County Employees Retirement System
Investment Committee – Special Meeting
September 17, 2024 at 2:00 PM EST
Live Video Conference/Facebook Live

AGENDA

1.	**Call to Order**	**Merl Hackbart**
2.	**Opening Statement**	**Eric Branco**
3.	**Roll Call**	**Sherry Rankin**
4.	**Public Comment**	**Sherry Rankin**
5.	**Investment Policy Statement***	**David Lindberg** **Craig Morton** **Chris Tessman**
6.	**Real Return Investment Recommendation***	**KPPA Investment Staff**
7.	**ADJOURN**	**Merl Hackbart**

Committee Action May Be Taken

County Employees Retirement System
1270 Louisville Road
Frankfort, KY 40601

County Employees Retirement Systems
Investment Policy Statement
Adopted DATE 2024

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, risk tolerance, asset allocation, implementation, employment of outside service providers, monitoring, as well as general governance of the 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 manage the assets of the insurance fund in the same manner in which it administers its retirement fund.

B. Philosophy

The CERS Trustees recognize their fiduciary duty not only to invest CERS funds in formal compliance with the Uniform Prudent Investor Act, 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 represent a strategic decision, with the primary aim that each fund of the CERS plan outperform its asset-class-weighted benchmark as outlined in section IV while assuming a commensurate level of risk. The appropriate level of risk is determined as part of the asset allocation or asset-liability study process and reflected in the target allocations and allowable ranges established in Section III.

The CERS Trustees recognize that there is a generally accepted principle that an inverse relationship exists between market efficiency and the ability for active management to produce excess returns. Therefore, KPPA Office of Investments staff (KPPA Investment Staff) will focus on investing in index or index-like investments with the goal of replicating, or exceeding, index returns with low management fees and low tracking errors in markets they deem to be more efficient. In markets KPPA Investment Staff deem to be less efficient, active management may be pursued, accepting higher tracking error and paying higher management fees with the expectation of producing excess returns over the long term. This allows the 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.

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 investor 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. Adequate security and a reasonable rate of return shall be provided 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)). Per KRS 78.790(1)(b), the CERS Investment Committee shall have the authority to implement the investment policies adopted by the CERS Board and act on behalf of the CERS Board on all investment-related matters. The CERS Investment Committee has the power to act on behalf of the CERS Board on all CERS Board approved 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 approve the recommendations of the CERS Investment Committee at the CERS Board meeting following the CERS Investment Committee meeting where such recommendation was made.

B. CERS Investment Committee

The CERS Board shall establish an investment committee as required by KRS 78.790(1)(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 approved investment related matters.

The CERS Investment Committee has the following oversight responsibilities:

1. Monitor compliance with this IPS and all applicable laws and regulations. Non-compliance shall be communicated by the Committee Chair to the Board along with suggestions for remediation and appropriate timing.
2. Recommend the selection and termination of service providers to be approved by the Board. Notwithstanding the previous sentence, 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. Upon termination, the CIO will notify all CERS Board members via a memo that contains the rationale for the decision. 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 pertinent details of the investment, including: (1) Recommendation by staff and the opinion of an investment consultant; (2) Location of investment within the strategic asset allocation., along with rationale; (3) Sizing of the investment, along with rationale; (4) Summary of the search process which details the criteria used to arrive at a list of finalist candidates and rationalization for recommending the proposed investment; (5) Key risks, fees, and liquidity terms; (6) Investment vehicle to be used; and if applicable, (7) Specific reasons why a CERS fund 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), for approved mandates, meeting the internal investments (section D) guidelines, 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 must be ratified by the Investment Committee and the Board of CERS.

D. Internal Investments

The Investment Committee may approve the internal management of assets. In general, internal mandates will be limited to investments that are meant to replicate the return and risk of a public index. These mandates will be subject to the same search and approval process outlined in Section II-C (vi) as well as Section II E.

Proxy accounts may also be managed internally to gain exposure to assets with similar risk, return, and economic characteristics to strategic asset class allocations that may take time to build, such as private asset classes where deployment of funds is dependent on managers/funds calling capital commitments. These proxies shall be included in regular performance reporting and a detailed review of the composition of the underlying investments shall be made to the Investment Committee for review and ratified by the board prior to implementation and at least annually thereafter.

E. 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 an investment consultant.

ii. Notwithstanding the CIO responsibilities when selecting a new investment, when the KPPA Investment Staff seeks a new mandate, staff will conduct a formal search process documenting how the universe was narrowed to the top option(s). If more than one investment option doesn't exist, staff shall outline comparable investments along with rationale as to why those strategies are not appropriate. As part of the process at arriving at a recommendation to the Investment Committee for investment, interviews shall be conducted and invitations to both the Board Chair and Investment Committee Chair members shall be extended providing the opportunity to participate in the selection process.

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 as set forth in KRS 78.790(5).
vi. All investment management services will be contracted according to the CERS Investment Procurement Policy established by the CERS Board.

F. Custody Bank

KPPA shall recommend 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. Upon approval of these recommendations by the CERS Board, KPPA may enter into a contractual agreement with these entities.

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.

G. Investment Consultants

Qualified independent investment consultants may be retained by the CERS Board to assist with the development of the overall strategic investment direction of the Fund and/or any of its asset classes. The Consultant may be expected to conduct asset-liability studies including presenting recommendations to the CERS Investment Committee and/or Board for appropriate asset allocation policies, rebalancing ranges, and the development of total fund policy benchmarks. The Consultant may also be expected to prepare and present performance reviews, manager searches, and other investment-related consulting functions and duties as set forth by contract.

H. Selection

Qualified investment managers, investment consultants, and other investment related service providers shall be selected by the CERS Investment Committee and recommended for approval by the CERS Board, 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 recommend service providers.

III. Asset Allocation Guidelines

In establishing asset allocation guidelines, the CERS Board recognizes that each CERS fund has its own capacity to tolerate investment volatility, or risk. Therefore, each CERS fund will be continually studied with asset allocation guidelines established on an individual fund basis. The CIO will ensure the asset allocation guidelines of each fund are reviewed annually with full asset-liability studies conducted every three to five years (or as market conditions warrant).

The CERS Board has established the following Asset Allocation Guidelines, effective July 1, 2024.

Asset Class	**Target**	Minimum	Maximum
Equity			
Public Equity	**45%**	30%	55%
Private Equity	**8%**	4%	12%
Fixed Income			
Core Fixed Income	**13%**	10%	20%
Specialty Credit*	**20%**	16%	24%
Cash	**2%**	0%	5%
Inflation Protected			
Real Estate	**5%**	3%	7%
Real Return	**7%**	4%	10%

*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 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 fund level asset allocations will be reviewed and reported on quarterly by KPPA Investment Staff relative to the target asset class allocations and taking into account any tactical asset allocation shift directed by the CERS Investment Committee.

Regarding individual investment manager initial allocations, KPPA Investment Staff will recommend a funding amount for illiquid private market investments to be approved by the CERS Investment Committee and ratified by the CERS Board. Subsequent investments with those same managers will also be approved by the CERS Investment Committee and ratified by the CERS Board. Regarding liquid public market investments, KPPA Investment Staff will recommend individual allocations expressed as a percentage of the relevant asset class target. The asset class structural targets will be approved by the CERS Investment Committee and ratified by the CERS Board. Modest deviations from approved structural targets can be expected in the normal course of business throughout market cycles, but it is expected that the KPPA Investment Staff will seek to maintain approved targets until otherwise recommended and approved for changes.

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(es) to the under-allocated asset class(es). 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.

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 at the next Quarterly CERS Investment Committee meeting and each Investment Committee meeting thereafter until the allocation is in compliance with the target. To best manage risk exposures, Deviations to these asset classes shall be offset in the public market asset classes 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. Equity

Public 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 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.

Generally, U.S. equity markets are more efficient than Non-U.S markets, while large-cap and developed market segments are more efficient than their small-cap and emerging market counterparts. Implementation of the public markets allocation should reflect the overall efficiency within a particular market segment. The more efficient the market segment, the higher the proportion of indexed assets. Similarly, active management is more likely to add value in inefficient markets, so a lower percentage of indexed assets would be appropriate.

Private Equity

Subject to approval of the CERS Investment Committee and ratification by the CERS Board, investments may be made for the purpose of creating a diversified portfolio of private equity investments. Private equity investments generally possess a higher degree of risk with a higher return potential than traditional equity investments. Accordingly, total net rates of return from private equity investments are expected to be greater than those that can be obtained from traditional public equity investments. Examples of private equity investments include, but are not limited to: venture capital, buyouts, special situations, distressed debt, and private placements. US Key features of a well-constructed private equity portfolio include diversification across vintage year, sector/style, and 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 investors and general partners. Most investment vehicles are structured as commingled vehicles and are 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 a reasonable time horizon to invest capital, add value through operational management, and realize the proceeds of their investments. Terms of the partnership are typically proposed by the general partner and are critical to the economic incentives and ultimate net performance of the partnership.

Private Equity Investment Strategy and Plan Guidelines

To strengthen diversification, 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 funds will gain exposure to private equity investments by hiring external investment managers either directly or through participation in secondary private equity markets. Typically, CERS will participate 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 funds 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 impact 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. Staff and investment consultant shall attempt to source on behalf of CERS 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 15% 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' fund assets allocated to this asset class. Should circumstances arise and the allocation go beyond the maximum allowable allocation as indicated at in the table at the start of Section III, the CIO will inform the Investment Committee Chair in writing 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

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.

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

Specialty Credit

Specialty Credit includes both publicly traded debt, e.g., high yield bonds, and private credit.

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. 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.

Post 2008/2009 Global Financial Crisis (GFC) regulatory changes created an opportunity for non-bank lenders to fill the loan demand vacated by the banks. Borrowers are generally small to medium sized businesses with non-investment grade ratings and are subject to loan terms controlled by the lenders (i.e., covenants, rates, and term) which provide additional risk controls, higher yields than that of public fixed rate loans, and periodic cash flows. Private credit investments may be illiquid in nature and structured as limited partnership agreements.

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.

Cash Equivalent Securities

Selection of 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. Inflation Protected Assets

Real Estate

Investments are made in real estate equity and debt for the purposes of achieving the highest total rate of return possible consistent with a prudent level of risk and provide returns that have a positive correlation to inflation.

