

Colorado PERA Statement of Investment Policy

Contents

1
1
2
2
4
5
5
7
9
9
9

Purpose

The Public Employees' Retirement Association of Colorado (Colorado 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.

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 followina:

- 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.) Marketrelated 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 longterm 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 amended on February 18, 2005, 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.

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
- 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 Policy and Procedure Manual, adopted by staff in October 2003, describes the process by which managers will be selected, criteria for evaluation, as well as reasons for termination or removal (Appendix A).

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 7	Target Allocation	Permissible Range
Domestic Equity	45%	42% to 48%
International Equity	14%	11% to 17%
Fixed Income	25%	22% to 28%
Alternative Investme	nts 8%	5% to 11%
Real Estate	7%	4% to 10%
Timber	1%	0% to 2%
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 quarterend, 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.

Domestic Equity

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 Wilshire 5000 Stock 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

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 public and private real estate, and be broadly diversified by geography and property type.

Timber

Investment in timber properties is expected to generate an investment return from a number of different sources including changing commodity 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.

Investment Restrictions

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

24-51-206. Investments.

- The board shall have complete control and authority to invest the funds of the association. (1) 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;
- Corporate notes, bonds, and debentures whether or not convertible;
- (e) Railroad equipment trust certificates;
- Real property; (f)
- 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
- Any other type of investment agreements.
- (3) Investments may also be made in either common or preferred stock with the following limitations:
 - 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.
 - 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.
 - (I) Each investment firm offering for sale to the board corporate stocks, bonds, notes, (c) 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.

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 quidelines 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 quidelines are measured and monitored, with compliance exceptions being reported to the Board.

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 ir	% Weighting 1 Policy Portfolio	Benchmark
Domestic Equity	45%	DJ Wilshire 5000 Stock Index
International Equity	14	MSCI All Country World Ex-US Index
Fixed Income	25	Lehman Brothers Universal Index
Alternative Investment	ts 8	DJ Wilshire 5000 + 300 basis points
Real Estate	7	Custom Real Estate Benchmark
Timber	1	NCREIF Timber Index

Proxy Voting

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



Policy and Procedure Manual for External Managers and Internal Portfolios Colorado PERA Investment Department

Staff Adopted and Updated October 7, 2003

Contents

Objective	.Tab 1
Development of Objectives and Guidelines for a Mandate	.Tab 2
Establishment of Internal Portfolios	.Tab 3
Selection of External Investment Managers	.Tab 4
Manager Performance Standards	.Tab 5
Periodic Monitoring and Review of Internal and External Investment Managers	.Tab 6
Termination of Internal Portfolios	.Tab 7
Termination of External Investment Managers	.Tab 8
External Manager Contracts	.Tab 9

Objective

The new PERA Governance model delegates to the Investment staff decisions such as the selection, retention, and termination of external managers and the establishment, modification, and termination of internal portfolios. Best practices for investment management require a structured process to manage this and other elements of the supervision of a large institutional portfolio.

PERA utilizes both internal and external investment management. Best practices suggest that similar or parallel steps be used to establish quidelines, objectives, and periodic evaluations for both internal and external managers. Finally, there are a number of investment-related processes which have evolved at PERA which should be documented.

Establishment of formal policies and written procedures will allow PERA Internal Audit to review conformance and report any exceptions to senior management and the PERA Board. While written policies and procedures are necessary for the efficient and effective management of an investment process, they, by themselves, will not prevent improper activities without the active support of management. Mere possession of such a Policy and Procedure Manual does not quarantee that improper or inappropriate behavior will be inhibited or discovered.

Development of Objectives and Guidelines for a Mandate

Policy: Investment mandates are established to implement the Investment Policy for the PERA portfolio.

Each investment mandate shall be consistent with the authority delegated to the Investment Department by the PERA Board. The objectives of the mandate shall be established to be supportive of the overall return and risk objectives in the Investment Policy.

