	% of Portfolio	MTD	QTD	FYTD	1 Year	3 Year	5 Year
<b>Total Portfolio</b>	<b>\$ 1,676,535,707</b>	<b>100.0%</b>	<b>2.7%</b>	<b>3.5%</b>	<b>5.1%</b>	<b>15.0%</b>	<b>12.8%</b>	<b>10.5%</b>
<i>CERS-H Insurance IPS Policy Index</i>			3.2%	4.0%	5.4%	14.6%	12.7%	10.1%
<b>Equity</b>	<b>\$ 898,676,299</b>	<b>53.6%</b>	<b>4.3%</b>	<b>5.2%</b>	<b>6.7%</b>	<b>21.3%</b>	<b>18.9%</b>	<b>14.7%</b>
<i>Equity Custom Benchmark</i>			2.7%	5.7%	6.4%	21.4%	20.7%	15.7%
<b>Public Equity</b>	<b>\$ 740,413,685</b>	<b>44.2%</b>	<b>4.1%</b>	<b>5.1%</b>	<b>4.1%</b>	<b>17.3%</b>	<b>20.3%</b>	<b>14.1%</b>
<i>MSCI All Country World Net Index</i>			4.0%	6.7%	5.6%	18.5%	20.4%	14.4%
<b>Private Equity</b>	<b>\$ 158,262,613</b>	<b>9.4%</b>	<b>4.8%</b>	<b>5.6%</b>	<b>19.2%</b>	<b>41.0%</b>	<b>15.6%</b>	<b>16.6%</b>
<i>Russell 3000 + Hurdle (Qtr Lag)</i>			-4.1%	0.7%	9.7%	34.9%	19.0%	19.8%
<b>Fixed Income</b>	<b>\$ 593,416,960</b>	<b>35.4%</b>	<b>0.9%</b>	<b>0.8%</b>	<b>1.8%</b>	<b>5.1%</b>	<b>5.7%</b>	<b>4.9%</b>
<i>Fixed Income Custom Benchmark</i>			0.5%	0.4%	0.9%	1.8%	6.1%	4.1%
<b>Cash</b>	<b>\$ 62,088,324</b>	<b>3.7%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.9%</b>	<b>1.2%</b>
<i>FTSE Treasury Bill-3 Month</i>			0.0%	0.0%	0.0%	0.0%	1.0%	1.1%
<b>Core Fixed Income</b>	<b>\$ 199,596,494</b>	<b>11.9%</b>	<b>0.0%</b>	<b>-0.3%</b>	<b>-0.1%</b>	<b>0.5%</b>	<b>4.5%</b>	<b>3.6%</b>
<i>Bloomberg Barclays U.S. Aggregate Bond Index</i>			-0.3%	0.0%	0.1%	-1.5%	4.8%	3.6%
<b>Specialty Credit</b>	<b>\$ 331,732,141</b>	<b>19.8%</b>	<b>1.6%</b>	<b>1.5%</b>	<b>3.4%</b>	<b>9.4%</b>	<b>7.3%</b>	<b>6.4%</b>
<i>High Yield Custom Benchmark</i>			1.3%	0.7%	1.7%	5.2%	7.2%	
<b>Inflation Protected</b>	<b>\$ 184,548,789</b>	<b>11.0%</b>	<b>1.6%</b>	<b>4.0%</b>	<b>6.9%</b>	<b>16.3%</b>	<b>9.5%</b>	<b>7.3%</b>
<i>Inflation Protected Custom Benchmark</i>			2.7%	3.8%	5.9%	8.7%	4.5%	4.4%
<b>Real Return</b>	<b>\$ 101,501,955</b>	<b>6.1%</b>	<b>1.2%</b>	<b>3.2%</b>	<b>3.6%</b>	<b>13.7%</b>	<b>8.5%</b>	<b>5.8%</b>
<i>KRS CPI + 300 bpts</i>			0.7%	2.3%	3.5%	6.1%	3.5%	3.2%
<b>Real Estate</b>	<b>\$ 83,046,833</b>	<b>5.0%</b>	<b>2.0%</b>	<b>4.9%</b>	<b>11.8%</b>	<b>19.1%</b>	<b>11.9%</b>	<b>11.6%</b>
<i>NCREIF NFI ODCE Net 1Qtr in Arrears Index</i>			6.4%	6.4%	10.3%	13.6%	6.1%	6.6%

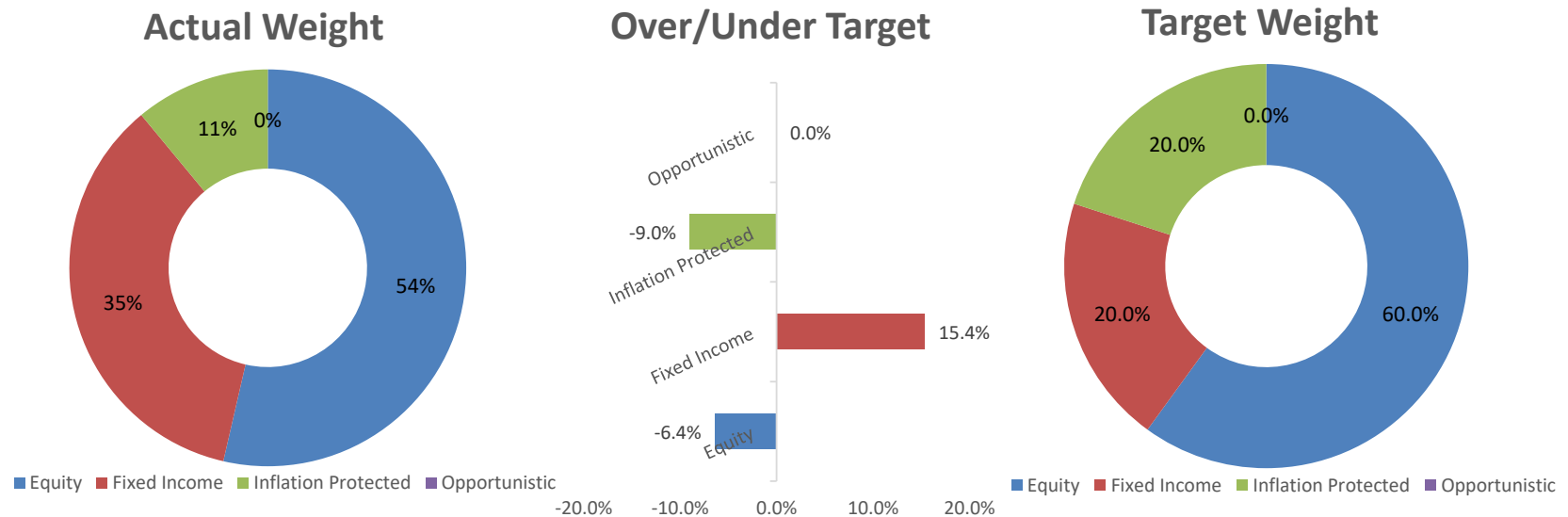


## CERS-H Insurance

### Asset Allocation vs Targets

As of December 31, 2021

#### Actual vs Target Weights



Asset Allocation	Ending Market Value (\$USD)	Actual Weight	Target Weight	Relative
Equity	\$898,676,299	53.6%	60.0%	-6.4%
Fixed Income	\$593,416,960	35.4%	20.0%	15.4%
Inflation Protected	\$184,548,789	11.0%	20.0%	-9.0%
Opportunistic	\$0	0.0%	0.0%	0.0%

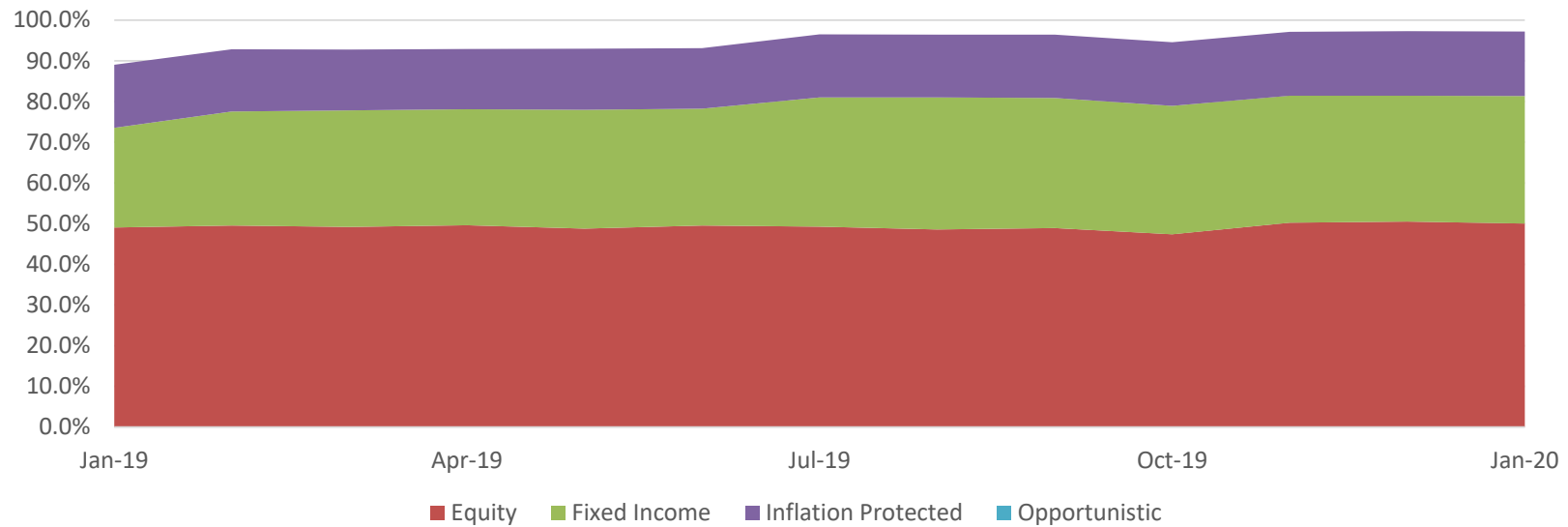


## CERS-H Insurance

### Asset Allocation Over Time

As of December 31, 2021

Asset Allocation Over time



Asset Allocation	July 2021	August 2021	September 2021	October 2021	November 2021	December 2021
Equity	54.32%	54.55%	53.70%	53.88%	53.12%	53.60%
Fixed Income	31.73%	31.88%	32.32%	31.73%	32.25%	35.40%
Inflation Protected	10.76%	10.49%	10.63%	11.07%	11.24%	11.01%
Opportunistic	3.20%	3.08%	3.36%	3.33%	3.40%	0.00%

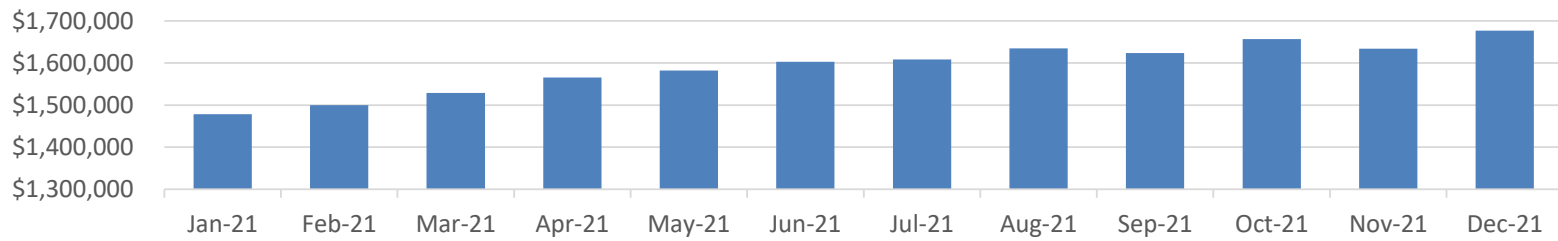


## CERS-H Insurance

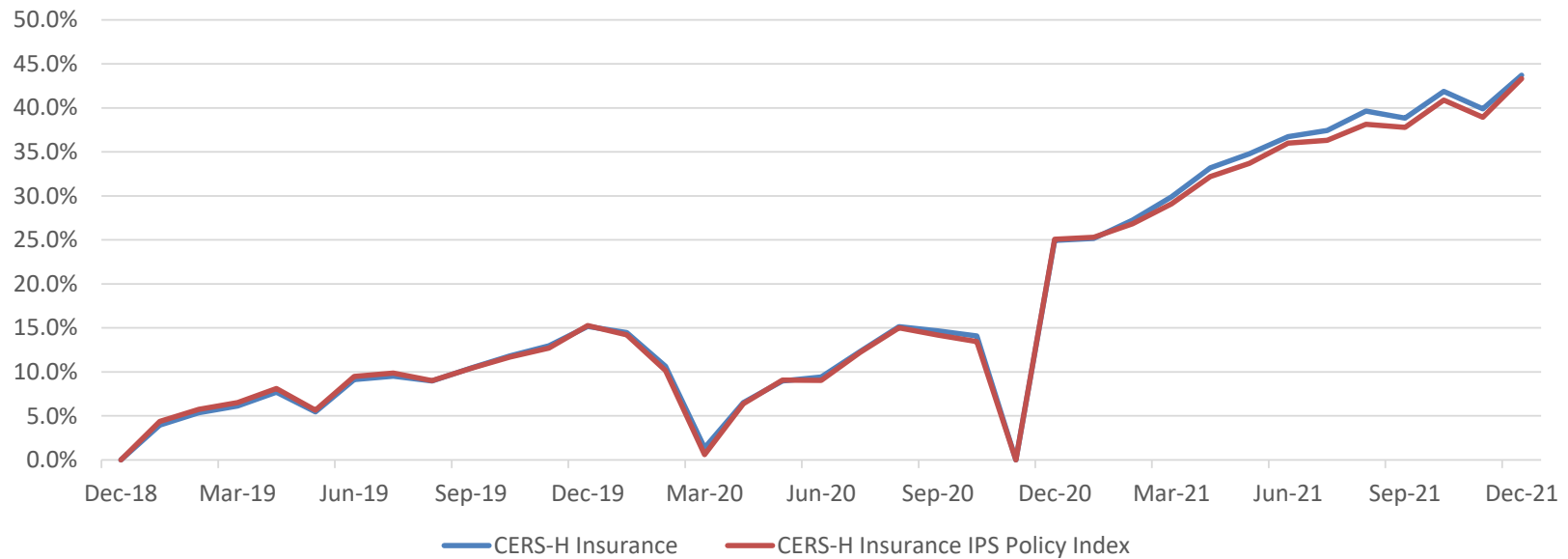
### Summary

As of December 31, 2021

Market Value Over Time (\$USD 000)



Cumulative Performance Over 1 Year



# Wilshire

## Kentucky Public Pensions Authority County Employees Retirement System (CERS)

Quarterly Board Summary

*December 31, 2021*

## Asset Class Performance

Asset Class Returns - Best to Worst						Annualized 5-Year as of 12/21
2016	2017	2018	2019	2020	2021 YTD	
High Yield 17.1%	Emrg Mkts 37.7%	T-Bills 1.9%	U.S. Equity 31.0%	U.S. Equity 20.8%	REITs 46.2%	U.S. Equity 18.1%
U.S. Equity 13.4%	Developed 25.6%	Core Bond 0.0%	REITs 25.8%	Emrg Mkts 18.7%	Commodities 27.1%	REITs 10.9%
Commodities 11.8%	U.S. Equity 21.0%	U.S. TIPS -1.3%	Developed 22.7%	U.S. TIPS 11.0%	U.S. Equity 26.7%	Emrg Mkts 10.3%
Emrg Mkts 11.6%	High Yield 7.5%	High Yield -2.1%	Emrg Mkts 18.9%	Developed 8.3%	Developed 11.8%	Developed 10.1%
REITs 7.2%	REITs 4.2%	REITs -4.8%	High Yield 14.3%	Core Bond 7.5%	U.S. TIPS 6.0%	High Yield 6.3%
U.S. TIPS 4.7%	Core Bond 3.6%	U.S. Equity -5.3%	Core Bond 8.7%	High Yield 7.1%	High Yield 5.3%	U.S. TIPS 5.3%
Core Bond 2.6%	U.S. TIPS 3.0%	Commodities -11.2%	U.S. TIPS 8.4%	T-Bills 0.7%	T-Bills 0.0%	Commodities 3.7%
Developed 1.5%	Commodities 1.7%	Developed -13.4%	Commodities 7.7%	Commodities -3.1%	Core Bond -1.5%	Core Bond 3.6%
T-Bills 0.3%	T-Bills 0.8%	Emrg Mkts -14.2%	T-Bills 2.3%	REITs -7.9%	Emrg Mkts -2.2%	T-Bills 1.2%

Data Sources: Bloomberg

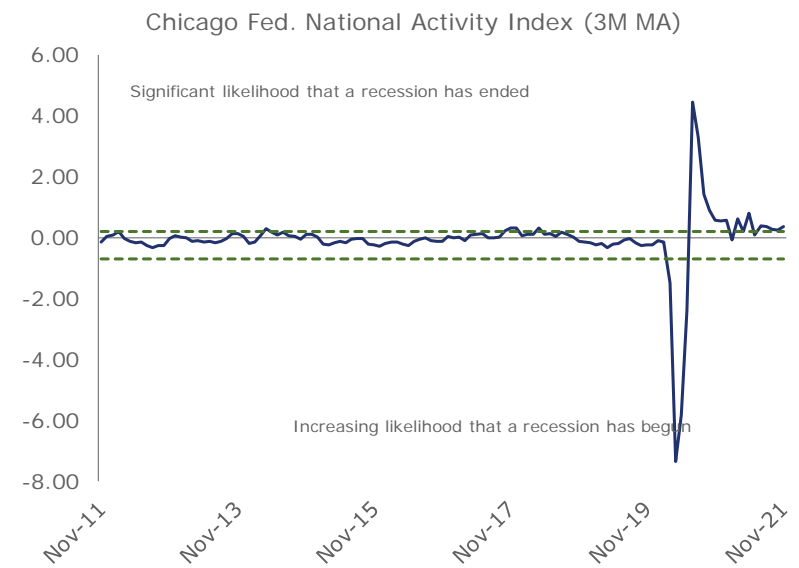
Note: Developed asset class is developed equity markets ex-U.S., ex-Canada



## December 2021 Asset Class Assumptions

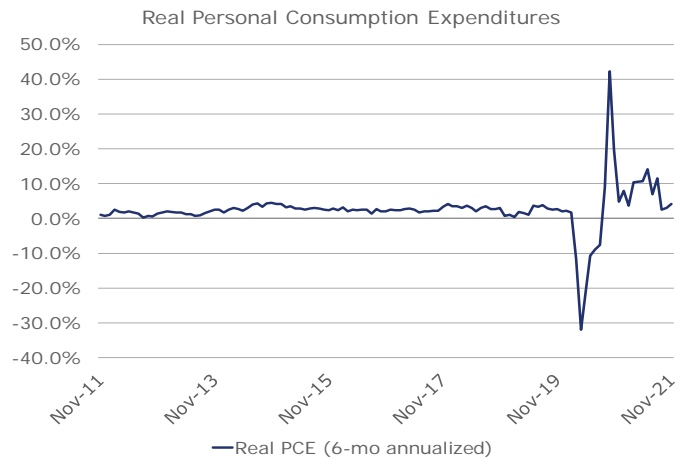
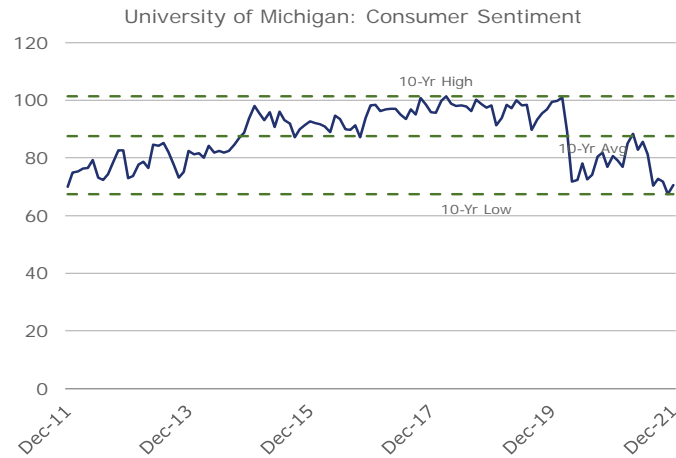
	Equity						Fixed Income					Real Assets						
	US	Dev		Global				LT				Dev ex-	Real Estate					
	Stock	ex-US	Emg	ex-US	Global	Private	Cash	Core	Core	TIPS	High	US Bond	US	Global	Private	Cmdty	Real	US
	Stock	Stock	Stock	Stock	Stock	Equity		Bond	Bond		Yield	(Hdg)	RES	RES	RE		Assets	CPI
Compound Return (%)	4.50	5.50	5.50	5.75	5.10	8.10	1.70	2.00	2.30	1.45	3.60	0.85	4.55	4.70	5.90	4.30	5.60	2.60
Expected Risk (%)	17.00	18.00	26.00	19.10	17.10	28.00	0.75	4.25	8.90	6.00	10.00	4.25	17.50	16.45	14.00	16.00	10.35	1.75
Cash Yield (%)	1.25	2.50	2.00	2.35	1.70	0.00	1.70	2.95	3.15	2.25	7.35	1.65	2.60	2.60	2.30	1.70	1.85	0.00
Growth Exposure	8.00	8.00	8.00	8.00	8.00	13.50	0.00	-0.85	-2.25	-3.00	4.00	-1.00	6.00	6.00	3.50	0.00	1.80	0.00
Inflation Exposure	-3.00	0.00	5.00	1.50	-1.25	-3.80	0.00	-2.50	-6.70	2.50	-1.00	-3.00	1.00	1.80	1.00	12.00	4.85	1.00
<b>Correlations</b>																		
US Stock	1.00																	
Dev ex-US Stock (USD)	0.81	1.00																
Emerging Mkt Stock	0.74	0.74	1.00															
Global ex-US Stock	0.83	0.96	0.87	1.00														
Global Stock	0.95	0.92	0.83	0.94	1.00													
Private Equity	0.74	0.64	0.62	0.67	0.74	1.00												
Cash Equivalents	-0.05	-0.09	-0.05	-0.08	-0.07	0.00	1.00											
Core Bond	0.28	0.13	0.00	0.09	0.20	0.31	0.19	1.00										
LT Core Bond	0.31	0.16	0.01	0.12	0.23	0.32	0.11	0.92	1.00									
TIPS	-0.05	0.00	0.15	0.05	0.00	-0.03	0.20	0.59	0.47	1.00								
High Yield Bond	0.54	0.39	0.49	0.45	0.51	0.34	-0.10	0.25	0.32	0.05	1.00							
Dev ex-US Bond (Hdg)	0.16	0.25	-0.01	0.17	0.18	0.26	0.10	0.66	0.65	0.39	0.26	1.00						
US RE Securities	0.58	0.47	0.44	0.49	0.56	0.50	-0.05	0.17	0.23	0.10	0.56	0.05	1.00					
Global RE Securities	0.64	0.58	0.56	0.61	0.65	0.58	-0.05	0.17	0.22	0.11	0.61	0.03	0.96	1.00				
Private Real Estate	0.54	0.44	0.44	0.47	0.52	0.51	-0.05	0.19	0.25	0.09	0.57	0.05	0.77	0.75	1.00			
Commodities	0.25	0.34	0.39	0.38	0.32	0.27	0.00	-0.02	-0.02	0.25	0.29	-0.10	0.25	0.28	0.25	1.00		
Real Assets	0.48	0.51	0.58	0.57	0.54	0.47	-0.02	0.23	0.25	0.39	0.56	0.05	0.70	0.75	0.70	0.65	1.00	
Inflation (CPI)	-0.10	-0.15	-0.13	-0.15	-0.13	-0.10	0.10	-0.12	-0.12	0.15	-0.08	-0.08	0.05	0.03	0.05	0.44	0.26	1.00

## Economic Growth



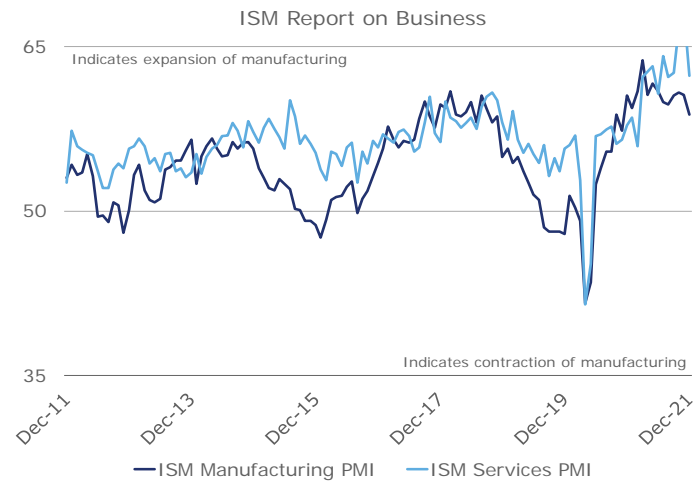
Data Sources: Bloomberg

## Consumer Activity



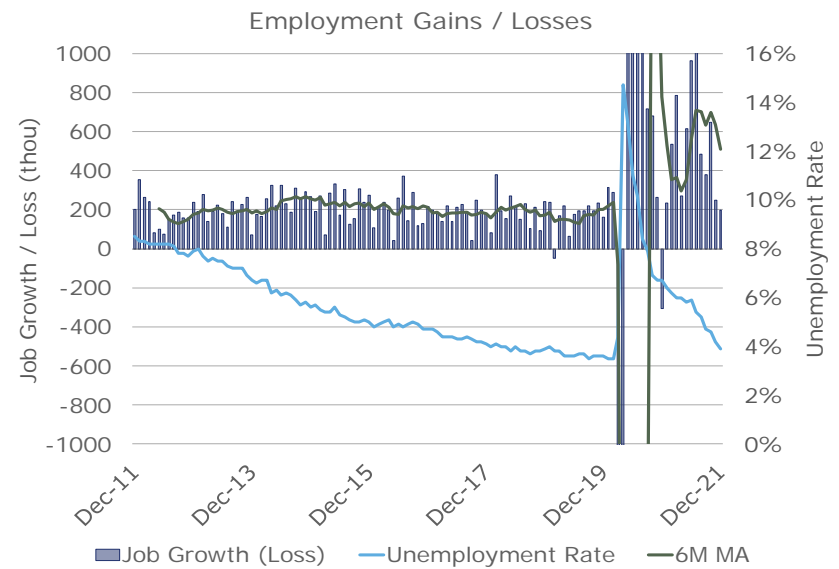
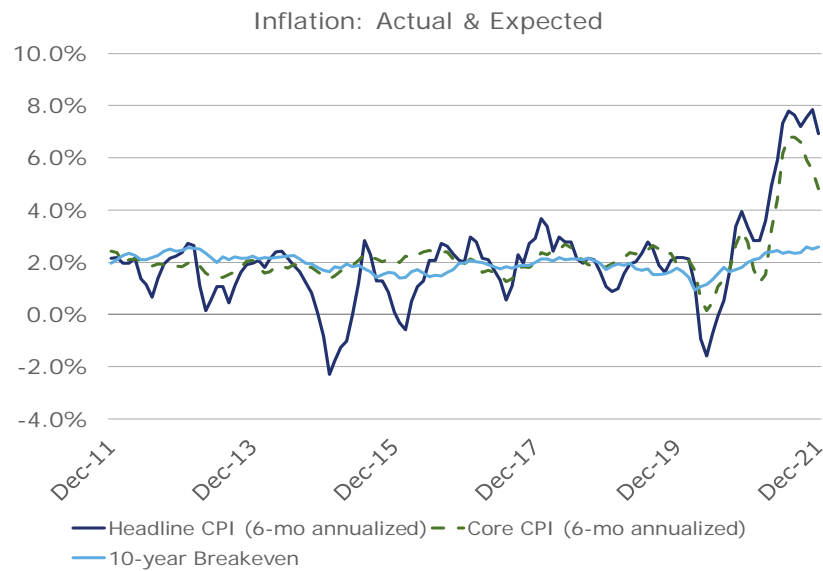
Data Sources: Bloomberg