The illiquid nature and complexity of real estate investments make it difficult for casual investors to effectively access the asset class. It is our belief that through active management and by investing with top tier managers that have aligned interests through co-investment and incentive-based compensation, CERS can maximize their risk-adjusted returns.

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 accessing managers with the expertise and capabilities to exploit market inefficiencies in the asset class.
- Diversification benefits through lower correlations with other asset classes
- Provide a hedge against unanticipated inflation, which real estate has historically provided due to lease structures that can reset to market and growth in existing asset replacement value during inflationary periods when material and labor costs increase.
- 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 may include real assets, such as infrastructure, real estate, commodities, and natural resources, as well as financial assets that have a positive correlation to inflation. This can include real bonds such as Treasury Inflation-Protected Securities (TIPS), other inflation linkers, or real stocks such as REITs, Master Limited Partnerships (MLPs), and oil & gas stocks.

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

- Inflation-linked securities 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 securities of companies that have a high sensitivity to inflation in their profit margins via the nature of their operating assets, such as energy, basic materials, mining, natural resources, utilities, real estate,and listed infrastructure companies. This category can also include, ETFs and index products that invest in inflation sensitive securities.
- 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 predominantly fixed or substantially long-lived, such as timberland and farmland. Timberland investing involves the institutional ownership of forests for the purpose of growing and harvesting the timber. 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, 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 return 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 20% 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 Plan's liquidity needs, funding status, and allocation targets on an investment-by-investment basis.

D. Co-Investment Policy

The CIO has discretion to make direct co-investments in companies alongside of current General Partners of CERS' Limited Partnership investments. Any co-investment opportunity must also be consistent with the strategy 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 the General Partner of an existing CERS' Limited Partnership investment deemed in good standing.

The maximum investment in any co-investment vehicle shall not exceed 50% of the total capital committed by all partners at the time of the final closing. The maximum investment in any single direct co-investment shall not exceed 20% of the original partnership commitment. Total investment in direct co-investments shall not exceed 20% 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
Equity	
Public Equity	MSCI ACWI ($ net)
Private Equity	Russell 3000 + 300 bps (one quarter) lagged)
Fixed Income	
Core Fixed Income	Bloomberg US Aggregate
Specialty Credit	50% Bloomberg US Corporate High Yield / 50% Morningstar LSTA Leveraged Loan
Cash	FTSE 3 Month US T-Bill
Inflation Protected	
Real Estate	NCREIF ODCE (one quarter lagged)
Real Return	US CPI + 3%

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:

<u>Total Public Asset Class Allocations</u>

Short-term

- For periods less than five years or a full market cycle, the Asset Class composite performance 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 composite performance 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.

<u>Individual Public Security Portfolios</u>: 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 a long-term net Internal Rate of Return (IRR) that exceeds public market equity investments as measured by a Public Markets Equivalent (PME) comparison using the most appropriate public equity index. KPPA Investment Staff shall complete a comparison of performance between equity portfolio performance and Private Equity portfolio returns quarterly and will report the following to the Investment Committee:

Short-term

- Alternative 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.

Intermediate & Long-term

- The private equity portfolio should earn a return that meets or exceeds the 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.

Inflation Protected

Real Estate

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 net returns above the National Council of Real Estate Investment Fiduciaries Open End Diversified Core Equity Index (NCREIF ODCE) lagged 1 calendar quarter.

Real Return

The total Real Return investments shall seek to:

- Short-term benchmark: For periods less than five years or a full market cycle, the allocation should achieve a net annual rate of return that exceeds the appropriate benchmark (the weighted average return of the underlying investment benchmarks).
- Strategic objective: For periods greater than five 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 (US CPI + 300 basis points) as well.

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, or KPPA staff, 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. KPPA 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 US 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.

7. The assets managed by any one active or passive investment manager shall not exceed 15% of assets as outlined in Section II of this IPS.

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.

V Additional Items

<u>Derivatives Permitted Use:</u>

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.

<u>Derivatives Restricted Use:</u>

Settlement:

Investments in futures contracts are to be cash settled unless physically settled and stored by external managers. At no time shall CERS 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.

<u>Derivatives Applications Not Permitted:</u>

<u>Speculation:</u>

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. Leveraging the portfolio beyond a 100% invested position is not permitted, i.e. the notional value should not exceed the market value of assets.

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 is and hereby incorporated by this reference. The policy can be found publicly using the following link:

ISS U.S. Proxy Voting Guidelines.com

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 Conflict of Interest and Confidentiality Policy as amended and hereby incorporated by reference.
I. CERS Proxy Voting Policy as amended and hereby incorporated by reference.

Signatories

As Adopted by the CERS Investment Committee	As Adopted by the CERS Board of Trustees
Date:_	Date:
Signature:_	Signature:
Dr. Merl Hackbart	Mr. George Cheatham
Chair, CERS Investment Committee	Chair, CERS Board of Trustees

County Employees Retirement Systems
Investment Policy Statement
Adopted DATE 202~~2~~4

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 .~~ This IPS is intended to provide general principles for establishing the goals, risk tolerance, asset allocation, implementation, employment of outside service providers, monitoring, as well as general governance of the 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.~~ The CERS Board shall manage the assets of the insurance fund in the same manner in which it administers its retirement fund.

B. Philosophy

The CERS Trustees recognize their fiduciary duty not only to invest CERS funds in formal compliance with the ~~Prudent Person Rule~~Uniform Prudent Investor Act, 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~~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 represent~~s~~ a strategic decision, with the primary aim that each fund of the CERS ~~plan~~~~fund~~ plan outperform ~~their strategic asset allocation~~its benchmark as outlined in section IV. ~~, as well as the~~

~~plans and stated discount rate meet their performance objectives in the long- term, but with the understanding that this may not necessarily occur every year.~~

Commented [HS(1]: The collective wanted in the Philosophy section some discussion about risk, risk tolerance and funding.

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.

Commented [HS(2]: Steve Willer to apply new language.

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 ~~R~~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.

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~~ investor 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 a~~Adequate security and a reasonable rate of return shall be provided 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 subject to Board ratification. 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(1)(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~~ Monitor compliance with this IPS and all applicable laws and regulations. ~~Violations~~Non-compliance shall be communicated by the Committee Chair to the Board along with suggestions for remediation and appropriate timing.
2. Approve the selection and termination of service providers to be ratified by the Board. 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. Upon termination, the CIO will notify all CERS Board members~~,~~ via a memo ~~, verifying the~~ that contains the rationale ~~of~~ for the decision. 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,~~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.

Commented [HV(3]: This section may need to be re-worded. Section 2.3 of the CERS Bylaws allows for delegation to Committees, and the first part of the 2nd and 3rd sentences appear to be delegating authority to the IC to acquire securities and investments. However, the last part of the third sentence qualifies any authority that the IC has by restricting its decisions by requiring the CERS Board - by a vote of 6 members - to ratify the IC's actions. This may be an area where the delegation authority is granted and the IC is authorized to make the investment decisions with a report to the CERS Board. Also, the last sentence requires the CERS Board to ratify the actions at the CERS Board meeting following the IC meeting where such action was taken. However, if the next CERS Board meeting has a quorum of CERS Trustees (5) there will be a CERS Board meeting, but the action of the IC cannot be voted upon because there are not 6 CERS Trustees present.

Commented [CT4R3]: Vickie to provide update wording?

Commented [HV(5]: As stated above, this sounds like delegation under Section 2.3 of the CERS Bylaws, but this may need to be clarified if the "action" of the IC must be ratified by the CERS Board.

Commented [CT6R5]: Vickie to provide any changes

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, ~~containing which should will outline~~including ~~include, but not be limited to~~: (1) Recommendation by staff and the ~~approval by~~opinion of ~~the general~~an investment consultant; ~~of the efficacy of the investment.~~ (2) ~~) Identification and rationalization of where the~~ Location of investment ~~will be located~~ within the strategic asset allocation., along with rationale;~~.~~. (3) Sizing of the investment, along with ~~structural considerations to justify the position sizing~~rationale;~~.~~ (4) Summary of the search process which ~~shall~~ details~~s~~ the criteria used ~~utilized~~ to arrive at a list of finalist candidates and ~~reasons~~ rationalization for ~~selection~~ recommending ~~of~~ the proposed investment.; (5) Key risks, fees, and liquidity terms; (6) Investment vehicle to be used; and if applicable, (7) S~~.~~. ~~Other pieces of information that should be~~~~should be included where applicable to support the investment include the amount of the investment, type of investment, purpose, opportunity/goal, risks, volatility assumptions, risks, liquidity, structure~~~~investment vehicle, fees,~~ ~~background of investment firm with reasons for selection, list of other firms considered, which CERS funds will invest, and the s~~pecific reasons ~~, if any, why~~~~any,~~ why a CERS ~~plan~~ fund 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.

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~~must be ratified by the Investment Committee and the Board of CERS.

D. Internal Investments

The Investment Committee may approve the internal management of assets. In general, internal mandates will be limited to investments that are meant to replicate the return and risk of a public index. These mandates will be subject to the same search and approval process outlined in Section II-C (vi) as well as Section II E.

Proxy accounts may also be managed internally to gain exposure to assets with similar risk, return, and economic characteristics to strategic asset class allocations that may take time to build, such as private asset classes where deployment of funds is dependent on managers/funds calling capital commitments. These proxies ~~should~~shall be included in regular performance reporting and a detailed review of the composition of the underlying investments ~~should~~shall be made to the ~~i~~Investment ~~c~~Committee~~investment committee~~ for review and ~~approval~~ratified by the board, prior to implementation and at least annually thereafter.

Commented [HV(7]: Is the IC approval all that is required or will these need to be ratified by the Board?

Commented [CT8R7]: Just like external mandates, internal mandates need to be brought before the IC and ratified by the board.

~~D~~E. 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~~ an investment consultant~~(s)~~.

ii. Notwithstanding the CIO responsibilities when selecting a new investment, when the KPPA Investment Staff seeks a new mandate, staff will conduct a formal search process documenting how the universe was narrowed to the top ~~three~~ option(s). If more than one investment option doesn't exist, staff shall outline comparable investments along with rationale as to why those strategies are not appropriate. As part of the process at arriving at a recommendation to the Investment Committee for investment, ~~final~~ interviews shall be conducted and invitations to both the Board~~B~~ Chair and Investment Committee Chair members shall be extended providing the opportunity to participate in the selection process. ~~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.