The objectives and guidelines of a mandate should be specific enough to permit continuous evaluation but not so restrictive as to preclude the investment management process from adding value or achieving objectives.

The objectives should be considered in the context of the entire PERA portfolio. This 'whole portfolio approach' would permit development of objectives for a particular mandate more aggressive than those for the total PERA portfolio, provided that lower levels of correlation or other diversifying factors result in the contribution of the mandate's risk to the total PERA portfolio risk being reasonable in light of the expected return.

Performance objectives and expectations should be based on performance relative to an appropriate index, performance relative to an appropriate universe, and return/risk characteristics relative to an appropriate universe. This last objective can be expressed in terms of return/risk ratio, a Sharpe ratio, or an Information Ratio, as appropriate.

The objectives of the mandate should not require extraordinary performance for the mandate to be considered a success. Specifically, the expected return or expected excess return should not be greater than would be expected of a manager performing at the 25th percentile to achieve the return expectation.

The quidelines of the mandate should allow the manager to generate a return above that of a passive implementation of the mandate. Use of out-of-benchmark securities should be considered when consistent with a manager's skill-set and demonstrated capability, provided that an excessively large portion of the expected value added is not due to the use of out-of-benchmark securities.

In mandates where use of out-of-benchmark securities is permitted, the performance benchmark shall be a premium over the core passive index rather than a composite developed using a weighted average of the mid-range allocation limits of out-of-benchmark securities. The PERA Investment Department believes that the freedom to use out-of-benchmark securities to a permitted maximum should be used truly opportunistically and the middle of the permitted range not be signaled to the manager as being a comfortable neutral position.

The guidelines should not restrict the manager from holding an essentially benchmark portfolio ('closet index') for short periods of time while discouraging holding an essentially benchmark portfolio for longer periods by performance objectives based on an appropriate incremental return.

As the market environment is continuously evolving and the capabilities of current and new managers changing, it is the policy of the PERA Investment Department to periodically review the definition of all mandates and where appropriate, update the definitions, objectives, and quidelines for mandates.

Procedure:

Upon the Requirement to Define a Mandate

- 1. The appropriate asset-class director and the PERA CIO will review the conceptual definition of the mandate and any expectations for performance and risk characteristics that were utilized in the last asset allocation or asset liability modeling study for the PERA portfolio.
- 2. The Asset Class Director and/or the PERA CIO may consult with outside experts regarding reasonable expectations as well as the historical record of manager performance for the mandate.
- 3. The Asset Class Director will develop a proposed mandate definition including the performance benchmark (return and risk), range and where appropriate, weights for sub-asset classes, and any quidelines regarding the use of out-of-benchmark securities.
- 4. The CIO shall review the Asset Class Director's recommendations and approve as required.

At Least Every Three Years after the Definition of a Mandate

- 1. The Asset Class Director will consider any evolution of the market environment regarding the mandate and any changes in the capability of PERA's or other managers.
- 2. Where there is a significant change in the market environment or a manager's capability that would provide an advantage to PERA, the Asset Class Director will consult with the CIO regarding making a change to the mandate definition, quidelines, or objectives.
- 3. After CIO review and approval, as the mandate definition, quidelines, and objectives are an element of manager contracts, appropriate steps must be taken to discuss the proposed changes with the managers and appropriate changes made in the manager contracts.

Establishment of Internal Portfolios

Policy: There is a preference for internal management of PERA assets where appropriate. The lower cost and superior internal control of internal management is advantageous relative to external management except where resource allocation and research requirement issues indicate otherwise.

In order to ensure that internal management is used appropriately, a structured review process shall be completed that identifies the mandate, research and staffing requirements, required trading and other execution support, ongoing policy compliance requirements and risk analysis procedures.

The Asset Class Director seeking to establish a new internal portfolio shall produce a written proposal to the Chief Investment Officer identifying the objectives, requirements, and rationale for the proposed internal portfolio.

