STATEMENT OF INVESTMENT POLICY

COMBINED INVESTMENT FUND (THE DEFINED BENEFIT TRUST FUNDS, THE LIFE INSURANCE RESERVE FUND, AND THE HEALTH CARE TRUST FUNDS)

LAST APPROVED JANUARY 1, 2022
POURPOSE

The Public Employees’ Retirement Association of Colorado (Colorado PERA or PERA) is a defined benefit plan, created by Colorado Statute 24-51-201:

There is hereby created the public employees’ retirement association, for the purpose of providing the benefits and programs specified in this article, which shall be a body corporate with the right to sue and be sued and the right to hold property for its use and purposes.

Notwithstanding the applicability of sections 2-3-103, 24-4-103, 24-6-202, and 24-6-402, C.R.S., as provided for in this article, the association shall not be subject to administrative direction by any department, commission, board, bureau, or agency of the state. The association is an instrumentality of the state.

The Statement of Investment Policy (SIP) sets forth the investment policies by which the Combined Investment Fund (the defined benefit trust funds, the life insurance reserve fund, and the health care trust funds) will be managed. This SIP is consistent with, and complements, related Colorado Statutes and is intended to be binding upon all persons with authority over PERA’s investments. Deviation from the SIP is not permitted without explicit written permission, in advance, from the Board of Trustees (Board). This SIP was adopted on November 19, 2004 and most recently amended on January 1, 2022.

INVESTMENT PHILOSOPHY

The investment philosophy for PERA has been determined with careful consideration of its primary fund purpose, fiduciary obligations, statutory requirements, liquidity needs, income sources, benefit obligations and other general business conditions. The investment philosophy embraces the following:

» Strategic asset allocation is the most significant factor influencing long-term investment performance and asset volatility. The asset allocation targets, determined by the Board, will be adhered to through a clearly defined rebalancing program.

» The fund’s liabilities are long term and the investment strategy will therefore be long term in nature. Strategic decisions will prevail in determining asset allocation rather than tactical or short-term market timing decisions.

» The Board recognizes that the strategic asset allocation is expected to achieve its objective over long time periods (e.g., 30 years) and that in shorter periods, the range of expected returns is wide. Given the perpetual nature of PERA’s investment time horizon, the Board believes the long-term focus of the strategic asset allocation is vital when reviewing success of the investment program.

» The asset allocation policy and its resulting diversification benefits will be periodically reexamined to ensure its appropriateness to the then prevailing liability considerations.

» Market-related risk and non-market related risk investments will be utilized. (Market-related risk refers to risk systematic to a market or risk embedded in the strategic asset allocation policy. Non-market related risk refers to risk derived from active management or tactical decisions.) Market-related risks are expected to produce returns proportional to the level of those risks over long periods of time as a natural feature of reasonably efficient capital markets. Non-market related risks may produce additional returns when capitalized upon through skilled active management in the presence of some degree of market inefficiency. As a long-term investor, PERA will invest across a wide spectrum of market-related risk investments, categorized in asset classes, in a prudent manner consistent with the strategic asset allocation policy referred to above. Passive investing can be a desirable way of obtaining market-related risk exposure to asset classes.

» Non-market related risks, also known as active management risk, may be expected to add value over passive investing with comparable benchmarks, under appropriate conditions, and can be employed by the fund with controls in place that are appropriate to the particular investment.
Illiquid and long-lived investments are expected to provide a return premium over more liquid alternatives. As a long-term investor, PERA will take on illiquid investments when it believes those will provide more favorable returns on an absolute and a risk-adjusted basis compared to liquid markets, and only to a degree where the fund’s ability to meet benefit payments and other cash outflows is not compromised.

Costs of an investment program matter. PERA will seek to manage all investment-related costs closely.

INVESTMENT GOALS AND OBJECTIVES

The function of PERA is to provide present and future retirement or survivor benefits for its members. This objective requires the prudent assumption of investment risk in seeking to maximize long-term investment returns while incorporating the fund’s liability requirements. The future investment performance of the fund directly affects its future financial strength. However, the greater the expected return of the strategic asset allocation policy, the higher the risk, and thus the greater the volatility of expected returns. With this greater volatility, the volatility of the surplus (deficit) of the plan may also be greater. The optimal balancing of these return and risk considerations will be considered in the context of the fund’s short-term and long-term benefit obligations.