F~~E~~. Custody Bank

KPPA shall ~~hire~~ recommend 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. Upon approval of these recommendations by the CERS Board, KPPA may enter into a contractual agreement with these entities.

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~~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

Commented [HV(9]: This is a requirement set forth in KRS 78.790(5). Why is it being removed?

Commented [CT10R9]: The idea here is that passive management could exceed this figure.

Commented [CM11R9]: If this is in statute and needs to be restored we should do so, but also need to consider if internally managed, passive accounts are exempt from the rule as they are not technically managed by an investment manager as set forth in this document but rather by staff

Commented [HS(12]: Mr. Owens to provide some language.

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~~G. Investment Consultants

Qualified independent investment consultants may be retained by the CERS Board~~Investment Committee~~ to assist with the development of the overall strategic investment direction of the Fund and/or any of its asset classes. The Consultant may be expected to conduct asset-liability studies including presenting recommendations to the CERS Investment Committee and/or Board for appropriate asset allocation policies, rebalancing ranges, and the development of total fund policy benchmarks. ~~for asset allocation studies, asset allocation recommendations,~~ The Consultant may also be expected to prepare and present performance reviews, manager searches, and other ~~investment related~~investment-related consulting functions and duties as set forth by contract.

H~~G~~. Selection

Qualified investment managers, investment consultants, and other investment related service providers shall be selected by the CERS Investment Committee, to be ratified by the CERS ~~Board, in~~Board, 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~~for Proposals (RFP) or Request ~~For~~for Information (RFI~~),if~~), 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~~recommend ~~a~~ service providers.

Commented [HV(13]: As stated above, certain portions seem to delegate this authority to the IC without ratification, e.g. service providers. These need to be consistent.

Commented [CT14R13]: From our conversations with CERS leadership, it is their desire to have all items be ratified at the board level. In section II subsection A, the delegation language should likely be reviewed by Vickie to update accordingly to make sure we are in-line with the statutes referenced.

Commented [HS(15]: Mr. Owens to provide recommendations.

III. Asset Allocation Guidelines

In establishing asset allocation guidelines, the CERS Board recognizes that each CERS ~~plan~~ fund has its own capacity to tolerate investment volatility, or risk. Therefore, each CERS ~~plan~~ fund ~~has been~~will be continually studied with~~and~~ asset allocation guidelines ~~have been~~ established on an individual ~~plan by~~ ~~plan~~ fund basis. The ~~CERS Board~~CIO will ensure the asset allocation guidelines of each ~~plan~~ fund are reviewed annually with full asset-liability studies conducted every three to five years (or as market conditions warrant). ~~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~~July 1, 2024.

Commented [HV(16]: New date will need to be inserted.

Commented [CT17R16]: July 1 would be a great day to use, but I don't believe the motion that was passed was accompanied by a date. As such, wouldn't the date of the board meeting be the prevailing effective date?

Asset Class	**Target**	Minimum	Maximum
Equity			

Public Equity	**~~50~~45%**	~~35~~30%	~~65~~55%
Private Equity	**~~10~~8%**	~~7~~4%	~~13~~12%
Fixed Income			
Core Fixed Income	**13~~0~~%**	~~8~~10%	~~12~~20%
Specialty Credit*	**~~1~~20%**	~~7~~16%	~~13~~24%
Cash	**~~0~~2%**	0%	~~3~~5%
Inflation Protected			
Real Estate	**~~7~~5%**	~~5~~3%	~~9~~7%
Real Return	**~~13~~7%**	~~9~~4%	~~17~~10%

*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~~ fund level asset allocations will be reviewed and reported on ~~monthly~~ quarterly by KPPA Investment Staff relative to the ~~its~~ target asset class allocations and taking into account any tactical asset allocation shift directed by the CERS Investment Committee.

Regarding individual investment manager initial allocations, KPPA Investment Staff will recommend a funding amount for illiquid private market investments to be approved by the ~~get approval at the~~ CERS Investment Committee and ratified by the CERS Board. Subsequent investments with those same managers will also be approved by the CERS Investment Committee and ratified by the CERS Board. Regarding liquid public market investments, KPPA Investment Staff will recommend individual allocations expressed as a percentage of the relevant asset class target. ~~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 managers. For those open-end funds where assets can be added or subtracted, Tthe CIO will have discretion to reduce or increase an investment manager's allocation between 50% and 150% of the approved target.~~ The asset class structural targets will be ~~not be raised prior to the one-year anniversary of the amount~~ approved by the CERS Investment Committee and ratified by the CERS Board. Modest deviations from approved structural targets can be expected in the normal course of business throughout market cycles, but it is expected that the KPPA Investment Staff will seek to maintain approved targets until otherwise recommended and approved for changes. ~~, 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(es) to the under-allocated asset class(es). 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.~~ Any movement beyond the policy ranges for any reason should only occur with the approval/direction of the CERS Investment Committee and CERS Board.

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. To best manage risk exposures~~, as best as possible~~, ~~Under/overweights~~ Deviations to these asset classes shall be ~~invested~~ offset in the public market~~s~~ asset classes ~~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 F~~f~~und'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. Equity

Public 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 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.

Generally, U.S. equity markets are more efficient than Non-U.S~~.~~ markets, while large-cap and developed market segments are more efficient than their small-cap and emerging market counterparts. Implementation of the public markets allocation should reflect the overall efficiency within a particular market segment . The more efficient the market segment, the higher the proportion of indexed assets. Similarly, active management is more likely to add value in inefficient markets, so a lower percentage of indexed assets would be appropriate.

~~The KPPA Investment Staff, with approval of the CERS investment Committee and CERS Board, may internally manage any structural allocations to passive indexes, subject to all policies and procedures regarding internal management as outlined in this Investment Policy Statement, 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 objectivesInternal managment 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.~~

Subject to ~~specific~~ approval of the CERS Investment Committee~~,~~ and ratification by the CERS Board, investments may be made for the purpose of creating a diversified portfolio of ~~alternative~~private equity investments. Private equity investments generally ~~are expected to achieve attractive risk-adjusted returns, and, by definition,~~ possess a higher degree of risk with a higher return potential than traditional equity investments. Accordingly, total net rates of return from private equity investments are expected to be greater than those that can be obtained from ~~conventional~~traditional ~~—~~public equity ~~or debt~~ investments. Examples of private equity ~~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 of the allocation is expected to include non-US investments. These non-U.S.~~US ~~investments are not restricted by geography.~~ Key features of a well-constructed private equity portfolio include diversification across vintage year, sector/style, and 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 investors and general partners. ~~To a great extent, market forces drive the bargaining of economic terms.~~ Most investment vehicles are structured as commingled vehicles and are 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~~and realize the proceeds of ~~such an~~their investments~~investment~~. ~~Moreover, t~~Terms~~terms~~ of the partnership are typically proposed by the general partner and are critical to the economic incentives and ultimate net performance of the partnership.

Private Equity 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~~ funds 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~~ participate 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~~ funds 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~~impact 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, ~~,~~Staff and investment consultant shall attempt to source on behalf of 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~~: 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~~ fund assets allocated to this asset class. ~~The asset allocation authorizes a maximum of thirteen (123%) percent of total CERS Plan assets to this asset class.~~ Should circumstances arise and the allocation go beyond the maximum allowable allocation as indicated at in the table at the start of Section III, the CIO will inform the Investment Committee Chair in writing 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

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.

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

Specialty Credit

Specialty Credit includes both publicly traded debt, e.g., high yield bonds, and private credit.

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. 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.

Post ~~the~~ 2008/2009 Global Financial Crisis (GFC) regulatory changes created an opportunity for non-bank lenders to fill the loan demand vacated by the banks. Borrowers are generally small to medium sized businesses with non-investment grade ratings and are subject to loan terms controlled by the lenders (i.e., covenants, rates, and term) which provide additional risk controls,

Commented [HV(18]: Is it CERS who should seek to identify attractive commitments, or the KPPA investment staff and the CERS investment consultant?

Commented [CT19R18]: KPPA Staff/Consultant would be the most likely entities to source attractive commitments and be brought to the IC for approval and then the board to ratify.

higher yields than that of public fixed rate loans, and periodic cash flows. Private credit investments may be illiquid in nature and structured as limited partnership agreements.

~~Private credit investments may be illiquid in nature and structured as limited partnership agreements.~~

Selection of 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. Inflation Protected Assets

Real Estate

Investments are made in real estate equity and debt ~~real estate~~ for the purposes~~purpose~~ of achieving the highest total rate of return possible consistent with a prudent level of risk ~~.~~and provide returns that have a positive correlation to inflation.~~that correlate more highly to inflation.~~

The illiquid nature and complexity of real estate investments make it difficult for casual investors to effectively access the asset class. It is our belief that through active management and by investing with top tier managers that have aligned interests through co-investment and incentive-based compensation, CERS can maximize their risk-adjusted returns.

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~~ accessing~~access~~ managers with the expertise and capabilities to exploit market inefficiencies in the asset class. ~~The illiquid nature of real estate investments combined~~

[illegible]

Diversification benefits through lower~~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 that can reset to market and growth in existing asset replacement value~~and the increases in material and labor costs~~ during inflationary periods when material and labor costs increase.

- 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 t~~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 (closed-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~~- L~~linked s~~S~~ecurities ~~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 s~~S~~ensitive e~~E~~quities include publicly traded ~~equity and equity related~~ securities ~~in of~~ companies ~~which~~ that 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~~mining~~ers~~~~miners~~, natural resources, utilities, real estate,~~resource stocks,~~ and listed infrastructure companies. This category can also include, ~~but are~~is ~~not limited to, REITs,~~

~~MLPs as well as~~ ETFs and index products that invest in inflation sensitive securities. ~~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 predominantly~~tely~~ fixed ~~and/or permanent~~ or ~~at least~~ substantially long-lived, such as ~~. 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 forests~~forest~~ for the purpose of growing and harvesting the timber. ~~The timber~~tTimber 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 cashcashcash~~, 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 return 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 ~~5~~20% 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~~ Plan's liquidity needs, funding status, and allocation targets on an ~~investment by investment~~investment-by-investment basis.