The written proposal shall contain, at the minimum, the following information:

- The definition of the mandate to be implemented as an internal portfolio
- The rationale for choosing internal management versus external management
- The staffing requirements to implement the internal portfolio. This can include an allocation of existing staff on a full-time equivalent basis
- The source and cost of required research and other decision-support information
- The requirements for trading, execution, and recordkeeping support
- The plans for ongoing compliance monitoring and risk analysis
- The contingency plan for support of the internal portfolio during periods of planned or unplanned temporary absences of the primary staff assigned to the mandate
- A business recovery plan to maintain effective and efficient management and control of the investment process in the event of both the sudden permanent loss of primary staff and/or the physical location where management is conducted
- A transition plan to implement the internal portfolio from initial funding in cash or securities to full operation

After obtaining any required corrections or enhancements to the written proposal, should the Chief Investment Officer approve of the new portfolio, the Chief Investment Officer shall consult with and obtain any required approvals from the Executive Director and/or PERA Board.



Procedure:

- 1. Upon perception of a potential opportunity or requirement for implementation of a new internal portfolio, the appropriate Asset Class Director will develop a written proposal addressing the issues in the policy above.
- 2. The appropriate Asset Class Director will submit and review the proposal with the Chief Investment Officer and seek their approval.
- 3. The Chief Investment Officer may seek advice or information regarding the desirability or feasibility of proceeding from any internal or external resource they feel appropriate.
- 4. Upon the satisfaction of the Chief Investment Officer of the desirability and feasibility of establishing a new internal portfolio, the Chief Investment Officer shall obtain any further approvals required.
- 5. Upon obtaining the approvals required, the Chief Investment Officer will authorize the Asset Class Director to execute the implementation plan contained within the proposal.
- 6. Weekly and upon completion of the implementation plan and full operation of the new internal portfolio, the Asset Class Director will prepare/update an implementation review and analysis that details the steps completed and highlighting any expected and unexpected difficulties that were encountered.
- 7. Upon full operation of the new internal portfolio, the Chief Investment Officer will endorse the implementation review with their comments and transmit that document to the Executive Director and PFRA Board.

Selection of External Investment Managers

Policy: As stated previously, there is a preference for internal management of PERA assets where appropriate. The lower cost and superior internal control of internal management is advantageous relative to external management except where resource allocation and research requirement issues indicate otherwise.

When it is appropriate to utilize an external manager, the process used to select that manager shall conform to best practices and be based on objective criteria. While in general, the manager selected for each mandate should have the highest likelihood of achieving PERA's objectives for that mandate, if all other factors are approximately equal, a manager with existing PERA mandates offering fee concessions or offering to provide significant access to research or other intellectual capital that benefits PERA's internal management may be selected over others.

The objective criteria used to evaluate and select managers should include successful execution of mandates of a size and characteristic similar to PERA. The investment processes and sources of excess return should be clear, understandable, and have an expectation of being repeatable. There should be sufficient research to evaluate and make purchase decisions, a portfolio management process with acceptable requirements for diversification and risk control, a structured sell discipline, and sufficient manual and automated internal controls to ensure specified processes and procedures are continuously implemented and PERA's guidelines observed.

While it is understood that past performance is not necessarily predictive of future performance, past performance should indicate that the manager's investment process has generated acceptable investment performance in recent and similar market environments. While selection of an investment manager with a strong process but weak recent absolute performance due to an investment strategy being out of favor is not precluded, the due diligence and standard of review for such a selection must be at the highest level. There should be objective grounds for assuming a turnaround in performance will occur in the relatively near future.