ROLES AND RESPONSIBILITIES

Although not specifically required by Statute, the Governance Manual, adopted November 2001, and subsequently updated and revised, identifies the roles and responsibilities of the various parties that oversee the investment and management of the Combined Investment Fund.

BOARD OF TRUSTEES

In accordance with PERA Law, the Board has complete control and authority to invest the funds of PERA. As fiduciaries, Trustees shall carry out their functions solely in the interest of PERA members and for the exclusive purpose of providing benefits and defraying reasonable expenses incurred in performing such duties. The Board shall diversify the investments of PERA so as to minimize the risk of losses unless, in light of the circumstances, it is not prudent to do so. The Trustees shall act with the care, skill, prudence, and diligence in light of the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use.

Specific responsibilities, as defined in the Governance Manual, include:

- Approve statements of investment policy and philosophy and review the statements at least biennially
- Approve the strategic asset allocation and associated benchmarks
- Ensure that an asset/liability study for the defined benefit trust funds is performed at least every three to five years, or more frequently if it so determines, and review the results
- Appoint, evaluate, and terminate the investment consultant

INVESTMENT COMMITTEE

The Investment Committee is responsible for assisting the Board in overseeing the PERA Investment Program. Specific responsibilities, as defined in the Governance Manual, include:

- Recommend to the Board statements of investment policy and philosophy, and review the statements at least biennially
- Recommend to the Board the strategic asset allocation and associated benchmarks
- If requested by the Board Chair, perform an asset/liability study of the defined benefit trust funds at least every three to five years, or more frequently if so directed by the Board
- Review, at least annually, PERA’s compliance with the statement of investment policy
- Review costs of the investment program
Review total fund, asset class, and investment manager performance and risk

If requested by the Board Chair, recommend to the Board the investment consultant

Advise the Board on any other investment matters and make recommendations for Board action when necessary

Additional monitoring and reporting requirements are specified in the Governance Manual.

INVESTMENT MANAGERS
Internal or external investment managers will invest plan assets according to the investment style for which they were hired and their judgments concerning relative value of securities. In particular, investment managers are accorded full discretion, within policy and guideline limits, to:

» Select individual securities and other investment exposures as defined in their mandates

» Diversify portfolio assets

STAFF
The overriding role of the Staff is to assist the Board in managing the PERA Investment Program. In this regard, as defined in the Governance Manual, Staff is expected to:

» Recommend to the Investment Committee statements of investment policy and philosophy, and review the statements with the Investment Committee at least biennially

» Coordinate an asset/liability study of the defined benefit trust funds at least every three to five years, or more frequently if so directed by the Board

» Develop, within policy parameters approved by the Board, investment manager structures for each asset category in which PERA invests

» Negotiate and approve guidelines and contracts for each investment manager

» Execute portfolio rebalancing in accordance with the policies of the Board

» Advise the Board and the Investment Committee on any other investment matters

» Recommend to the Investment Committee the investment consultant

Additional monitoring and reporting requirements are specified in the Governance Manual.

CONSULTANTS
Consultants are fiduciaries and shall discharge their duties with respect to this fund solely in the interest of the members and benefit recipients with the care, skill, prudence, and diligence under the circumstances then prevailing.

Qualified Consultants include those professionals with the background, expertise, and demonstrated success as institutional investment consultants, and with research/database access to assist in providing investment program advice.

CUSTODIAN
The Custodian(s) holds directly, through its agents, its sub-custodians, or designated clearing systems, assets as designated by the Board. The Custodian is accountable for registration of those designated assets in good delivery form, collection of income generated by those assets, and any corporate action notification. The Custodian(s) is responsible for delivery and receipt of securities of the aforementioned transactions. The Custodian(s) is required to provide records and reports, performance reporting, accounting reports and other services included by contract. The Board may opt to designate other duties to the Custodian(s).
**ASSET ALLOCATION POLICY**

PERA’s 2021 Policy Benchmark weights and long-term target asset allocations and ranges are specified below.