## Business Activity



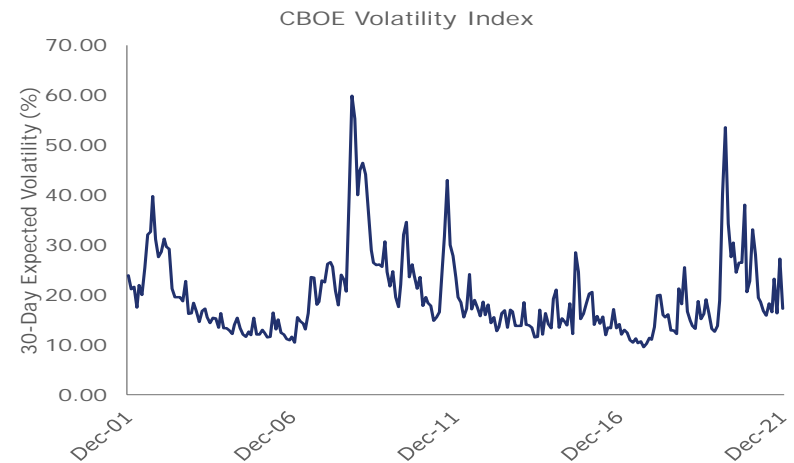
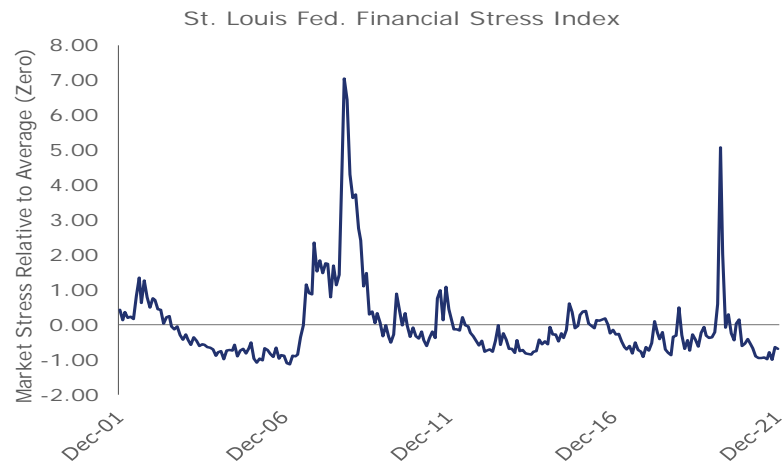
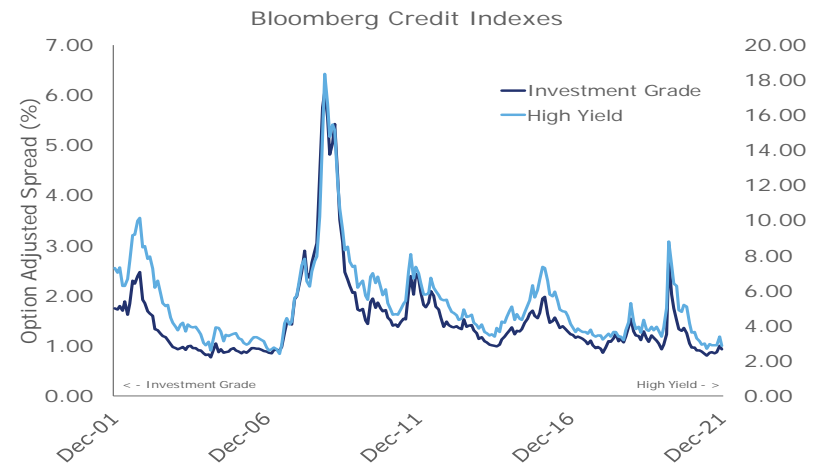
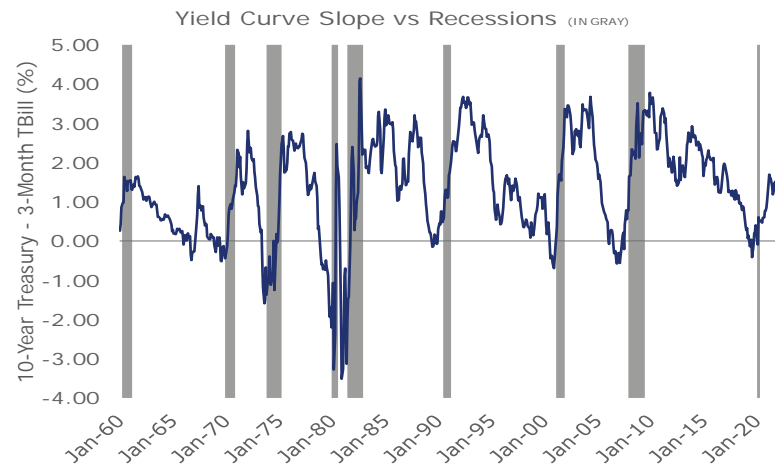
Data Sources: Bloomberg

## Inflation and Employment



Data Sources: Bloomberg

## Risk Monitor



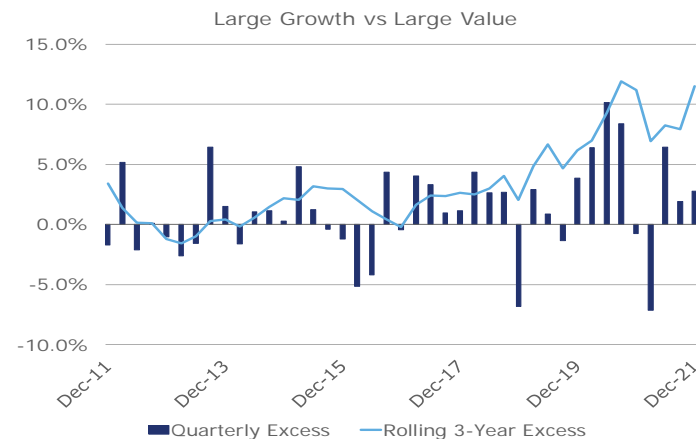
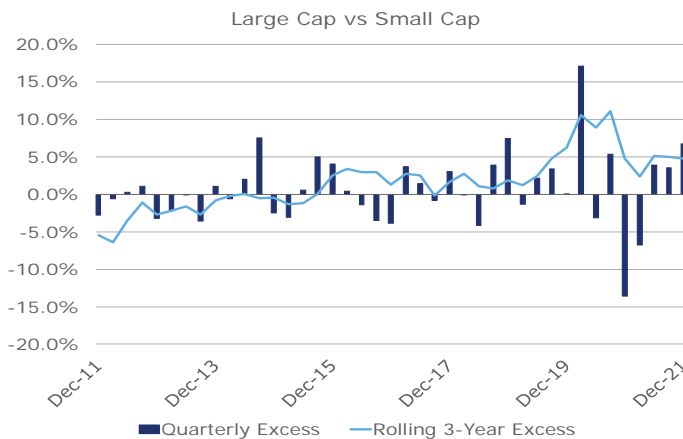
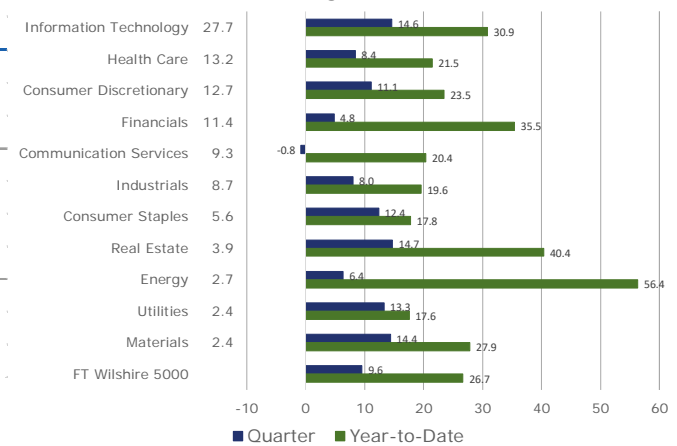
Data Sources: Bloomberg

## U.S. Equity Market

As of 12/31/2021

	Quarter	YTD	1 Year	3 Year	5 Year	10 Year
FT Wilshire 5000	9.6	26.7	26.7	26.1	18.1	16.4
Wilshire U.S. Large Cap	10.2	27.5	27.5	26.6	18.7	16.7
Wilshire U.S. Small Cap	3.3	19.2	19.2	20.9	12.3	13.9
Wilshire U.S. Large Growth	11.6	28.9	28.9	33.3	23.9	19.5
Wilshire U.S. Large Value	8.6	24.5	24.5	19.5	13.3	13.7
Wilshire U.S. Small Growth	1.8	10.1	10.1	22.7	14.8	14.5
Wilshire U.S. Small Value	4.8	29.2	29.2	19.1	9.8	13.2
Wilshire REIT Index	17.1	46.2	46.2	19.2	10.9	11.5
MSCI USA Min. Vol. Index	10.4	21.0	21.0	17.9	14.7	14.2
FTSE RAFI U.S. 1000 Index	9.0	31.6	31.6	22.1	14.2	14.8

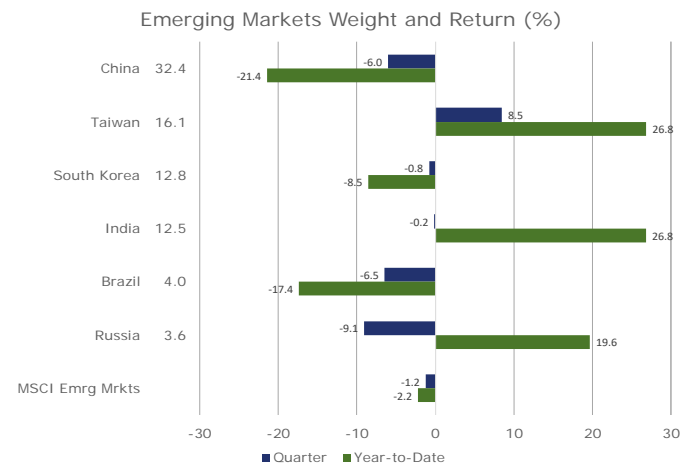
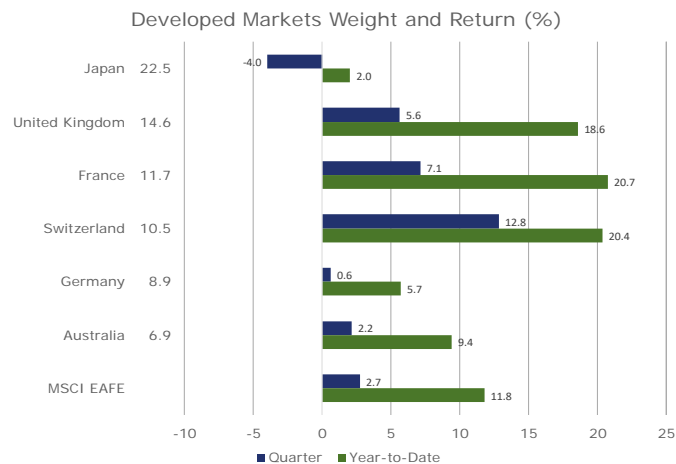
U.S. Sector Weight and Return (%)



Data Sources: Bloomberg, Wilshire Atlas

## Non-U.S. Equity Market

As of 12/31/2021	Quarter	YTD	1 Year	3 Year	5 Year	10 Year
MSCI ACWI ex-US (\$G)	1.9	8.3	8.3	13.7	10.1	7.8
MSCI EAFE (\$G)	2.7	11.8	11.8	14.1	10.1	8.5
MSCI Emerging Markets (\$G)	-1.2	-2.2	-2.2	11.3	10.3	5.9
MSCI Frontier Markets (\$G)	2.0	4.6	4.6	5.3	5.0	4.1
MSCI ACWI ex-US Growth (\$G)	2.4	5.4	5.4	18.2	13.4	9.5
MSCI ACWI ex-US Value (\$G)	1.2	11.6	11.6	9.5	7.0	6.3
MSCI ACWI ex-US Small (\$G)	0.7	13.4	13.4	16.9	11.6	9.9
MSCI ACWI Minimum Volatility	6.4	14.5	14.5	13.0	11.1	10.7
MSCI EAFE Minimum Volatility	2.5	7.6	7.6	8.3	8.0	8.0
FTSE RAFI Developed ex-US	2.6	15.5	15.5	12.0	8.3	7.5
MSCI EAFE LC (G)	4.0	19.2	19.2	13.9	8.9	10.6
MSCI Emerging Markets LC (G)	-0.8	0.1	0.1	12.3	10.9	8.4



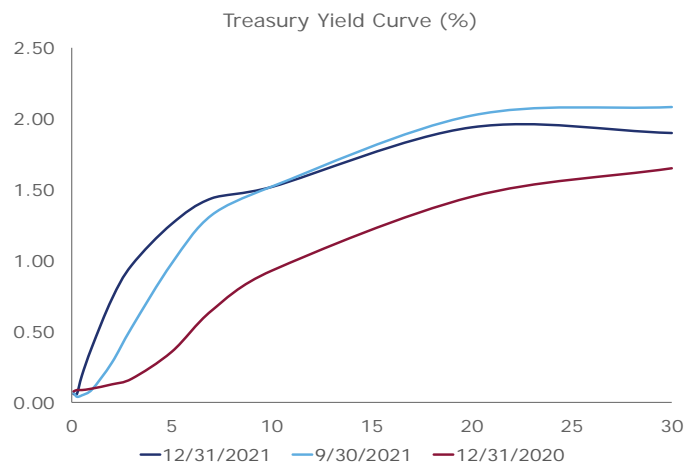
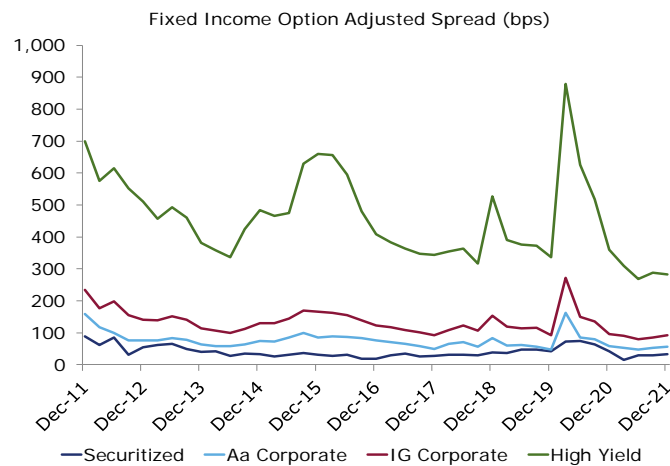
Data Sources: Bloomberg



## U.S. Fixed Income

As of 12/31/2021	YTW	DUR.	QTR	YTD	1 YR	3 YR	5 YR	10 YR
Bloomberg Aggregate	1.8	6.8	0.0	-1.5	-1.5	4.8	3.6	2.9
Bloomberg Treasury	1.2	7.1	0.2	-2.3	-2.3	4.1	3.1	2.1
Bloomberg Gov't-Rel.	1.6	6.1	0.0	-1.3	-1.3	4.5	3.6	2.8
Bloomberg Securitized	2.0	4.8	-0.4	-1.0	-1.0	3.1	2.6	2.4
Bloomberg Corporate	2.3	8.7	0.2	-1.0	-1.0	7.6	5.3	4.7
Bloomberg LT Gov't/Credit	2.6	16.5	2.2	-2.5	-2.5	10.6	7.4	5.7
Bloomberg LT Treasury	1.9	18.6	3.1	-4.6	-4.6	8.8	6.5	4.5
Bloomberg LT Gov't-Rel.	3.0	13.6	1.9	-1.5	-1.5	8.6	6.8	5.5
Bloomberg LT Corporate	3.1	15.2	1.5	-1.1	-1.1	11.8	7.7	6.5
Bloomberg U.S. TIPS *	1.4	8.2	2.4	6.0	6.0	8.4	5.3	3.1
Bloomberg High Yield	4.2	3.8	0.7	5.3	5.3	8.8	6.3	6.8
S&P/LSTA Leveraged Loan	3.9	0.3	0.7	5.2	5.2	5.6	4.3	4.7
Treasury Bills	0.1	0.3	0.0	0.0	0.0	1.0	1.2	0.7

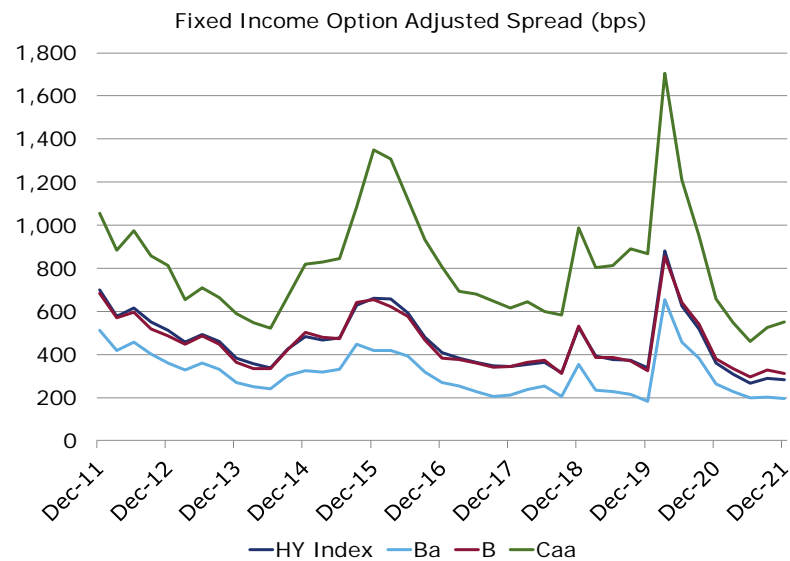
\* Yield and Duration statistics are for a proxy index based on similar maturity, the Bloomberg Barclays U.S. Treasury 7-10 Year Index



Data Sources: Bloomberg

## High Yield Bond Market

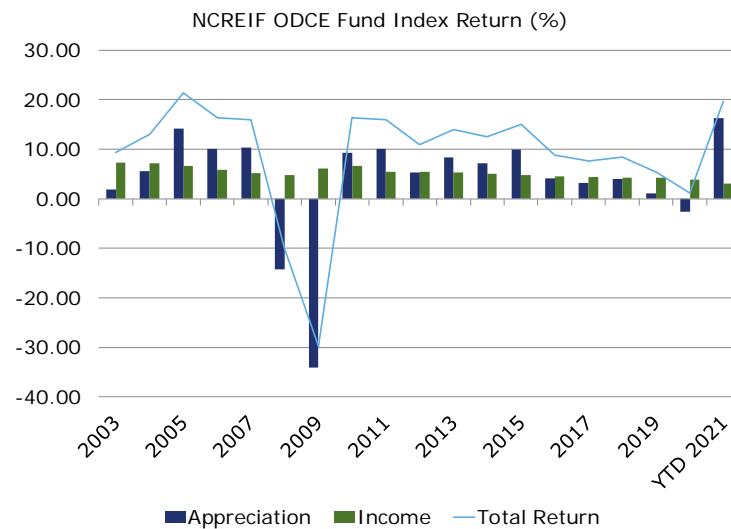
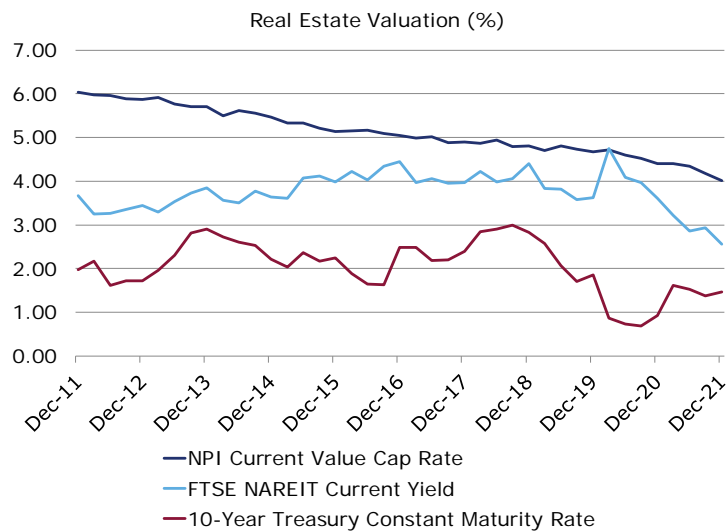
As of 12/31/2021		YTW	QTR	YTD	1 YR	3 YR	5 YR	10 YR
Bloomberg High Yield		4.2	0.7	5.3	5.3	8.8	6.3	6.8
S&P LSTA Leveraged Loan		3.7	0.4	3.5	3.5	5.6	3.9	4.3
<b>High Yield Quality Distribution</b>		<b>Weight</b>						
Ba U.S. High Yield	52.8%	3.3	0.7	4.6	4.6	10.0	6.9	7.0
B U.S. High Yield	35.7%	4.6	0.8	4.8	4.8	8.0	5.8	6.3
Caa U.S. High Yield	11.3%	6.8	0.5	8.6	8.6	6.7	5.2	7.1
Ca to D U.S. High Yield	0.3%	27.8	-12.9	12.5	12.5	4.8	5.3	-1.4
Non-Rated U.S. High Yield	0.0%	0.0	0.0	0.0	0.0	-0.2	1.9	2.5



Data Sources: Bloomberg

## Real Assets

As of 12/31/2021	Quarter	YTD	1 Year	3 Year	5 Year	10 Year
Bloomberg U.S. TIPS	2.4	6.0	6.0	8.4	5.3	3.1
Bloomberg Commodity Index	-1.6	27.1	27.1	9.9	3.7	-2.9
Bloomberg Gold Index	4.0	-4.3	-4.3	11.0	8.4	0.7
Wilshire Global RESI Index	13.1	34.1	34.1	15.1	9.7	10.5
NCREIF ODCE Fund Index	8.0	22.2	22.2	9.2	8.7	10.4
NCREIF Timberland Index	4.6	9.2	9.2	3.7	3.6	5.3
FTSE Global Core Infrastructure 50/50	7.7	15.7	15.7	12.2	10.3	9.7
Alerian Midstream Energy	-0.4	38.4	38.4	9.6	2.2	n.a.
Bitcoin	6.7	59.8	59.8	132.8	117.5	153.4



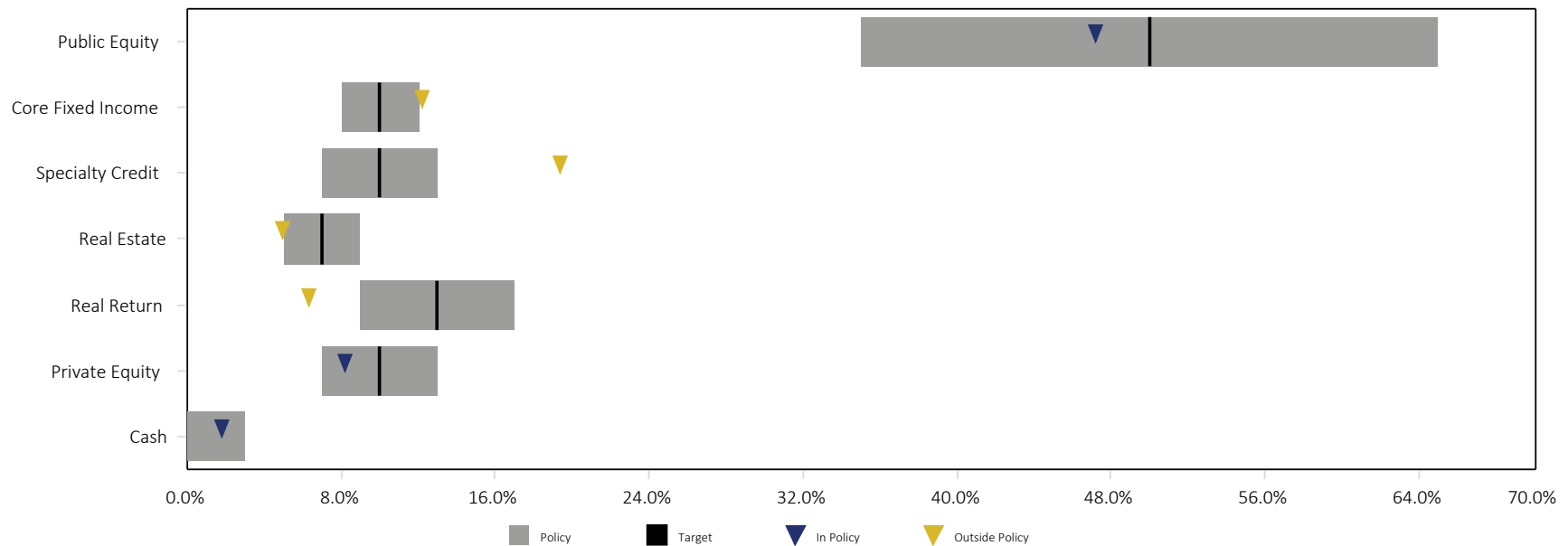
Data Sources: Bloomberg, National Council of Real Estate Investment Fiduciaries

# Asset Allocation Compliance

## CERS Pension Plan

Periods Ended As of December 31, 2021

### Executive Summary



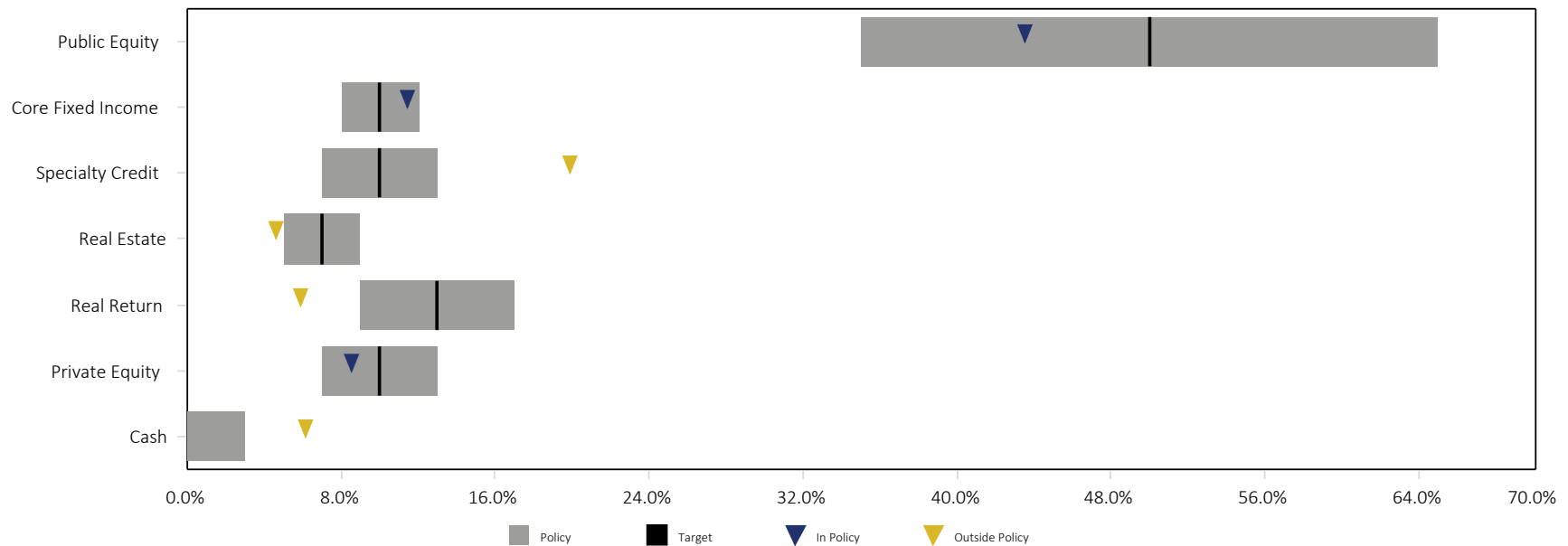
	Asset Allocation \$	Asset Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)	Target Rebalance \$
Public Equity	4,211,504,123	47.20	35.00	65.00	50.00	250,157,716
Core Fixed Income	1,088,720,804	12.20	8.00	12.00	10.00	-196,388,436
Specialty Credit	1,731,934,576	19.41	7.00	13.00	10.00	-839,602,208
Real Estate	438,491,792	4.91	5.00	9.00	7.00	186,140,866
Real Return	564,672,958	6.33	9.00	17.00	13.00	595,359,120
Private Equity	730,453,143	8.19	7.00	13.00	10.00	161,879,225
Cash	157,546,282	1.77	0.00	3.00	0.00	-157,546,282
Total Fund	8,923,323,679	100.00			100.00	