While the selection of external managers is ultimately a discretionary process, there are a number of quidelines an external manager should have to be considered:

- 1. Five years of organization existence except where the manager is the result of a 'lift out' of an investment team from another manager. In the case of a 'lift out', substantially all resources used in the investment process, particularly the analysts, and portfolio managers, that generated the investment performance record being relied upon must be at the new firm. Further, the appropriate SEC requirements for transference of the past performance record must be in place.
- 2. Sufficient assets under management at the firm and mandate level such that PERA's assets do not constitute more than 10% of the total assets under management at the firm level and 50% of the assets under management at the mandate level should the manager be retained. In the event that the manager's product or capability represents a unique opportunity for PERA, PERA may serve as the launch client for a new product with a clear understanding of the manager's future plans for the development of that product. Except of the most unusual of circumstances, PERA will not be the launch client for an entirely new manager except in the event of a 'lift out' situation from an existing PERA manager.
- 3. Generally positive comparative new/lost clients and new/lost assets under management ratios for the product for the last three years.
- 4. A generally positive new/lost staff ratio for the product for the last three years with no losses of such a significant nature that the applicability of the historical performance record is called into question.



- 5. Portfolio characteristics substantially aligned with those expected of the mandate, both currently and historically. For style-specific mandates, style drift should be minimal and consistent with appropriate responses to changes in the market environment. For products that allow opportunistic use of nonbenchmark securities, usage of non-benchmark securities should be within policy, be appropriate responses to changes in the market environment, and within acceptable risk parameters.
- 6. Cumulative performance in an appropriate universe generally above the 50th percentile, particularly for the one-year, three-year, and five-year periods. Annual performance generally above the median with few/no years below the 65th percentile. Annual performance should not consist of a pattern of very good and very bad performance that generates good cumulative performance or a pattern of one/two exceptional years and mediocre performance in other years.
- 7. Performance should not exhibit a strong bias to outperformance in one or the other of up or down markets and very weak performance in the other unless required to pair with another PERA manager. Strong outperformance in one market-phase and median performance in the other is fully acceptable provided that there is not a strong bias in one direction across all PERA managers in an asset or subasset class.
- 8. Standard deviation of returns should be below the median of an appropriate universe and Sharpe and Information Ratios above the median of an appropriate universe. The Information Ratio should be above that expected for the mandate in the last asset allocation or asset liability modeling study.
- 9. Relative performance versus a universe should be consistently above the median for rolling one-year and three-year periods with few periods, particularly for three-year periods, in the fourth quartile.

Procedure:

- 1. Upon the identification of a need to retain a new external investment manager, the Asset Class Director shall review the current definition of the mandate and ensure that the definition, quidelines and objectives are appropriate.
- 2. In order to provide the largest pool of candidate managers to be considered it is generally accepted that an external resource will be used to provide a pool of candidate managers to be considered and to identify and rank those candidate managers. If PERA does not choose to use an external resource for a given search, substantially the same process should be completed.
- 3. The Asset Class Director shall screen a large number of candidate managers, usually with the assistance of an external resource, to identify a small (3-5) list of semi-finalist candidate managers for which extensive due diligence and data analysis is to be completed.
- 4. Appropriate due diligence and data analysis is developed consistent with the policy above for all semi-finalist candidate managers. This is reviewed by the Asset Class Director and discussed with the CIO.
- 5. It is generally expected, although not required, that a small group of finalists will be interviewed by the Asset Class Director and the CIO from which a winner is selected. It is expected that all finalists will be provided prior to the interview with the current standard PERA Investment Management Agreement and asked to identify any issues they have with its provisions. Managers with significant issues with the standard PERA IMA may be dropped from the search process after consultation with the PERA Legal Department.
- 6. Following selection of the winning manager by the Asset Class Director and approval by the CIO, the contracting and transition steps are completed.

Manager Performance Standards

Policy: It is expected that all external investment managers retained by the PERA Investment Department will have objective performance standards and that their performance will be reviewed frequently against those standards. A parallel process shall be developed for all internal investment mandates. These performance standards are an integral part of Investment management agreements with external managers and part of the documentation for all internal mandates.

