Colorado PERA's overall approach to investment stewardship is straightforward: Seek out quality investments that are expected to provide the best risk-adjusted returns to PERA’s portfolio over the long term. We break down this approach to financial sustainability into four parts.

**PROTECT**
Protect members’ interests by watching costs

**INTEGRATE**
Integrate relevant factors into PERA’s investment strategy

**ADVOCATE**
Advocate for stronger markets

**EVALUATE**
Evaluate exposures and recognize limitations

---

**PROTECT**
- $90,000 Savings by producing CAP fund fact sheets internally
- 0.32% Cost to manage the Total Fund

**INTEGRATE**
- ~63,000 Proxy proposals voted in 2020
- >220 Proposals seeking ESG disclosures voted in 2020

**ADVOCATE**
- $4 Trillion In assets under management by members of the primary advocacy group in which PERA participates
- ~78% Of eligible private fund advisory boards on which PERA staff serve
- 9.4% Annualized 10-year return on PERA's investments

**EVALUATE**
- $69 Billion Generated by PERA's investments since 1980
- 6.1 Million Metric tonnes of carbon credits sold by PERA’s timberland manager
- >35 Legislative and regulatory offices engaged on matters that can affect PERA and our members
- 11.6% Annualized 5-year return on PERA's investments

As of December 31, 2020, except where noted.
# CONTENTS

A Message From PERA Management ................................................................. 1

Introduction ........................................................................................................ 3

PERA’s Investment Stewardship Philosophy .................................................. 4

**PERA’s Investment Stewardship Approach** .................................................. 6

Building a Portfolio with Long-Term Sustainability ........................................ 6

Protect .................................................................................................................. 7

Cost-Conscious Investing ................................................................................ 7

Integrate .............................................................................................................. 12

Environmental Stewardship: Investmenting in Renewable Resources and A Lower-Carbon Future ................................................................. 12

Social Stewardship: Investing in Local Economies .......................................... 14

Governance Stewardship: Exercising Shareholder Responsibility to Strengthen Corporate Practices ................................................................. 14

Advocate ............................................................................................................. 22

Fair Market Advocacy ....................................................................................... 22

Alignment Advocacy ......................................................................................... 24

Disclosure Advocacy ........................................................................................ 25

Evaluate ............................................................................................................. 26

Sustainable Investment Benchmarking .......................................................... 26

**Industry Perspectives on Sustainable Investing** ........................................... 32

Why Sustainability Matters to Investors ......................................................... 32

How Investors Integrate Sustainability into Portfolios ................................... 34

Obstacles to Evaluating the Financial Impact of Sustainability ....................... 36

Ongoing Stewardship for a Financially Sustainable Future ......................... 37

Disclosures ......................................................................................................... 38

LEED® ............................................................................................................... 38

ENERGY STAR® ............................................................................................... 38

MSCI ESG Research LLC .................................................................................. 38

Endnotes ............................................................................................................ 39
A MESSAGE FROM PERA MANAGEMENT

The events of 2020 have brought new opportunities and challenges that will continue to shape markets for years to come. The impacts of the global health crisis, coupled with sociopolitical movements, have forced organizations to react, rethink, and reimagine the ways they do business in order to stay competitive. Investors have in turn been monitoring companies to see how they respond to heightened attention to those aspects that can impact profitability and returns.

When current events impact supply and demand functions, technological innovation, or legislative and regulatory dynamics, they can affect investment returns and therefore may be financially material. Under Colorado PERA’s fiduciary duty to our members, we integrate material considerations throughout the investment process. This process starts with the decision-making phase and continues throughout the end of the holding period, while adjusting expectations for financial performance accordingly.

One of the ways PERA integrates financially material environmental, social, and governance (ESG) factors is through proxy voting. As shareholders, we hold the right to vote on matters that can affect the long-term financial sustainability of the investments we make on behalf of the membership. The PERA Board’s Proxy Voting Policy (Policy) gives staff guidance for casting votes with the aim of seeking long-term value creation by encouraging the alignment of corporate management’s interests with those of institutional investors.

Within their fiduciary oversight of PERA’s investment program, the Investment Committee of the PERA Board periodically updates their Policy to maintain its applicability and relevance in voting and engagement matters. As part of the Board’s current Strategic Plan, the Trustees set forth an initiative to solidify their position on ESG matters as one aspect of PERA’s ongoing objective to fortify the resiliency of the investment portfolio. Throughout 2020, the Investment Committee met to evaluate their existing Policy, examine emerging themes in proxy ballots, and articulate their philosophy on the integration of financially material ESG matters in PERA’s investment program.

While the Board’s Policy continues to promote best practices in corporate governance, it also expands on matters of environmental and social sustainability that may affect a company’s long-term profitability. The Philosophy Statement reiterates PERA’s focus on long-term financial sustainability in our investment decisions. In addition to the new Philosophy Statement, the resulting updates to the Policy include amendments that guide PERA’s votes regarding corporate disclosure of material sustainability metrics pertaining to climate-related risks and opportunities, human capital management, and corporate diversity and inclusion practices. The Board’s updated Policy also includes revisions that increase transparency into PERA’s proxy voting activities and enable staff to bolster PERA’s practices in the areas of securities lending and fair legal forum provision advocacy.

Through careful deliberation, the Board continues to uphold its fiduciary duty in setting parameters for PERA’s investment activities that demonstrate our integrative approach to achieving long-term financial sustainability of the fund for the retirement security of our members. In this year’s Investment Stewardship Report, we invite you to learn more about PERA’s integrative proxy voting activities and the Board’s updated Policy.

Sincerely,

Ron Baker
Executive Director

Amy C. McGarrity
Chief Investment Officer
Look for this symbol to see notable additions to the report in 2021.

Look for these symbols throughout the report for specific examples of how PERA’s four-part stewardship approach is used to achieve financial sustainability over the long term.
INTRODUCTION

Stewardship is the heart of Colorado PERA’s mission. As stewards of pension plan assets, we manage approximately $59 billion in assets on behalf of more than 630,000 members. That is a tremendous responsibility, and one we accept whole-heartedly. In fulfillment of our fiduciary duty, PERA’s investment stewardship is founded on our commitment to the long-term financial sustainability of the Total Fund for its beneficiaries.

This report explores PERA’s approach to seeking financial sustainability through investment stewardship. With increasing focus on environmental, social, and governance (ESG) considerations within the investment industry, we uphold PERA’s view of stewardship as a more integrative framework for achieving financial sustainability. Under this approach, we have found opportunities to invest in firms and partnerships that integrate quality practices into their business models, while prioritizing long-term financial sustainability.

PERA’s stewardship approach adheres to our investment policies by maintaining our foundational focus on maximizing risk-adjusted returns across the Total Fund. Throughout this report, we demonstrate how PERA uses the lens of stewardship to guide our decisions in the fulfillment of our fiduciary duty. We conclude with a discussion of industry perspectives on sustainable investing and reflect on how they help inform PERA’s ongoing investment stewardship toward the ultimate financial sustainability of the Total Fund.
PERA’S INVESTMENT STEWARDSHIP PHILOSOPHY

PERA uses the term “stewardship” to describe our financially sustainable investing philosophy. We believe stewardship encompasses risk and opportunity factors that are relevant to our investment decisions as fiduciaries. Under our fiduciary duty, we have the foremost obligation to invest in opportunities that provide the best risk-adjusted returns. We evaluate appropriate investments that fall within the parameters set forth by the PERA Board of Trustees (Board).

That means we may consider factors characterized within an ESG framework, but we will not limit our investment decisions to only those factors. Instead, we recognize that sustainable practices are pieces in the mosaic of information necessary to determine an investment’s comprehensive value.

Companies that effectively manage stewardship risks and opportunities may demonstrate innovation, leadership, alignment with stakeholders, and financial success. These are qualities of companies that are built to last, and which present potential for increased financial value. Ultimately, we believe the best investments for long-term financial sustainability are found in quality companies and partnerships that practice strong stewardship over all aspects of business in order to generate profits and attractive investment returns.

See "Why Sustainability Matters to Investors" on page 32
WHAT IS ESG?

ESG is an acronym for environmental, social, and governance factors which investors may consider as part of their investment decision framework. Underlying each of these motifs are countless elements of sustainable practices. ESG is the most common label used to indicate global sustainability within the investment industry, but it is not the only label. Sustainable investing, socially responsible investing, and corporate social responsibility are also among the many terms investors may use to describe sustainable investing. Each designation can be underpinned by unique approaches and limitations, which investors may apply to their portfolios for alignment with their investment philosophies and policies.
PERA’S INVESTMENT STEWARDSHIP APPROACH

PERA’s approach to financial sustainability is guided by four principles for sound investment stewardship.