# Asset Allocation Compliance

## CERS Insurance Plan

Periods Ended As of December 31, 2021

### Executive Summary



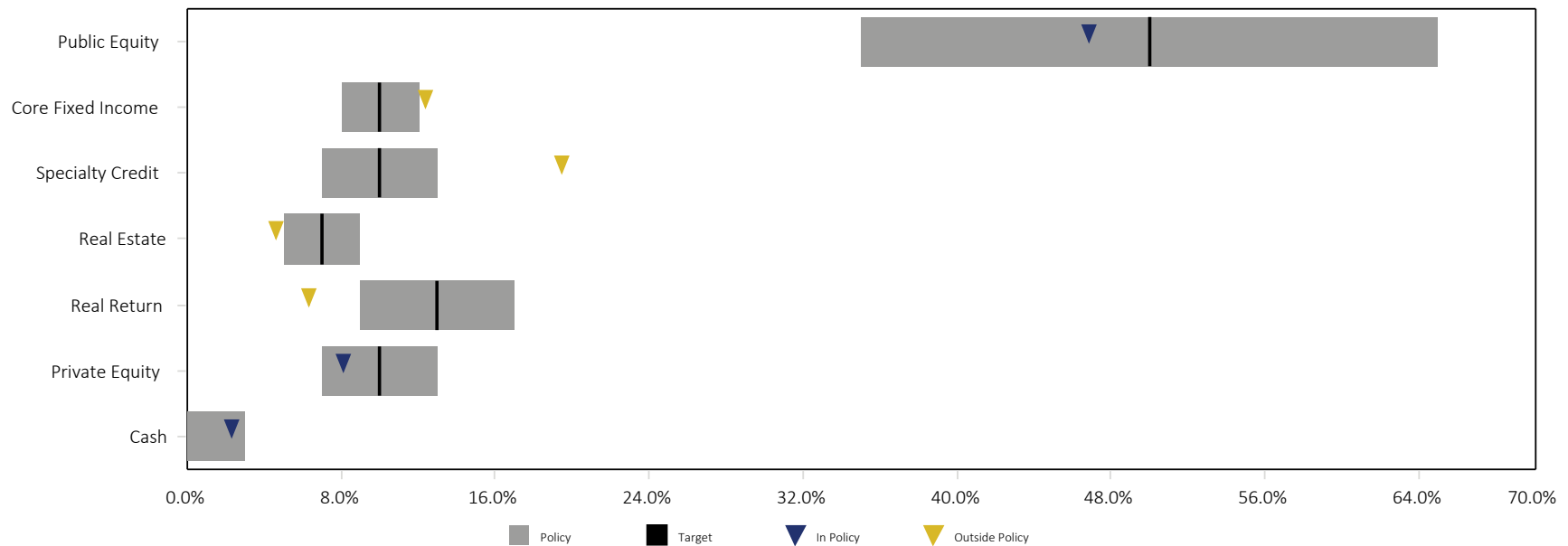
	Asset Allocation \$	Asset Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)	Target Rebalance \$
Public Equity	1,439,772,299	43.54	35.00	65.00	50.00	213,588,456
Core Fixed Income	379,119,018	11.47	8.00	12.00	10.00	-48,446,867
Specialty Credit	658,339,405	19.91	7.00	13.00	10.00	-327,667,254
Real Estate	151,537,121	4.58	5.00	9.00	7.00	79,933,385
Real Return	193,759,569	5.86	9.00	17.00	13.00	236,114,227
Private Equity	281,560,342	8.51	7.00	13.00	10.00	49,111,809
Cash	202,633,756	6.13	0.00	3.00	0.00	-202,633,756
Total Fund	3,306,721,510	100.00			100.00	

# Asset Allocation Compliance

## CERS (H) Pension Plan

Periods Ended As of December 31, 2021

### Executive Summary



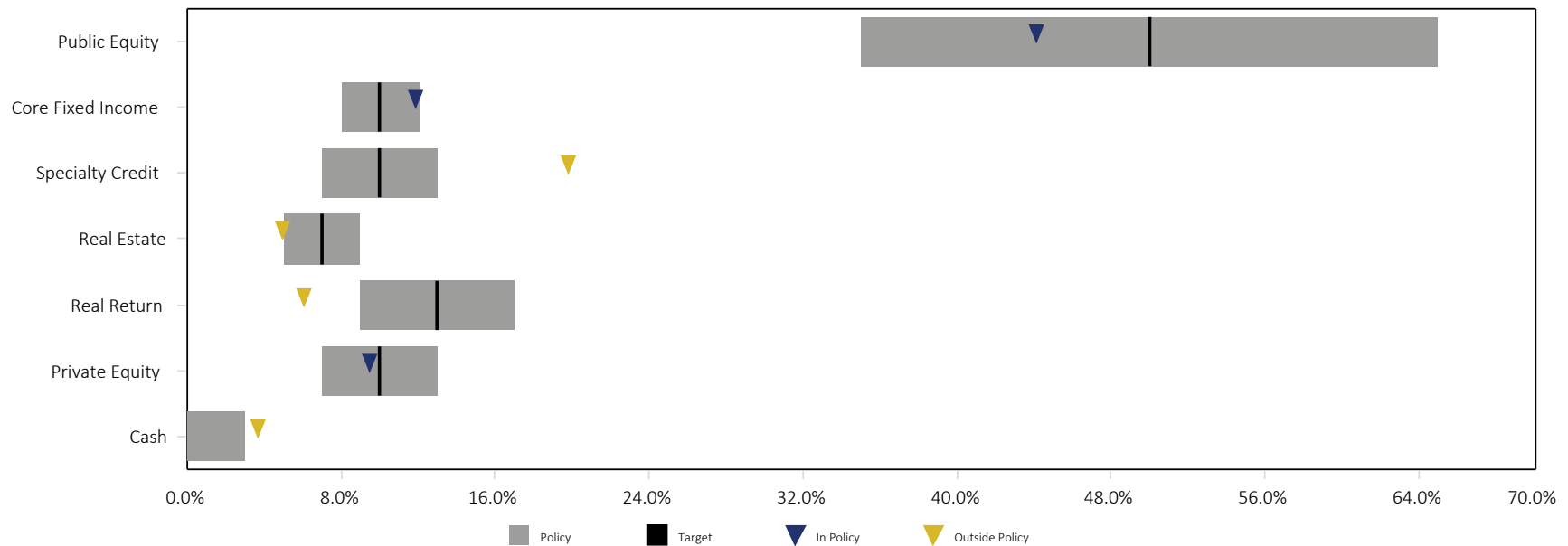
	Asset Allocation \$	Asset Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)	Target Rebalance \$
Public Equity	1,418,838,417	46.85	35.00	65.00	50.00	95,280,513
Core Fixed Income	374,799,175	12.38	8.00	12.00	10.00	-71,975,388
Specialty Credit	589,576,349	19.47	7.00	13.00	10.00	-286,752,563
Real Estate	139,685,834	4.61	5.00	9.00	7.00	72,290,816
Real Return	190,896,012	6.30	9.00	17.00	13.00	202,774,910
Private Equity	244,872,272	8.09	7.00	13.00	10.00	57,951,514
Cash	69,569,803	2.30	0.00	3.00	0.00	-69,569,803
Total Fund	3,028,237,861	100.00			100.00	

# Asset Allocation Compliance

## CERS (H) Insurance Plan

Periods Ended As of December 31, 2021

### Executive Summary



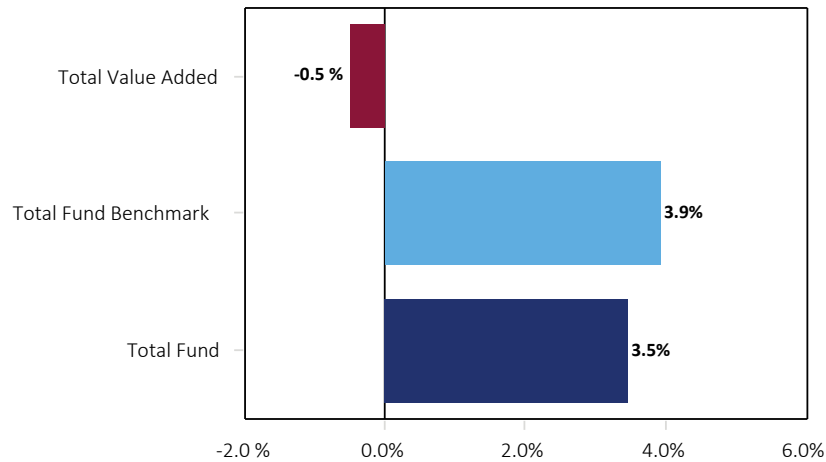
	Asset Allocation \$	Asset Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)	Target Rebalance \$
Public Equity	740,413,686	44.16	35.00	65.00	50.00	97,854,166
Core Fixed Income	199,596,493	11.91	8.00	12.00	10.00	-31,942,922
Specialty Credit	331,732,141	19.79	7.00	13.00	10.00	-164,078,571
Real Estate	83,046,833	4.95	5.00	9.00	7.00	34,310,666
Real Return	101,501,956	6.05	9.00	17.00	13.00	116,447,686
Private Equity	158,262,613	9.44	7.00	13.00	10.00	9,390,957
Cash	61,981,982	3.70	0.00	3.00	0.00	-61,981,982
Total Fund	1,676,535,704	100.00			100.00	