As PERA is sensitive to the risk being taken to generate incremental returns above the passive benchmark used in the asset allocation or asset liability modeling process, performance standards should contain measures of risk and return/risk performance.

In the case of external managers, PERA has elected to pay external manager fees in order to achieve excess return above the passive benchmark. These fees are a continuous drag on performance and it is appropriate to expect managers to add value in excess of the fees paid. Therefore, it is appropriate to generally consider performance measures on a net of fees basis. It is understood that some comparisons, such as performance relative to an active manager universe should be on a gross of fees basis for comparability.

There are four primary performance measures that are used in a variety of ways for a range of time periods:

- Excess performance, net of fees, versus a passive benchmark
- Relative ranking of gross of fees performance in a universe of managers pursuing a similar mandate
- Return/risk measure such as Sharpe Ratio or Information Ratio
- Relative ranking of Information Ratio in a universe of managers pursuing a similar mandate

Given PERA's conservative risk posture, it is not the intention of the Investment Department to require extraordinary performance from its external managers. Extraordinary performance in generally efficient markets requires assumption of a high level of risk and repeated success in making fund investments. PERA believes that consistent, moderate outperformance, when compounded over an intermediate or longer term, will provide significant cumulative outperformance when compared to managers assuming high levels of risk.

Performance objectives are therefore moderate but requiring a high level of consistency. Significant underperformances for any appreciable period, particularly where analysis of portfolio characteristics and performance attribution identify high levels of risk, are cause of rapid termination.

Performance standards should be considered over multiple time-frames. While PERA can be considered a long-term investor, it is important that the performance evaluation process react quickly enough to limit the damage of poor manager performance.

The classic industry standard for longer term performance is a market cycle. This concept was developed when most performance benchmarks were not style specific and fair evaluation required a sufficiently long period such that a particular style had an opportunity to be in favor during a phase of the market cycle. As market cycles have become longer, market volatility greater, and available performance benchmarks for customized by style, the PERA Investment Department believes that a shorter fixed period of performance is the most appropriate.

The primary evaluation period is three-years with less weight given to performance for one-year and fiveyears. While performance is reviewed on a quarterly basis, quarterly performance results are generally not considered significant except when results are extreme. When results are extreme, either positive or negative, there should be an in depth analysis of portfolio structure to identify the presence of excessive levels of risk.

It is not the intention of the PERA Investment Department to grant any period for a new mandate or manager where performance is not truly reviewed critically. In order to provide continuous performance evaluation relative to PERA's standards, performance for new mandates or managers who have managed PERA assets for periods less than three years shall have their 'house' or 'composite' performance for that product combined with PERA's actual performance to measure performance for the one-year, three-year, and five-year returns. As the series of PERA performance grows, the relative proportion of PERA performance increases and that of 'house' or 'composite' performance declines.

While each mandate is different and performance standards must be adjusted for the inherent ability of active management to add value, there are general ranges of performance targets that PERA considers a requirement.

Excess Performance, Net of Fees, Versus a Passive Benchmark

Performance for one-year, three-years, and five-years should be positive for three-years and for either oneyear or five-years. The amount of excess performance should exceed the alpha expectation for that mandate determined as part of the asset allocation process.

Relative Ranking of Gross of Fees Performance in a Universe of Managers Pursuing a Similar Mandate

Performance should rank above the 50th percentile for a majority of periods with no or a limited number of periods with a ranking below the 75th percentile.

Return/Risk Measure Such As Sharpe Ratio or Information Ratio

The Sharpe Ratio or Information Ratio should exceed the expectation for that mandate determined as part of the asset allocation process.

Relative Ranking of Information Ratio in a Universe of Managers Pursuing a Similar Mandate

The relative ranking of the manager's Information Ratio should be above the 50th percentile of a universe of managers pursing a similar mandate. Further, a 't-test' of the Information Ratio should indicate that there is a less than 35% probability that the excess return is random.