» We protect our members’ interests through cost-conscious investment management.
» We integrate relevant and financially material factors into our investment decisions.
» We advocate for stronger capital markets and business practices.
» We evaluate various exposures within our portfolios on an ongoing basis to cultivate a deeper understanding of their real and potential financial impacts.

In this section, we highlight our work to preserve and enhance our members’ retirement assets through investment stewardship. Within the context of our long-term investment horizon, we describe our ongoing cost stewardship to protect assets and discuss the opportunities to integrate ESG stewardship into the portfolio while seeking risk-adjusted returns. We also demonstrate PERA’s influence as the voice of our membership in the global marketplace through our focus on advocacy. This section concludes with evaluations of various ESG exposures within our portfolios to reinforce our commitment to promoting objective analysis and increased disclosures for better stewardship.

BUILDING A PORTFOLIO WITH LONG-TERM SUSTAINABILITY

Meeting perpetual financial needs requires using PERA’s breadth of resources to design a sustainable framework on which to build a long-term investment portfolio. In constructing the portfolio, PERA allocates assets across diverse public and private markets. We actively manage investments in public equity and debt instruments in both developed and emerging markets, commercial real estate properties, private equity partnerships, and opportunistic interests. Allocating assets to diverse strategies allows PERA to maintain a broad investment portfolio, which is imperative for long-term financial success.

PERA’s long-term investment horizon provides time to not only identify, but to understand and anticipate changing market forces and their far-reaching impacts. This is especially advantageous as technology changes the quality of, and rate at which, information is disseminated and priced by markets. As new data become available, PERA is poised to thoughtfully evaluate broad consequences of information without compromising long-term gains with short-sighted decisions. This long-term vision helps PERA manage excess volatility created in public markets by investors reacting to short-term signals.

By looking deep into the investment horizon for diverse opportunity sets, PERA seeks to identify enduring companies that will contribute to thriving economies, while avoiding those that will be unable to compete in the long run. PERA believes companies with strategies built for longevity are high-quality firms that adapt their business models to meet stakeholder interests and provide strong risk-adjusted returns. In the long run, this focus on high-quality companies should boost performance of the Total Fund and contribute to its sustainability.

Target Asset Allocation (as of December 31, 2020)
COST-CONSCIOUS INVESTING

PERA aims to earn risk-adjusted returns in an efficient, cost-effective manner without sacrificing our focus on quality investments. We acknowledge there are inherent monetary costs to investing. These costs may be explicit or implicit and may vary depending on factors such as market structures, investment needs and availability, relationship agreements, regulatory fees, operational efficiencies, and management expertise. We advocate for cost transparency where we can, and seek the lowest possible costs to preserve risk-adjusted returns in both our defined benefit and defined contribution plans.

REDUCING FEES FOR PERA’S CAPITAL ACCUMULATION PLANS (CAPS)

PERA recognizes the value of saving for retirement. All PERA members have the option to invest for retirement through PERA’s 401(k) Plan, and members of affiliated employers have the option to participate in PERA’s 457 Deferred Compensation Plan. Additionally, eligible members can opt to forgo participation in the Defined Benefit (DB) Plan in favor of sole participation in the Defined Contribution Plan. The 401(k) Plan, 457 Deferred Compensation Plan, and the Defined Contribution Plan are collectively called the Capital Accumulation Plans (CAPs). These plans are separate from the DB Plan, and provide the opportunity for PERA members to self-direct their own money across a wide variety of investment options to help meet their individual retirement savings goals.

As of December 31, 2020, the CAPs offer 17 PERAdvantage funds and a self-directed brokerage account (SDBA) in which participants may choose to invest their individual account assets. The SDBA allows participants to construct a portfolio with publicly traded securities and funds of their choosing, while the PERAdvantage options range from managed target-date funds to funds specializing in specific asset classes and strategies. The costs to invest in each PERAdvantage plan include a $1 flat participation fee per month ($12 per year per plan), and plan administration fees of 0.03% on assets. The low participation and asset-based fees encourage PERA members to participate.

In an ongoing effort to reduce fees paid by participants, PERA has worked to reduce the CAPs' administration fees from 0.50% of assets in 1995 to 0.03% of assets in 2020. PERA also internally manages a portion of the funds offered through the Plans, resulting in lower overall investment management fees.

Reductions in administration and investment management fees have decreased the all-in costs of PERA’s 401(k) Plan down from 0.66% of assets in 2011 to 0.16% of assets in 2020. That’s a 76% decrease in fees. Those smaller investment costs equal bigger nest eggs for participants and more efficient Plan management. The PERA Board has prioritized the continuing reduction of CAPs’ fees, and we will regularly evaluate additional potential cost savings that would benefit participants.

In addition to lowering costs paid by participating members, PERA works to reduce the CAPs’ operating costs. As of 2020, fact sheets for each of the funds offered through the CAPs are produced internally by PERA staff, at a savings of $90,000 per year. These fact sheets are updated quarterly and published through the Plans’ recordkeeper to inform participating members about each fund’s strategy, portfolio composition, performance, and fees.

Lower Fees = More Savings

<table>
<thead>
<tr>
<th>Year</th>
<th>Fee Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>0.66%</td>
</tr>
<tr>
<td>2020</td>
<td>0.16%</td>
</tr>
</tbody>
</table>

76% All-in Fee Decrease in PERA’s 401(k) Plan
LOWER AGGREGATE INVESTMENT MANAGEMENT FEES

As part of our cost stewardship within PERA's DB Plan, we emphasize low-cost, high-quality internal management of the majority of our assets, while selectively partnering with external experts where those relationships add value. As our assets have grown over the past 10 years, we have kept internal investment management costs consistently low. The lower costs of managing the majority of our assets internally help to offset the costs of managing assets externally. This enables PERA to provide higher quality returns at lower overall costs.

Within the public equity asset class, PERA's experts manage the majority of assets in-house, resulting in significant overall cost savings. As PERA's assets have grown, the competitive advantage of using in-house investment professionals has also increased, saving PERA over $60 million annually.

In 2020, PERA utilized external experts for a portion of our public equity investments, as well as for partnerships that help facilitate our private asset investment strategies where they can produce compelling results. The complexity of private asset strategies necessitates deeper resources and specialized expertise to transform underlying assets to generate expected returns generally higher than those of public investments. Where we can, we negotiate with our external partners for lower management fees. In every partnership, we hold our managers to high standards and select only those managers who we believe will add the greatest value on a risk-adjusted basis at a fair cost.

Since 2014, PERA's Real Estate investors have focused on driving fees lower while pursuing investment structures that maximize risk-adjusted returns. One way we have done this is by shifting focus to develop smaller investment structures, which allow for asset flexibility over the long run, decision-making capability, better overall transparency, and potential management and incentive fee reductions. Staff have also worked to reduce both management and incentive fees by shifting assets toward direct investing, which gives PERA full ownership control of underlying assets. In the past five years, PERA has doubled its investment dollars in direct investing in pursuit of compelling long-term returns, while reducing management and incentive fees.

Assets in PERA's Real Estate portfolio have also been strategically allocated to certain fund strategies that allow for increased flexibility in cash management while further reducing fees. PERA has successfully negotiated perpetual management fee structures to lock in below-market costs for new fund investments in these strategies, as well as for future add-on investments. Besides cost reduction benefits, the move to these funds has allowed for more flexibility in diversification and tactical investing, while also offering higher asset quality and an income dividend.

While private asset management contracts generally restrict investors from fully disclosing most fee-related information to the general public, PERA staff has full access to this information and carefully evaluates fees paid on an ongoing basis. This fee information is also reviewed by the PERA Board's Investment Committee. PERA continues to strive toward increased transparency within our contractual limits. To that end, we have adopted the Institutional Limited Partner Association's (ILPA) Reporting Template which aims to standardize disclosures of fees, expenses, and carried interest costs within private asset partnerships. In joining our peers in the adoption of the ILPA Template, PERA endeavors to bring forth mainstream transparencies that address potential risks and promote efficiencies within private markets.

“Internal management supports our ability to be agile in responding to market conditions while also saving PERA significant costs.”

—KEITH TAYMAN
PERA Director of Fixed Income
18 years  
Average experience in investment management among internal investment experts.

63% 
Of Total Fund managed in-house at a cost of ~0.04% of those assets.