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>2021 Policy Benchmark Weight</th>
<th>2021 Permissible Ranges</th>
<th>Long-Term Target Allocation</th>
<th>Permissible Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Equity</td>
<td>55.5%</td>
<td>49.5% to 61.5%</td>
<td>54%</td>
<td>48% to 60%</td>
</tr>
<tr>
<td>Fixed Income</td>
<td>23.5%</td>
<td>18.5% to 28.5%</td>
<td>23%</td>
<td>18% to 28%</td>
</tr>
<tr>
<td>Private Equity</td>
<td>8.5%</td>
<td>4% to 13%</td>
<td>8.5%</td>
<td>4% to 13%</td>
</tr>
<tr>
<td>Real Estate</td>
<td>8.5%</td>
<td>4% to 13%</td>
<td>8.5%</td>
<td>4% to 13%</td>
</tr>
<tr>
<td>Alternatives</td>
<td>4.0%</td>
<td>0% to 12%</td>
<td>6%1</td>
<td>0% to 12%</td>
</tr>
<tr>
<td>Cash</td>
<td>0%</td>
<td>0% to 3%</td>
<td>0%</td>
<td>0% to 3%</td>
</tr>
<tr>
<td>Total Fund</td>
<td>100%</td>
<td>—</td>
<td>100%</td>
<td>—</td>
</tr>
</tbody>
</table>

1 Maximum allocation to Alternatives. The Policy Benchmark weight will be set yearly based on final 12/31 weights, rounded to the nearest 0.5%. Any uninvested allocation will be re-allocated to the Public Markets Benchmark.

The strategic asset allocation policy will be periodically reviewed, as described under “Investment Philosophy” and “Roles and Responsibilities.”

**REBALANCING POLICY**

The purpose of the rebalancing policy is to ensure the adherence to the strategic allocation plan. Unexpected changes in market values may, on occasion, cause the actual asset allocation to fall outside of the allowable ranges. This policy applies to all asset classes in which PERA invests and requires Staff to implement rebalancing trades if, as of any quarter end, the allocation to any asset class is outside the allowable ranges. The Board recognizes, however, the inherent difficulty in managing the allocations to the illiquid (private) asset classes. While the Board expects there to be a process in place that attempts to estimate capital calls and distributions in the private asset classes, it recognizes the difficulty in buying and selling partnership interests or real estate to manage the Fund’s allocation to these asset classes.

As such, with respect to PERA’s private asset classes, the Board expects the allocations to these areas to be managed as close as practical to the policy targets. As of any quarter-end, the Board expects Staff to report private asset class allocations that fall outside the prescribed ranges. In addition, the Board expects Staff to provide an implementation recommendation, if any, to bring the fund’s allocation to these areas back within the allowable ranges.

Managing the allocations to the public asset classes involves a risk reduction trade-off with increased transaction costs. As such, the Board expects Staff to implement this policy in a manner which seeks to minimize the impact of transaction costs. The Board also expects Staff to use cash contributions and cash needs to move the Total Fund’s asset allocation as close as practical to the policy targets.

When markets move such that the Fund’s normal cash flows are insufficient to maintain the Fund’s actual asset allocation within the permissible ranges as of any quarter end, the Board expects Staff to implement the necessary transactions to bring the Fund’s allocation back to within the allowable ranges. Before a rebalancing transaction is implemented, the Board expects Staff to identify those portfolios that are likely to have the lowest cost of trading. Absent any asset class structure considerations, the Board expects these low trading cost portfolios to be utilized more frequently to implement required Total Fund rebalancing.
ELIGIBLE ASSET CATEGORIES

The Board is responsible for identifying asset categories in which the fund will invest. The following are the asset categories in which PERA currently invests along with a discussion of market efficiency in each category.

The efficiency of markets is relevant to expected return opportunities. Highly efficient markets provide less opportunity to add value above market returns. Highly inefficient markets provide more opportunity to add return above what is available by the market. This above market return expectation can be referred to as alpha. Market return can be referred to as beta.