~~The KPPA Investment Staff, with approval of the CERS investment Committee and CERS Board, may internally manage any structural allocations to passive indexes, subject to all policies and procedures regarding internal management as outlined in this Investment Policy Statement, consistent with the governing Plan documents.~~

D. Co-Investment Policy

The CIO has discretion to make direct co-investments in companies alongside of current G~~g~~eneral P~~p~~artners of CERS' Limited Partnership ~~.~~investments. Any co-investment opportunity must also ~~be part of the main account or fund into which CERS~~ be consistent with the strategy 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 the General Partner of an existing CERS' Limited P~~p~~artnership investment 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

Commented [HV(20]: Does this decision have to be approved by the IC and ratified by the CERS Board?

Commented [CT21R20]: Per my prior comment, it seems CERS leadership does want all decisions ratified by the board. Perhaps Vickie would like to insert some language earlier in the document to memorialize this operation.

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**
Equity	
Public Equity	MSCI ACWI ($ net)
Private Equity	Russell 3000 + 300 bps (one quarter) lagged)
Fixed Income	
Core Fixed	Bloomberg ~~Barclays~~ US Aggregate
Specialty Credit	50% Bloomberg ~~Barclays~~ US Corporate High Yield / ~~/~~ 50% ~~S&P~~Morningstar LSTA Leveraged Loan
Cash	FTSE 3 Month US T-Bill~~Citi Grp 3-mos Treasury Bill~~
Inflation	
Real Estate	NCREIF ODCE (one quarter lagged)
Real Return	US CPI + 3%
~~Absolute Return~~	~~HFRI Diversified Fund of Fund Composite~~

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:

<u>Total Public Asset Class Allocations</u>

Short-term

- For periods less than five years or a full market cycle, the Asset Class ~~Allocation~~composite performance 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~~composite performance 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.

<u>Individual Public Security Portfolios</u>: 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

Commented [HV(22]: I think the Public Equity benchmark needs to be changed to Russell with the recently approved change.

Commented [CT23R22]: No, the overall equity portfoli ...

Formatted ...
Formatted: Font: Bold
Formatted ...
Formatted Table
Formatted: Font: Bold, (Intl) Arial
Formatted ...
Formatted ...
Formatted ...
Formatted: Font: (Intl) Arial
Formatted: Font: (Intl) Arial
Formatted ...
Formatted: Font: (Intl) Arial
Formatted Table
Formatted ...
Formatted ...
Formatted: Font: (Intl) Arial
Formatted ...
Formatted: Font: (Intl) Arial
Formatted ...
Formatted: Font: (Intl) Arial
Formatted: Font: (Intl) Arial
Formatted: No Spacing
Formatted: Font: (Intl) Arial
Formatted: Font: Arial
Formatted: No Spacing, Line spacing: single
Formatted ...
Formatted: Font: (Intl) Arial
Formatted ...
Formatted: Font: (Intl) Arial
Formatted ...
Formatted Table
Formatted ...
Formatted ...
Formatted ...

- 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 a ~~both short-term and intermediate/~~long term n~~N~~et Internal Rate of Return~~s~~ (IRR) that ~~provide yields~~~~are in excess~~ exceeds ~~of~~ ~~core~~public market equity investments as measured by a ~~PME (~~Public Markets Equivalent (PME) comparison using the most appropriate public equity ~~index.~~index. ~~The~~ KPPA Investment Staff shall ~~quarterly~~ complete a comparison of performance between equity portfolio performance and Private Equity portfolio returns quarterly~~. The KPPA Investment~~ and ~~Staff~~ will report ~~to the Investment Committee~~ the following to the Investment Committee: ~~:~~

Short-term

- Alternative investments should earn a n~~N~~et ~~Internal Rate of Return (~~IRR~~)~~ ~~that place the investment~~ above the median ~~N~~net~~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~~the CERS Private Equity Index. Individual private equity investments should earn a n~~N~~et IRR above the median n~~N~~et IRR of other similar funds~~,~~ of the same vintage year, as reported by industry benchmarks.

Inflation Protected

Real Estate

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 net returns~~, net of all fees and expenses, in excess of~~above 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.~~

Real Return

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 a net~~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 (US CPI + 300 basis points) as well.

~~Achieve a positive risk/reward trade-off when compared to similar style Real Return Investment Managers.~~

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, or KPPA staff, 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. KPPA Internal Audit will schedule periodic reviews/audits of this function to ensure compliance with this IPS.

Commented [HV(24]: KPPA currently does not have a Compliance Officer. Do you want to expand this to say the Compliance Officer or Investment Staff assigned to evaluate compliance shall perform....?

Commented [CT25R24]: Will this change work?

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.~~US 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.

~~6.~~7. The assets managed by any one active ~~or passive~~ external investment manager shall not exceed 10% or 20% of the overall assets in the pension and insurance funds, respectively.

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 visits to at least 1/3 of all current managers occurring on a yearly basis.

Commented [HV(26]: KRS 78.790(4) limits the amount of assets managed by any active or passive investment manager to 15% of the assets in the pension and insurance funds, determined at the time of the purchase.

Commented [CT27R26]: This likely warrants broader discussion and could likely be a problem for passive implementation

Commented [HV(28]: Is this fiscal year or calendar year?

Commented [CT29R28]: I don't think fiscal or calendar matters, but rather the fact that staff is doing on site visits at least once every three years and they shouldn't all be done in one year to fulfill the requirement.

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 Real Return investments, d~~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. Leveraging the portfolio beyond a 100% invested position is not permitted, i.e. the notional value should not exceed the market value of assets.

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 is and hereby incorporated by this reference. The policy can be found publicly using the following link:

ISS U.S. Proxy Voting Guidelines.com

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.~~
~~J.~~I. CERS Proxy Voting Policy as amended and hereby incorporated by reference.

Commented [HV(30]: Is there a need for a separate Real Estate Policy? This is the only asset class to have a separate policy. Isn't the rules governing the Real Estate investments already set forth in this IPS?

Signatories

As Adopted by the CERS Investment Committee	As Adopted by the CERS Board of Trustees
Date:_	Date:
Signature:_	Signature:

Dr. Merl Hackbart	~~Ms. Betty Pendergrass~~Mr. George Cheatham
Chair, CERS Investment Committee	Chair, CERS Board of Trustees

Wilshire

MEMORANDUM

To: Kentucky County Employees Retirement System

From: Wilshire Advisors

Subject: Overview of Suggested IPS Edits

Date: September 17, 2024

Below is an overview of the key recommended edits to the CERS Investment Policy Statement. This memo focuses on the most substantive changes, while a complete view of all suggestions is shown in the redline version of the document included in your materials.

- Section I – Introduction
  - Section A – Purpose: strengthened and broadened the language in the first paragraph.
  - Section B – Philosophy: edited the second paragraph to reference other sections and address the level of risk as being determined via Asset Liability studies.
  - Section B – Philosophy: clarified the language around the intended use of active management.
- Section II – Responsibilities
  - There are several edits in this section intended to clarify the decisions that the CERS Board wishes to ratify upon recommendation from the Investment Committee, as well as clarifying the necessary communication between staff, IC, service providers and the Board.
  - Section D – Internal Investments: added to clarify the role of and procedures for use of internally managed asset and proxy accounts.
- Section III – Asset Allocation Guidelines
  - The approved targets and ranges effective 7/1/2024 are reflected.
  - The language around investment funding amounts and subsequent trading is amended.
  - Section B – Fixed Income: parts of this section are edited and reorganized to distinguish more clearly between core fixed income and specialty credit investments.
  - Section C – Inflation Protected Assets: the Real Return section has been updated to remove the language that allowed for this segment to be tactically ramped up or down based on the outlook for inflation and removed GTAA as an asset class to be used for implementation.
- Section IV – Monitoring
  - The benchmarks are updated to reflect name changes and to further clarify the timing for Private Equity and Real Estate

One area not currently addressed by this IPS edit is the Co-Investment Policy (Section III D). As written this policy allows for co-investments to be made at the CIO's discretion with some limitations. This was adopted to allow flexibility because co-investment opportunities are sometimes available for a limited time which could necessitate a decision and approval in a matter of weeks. Allowing CIO discretion as currently written provides guiderails while maintaining flexibility to take advantage of more co-investment opportunities, while requiring a traditional approval process offers greater Board oversight but may sacrifice the ability to do some deals.

KPPA

Kentucky Public Pensions Authority

CERS Investment Committee

Real Assets Recommendation

September 17, 2024

Asset Allocations

Over the last several years, the CERS portfolios have maintained a structural underweight to the Real Return asset class based on lack of compelling risk/return opportunities

CERS Pension - Target vs Actual Weights
September 6, 2024

Category	Market Value	Actual	Target	IPS Min	IPS Max	Tgt Diff
Equity	**$5,264,657,136**	**54.0%**				
Public Equity	$4,645,047,655	47.6%	45.0%	30.0%	55.0%	2.6%
Private Equity	$619,609,480	6.4%	8.0%	4.0%	12.0%	-1.6%
Fixed Income	**$3,585,934,035**	**36.8%**				
Specialty Credit	$1,950,950,857	20.0%	20.0%	16.0%	24.0%	0.0%
Core Fixed Income	$1,293,330,432	13.3%	13.0%	10.0%	20.0%	0.3%
Cash	$341,652,745	3.5%	2.0%	0.0%	5.0%	1.5%
Inflation Protected	**$905,076,062**	**9.3%**				
Real Return	$392,151,931	4.0%	7.0%	4.0%	10.0%	-3.0%
Real Estate	$512,924,132	5.3%	5.0%	3.0%	7.0%	0.3%
TOTAL PORTFOLIO	**$9,755,667,233**					