$60 million  
Estimated annual savings by managing public equity and fixed income assets internally.
MAKING EQUITY RESEARCH AND TRANSACTION COSTS MORE TRANSPARENT

PERA’s efforts to increase transparency and reduce investment costs go beyond product and management fees. As an institutional investor, PERA is also concerned with research and transaction costs, which have implications for large and small investors alike. These costs may add significant financial burdens to asset managers and owners.

In the traditional model, equity trading and research services are bundled together by broker-dealers and offered to investor clients as one service package. In this model, investors pay a single price for multiple services, without knowing the exact costs for each service in the bundle. Although broker-dealers may add services to the bundle to try to lure clients, this model is disadvantageous for buy-side market participants—such as asset managers and asset owners—because it permits obscured and inflated pricing. The lack of transparency into costs for each service makes it difficult to assess and fairly pay for services received in a bundled model. As a result, investor clients may end up paying a higher price relative to the value received for one service, simply because they contracted that provider for a different service in the same bundle.

A few years ago, the European Commission released the Markets in Financial Instruments Directive II (MiFID II) regulation, which includes a new model for investors to access equity research and trading services. Under the unbundling model in MiFID II, investors are not beholden to any one broker-dealer for execution services simply because they receive research from that provider, and vice versa. Instead, unbundling offers investors the opportunity to use research from brokers they find most informative to their investment strategies, and trading services from dealers they believe offer the best execution. The transparency into the costs of each service in the unbundled model allows investors to determine which services are truly valuable from each broker-dealer, and negotiate a fair price to receive those services. Essentially, this facilitates transparency, price discovery, conflict mitigation, and improved efficiency of research consumption.

However, because this regulation applies to European investors only, investors in other jurisdictions may be disadvantaged. For example, costs for research and trading services in the U.S. may be higher and less transparent than costs paid by European investors for the same services from the same broker-dealers. This disparity also implies that some investors are subsidizing services provided to other investors at lower costs. This not only creates cost inequities in the market (thus limiting price discovery), it also perpetuates poor transparency which encourages intermediaries to continue inflating hidden costs. In turn, this may create conflicts of interest for equity managers acting as fiduciaries to their clients.

Although PERA is not subject to MiFID II, we were one of the first institutional investors in the U.S. to proactively seek unbundled services and costs through private negotiations with our equity asset managers and broker-dealers, beginning in 2018. As of December 31, 2020, PERA has successfully negotiated unbundling of equity research and trading services and costs through the majority of the broker-dealers with whom we do business. Additionally, we have been working with our external equity managers to renegotiate fees and services with the goal of disentangling each service in order to assess their true value and contract with those that offer the best services at fair costs. Unfortunately, not all intermediaries in the U.S. are willing to offer services a la carte. For those that will not accept direct payment from PERA for individual services, we may be able to negotiate reduced fees for bundled services we value, or pay through indirect trading arrangements.

ADVANTAGES OF PAYING DIRECTLY FOR INDIVIDUAL SERVICES

- Distinct costs for equity trading and research services are known.
- With explicit costs known for trading and research, the value of each service can be properly evaluated.
- Equity managers can efficiently access the most valuable research and trading from different brokers of choice.
- Selecting different brokers for individual services based on their respective advantages in research and trading services can mitigate conflicts of interest and improve outcomes for investors.
Our efforts are ongoing and we will continue to advocate for market-based solutions that increase transparency and reduce costs to investors and their beneficiaries. Our goal is to pay for equity trade execution and research fees separately, to the best providers of each, so that we can continue to manage costs to the greatest benefits. We believe that allowing investors to pay for services like research, trading, asset management, and conferences a la carte will lead to increased transparency and reduced costs to PERA. This ultimately benefits our members as we are able to maximize risk-adjusted returns to the portfolio by paying fair costs for quality services.

**IMPLEMENTING NEW STRATEGIES TO IMPROVE RETURNS**

PERA’s cost-effective investment program not only saves money, but can add value to the Total Fund through strategies aimed at improving return on investment. PERA expanded internal management of its public market portfolios in 2020 by bringing the full DB fixed income portfolio in-house, establishing an Asset-Backed Securities (ABS) portfolio, and initiating the use of To-Be-Announced (TBA) transactions within the Mortgage-Backed Securities (MBS) portfolio.

ABS are pools of loans issued to consumers and businesses. These pools include credit card debt, auto loans, and loans secured by personal or business assets, and are issued by companies such as banks and auto manufacturers that provide financing to consumers and small businesses. These are typically very short-duration securities that are highly rated (AA average) and offer yields that are 20 to 30 basis points higher than typical money market returns. Including ABS in PERA’s portfolio is expected to obtain attractive yields, increase portfolio diversification, and reduce benchmark tracking errors.

TBAs are forward-settled contracts that package MBS together into a liquid trading instrument with deliverable securities to be announced shortly before settlement. These transactions give investors exposure to diversified underlying assets that would be difficult and costly to obtain otherwise due to current market dislocations from expansionary monetary policy and inefficiencies from index replication within the MBS market.

The U.S. Federal Reserve purchases TBAs exclusively (rather than individual securities) when conducting quantitative easing to stimulate the economy. This program is designed to keep mortgage rates affordable, provide cash to financial markets, and elevate the prices of MBS. Because the Federal Reserve now owns a substantial portion of the U.S. MBS market, prices have escalated to the point of diminishing yields and liquidity, while increasing risks and index replication challenges for investors.

Sophisticated investors such as PERA, can use TBAs to gain and hedge exposures to these risks while locking in stronger returns and yield, relative to owning the underlying bonds directly. TBA contracts allow us to pay a discounted price in the future to obtain exposure to underlying asset characteristics today, without having to pay higher prices for individual securities. The inclusion of TBAs in the PERA portfolio is expected to enhance returns, reduce transaction costs, generate higher income, and assist in managing risk and index replication more efficiently.

Whether by working to reduce costs for our members to save through individual retirement accounts, managing assets internally, or encouraging greater transparency, PERA’s cost stewardship is about protecting our members’ interests by focusing on high quality investments at lower costs.
PERA integrates financially material factors into our investment decisions. These may include ESG factors, which may be considered in the mosaic of information taken into account if they are deemed financially material. Materiality is dynamic and the financial relevance of any risk or opportunity may change over time and within the context of changing businesses, markets, regulation, and the overall asset mix of PERA's portfolio. By focusing on materiality in our investment decisions, we believe we can direct PERA's resources toward issues that are most pertinent to the expected risk-adjusted returns of our investments, in line with our fiduciary duty. This integrative framework for stewardship has always been PERA's approach to making investment decisions.

ENVIRONMENTAL STEWARDSHIP: INVESTMENTING IN RENEWABLE RESOURCES AND A LOWER-CARBON FUTURE

As standards of practice and technologies advance, we recognize there are investment risks and opportunities in all forms of resource production and utilization—including both traditional and alternative resources. PERA's investors may consider factors of environmental stewardship in their fundamental analysis when evaluating investments in public securities, or through due diligence when evaluating private investment assets and managers. Through our long-term, high-quality investment focus, PERA has found material financial value in companies and partnerships that also integrate environmentally sustainable practices in their business models. We highlight some of our investment managers and holdings that utilize and produce renewable resources through their operations in the following sections.

REFORESTATION AND CARBON CAPTURE

In PERA's Alternatives portfolio, our investment in timberland is also an investment in reforestation, land conservation, and carbon capture. By focusing on sustainable practices that offer profitable opportunities, our timberland manager is committed to responsible natural resource management. In 2020, they released their third annual Report on Sustainability and Responsible Investing and their first-ever Climate Report, which describes their assessment of various physical and transition risks and opportunities arising from climate change.

Following the recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD), the manager's Climate Report provides qualitative and quantitative insights into their environmental impacts and oversight. These include reporting on the company's Scopes 1, 2, and 3 emissions, as well as short-, medium-, and long-term risks to their business due to climate change. As a long-lived asset, investing in timber necessitates an understanding of related risks and opportunities up to 50 years or more into the future. These may include physical risks such as increasingly frequent and severe fires, drought, special growth rate dispersions across regions and time, altered pollination patterns, infestations, and extreme outdoor working conditions. They also include transition risks, such as the potential for heightened reputational, legal, and operational risks.