# Total Fund Attribution

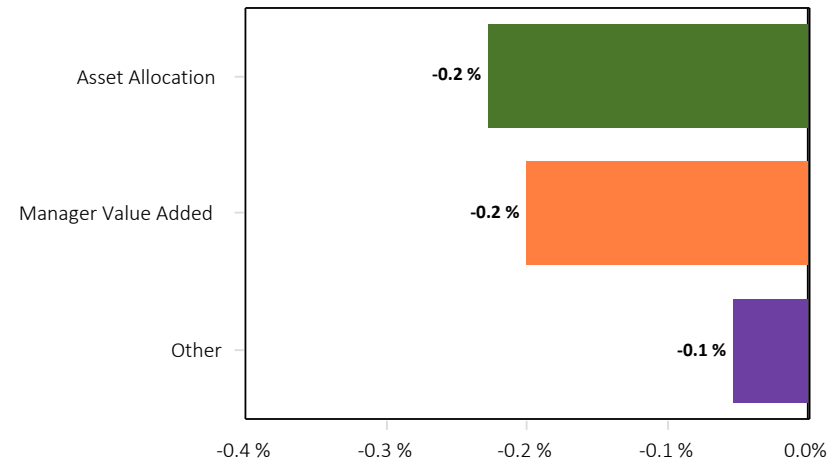
CERS Pension Plan

Periods Ended 1 Quarter Ending December 31, 2021

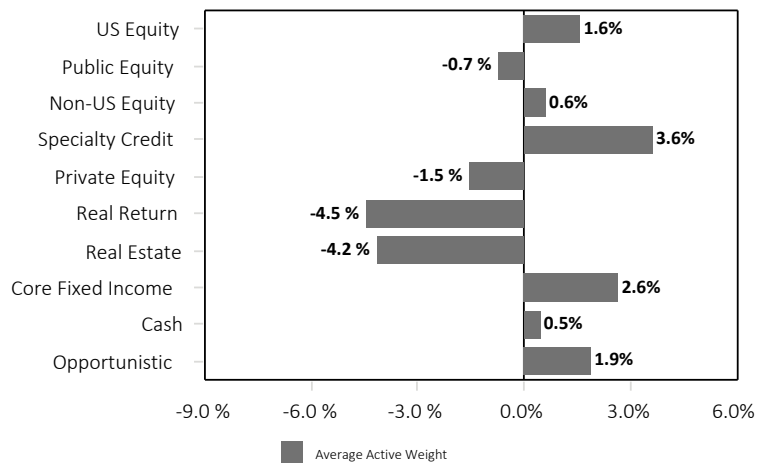
## Total Fund Performance



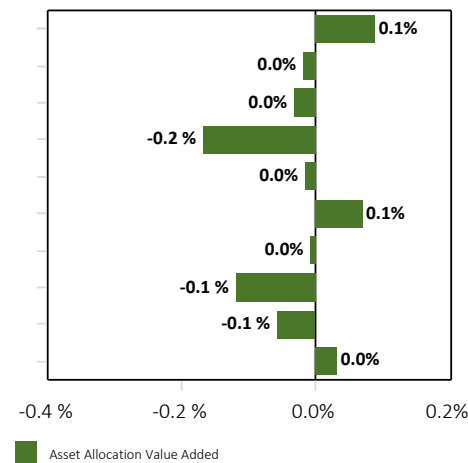
## Total Value Added:-0.5 %



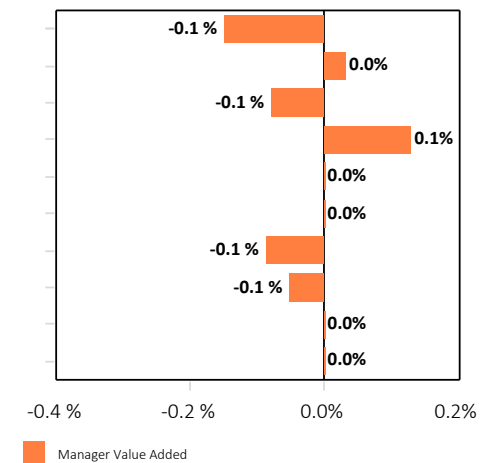
## Total Asset Allocation:-0.2 %



## Asset Allocation Value Added:-0.2 %



## Total Manager Value Added:-0.2 %



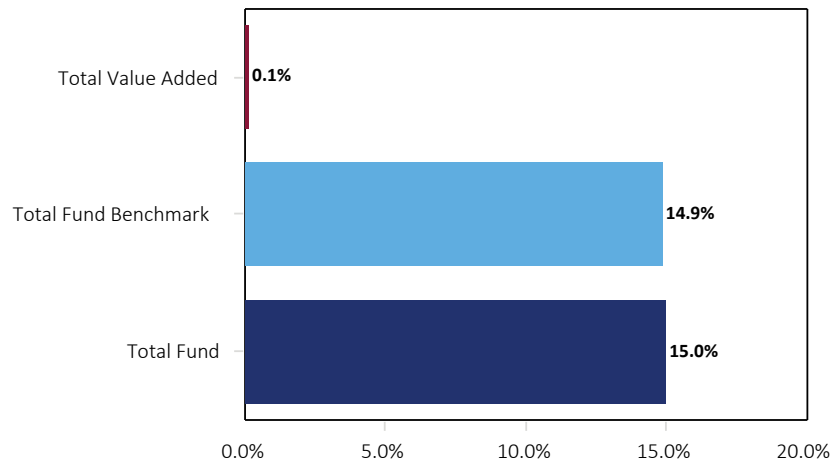


# Total Fund Attribution

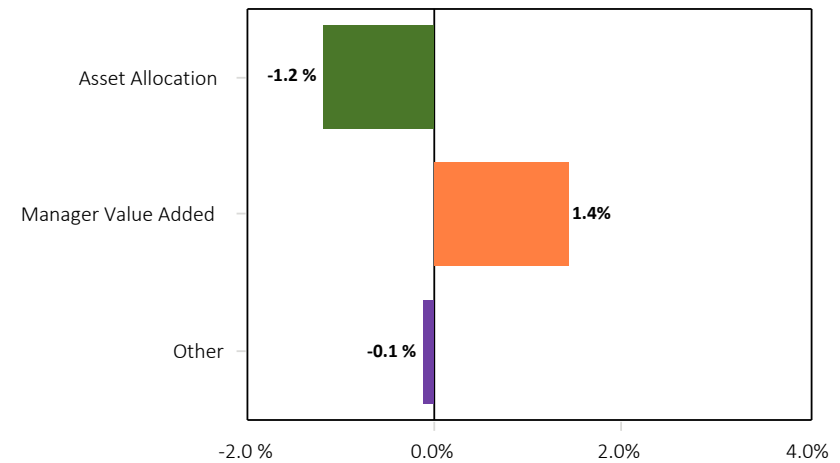
CERS Pension Plan

Periods Ended 1 Year Ending December 31, 2021

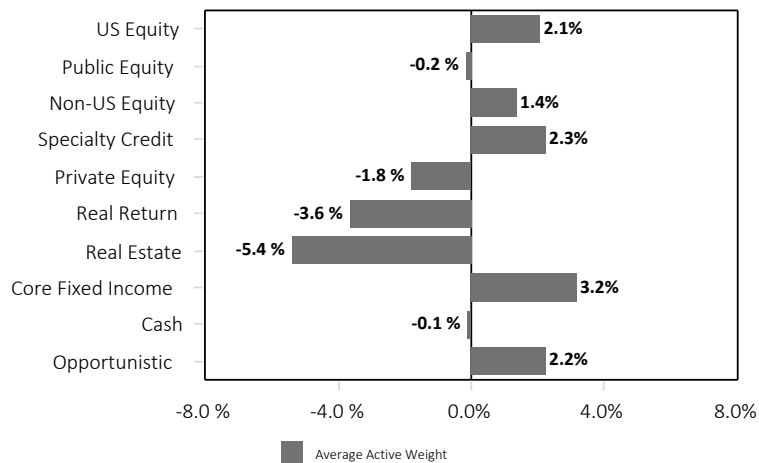
## Total Fund Performance



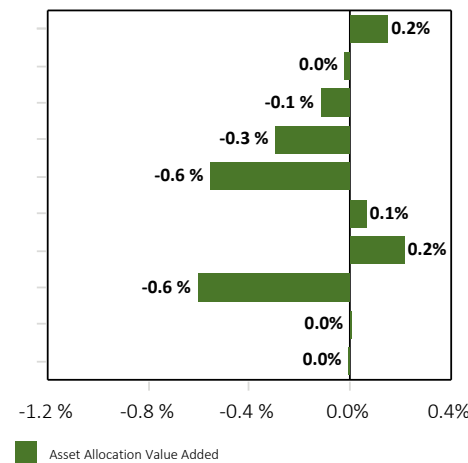
## Total Value Added:0.1%



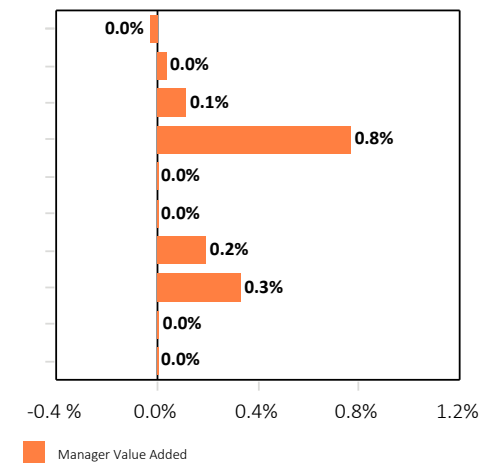
## Total Asset Allocation:-1.2 %



## Asset Allocation Value Added:-1.2 %



## Total Manager Value Added:1.4%

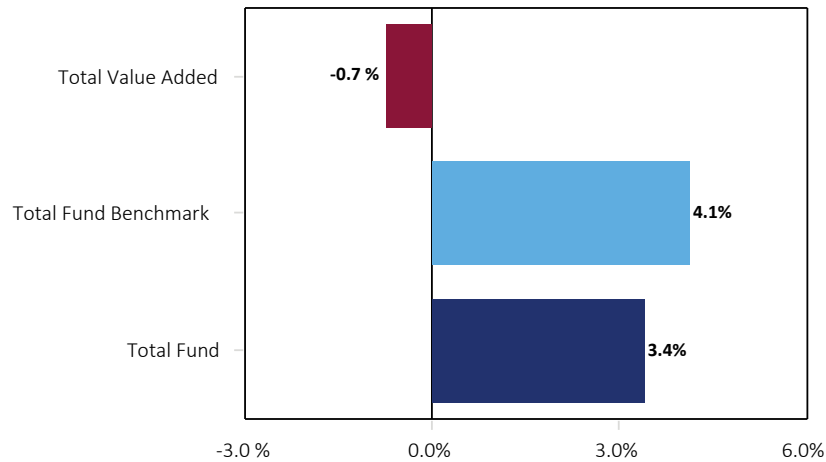


# Total Fund Attribution

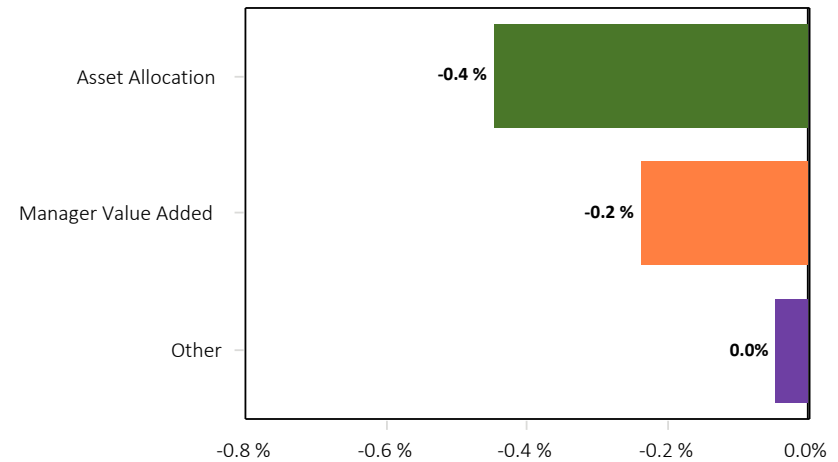
CERS Insurance Plan

Periods Ended 1 Quarter Ending December 31, 2021

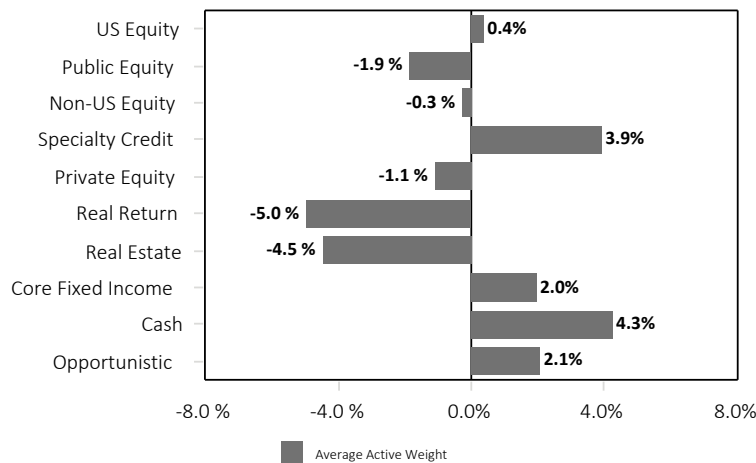
## Total Fund Performance



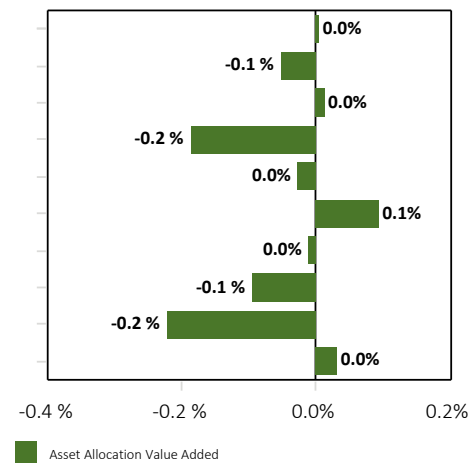
## Total Value Added:-0.7 %



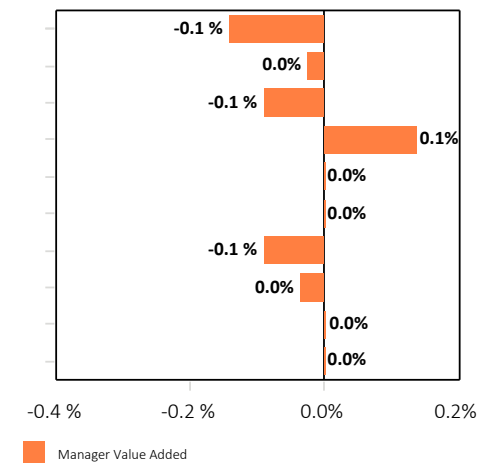
## Total Asset Allocation:-0.4 %



## Asset Allocation Value Added:-0.4 %



## Total Manager Value Added:-0.2 %

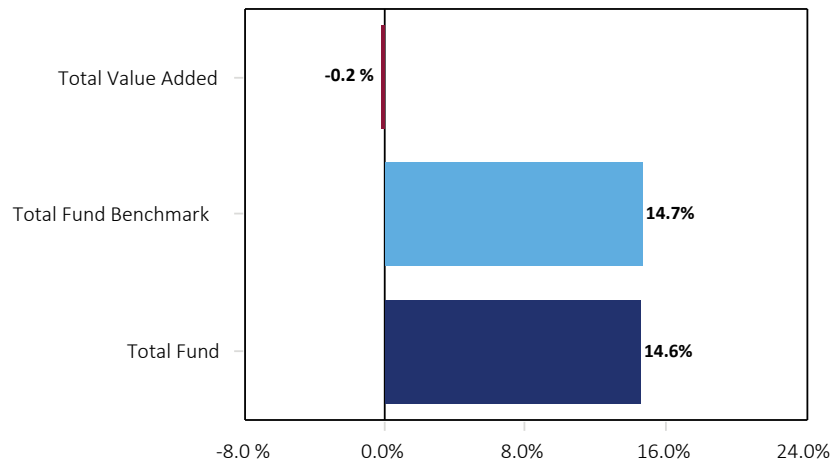


# Total Fund Attribution

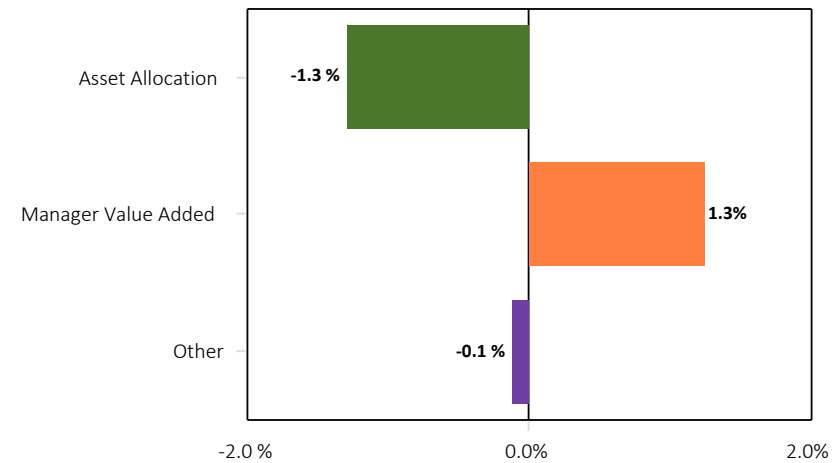
CERS Insurance Plan

Periods Ended 1 Year Ending December 31, 2021

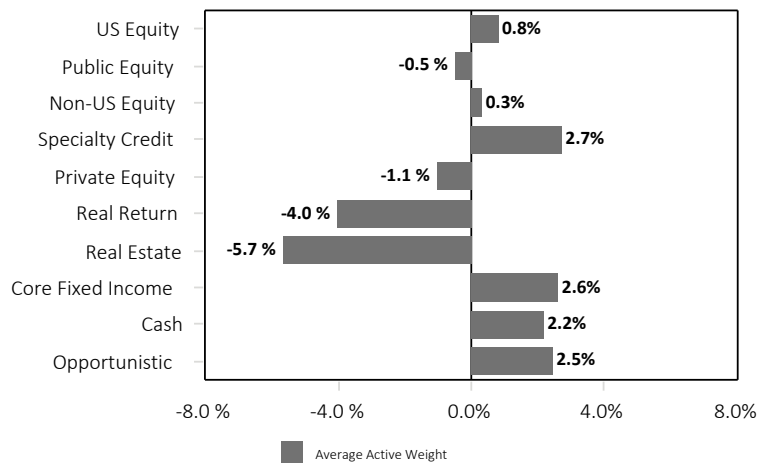
## Total Fund Performance



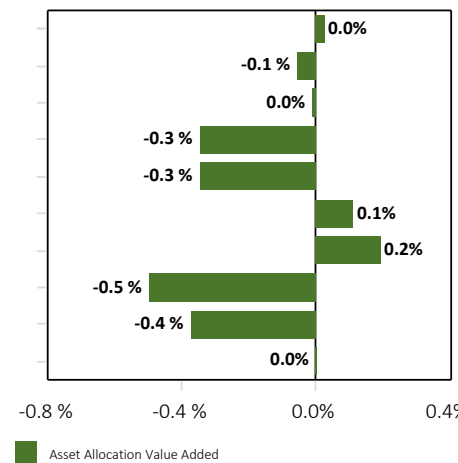
## Total Value Added:-0.2 %



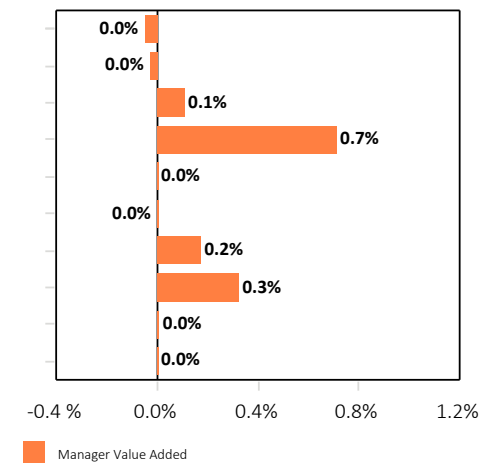
## Total Asset Allocation:-1.3 %



## Asset Allocation Value Added:-1.3 %



## Total Manager Value Added:1.3%

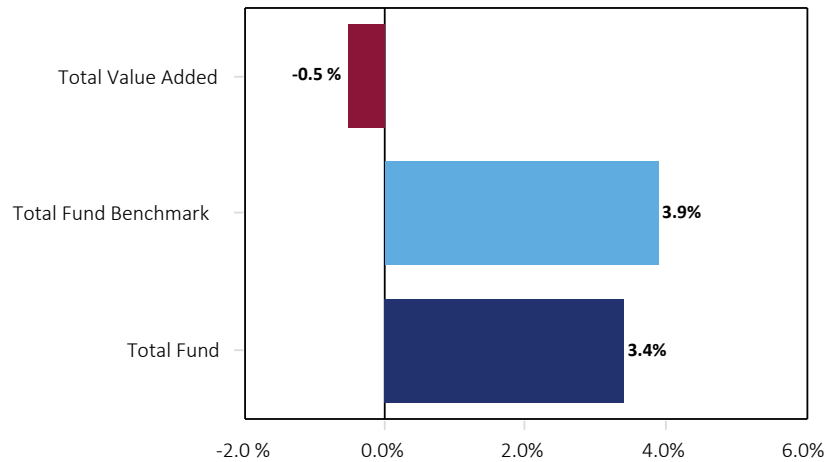


# Total Fund Attribution

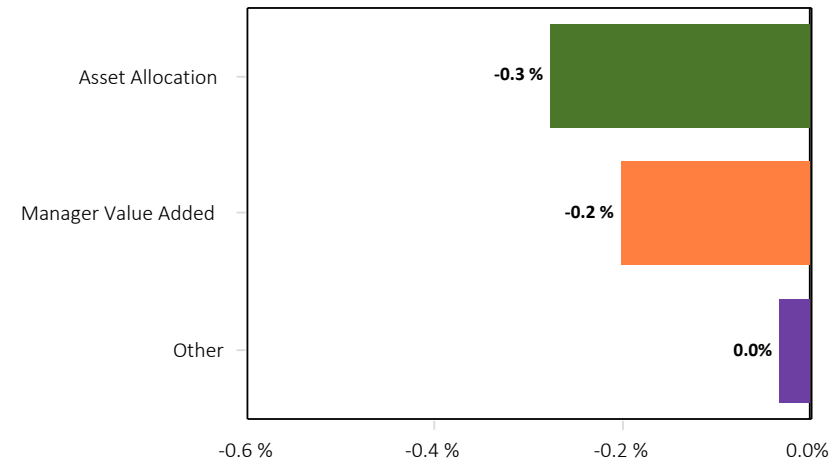
CERS (H) Pension Plan

Periods Ended 1 Quarter Ending December 31, 2021

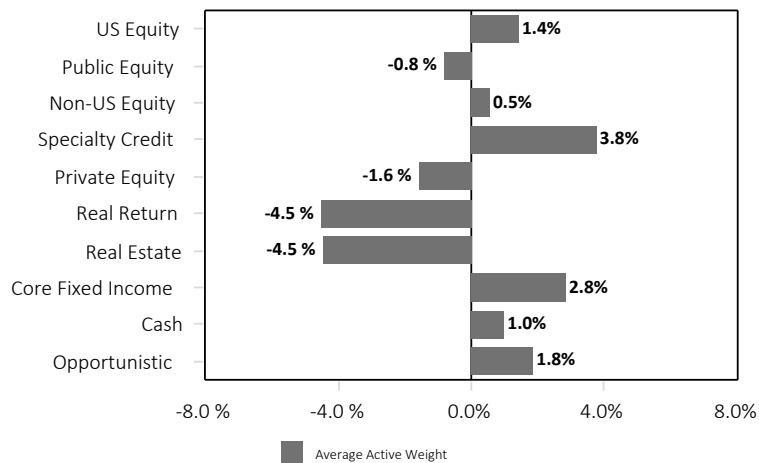
## Total Fund Performance



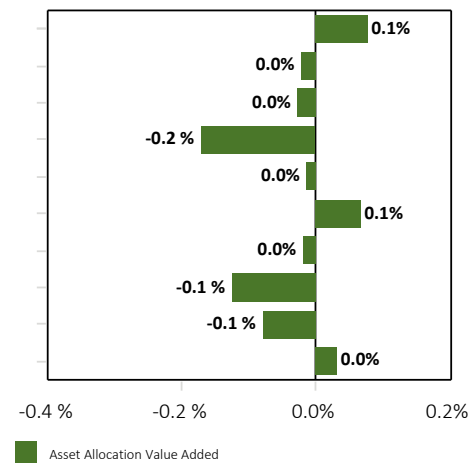
## Total Value Added:-0.5 %



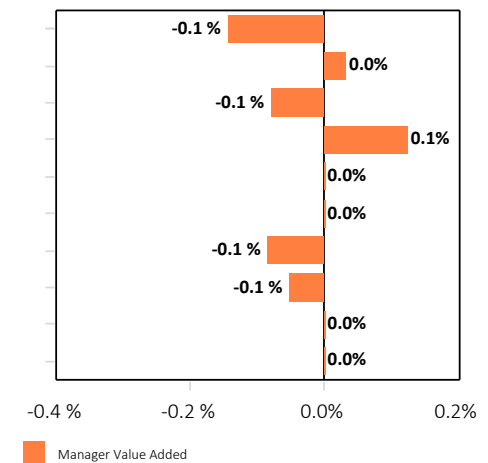
## Total Asset Allocation:-0.3 %



## Asset Allocation Value Added:-0.3 %



## Total Manager Value Added:-0.2 %

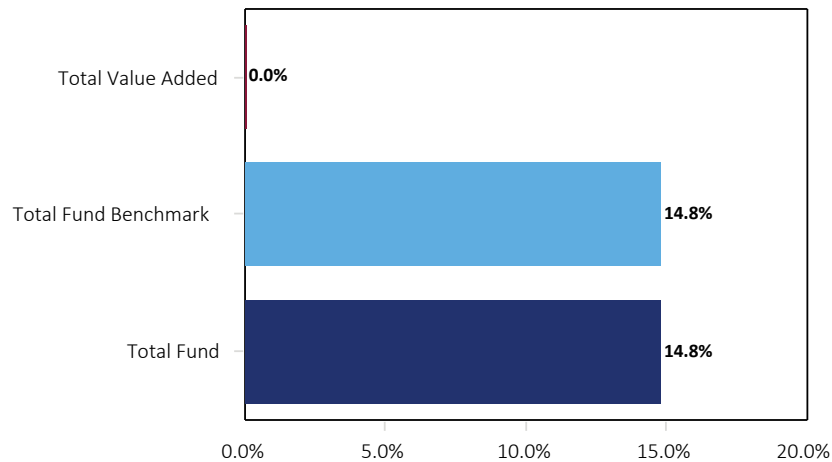


# Total Fund Attribution

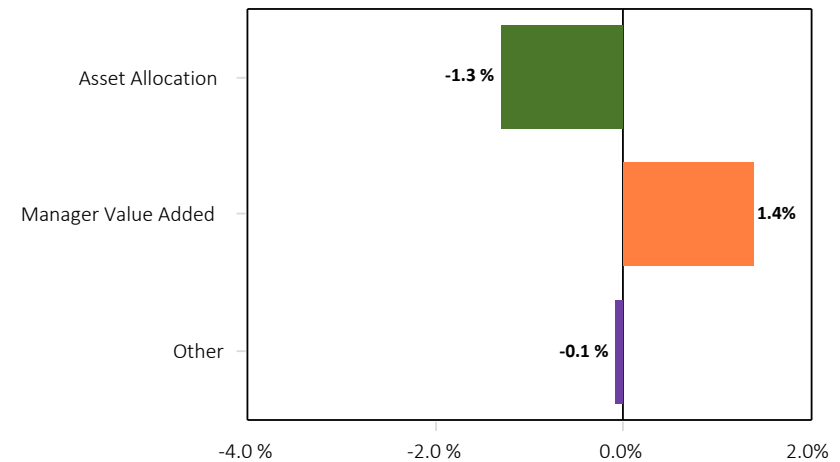
CERS (H) Pension Plan

Periods Ended 1 Year Ending December 31, 2021

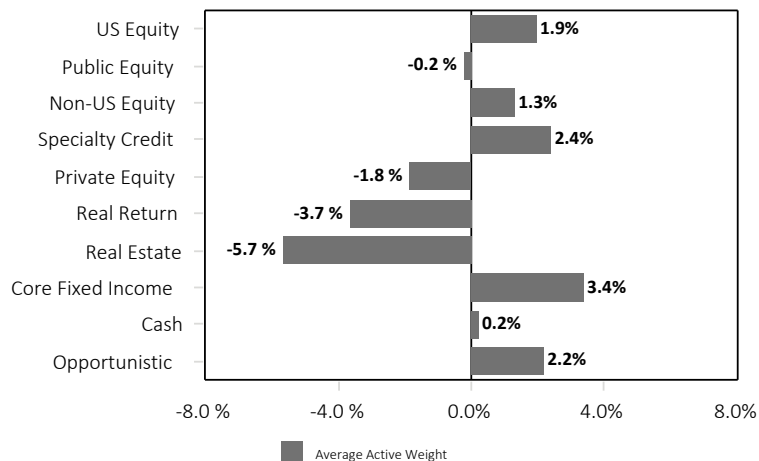
## Total Fund Performance



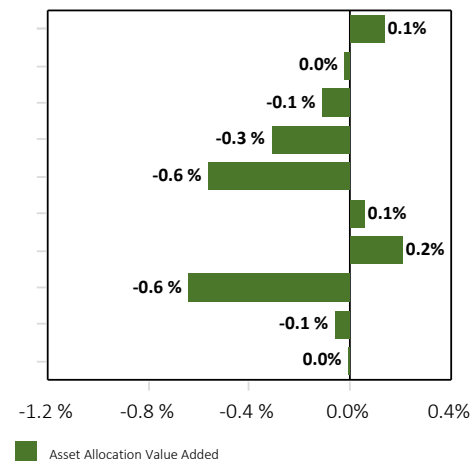
## Total Value Added:0.0%



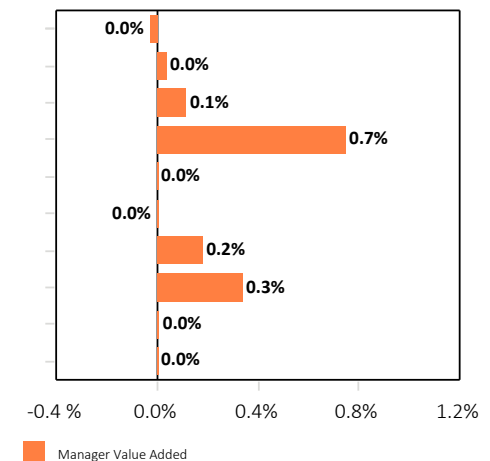
## Total Asset Allocation:-1.3 %



## Asset Allocation Value Added:-1.3 %



## Total Manager Value Added:1.4%

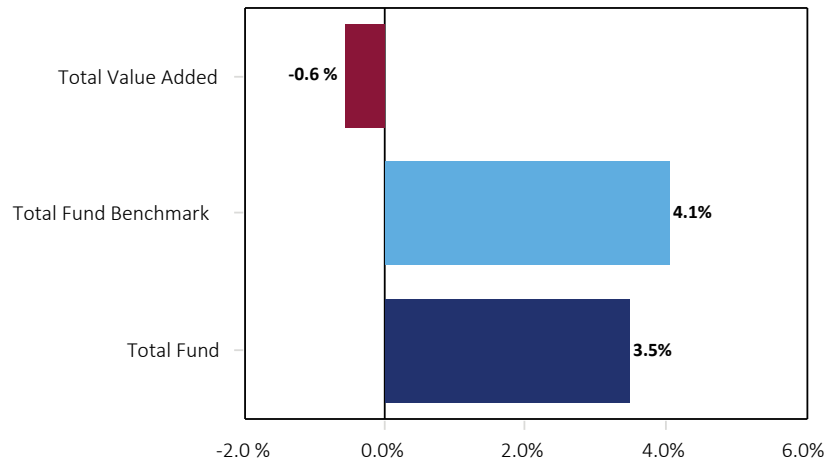


# Total Fund Attribution

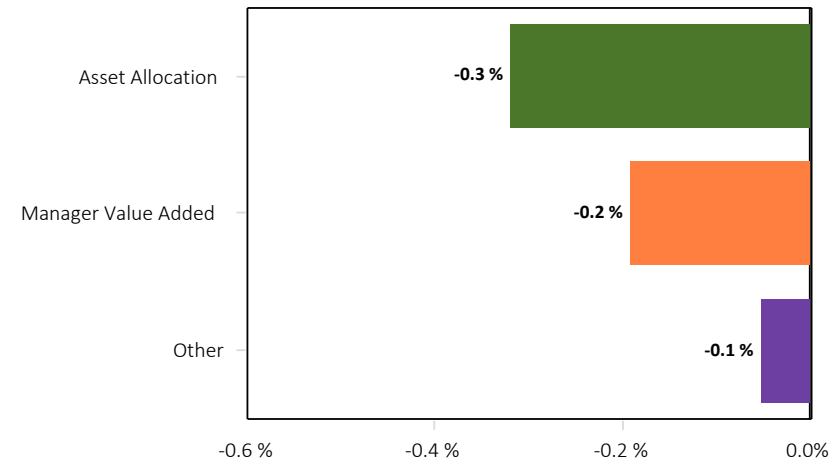
CERS (H) Insurance Plan

Periods Ended 1 Quarter Ending December 31, 2021

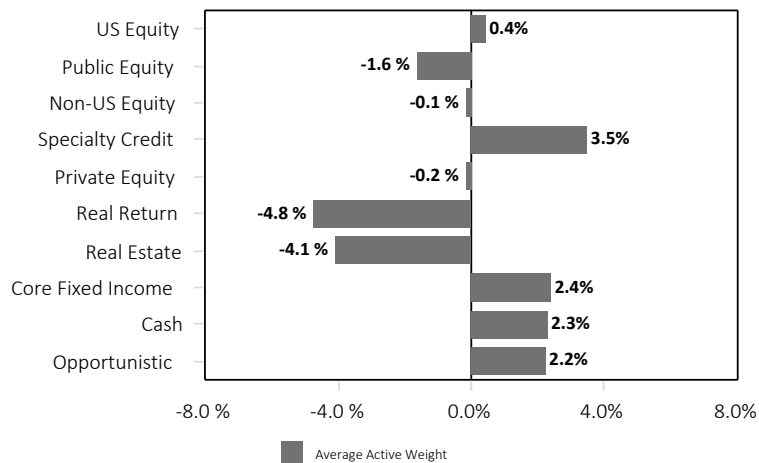
## Total Fund Performance



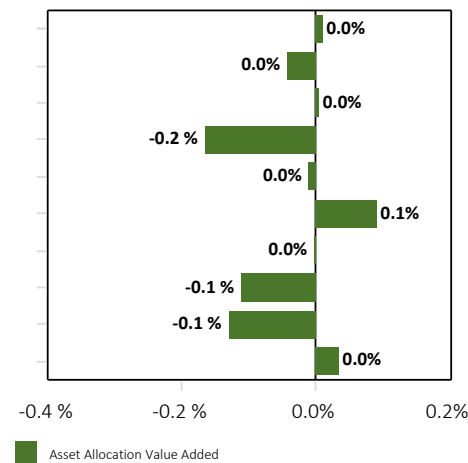
## Total Value Added:-0.6 %



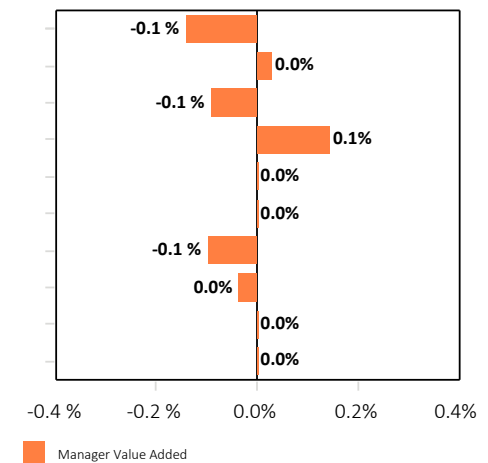
## Total Asset Allocation:-0.3 %



## Asset Allocation Value Added:-0.3 %



## Total Manager Value Added:-0.2 %

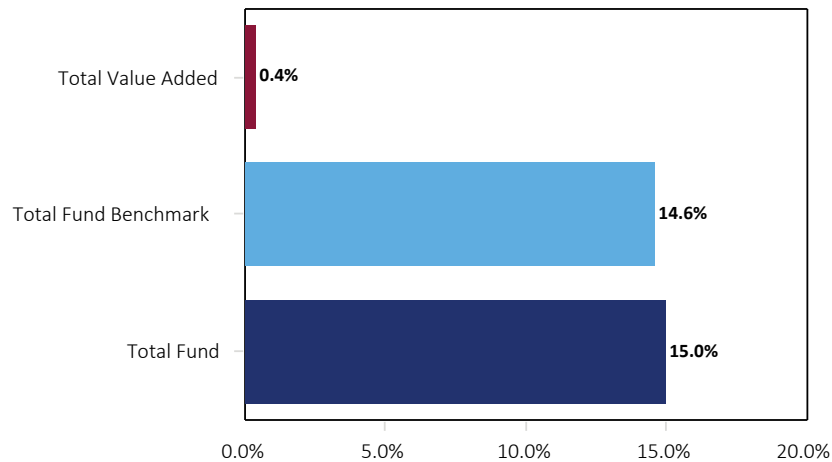


# Total Fund Attribution

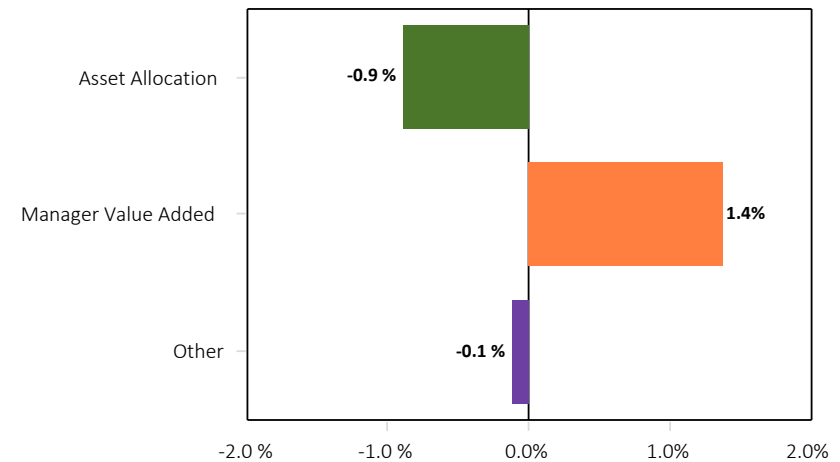
CERS (H) Insurance Plan

Periods Ended 1 Year Ending December 31, 2021

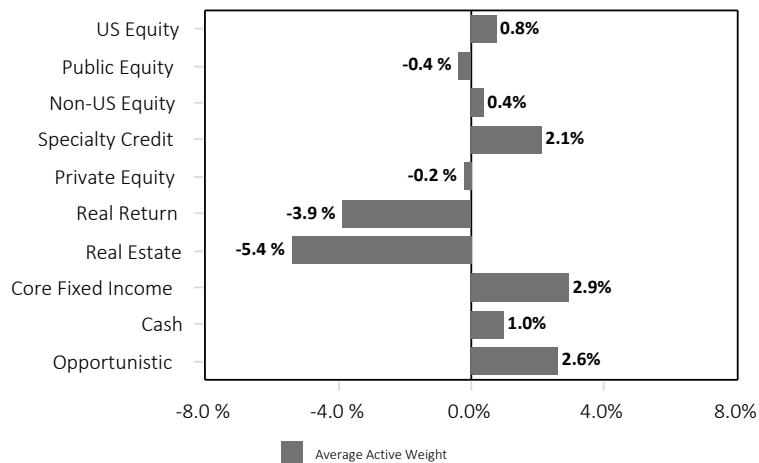
## Total Fund Performance



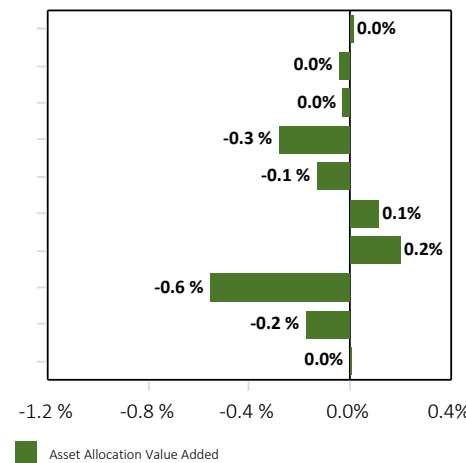
## Total Value Added:0.4%



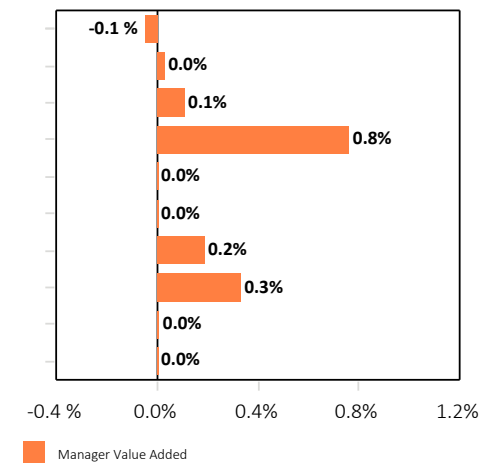
## Total Asset Allocation:-0.9 %



## Asset Allocation Value Added:-0.9 %



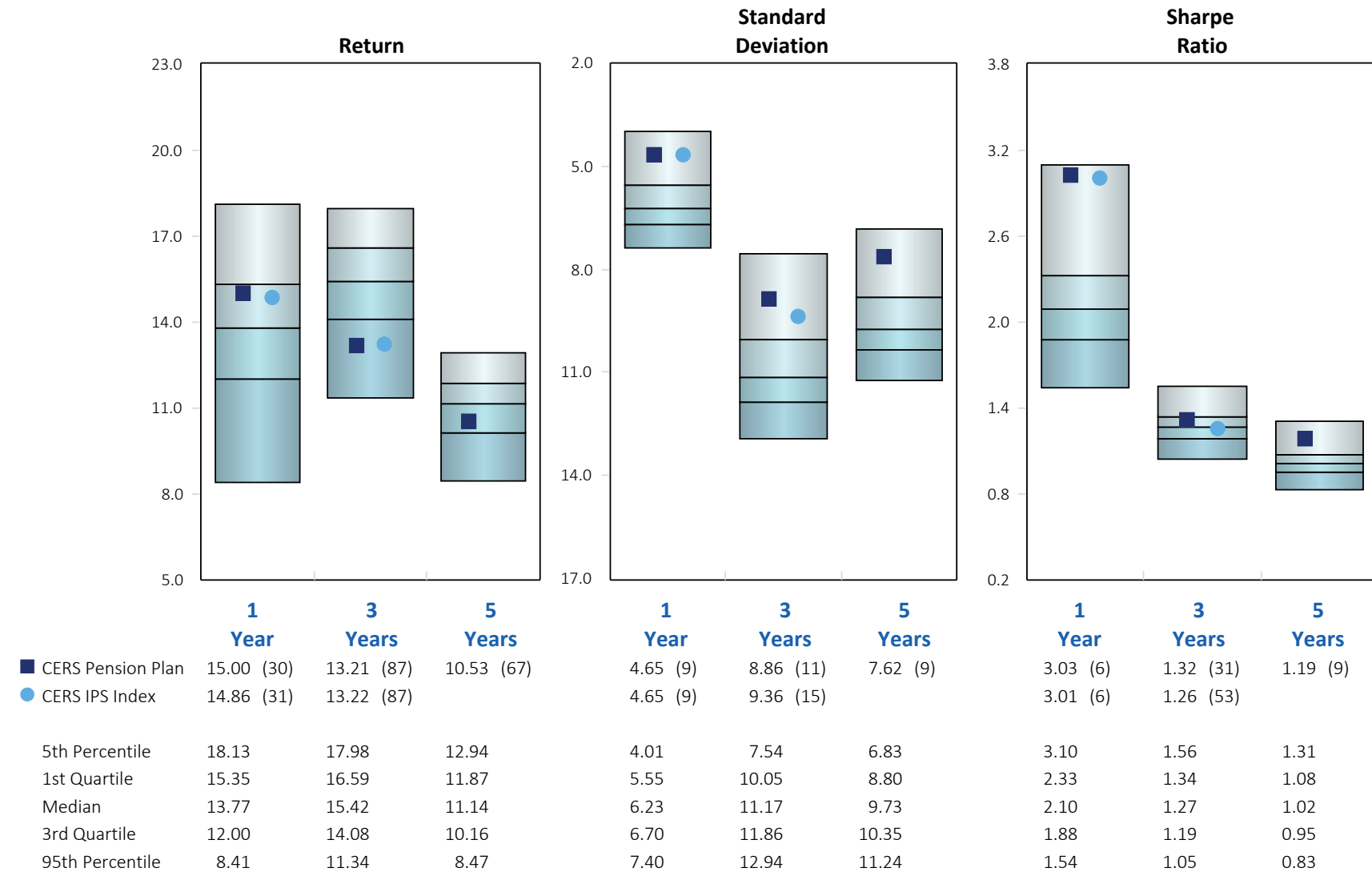
## Total Manager Value Added:1.4%



# Plan Sponsor Peer Group Analysis - Multi Statistics

CERS Pension Plan vs All Public Plans-Total Fund

Periods Ended December 31, 2021



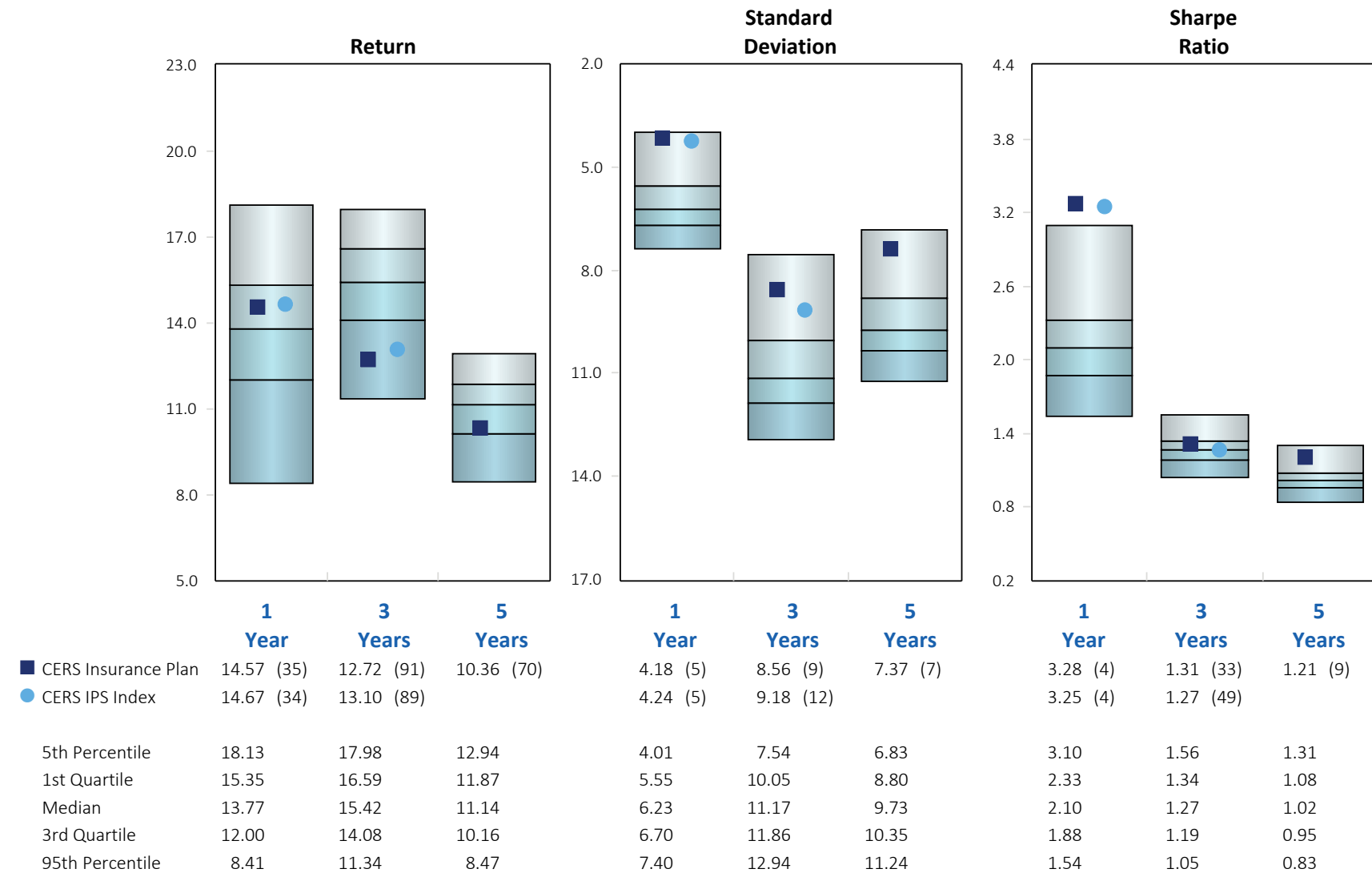
Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.