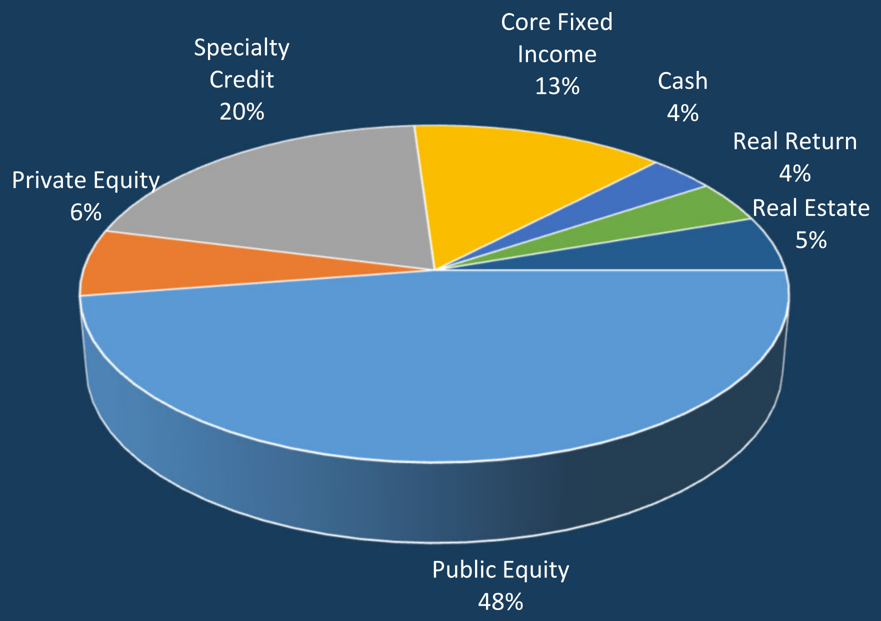
CERS Real Return - Target vs Actual Weights
2017 - Present

Year	Actual	Target	+ / -
2017	9%	15%	-6%
2018	9%	15%	-6%
2019	9%	15%	-6%
2020	7%	10%	-3%
2021	6%	13%	-7%
2022	3%	13%	-10%
2023	4%	13%	-9%
Sep-24	4%	7%	-3%

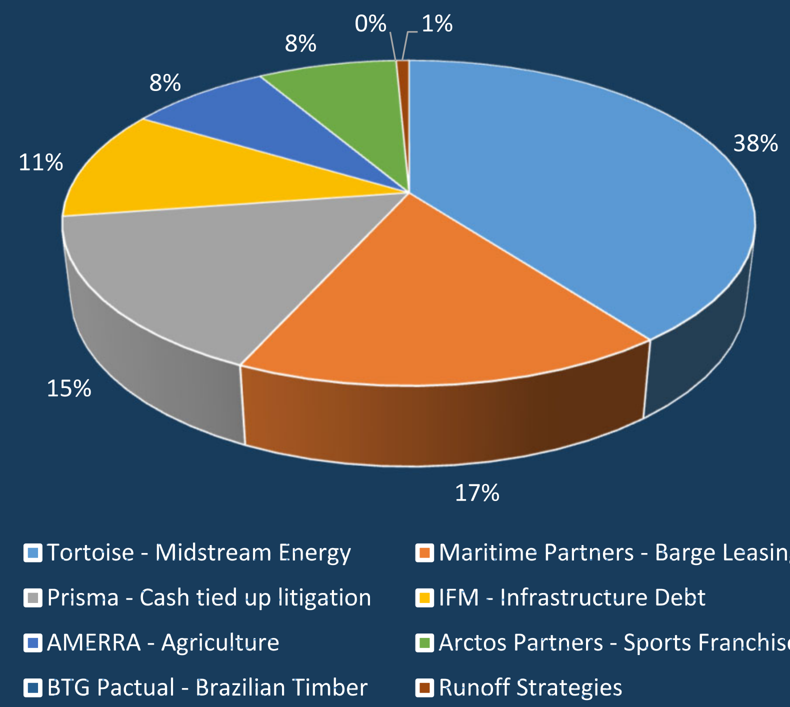
CERS County Employees Retirement System

Real Return Allocation Today

Current Asset Allocation

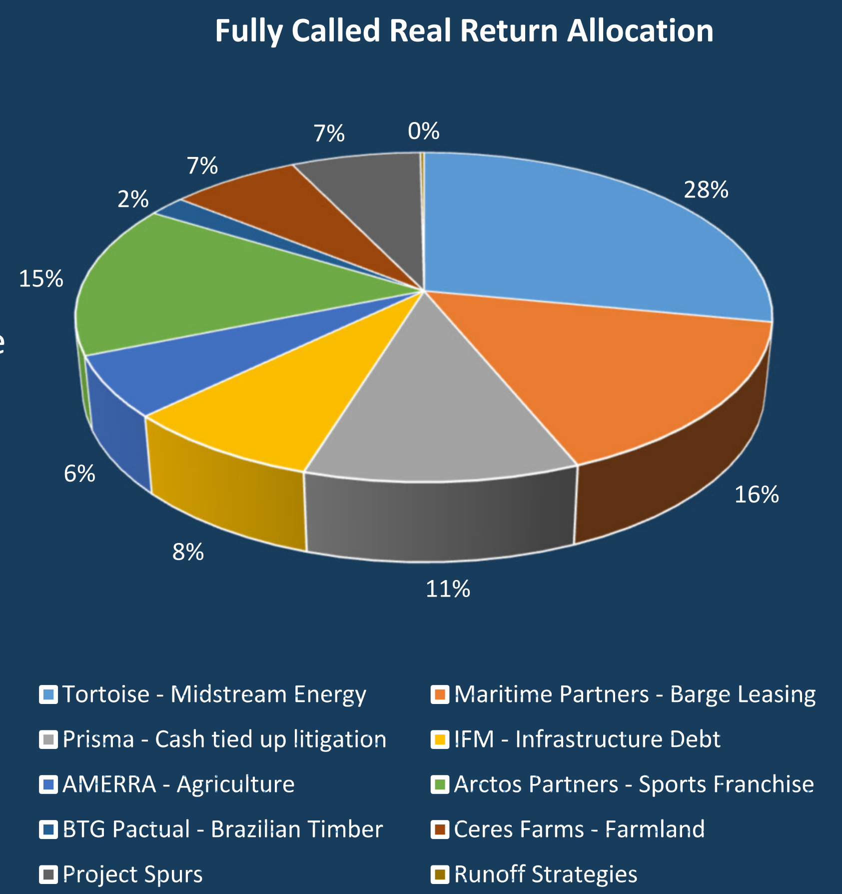


Current Real Return Allocation



Project Spurs - Impact and Rationale

- Unique investment opportunity in scarce, hard to replicate asset with defensive characteristics
- Favorable expected risk-adjusted return from steady and growing cash flows that mitigate inflation
- Low return correlations to current Real Return investments and the broader overall portfolio
- High alignment with control owner Strategic Value Partners, who is rolling its proceeds and carried interest as well as investing additional money in the new vehicle
- CERS will realize its current investment in Spurs at >2.0x net – Staff recommendation is to roll current exposure and add additional capital alongside Strategic Value Partners
- Will get CERS an additional 0.3 – 0.4% closer to Real Return target weight within 1-3 months, funded by cash on hand and sale of proxy assets



CERS
County Employees Retirement System

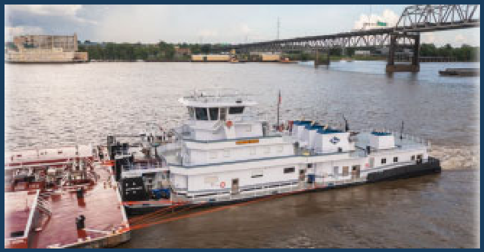
Real Return / Private Markets Investment Process

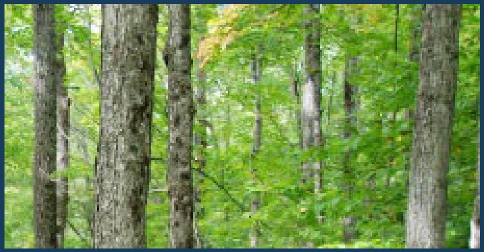
- CIO, Investment Staff and Consultant are responsible for overseeing Private Markets portfolio, including Real Return
  - Sourcing: Ongoing (not point-in-time) review of staff and consultant contacts, consultant databases, networking, reading, peer references, and inbound approaches.
  - Due Diligence: CIO and Investment Staff are responsible for evaluating managers' strategy, team, processes, and investments
    - Includes investor and other reference calls
    - Consultants / databases utilized as needed
  - Each investment opportunity is evaluated against:
  - (1) comparable investment managers / strategies
  - (2) other available investments and their risk / return characteristics

CERS
County Employees Retirement System

Other Real Return Strategies Reviewed / In Consideration

- Transportation leasing: Currently in diligence
- Energy credit / energy secondaries: Initial calls
- Mining credit: Early-stage evaluation
- Timberland: Early-stage evaluation
- Infrastructure: Early-stage evaluation
- Dedicated Commodities: Ongoing
- Global maritime: Passed
- Permanent cropland: Passed





CERS
County Employees Retirement System

Other Real Return Strategies Reviewed / In Consideration

- Global Maritime: Passed

Opportunity: Fund that primarily invests in transactions within the commodity shipping and maritime equipment industries.

- ➢ Highly cyclical market with global oversupply risk
- ➢ Lower barriers to entry with structured loans to the riskiest borrowers
- ➢ Strategy extension beyond lending to do vessel acquisition
- ➢ Limited workout experience and capability to internally manage any collateral repossession scenarios
- ➢ Significant Key Person risk
- ➢ Alignment concerns around the team’s lack of equity ownership at the GP level

CERS County Employees Retirement System

Other Real Return Strategies Reviewed / In Consideration

- Permanent Crops: Passed

Opportunity: Fund that primarily invests in permanent crop farms (e.g. wine grapes, tree nuts, apples, cherries, citrus) across the United States

- ➢ Higher exposure to weather, pest, and commodity price risk than currently approved Ceres strategy
- ➢ Significant water risk in several regions where crops like nuts and wine grapes are grown
- ➢ High upfront cost / 'J-curve' experience for crops that require long lead times before producing
- ➢ Weak historic returns (<1% net IRR through 3 and 5 years for prior funds)

CERS County Employees Retirement System

Other Real Return Strategies Reviewed / In Consideration

- Dedicated Commodities

Opportunity: Provides portfolio diversification benefits and low correlation to equities and fixed income in normalized markets while historically exhibiting positive correlation with inflation.