Risks are not without opportunity, and investors aim to be compensated for taking on risk. Market opportunities can stem from technological innovation, regulatory and legislative developments, and supply and demand shifts. In the transition to a lower-carbon future, PERA's timberland manager foresees opportunities to capitalize on heightened market demand for products and services such as solar and wind energy development on existing assets, biomass wood-based energy supply, and carbon capture and removal. Furthermore, the Climate Report cites potential opportunities to participate in carbon pricing and market regulation, improve reputation through sustainable forestry, attract and retain top talent, and innovate more efficient water and land use management. Through adequate, relevant disclosure of how companies are projecting and managing financially material climate-related risks and opportunities into the future, investors like PERA have a better understanding of how these factors can contribute to risk-adjusted returns.
GREEN REAL ESTATE
In the PERA Real Estate portfolio, we seek ways to integrate responsible investing principles into our investment decision-making framework. Where environmentally friendly technologies and practices are incorporated into buildings we own, we believe they can add value to the portfolio and to the quality of life for tenants and their communities.

PERA is proud to invest in green real estate projects. One example is found in our long-term and controlling interest in a large multi-family residential property that works with the City of Dallas to implement a comprehensive program called “Go Green.” The property consists of 15 residential communities comprised of more than 6,000 units. The buildings have been upgraded with energy-efficient lighting, ENERGY STAR® certified appliances, high-efficiency toilets and faucets to reduce water waste, eco-friendly carpeting, and low VOC paint. The properties are also managed with environmentally responsible practices including solar-powered irrigation, drought-tolerant landscaping, in-house composting, extensive recycling programs, low carbon emission warehouse operations, and use of post-consumer and re-manufactured office products. The property management team further reduces waste by reusing fixtures within the properties and partnering with local and national organizations to donate useful household items, clothing, electronics, and appliances.

Buildings in this project as well as several others within PERA’s Real Estate portfolio have earned the ENERGY STAR® certification, have the IREM Certified Sustainable Property (CSP) certification, or are certified by the LEED® green building program. The U.S. Green Building Council’s Leadership in Energy and Environmental Design™ (LEED) building program is the preeminent program for the design, construction, maintenance, and operations of high-performance green buildings worldwide. The LEED certification program verifies these buildings’ resource and cost efficiency, and encourages higher lease rates through its emphasis on healthy buildings. PERA has $1 billion invested in more than 330 buildings that are LEED certified.

RENEWABLE ENERGY
PERA has exposure to renewable energy companies through our private equity and debt investments. The underlying companies in which we invest through our private partnerships include producers and suppliers of eco-friendly energy. Many of these companies generate solar, wind, geothermal, and hydro-powered electricity. Other firms work to develop low-cost green technologies. Some of these technologies are used to produce biofuels by converting municipal solid waste and biomass into green chemicals.

PERA utilizes third-party research data from MSCI, Inc., to help identify ESG exposures in our public equity and fixed income portfolios. According to the data, PERA has hundreds of millions of dollars invested in utility companies that use renewable resources to generate energy, and which take advantage of financial opportunities linked to the development of renewable power production. Many of these companies commercialize renewable energy equipment and offer customers the option to purchase power from green energy sources.

PERA currently invests in public companies that recognize the demand for decreasing carbon emissions, which seek to mitigate their carbon emissions by managing energy consumption and improving the energy efficiency of their operations. Many of these companies have committed to net-zero carbon emissions by 2050, in line with the goals of the Paris Agreement.

As consumer demands shift and technologies in energy production change, opportunities for company profitability evolve and present unique risks to investors. PERA will continue to manage the investment risks and opportunities across the energy sector, including traditional and alternative sources, and construct our portfolios around companies and assets that provide the most attractive long-term return to risk profile.
SOCIAL STEWARDSHIP: INVESTING IN LOCAL ECONOMIES

PERA contributes to economic health in communities through our investments in Colorado companies and properties, affordable housing, and small companies that prioritize employee and customer satisfaction.

COLORADO INVESTMENTS

As stewards of Colorado’s largest public pension plan, PERA takes pride in our contributions to Colorado’s economy. We have more than $808 million in Colorado investments that meet the rigorous investment criteria for inclusion in the PERA portfolio. Our local investments include:

» Equity in public and private companies headquartered in Colorado.

» Real estate in both direct ownership and pooled investment capital.

HUMAN CAPITAL MANAGEMENT

Strategies that delight customers and engage employees can increase profits for companies and returns for their investors. One of PERA’s private equity fund managers ingrains social responsibility into its value-creation approach to increase the market share and valuation multiples of portfolio companies. The manager believes that developing customer and employee satisfaction is foundational to competitive advantages in the market.

According to a private equity industry report, after acquiring a company, the fund manager centers management’s focus on six primary areas of their business to revamp performance—human capital, simplification, customer focus, communities, environment, and governance. By transforming these aspects with special attention on the people who make it happen, the firm is able to increase annual revenues and margins, expand a company’s market presence, and improve satisfaction scores from both consumers and employees.

In one instance, the fund manager increased gross margins by 3.9 percentage points and annual revenue growth by 20% from 2017–2020 through this approach at one of its portfolio companies. The company expanded by 652 new storefronts to serve consumers with new product offerings that are responsibly sourced with healthier ingredients and waste-reducing packaging to meet the growing demand for more sustainably prepared foods and beverages. As a result of the fund manager’s ability to transform businesses to strengthen competitive advantages, investors in the fund expect higher internal rates of return.

AFFORDABLE HOUSING

As PERA pursues risk-adjusted returns across various market opportunities, we have found profitable investments in real estate partnership funds that take advantage of low-cost, tax-exempt bond financing programs to meet market demand for affordable housing while generating strong returns to investors.

Over the past quarter-century, the management team of these partnerships has worked with more than two dozen different municipalities across 14 states to create or update more than 4,500 affordable units in 72 distinct properties. Through attractive bond financing, the fund manager is able to acquire and renovate existing rental housing properties and set aside a portion of these units for households that earn substantially less than the median household income for the area.

PERA’s investment decisions prioritize the financial sustainability of the Total Fund above all else. In the case of our affordable housing investments, that priority is reflected in the 10.5% net internal rate of return generated through these funds since their inception, as of December 31, 2020. PERA has enjoyed the financial benefits of participating as a cornerstone investor in a series of these funds since 1993, and we are pleased to continue our investment partnership through the current affordable housing fund offered by this manager.

GOVERNANCE STEWARDSHIP: EXERCISING SHAREHOLDER RESPONSIBILITY TO STRENGTHEN CORPORATE PRACTICES

Corporate governance has been PERA’s most in-depth and impactful focus in ESG integration. We believe companies with sound business practices will be more likely to provide sustainable financial returns to shareholders. As part of PERA’s commitment to our members’ best interests, we encourage strong oversight practices through ongoing engagement with the companies and partnerships in which we invest.

PROXY VOTING

The goal of PERA’s proxy voting activities is to exercise shareholder rights to encourage the alignment of corporate interests with long-term investor interests. These activities are governed by the PERA Board through its Proxy Voting Policy (Policy), which was established in 1979 and is periodically re-evaluated and updated through the Board’s Investment Committee in order to enhance applicability as markets and regulations evolve. The Policy acts as a public statement on why and how we make voting decisions, and can guide conversations with companies, peers, and stakeholders around PERA’s stance on a variety of
## Investments in Colorado (As of December 31, 2020)

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Fair Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Equity*</td>
<td>$170,282,000</td>
</tr>
<tr>
<td>Fixed Income</td>
<td>14,358,000</td>
</tr>
<tr>
<td>Real Estate</td>
<td></td>
</tr>
<tr>
<td>Portfolio Investments**</td>
<td>148,999,000</td>
</tr>
<tr>
<td>Future Commitments to Colorado-based general partnerships or funds</td>
<td>47,265,000</td>
</tr>
<tr>
<td><strong>Total Real Estate Fund</strong></td>
<td>196,264,000</td>
</tr>
<tr>
<td>Private Equity</td>
<td></td>
</tr>
<tr>
<td>Portfolio Investments**</td>
<td>139,225,000</td>
</tr>
<tr>
<td>Future Commitments to Colorado-based general partnerships or funds</td>
<td>38,096,000</td>
</tr>
<tr>
<td><strong>Total Private Equity</strong></td>
<td>177,321,000</td>
</tr>
<tr>
<td>Alternatives</td>
<td></td>
</tr>
<tr>
<td>Portfolio Investments**</td>
<td>154,274,000</td>
</tr>
<tr>
<td>Future Commitments to Colorado-based general partnerships or funds</td>
<td>95,885,000</td>
</tr>
<tr>
<td><strong>Total Alternatives</strong></td>
<td>250,159,000</td>
</tr>
<tr>
<td><strong>Total Investments in Colorado</strong></td>
<td><strong>$808,384,000</strong></td>
</tr>
</tbody>
</table>

* Companies headquartered in Colorado
** Portfolio investments domiciled in Colorado

PERA has more than **$808 million** in Colorado investments, including:

- Equity in public and private companies headquartered in Colorado.
- Real estate in both direct ownership and pooled investment capital.
PERA advocates for the following core governance principles:

» Directors should be elected by a majority shareholder vote.