Procedure:

- 1. The Asset Class Director will draft proposed guidelines and objectives consistent of the policy above and PERA's overall return and risk requirements.
- 2. The Asset Class Director will review the proposed guidelines and objectives with the CIO who will consider the quidelines and objectives in relation to other asset classes and the overall PERA portfolio.
- 3. The CIO will amend and approve the proposed quidelines and objectives for incorporation into any search process or manager contracts.

Periodic Monitoring and Review of Internal and External Investment Managers

Policy: All internal and external investment mandates retained by the PERA Investment Department shall have their performance reviewed on a quarterly basis. Performance evaluations shall be versus predetermined performance and risk quidelines established for each mandate and periodically reviewed.

The performance review process shall be substantially the same between internal and external mandates except for internal passive and enhanced passive mandates for which the principal evaluation methodology shall be a measure of tracking error performance.

This policy has different potential outcomes depending on whether the management of the mandate is external or internal. The decisions for external managers involve a retain, revise, or terminate decision with respect to the external manager for a given mandate. The decisions for internal managers involve a retain, revise, or terminate decision with respect to the mandate. This policy per se, does not have an impact on the employment status of any PERA employee involved with the management of a mandate.

The quarterly performance evaluation results shall be summarized by the appropriate Asset Class Director and reviewed by the CIO. In cases where performance standards are not met or where portfolio analysis indicates high levels of risk being taken, a supplementary analysis shall be completed by the Asset Class Director and reviewed with the CIO.

In order to provide a structure to the manager review process, the PERA Investment Department defines three performance-related statuses that each mandate will have. While it is the intention of these Policies and Procedures to permit a degree of discretion to the CIO with respect to a decision to terminate an external manager and discontinue or revise an internally managed mandate, the general guidelines are:

- **Satisfactory**—Mandate is meeting substantially all performance requirements
- Marginal—Mandate is substantially failing to meet performance standards for a period of four successive quarters or has exceeded acceptable risk parameters
- Unsatisfactory/Termination—Mandate has substantially failed to meet performance standards for more than four successive quarters or has exceeded acceptable risk parameters for any period and failed to correct the portfolio risk

These statuses are with respect to performance and risk characteristics only and do not limit PERA's potential action for other reasons.

Continued retention of a manager in a Termination status is at the discretion of the CIO but requires quarterly review and documentation for the action in the files.



Procedure:

- 1. On a quarterly basis, each Asset Class Director will develop an evaluation of each internal and external manager's performance relative to the previously defined mandate definition, quidelines, and objectives.
- 2. When required by a chronic performance issue or an acute development, a supplemental analysis will be developed. In the event of an acute issue in the middle of a quarter, the Asset Class Director will develop such information as required with the timing appropriate with the circumstances.
- 3. The Asset Class Director will review the analysis with the CIO and propose an appropriate status for that mandate in light of all known information
- 4. The CIO will amend as needed and approve any status change. In the event the status change is to terminate, the CIO will obtain approval from the Executive Director. If the decision is to terminate, the Asset Class Director will begin the Manager Termination process.

Termination of Internal Portfolios

Policy: Internal portfolio shall be held to the same high, objective standards, as external managers. In the event that an internal portfolio consistently fails to meet the objectives established for that mandate or is deemed no longer to be required to meet the overall investment objectives of PERA, the internal portfolio may be:

- 1. Revised to better suit evolving PERA requirements, including modifications to any or all elements of the mandate
- 2. Defunded but maintained as an internal portfolio with zero assets
- 3. Terminated and removed as an internal portfolio

The appropriate Asset Class Director shall determine that a change to an internal portfolio is appropriate and prepare a written discussion of the issues for the Chief Investment Officer.