- Universe screened down to eight strategies/managers, with due diligence conducted on five
- Significantly trending markets with clustered performance profiles, boom-bust cycle behavior
- High overall volatility with performance that often lags over longer periods
- High correlation amongst constituents
- Smaller opportunity set, often relying on trading strategies to generate significant returns
- Less compelling risk-adjusted returns compared to currently available alternatives
- Continuing to monitor and evaluate as potential future investment opportunity

KENTUCKY PUBLIC PENSIONS AUTHORITY

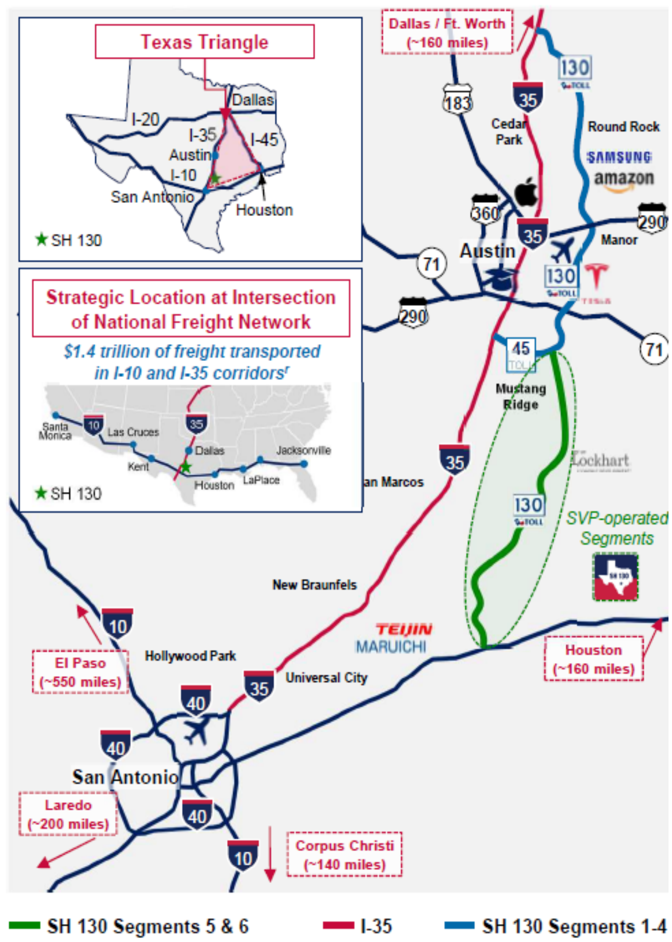
INVESTMENTS

To:	CERS Investment Committee
From:	Anthony Chiu, Deputy CIO
Date:	September 17, 2024
Subject:	Investment Recommendation – Project Spurs

KPPA Investment Staff is proposing an investment with Strategic Value Partners ("SVP" or the "Firm") in a continuation vehicle ("CV") for Project Spurs ("Spurs"). As of 2Q 2024, Spurs is a 9% position in Strategic Value Special Situations IV ("SVSS IV" or "Fund IV"), a 2017 vintage fund with $2.85 billion of committed capital. This includes $65 million from KPPA, which was less than the approved $75 million due to the fund being oversubscribed.

Spurs is a 41-mile toll road asset in Texas between Austin and San Antonio that SVP acquired directly from lenders in a 2017 restructuring. Today the Firm controls 65%, with the remainder held by the US Department of Transportation through its Build America program.

SVP has created a CV structure as they see compelling value in owning Spurs for several years beyond Fund IV's term, which expires in 2025. They believe Spurs remains well-positioned for growth because of Texas's continuing economic expansion; Spurs' market share gains from the more congested and less reliable I-35; and proposed development initiatives that could significantly boost Spurs' earnings and extend the current concession (which has 38 years remaining) by an additional 20 years.



This investment opportunity is a time-sensitive one that is expected to have significant investor demand. Two large investors have committed to anchor the CV with $500 million of the $1.45 billion that SVP is raising. SVP's Partners are also rolling their Fund IV proceeds from Spurs into the new CV and contributing new capital for a total internal investment of approximately $100 million, further aligning their interests.

Staff believes Spurs will provide an attractive risk-adjusted return with low correlation to CERS' existing overall portfolio and provide complementary exposure within the Real Return allocation. Following the recent asset allocation update, CERS' target portfolio weight for Real Return is 7%. This proposed investment would help the plans continue moving toward the target weight and will be fully invested during the 4th quarter of 2024.

Investment Process and History:
Spurs was originally constructed by a subsidiary of Spanish company Ferrovial, who was awarded a 50-year concession from the Texas Department of Transportation (TxDOT) in 2006. Ferrovial's subsidiary Cintra partnered with Texas-based Zachry American Infrastructure to construct the road, which opened for traffic in October 2012.

However, a combination of overly optimistic traffic projections, excessive leverage, and an ill-fated interest rate swap caused Spurs to file for bankruptcy in March 2016. Road construction flaws also appeared shortly after opening, for which Ferrovial and Zachry were sued and resulted in a settlement.

Through its direct sourcing relationships with European banks, SVP was able to buy enough of Spurs' discounted debt to become its control owner, restructure the debt, and bring the company out of bankruptcy in June 2017. After taking control, SVP replaced the Spurs management team and board; remediated the road construction flaws; recovered proceeds through litigation from Spurs' original contractors; and repaired relations with key stakeholders like TxDOT and local chambers of commerce and foundations where Spurs passes.

Spurs has benefited from Austin and Texas's recent economic and population growth, which is expected to continue through the duration of this investment. Combined with SVP's execution of its value creation plan, Spurs' revenue and EBITDA have both doubled from 2019 to 2023 - even amidst the COVID pandemic. Traffic grew more than 60% over the same timeframe, even as toll rates also increased nearly 30%, suggesting low demand elasticity and a significant value placed on the reliability of transit time on Spurs compared to the increasingly clogged I-35.

Business / People:
As Spurs exited bankruptcy in 2017, SVP engaged transportation facility management specialist Louis Berger Services to operate and manage the asset. The CEO and COO also had previous experience as Deputy Commissioners of two states' Departments of Transportation. Additionally, a former chairperson of the Texas Transportation Commission as well as two infrastructure investors with experience from Abertis and Global Infrastructure Partners were named as independent directors.

Over SVP's 7+ year investment, management and board members have cycled through and now feature several executives with experience at Transurban, a $40+ billion Australia-listed operator of toll roads in the US, Canada, and Australia. As shown below, the executive team continues to have construction and government relations experience which should aid Spurs' continued operations, growth, and potential additional concession.

Jenn Aument
Board Co-Chair

25+ years experience

- Current CEO of The New Terminal One at JFK Airport
- Former AECOM Global Chief Executive for Transportation
- Former President and CEO of North America at Transurban
- Former Commissioner at the Port of Virginia

Tyler Duvall
Board Co-Chair

20+ years experience

- Appointed Co-Chair in 2020; previously Chief Executive Officer at SH 130
- Current Chief Executive Officer and Co-Founder of Cavnue, a leading smart road company
- Former Number 3 Official and Assistant Secretary for Transportation Policy at USDOT

Adam Hesketh
Chief Executive Officer

20+ years experience

- Joined SH 130 as CFO and subsequently appointed CEO
- Former Managing Director at KPMG's Infrastructure Advisory Practice
- Former CFO, North America and Vice President: Development at Transurban

Manish Jain
Senior VP, Revenue and Analytics

20+ years experience

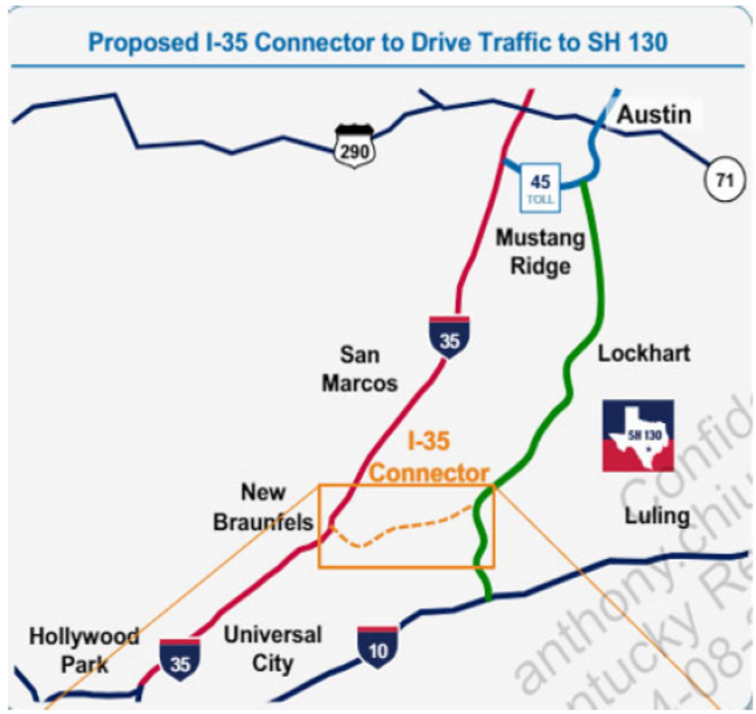
- Currently leads the traffic, revenue, and data analytics functions
- Former Specialist Leader at Deloitte
- Former Principal and Senior Manager at Transurban

After investing over $160 million to remediate and repave Spurs from 2017-22, Spurs is well-positioned to maintain and even grow margins with minimal capex needs until 2031.

Besides additional population growth and economic development, a potentially significant return driver for Spurs is a non-tolled connector road to I-35 that could drive additional traffic and gain a 20-year extension of Spurs' concession to 2082.

This would require state-level legislation and has broad support that helped it pass the Texas House in 2023. SVP is hopeful the bill will pass during the next legislative session in 1H 2025 and projects that the additional concession would boost net multiple and IRR by [redacted] respectively.

Notably, this is not incorporated in SVP's original base case projected returns of [redacted]. Subsequently, Spurs' performance in the first half of 2024 has been above forecast across the board and has increased SVP's base case to [redacted]



While this growth would of course be welcome, Staff is viewing Spurs as an attractive infrastructure asset that will likely (1) have steady cash flows that grow with inflation and (2) retain value as a scarce, essential, and difficult to replicate asset.

Even in Wilshire's low scenario that discounts SVP's traffic volume growth by 50% and assumes a below-market exit multiple of 20x EBITDA, Spurs' expected return would be [redacted] at the end of the investment's term in 2032. For reference, one of KPPA's managers who has also previously invested in Spurs' debt viewed typical toll road valuations to be in the 30-45x range. Additionally, the Northwest Parkway toll road near Denver with slower growth dynamics than Spurs traded at over 65x in May.