» Declassified boards are considered a best practice and enhance accountability.

» Proxy access gives the shareholder the ability to nominate a director.

» Independent board chair promotes greater accountability.

issues that can affect financial value. The Policy parameters seek to encourage public companies to adopt sound business practices that align with sustainable shareholder value creation.

PERA’s Investment Stewardship Division implements the Policy set forth by PERA’s Board through its Investment Committee. The fulfillment of these policies is supplemented with insights from PERA’s investors, as well as third-party experts such as proxy advisors and ESG data providers. Our Investment Stewardship staff also partner with other pension funds and asset managers to help develop and share best practices to drive long-term investment value.

IMPACT OF CURRENT EVENTS ON ANNUAL GENERAL MEETINGS (AGM) AND PROXY VOTING

The COVID-19 pandemic and sociopolitical movements of 2020 have altered many facets of business. These events have brought renewed attention to the role of corporations in global economies, and their ability to meet stakeholder demands competitively while taking into account the varied contexts in which they conduct business. This is reflected in how a firm responds to investors, customers, suppliers, and regulators.

One of the ways companies responded to the events of 2020 was to shift how and when they conduct their annual shareholder meetings. While some corporations were legally restricted from hosting meetings online, many companies adopted a virtual format due to restrictions on in-person gatherings. The shift to virtual meetings provided a cost-efficient way for shareholders to attend an AGM, and is expected to increase engagement between companies and shareholders.

PERA’s staff took advantage of the opportunity to attend virtual meetings during the 2020 proxy season. Staff gained valuable insight into how individual companies respond to, and actively create (or avoid) engagement with shareholders. Post-pandemic AGMs are expected to evolve toward a hybrid model where shareholders can attend in person or virtually, and companies will be under more scrutiny to conduct meetings that improve shareholder accessibility to management and reciprocal responsiveness to investor interests.

The events of 2020 also proved businesses will have to be adaptable and demonstrate resilience as policies and stakeholder interests continue to morph. Shareholders want to understand how the company is rethinking financially material aspects of business practices in order to remain competitive in the market. We expect to see continued emphasis on executive compensation, human capital management, diversity and inclusion, and transition readiness in ballot proposals. PERA will continue to consider how the company is disclosing and evaluating financially material opportunities and risks associated with these issues.

UPDATES TO PERA’S PROXY VOTING POLICY

In March 2020, the PERA Board began work on their strategic initiative to update their Policy by 2021. The Policy enhancements achieve the Board’s strategic plan objective to update the voting guidelines and solidify a position on ESG issues that can affect our financial success over the long term.

The revisions clarify the intention of the Policy, increase transparency into PERA’s proxy voting activities, and modernize the covered ballot topics. The enhanced Policy includes an expansion on existing language pertaining to disclosure of financially material environmental and social risks and opportunities. All updates focus on matters relevant to PERA’s investment objectives and theses. Various topics covered in the Board’s revisions are highlighted in the next pages.
WHAT IS PROXY VOTING?

Proxy voting is a formal mechanism through which corporations and their shareholders communicate about a broad range of issues and practices that can affect a company’s long-term sustainability and investment returns. It is one of the ways shareholders exercise engaged ownership. Voting matters can be put to ballot by the company’s board or its shareholders, and cover important decisions such as approving the members of the board of directors, mergers, acquisitions, and types of disclosures made to shareholders. Shareholders can vote in person at a corporation’s annual general meeting (AGM), or cast their votes electronically in advance of the AGM, which is called voting by proxy, or proxy voting.

A company’s management of environmental, social, and governance matters can be nuanced, complex, and interrelated. This may present overlapping considerations for shareholders when casting their votes.

Proposals Voted by PERA in 2020

- Environmental Related Proposals: 81
- Social Related Proposals: 164
- Governance Related Proposals: 62,744

Proposals from Shareholders: 938
Proposals from Management: 62,051

Shareholders can vote against director nominees to hold them accountable for responding to shareholder interests:

- Nominating committee members should be attentive to board refreshment and declassification.
- Audit committee members should be attentive to audit integrity.
- Compensation Committee members should be attentive to long-term value alignment.

Proposals may seek to link executive compensation with company performance in areas such as greenhouse gas emissions reductions or diversity targets.

Proposals may seek transparency into whether a company’s lobbying activities are aligned with stated objectives such as employee rights or climate change strategies.
PHILOSOPHY STATEMENT REGARDING PROXY VOTING AND FINANCIALLY MATERIAL ESG MATTERS

The Policy update includes a philosophy statement that frames the Board’s overarching ideology regarding proxy voting and financially material ESG matters. It reiterates PERA’s fiduciary duty and focus on long-term financial sustainability in our investment decisions, and includes a discussion of how ESG risks and opportunities may be material to a company’s profitability, and thus, to shareholder value over the long run.

INCREASING TRANSPARENCY INTO PERA’S PROXY VOTING ACTIVITIES

The Policy speaks to PERA’s cost-consciousness within our investing program and our efforts to increase transparency. PERA utilizes proxy advisory services to cast votes in a cost-effective manner by leveraging proxy advisors’ expertise and technology, obtaining objective proxy research, utilizing electronic vote submission capabilities, and evaluating voting analytics. By contracting these services, PERA staff can successfully implement the Board’s custom Policy in voting more than 60,000 proposals annually at meetings held by companies worldwide.

To enhance transparency to PERA’s stakeholders as to when and under what circumstances we utilize electronic vote submission platforms and independent proxy research, the Policy now describes our use of these third-party services. The Board’s Policy also includes a link to PERA’s public disclosure of our voting activities, which is updated following each AGM.

RECALLING SHARES ON LOAN TO VOTE BY PROXY

PERA participates in securities lending to incrementally enhance returns to the portfolio. When shares are loaned, voting rights are transferred to the borrower for the duration of that loan. As lenders, we cannot dictate how the borrowed shares should be voted, which could present conflicts between PERA’s proxy voting objectives and those of security borrowers. In rare cases, PERA staff may determine a ballot issue is of heightened importance due to our holding size and the materiality of the potential outcome to our investment thesis. The updated Policy grants staff authority to recall shares from the lending program in order to vote them as appropriate, weighing the potential costs and benefits of voting versus loaning the shares in question.

PERA will generally support proposals asking for financially material disclosure pertaining to:

- Greenhouse gas emissions and climate change risk management.
- Human capital management and diversity of talent.
- Corporate political spending and lobbying.
GOVERNANCE PROPOSALS
EXAMPLE OF PROPOSAL PERA VOTED IN 2020

REPORT ON EMPLOYMENT-RELATED ARBITRATION—FOR

The proposal requests a report on the use of contractual provisions mandating arbitration on employment-related claims, specifying the proportion of workforce subject to those provisions and the number of those claims initiated and decided in favor of the employee.

PERA’s Policy is to generally support proposals asking for material disclosures pertaining to associated risks and their management—and to support proposals calling for the removal of mandatory arbitration provisions where appropriate.

PERA supports the proposal as it requests a risk assessment around mandatory arbitration of employment-related claims under reasonable terms given the company has been involved in litigation that may have been exacerbated by forcing complainants from class action to arbitration.

The above proposal was voted under PERA’s Policy in effect in 2020. The Policy language above is from the current Policy, effective February 1, 2021. The proposal was voted in compliance with the Policy in effect at the time of vote.

MANDATORY ARBITRATION

Mandatory arbitration provisions can diminish shareholders’ rights in pursuing legal action against a company with respect to fraud and other securities claims. Mandatory arbitration clauses can also be used in contracts or as a condition of employment, which may diminish the rights of other stakeholders in pursuing actions on the basis of employment issues, product safety, breach of contract, etc. To build on our advocacy for fair and equitable markets, the revised Policy reinforces PERA’s opposition to forced arbitration and supports proposals seeking the appropriate dissolution of mandatory arbitration provisions and enhanced disclosure about the associated risks.
ENVIRONMENTAL PROPOSALS

EXAMPLE OF PROPOSAL PERA VOTED IN 2020

REPORT ON CLIMATE CHANGE RISK—FOR

The proposal requests a report on climate change impacts and alignment with the Paris Agreement, including short- and long-term GHG targets and strategies.