If the internal portfolio is consistently failing to meet established performance expectations, before performance expectations are revised downward, a critical evaluation shall be completed and reviewed with the Chief Investment Officer. Included in that analysis shall be an objective analysis of the causes of the underperformance and a review of the performance, adjusted to suit PERA's environment, such as for fees and quidelines differences, of the experience of external managers in that mandate.

Should there be a significant indication that external management is more appropriate, that option shall be considered, using the appropriate review processes.

Should the Chief Investment Officer consider option (1) above appropriate, they may approve such changes to the mandate including guidelines and objectives that they feel are appropriate provided such changes are within the general bounds of the mandate. Changes which generate a substantially new mandate shall follow the appropriate procedure and not be affected by this amendment process.

Should the Chief Investment Officer consider option (2) or (3) from above appropriate, the Chief Investment Officer shall review and obtain approval of the Executive Director and/or PERA Board as required.

In all cases, the Chief Investment Officer shall notify the Executive Director and/or PERA Board of the actions approved and implemented.

Procedure:

- 1. Upon the determination that a change or elimination of an internal portfolio may be in the best interest of the PERA investment program, the appropriate Asset Class Director shall prepare a written discussion of the issue and review it with the Chief Investment Officer.
- 2. The Chief Investment Officer shall review the facts and circumstances of the discussion and after consultation with appropriate internal and external resources, proceed in the appropriate manner pursuant to the policy above.
- 3. If a change is approved, the appropriate Asset Director shall prepare an implementation plan for the approved course of action and obtain the approval of the Chief Investment Officer.
- 4. Upon obtaining the approvals required, the Chief Investment Officer will authorize the Asset Class Director to execute the implementation plan.
- 5. Weekly and upon completion of the implementation plan, the Asset Class Director will prepare/update an implementation review and analysis that details the steps completed and highlighting any expected and unexpected difficulties that were encountered.
- 6. Upon completion of the implementation plan, the Chief Investment Officer will endorse the implementation review with their comments and transmit that document to the Executive Director and PERA Board.

Termination of External Investment Managers

Policy: All external investment managers retained by the PERA Investment Department are expected to maintain a Satisfactory status at all times. Managers with a persistent or frequent marginal status are candidates for termination. Absent specific dispensation granted by the CIO, managers in an Unsatisfactory/Terminate status shall be replaced or their assets reallocated within a three-month timeframe.

It is the policy of PERA's Investment Department not to advise managers of their marginal or termination status. PERA's Investment Department believes that each professional investment manager is working at the best of their ability and warning them of their status will not incent them to be smarter or work harder, only potentially to increase the level of risk in the portfolio in an attempt to 'catch up'. This 'moral hazard' is a greater negative to PERA than any possible advantage of premature notification.

Prior to a manager being terminated, except when extreme measures are required, a plan shall be developed to replace the manager or to reallocate the manager's assets to other mandates. In the event that a manager is to be replaced, all steps required to permit funding of the new manager should be completed. These include:

- Identifying candidate replacement managers
- Interviews, if deemed desirable, with candidate replacement managers
- Approval as required by PERA's governance model of the selection of a winning bidder
- Completion of required account setup and PERA's custodian
- Preparation of a transition plan for the terminated manager's assets at minimum net cost to PERA

Upon completion of these steps, the manager to be terminated is advised that their authority to trade on behalf of PERA is revoked and no further trading should be undertaken except in the event of a sudden situation that represents the potential for a large loss to PERA and then only with the specific approval of the appropriate Asset Class Director. The Asset Class Director shall promptly advise the CIO of any use of that emergency authority.

After notification, the previously prepared transition process for the terminated manager's assets is implemented and the new manager is free to begin portfolio management operations.

Procedure:

- 1. Upon the direction of the CIO to implement a termination of an external manager, the Asset Class Director will begin the process of selecting a replacement or a plan to reallocate the terminated manager's assets.
- 2. Generally an external resource will be retained to manage the process of selecting a replacement manager and making a recommendation to PERA but with the ultimate authority to retain a manager exclusively with PERA.
- 3. Upon completion of the manager search process, a transition plan is developed to effect the transition of assets and/or cash from the account of the terminated manager to a replacement manager or in the event of a reallocation, to the accounts of existing managers.

