COLORADO PERA

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Colorado PERA Statement of Investment Policy

Colorado
Public
Employees'
Retirement
Association

Contents

Purpose

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 fund's investments 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 Colorado PERA's investments. Deviation from the Statement of Investment Policy is not permitted without explicit written permission, in advance, from the Board of Trustees. 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, and March 19, 2010.

Investment Philosophy

The investment philosophy for Colorado 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 of Trustees, 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 asset allocation policy 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 risk refers to risk derived from active management or tactical decisions.) Market-related risks are expected to produce higher returns over time. As a long term investor, Colorado 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. Index funds 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 index funds with comparable benchmarks, under appropriate conditions, and can be employed by the fund with controls in place which are appropriate to the particular investment.

Investment Goals and Objectives

The function of Colorado 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 last revised on February 16, 2007, identifies the roles and responsibilities of the various parties that oversee the investment and management of fund assets.

Board of Trustees

Trustees shall carry out their functions solely in the interest of the members and benefit recipients and for the exclusive purpose of providing benefits and defraying reasonable expenses incurred in performing such duties, as required by law. The Trustees shall act in accordance with the provisions of State Statute and 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 in the conduct of an enterprise of a like character and with like aims by diversifying the investments of the association so as to minimize the risk of large losses, unless in light of such circumstances it is clearly prudent not to do so.

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

- Approve a statement of investment philosophy that sets forth PERA's beliefs on key investment issues
- Approve an investment policy
- Ensure strategies are in place to achieve the investment goals and objectives of PERA
- Approve the decision to use internal or external investment managers for any asset class PERA invests in
- Ensure that a study of the relationship between PERA's assets and liabilities is performed at least every three to five years or more frequently, if needed
- Approve corporate governance or shareholder rights actions deemed necessary with respect to any corporation or entity of which PERA is a shareholder, partner or member
- Review adherence to the investment philosophy of PERA
- Review compliance with, and the continued appropriateness of, the investment policy
- Review the investment performance of the fund, including the performance of all investment managers
- Review the performance of the Investment Consultants

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 recommending to/advising the Board:

- A written statement of investment philosophy for the fund
- A written statement of investment policy and any amendments thereto
- Strategies to achieve the investment goals and objectives of PERA
- Use of internal or external investment managers for any asset class in which PERA invests
- Use of nominee partnerships to facilitate investment sales and exchange transactions
- On any other investment matters and make recommendations for Board action when necessary
- Keep minutes of Investment Committee meetings and ensure the minutes are made available to Trustees

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

Staff

The overriding role of the staff is to assist the Board of Trustees in managing Colorado PERA's investments. In this regard, as defined in the Governance Manual, staff is expected to:

- Recommend to the Investment Committee a written statement of investment philosophy and review that statement with the committee at least every three years
- Recommend to the Investment Committee a written statement of Investment Policy and review that statement with the committee at least annually
- Recommend to the Investment Committee strategies to achieve the investment goals and objectives of PERA
- Recommend to the Investment Committee the use of internal or external investment management for any asset class in which PERA invests
- Within the policy parameters approved by the Board, develop investment manager structures for each asset category in which PERA invests, including but not limited to the funds to be allocated to active and passive portfolios, and to internally and externally managed portfolios
- Conduct all necessary due diligence relating to the appointment of investment managers and consultants
- Negotiate and approve guidelines and contracts for each investment manager retained by PERA
- Execute portfolio rebalancing in accordance with the policies of the Board
- Recommend to the Board, the use of nominee partnerships to facilitate investment sales and exchange transactions
- Advise the Board and the Investment Committee on any other investment matters and make recommendations for Board or committee 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 their investment style for which they were hired and 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 will monitor and review all investment portfolios and managers. The Investment Department's Polices and Procedures, adopted by staff in January 2006, and subsequently updated and revised, describes the process by which managers will be selected, criteria for evaluation, as well as reasons for termination or removal.

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 for at least five years, and with research/data base access to provide investment program advice.

Custodian

The Custodian(s) holds directly, through it 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 online 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

Colorado PERA's current target asset allocation and ranges are specified below.

Asset Class	Target Allocation	Permissible Range
Global Equity	58%	52% to 64%
Fixed Income	25%	22% to 28%
Alternative Investments	7%	4% to 10%
Real Estate	7%	4% to 10%
Opportunity Fund	3%	0% to 6%
Total	100%	–

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

Rebalancing Policy

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 asset classes. While the Board expects there to be a process in place that attempts to estimate capital calls and distributions in the non-marketable 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 non-marketable securities 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 non-marketable 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 marketable asset classes involves a risk reduction tradeoff with increased transaction costs. As such, the Board expects Staff to implement this policy in a manner to which seeks to minimize the impact of transaction costs. In particular, the Board 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.
- Take advantage of crossing opportunities available with an external index fund manager, even if the Fund's asset allocation is not outside the prescribed ranges denoted in the asset allocation section of this Statement during the intra-quarter periods.