PERA's Policy is to generally support well-targeted proposals seeking disclosure of financially material climate-related metrics, such as those prescribed by SASB.

PERA supports this proposal as disclosures such as GHG metrics are considered financially material for the transportation industry according to SASB, and the report will reinforce PERA's interest in material climate-related disclosures.

The above proposal was voted under PERA's Policy in effect in 2020. The Policy language above is from the current Policy, effective February 1, 2021. The proposal was voted in compliance with the Policy in effect at the time of vote.

REPORT ON GHG EMISSIONS—AGAINST

The proposal requests that the company set and publish GHG targets that are aligned with the goal of the Paris Agreement.

PERA's Policy is to generally support well-targeted proposals seeking enhanced disclosure of material risks and opportunities related to GHG emissions.

PERA cannot support the proposal because the company announced GHG targets after this proposal was filed and before the annual meeting, making the implementation of this proposal unnecessary.

The above proposal was voted under PERA's Policy in effect in 2020. The Policy language above is from the current Policy, effective February 1, 2021. The proposal was voted in compliance with the Policy in effect at the time of vote.

DISCLOSURE OF SUSTAINABILITY METRICS

The updated Policy reflects PERA's commitment to advocating for reliable and decision-useful disclosure of all risks and opportunities that may have a material impact on long-term investment returns. It clarifies the Board's expectations on disclosure of environmental and social sustainability metrics.

As interest in sustainability disclosures continues to increase, many frameworks and standards have emerged that attempt to bridge reporting gaps for sustainability metrics. In line with PERA's investment objectives, we value disclosure metrics that focus on the financial materiality of ESG matters—such as those developed by the Sustainable Accounting Standards Board (SASB). These metrics can be integrated into fundamental active investment analysis, are based on industry-specific business practices, and can be used to fulfill reporting requirements of the Taskforce for Climate-related Financial Disclosures (TCFD), which is a globally recognized environmental impact reporting framework.

Over time, we expect global market participants and regulators to coalesce around the types of ESG disclosures that investors need from companies in order to make informed decisions that account for relevant risks and opportunities.

Climate-Related Disclosures

Financially material climate-related risks and opportunities should be adequately disclosed to investors so they can integrate potential impacts into their investment models. While climate change is a global issue with far-reaching and long-term consequences, associated physical and transition risks can affect different industries in different ways, and at different times. It is important for investors to understand how companies are managing those opportunities and risks that are relevant to their business operations.

To do so, shareholders require disclosed metrics that are reliable, decision-useful, and preferably standardized for comparability across industry peers. PERA's Policy guides staff to support well-targeted proposals that would be expected to enhance our understanding of material climate-related matters pertinent to our expectations for profitability at the companies in which we own shares.
Human Capital Management Disclosures

Investors continue to focus on human capital management and stakeholder relationships as they seek to understand how companies develop and manage profitable relationships with boards, supply chains, workforces, consumers, communities, and shareholders.

PERA believes that a company’s ability to maintain strong relationships with its many stakeholders can have long-term effects on profitability. The revised Policy recognizes the potential risks and opportunities related to the management of those relationships, and reflects PERA’s philosophy that corporations should be responsive to investors and align their practices with the maximization of long-term investment returns.

Diversity, Inclusion, and Equity Disclosures

As a sub-set of human capital management, employee recruitment, retention, and pipeline building can impact corporate profits and the global economy. Shareholders are increasingly interested in how companies manage risks and opportunities pertaining to diversity, equity, and inclusion in the workplace. The Policy expands on PERA’s philosophy for diversity at the board level to apply across all levels of an organization. PERA believes company culture that fosters inclusion and values the diversity of talent may fuel innovation and competitive advantages in the marketplace. In turn, these may translate into outperformance and increased shareholder value.
PERA’s advocacy philosophy is centered on three principles: fair markets, alignment, and disclosure. We believe markets that treat participants in a fair and equitable manner are beneficial to all long-term investors. We believe aligned interests of companies and investors are paramount to company success in the long run. We believe that as owners and creditors of a business, investors deserve robust and accurate information on financial and operational results.

FAIR MARKET ADVOCACY

PERA believes that fair and equitable markets are in the best interest of our members. Given PERA’s size and reputation, we can have a meaningful impact in creating markets that are designed for the benefit of investors. We advocate for all investors by engaging with regulatory bodies, supporting investor-friendly legislation, and participating in advisory groups to develop and share best practices across asset classes. In our efforts to help improve global capital markets for investors, our staff and Board members provide their expertise to various regulatory boards and capital market organizations.

Our primary fair market advocacy partnership is with the Council of Institutional Investors (CII), which is a non-profit, non-partisan association including pension funds, endowments, and foundations representing $4 trillion in assets. Ron Baker, PERA’s Executive Director, was re-elected to CII’s Board of Directors for a fourth year and has been elected to serve a second year as Chair of the CII Policies Committee in 2021. PERA’s seat on the CII leadership team gives us the opportunity to not only participate in collective advocacy efforts, but to help shape the conversation on fair markets and sound business practices. By joining other institutional investors in advocating on issues that matter for long-term value creation, we are able to amplify our voice in the markets on behalf of PERA members and their beneficiaries.

Over the past few years, PERA has engaged with legislators and regulators to advocate for fair rules that protect investors’ rights related to proxy voting. In 2019 and 2020 we submitted public comment letters to the SEC objecting to proposed rulemaking that would make the use of proxy advisory services less efficient and more costly for investors. In 2020 we also submitted a letter objecting to raising ownership thresholds for shareholders to be eligible to file proxy proposals. Additionally, we engaged with local and national legislators on these matters, and met with SEC staff to voice our concerns that these regulations would place an undue burden on proxy advisors and shareholders while reducing transparency into financially material ESG matters affecting public corporations.

See the “Advocate” video for a snapshot of how PERA advocates for stronger markets on behalf of our members at www.copera.org/stewardship.
Advisory Group Involvement

**ADVISORY GROUP**

**Council of Institutional Investors (CII)**
Board of Directors, Policies Committee

**International Corporate Governance Network (ICGN)**
Member

**University of Colorado Burridge Center for Finance**
Board of Directors

---

**WHY PERA IS INVOLVED**

CII provides a forum for discourse among asset owners, issuers, managers, and others who work to promote strong corporate governance and fair markets.

PERA values the opportunity to join with other U.S. institutional investors and market participants in advocating on issues that can affect the ways companies conduct business and generate investment returns.

ICGN provides investor-led resources on international corporate governance policy and non-U.S. regulation.

PERA values the opportunity to collaborate on influencing stewardship policy through investor-led initiatives and ongoing professional development.

The Burridge Center focuses on educating and preparing students of the University of Colorado to be responsible investment professionals.

PERA values the opportunity to engage with Colorado students in fostering education for best practices in the investment industry.

---

**WHO REPRESENTS PERA**

“I’m honored to have been elected to serve on CII’s Board of Directors and chair CII’s Policies Committee as we continue PERA’s long-standing focus on investor advocacy. The work of CII is all about advancing the business and regulatory oversight necessary to drive profitability for companies and their long-term investors. Together we can influence market changes that ultimately benefit the members of pension plans like PERA.”

– Ron Baker, Executive Director

“We leverage our ICGN membership to promote effective standards of corporate governance and investment stewardship by advocating for comprehensive improvements to shareholder rights, rigorous regulatory oversight, and reforms that foster trust in the integrity of the global capital markets.”

– Luz Rodriguez, Sr. Corporate Governance Analyst

“I love the idea of returning to my alma mater to introduce talented people to the investment profession. Partnering with Burridge Center gives me the chance to encourage students, and especially women, to find the same excitement and fulfillment in a finance career that I have found at PERA.”

– Bessie Conty, Assistant Director of Fixed Income
**ALIGNMENT ADVOCACY**

PERA's advocacy for alignment of management actions with stakeholder interests also involves engaging with companies on a wide range of issues that may impact investor value. PERA aims to invest in firms with a history of strong business practices, and we monitor our partners on an ongoing basis to ensure they continue to act in the best interest of their investors. To that end, we hold meetings with corporate management, conduct thorough due diligence reviews on fund managers, analyze management track records, hold positions as advisory board members of our investment partnerships, and seek recovery of assets through securities litigation when necessary.

**INVESTMENT FUND ADVISORY**

PERA participates in private market fund advisory groups to advance best practices in investment management. Participation in these advisory boards and committees is an integral part of developing oversight and financial performance. As members of these committees, PERA staff may be responsible for reviewing valuation methodologies, examining conflicts of interest, and governing the fund partnership. This gives us the opportunity to advocate for practices that may influence profitable outcomes and improve the financial sustainability of our investments.