Performance:

SH-130 in Fund IV	Invested ($ MM)	Realized ($ MM)	Unrealized ($ MM)	Total Value ($ MM)	Gross Multiple	Gross IRR
1Q 2024	$ 152	$ 93	$ 316	$ 409	2.7x	22%

*Exiting Fund IV investor returns expected to be [redacted]
Source: Strategic Value Partners

Conclusion: Given the attractive asset, compelling market opportunity, and current Real Return allocations, Staff is recommending an investment of $60 million to be shared among all CERS plans pending successful legal negotiations. When fully funded, this would represent an additional ~0.3–0.4% of plan assets (depending on fluctuations in market value). It is anticipated this investment would be funded by existing cash or the unwinding of proxy positions based on the specific needs of each plan.

<u>Investment and Terms Summary</u>

Type of Investment: Real Return

Structure: Continuation Vehicle

Term: 8 years, with 3 one-year extensions (2 at GP discretion, 1 with Advisory Committee consent)

Management Fee: 1% on invested cost

Profit Sharing: 10% of profits above a 10% compounded annual return
12.5% of profits above a 12.5% compounded annual return
20% of profits above a 15% compounded annual return

Purpose: Provide CERS with exposure to a unique, long-lived real asset with steady and growing cash flows

Risks: Inaccurate traffic and revenue projections, leverage, regulatory / legal, illiquidity

Exp. Net Return: 7% - 10%

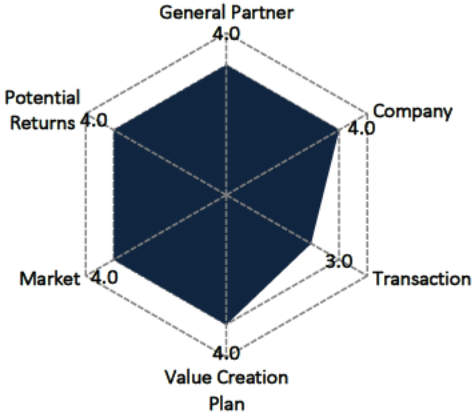
*No placement agents have been involved or will be compensated as a result of this recommendation.

Project Spurs

Final Diligence

General Partner	SVP
Vintage Year	2024
Timing	August 2024
Strategy	Core-Plus Infrastructure
Sector	Generalist
Investment Structure	Continuation Vehicle
Region	North America
Purchase Price (EV, $M)	[redacted]
Capital Structure	74% Equity, 26% Debt
Fund/LP Co-Inv. Equity ($M)	$1,220
LTM Revenue (2023A)	$72.7M
LTM Adj. EBITDA (2023A)	$60.5M
Base Case Returns	[redacted]
Base Case Hold	8 years
Fee / Carry* / Hurdle*	1% / 10% / 10%

*Tiered carry/hurdle = 10%/10%, 12.5%/12.5%, 20%/15%



Key: 5 = Top Decile; 4 = Top Quartile; 3 = Average;
2 = Bottom Half; 1 = Bottom Decile; 0 = No Information

Past performance is not indicative of future results.

General Partner

Founded in 2001 by Viktor Khosla, Strategic Value Partners ("SVP" or the "Firm") is a global investment manager specializing in opportunistic credit, distressed debt, and special situations. The Firm currently manages $18.4 billion in AUM across asset classes through a combination of both open-end and closed-end investment vehicles. Known for its expertise in stressed and distressed investments, SVP also has an established real asset track record, including $3.5 billion of invested capital in infrastructure assets, which includes 11 toll road investments. Notably, Wilshire has a longstanding relationship with the Firm, including allocations to various SVP strategies, the most recent being the Strategic Value Capital Solutions Fund II in 2023.

Company & Transaction

State Highway 130 ("SH 130" or the "Asset") is a toll road servicing the fast-growing Austin-San Antonio corridor in Texas. The Asset was originally built by Spanish transportation infrastructure company Cintra and opened in 2012. Despite SH 130 performing well since opening, in 2017 the Asset became over-levered and was struggling to service the $1.6 billion of debt on its balance sheet, which SVP acquired for ~50% of face value from two European commercial banks. SVP ultimately led SH 130's restructuring and emerged as the control equity owner in 2017, allocating $348 million across its Special Situations Fund III and Special Situations Fund IV and $452 million across two SMAs (the "Existing Funds"). SH 130 is currently owned by SVP (~65%), U.S. Department of Transportation (~32%), and others (~4%).

Currently, SVP is seeking to transfer its ~65% ownership interest in SH 130 Concession Company, LLC (the "Company"), which owns and operates the Asset, from the Existing Funds to a single-asset continuation vehicle ("CV") that will be managed by SVP. The transaction is taking place at 97.6% of NAV as of March 31, 2024, which implies total equity for the CV of approximately $1.22 billion. The proposed entry enterprise value for the Asset is [redacted], which implies a valuation of [redacted] EV/2024E EBITDA. Anchor investors for the CV are [redacted] who are responsible for setting the entry price and terms.

Value Creation Plan

SVP's anticipated value creation plan for the Asset includes various growth drivers, including government-mandated toll escalations, organic traffic volume growth, existing excess road capacity to absorb additional demand, I-35 connector development and associated 20-year concession extension, industrial development along the traffic corridor, and trucking partnerships

Track Record

Since the strategy's inception in 2008, SVP has raised approximately $10.2 billion in total commitments across five Strategic Value Special Situations Funds ("SVSS"). Funds I-IV have generated strong returns and Fund V, while relatively early, is tracking well.

Fund	Vintage	Size ($M)	Net ROI	Net IRR
SVSS V	2021	5,089	1.3x	16.0%
SVSS IV	2017	2,500	1.8x	15.2%
SVSS III	2013	1,310	2.3x	13.7%
SVSS II	2010	918	1.9x	12.6%
SVSS I	2008	346	1.9x	15.0%

Source: Strategic Value Partners as of May 31, 2024.

Investment Merits

- Marquee, difficult to replicate toll road asset
- High-quality general partner and management team, both with an extensive history in the space
- Attractive risk-adjusted return profile

Investment Concerns

- Traffic volume risk
- Elevated entry multiple
- Management fees and carried interest

State Highway 130 Overview

Vital toll road providing a high-speed, congestion-free route in the heart of the Texas Triangle

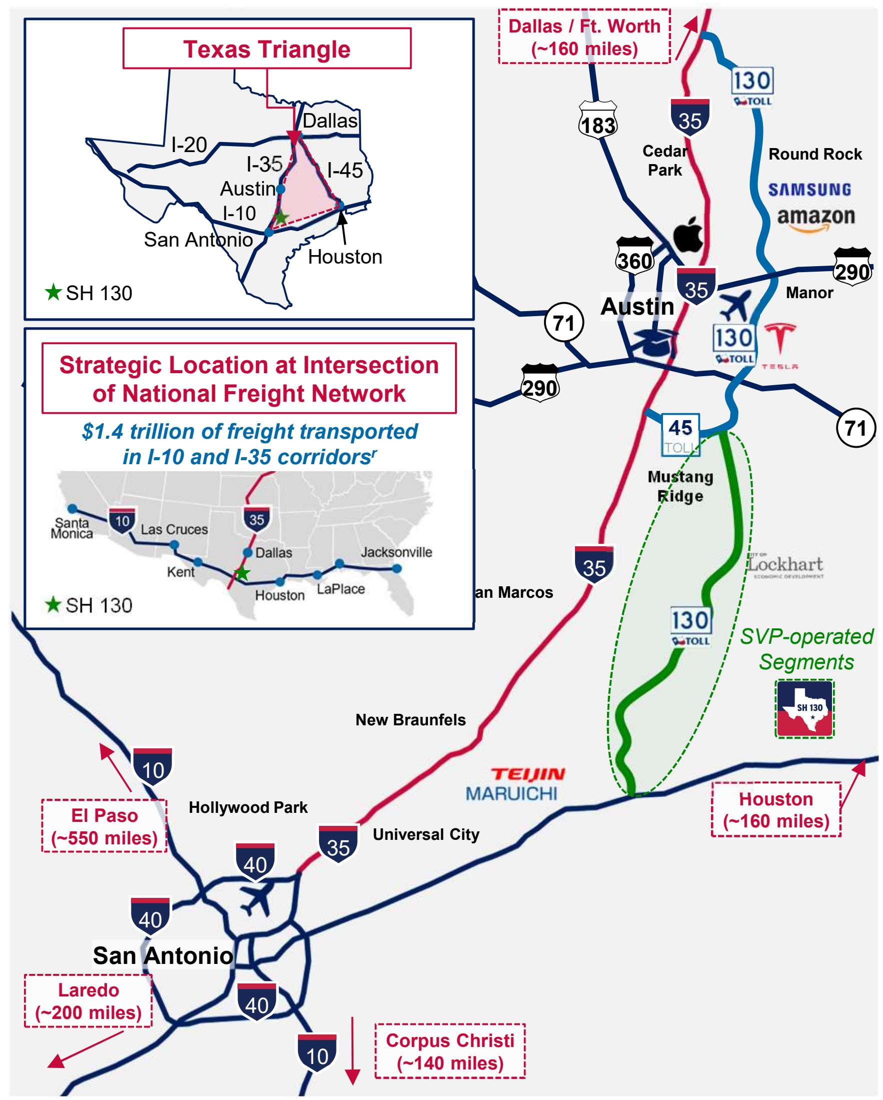
SH 130 segments 5 & 6 is a 41-mile, 4 lane toll road in Texas serving as critical link between Austin and San Antonio metropolitan areas, facilitating local and long-distance travel