When markets move such that the Fund's normal cash flows and crossings opportunities 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 Colorado PERA Governance Manual requires that the investment policy statement identify the eligible asset categories in which the fund might invest, while Statute requires a discussion of market efficiency. Listed below are the asset categories in which Colorado 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 domestic and international equity markets. The factors that have made U.S. and non-U.S. equity markets distinct enough to be viewed as separate asset classes have receded. Increasing capital and trade flows and decreasing capital constraints and currency controls around the globe are important factors in global financial integration. Equity prices are increasingly determined by global sector factors, suggesting advantages for investors who look for diversification beyond a pure country framework. Increasing similarities among countries and markets suggest that a global approach to investing in the world's equity markets may be optimal.

Domestic Equity Market

Investing in the domestic equity market is a way to participate in one of the largest and most diverse economies in the world through ownership of the companies that make up that economy. Investment theory and history suggest that the domestic equity markets provide long-term price appreciation in an amount that tends to mirror the overall growth in the economy. In addition, historically stocks have provided a return that served as an effective hedge relative to inflation (i.e., the historical return of stocks has been in excess of the rate of inflation).

It is expected that Colorado PERA will have exposure to all segments of the domestic equity market including but not limited to growth and value stocks of large- and small-capitalization companies. The domestic equity market is considered by many to be one of the most efficient capital markets in the world. The availability of public information regarding the future prospects of individual companies combined with the numerous market participants rendering assessments of this information contribute to this market's efficiency. In structuring portfolios, financial theory and empirical evidence suggests that a broad-market index, that encompasses the entirety of the domestic equity market, such as the DJ U.S. Total Stock Market Index, will provide the most efficient portfolio structure.

While this market is very efficient, neither it nor any other market is 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.

International Equity Market

The international equity markets are becoming an increasingly larger share of the investment opportunity set. In addition, because international company stocks tend to react to local as well as global influences, the fluctuations in the returns of international equity markets are only partially related to the movements in the domestic equity market. Further, capital market theory suggests that we should be fully diversified in a global, not just in a local, sense. Therefore, it behooves investors to consider international equity allocations for a portion of their investment portfolios.

International equity markets encompass those of developed and emerging economies. While individual country markets exhibit varying degrees of market efficiency, it is believed that international equity markets, as a group, are less efficient than those of the United States due to a lack of timely, accurate information regarding the future prospects of international companies. In addition, one requirement of market efficiency is the ability of capital to flow freely among markets. Capital flows in international equity markets are hampered somewhat by less liquidity than what is available in the United States. Therefore, it is expected that the Colorado PERA international equity portfolio will be structured to attempt to capitalize on the perceived inefficiencies of these markets.

Fixed Income

Bonds provide a source of diversification relative to an equity-oriented portfolio. The rate of return 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 stock and bond investments. Further, fixed income securities are generally believed to provide a better match to the plan's liabilities than do equities. This suggests that when combined with equity securities, 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 perhaps the most diverse capital market. Common 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. The fixed income market may be more efficient than once believed. However, fixed income can experience less efficiency at times and in certain segments such as lower quality bonds. It is expected that the fixed income portfolio will make use of both active and passive investment mandates and will include allocations to all major segments of the fixed income market.

Alternative Investments

The alternative investment asset class can encompass many different and distinct asset categories. Currently, the Colorado PERA portfolio is comprised of private equity investments—largely buyout 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 alternative investment 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 within this asset class.

Real Estate

Real estate investments can serve as a diversifier of a stock and bond portfolio. While the factors that influence real estate returns may also influence the returns of stock and bond 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 stocks and bonds.

With the growth in the publicly traded real estate market, information has become more readily available with respect to local property markets. The nature of real estate investing, however, suggests 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 profile, among others. It is expected that the real estate portfolio will be invested according to this information intensive investment approach, and will include exposure to private real estate, and be broadly diversified by geography and property type.

Opportunity Fund

The purpose of the Opportunity Fund is to provide a framework for including asset categories that do not fit within the traditional asset class structure. Currently, the Opportunity Fund is comprised of timber and commodity investments.

Investment in timber properties is expected to generate an investment return from a number of different sources including changing timber prices and land values. Timber properties may provide a diversification benefit when added to a diversified portfolio as their return patterns are influenced by factors unique to this area of investment. Timber markets are considered less efficient. There are a number of different participants in the timber marketplace including forest and paper products companies, timber real estate investment trusts, retail investors, wealthy individuals, and institutional investors. Investors enter the timber market for varying reasons, and as such may benefit from utilizing a specialized, active investment manager in structuring and managing a portfolio of timber properties.

Commodities offer several benefits to an investment portfolio. Low correlations with traditional asset classes like stocks and bonds make commodities a good diversifier for an investment portfolio, positive correlation with inflation make commodities a reasonable inflation hedge and historically, commodity returns have been competitive with other asset classes. However, commodity returns can be volatile and commodity prices are sensitive to global recessions. Commodities are negatively correlated with traditional asset classes and the pricing dynamics of commodities are unique. Commodity prices relate to actual levels of economic activity and are determined by underlying supply and demand conditions at each point in the business cycle. In contrast, stocks and bonds tend to price in market expectations of corporate earnings, interest rates, or inflation.