# Plan Sponsor Peer Group Analysis - Multi Statistics

CERS Insurance Plan vs All Public Plans-Total Fund

Periods Ended December 31, 2021

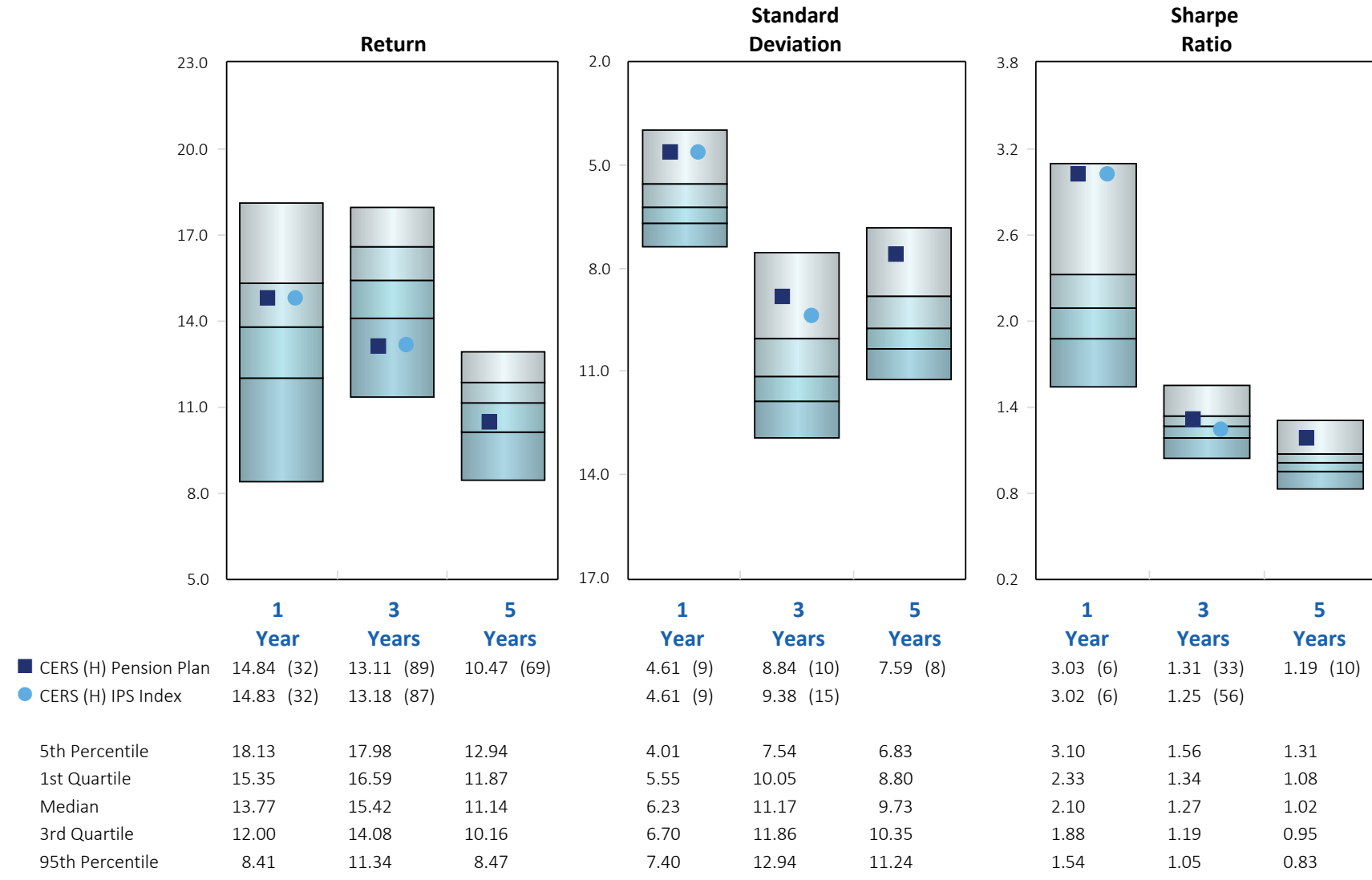


Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

# Plan Sponsor Peer Group Analysis - Multi Statistics

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

Periods Ended December 31, 2021

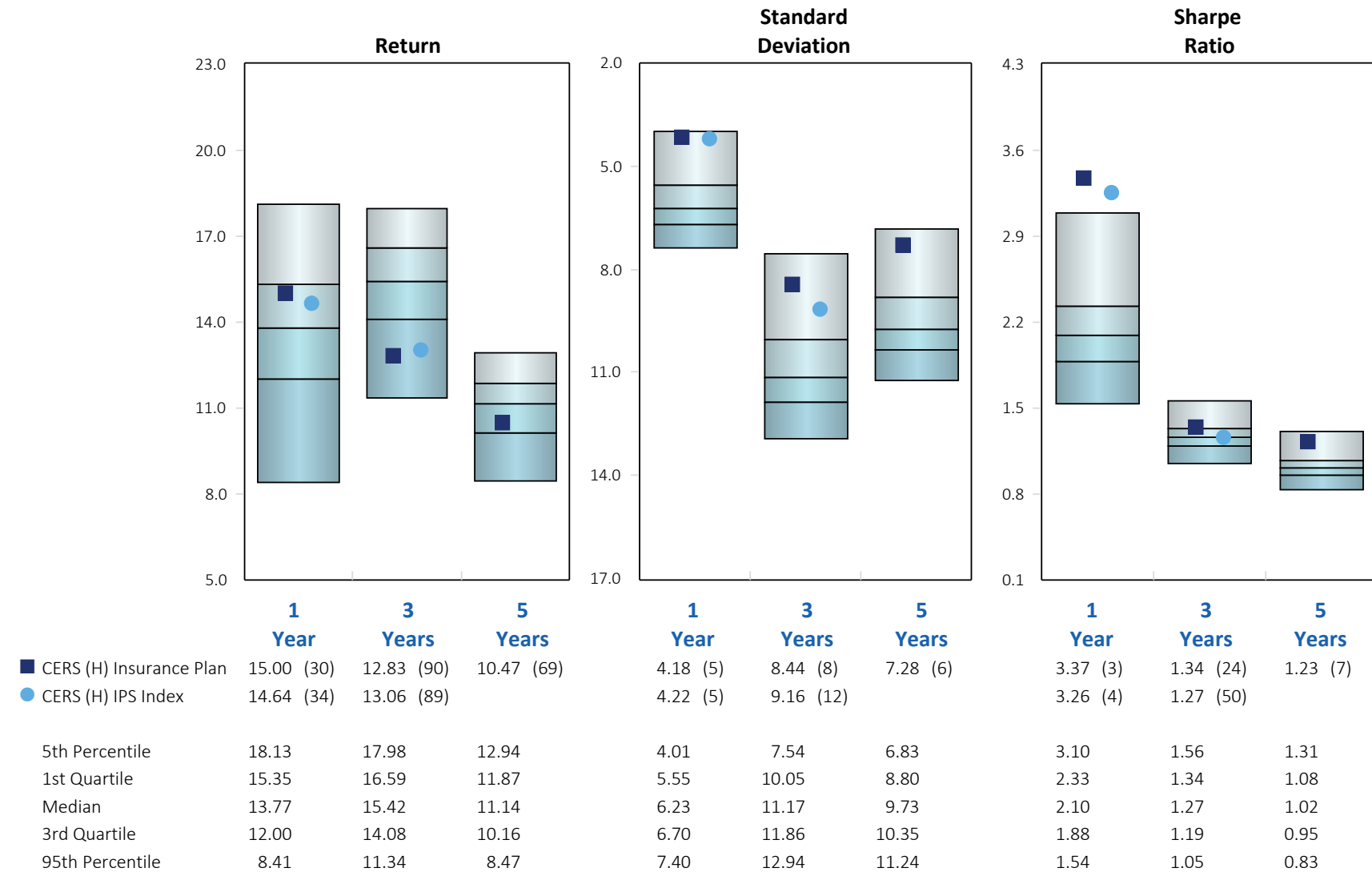


Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

# Plan Sponsor Peer Group Analysis - Multi Statistics

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

Periods Ended December 31, 2021

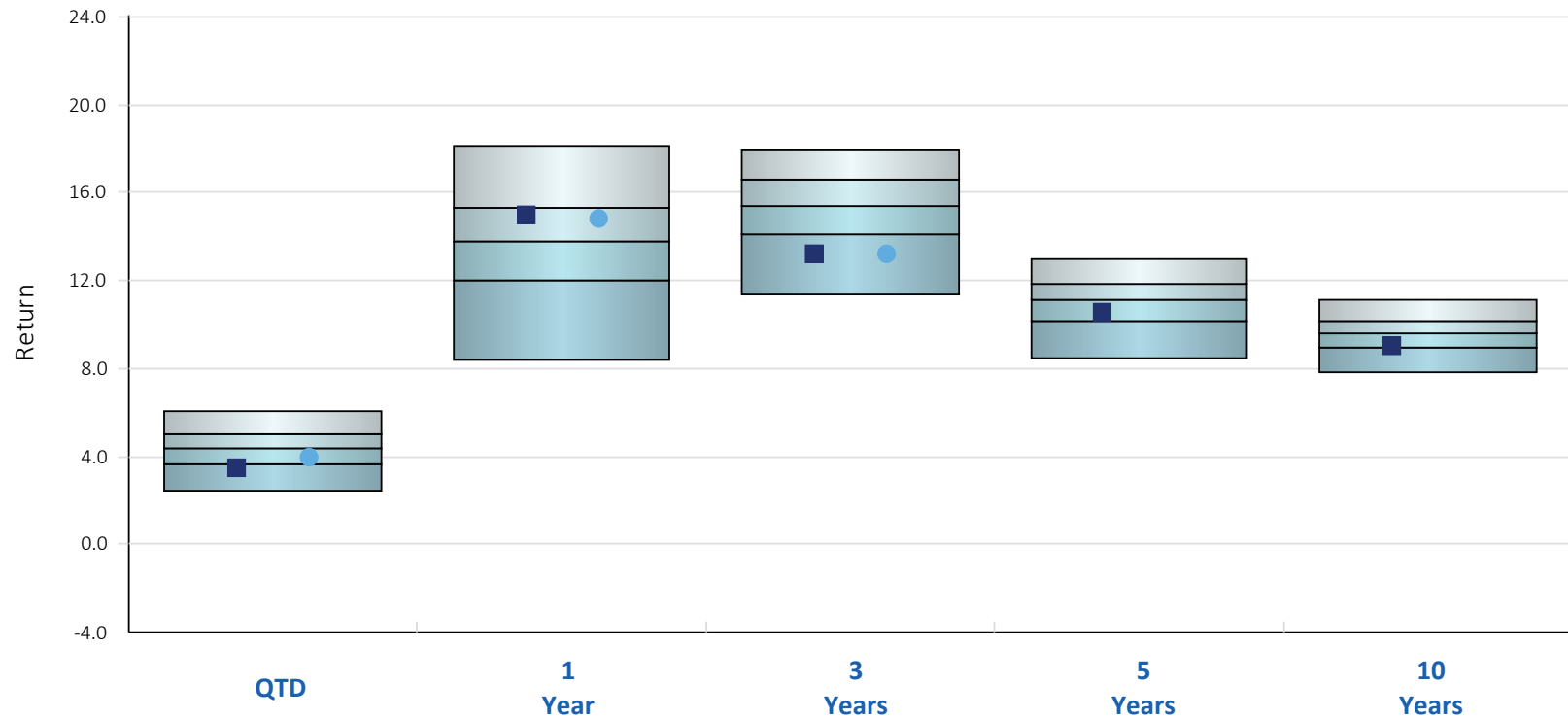


Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

# Plan Sponsor Peer Group Analysis

CERS Pension Plan vs All Public Plans-Total Fund

Periods Ended December 31, 2021



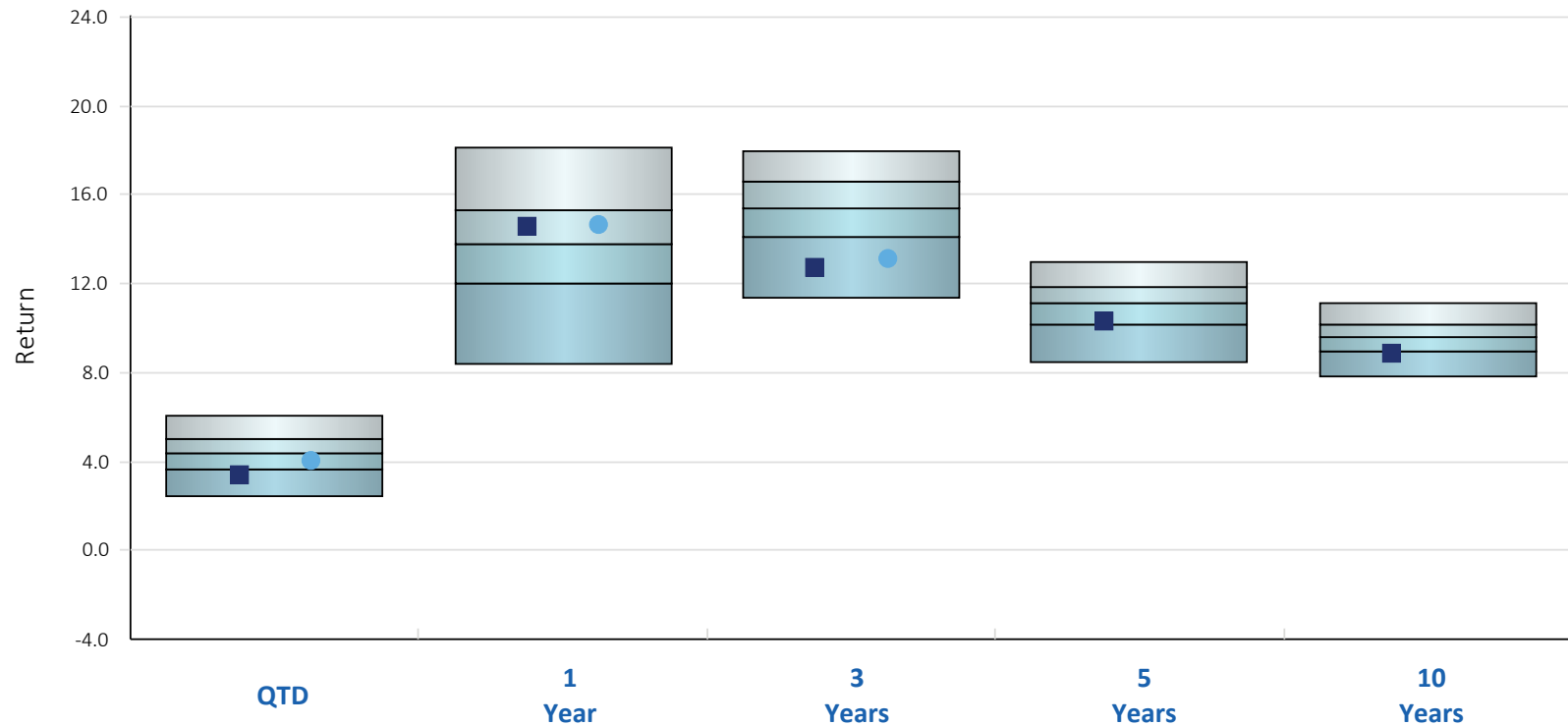
	QTD	1 Year	3 Years	5 Years	10 Years
■ CERS Pension Plan	3.46 (80)	15.00 (30)	13.21 (87)	10.53 (67)	9.04 (72)
● CERS IPS Index	3.94 (67)	14.86 (31)	13.22 (87)		
5th Percentile	6.05	18.13	17.98	12.94	11.09
1st Quartile	5.00	15.35	16.59	11.87	10.18
Median	4.36	13.77	15.42	11.14	9.60
3rd Quartile	3.65	12.00	14.08	10.16	8.92
95th Percentile	2.46	8.41	11.34	8.47	7.82
Population	635	630	612	584	482

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, 2021



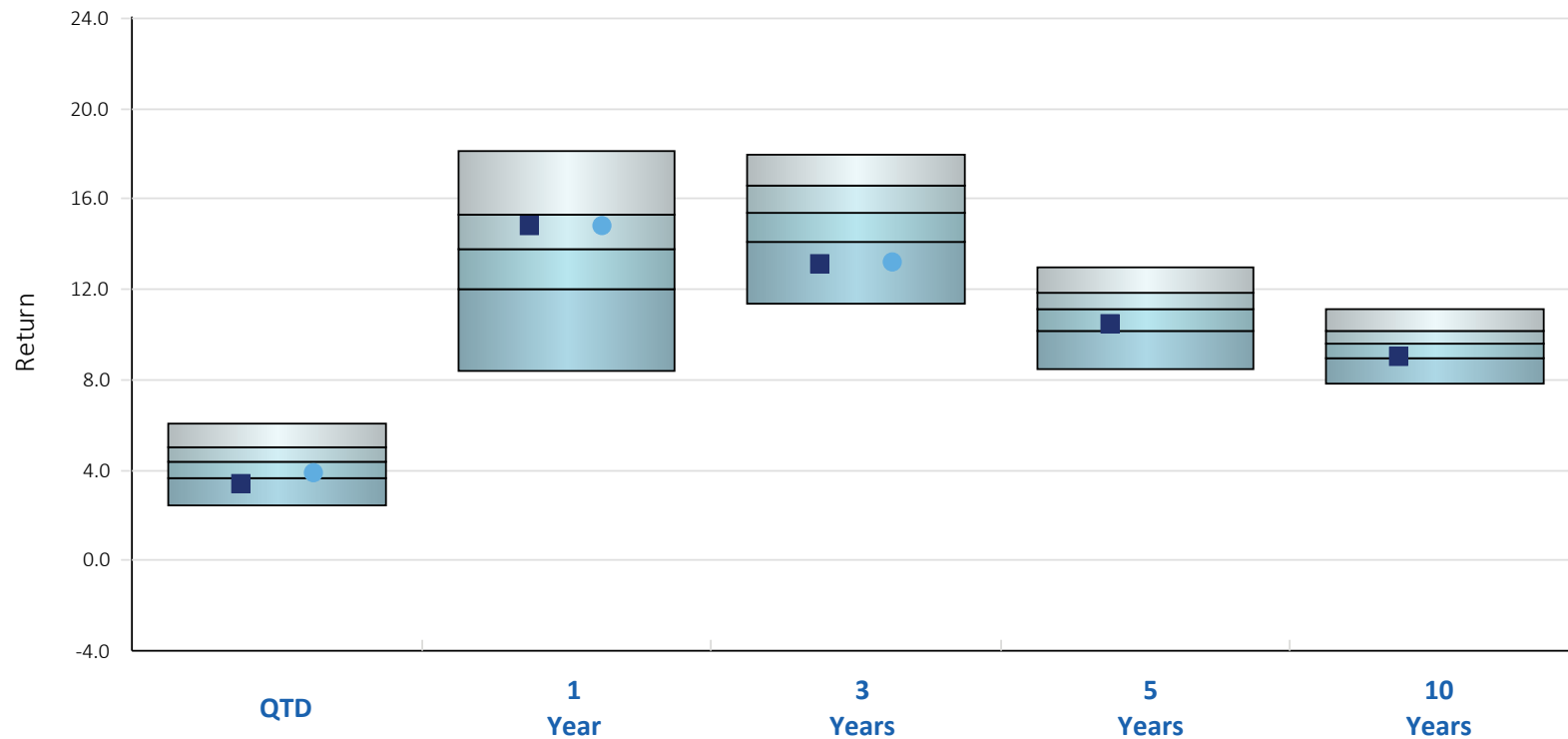
	QTD	1 Year	3 Years	5 Years	10 Years
■ CERS Insurance Plan	3.40 (82)	14.57 (35)	12.72 (91)	10.36 (70)	8.84 (78)
● CERS IPS Index	4.08 (62)	14.67 (34)	13.10 (89)		
5th Percentile	6.05	18.13	17.98	12.94	11.09
1st Quartile	5.00	15.35	16.59	11.87	10.18
Median	4.36	13.77	15.42	11.14	9.60
3rd Quartile	3.65	12.00	14.08	10.16	8.92
95th Percentile	2.46	8.41	11.34	8.47	7.82
Population	635	630	612	584	482

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, 2021



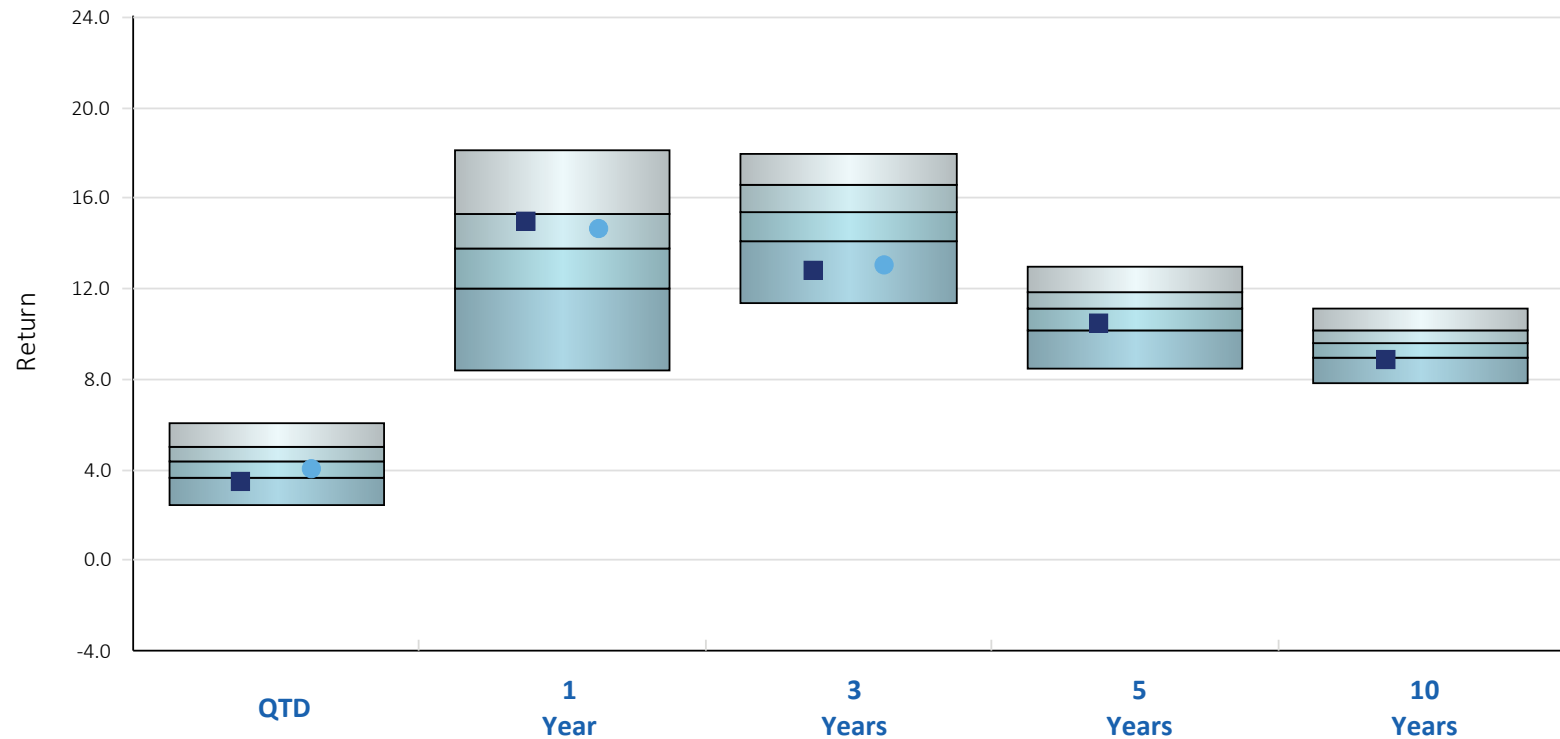
	QTD	1 Year	3 Years	5 Years	10 Years
■ CERS (H) Pension Plan	3.41 (82)	14.84 (32)	13.11 (89)	10.47 (69)	9.02 (72)
● CERS (H) IPS Index	3.91 (68)	14.83 (32)	13.18 (87)		
5th Percentile	6.05	18.13	17.98	12.94	11.09
1st Quartile	5.00	15.35	16.59	11.87	10.18
Median	4.36	13.77	15.42	11.14	9.60
3rd Quartile	3.65	12.00	14.08	10.16	8.92
95th Percentile	2.46	8.41	11.34	8.47	7.82
Population	635	630	612	584	482

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, 2021



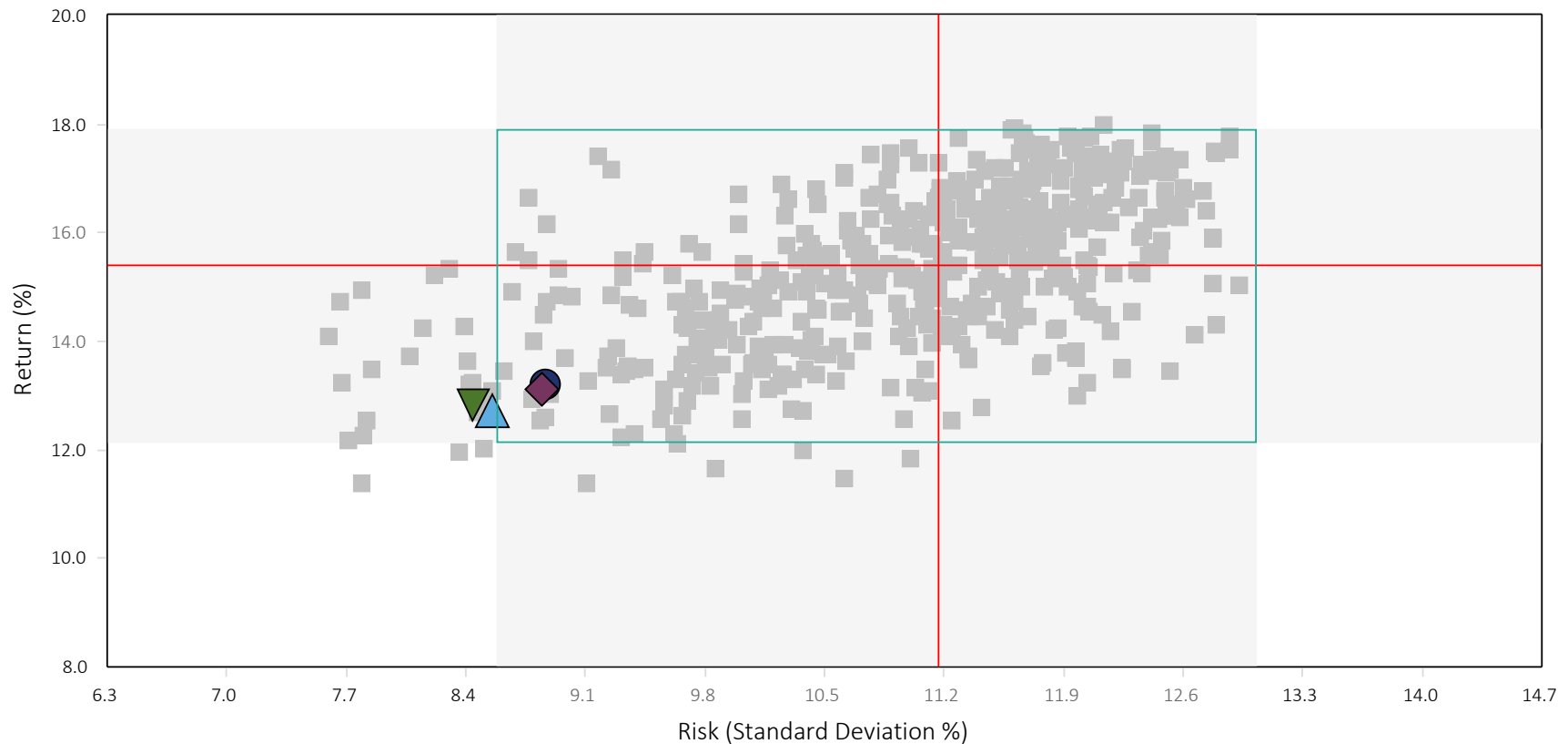
■ CERS (H) Insurance Plan	3.50 (79)	15.00 (30)	12.83 (90)	10.47 (69)	8.90 (76)
● CERS (H) IPS Index	4.06 (63)	14.64 (34)	13.06 (89)		
5th Percentile	6.05	18.13	17.98	12.94	11.09
1st Quartile	5.00	15.35	16.59	11.87	10.18
Median	4.36	13.77	15.42	11.14	9.60
3rd Quartile	3.65	12.00	14.08	10.16	8.92
95th Percentile	2.46	8.41	11.34	8.47	7.82
Population	635	630	612	584	482

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

## Plan Sponsor Scattergram

CERS Pension Plan vs All Public Plans-Total Fund

Periods Ended 3 Years Ending December 31, 2021



	Return	Standard Deviation
● CERS Pension Plan	13.21	8.86
▲ CERS Insurance Plan	12.72	8.56
◆ CERS (H) Pension Plan	13.11	8.84
▼ CERS (H) Insurance Plan	12.83	8.44
— Median	15.42	11.17

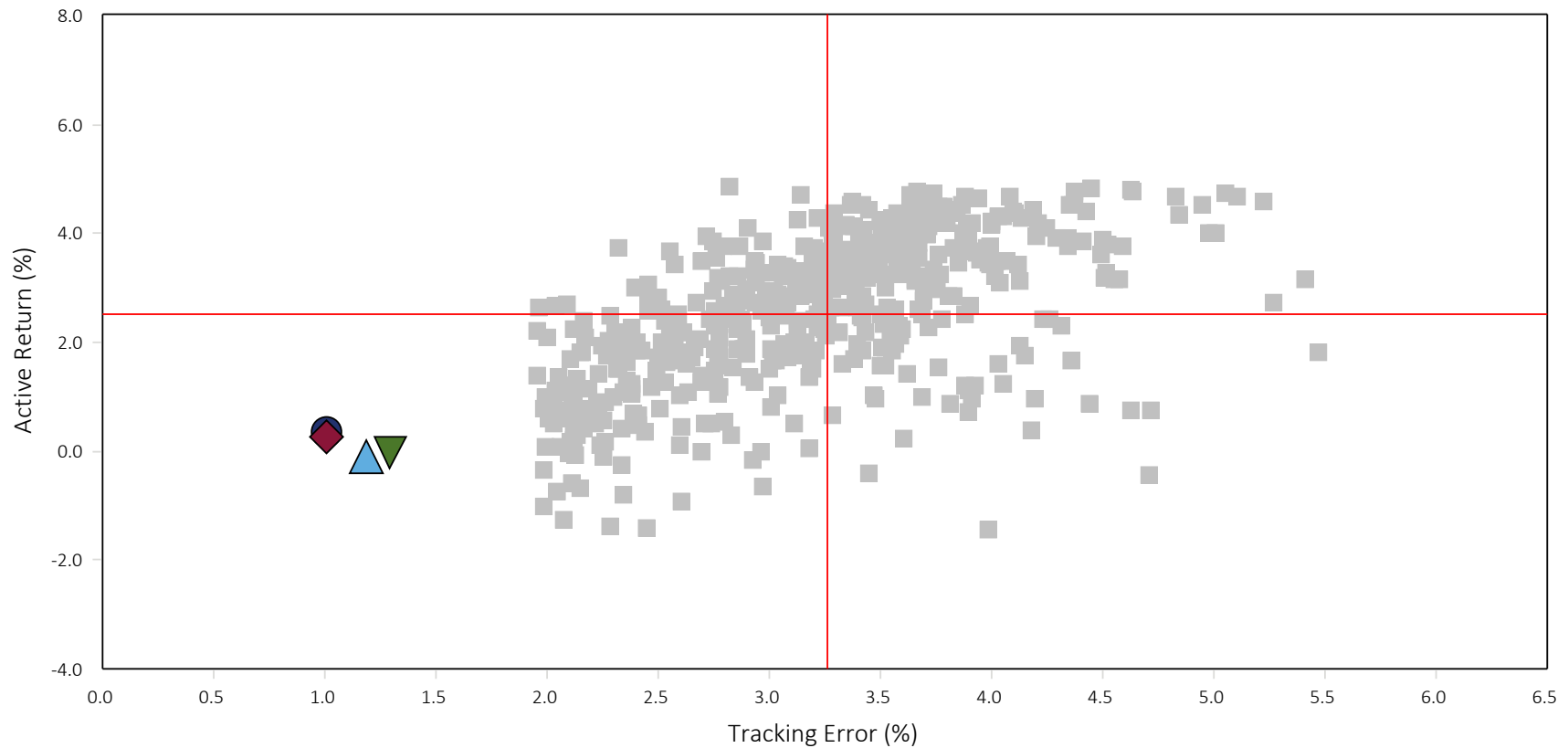
Calculation based on monthly periodicity.