- SH 130 manages, operates and maintains SH 130 Segments 5 & 6 under a 50-year concession agreement (**~39 years remaining**) with Texas Department of Transportation ("TxDOT")
- Significant customer value proposition, allowing users to bypass heavily congested traffic on I-35 **providing meaningful time savings and reliability**[k]
  - **Substantial unutilized capacity to absorb demand growth** in the corridor and continue taking share from capacity constrained competing route (I-35)[w]
  - **99% of trips with on-time arrivals on SH 130** compared to **20% of trips with on-time arrivals on I-35**[l]
- Vital asset connecting **two of the fastest growing MSAs in the country**[c] and situated strategically in a corridor experiencing **rapid commercial and industrial investment** (over $50bn capital projects currently being executed)[c]
  - Austin and San Antonio expected to continue **growing at multiples of U.S. growth rates**[c] as the region converges to a single mega MSA
- **Located at the intersection of I-10 and I-35**, SH 130 serves as an essential link in the prominent **Texas Triangle freight network**
- **United States-Mexico-Canada Agreement trade route corridor** via the Laredo border crossing (#1 U.S. inland port by trade value)[m]
- Attractive toll escalation regime providing an **embedded inflation hedge and direct GDP-linkage**, with no requirement to lower tolls

SH 130 Segments 5 & 6: Key Facts

Asset	▪ 41 miles; 2x2 lanes; 2 mainline gantries (each direction) and 12 ramp gantries; fully electronic tolling system ▪ 85 mph posted speed limit
Concession	▪ 50-year concession with 39 years remaining (2062 expiry)
Toll Regime	▪ Annual escalation based on Nominal Gross State Product per Capita for Texas, with no requirement to lower tolls ▪ Current Full Length Toll Rate (Class A / D): $9.49 / $37.87[n]
Revenue	▪ 2023 revenue ~93% above 2019 revenue (pre-COVID) ▪ ~38% light vehicles; ~62% heavy vehicles[o]

Critical Artery in Highly Congested Corridor



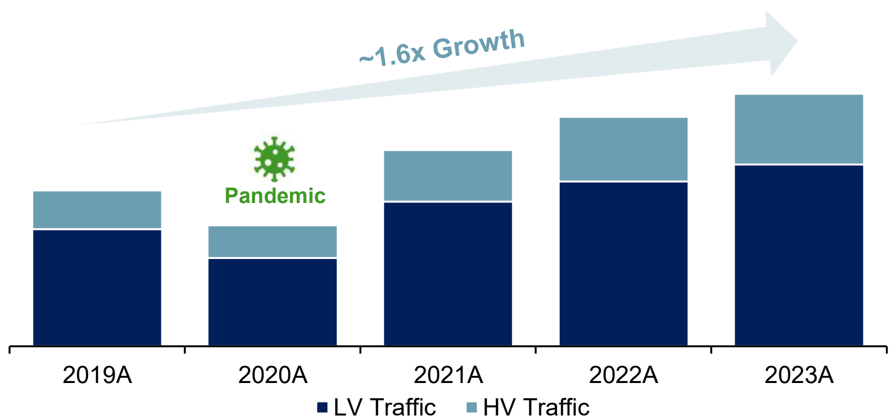
SH 130 Segments 5 & 6 — I-35 — SH 130 Segments 1-4

Compelling Traffic Growth and Financial Trends

Attractive historical double-digit volume and EBITDA[s] growth

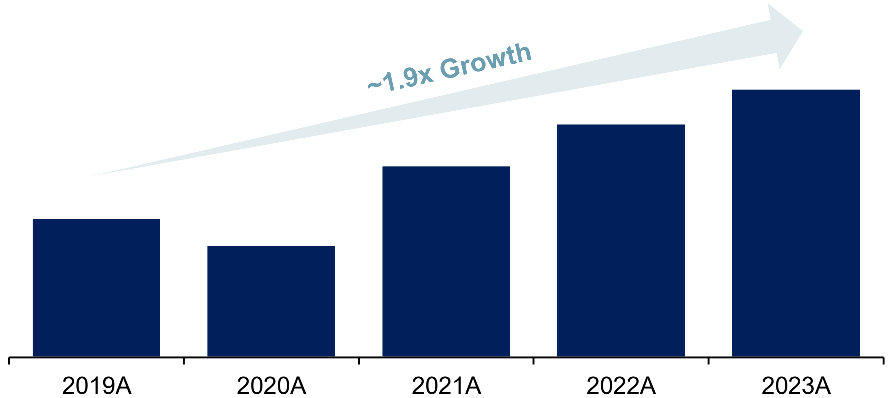
Robust Historical Traffic Growth[1]

~13% CAGR since 2019[g]



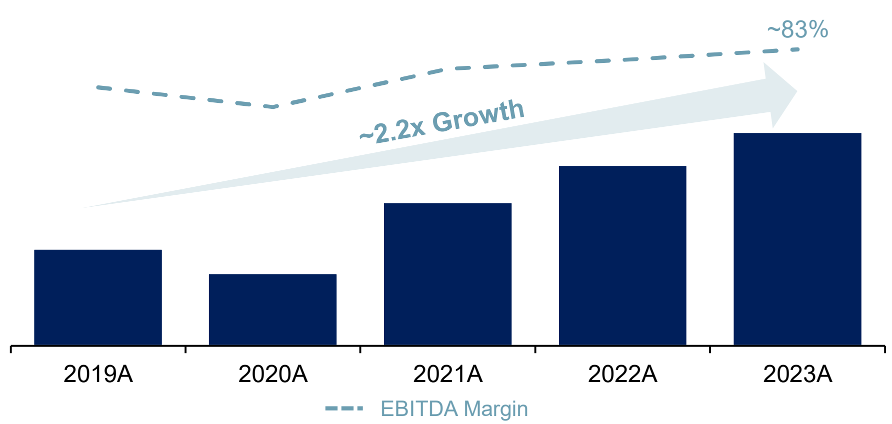
Significant Revenue Growth driven by Volume and Price[2]

~18% CAGR since 2019[g]



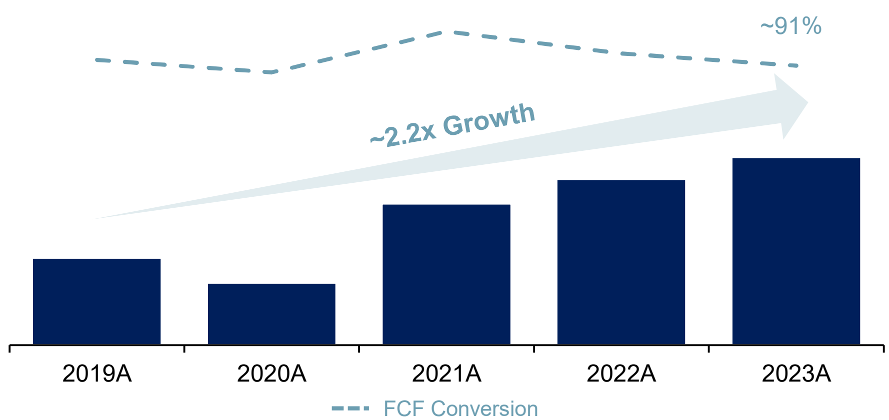
High and Growing EBITDA[s] Margins

~22% CAGR since 2019[g]



Strong FCF Profile Driven by Low Maintenance Capex[3]

~89%+ average FCF conversion since 2019[g]



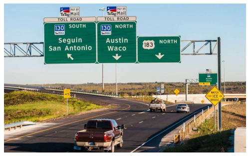
Note: Past financial performance is not indicative of future results. There can be no assurance that any expected trends or developments presented herein will continue

1. Growth rates based on number of transactions
2. Reflects toll revenue after revenue adjustments and TxDOT revenue share
3. Reflects EBITDA less recurring capex; Please refer to Endnote S on page 15 for further detail on EBITDA

SH 130 Key Investment Highlights

Well Located in Booming Economic and Demographic Corridor

- Link between two of the **fastest growing MSAs in the U.S.: Austin and San Antonio**[c]
- Essential route for US-Mexico freight movement, with **10% of all domestic truck freight**[c] passing through the corridor
- **Significant corporate investment** adjacent to SH 130 (e.g., Tesla, Amazon, Samsung, Lockhart industrial park)[h]



Positioned for Continued Market Share Growth by Offering Significant Value Proposition

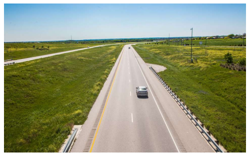
- SH 130 offers **time savings and greater reliability,** which we believe is poised to increase from potentially **worsening I-35 congestion**[k]
- SH 130 has **taken share from I-35**[1] over time, with **headroom to continue** capturing rapid growth due to available capacity
- I-35 is expected to **remain congested despite planned expansion**[2]

Long-Dated Concession Agreement with Favorable Toll Regime

- **~39-years remaining concession life** subject to annual toll escalation with **embedded inflation hedge**
- Significant **outperformance of toll regime** relative to competing toll roads[i]
- **Favorable concession agreement terms**

Well-Maintained Asset with Efficient Operating Model

- Substantial **remediation of prior roadway issues** with **minimal near-term capex expected**[j]
- **Independent operator** with focus on optimizing for efficiency and value maximization
- Efficient operations with **fully electronic, open road tolling** with **no collection risk exposure**[p]



Compelling Traffic Growth and Financial Trends

- **Strong historical growth** in revenue and EBITDA[s] (~18% and ~22% CAGR between 2019-2023, respectively)
- Economic shock **resiliency**, with 2023 revenue ~93% above pre-COVID (2019) levels[g]
- **Double-digit revenue and EBITDA** projections[b] underpinned by economic trends and development underway

High Quality Management Team Driving Substantial Upside That the Company Can Actively Influence

- Management team comprised of **highly experienced industry veterans**
- Significant **operational and financial management achievements already accomplished**
- Additional developments underway create **substantial near-term benefit potential** (e.g., Lockhart interchange, TruckPort, and VMS)
- Government partnership efforts create **portfolio of potential 'step-change' upsides** (e.g. Connector/concession extension, I-35 Corridor partnership, Caldwell site partnership)

Exceptional Community Partner and Established ESG Practices

- **Demonstrated positive relationships** with key community stakeholders and government bodies
- Ongoing work with local and state governments to **advance priorities**
- **Strong ESG programs complement positive community engagement**, with both accomplishments to date and programs underway

1. Based on management analysis of SH 130 market share vs. I-35 using Streetlight data for trips between I-10 to SH 130 Segments 1-6 to I-35 in Jarrell vs. either of (a) I-35 all the way from NE of San Antonio to Jarrell, or (b) I-35 NE of San Antonio to SH 45SE to SH 130 Segment 1-4 to I-35 in Jarrell
2. Based on management analysis of current public plans, which continue to predict that I-35 will remain at capacity despite $5bn+ in upgrades