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.

(II) 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.

24-54.8-101 Sudan Divestment by Public Pension Plans.

Colorado Statute 24-54.8-101 *et seq.* titled Sudan Divestment by Public Pension Plans was signed into law on April 19, 2007.

The statute:

- Requires PERA to create a Scrutinized Company list comprised of companies with active and inactive business operations in Sudan.
- Prohibits PERA from acquiring direct holdings in securities of companies on the Scrutinized Company list that have active business operations.
- Requires PERA to engage companies on the Scrutinized Company list.
- Requires PERA to divest of certain securities as specified in the statute.
- Requires certain actions related to commingled portfolios and private equity partnerships.
- Requires certain periodic reporting as specified in the statute.

The Board adopted the following methodology for creation of the Scrutinized Company list required by 24-54.8-103:

A. The Board shall use the most current Sudan Divestment Task Force Scrutinized Company List (SDTF SCL) to create the Colorado PERA Scrutinized Company List (PERA SCL).

B. The Board shall update the PERA SCL at the regularly scheduled PERA Board meeting which allows for updates to be effective at six month intervals. The PERA SCL shall not change or be modified until officially updated by the Board except that if PERA becomes aware that a company with active business operations in Sudan (at the time of the creation of the most current PERA SCL) has ceased such active business operations and has been removed from the active business operations portion of the most current SDTF SCL, then that company will be immediately removed as a company with active business operations on the PERA SCL.

Iran Related Investment Policy

PERA will initiate a phased strategy to address PERA's direct public investments in foreign companies doing business in the Islamic Republic of Iran. The strategy will address and will include a number of actions, up to and including possible divestment. PERA recognizes the federal government has sole responsibility for the conduct of American foreign policy. PERA is acting out of a fiduciary concern for the welfare of its members' assets which requires a broad horizon and sensitivity to the potential risks posed by investment in Iran.

The United States prohibits loans from U.S. financial institutions and direct investment in the Iranian energy and defense sectors. The U.S. government can also impose economic sanctions on foreign companies investing in Iran's petroleum and natural gas sector. It is widely reported that Iran supports terrorism, supplies explosively formed penetrators for use against our troops in Iraq, continues to develop the infrastructure to support advanced nuclear technology, and that its president publicly calls for the destruction of the State of Israel.

PERA must be managed for the benefit of the members, retirees and beneficiaries, and this policy is developed to address the potential for risk presented by pension fund investments in companies doing business in Iran.

Accordingly the PERA Board of Trustees adopts a policy consisting of the following phases:

- Phase I: Commencing immediately, staff shall undertake research to identify a list of public companies doing business in Iran which meet the following criteria: (This list will be developed through staff research of publicly available information that may include the retention of external third party researchers and/or other information provided by other public funds, pension systems and investor organizations.)

  1) That have made an investment on or after August 5, 1996, or in any combination in any 12 month period, of $20,000,000 or more, in Iran's energy sector; or

  2) Are engaged in business with any Iranian organization labeled by the U.S. government as a terrorist organization; or

  3) Are engaged in any business that facilitates Iranian acquisition of nuclear, chemical or biological weapons technology or military equipment.

  The Board may determine that a company has taken sufficient steps to mitigate risks presented by Iranian investments or that there is sufficient evidence of an elimination of ongoing Iranian investment or business activities to warrant removal of a company from the list (removal of moratorium companies requires 90-day advance notice as specified in Phase III).

- Phase II: Upon a company being included on the list that meets the criteria set forth under Phase I in which PERA holds a direct public investment, staff shall within 30 days after identifying such a company, engage such company and ask them to:

  1) Provide a detailed description of the nature, extent, duration, and full history of the companies' business activities in Iran;

  2) Provide an explanation as to how these activities are consistent with a sound and prudent long-term investment strategy;

  3) Report how they are engaging the government of Iran regarding its conduct and how they are mitigating investment risks posed by doing business in Iran;

  4) Report whether substantial action has been taken to affect the policies and practices of the government of the Islamic Republic of Iran; and

  5) Additionally, staff shall, where practical, confer and work with other pension systems and investor organizations regarding information stemming from their engagement with such companies and potentially cooperate in taking joint action in engaging such companies.

- Phase III: Upon a company being included on the list that meets the criteria set forth under Phase I, the Board enacts a moratorium on direct public investments in companies in which PERA currently holds no interest. The moratorium shall apply upon the date that staff determines such a company meets the criteria. The Board shall give 90-days advance notice before the effective date of any amendment or repeal of this moratorium to the public, the General Assembly and the Governor.