**SECURITIES LITIGATION**

Ideally, company interests are aligned with investors’ interests through sound governance. However, the temptation for management to act in ways that benefit themselves over investors is always present. If company management is not acting in the best interests of long-term shareholders, investment returns will suffer. Academic research has estimated corporate fraud costs the U.S. economy between $180 and $360 billion dollars a year. This has a significant impact on shareholder value.

Deterring fraud and creating a culture of accountability through securities litigation are part of PERA's commitment to being good stewards of Total Fund assets. When public companies act fraudulently, we exercise our rights through litigation to hold the company accountable and collect PERA’s share of recovered assets. These claims are in themselves assets of the Total Fund, and as such, it is within our fiduciary duty to pursue recovery in this manner.

Pursuant to the PERA Board’s [Securities Litigation Policy](#), we utilize the expertise of internal and external counsel, as well as our custodian bank, to identify claims and evaluate our participation eligibility. Many cases brought in the U.S., as well as foreign jurisdictions, are passive cases that require PERA only to file a claim for recovery. In those cases, PERA is not in a decision-making role, but will receive a pro-rata share of recovered assets.

However, there are circumstances where it is appropriate for PERA to pursue active participation in a case, which can include seeking a lead plaintiff of a class or opting out of a class action to bring a separate action. To determine whether PERA should pursue active participation, PERA’s General Counsel, in conjunction with the Executive Director, examines a variety of factors, including the viable avenues of litigation; assets lost by PERA; the strength of the legal claims; and legal requirements in the defendant’s country of incorporation. We believe this private right of action, when combined with regulatory enforcement actions, helps deter future corporate fraud for the ultimate protection of shareholders’ interests.

---

**PERA staff serve on the advisory boards of the majority of eligible private investment funds:**

- **Private Equity:** 76%  
- **Real Estate:** 75%  
- **Alternatives:** 84%

---
DISCLOSURE ADVOCACY

Investors require accurate and timely information from companies in order to adequately assess and project the overall performance of their investments. Necessary disclosures can cover a broad range of topics, from material risks and how firms are managing them to investment costs and benefits. Disclosure transparency may vary by company and between private and public markets. Likewise, regulatory policies for financial reporting may vary by country, sector, or industry. Furthermore, the true financial value of intangible assets can be difficult to identify and quantify. These disclosure gaps create obstacles for investors to navigate in pursuit of reliable valuations.

As PERA continues to advocate for stronger capital markets, we recognize the need for increased availability and quality of financially material disclosures. Our investors lend their expertise to accounting standards boards to develop and promote transparent and accurate disclosures regarding companies’ operations and financial positions.

We also advocate for enhanced investment fee disclosure. Through our work with the ILPA, we pursue stronger private fund governance including greater transparency into private asset management fees. PERA’s fee transparency advocacy also extends to the public markets, where we are engaged with the U.S. Securities and Exchange Commission in supplication of the removal of regulations that currently impede the unbundling of equity research and transaction costs in the U.S.10

Advocacy Groups in Which PERA Participated in 2020

<table>
<thead>
<tr>
<th>Organization</th>
<th>Group</th>
<th>Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chartered Financial Analyst Institute (CFA)</td>
<td>Diversity and Inclusion Steering Committee</td>
<td>Inclusive Human Capital</td>
</tr>
<tr>
<td>Council of Institutional Investors (CII)</td>
<td>Board of Directors, Policies Committee</td>
<td>Advocacy Policy</td>
</tr>
<tr>
<td>Harvard Institutional Investor Forum</td>
<td>Advisory Council</td>
<td>Institutional Investment</td>
</tr>
<tr>
<td>Healthy Markets Association</td>
<td>Board of Directors</td>
<td>Market Structure Reform</td>
</tr>
<tr>
<td>Institutional Limited Partners Association (ILPA)</td>
<td>Membership</td>
<td>Private Market Partnership Practices</td>
</tr>
<tr>
<td>International Corporate Governance Network (ICGN)</td>
<td>Membership</td>
<td>International Corporate Governance Policies</td>
</tr>
<tr>
<td>National Council of Real Estate Fiduciaries (NCREF)</td>
<td>Membership</td>
<td>Real Estate Performance and Standards Metrics</td>
</tr>
<tr>
<td>Pension Real Estate Association (PREA)</td>
<td>Membership</td>
<td>Institutional Investor Education</td>
</tr>
<tr>
<td>Stanford Institutional Investors’ Forum</td>
<td>Membership</td>
<td>Institutional Investment</td>
</tr>
<tr>
<td>Sustainable Accounting Standards Board (SASB)</td>
<td>Standards Advisory Group</td>
<td>Sustainable Disclosure</td>
</tr>
<tr>
<td>University of Colorado Burridge Center for Finance</td>
<td>Advisory Committee</td>
<td>Professional Investor Education</td>
</tr>
</tbody>
</table>
PERA continues to examine the ways in which stewardship can have a financial impact. While we recognize there are limitations to the sustainability data currently available to investors, we also recognize the importance of assessing non-financial exposures within our portfolios on a continual basis with available tools. Our initial ESG benchmarking evaluations give us a snapshot of the sustainability exposures in our portfolios, and how those compare to exposures in our benchmarks. These snapshots can then be used to help us identify sustainability factors to which PERA’s portfolios may be exposed. We do not manage PERA’s investments solely to these factors; rather, they are an additional lens through which we can view our portfolios.

**SUSTAINABLE INVESTMENT BENCHMARKING**

PERA has engaged with MSCI to access index constituent data, risk management tools, sector data down to the sub-industry level, and independent ESG ratings and research that inform our portfolio evaluations. MSCI conducts detailed research on over 8,500 companies and scores them based on their sustainability risks, and their effectiveness in managing those risks. MSCI’s ESG scores are dynamic and fluctuate through time based on company practices evaluated under their research and scoring methodologies. In general, MSCI asserts that companies that score more highly are expected to have a greater ability to manage and mitigate company-specific risks, and to be more resilient when confronted with fluctuations in financial markets and regulatory policy.11

This information is supplementary to our analysts’ fundamental analysis of material factors pertaining to a company’s sustainability throughout the holding period. As PERA actively manages assets with consideration to financially material factors, the composition of our portfolios may change over time, resulting in score fluctuations relative to each appropriate benchmark.

In the following exhibits, we provide some of the benchmarking results for PERA’s total Global Equity portfolio (representing $34.0 billion), along with two of our largest actively managed internal public equity portfolios, using holdings as of December 31, 2020: PERA Large Cap Core (representing U.S. large-cap equities with a market value of $6.9 billion) and PERA All Country (representing global large-cap and mid-cap equities with a market value of $4.2 billion).
MSCI ESG QUALITY SCORES

MSCI's analysts research companies and designate ESG Quality scores based on each company's ability to manage medium- to long-term ESG risks. The ratings are based on quantitative as well as subjective analyses. ESG Quality scores range from 0–10, with a higher ESG score implying stronger ESG Quality.

The chart below represents the overall ESG Quality scores of PERA's total Global Equity, Large Cap Core, and All Country portfolios, with each compared to its respective benchmark's ESG Quality scores. The results show these portfolios have lower ESG Quality scores relative to their respective benchmarks, based on holdings as of December 31, 2020.

As aforementioned, we do not target any specific ESG metrics in selecting securities for our portfolios; rather we include these scores as input to a much broader mosaic of understanding a company's fundamental business. As such, these scores are expected to vary on both absolute and relative bases.

$546 million invested in companies that score highly* for greenhouse gas mitigation strategies including use of cleaner sources of energy, energy consumption management, and operational efficiency enhancements.

* Includes companies with scores of 80% or higher as evaluated by MSCI.

MSCI ESG Quality Scores† of PERA's Portfolios vs. Benchmarks (As of December 31, 2020)

† MSCI ESG Quality scores range from 0–10.
$1.2 billion invested in the top quartile* of companies that measure and reduce carbon emission of their products throughout the value chain and implement programs with their suppliers to reduce their carbon footprint.

* MSCI quartile rankings are relative to companies in the relevant ESG rating industry that are constituents of the MSCI ACWI.

MSCI ESG RATINGS DISTRIBUTION

Portfolio-level ESG Quality scores are a helpful tool for evaluating the overall sustainability profile of our investments, but we must also understand what factors are driving these scores. By examining ESG Ratings Distributions, we can come to a better understanding of drivers for our overall sustainability profile. The Ratings Distributions show firms categorized as Laggards (low ESG Quality scores), Leaders (high ESG Quality scores), or Average in terms of their individual sustainability profiles. These distributions allow us to identify where we have the greatest risk and reward opportunities through firms practicing global stewardship within our portfolios.