## Plan Sponsor Scattergram

CERS Pension Plan vs All Public Plans-Total Fund

Periods Ended 3 Years Ending December 31, 2021



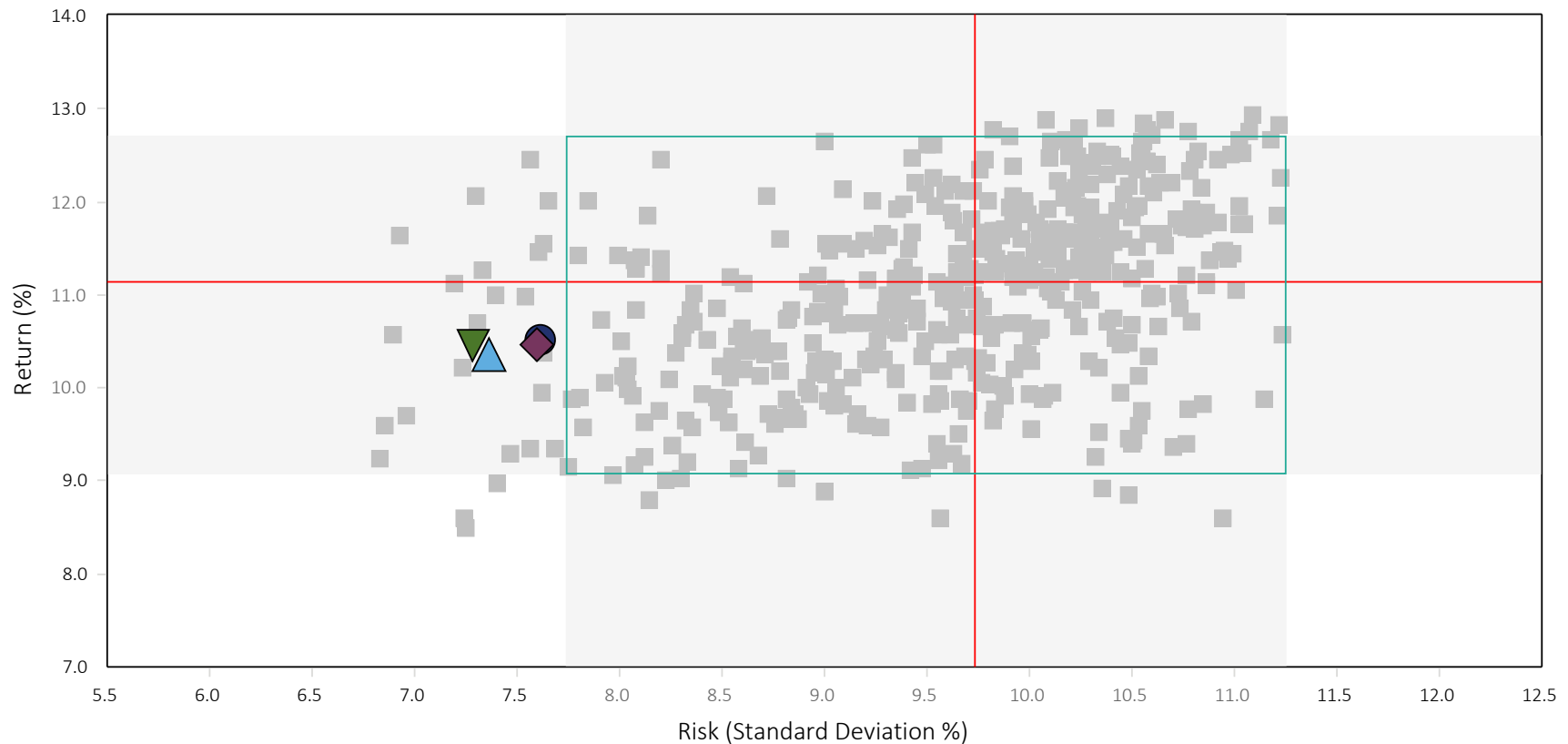
	Active Return	Tracking Error
● CERS Pension Plan	0.36	1.01
▲ CERS Insurance Plan	-0.11	1.19
◆ CERS (H) Pension Plan	0.27	1.00
▼ CERS (H) Insurance Plan	-0.02	1.29
— Median	2.52	3.26

Calculation based on monthly periodicity.

## Plan Sponsor Scattergram

CERS Pension Plan vs All Public Plans-Total Fund

Periods Ended 5 Years Ending December 31, 2021



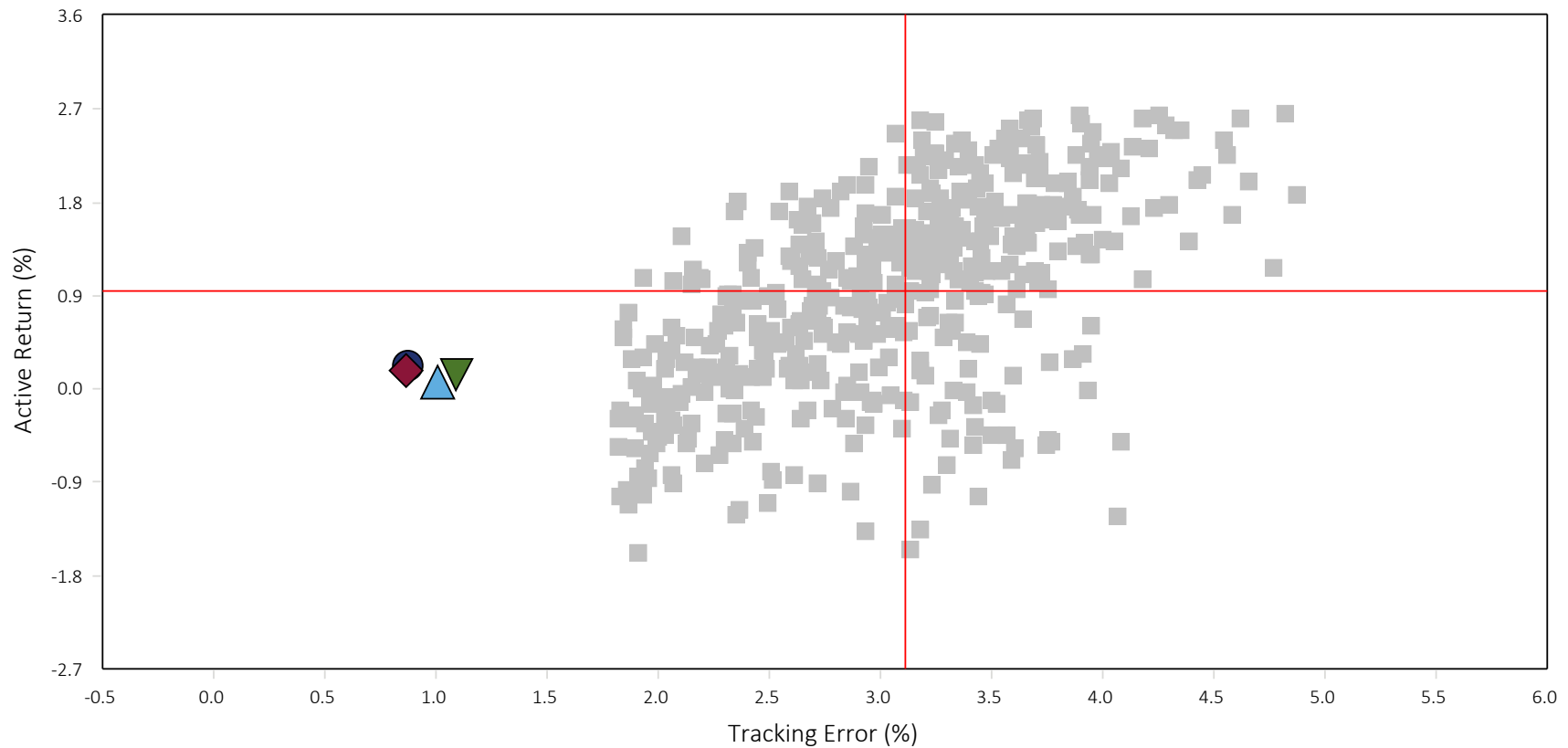
	Return	Standard Deviation
● CERS Pension Plan	10.53	7.62
▲ CERS Insurance Plan	10.36	7.37
◆ CERS (H) Pension Plan	10.47	7.59
▼ CERS (H) Insurance Plan	10.47	7.28
— Median	11.14	9.73

Calculation based on monthly periodicity.

## Plan Sponsor Scattergram

CERS Pension Plan vs All Public Plans-Total Fund

Periods Ended 5 Years Ending December 31, 2021



	Active Return	Tracking Error
● CERS Pension Plan	0.23	0.87
▲ CERS Insurance Plan	0.06	1.01
◆ CERS (H) Pension Plan	0.18	0.87
▼ CERS (H) Insurance Plan	0.15	1.09
— Median	0.94	3.11

Calculation based on monthly periodicity.

# Asset Allocation & Performance

Total Fund

Periods Ended December 31, 2021

	Market Value \$	Performance (%) net of fees							
		1 Month	QTD	FYTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
<b>CERS Pension Plan</b>	<b>8,923,323,679</b>	<b>2.67</b>	<b>3.46</b>	<b>4.73</b>	<b>15.00</b>	<b>13.21</b>	<b>10.53</b>	<b>9.25</b>	<b>4/1/1984</b>
CERS IPS Index		3.15	3.94	5.20	14.86	13.22			
Value Added		-0.48	-0.48	-0.47	0.14	-0.01			
Assumed Rate 6.25%		0.51	1.53	3.08	6.25	6.25			
Value Added		2.16	1.93	1.65	8.75	6.96			
<b>CERS Insurance Plan</b>	<b>3,306,721,510</b>	<b>2.65</b>	<b>3.40</b>	<b>4.83</b>	<b>14.57</b>	<b>12.72</b>	<b>10.36</b>	<b>7.71</b>	<b>4/1/1987</b>
CERS IPS Index		3.20	4.08	5.49	14.67	13.10			
Value Added		-0.55	-0.68	-0.66	-0.10	-0.38			
Assumed Rate 6.25%		0.51	1.53	3.08	6.25	6.25			
Value Added		2.14	1.87	1.75	8.32	6.47			
<b>CERS (H) Pension Plan</b>	<b>3,028,237,861</b>	<b>2.63</b>	<b>3.41</b>	<b>4.68</b>	<b>14.84</b>	<b>13.11</b>	<b>10.47</b>	<b>9.24</b>	<b>4/1/1984</b>
CERS (H) IPS Index		3.13	3.91	5.22	14.83	13.18			
Value Added		-0.50	-0.50	-0.54	0.01	-0.07			
Assumed Rate 6.25%		0.51	1.53	3.08	6.25	6.25			
Value Added		2.12	1.88	1.60	8.59	6.86			
<b>CERS (H) Insurance Plan</b>	<b>1,676,535,704</b>	<b>2.72</b>	<b>3.50</b>	<b>5.09</b>	<b>15.00</b>	<b>12.83</b>	<b>10.47</b>	<b>7.73</b>	<b>4/1/1987</b>
CERS (H) IPS Index		3.18	4.06	5.49	14.64	13.06			
Value Added		-0.46	-0.56	-0.40	0.36	-0.23			
Assumed Rate 6.25%		0.51	1.53	3.08	6.25	6.25			
Value Added		2.21	1.97	2.01	8.75	6.58			

# Asset Allocation & Performance

## Insurance Plan Accounts

Periods Ended December 31, 2021

	Performance (%) net of fees							Inception Date
	1 Month	QTD	FYTD	1 Year	3 Years	5 Years	Since Inception	
<b>Public Equity</b>	<b>4.10</b>						<b>4.10</b>	<b>12/1/2021</b>
MSCI AC World Index	4.03						4.03	
Value Added	0.07						0.07	
<b>US Equity Composite</b>	<b>4.45</b>	<b>9.17</b>	<b>8.93</b>	<b>26.07</b>	<b>25.27</b>	<b>17.02</b>	<b>10.68</b>	<b>7/1/1992</b>
Russell 3000 Index	3.94	9.28	9.17	25.66	25.79	17.97	10.91	
Value Added	0.51	-0.11	-0.24	0.41	-0.52	-0.95	-0.23	
<b>S&amp;P 500 Index</b>	<b>4.48</b>	<b>11.00</b>	<b>11.56</b>	<b>28.44</b>	<b>26.36</b>	<b>18.76</b>	<b>9.42</b>	<b>7/1/2001</b>
S&P 500 Index	4.48	11.03	11.67	28.71	26.07	18.47	8.98	
value added	0.00	-0.03	-0.11	-0.27	0.29	0.29	0.44	
<b>Scientific Beta</b>	<b>5.52</b>	<b>9.32</b>	<b>8.87</b>	<b>24.98</b>	<b>20.92</b>	<b>14.77</b>	<b>14.12</b>	<b>7/1/2016</b>
S&P 500 Index	4.48	11.03	11.67	28.71	26.07	18.47	18.27	
Value Added	1.04	-1.71	-2.80	-3.73	-5.15	-3.70	-4.15	
<b>River Road FAV</b>	<b>7.22</b>	<b>5.30</b>	<b>1.24</b>	<b>14.35</b>	<b>16.49</b>	<b>11.38</b>	<b>13.73</b>	<b>7/1/2016</b>
Russell 3000 Value Index	6.16	7.54	6.54	25.37	17.65	11.00	12.13	
Value Added	1.06	-2.24	-5.30	-11.02	-1.16	0.38	1.60	
<b>Westfield Capital</b>	<b>4.17</b>	<b>9.05</b>	<b>8.59</b>	<b>23.80</b>	<b>33.67</b>	<b>24.43</b>	<b>16.78</b>	<b>7/1/2011</b>
Russell 3000 Growth Index	2.02	10.89	11.66	25.85	33.21	24.56	17.87	
Value Added	2.15	-1.84	-3.07	-2.05	0.46	-0.13	-1.09	
<b>Internal US Mid Cap</b>	<b>5.12</b>	<b>7.99</b>	<b>6.12</b>	<b>24.68</b>	<b>21.81</b>	<b>13.69</b>	<b>12.50</b>	<b>8/1/2014</b>
S&P MidCap 400 Index	5.08	8.00	6.09	24.76	21.41	13.09	12.08	
Value Added	0.04	-0.01	0.03	-0.08	0.40	0.60	0.42	
<b>NTGI Structured</b>	<b>3.82</b>	<b>4.43</b>	<b>1.98</b>	<b>22.06</b>	<b>20.73</b>	<b>12.98</b>	<b>12.48</b>	<b>7/1/2011</b>
Russell 2000 Index	2.23	2.14	-2.31	14.82	20.02	12.02	11.47	
Value Added	1.59	2.29	4.29	7.24	0.71	0.96	1.01	

# Asset Allocation & Performance

## Insurance Plan Accounts

Periods Ended December 31, 2021

	Performance (%) net of fees							Inception Date
	1 Month	QTD	FYTD	1 Year	3 Years	5 Years	Since Inception	
<b>Next Century Growth</b>	<b>-1.33</b>	<b>0.39</b>	<b>3.29</b>	<b>31.81</b>			<b>61.52</b>	<b>11/1/2019</b>
Russell Microcap Growth Index	-2.57	-7.97	-16.33	0.88			25.09	
Value Added	1.24	8.36	19.62	30.93			36.43	
<b>Non-US Equity Composite</b>	<b>3.75</b>	<b>0.82</b>	<b>-0.94</b>	<b>8.54</b>	<b>15.29</b>	<b>11.35</b>	<b>3.45</b>	<b>4/1/2000</b>
MSCI ACWI ex US IMI (10/17)	4.15	1.64	-0.96	8.53	13.62	9.91	3.48	
Value Added	-0.40	-0.82	0.02	0.01	1.67	1.44	-0.03	
<b>BlackRock World Ex US</b>	<b>5.08</b>	<b>3.14</b>	<b>2.47</b>	<b>12.71</b>	<b>13.54</b>	<b>9.86</b>	<b>8.12</b>	<b>6/1/2012</b>
MSCI World ex US (11/19)	5.08	3.14	2.46	12.62	13.49	9.79	8.04	
value added	0.00	0.00	0.01	0.09	0.05	0.07	0.08	
<b>American Century</b>	<b>2.74</b>	<b>2.68</b>	<b>1.13</b>	<b>9.13</b>	<b>24.78</b>	<b>18.01</b>	<b>9.94</b>	<b>7/1/2014</b>
MSCI ACWI ex US IMI (10/17)	4.15	1.64	-0.96	8.53	13.62	9.86	5.10	
Value Added	-1.41	1.04	2.09	0.60	11.16	8.15	4.84	
<b>Franklin Templeton</b>	<b>1.72</b>	<b>-2.11</b>	<b>-4.99</b>	<b>0.40</b>	<b>19.05</b>	<b>14.82</b>	<b>8.81</b>	<b>7/1/2014</b>
MSCI ACWI ex US IMI (10/17)	4.15	1.64	-0.96	8.53	13.62	9.86	5.10	
Value Added	-2.43	-3.75	-4.03	-8.13	5.43	4.96	3.71	
<b>Lazard Asset Mgmt</b>	<b>3.75</b>	<b>-0.39</b>	<b>-2.14</b>	<b>6.31</b>	<b>12.78</b>	<b>10.11</b>	<b>5.60</b>	<b>7/1/2014</b>
MSCI ACWI ex US IMI (10/17)	4.15	1.64	-0.96	8.53	13.62	9.86	5.10	
Value Added	-0.40	-2.03	-1.18	-2.22	-0.84	0.25	0.50	
<b>LSV Asset Mgmt</b>	<b>6.06</b>	<b>0.92</b>	<b>-0.48</b>	<b>14.17</b>	<b>9.96</b>	<b>7.73</b>	<b>3.94</b>	<b>7/1/2014</b>
MSCI ACWI ex US IMI (10/17)	4.15	1.64	-0.96	8.53	13.62	9.86	5.10	
Value Added	1.91	-0.72	0.48	5.64	-3.66	-2.13	-1.16	
<b>Blackrock ACWI Ex-US Small Cap</b>	<b>0.22</b>	<b>-3.25</b>	<b>-3.33</b>	<b>8.44</b>	<b>14.89</b>	<b>10.36</b>	<b>8.61</b>	<b>7/1/2013</b>
MSCI AC World ex USA Small Cap (Net)	4.23	0.62	0.61	12.93	16.46	11.21	8.79	
Value Added	-4.01	-3.87	-3.94	-4.49	-1.57	-0.85	-0.18	

# Asset Allocation & Performance

## Insurance Plan Accounts

Periods Ended December 31, 2021

	Performance (%) net of fees							Inception Date
	1 Month	QTD	FYTD	1 Year	3 Years	5 Years	Since Inception	
<b>JP Morgan Emerging Markets</b>	-0.35	-3.98	-10.25	-3.27			16.10	11/1/2019
MSCI Emerging Markets IMI	2.22	-0.91	-8.10	0.06			11.82	
Value Added	-2.57	-3.07	-2.15	-3.33			4.28	
<b>Pzena Emerging Markets</b>	2.79	-1.82	-4.40	6.52			10.29	11/1/2019
MSCI Emerging Markets (Net)	1.88	-1.31	-9.30	-2.54			10.33	
Value Added	0.91	-0.51	4.90	9.06			-0.04	
<b>Private Equity Composite</b>	4.81	5.78	19.67	41.55	15.79	16.72	11.27	7/1/2002
KRS Short-Term PE Index	4.81	5.78	19.67	41.55	15.79	16.72	11.27	
Value Added	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Russell 3000 +3% 1 Quarter Lag	-4.25	0.64	9.74	35.83	19.48	20.36	12.71	
Value Added	9.06	5.14	9.93	5.72	-3.69	-3.64	-1.44	
<b>Core Fixed Income Composite</b>	-0.01	-0.28	-0.06	0.49	4.56		4.50	10/1/2018
Blmbg. U.S. Aggregate	-0.26	0.01	0.06	-1.55	4.79		4.94	
Value Added	0.25	-0.29	-0.12	2.04	-0.23		-0.44	
<b>NISA</b>	-0.29	0.06	0.03	-1.51	4.75	3.58	3.33	7/1/2011
Blmbg. U.S. Aggregate	-0.26	0.01	0.06	-1.55	4.79	3.57	3.24	
Value Added	-0.03	0.05	-0.03	0.04	-0.04	0.01	0.09	
<b>Loomis Sayles Intmd</b>	-0.09	-0.53	-0.54	-1.21			4.11	2/1/2019
Blmbg. U.S. Intermediate Aggregate	-0.12	-0.51	-0.46	-1.29			3.41	
Value Added	0.03	-0.02	-0.08	0.08			0.70	
<b>Lord Abbett</b>	0.06	-0.27	0.05	1.31	3.40		3.31	10/1/2018
ICE BofAML 1-3 Year U.S. Corporate	-0.07	-0.55	-0.37	-0.02	3.17		3.17	
Value Added	0.13	0.28	0.42	1.33	0.23		0.14	

# Asset Allocation & Performance

## Insurance Plan Accounts

Periods Ended December 31, 2021

	Performance (%) net of fees							
	1 Month	QTD	FYTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
<b>Specialty Credit Composite</b>	<b>1.56</b>	<b>1.55</b>	<b>3.37</b>	<b>9.37</b>	<b>7.52</b>		<b>6.60</b>	<b>10/1/2018</b>
Specialty Credit Policy Index	1.26	0.73	1.74	5.25	7.24		5.33	
Value Added	0.30	0.82	1.63	4.12	0.28		1.27	
<b>Adams St SPC II A</b>	<b>1.57</b>	<b>1.57</b>	<b>6.20</b>	<b>17.67</b>			<b>13.43</b>	<b>6/1/2020</b>
<b>Adams St SPC II B</b>	<b>1.92</b>	<b>1.92</b>	<b>7.19</b>	<b>20.43</b>			<b>15.50</b>	<b>6/1/2020</b>
<b>Blue Torch</b>	<b>3.90</b>	<b>3.90</b>	<b>6.73</b>	<b>9.11</b>			<b>7.30</b>	<b>8/1/2020</b>
<b>BSP Coinvestment</b>	<b>1.58</b>	<b>1.58</b>	<b>2.72</b>	<b>7.24</b>			<b>6.40</b>	<b>10/1/2019</b>
S&P/LSTA Leverage Loan Index	0.64	0.75	1.87	5.21			4.48	
Value Added	0.94	0.83	0.85	2.03			1.92	
<b>BSP Private Credit</b>	<b>2.85</b>	<b>2.85</b>	<b>6.26</b>	<b>16.06</b>	<b>7.01</b>		<b>5.99</b>	<b>2/1/2018</b>
S&P/LSTA Leverage Loan Index	0.64	0.75	1.87	5.21	5.63		4.15	
Value Added	2.21	2.10	4.39	10.85	1.38		1.84	
<b>CapitalSpring</b>	<b>0.59</b>	<b>0.59</b>	<b>2.60</b>	<b>8.40</b>			<b>9.42</b>	<b>2/1/2020</b>
S&P/LSTA Leverage Loan Index	0.64	0.75	1.87	5.21			4.04	
Value Added	-0.05	-0.16	0.73	3.19			5.38	
<b>Cerberus Capital Mgmt</b>	<b>0.96</b>	<b>2.48</b>	<b>9.46</b>	<b>17.67</b>	<b>11.40</b>	<b>10.28</b>	<b>9.60</b>	<b>9/1/2014</b>
S&P/LSTA Leverage Loan Index	0.64	0.75	1.87	5.21	5.63	4.27	4.00	
Value Added	0.32	1.73	7.59	12.46	5.77	6.01	5.60	
<b>Columbia</b>	<b>2.05</b>	<b>0.83</b>	<b>1.68</b>	<b>4.77</b>	<b>8.73</b>	<b>5.94</b>	<b>6.72</b>	<b>11/1/2011</b>
Blmbg. U.S. Corp: High Yield	1.87	0.71	1.60	5.28	8.83	6.30	6.76	
Value Added	0.18	0.12	0.08	-0.51	-0.10	-0.36	-0.04	
<b>Manulife Asset Mgmt</b>	<b>1.68</b>	<b>-0.02</b>	<b>0.06</b>	<b>2.24</b>	<b>8.00</b>	<b>5.11</b>	<b>4.73</b>	<b>12/1/2011</b>
Policy Index	-0.07	-0.03	0.05	-1.10	5.15	3.84	2.31	
Value Added	1.75	0.01	0.01	3.34	2.85	1.27	2.42	