- Phase IV: Within 90 days after engaging such a company, staff shall evaluate the companies' responses and determine if they have taken sufficient steps to minimize risk to PERA and/or whether additional time is required to effectively engage such company. If not, staff shall analyze:

1) The available strategies for addressing the risk presented;

2) The viability of working with other interested parties and investors to affect the policies and practices of companies with business operations in Iran;

3) The materiality of the company's Iranian operations in regards to their overall operations; and

4) The availability of alternative direct public investments providing similar diversity and return expectations.

- Phase V: Staff shall report to the Board its findings, actions and recommendations concerning individual companies on the list as changes to the list warrant, but not less than annually. This report shall be made available to the public and forwarded to the General Assembly and the Governor; provided, however, the first public report shall be made no later than March 21, 2008. Should adequate mitigation of risk not be possible, the PERA Board of Trustees, consistent with its fiduciary obligations and responsibilities, will thereafter direct staff to:

  1) Withhold additional or new direct public investments in non-complying companies; and/or

  2) Divest current direct public investments in the companies.

Risk Controls

The Board requires:

- The 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 Colorado 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 marketable securities asset classes and for the total marketable securities asset class 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 marketable securities asset classes and total marketable securities portfolios according to the following limits (to be measured over a three-year period):

Portfolio	Active Risk Maximum
Global Equity	225 basis points
Fixed Income	100 basis points
Total Marketable Securities	150 basis points

The above limits are intended to be maximums, with the specific levels of active risk to be determined by Staff's outlook for investment opportunities.

The Board expects Staff to continually monitor the active risk of the various portfolios to ensure compliance with the above limits. Furthermore, a report from an independent third party regarding the active risk profile of the various portfolios will be provided annually. In this report, the Board expects trailing three-year active risk of each portfolio, along with forward-looking active risk estimates of each to be presented.

Performance Measurement

The investment objective of the Colorado PERA total fund is to earn the net-of-fees rate of return of the Policy Portfolio (as defined below), plus an excess over that appropriate to the level of active management risk taken by the total fund, over reasonable measurement periods. A Policy Portfolio is a passive representation of the specific asset allocation strategy pursued and is the most objective performance evaluation metric. Currently, the Policy Portfolio is comprised of the following asset classes, weights and benchmarks:

Asset Class	% Weighting in Policy Portfolio	Benchmark
Global Equity	58%	Global Equity Benchmark (74.1% DJ U.S. Total Stock Market Index and 25.9% MSCI All Country World Ex-US Index)
Fixed Income	25	Barclays Capital Universal
Alternative Investments	7	DJ U.S. Total Stock Market + 300 basis points
Real Estate	7	Net NFI + 100 basis points
Opportunity Fund	3	Public Fund Benchmark

Proxy Voting

Refer to Colorado PERA Proxy Voting Policy as revised in January 2003. (Appendix A)

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Colorado PERA Proxy Voting Policy

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Contents

Statutory Authority

The Public Employees' Retirement Association was created by the State of Colorado. The Plan operates by the authority of the Colorado General Assembly, with benefits and administration defined under Title 24, Article 51 of the Colorado Revised Statutes. By state law, the management of the public employees' retirement fund is vested in the Board of Trustees of the Public Employees' Retirement Association of Colorado.

Statutory Fiduciary Responsibility

The trustees of the Board shall be held to the standard of conduct of a fiduciary in discharging their responsibilities. C.R.S. 24-51-207(2) states:

> As fiduciaries, such trustees shall carry out their functions solely in the interest of the members and benefit recipients and for the exclusive purpose of providing benefits and defraying reasonable expenses incurred in performing such duties as required by law. The trustees shall act in accordance with the provisions of this article and 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 in the conduct of an enterprise of a like character and with like aims by diversifying the investments of the association so as to minimize the risk of large losses, unless in light of such circumstances it is clearly prudent not do so.

Other Fiduciary Responsibility

Although the Public Employees' Retirement Association of Colorado is not subject to ERISA (Employee Retirement Income Security Act of 1974), it is attempting to comply with the position taken by the U.S. Department of Labor in February 1988. The Department of Labor has stated that the right to vote shares of stock owned by a pension plan is, in itself, an asset of the plan, and therefore the fiduciary's responsibility to manage the assets includes proxy voting. Fiduciaries are required to develop and maintain a written proxy policy, vote in accordance with the written policy, and maintain accurate records of the proxy voting activities.

Shareholder Responsibility Committee of the Board of Trustees[1]

To assist the Board of Trustees in carrying out its fiduciary responsibilities in voting proxies, the Board has established a Shareholder Responsibility Committee. The Committee is composed of members of the Board with the Chairman of the Board as an ex-officio member of the Committee. The General Counsel serves as an advisor to the Committee. The Board of Trustees and the Shareholder Responsibility Committee have delegated to its staff in the Legal Department the authority to execute and vote all proxies according to the PERA Proxy Voting Policy. All proxy issues are reviewed by staff on a case-by-case basis and then voted according to guidelines established by the Policy. Staff maintains a complete file of all proxy voting activities. At least annually the Board of Trustees is given a report of shareholder activities.