GLOBAL EQUITY

PERA's Global Equity asset class includes a combination of public U.S. and non-U.S. equity markets. The asset class is a primary driver of total fund return in the long run, while also providing liquidity to the total fund. Capital market theory suggests that PERA should be fully diversified globally, not just locally. The role of the Global Equity asset class is to provide capital appreciation and income for the Total Fund. While equities provide an opportunity for long-term growth, it is a volatile asset class, which must be balanced with a diversified portfolio.

The U.S. equity market is one of the most efficient capital markets in the world because of the availability of public information regarding the future prospects of individual companies, combined with the numerous market participants rendering assessments of this information. In structuring portfolios, financial theory and empirical evidence suggest that a broad-market index, that encompasses the entirety of the U.S. equity market, will provide the most efficient portfolio structure.

Non-U.S. equity markets encompass those of developed and emerging economies. Individual country markets exhibit varying degrees of market efficiency. One requirement of market efficiency is the ability of capital to flow freely among markets. Capital flows in non-U.S. equity markets are sometimes hampered by capital controls and less liquidity relative to that available in the U.S. Therefore, it is expected that the PERA non-U.S. equity exposure will be structured to attempt to capitalize on the perceived inefficiencies of these markets.

While equity markets are very efficient, they are not perfectly efficient. When appropriate skill is available, it may be possible to successfully use active management techniques to make modest improvements over benchmark returns, with acceptable levels of risk.

FIXED INCOME

The role of Fixed Income is to provide diversification and liquidity, while reducing total fund volatility. Fixed income provides a source of diversification relative to an equity-oriented portfolio. The volatility (investment risk) of fixed income securities is substantially lower than the volatility of equities. In addition, there are significant differences in the pattern of returns between equity and fixed income investments.

This suggests that when combined with equity securities and other assets, a fixed income allocation can serve to reduce the overall risk of the portfolio without materially sacrificing return potential.

The fixed income asset class is a diverse capital market. Common public securities include government, mortgage-backed, and corporate bonds of U.S. and non-U.S. issuers. It also includes bonds issued by high-quality as well as low-quality companies and countries. While fixed income markets are relatively efficient, they are not perfectly efficient. Fixed income can experience less efficiency at times and in certain segments. The Fixed Income portfolio may make use of both active and passive investment mandates and will include allocations to all major segments of the core fixed income market, with a primary focus on higher quality fixed income. When appropriate, the portfolio may also include a small allocation to non-core assets.
PRIVATE EQUITY

The role of Private Equity is to provide enhanced returns beyond what is available in public equity, while also providing diversification. The private equity asset class can encompass many different and distinct asset categories. Currently, the PERA portfolio is comprised of various private equity investments—largely buyout, growth and venture capital partnerships, and special situations. These types of investments exhibit high levels of risk, with an expectation for high rates of investment returns. Many of these investments also exhibit a high level of correlation with the publicly-traded equity markets.

The private equity asset class is considered highly inefficient, as the lack of publicly available company and pricing information suggests active management is critical in this asset class. The primary benefit afforded investors in this asset class is the expectation of generating high levels of investment returns, although manager selection is a critical determinant of success.

REAL ESTATE

The role of Real Estate is to be a source of alternative income and diversification. While the factors that influence real estate returns may also influence the returns of equity and fixed income portfolios, these factors impact real estate in a different manner than the other asset classes. This suggests that the return patterns of real estate have a low correlation to other asset classes, providing a diversification benefit when combined with equities and bonds.

The nature of real estate investing indicates that each individual property has unique characteristics, and as such, investing in real estate requires a substantial amount of information regarding local economic factors and demographic profiles, among others. It is expected that the real estate portfolio will be invested according to this information intensive investment approach, will primarily include exposure to private real estate, and be broadly diversified by geography and property type.

ALTERNATIVES

The role of Alternatives is to provide improved risk-adjusted returns and diversification. The purpose of Alternatives is to provide a framework for investing in assets and strategies that do not fit within the traditional asset class structure. Currently, PERA’s Alternatives asset class is comprised of three sub-strategies: Opportunistic, Real Assets, and Risk Mitigation, which are each established to structure an overall asset class portfolio which is designed to meet Alternatives’ role over the long term.