# Asset Allocation & Performance

## Insurance Plan Accounts

Periods Ended December 31, 2021

	Performance (%) net of fees							Inception Date
	1 Month	QTD	FYTD	1 Year	3 Years	5 Years	Since Inception	
<b>Marathon Bluegrass</b>	<b>2.77</b>	<b>3.20</b>	<b>6.18</b>	<b>16.95</b>	<b>7.81</b>	<b>5.83</b>	<b>7.60</b>	<b>1/1/2016</b>
Blmbg. U.S. Corp: High Yield	1.87	0.71	1.60	5.28	8.83	6.30	8.03	
Value Added	0.90	2.49	4.58	11.67	-1.02	-0.47	-0.43	
<b>Shenkman Capital</b>	<b>0.95</b>	<b>0.62</b>	<b>1.59</b>	<b>4.25</b>	<b>5.46</b>	<b>4.07</b>	<b>4.09</b>	<b>7/1/2011</b>
S&P/LSTA Leverage Loan Index	0.64	0.75	1.87	5.21	5.63	4.27	4.36	
Value Added	0.31	-0.13	-0.28	-0.96	-0.17	-0.20	-0.27	
<b>Waterfall</b>	<b>0.00</b>	<b>3.02</b>	<b>4.50</b>	<b>14.17</b>	<b>5.04</b>	<b>7.07</b>	<b>8.51</b>	<b>7/1/2011</b>
Policy Index	0.96	0.23	0.89	3.53	6.06	4.75	4.62	
Value Added	-0.96	2.79	3.61	10.64	-1.02	2.32	3.89	
<b>White Oak Yield Spectrum</b>	<b>1.19</b>	<b>1.19</b>	<b>2.55</b>	<b>6.41</b>	<b>5.80</b>		<b>5.26</b>	<b>3/1/2018</b>
S&P/LSTA Leverage Loan Index	0.64	0.75	1.87	5.21	5.63		4.19	
Value Added	0.55	0.44	0.68	1.20	0.17		1.07	
<b>Arrowmark</b>	<b>1.21</b>	<b>3.09</b>	<b>6.13</b>	<b>13.36</b>	<b>9.52</b>		<b>9.33</b>	<b>6/1/2018</b>
S&P/LSTA Leverage Loan Index	0.64	0.75	1.87	5.21	5.63		4.23	
Value Added	0.57	2.34	4.26	8.15	3.89		5.10	
<b>H/2 Credit Partner</b>	<b>-2.90</b>	<b>-3.69</b>	<b>-3.57</b>	<b>7.98</b>	<b>-0.01</b>	<b>1.82</b>	<b>4.08</b>	<b>7/1/2011</b>
<b>Mesa West Core Lend</b>	<b>1.52</b>	<b>1.52</b>	<b>1.57</b>	<b>5.65</b>	<b>5.80</b>	<b>6.57</b>	<b>6.40</b>	<b>5/1/2013</b>
<b>Mesa West IV</b>	<b>3.10</b>	<b>3.10</b>	<b>5.61</b>	<b>9.62</b>	<b>7.65</b>		<b>6.67</b>	<b>3/1/2017</b>
<b>Cash Composite</b>	<b>0.01</b>	<b>0.02</b>	<b>0.03</b>	<b>0.07</b>	<b>0.99</b>	<b>1.22</b>	<b>2.48</b>	<b>7/1/1992</b>
FTSE 3 Month T-Bill	0.00	0.01	0.02	0.05	0.96	1.11	2.34	
Value Added	0.01	0.01	0.01	0.02	0.03	0.11	0.14	
<b>Real Estate Composite</b>	<b>2.06</b>	<b>4.77</b>	<b>11.75</b>	<b>19.15</b>	<b>11.64</b>	<b>10.90</b>	<b>9.66</b>	<b>5/1/2009</b>
NCREIF ODCE NOF 1 Quarter Lag	6.41	6.41	10.33	13.64	6.13	6.56		
Value Added	-4.35	-1.64	1.42	5.51	5.51	4.34		

# Asset Allocation & Performance

## Insurance Plan Accounts

Periods Ended December 31, 2021

	Performance (%) net of fees							
	1 Month	QTD	FYTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
Baring	3.21	0.24	1.04	6.89	21.92		21.92	1/1/2019
Barings Euro RE II	27.87	24.19	22.16	-30.20			-26.73	12/1/2020
Divcowest IV	7.13	7.13	15.64	20.70	10.88	15.32	18.40	3/1/2014
Fundamental Partners III	9.55	9.55	17.47	30.34	18.80		14.13	5/1/2017
Greenfield Acq VI	20.39	20.39	-33.41	-50.70	-47.21	-33.45	-16.10	12/1/2012
Greenfield Acq VII	1.17	1.17	14.84	32.57	17.53	16.07	14.04	7/1/2014
Harrison Street	0.00	2.15	4.24	5.79	5.75	7.57	7.65	5/1/2012
Lubert Adler VII	2.68	2.68	3.08	-0.49	-2.69	1.73	-1.89	7/1/2014
Lubert Adler VII B	17.20	17.20	38.44	47.22	22.73		14.45	7/1/2017
Patron Capital	7.59	4.48	14.18	12.88	8.16	13.03	4.65	8/1/2016
Prologis Targeted US	0.00	11.51	24.89	38.45	19.77	19.89	17.34	10/1/2014
Rubenstein PF II	0.30	0.30	1.08	-1.97	-1.48	4.75	8.38	7/1/2013
Stockbridge Sm/Mkts	0.00	0.00	7.39	17.89	8.83	8.74	9.15	5/1/2014
Walton St RE VI	3.24	3.24	5.00	9.15	-1.54	2.25	-13.55	5/1/2009
Walton St RE VII	1.23	1.23	7.53	11.65	-3.97	0.65	6.06	7/1/2013
Real Return Composite	1.20	3.19	3.57	13.65	8.47	5.76	4.35	7/1/2011
Real Return (I)	1.20	3.19	3.57	13.65	8.47	5.01	3.79	
Value Added	0.00	0.00	0.00	0.00	0.00	0.75	0.56	
Putnam	2.47	4.84	4.44	14.76			20.16	7/1/2020
Policy Index	2.49	4.94	4.94	13.22			19.64	
Value Added	-0.02	-0.10	-0.50	1.54			0.52	

# Asset Allocation & Performance

## Insurance Plan Accounts

Periods Ended December 31, 2021

	Performance (%) net of fees							
	1 Month	QTD	FYTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
Tortoise Capital	2.51	1.78	-0.71	41.34	2.91	-1.90	7.64	8/1/2009
Alerian MLP Index	3.56	0.55	-5.19	40.17	2.12	-2.70	4.77	
Value Added	-1.05	1.23	4.48	1.17	0.79	0.80	2.87	
Amerra AGRI Fund II	0.36	0.36	4.49	5.63	7.78	3.91	5.00	12/1/2012
Amerra AGRI Holdings	-0.19	-0.19	0.59	-6.33	-1.35	-2.03	-1.53	8/1/2015
BTG Pactual	1.11	1.11	17.56	17.88	1.87	0.80	-4.52	12/1/2014
IFM Infrastructure	2.04	0.02	4.71	8.04			4.19	7/1/2019
Magnetar MTP EOF II	4.33	4.33	16.18	53.91	20.17	14.93	10.79	8/1/2015
Oberland Capital	7.94	7.94	9.25	16.32	15.71		15.48	8/1/2018
Taurus Mine Finance	7.47	7.47	9.44	2.37	0.86	5.00	8.01	4/1/2015
TPF II	-0.13	-0.13	-0.31	-11.60	0.19	0.52	-2.67	10/1/2008
Blackstone Strat Opp	1.15	1.76	2.63	-2.19	-6.68		-2.72	8/1/2017
Luxor Capital	0.00	10.06	9.92	14.23	-6.40	3.98	-0.50	4/1/2014
Myriad Opportunities	-5.43	-12.20	-26.42	-16.80	-5.26	-1.55	-0.49	5/1/2016
Pine River	0.72	2.62	0.55	4.47	12.05	6.52	4.37	5/1/2014
PRISMA Capital	-8.10	-1.26	-0.40	-0.36	0.51	1.70	2.68	9/1/2011
SRS Partners US	0.00	-0.01	-0.57	22.32	9.78		10.30	8/1/2017
Tricadia Select	0.00	0.00	0.00	0.00	0.73		-5.73	9/1/2017



## KENTUCKY PUBLIC PENSIONS AUTHORITY

David L. Eager, Executive Director

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



To: County Employees Retirement System Board of Trustees

From: Betty Pendergrass, CPA, CGFM, Chair  
Joint Audit Committee

Kristen N. Coffey, CICA *KNC*  
Division Director, Internal Audit Administration

Date: March 16, 2022

Subject: Summary of Joint Audit Committee Meeting

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The County Employees Retirement System (CERS) and Kentucky Retirement Systems (KRS) Joint Audit Committee held a regularly scheduled meeting on February 22, 2022. In addition to the CERS Board Election Policy, which will be presented separately, the following items were reviewed:

1. These were presented for informational purposes only.
  - a. KPPA Archives Policy – *this task will remain with staff until such a time that updates are made that need approval from one or more Boards of Trustees.*
  - b. Financial statements for the quarter ended December 31, 2021.
  - c. Follow-up on the 2021 Annual Comprehensive Financial Report – *reviewed requested changes that were made to the report after it was presented to the various Boards of Trustees in December 2021.*
  - d. Fiscal Year End June 30, 2021 End of Year Audit Requirements – *all items were submitted by the required deadline.*
  - e. APA Approval Request for the Fiscal Year 2022 External Audit – *the APA will not be able to perform the audit for fiscal year 2023. There was a deadline of early October for the report, KPPA staff did follow-up and verify that we do not have to submit our report by that deadline since our GASB reports will not be ready until the end of October.*
  - f. Information disclosures – *Eight disclosures identified, effecting eight members.*
  - g. Anonymous Tips – *Two open cases.*
2. The following items were deferred and will be presented at a Special Called Joint Audit Committee meeting:
  - a. Results of the GASB 68 and GASB 75 Proportionate Share audits for fiscal year ended June 30, 2022.
  - b. Results of the Plan Liquidity Audit, Phase 1.
  - c. Additions to the Current Audit Plan.
  - d. Internal Audit Budget.
  - e. Status of current internal audits.

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## County Employees Retirement System

### Board of Trustees Election Policy

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#### I. INTRODUCTION

##### Adoption of Board Election Policy

Pursuant to the provisions of Kentucky Revised Statutes (KRS) 78.782, the Board of Trustees (Board) of the County Employees Retirement System (System) is permitted to adopt procedures necessary to conduct the business of the System as needed. State and federal law shall control if any inconsistency exists between the law and this policy.

##### Statement of Board Election Policy

The Board is composed of nine Trustees who shall be selected as follows:

1. Three (3) elected from members of the County Employees Retirement System.
  - a. Two (2) elected individuals shall have a majority of service credit earned in a nonhazardous position.
  - b. One (1) elected individual shall have a majority of service credit earned in a hazardous position.
2. Six (6) appointed by the Governor.
  - a. Three (3) Trustees with retirement experience.
    - i. One (1) appointed from a list of three (3) applicants submitted by the Kentucky League of Cities.
    - ii. One (1) appointed from a list of three (3) applicants submitted by the Kentucky Association of Counties.
    - iii. One (1) appointed from a list of three (3) applicants submitted by the Kentucky School Boards Association.
  - b. Three (3) Trustees with investment experience.
    - i. One (1) appointed from a list of three (3) applicants submitted by the Kentucky League of Cities.
    - ii. One (1) appointed from a list of three (3) applicants submitted by the Kentucky Association of Counties.
    - iii. One (1) Trustee appointed from a list of three (3) applicants submitted by the Kentucky School Boards Association.

KRS 78.782 (3) through (6) provides the basic statutory requirements for the election of the elected Trustees of the Board. The Board recognizes the need to establish consistent procedures for the implementation of these statutory provisions requiring the election of certain Trustees.

##### Purpose

The purpose of this Board Election Policy (Policy) is to establish procedures to implement KRS 78.782 and 105 Kentucky Administrative Regulation 1:445, Electronic ballots in Trustee elections.

## II. DEFINITIONS

The following definitions and terms used in this Policy shall be applicable whenever used herein:

1. "Application" means the form adopted by the Board to be used by members seeking to be nominated and placed on the Official Ballot as a candidate. The application can be submitted through the KPPA website using DocuSign. It may also be submitted to the KPPA either electronically at trustee.election@kyret.ky.gov or at the Frankfort retirement office by a member.
2. "Ballot" or "Official Ballot" means a voting instrument, either electronic or paper, that includes the candidates for election as a Board Trustee and the following information for each of the candidates:
  - a. Name;
  - b. Recent photograph;
  - c. City and county of residence;
  - d. The System's current employing agency and position title or the System's employing agency from which the candidate last worked or retired and the position title of the last position held;
  - e. Education including schools and/or universities attended and degrees earned;
  - ~~f. Whether or not the candidate has been convicted of a felony;~~
  - g. Any professional licenses or certifications held by the candidate; and
  - h. Any organization of which the candidate is a member that is listed on the candidate's application or résumé.

**Commented [CK(1)]:** This information is on the application, not the ballot.

The ballot shall contain the website address where each candidate's application, cover letter, picture, and résumé shall be available for viewing. Candidates' position on the ballot shall be determined by random lottery, performed and certified by a representative from the Kentucky Public Pensions Authority (KPPA) Division of Internal Audit Administration. Identification information for each eligible voter shall be protected by bar code or other means. The ballot shall include the ability to write-in candidates.

3. "Candidate" means a potential candidate who has been nominated and placed on the Official Ballot by the current Board or by petition from the membership of the System.
4. "Constitutionally eligible individual" means a potential candidate who does not have a conflict of interest on the basis of holding a constitutionally elected or appointed position pursuant to KRS 78.782 and Kentucky Constitution Section 165.
5. "Cover Letter" means a document submitted to the KPPA either electronically at [trustee.election@kyret.ky.gov](mailto:trustee.election@kyret.ky.gov) or at the Frankfort retirement office by a member, which details the member's qualifications for serving as a Trustee to the board.
6. "Eligible voter" means any person who was a member of the System on or before December 31 of the year preceding the election year and who has provided the KPPA at the Frankfort retirement office with a valid email or physical address as set forth in KRS 78.782.

7. "Member" shall mean individuals of the System, whether that individual is active (i.e. currently employed), inactive (i.e. formerly employed, but not retired and has not taken an account refund), or retired.
8. "Petition" means a document submitted by a potential candidate requesting to be nominated and placed on the Official Ballot by the members of the System. A petition shall meet the following standards or, if it fails to meet the following standards, shall be deemed invalid and the requesting individual shall not be a potential candidate qualified for nomination and placement on the Official Ballot as a candidate:
  - a. The petition shall contain the names, the last four digits of Social Security numbers, and signatures of not less than one-tenth of the number of members voting in the last election for the System. Each member may only be counted once on the petition.
  - b. A potential candidate seeking nomination by petition shall submit a fully completed application, cover letter, résumé, picture, and a release for a criminal background check at the same time the petition is submitted to the KPPA at the Frankfort retirement office.
9. "Picture" means a photograph that will be included on the KPPA website and on the Official Ballot. The picture should be in color and at least size 5x7. The picture should be submitted in an electronic format to [trustee.election@kyret.ky.gov](mailto:trustee.election@kyret.ky.gov).
10. "Plurality of votes" means a majority of votes cast in the election on a Valid Ballot.
11. "Potential candidate" means a member who is seeking nomination as a candidate by the current Board or by valid petition from the membership of the System and who meets the following criteria:
  - a. Is a member of the System;
  - b. Has fully completed and submitted an application, cover letter, résumé, picture, and a release for a criminal background check by the required deadline;
  - c. Is a constitutionally eligible individual;
  - d. Is not statutorily prohibited from being a Trustee by virtue of the term limits in KRS 78.782 (3);
  - e. Is not a current or former employee of the System, Kentucky Retirement Systems, or KPPA; and
  - f. Is not in violation of any provision of KRS 11A.020 or 11A.040 by a court of competent jurisdiction or any other statute.
12. "Résumé" means a document submitted to the KPPA either electronically at [trustee.election@kyret.ky.gov](mailto:trustee.election@kyret.ky.gov) or at the Frankfort retirement office by a member, which shall include the member's name, address, phone number, e-mail address, educational background, and professional employment history. Employment history must include dates of employment, job title, employer name and address, and type of business. Résumé may also include any certifications and relevant memberships not included on the application.
13. "Term of Office" means the period of membership on the Board, which shall begin on April 1 of the year elected or appointed and shall end on March 31 four years thereafter.

14. "Valid Ballot" means a current version of the electronic or paper ballot provided to an eligible voter that has been marked to show the voter's choice of at least one (1), but not more than the maximum number of eligible candidates for the number of vacancies being filled.

- a. Electronic ballots shall be cast on or before March 1.
- b. Paper ballots shall contain the signature of the voter and be postmarked to the System in care of a predetermined post office box number at a United States Post Office on or before March 1.

Any ballot that does not meet these standards shall be deemed an invalid ballot and shall not be counted. In addition, if multiple ballots are submitted by one (1) individual, only the first received ballot will be considered valid and will be counted; all subsequent ballots shall be invalid and will not be counted.

15. "Write-in candidate" means an individual whose full name (first, middle, and last name) was written in the space provided on at least one Valid Ballot. Should a write-in candidate receive a plurality of votes, a representative from the KPPA Division of Internal Audit Administration will ensure the write-in candidate meets all of the following criteria. If the criteria is not met, the write-in candidate will not be allowed to serve as Trustee:

- a. Is a member of the System;
- b. Is a constitutionally eligible individual;
- c. Is not statutorily prohibited from being a Trustee by virtue of the term limits in KRS 78.782 (3);
- d. Is not a current or former employee of the System, Kentucky Retirement Systems, or KPPA; and
- e. Is not in violation of any provision of KRS 11A.020 or 11A.040 by a court of competent jurisdiction or any other statute.

### III. REQUESTS FOR CANDIDATES

1. The KPPA shall notify the membership that applications are being accepted from members who would like to be considered for nomination by the Board as a candidate for the position of Trustee. The notice shall include information, or direct the membership on how to find information, regarding the qualifications necessary for candidacy as well as the due dates for applications and other required documents.
2. A member seeking nomination by the Board must submit a completed application, cover letter, résumé, picture, and a release for a criminal background check to the KPPA by July 31 of the year prior to the expiration of a term of office.
3. If a member requesting nomination by the Board is currently employed or holds any other office, the member's personal information will be forwarded to the Office of the Attorney General of Kentucky to determine whether the member is a constitutionally eligible individual.
  - a. If the member is not a constitutionally eligible individual, the member shall be notified of his or her ineligibility, and that he or she will not be listed as a potential candidate for nomination by the Board, unless the member agrees to resign from the position causing the constitutional ineligibility. This resignation would only be required if the member were to be declared a winner of the election.



- b. The Board also shall be notified if the member seeking to be listed as a potential candidate for nomination by the Board is determined not to be a constitutionally eligible individual.
- 4. Any information requested by a potential candidate and approved by designated KPPA staff to be provided to the potential candidate shall be forwarded to all other potential candidates, providing the information does not violate the confidentiality requirements specified in KRS 61.661 or any other binding law.

#### IV. NOMINATION BY THE BOARD

- 1. The System's Chief Executive Officer or designee shall provide written notice to the Board of election procedures at the first quarterly meeting in the Board year preceding the expiration of the term of office.
- 2. The Board shall nominate no more than three (3) candidates for each position to be elected. No more than six (6) candidates can be nominated who have a majority of service in a non-hazardous position and no more than three (3) candidates can be nominated that have a majority of service in a hazardous position. Therefore, the ballot shall contain no more than nine (9) names. This nomination shall take place no less than six (6) months prior to the expiration of the current elected Trustee's term of office. Prior to making the nominations, the current Trustees will be given a list of all potential candidates seeking nomination by the Board.
- 3. From the list provided, each Trustee may vote for up to three (3) potential candidates, but must vote for at least one (1) potential candidate per open position. Voting will occur in a roll call manner so that each current Trustee verbally confirms his or her nomination(s). Current Trustees may vote for up to a maximum of nine (9) candidates, but must vote for at least three (3) candidates.
- 4. After voting under Paragraph three (3) of this section is completed, a representative from the KPPA Division of Internal Audit Administration will review the number of votes received by each potential candidate. The potential candidates that receive the highest number of votes will be placed on the Official Ballot. No more than the maximum allowed nominated candidates under Paragraph two (2) of this section will be placed on the Official Ballot.
- 5. If multiple potential candidates receive the same number of votes under Paragraph three (3) of this section resulting in more than the maximum allowed nominated candidates under Paragraph two (2) of this section, another vote will be taken only of those potential candidates receiving a tying vote for the last spot(s) on the Official Ballot. Trustees will vote for up to one (1) potential candidate per remaining spot to be filled on the Official Ballot. After the additional vote is taken, the potential candidate(s) receiving the highest number of votes will be placed on the Official Ballot. The voting shall continue in this manner until the ties are broken resulting in no more than the maximum number of allowed nominated candidates under Paragraph two (2) of this section.

**Commented [BC(2):** Nomination by the Board must occur no later than September 30<sup>th</sup> (6 months prior to the end of the candidate terms). Additionally, Kristen has noted that applications are not due until July 31 according to Section 3 of this policy, so if the nomination occurs prior to July 31<sup>st</sup>, we would need to change some of the dates earlier in this policy.

6. If voting under Paragraphs three (3) and/or five (5) of this section results in fewer than the maximum number of allowed potential candidates being nominated to the Official Ballot under Paragraph two (2), the Trustees must take one (1) of the following actions by affirmative majority vote:
  - a. Allow only those potential candidates with the highest number of votes under Paragraphs three (3) and/or five (5) to be placed on the Official Ballot, or
  - b. From the original list of potential candidates, vote in accordance with Paragraph five (5) of this section for potential candidates who have not received sufficient votes under Paragraphs three (3) or five (5) to be placed on the ballot until the maximum number of potential candidates under Paragraph two (2) are nominated to be on the Official Ballot.

The KPPA will publish the candidates nominated by the Board on the KPPA website. Deadlines as set out below shall be provided on the website.

## V. NOMINATION BY PETITION

1. After the candidates are nominated by the Board, a member may also seek nomination by petition from members of the System. The petition nomination process will be published on the KPPA website.
2. To be nominated as a candidate on the Official Ballot, a member seeking nomination by petition from the membership of the System must submit a petition complying with the requirements as set out in the definitions above and adhere to the following requirements:
  - a. The petition may only contain the name of one (1) potential candidate.
  - b. The petition shall be delivered to the KPPA at the Frankfort retirement office no later than November 30 of the year prior to the expiration of a term of office.
3. Names and last four digits of Social Security numbers on petitions shall be verified by designated KPPA staff and the results shall be certified by a representative from the KPPA Division of Internal Audit Administration. The certification of additional candidates shall become part of the official minutes of the Board.
4. If a member submitting a petition is currently employed or holds any other office, the member's personal information will be forwarded to the Office of the Attorney General of Kentucky to determine whether the member is a constitutionally eligible individual.
  - a. If the member is not a constitutionally eligible individual, the member shall be notified of his or her ineligibility, and that he or she does not qualify as a potential candidate for nomination by petition, unless the member agrees to resign from the position causing the constitutional ineligibility. This resignation would only be required if the member were to be declared a winner of the election.
  - b. The Board also shall be notified if the member seeking to qualify as a potential candidate for nomination by petition is determined not to be a constitutionally eligible individual.

5. Any information requested by a potential candidate and approved by designated KPPA staff to be provided to the potential candidate shall be forwarded to all other potential candidates, providing the information does not violate the confidentiality requirements specified in KRS 61.661 or any other binding law.

## VI. ELECTION BY THE MEMBERSHIP

1. An Official Ballot, complying with the requirements as set out in the definitions above, shall be prepared no later than three (3) months prior to the expiration of the term of office in question.
  - a. Electronic ballots shall include instructions on voting for a candidate, including write-in candidates. The deadline by which electronic votes must be cast shall be included on the electronic ballots.
  - b. Paper ballots shall include instructions for voting for a candidate, including write-in candidates, and for marking and returning the ballots. The postmark deadline for the paper ballots shall be printed on the ballots. Paper ballots shall be addressed to the System in care of a predetermined post office box number at a United States Post Office.
2. The KPPA Executive Director or designee shall initiate a bid for a contracted firm to administer the election (hereafter referred to as the "Election Services Vendor") using the procurement procedures then in place. The bid shall outline vendor security requirements, the technical requirements for both electronic and paper ballots (including paper ballot printing specifications), and the required election timeline.
3. The Election Services Vendor shall obtain the post office box for receipt of paper ballots. Access to this post office box shall be limited to the Election Services Vendor. An agreement shall be made between KPPA and the Election Services Vendor concerning the location of the postal box and the Business Reply Permit Number that shall be used.
4. All eligible voters will be provided with an electronic ballot or mailed a paper ballot on or before January 20.
5. Only one (1) ballot will be provided to an eligible voter. Ballots will be distributed as follows:
  - a. Electronic ballots for the election of Trustees shall be distributed via email addresses on file at KPPA.
  - b. Paper ballots for the election of Trustees shall be distributed via the United States Postal Service to each voter that does not have a valid email address on file at KPPA or to each eligible voter that requests a paper ballot by November 30 of the year prior to the expiration of a term of office.
6. Duplicate ballots will not be produced.
  - a. If an eligible voter fails to receive a ballot (paper or electronic) because of an act or omission of the System or the KPPA and makes the System or the KPPA aware of this before the voting has closed, a representative from the KPPA Division of Internal Audit Administration shall work with the Election Services Vendor to provide a replacement ballot. If the System or the KPPA is made aware of the situation on or before one (1) week prior to the postmark deadline, the eligible

**Commented [CK(3)]:** House Bill 297 (2022) allows KPPA to exclude a member address that has been marked as invalid in the KPPA system. If that portion of HB 297 passes, the policy will be updated to say:  
 Paper ballots for the election of Trustees shall be distributed via the United States Postal Service to each voter that does not have a valid email address on file at KPPA or to each eligible voter that requests a paper ballot by November 30 of the year prior to the expiration of a term of office. Paper ballots shall not be distributed by mail to member addresses reported as invalid to KPPA.

voter may request either a paper or electronic ballot. If the System or the KPPA is made aware of the situation with less than a week before for the postmark deadline, only an electronic ballot will be provided to the eligible voter.

- b. If a paper ballot is returned to the Election Services Vendor, the System, or KPPA with an invalid address, but a corrected address is received from the United States Postal Service on or before one (1) week prior to the postmark deadline, a representative from the KPPA Division of Internal Audit Administration may work with the Election Services Vendor to mail a subsequent paper ballot to the eligible voter at the corrected address.
7. The Election Services Vendor shall count each ballot. In so doing, the Election Services Vendor shall review the validity of the ballot in accordance with the definition above. All votes via valid ballots shall be counted for the candidates marked. During the process of the count, all ballots shall be in the exclusive control of the Election Services Vendor, with proper security to ensure that no one other than the Election Services Vendor has access to the ballots.
  8. Official ballots returned to the System or KPPA will be processed in accordance with 105 KAR 1:445 Sections 4, 6.
  9. After counting all valid ballots, the Election Services Vendor shall certify in writing the results of the election to the Chair of the Board in care of the System's Chief Executive Officer and the KPPA Executive Director on or before March 15 of the year in which a term of office expires.
  10. The two (2) candidates with a majority of service in a non-hazardous duty position and the one (1) candidate with a majority of service in a hazardous position receiving a plurality of the votes shall be designated as the winners. Winning candidates shall begin their term of office as Trustee on April 1 and shall be sworn in at the annual meeting of the Board.
  11. Once ballots have been counted and the election is deemed final, the Election Services Vendor shall destroy all ballots and provide a certificate to that effect to the System's Chief Executive Officer and the KPPA Executive Director.

## VII. FILLING A VACANCY

1. Any vacancy that may occur in a Trustee position other an elected Trustee position, except by the expiration of the term, shall be filled in the same manner that provides for the selection of that non-elected Trustee position under KRS 78.782.
2. Any vacancy, which may occur in an elected position, other than by the expiration of the term, shall be filled within ninety (90) days by appointment by a majority vote of the remaining elected Trustees.
  - a. The KPPA shall notify the membership that applications are being accepted from members who would like to be considered for appointed to the position of Trustee.
  - b. A member seeking appointment by the Board must submit a completed application, cover letter, résumé, picture, and release for criminal background

check to the KPPA at the Frankfort retirement office no later than sixty (60) days after the vacancy occurs. The specific due date will be listed in the provided notice.

- c. If the member requesting appointment by the Board is currently employed or holds any other office, the member's personal information will be forwarded to the Office of the Attorney General of Kentucky to determine whether the member is a constitutionally eligible individual.
  - i. If a member is not a constitutionally eligible individual, the member shall be notified of ineligibility, and that he or she will not be considered for appointment to the vacant position, unless the member agrees to resign from the position causing the constitutional ineligibility. This resignation would only be required if the member were appointed to the position of Trustee.
  - ii. The Board shall also be notified if a member seeking appointment is determined not to be a constitutionally eligible individual.
- 3. Each current elected Trustee may make one (1) nomination for the vacancy of the elected position, which will allow for a maximum of two nominees.
- 4. All individuals nominated by the current elected Trustees shall meet the requirements of a potential candidate as defined above.
- 5. The remaining elected Trustees shall then vote on a nominee to fill the vacancy using the voting procedure set forth above in Nomination by the Board Procedures Paragraphs 3, 4, 5, and 6.
- 6. Any such vacancies shall only be filled for the expiration of the unexpired term.