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[1] Committee name changed from Proxy Committee to Shareholder Responsibility Committee pursuant to adoption by Committee on November 20, 1997 and PERA Board on November 21, 1997.

Operational Items

Description: Operational items are generally noncontroversial and are proposed by both management and shareholders. Most operational items address issues and procedural matters relating to the annual meeting process; however, there are some items that are outside the realm of the annual meeting process that are considered operational items. Many proposals do not require shareholder approval pursuant to the charter or bylaws of the company but will be submitted to shareholders for ratification as a practice of good corporate governance. While most operational items are usually considered routine, PERA believes that it has a fiduciary responsibility to vote proposals dealing with any operational item. Proposals dealing with operational items not addressed in this policy will be reviewed and voted on a case-by-case basis utilizing analyses and recommendations from staff and outside proxy consultant sources.

Adjourn Meetings

PERA generally opposes attempts to adjourn meetings by proxy vote. Adjournments are normally called for by management when insufficient votes have been received for passage of a proposal item. PERA believes this tactic does not allow for the voice of shareholders to be heard. PERA will vote *Against* adjournment proposals.

Transact Other Business

PERA opposes attempts by management to bring new proposals for a vote at meetings because of the uncertainty of items to be submitted. As such, PERA will vote *Against* proposals that seek approval to transact other business during a meeting.

Change Date, Time, or Location of Annual Meeting

PERA believes good corporate governance provides for changing the date, time, or location of annual meetings when the change is sought to allow and promote increased attendance and participation by shareholders. PERA is against proposals that seek to limit attendance as a result of a difficult location to reach or if a meeting location is changed in an attempt to avoid a majority of angry shareholders. As such, PERA will vote proposals to change the date, time, or location of annual meetings on a *Case-by-Case* basis utilizing analyses and recommendations from staff and outside proxy consultant sources.

Change of Company Name

Corporate name changes that are distinctive, or more functional than the original name, usually tend to have a positive effect on stock prices. As such, PERA will vote *For* proposals to change the corporate name.

Ratification of Auditors

Although companies are not legally required to obtain ratification of auditors by shareholders, companies have routinely submitted proposals for ratification of auditors to shareholders as a practice of good corporate governance. In light of recent scandals surrounding audit firms, PERA believes a minimum set of standards should be applied to the ratification of auditors which includes: the same firm should not perform audit and consulting services, the auditing team should be rotated every five years, an audit committee should be established if there is none, chief executive officers and chief financial officers should sign a statement certifying and verifying that all audit reports are correct, accurate, and based on the companies actual accounting records, and accounting methods used should comply with all federal and state statutes and regulatory bodies as well as accounting standards and generally accepted accounting practices. While PERA believes a vote should be cast against such auditor proposals when companies do not comply with these standards, it can be difficult to determine if certain standards are met due to a lack of available information. As such, PERA will vote proposals to ratify auditors on a *Case-by-Case* basis utilizing analyses and recommendations from staff and outside proxy consultant sources.

Disclosure Proposals

PERA will vote *For* disclosure proposals when company disclosure has been inadequate and the shareholder request in not overly expensive or burdensome.

Board of Directors

Description: The primary purpose of the Board of Directors is to represent shareholders, protect their interests, and maximize shareholder value. As such, the Board is the focal point of corporate governance at a company. It is widely held by corporate governance experts that non-classified boards composed of a majority of independent directors with separate Chief Executive Officer and Chairman positions contain the greatest diversity for oversight and ensuring fair representation of shareholder interests. PERA believes that corporate transparency is increased by Boards of Directors that meet our policy standards, and that transparency is important in our ability to make informed investment decisions. Proposals dealing with the Board of Directors not addressed by this policy will be reviewed and voted on a case-by-case basis utilizing analyses and recommendations from staff and outside proxy consultant sources.

Separate Positions for Chief Executive Officer and Chairman

PERA believes a Board that has separate positions for Chief Executive Officer and Chairman promotes greater management accountability, helps create a board atmosphere of independent leadership, and allows for an unbiased evaluation of the performance of the Chief Executive Officer by the Board. PERA will vote *For* proposals that seek the separation of Chief Executive Officer and Chairman positions and *Against* proposals that seek to present such separation or impair the independence of the Chief Executive Officer and Chairman positions.

Establish Nominating, Compensation, Audit and Governance Committees

PERA believes good corporate governance requires companies to establish nominating, compensation, audit and governance committees. PERA will vote *For* proposals that seek to establish any or all of these committees.

Withhold Votes for Individual Directors in Uncontested Elections

With the additional focus placed on the performance of boards, PERA believes more scrutiny should be given to voting for individual directors. In uncontested elections, PERA will ordinarily vote *For* the director nominees. However, based upon analyses and recommendations from staff and outside consulting sources, PERA will review individual directors on a *Case-by-Case* basis and *Withhold* votes from individuals who have attended less than 75% of board meetings and committee meetings, sit on an excessive number of boards which may prohibit effective participation on the board in question, are affiliated with boards of failed companies, or companies under current federal, state, regulatory or congressional investigation or review, or whose governance record is indicative of a board member who does not support policies expressed by PERA's Proxy Voting Policy.