Alternatives invests in a variety of investments, exhibiting various levels of return and volatility and which may or may not be correlated with other assets in the PERA portfolio. Accordingly, these investments will provide varying levels of diversification benefits for the Total Fund. Also, since Alternatives’ investments include both liquid and illiquid investments, the market efficiencies of these Alternatives investments will vary. In general, illiquid investments will provide greater exposure to market inefficiencies, while liquid investments such as equity and fixed income securities represent markets that are usually considered to be efficient markets.

INVESTMENT RESTRICTIONS

Colorado Statute 24-51-206 establishes what investments are permissible as well as certain limitations:

24-51-206 INVESTMENTS

(1) The board shall have complete control and authority to invest the funds of the association. Preference shall be given to Colorado investments consistent with sound investment policy.

(2) Investments may be made without limitation in the following:

(a) Obligations of the United States government;

(b) Obligations fully guaranteed as to principal and interest by the United States government;

(c) State and municipal bonds;
(d) Corporate notes, bonds, and debentures whether or not convertible;

(e) Railroad equipment trust certificates;

(f) Real property;

(g) Loans secured by first or second mortgages or deeds of trust on real property; except that the origination of mortgages or deeds of trust on residential real property is prohibited. For the purposes of this paragraph (g) “residential real property” means any real property upon which there is or will be placed a structure designed principally for the occupancy of from one to four families, a mobile home, or a condominium unit or cooperative unit designed principally for the occupancy of from one to four families.

(g.5) Investments in stock or beneficial interests in entities formed for the ownership of real property by tax-exempt organizations pursuant to section 501 (c) (25) of the federal “Internal Revenue Code of 1986”, as amended; except that the percentage of any entity’s outstanding stock or bonds owned by the association shall not be limited by the provisions of paragraph (b) of subsection (3) of this section;

(h) Participation agreements with life insurance companies; and

(i) Any other type of investment agreements.

(3) Investments may also be made in either common or preferred stock with the following limitations:

(a) The aggregate amount of moneys invested in corporate stocks or corporate bonds, notes, or debentures which are convertible into corporate stock or in investment trust shares shall not exceed sixty-five percent of the then book value of the fund.

(b) No investment of the fund in common or preferred stock, or both, of any single corporation shall be of an amount which exceeds five percent of the then book value of the fund, nor shall the fund acquire more than twelve percent of the outstanding stock or bonds of any single corporation.

(c) (i) Each investment firm offering for sale to the board corporate stocks, bonds, notes, debentures, or a mutual fund that contains corporate securities, shall disclose, in any research or other disclosure documents provided in support of the securities being offered, to the board whether the investment firm has an agreement with a for-profit corporation that is not a government-sponsored enterprise, whose securities are being offered for sale to the board and because of such agreement the investment firm:

(A) Had received compensation for investment banking services within the most recent twelve months; or

(B) May receive compensation for investment banking services within the next three consecutive months.

(iii) For the purposes of this paragraph (c), “investment firm” means a bank, brokerage firm, or other financial services firm conducting business within this state, or any agent thereof.

24-54.8-201 DIVESTMENT FROM COMPANIES WITH PROHIBITIONS AGAINST ISRAEL

Colorado Statute 24-54.8-201 et seq. titled Divestment From Companies With Prohibitions Against Israel was signed into law on March 18, 2016.

The statute:

» Requires PERA to create a Restricted Company list comprised of non-United States based companies that maintain economic prohibitions against Israel

» Prohibits PERA from acquiring direct holdings in securities of non-United States based companies that maintain economic prohibitions against Israel

» Requires PERA to engage companies on the Restricted Company list

» Requires PERA to divest of certain securities as specified in the statute

» Requires PERA to provide divestment information on its website at least annually
Additional information as well as the Board-adopted methodology for the creation of the Restricted Company list required by statute can be found on the PERA website at: www.copera.org/investments/divestment

RISK CONTROLS

The Board requires:

» The Total Fund is to be broadly diversified across and within asset classes to limit the volatility of the Total Fund investment returns and to limit the impact of large losses on individual investments of the Total Fund

» Individual portfolios will be managed according to written investment guidelines that are approved by PERA Staff. These guidelines are intended to ensure that the portfolio meets its objective and operates within acceptable risk parameters