#### **VIII. PROCUREMENT OF THE ELECTION SERVICES VENDOR**

- 1. When procuring an Election Services Vendor, the request for proposal (RFP) shall indicate that the selected vendor will sign the KPPA's Business Associate and Confidentiality Agreements as well as provide a summary of security policies and standard security procedures related to ensuring election integrity. The RFP must include specific security details to which the vendor must adhere. The security details should include, but not be limited to, the following topics:
  - a. Technology systems, network, and application software used to process sensitive information.
  - b. Vendor risk and threat management responsibilities.
  - c. Software License Agreements.
  - d. Service Level Agreement and Support.
- 2. The team that drafts the RFP and evaluates the bid proposals should include KPPA employees from the Divisions of Internal Audit Administration, Communications, and Enterprise and Technology Services. The KPPA Executive Management team and Office of Legal Services employees as well as the System's Chief Executive Officer and General Counsel should be consulted as needed.

**IX. ETHICS**

Ethics in the election process shall conform to the Executive Branch Code of Ethics as set forth in KRS Chapter 11A.

**X. CERTIFICATION**

We, the Chair of the County Employees Retirement System Board, the Chief Executive Officer of the County Employees Retirement System, and the Executive Director of KPPA do hereby certify that this Board Election Policy was adopted by the Board on this the 14th day of March, 2022.

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Betty Pendergrass, Board Chair  
County Employees Retirement System Board of Trustees

Date

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Ed Owens III, Chief Executive Officer  
County Employees Retirement System

Date

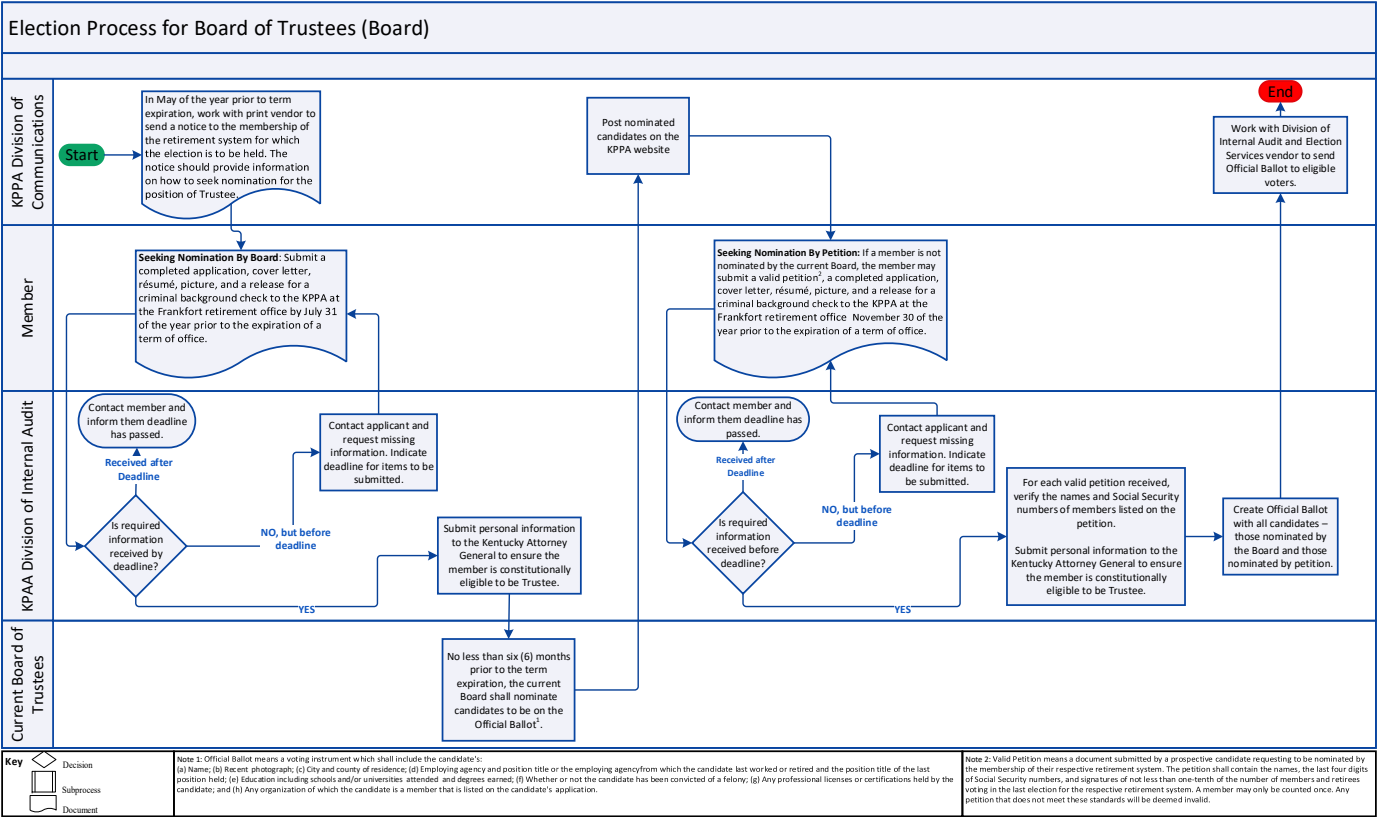
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David Eager, Executive Director  
Kentucky Public Pensions Authority

Date

History:      Approval Date: March 14, 2022  
Amended:

Exhibit A





## KENTUCKY PUBLIC PENSIONS AUTHORITY

David L. Eager, Executive Director

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



**TO:** Members of the CERS Board of Trustees

**FROM:** Joint CERS & KRS Retiree Health Plan Committee

**DATE:** March 16, 2022

**SUBJECT:** Joint CERS & KRS Retiree Health Plan Committee Report

The Joint CERS & KRS Retiree Health Plan Committee met on Thursday, February 10, 2022 and reviewed an informational presentation from Humana regarding Account Management for 2021.

### 2021 Review:

- Member Engagement
- Call Center Report
- Member Satisfaction
- Net Promotor Score
- Annual Member Study
- Value Based Products

Humana Member Engagement, in partnership with KPPA Retiree Health Care staff, coordinated six (6) live online enrollment events during October open enrollment. The following Bringing Humana to You Events were also hosted online during 2021: Value Added Benefits; Partnering with Your Doctor; Decompressing from Stress; and Eating Healthy. The Humana Annual Enrollment Education video, which was accessible through the KPPA website, had 592 views with an average watch time of 24 minutes of the 36 minute recording.

The Call Center Report for 2021 was comparable to 2020, with a total of 63,125 calls answered for the year. The Member Satisfaction and Net Promotor Score are determined based on results of surveys that Humana issues and reviews to gather vital information for continuing opportunities for improvement on an ongoing basis. Humana was able to add additional members to the survey than in previous years totaling 4,361 vs. 491 in previous years. Retirees gave an overall satisfaction rating of higher than 90%.

Value Based Products is a partnership between providers and Humana which results in shared savings and enhanced quality care measures. This partnership has resulted in improved outcomes and higher quality in patient experience and satisfaction. Compared to original Medicare, there were 29% less hospital admissions and 10% less emergency room visits. The cost associated with these savings was \$4 billion for plan year 2020.



Finally, Connie Pettyjohn reported that due to a calculation error there was a premium reduction of \$1.26 on the Prescription Drug Plans for 2022 from what the Boards approved in September 2021.

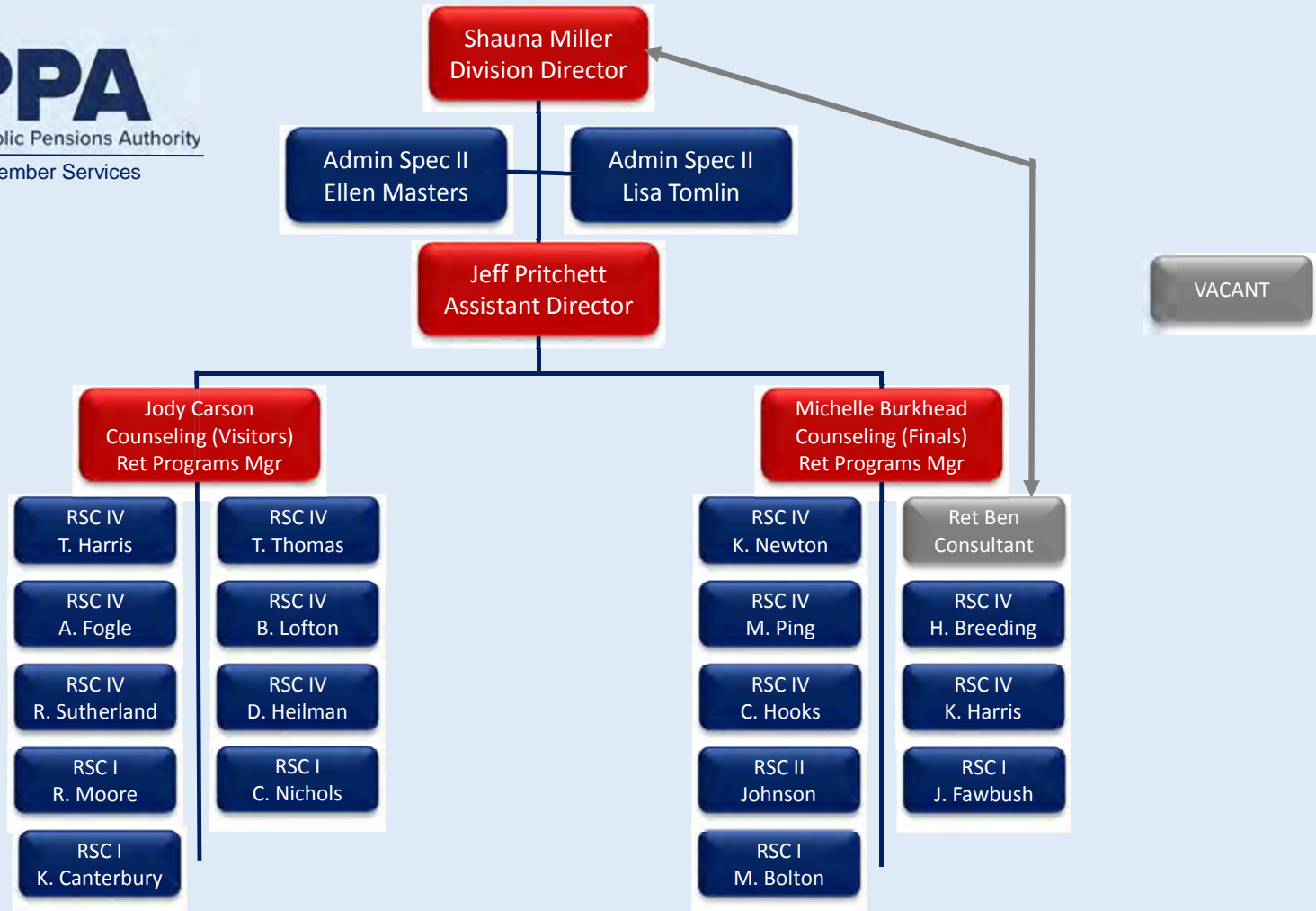


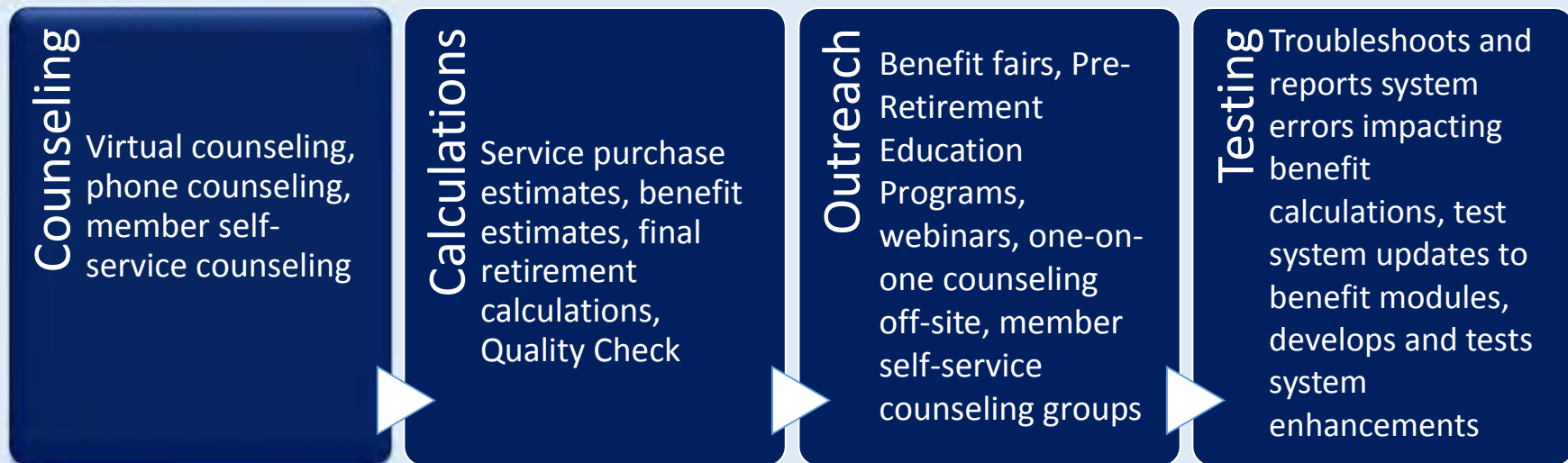
# KPPA

Kentucky Public Pensions Authority

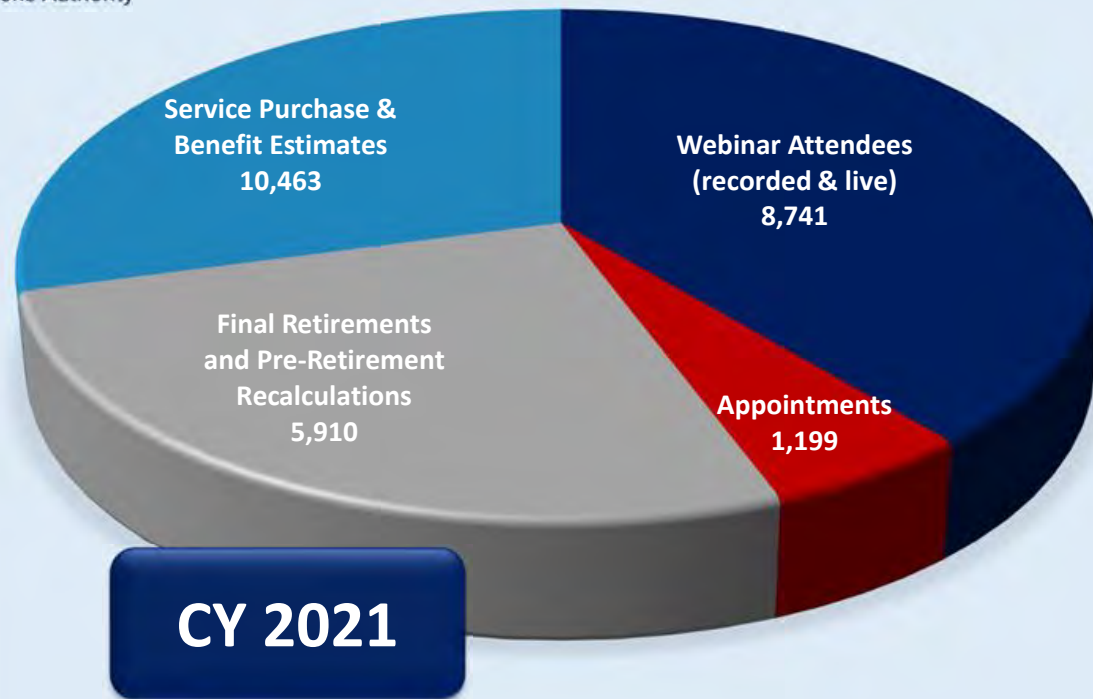
## Office of Benefits Division of Member Services

Shauna Miller, Division Director

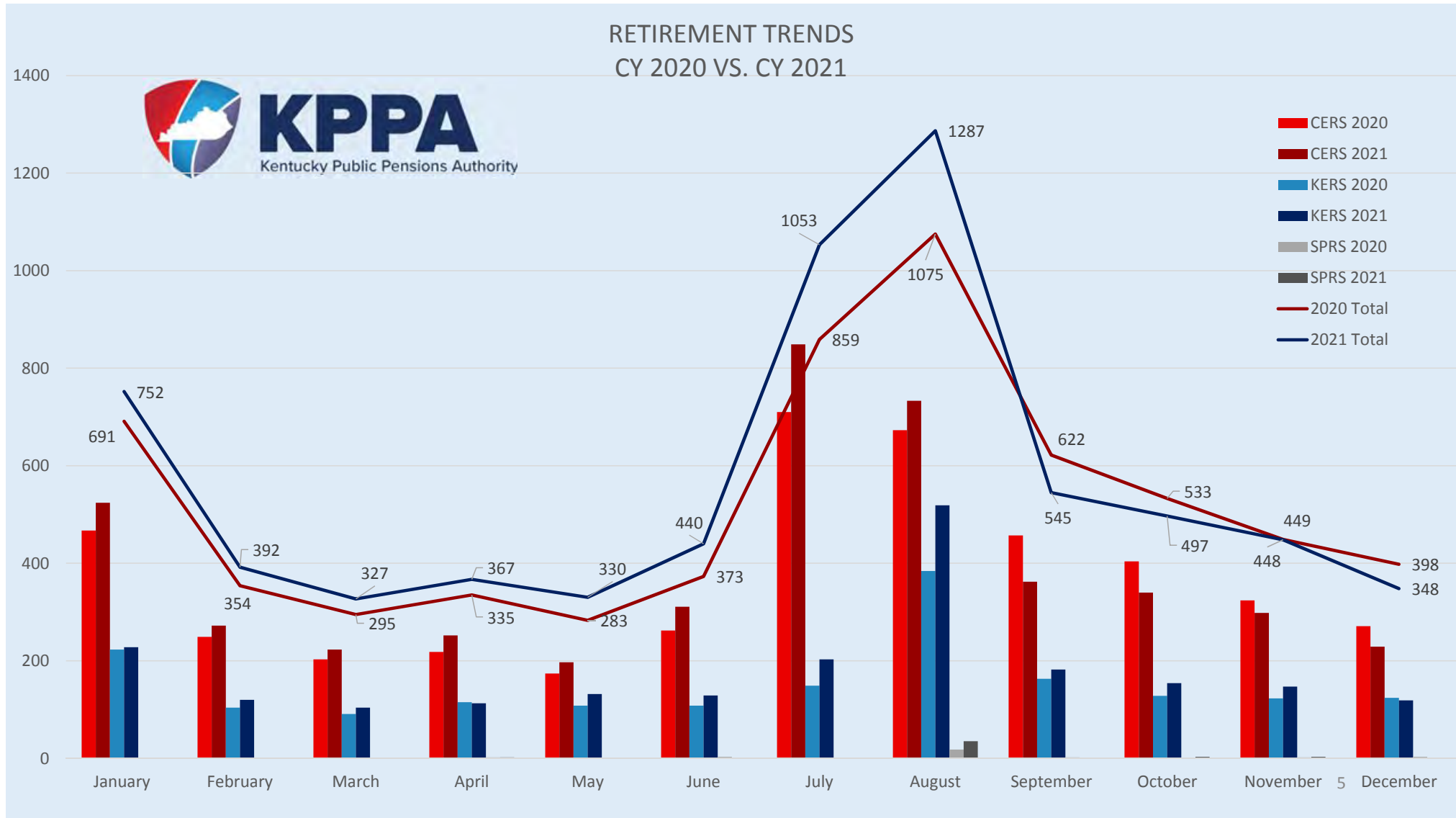




## Roles & Responsibilities



## Member Services Statistics





#### **Online Retirement**

- Launched in MSS February 2020
- 2020- 2,228 members applied for retirement online (46% CY Feb 2020 to CYE)
- 2021- 3,975 members applied for retirement online (59% CY 2021)

#### **Document Upload**

- Launched in MSS February 2020
- Allows members to upload documents securely via Member Self Service

#### **Benefit Estimates**

- Benefit Estimate Calculator enhanced to encompass more specific member account info

#### **Internal Messaging Center (IMC)**

- Immediate and secure access to calculations via Member Self Service

## MSS Enhancements



- ✓ Continue to identify system and procedural improvements
- ✓ Retirement Benefit Consultant
- ✓ Update and expand retirement webinar topics
- ✓ Maintain a backlog response time of 2 weeks or less
- ✓ Reintroducing in-person services
- ✓ Additional MSS Enhancements
  - Service Purchase Calculator to generate cost calculations that payments can be applied to
  - Retirement documents in IMC

## Looking Forward





Our staff regularly receives positive comments from our membership. Here are a couple of our favorites:

“Here is a belated but heartfelt thank you for helping answer my questions about retirement in our phone session. You really focused on all of my concerns and even brought up some things I had not thought of. Your job can be challenging with so many policies and rules to remember, not to mention some difficult cases. Thanks for taking time to thoroughly help me.”

Member expressed his appreciation for offering virtual appointments stating that he had already scheduled his appointment when an opportunity to travel with his family came up. He was very thankful that he was able to keep his appointment while sitting in Tomorrowland outside of Space Mountain!

## Honorable Mentions



## **COUNTY EMPLOYEE RETIREMENT SYSTEM BOARD OF TRUSTEES PER DIEM AND REIMBURSEMENT POLICY**

Approval Date: March 16, 2022

### **Section 1: Scope**

- A. This policy is enacted pursuant to Kentucky Revised Statutes (“KRS”) 78.782, which provides that the Board of Trustees (“Board”) of the County Employees Retirement System (“System”) is permitted to adopt procedures necessary to conduct the business of the System as needed. As well, this policy is enacted consistent with the Bylaws of the Board, which provide for reimbursement of the Trustees in their official duties for the System.
- B. Pursuant to KRS 78.780, Trustees who do not otherwise receive a salary from the State Treasury shall receive a per diem of \$80 for each day they are in session or on official duty, and shall be reimbursed for their actual and necessary expenses in accordance with state administrative regulations and standards.
- C. All payments of per diem and/or reimbursement under this policy shall be made consistent with the Model Procurement Code as set forth in KRS Chapter 45A, 200 KAR 2:006, and the Executive Branch Code of Ethics as set forth in KRS Chapter 11A.
- D. In every event, Trustees shall endeavor to conduct the official affairs of the System in such a manner as to minimize the cost of providing efficient guidance and administration of the funds entrusted to the Board.
- E. Nothing in this Policy shall be interpreted so as to prohibit or discourage Trustees from attending all official functions of the Board or its Committees, or Kentucky General Assembly or other legislative functions, which such Trustee believes will enhance his/her ability to make decisions that benefit the System.

### **Section 2: Official Duty**

- A. “In Session” shall include the following:
  - (1) Meetings of the full Board;
  - (2) Meetings of Committees of which the Trustee is a member or alternate or the Trustee chooses to attend in order to strengthen their overall knowledge of the Board’s CERS administration, and

County Employees Retirement System  
1270 Louisville Road  
Frankfort, KY 40601

Betty A Pendergrass, Chair  
Jerry Powell, Vice-Chair  
Ed Owens, CEO

- B. “Official Duty” shall include the following:
  - (1) Preparation for Board or Committee meetings;
  - (2) New Trustee Orientation at the Kentucky Public Pension Authority office building in Frankfort;
  - (3) Training approved by the CERS CEO (or Board Chair) in an amount deemed necessary by the CERS CEO (or Board Chair) and the Trustee to enhance the work of the Board;
  - (4) The Chair or Vice-Chair’s presentations at sessions of the General Assembly, the Legislative Research Commission, or another legislative subcommittee at the invitation of the Legislature, or a Legislator.
- C. The following are not considered to be “in session” or “on official duty” in order to permit the Trustee to seek a per diem reimbursement, unless specific permission is given by the Chair or the Chief Executive Officer or designee:
  - (1) Group or Association meetings;
  - (2) Membership meetings;
  - (3) Other constituent meetings; and
  - (4) When requested to appear by a court or other government entity.
- D. Trustees attending functions as described in Section 2, subsection (C) above shall only be considered to be on official duty when attendance is at the written request, invitation or permission of the Chair of the Board or the Chief Executive Officer or designee. Approval will only be granted for a reasonable number of these functions per year.
- E. If the Chair requests authorization for functions as provided under Section 2, subsections (C) and (D) above, the Vice Chair shall approve such requests.

### **Section 3: Authorization**

- A. Prior to attending a non-System and/or non-State (e.g. industry conference) function, a Trustee shall obtain authorization to be reimbursed for attending such a function on official business of the System by the Board Chair or the Chief Executive Officer or designee.
- B. Authorization shall be obtained through written or e-mailed communication, and should contain the following information:
  - (1) Name of Trustee requesting authorization;
  - (2) Purpose of the function;
  - (3) Vicinity and length of time of travel;
  - (4) Estimated cost of travel;
  - (5) Signature of person requesting authorization; and
  - (6) Signature of Chief Executive Officer or designee.
- C. Attendance at full CERS meetings or Committee meetings requires no separate authorization.

### **Section 4: Preparation for Meetings**

- A. Preparation worked in advance for a meeting of the Board or a Committee of the Board shall include time spent reviewing written and/or video transcripts of formal administrative

hearings or the records, exhibits, documents and memoranda provided to Trustees by the System prior to each Board or Committee meeting.

- B. Trustees shall be compensated for preparation for a meeting of the Board or a Committee of the Board as provided under Section 4, subsection (A), at an hourly rate equal to the per diem divided by seven and one-half (7 ½) hours. Each Trustee shall report the number of hours spent in preparation on the Preparation Reimbursement Form provided by the System.
- C. Trustees may not request per diem reimbursement for preparation time on the same day as another CERS Board or committee meeting. Trustees are paid for a full day for each meeting attended, so any preparation time worked on a meeting day is automatically included in the 7.5 hours for the day when the meeting occurred.
- D. The Chief Executive Officer or designee shall review all Preparation and Reimbursement Forms and approve all hours for payment as deemed appropriate for the required task.

## **Section 5: Reimbursement**

- A. Following the function, all travel expenses should be timely claimed on a Commonwealth of Kentucky Finance and Administration Cabinet Travel Voucher form. In no event shall a Trustee be reimbursed by the System for any expenses also claimed reimbursable from another state agency or the Trustee's employer.
- B. Actual and necessary travel expenses shall be paid in accordance with 200 KAR 2:006.
- C. Twice a month, the Chief Executive Officer or designee shall prepare the Per Diem Compensation Schedule and approve such payments.
- D. Reimbursement will be made only for individuals who are doing business on behalf of the Systems.
- E. All reimbursement under this Section must be made consistent with the requirements of the Executive Branch Code of Ethics, KRS Chapter 11A. Please refer to the Executive Branch Ethics Commission web site for more information at: <http://ethics.ky.gov/>.

## **Section 6: Forms**

- A. The following forms are attached and are incorporated by reference.
  - (1) Preparation Reimbursement Form - General
  - (2) Preparation Reimbursement Form – DAC/AAC
  - (3) Commonwealth of Kentucky Finance and Administration Cabinet Travel Voucher form
  - (4) All forms incorporated by reference in 200 KAR 2:006
  - (5) Per Diem Compensation Schedule
- B. These forms may be updated and amended as necessary without effect to this Policy.

**Section 7: Certification**

We, the Chair of the Board of Trustees of the County Employee Retirement System, and the Chief Executive Officer of the County Employee Retirement System, do hereby certify that this Per Diem and Reimbursement Policy was amended and made effective by the Board of Trustees of the County Employees Retirement System on the 16th day of March, 2022.

\_\_\_\_\_  
Chair of the Board of Trustees  
County Employee Retirement System

\_\_\_\_\_  
Date

\_\_\_\_\_  
Chief Executive Officer  
County Employee Retirement System

\_\_\_\_\_  
Date

**Deborah Kidd**

Deborah Kidd, CFA, is a Director with the Global Industry Standards team at CFA Institute. She contributes to the development, maintenance, and promotion of CFA Institute industry codes and standards. Before joining CFA Institute in 2019, Deborah was a long-time volunteer and contributed to the organization as an author and editor for CFA Institute publications and CFA exam curriculum. Prior to joining CFA Institute, Deborah was a fixed income portfolio manager for institutional and Ohio public funds with Boyd Watterson Asset Management, LLC. Deborah also served for ten years as a board member of CFA Society Cleveland. Deborah has a Bachelor of Arts degree from Ursuline College and is a CFA charterholder.

**Chris Fidler**

Chris Fidler is a Senior Director in the Global Industry Standards team at CFA Institute where he leads the promotion of CFA Institute industry codes and standards globally and helps to identify areas where new standards are needed. Additionally, he led the development of the Global ESG Disclosure Standards for Investment Products. Prior to joining CFA Institute, Mr. Fidler was a management consultant at Thought Logic Consulting, LLC, and served in a number of management roles at Capital One Financial Corporation. Mr. Fidler holds a Bachelor of Science degree in mechanical engineering from University of Illinois and a Master of Business Administration from the Darden School of Business at University of Virginia.