External Manager Contracts

Policy: All external investment managers retained by the PERA Investment Department shall have a current PERA-approved contract. The PERA CIO will maintain a standard PERA Investment Manager Agreement (IMA) which shall be approved by PERA Legal.

As industry practices and common contract provisions evolve over time, the standard PERA IMA will be reviewed every three years and updated as required. As part of that review, the PERA CIO shall seek expert opinion as to the language that best protects PERA's interests subject to commercial acceptability.

Each use of the standard PERA IMA shall have noted an edition code and periodically, all existing PERA manager contracts shall be reviewed and updated where significant enhancements have been made since their original execution.

Procedure:

Upon Retention of a New External Investment Manager

- 1. The appropriate asset-class director and the PERA CIO will discuss any special mandate or contract issues and present the then-current PERA IMA to the prospective manager.
- 2. Any issues with the PERA IMA that are unacceptable to the prospective manager will be reviewed with and approved by the PERA CIO and PERA Legal. Changes from the standard PERA IMA will be documented in an exception sheet attached to PERA's copy of the contract.

Every Third Year After the Inception of this Policy and Procedure

- 3. The PERA CIO, working with PERA Legal and other expert resources will review the then-current PERA IMA for potential changes due to evolving statute, case law, or industry practice. Appropriate changes will be made in the PERA IMA with changes from the previous edition noted in a contract management log.
- 4. Upon approval of a new edition of the standard PERA, all previously signed IMA's will be reviewed and where there have been significant changes to the provisions that would provide additional protection and benefit to PERA, negotiations will be conducted with managers using that/those edition(s) so affected. In these evaluations, the exceptions documented in each individual contract will be considered.
- 5. It is the objective of this process to ensure that all manager contracts, at any point in time, conform in all material ways, to the then-current standard PERA IMA.



Colorado PERA Proxy Voting Policy

Contents

Statutory Authority
Statutory Fiduciary Responsibility
Other Fiduciary Responsibility
Shareholder Responsibility Committee of the Board of Trustees
Operational Items
Adjourn Meetings
Transact Other Business
Change Date, Time or Location of Annual Meeting
Change of Company Name
Ratification of Auditors
Board of Directors
Establish Nominating, Compensation, Audit and Governance Committees
Separate Positions for Chief Executive Officer and Chairman
Declassified Boards
Stock Ownership Requirements
Board and Committee Composition
Proxy Contests
Cumulative Voting
Confidential Voting
Director Nominees in Contested Election
Antitakeover Defenses and Voting Related Issues
Blank Check Preferred Stock4
Bundled Proposals
Mergers and Corporate Restructuring
Sale or Purchase of Company Assets5
Mergers and Acquisitions
Poison Pills
Stock Authorizations
Preemptive Rights
Unequal Voting Rights
State of Incorporation and Charters/Bylaws
Offshore Reincorporation Proposals
State of Incorporation
Supermajority Vote Requirement for Amending Charter/Bylaws
Capital Structure
Common Stock Authorization
Executive and Director Compensation
Director Retirement Plans
Employee Stock Purchase Plans
Incentive Bonus Plans
Employee Stock Ownership PlansLong-term Incentive Plans
Public Disclosure of Director Compensation Packages
Minimum Stock Ownership Requirements
Stock Ownership Requirements
Golden Parachutes
Other Proxy Issues Regarding Corporate Governance
Social and Environmental Issues
Morgan Stanley Real Estate Special Situations Fund
International Proxy Voting
Domestic Proxy Voting

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 Trustees¹

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 quidelines 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.

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.

Adiourn 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-bycase 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 Caseby-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 Caseby-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 caseby-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.