Declassified Boards

Corporate governance experts believe boards that are not classified are more effective than classified boards as they do not lead to entrenchment of management, do not insulate directors from being accountable to shareholders, and they allow for greater ease to change control of a company through a proxy contest. Although many U.S. companies have classified boards, recent trends have shown more and more proposals have been submitted and received substantial votes to repeal classified boards. In addition to shareholder proposals calling for the repeal of classified boards, some companies have voluntarily submitted proposals to repeal their classified boards. PERA believes declassified boards provide a valuable avenue toward director responsibility and accountability to shareholders and will vote *For* proposals to repeal classified boards. *

> * It is acknowledged that PERA is a classified board and voting for the repeal of classified boards may appear to be a double standard. However, PERA's board structure is mandated by state statute, not corporate by-laws, and subject to change only through state legislation. Further, PERA Board members are selected by an open election and placed on the election ballot by petition rather than a ratification vote of a predetermined slate.

Stock Ownership Requirements

PERA is opposed to minimum stock ownership requirements if they create a financial barrier for qualified individuals serving as directors. PERA maintains that it is desirable but not mandatory that directors hold their stock in the company until one year after their term expires.

Board and Committee Composition

PERA has adopted the Council of Institutional Investor's definition of an independent director. Basically, an independent director is a person who does not have any kind of significant affiliation with a company other than the directorship. Management-affiliated and management directors are presumed not to be independent directors and the audit, compensation, nominating and governance committees should be comprised of a majority of independent directors. PERA will vote *Against* proposals that do not provide for the board and committees to be composed of a majority of independent directors.

Proxy Contests

Description: Proxy contests are the result of an unsatisfied or dissident shareholder, or group of shareholders, who believe current management has not done a viable job of protecting and increasing shareholder value and profits. Proxy contests can be directed towards directors and corporate policy. Proposals dealing with proxy contests not addressed by this policy will be reviewed and voted on a case-by-case basis utilizing analyses and recommendations from staff and outside proxy consultant sources.

Cumulative Voting

PERA will generally vote *For* proposals that allow for cumulative voting since cumulative voting provides more opportunity for shareholders to change management in contested elections. However, PERA will evaluate proposals on a *Case-by-Case* basis utilizing analysis and recommendations from staff and outside proxy consultant sources.

Confidential Voting

PERA is in favor of confidential voting systems and believes only vote tabulators and inspectors of elections should be allowed to view individual proxy ballots. Dissemination of proxy voting information to management and shareholders should apply to the number of votes cast only.* PERA will vote *For* proposals that provide for confidential voting.

* Disclosure of PERA proxy voting records will be reviewed on a case-by-case basis and subject to Colorado law.

Director Nominees in Contested Election

PERA will vote proxy contests for board seats on a *Case-by-Case* basis utilizing analyses and recommendations from staff and outside proxy consultant sources.

Antitakeover Defenses and Voting Related Issues

Description: Various methods of antitakeover defenses have been adopted by companies to prevent hostile takeovers. Additionally, state governments have adopted statutes to support companies in antitakeover defenses in an attempt to be more attractive as a location for incorporation. The result has been a lessening of shareholders' abilities to effect change in companies when there is a belief that management may not be protecting and promoting the best interests of the shareholders in a hostile takeover situation. Proposals dealing with antitakeover defenses and voting related issues not addressed by this policy will be reviewed and voted on a case-by-case basis utilizing analyses and recommendations from staff and outside proxy consultant sources.

Blank Check Preferred Stock

PERA does not support the creation or addition of blank check preferred stock and will vote *Against* proposals which attempt to add this provision.

Bundled Proposals

PERA will vote bundled proposals on a *Case-by-Case* basis utilizing analyses and recommendations from staff and outside proxy consultant sources.

Mergers and Corporate Restructuring

Description: Good financial health of companies is essential for maximizing shareholder value. In an effort to ensure financial success, companies will look to mergers, acquisitions, and the sale or purchase of assets. Each proposal is complex and composed of many factors that must be considered when reviewing proposals. Proposals dealing with mergers and corporate restructuring issues not addressed by this policy will be reviewed and voted on a case-by-case basis utilizing analyses and recommendations from staff and outside proxy consultant sources.

Sale or Purchase of Company Assets

PERA will vote all proposals regarding the sale or purchase of company assets on a *Case-by-Case* basis utilizing analyses and recommendations from staff and outside proxy consultant sources.

Mergers and Acquisitions

PERA realizes that each proposal for a merger and/or acquisition is unique, and many factors must be considered in each merger and/or acquisition. As such, PERA will vote all proposals on a *Case-by-Case* basis utilizing analyses and recommendations from staff and outside proxy consultant sources.