» A process be established by which compliance with all elements of the investment policy and portfolio guidelines are measured and monitored, with compliance exceptions being reported to the Board

ACTIVE RISK

This policy applies to all public asset classes (Global Equity and Fixed Income) and for the Total Public Markets portfolio and requires Staff to measure and monitor the active risk incurred within each relevant portfolio. While the Board recognizes that its risk tolerance is captured, to a significant extent, through the asset allocation policy, it also recognizes that active risk needs to be measured, monitored and controlled. As such, it is the Board’s policy to incur no more active risk within the public asset classes and Total Public Markets portfolio according to the following limits (to be measured as annualized over a trailing five-year period):

<table>
<thead>
<tr>
<th>Portfolio</th>
<th>Active Risk Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Equity</td>
<td>225 basis points</td>
</tr>
<tr>
<td>Fixed Income</td>
<td>100 basis points</td>
</tr>
<tr>
<td>Total Public Markets</td>
<td>150 basis points</td>
</tr>
</tbody>
</table>

These limits are intended to be maximums, with the specific levels of active risk to be determined by Staff’s outlook for investment opportunities. Active risk measures (and above maximums) are annualized figures and will be calculated using a monthly returns-based methodology.

The Board expects Staff to monitor the active risk of the various portfolios to ensure compliance with the above limits. As of any quarter-end, the Board expects Staff to report any active risk that is above the maximum limit. In addition, the Board expects Staff to provide an implementation plan, if any, to bring the amount back below the maximum limit.

Active risk topics will be presented to the Board annually as an education session.

PERFORMANCE MEASUREMENT

The investment objective of the PERA Total Fund is to earn the net-of-fees rate of return of the Policy Benchmark (as defined below), plus an excess appropriate to the level of active management risk taken by the Total Fund, over reasonable measurement periods. A Policy Benchmark is a passive representation of the asset allocation policy approved by the Board and is the most objective performance evaluation metric. Currently, the Policy Benchmark is comprised of the following asset classes, weights, and benchmarks:

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>2021 Policy Benchmark Weight</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Equity</td>
<td>55.5%</td>
<td>Global Equity Custom Benchmark</td>
</tr>
<tr>
<td>Fixed Income</td>
<td>23.5%</td>
<td>Fixed Income Custom Benchmark</td>
</tr>
<tr>
<td>Private Equity</td>
<td>8.5%</td>
<td>Private Equity Custom Benchmark</td>
</tr>
<tr>
<td>Real Estate</td>
<td>8.5%</td>
<td>Real Estate Custom Benchmark</td>
</tr>
<tr>
<td>Alternatives</td>
<td>4.0%</td>
<td>Alternatives Custom Benchmark</td>
</tr>
<tr>
<td>Cash</td>
<td>0%</td>
<td>ICE BofAML U.S. 3-Month Treasury Bill Index</td>
</tr>
</tbody>
</table>
Global Equity Custom Benchmark: MSCI ACWI IMI (Net) with USA Gross

Fixed Income Custom Benchmark: Bloomberg Barclays U.S. Aggregate Bond Index

Private Equity Custom Benchmark: MSCI ACWI IMI (Net) with USA Gross plus 150 basis points

Real Estate Custom Benchmark: NCREIF Open End Diversified Core Equity Index (NFI-ODCE) plus 50 basis points, annually

Alternatives Custom Benchmark: Weighted average of the HFRI FOF Market Defensive, CPI plus 400 basis points, and the Public Markets Benchmark plus 150 basis points

PROXY VOTING

Refer to Colorado PERA Proxy Voting Policy for further information.

DOCUMENT HISTORY

This SIP was adopted on November 19, 2004.

It was amended on:
February 18, 2005
January 20, 2006
January 19, 2007
November 16, 2007
March 21, 2008
March 20, 2009
March 19, 2010
March 18, 2011
March 16, 2012
September 21, 2012
March 15, 2013
January 17, 2014
March 20, 2015
July 1, 2015
July 1, 2016
January 20, 2017
June 22, 2018
July 1, 2018
August 1, 2018
January 18, 2019
January 1, 2020
January 15, 2021
January 1, 2022