Poison Pills

PERA is not in favor of poison pills and will vote *For* proposals that call for companies to submit poison pills to shareholder votes, or proposals calling for companies to rescind or redeem poison pills. PERA will vote *Against* management proposals to create poison pills even when they are submitted to a vote.

Stock Authorizations

Stock authorizations include a wide variety of issues. PERA will vote all proposals for stock authorizations on a *Case-by-Case* basis utilizing analyses and recommendations from staff and outside proxy consultant sources.

Preemptive Rights

PERA will vote *For* shareholder proposals that provide shareholders preemptive rights, but will vote *Against* new issues of stock representing five percent or less of existing capital.

Unequal Voting Rights

PERA will vote *Against* all proposals to institute new classes of common or preferred stock with unequal voting rights. If voting rights are equal, PERA will not oppose the proposal unless it is used as an anti-takeover device, which would reduce the value of the outstanding stock.

State of Incorporation and Charters/Bylaws

Description: Proposals to change the state of incorporation or charters and bylaws of a company are common and normally without controversy. Recent trends have shown a tendency by some companies to reincorporate as an attempt to circumvent tax laws or amend charters/bylaws in a manner that could diminish shareholder value. PERA believes good corporate governance requires careful evaluation of proposals to ensure the protection of shareholder's value and rights when addressing these proposals. Proposals dealing with state of incorporation and charters/bylaws issues not addressed by this policy will be reviewed and voted on a case-by-case basis utilizing analyses and recommendations from staff and outside proxy consultant sources.

Offshore Reincorporation Proposals

PERA will vote all offshore reincorporation proposals on a *Case-by-Case* basis utilizing analyses and recommendations from staff and outside proxy consultant sources.

State of Incorporation

PERA will vote *For* proposals to change the state of incorporation whenever the change supports shareholder interests and will vote *Against* a change if it results in limiting rights of shareholders.

Supermajority Vote Requirement for Amending Charter/Bylaws

Good corporate governance practices require only a simple majority of voting shares to pass proposals effecting corporate governance provisions. Requiring a supermajority of voting shares could permit management to become entrenched and allow amendments that are in the interest of shareholders to fail on the ballot. PERA will vote *Against* proposals that provide for a supermajority vote.

Capital Structure

Description: Overseeing the capital structure of a company calls for the practice of good corporate governance as capital structure involves many important issues that include, but are not limited to, dividend policy, taxes, types of assets, and growth opportunity. While many aspects should be handled by the board and/or senior management, there are issues that can have an impact on shareholder value, especially those that deal with the issuance of stock. Proposals dealing with capital structure issues not addressed by this policy will be reviewed and voted on a case-by-case basis utilizing analyses and recommendations from staff and outside proxy consultant sources.

Common Stock Authorization

Common stock authorizations include a wide variety of issues. PERA will vote on common stock authorizations on a *Case-by-Case* basis utilizing analyses and recommendations from staff and outside proxy consultant sources.

Executive and Director Compensation

Description: PERA believes that determining executive and director compensation is one of the most important, and difficult, functions facing companies. With the spotlight on recent corporate failures and the perceived excess of corporate executives, it is imperative that critical attention be given when analyzing the many facets of executive and director compensation. Because each company is unique, PERA believes that compensation committees, when composed of independent directors, are capable of making sound decisions concerning compensation. They should be allowed to utilize all available tools—such as stock plans or bonus incentives—to attract and maintain individuals who possess the vision and leadership necessary to promote corporate growth and profits, and protect shareholder rights and value. While compensation committees should have the flexibility to determine executive compensation, it is also imperative that executives not be given preference over shareholders when non-cash awards are being considered as a means of compensation, and shareholders should approve all non-cash awards. Proposals dealing with executive and director compensation not addressed by this policy will be reviewed and voted on a case-by-case basis utilizing analyses and recommendations from staff and outside proxy consultant sources.

Director Retirement Plans

Nonemployee director retirement plans can create conflicts of interest because of their high value and flexible terms that could lead to a lifetime benefit for not only the director, but also a director's surviving spouse. Additionally, director retirement plans are often times redundant because many nonemployee directors receive pension benefits from their primary or previous employer. Faced with the increase of scrutiny by shareholders in the arena of director compensation, many companies are seeking shareholder approval to eliminate director retirement plans. PERA favors proposals that eliminate nonemployee director retirement plans and will vote *For* proposals that eliminate nonemployee director retirement plans.

Employee Stock Purchase Plans

Due to the uniqueness and needs of each company, PERA will vote for employee stock purchase plans on a *Case-by-Case* basis utilizing analyses and recommendations from staff and outside proxy consultant sources.

Incentive Bonus Plans

PERA generally favors, and will vote *For,* proposals that add performance goals to incentive bonus plans, or place a cap on the annual grants any one participant may receive. PERA will vote on a *Case-by-Case* basis utilizing analyses and recommendations from staff and outside proxy consultant sources regarding any proposal that amends existing plans to increase shares reserved to qualify for favorable tax treatment under the Internal Revenue Service regulations.

Employee Stock Ownership Plans

Employee Stock Ownership Plans ("ESOPs") have become a popular method in which a company rewards employees for their commitment and hard work to ensure the success of the company. PERA will vote *For* proposals to implement an ESOP or increase authorized shares for an existing ESOP provided the number of allocated shares are not excessive (more than five percent of outstanding shares).

Long-term Incentive Plans

PERA favors the use of stock options for compensation and bonus plans because they are long-term incentives. PERA will vote proposals regarding long-term incentive plans on a *Case-by-Case* basis utilizing analyses and recommendations from staff and outside proxy consultant sources.

Public Disclosure of Director Compensation Packages

PERA is in favor of, and will vote *For* proposals, which call for the public disclosure of director compensation packages.

Minimum Stock Ownership Requirements

PERA generally opposes minimum stock ownership requirements if they create a financial barrier for qualified individuals serving as directors. However, because of increased shareholder scrutiny, PERA will vote proposals opposing minimum stock ownership requirements on a *Case-by-Case* basis utilizing analyses and recommendations from staff and outside proxy consultant sources.

Stock Ownership Requirements

PERA believes it is desirable, but not mandatory, that directors hold their stock for a minimum of one year after their term expires. However, because of increased shareholder scrutiny, PERA will vote these proposals on a *Case-by-Case* basis utilizing analyses and recommendations from staff and outside proxy consultant sources.

Golden Parachutes

PERA will vote *Against* proposals which would enrich management excessively or that would result in unreasonable costs for the company.

Other Proxy Issues Regarding Corporate Governance

Description: Many issues dealing with corporate governance have not been addressed in this policy. PERA believes good corporate governance practices are essential to maximize and protect shareholder value and interests. Corporate governance issues that are not addressed with the Proxy Voting Policy will be voted on a case-by-case basis utilizing analyses and recommendations from staff and outside proxy consultant sources.

Corporate governance issues that are not addressed within the Proxy Voting Policy will be voted on a *Case-by-Case* basis utilizing analyses and recommendations from staff and outside proxy consultant sources.

Social and Environmental Issues

Description: Social and environmental proposals include a broad spectrum of shareholder issues that deal with subjects ranging from genetically modified foods to human rights and labor issues. Such proposals are becoming more commonplace at annual meetings and it is not unusual to see public pension funds, institutional investors, and individual investors submitting shareholder proposals for consideration.

PERA will *Abstain* on all social issues, and will only vote on financial issues.

Morgan Stanley Real Estate Special Situations Fund

The provisions of Section I through Section X of the Policy shall not apply to voting stock acquired by Morgan Stanley Asset Management, Inc. (MSAM) for PERA in the Real Estate Special Situations Fund. PERA delegates to MSAM the authority to vote such proxies in its discretion subject to MSAM's obligation to vote such proxies as a fiduciary to PERA, to develop and maintain a written proxy policy, to vote in accordance with that policy, and to maintain and provide to PERA accurate records of proxy votes. To the extent feasible, MSAM's Proxy Voting Policy shall be consistent with the principles set out in PERA's Proxy Voting Policy.

International Proxy Voting

Description: Proxy voting for international companies is not currently handled by internal PERA staff. The Board of Trustees has determined that the best method for voting international proxies at this time is to continue having the international equity managers vote international proxies.

Shares of stock with associated voting rights, which are purchased by international equity managers for PERA, shall be voted by the purchasing international equity manager subject to the following requirements and standards:

- Each manager shall have a written proxy voting policy which shall be submitted to PERA. Changes or amendments to this policy shall be submitted to PERA when implemented. This policy shall not conflict with the principles set out in PERA's general Proxy Voting Policy unless for good reason, communicated to PERA in writing.
- The manager shall vote all proxies unless it documents in writing that the cost/benefit ratio of voting in that case in unfavorable.
- The manager shall report quarterly in writing all proxy votes. Any exceptions from the manager's proxy voting policy shall be documented.

Domestic Proxy Voting

Description: Proxy voting for domestic companies is handled by internal PERA staff. The Board of Trustees has determined that the best method for voting domestic proxies at this time is to continue having internal PERA staff vote domestic proxies.

Shares of stock with associated voting rights, which are purchased by PERA internal investment staff and domestic equity managers for PERA, shall be voted internally by PERA staff subject to the following requirements and standards:

- PERA staff shall vote all domestic proxies pursuant to the written proxy voting policy adopted by the PERA Board of Trustees.
- PERA staff shall report quarterly in writing all domestic proxy votes.

Revised and adopted by the PERA Board of Trustees and Shareholder Responsibility Committee (formerly Proxy Committee) in January 2003. Previous versions of the Proxy Voting Policy were revised and adopted by the PERA Board of Trustees and/or Shareholder Responsibility Committee (formerly Proxy Committee) in November 2002, November 1997, March 1997, November 1993, 1990, 1987, 1985, 1984, 1980, and 1979.