The chart below illustrates the mix of ESG Quality Leaders and Laggards for PERA’s total Global Equity, Large Cap Core, and All Country portfolios. These are each compared to the ESG Ratings Distributions of their respective benchmarks. The results shown below indicate a slightly higher exposure to ESG Quality leaders in these PERA portfolios, versus their respective benchmarks.

MSCI ESG Ratings Distribution of PERA’s Portfolios vs. Benchmarks (As of December 31, 2020)

![Chart showing MSCI ESG Ratings Distribution of PERA's Portfolios vs. Benchmarks](image-url)
MSCI ESG RATINGS MOMENTUM

Sustainability encompasses a dynamic and fluid mosaic of factors for investors to continuously monitor. MSCI’s ESG Ratings Momentum demonstrates the improving or degrading sustainability profiles of the companies in which we invest. By evaluating the ESG Quality movement, we can further analyze how companies are managing sustainability risks and opportunities in response to changing market and business conditions.

The following chart compares the MSCI ESG Ratings Momentum of PERA’s portfolios to the Momentum of their respective benchmarks. These results show that our Global Equity investments’ momentum ratings distribution is similarly concentrated in Average performers to those of its benchmark based on holdings as of December 31, 2020. Within the total Global Equity portfolio, underlying portfolios may exhibit more or less exposure to companies moving between Laggards, Leaders, and Average ESG Quality performers, relative to their benchmarks over time. We expect short-term volatilities to be reflected in these scores for our portfolios, and we remain committed to PERA’s long-term investment objectives.

MSCI ESG Ratings Momentum of PERA’s Portfolios vs. Benchmarks
(As of December 31, 2020)
MSCI CARBON RISK

MSCI also provides PERA an assessment of our portfolios’ carbon risk by measuring our investments based on their carbon intensity, which is calculated as the company’s carbon dioxide emissions (in metric tons of CO2) divided by their reported sales (in millions of dollars). As shown in the chart below, PERA’s Global Equity, Large Cap Core, and the All Country portfolios have between 37% and 66% less carbon intensity versus their respective benchmarks.

$2.6 billion invested in the top quartile* of companies with significant carbon footprints that are proactively investing in low-carbon technologies and increasing the carbon efficiency of their facilities.

* MSCI quartile rankings are relative to companies in the relevant ESG rating industry that are constituents of the MSCI ACWI.
MSCI GOVERNANCE RISK RATINGS

Evaluating the quality of corporate governance is a complex and detailed process. MSCI’s Governance Risk Ratings give us a top-down view of our portfolio companies’ performance on corporate governance. MSCI also provides supplemental insights on firms they have identified to have particular strengths or weaknesses in their corporate governance.

As shown in the chart below, PERA’s Global Equity, Large Cap Core, and All Country portfolios have similar distributions of corporate governance performers as do their respective benchmarks.

The research, ratings, and analysis provided by MSCI are valuable tools for PERA in assessing the environmental, social, and corporate sustainability profiles of our public portfolios.

$7.3 billion invested in the top quartile* of companies with comprehensive privacy policies and data security management systems and companies that do not have business models reliant on trafficking of personal data.

* MSCI quartile rankings are relative to companies in the relevant ESG rating industry that are constituents of the MSCI ACWI.
INDUSTRY PERSPECTIVES ON SUSTAINABLE INVESTING

In this section, we take a look at the broader context of sustainable investing themes and practices, and how these may inform PERA’s investment stewardship. We discuss why sustainability matters to investors, approaches to sustainable investing that investors may take in meeting their unique objectives, and obstacles that investors encounter in effectively evaluating the financial impact of sustainable investing.

WHY SUSTAINABILITY MATTERS TO INVESTORS

As market climates evolve across changing political, social, environmental, and economic landscapes, sustainable business practices are increasingly viewed as integral to long-term success. Investors, consumers, regulatory authorities, and businesses are becoming more interested in sustainability factors and how they correspond to best practices, innovation, competitive advantages, and profitability.

SUSTAINABLE INVESTING IS A GROWING COMPONENT OF THE GLOBAL ECONOMY

The relevance of sustainable business practices varies by firm and industry, and is also tied to various government regulations. As countries adopt or reject standards for sustainable practices, businesses may adapt to meet those regulations in order to remain competitive.

With increased awareness of sustainable technologies and practices, market participants are becoming interested in investments that promote global stewardship while providing strong returns. There is rising demand from consumers, investors, and company executives for corporate alignment with sustainable interests. The economic impact of interest in sustainable investing has been significant in the U.S.

The Forum for Sustainable and Responsible Investment reported a 42% increase in assets under management in sustainability aligned investment strategies from 2018 to 2020, and a 25-fold increase during the period from 1995 to the beginning of 2020. This includes $6.2 trillion in assets owned by institutional investors, like PERA, that incorporate ESG considerations to various degrees in their portfolio management. These data demonstrate that sustainable investing is not a passing fad, but rather an integral component of global markets.

Growth of ESG Incorporation Reported by Institutional Investors 2005–2020*

*Source: U.S. SIF: The Forum for Sustainable and Responsible Investment
SUSTAINABILITY MAY SIGNAL QUALITY AND LONGEVITY

As market participants become more interested in sustainable practices, companies have opportunities to meet evolving demand in new ways. Firms that are adept at managing risks and seizing opportunities, including those presented by sustainability, may maintain competitive advantages in changing market climates.

Consider a firm that invests in manufacturing equipment to meet consumer demand. If the firm invests in new technology designed to decrease carbon emissions and increase operator safety, the firm can boost productivity while mitigating risks to the well-being of its employees and the environment. These stewardship efforts may also mitigate financial risks as sustainable technologies might be cost-saving for the firm in the long run. Investing in new technology may also help the firm avoid punitive financial damages that could be assessed through legal and regulatory fines resulting from potentially negligent business operations.

Beyond managing risks, global stewardship can create new opportunities for companies to maintain competitive advantages. For example, buildings that meet requirements for sustainable certifications can maintain significantly higher occupancy rates while receiving higher rent revenues than buildings without sustainable operations. Sustainable buildings may include grand features to capture renewable energy, or smaller-scale features that minimize energy use within the building. These efforts can improve the quality of building environments, attract tenants, and efficiently meet tenant demands over the long run.

Sustainable practices also encompass the core competencies of an organization. Company culture, employee engagement, executive oversight, board independence, community investment, innovative intellectual capital, and alignment with stakeholders are examples of stewardship factors that can drive long-term success. Firms that foster organizational sustainability can attract and retain high-quality talent, increase productivity, reinforce ethical and professional standards, and improve client satisfaction. In this way, the integration of sustainability efforts may signal a company’s quality and capacity for longevity.

Sustainable technologies and practices may maximize operational efficiency, improve production, attract consumers and investors, and increase revenues. Global stewardship efforts can also decrease operational costs and consumer price sensitivities. Combined, these factors may significantly boost profits. When stewardship efforts impact a firm’s financial success, they become financially meaningful to stakeholders.

“Colorado PERA continues to encourage its partners to develop and utilize holistic frameworks that seek to integrate sustainability factors directly into the due diligence process and portfolio construction. From an asset owner perspective, it is becoming increasingly valuable when private market investment strategies endeavor to link ESG issues with drivers of financial returns.”

—GARY RATLIFF
PERA Director of Alternatives

WHY SUSTAINABILITY MATTERS TO PERA'S INVESTORS

As an institutional investor, PERA keeps a pulse on changes in business and markets that may affect the long-term profitability of the companies in which we invest. As we seek the best risk-adjusted returns throughout our investible universe, it is imperative that we recognize and understand how changes in sustainable technologies and practices can influence long-term profitability. Our investors are experts in their field and consider regulatory frameworks, supply and demand shifts, as well as advancements in technology and ethical practices when evaluating investment risks and opportunities. We invest in companies with long-term competitive advantages which can offer financial rewards that outweigh risks.
HOW INVESTORS INTEGRATE SUSTAINABILITY INTO PORTFOLIOS

The magnitude of vernacular used to describe sustainability is almost as complex as the multitude of approaches to integrating sustainability within the investment industry. Even as ESG investing becomes more prominent within the investment industry, there is no one-size-fits-all terminology or approach. Because investment objectives vary widely among investors, investors may choose to implement any combination of options along a broad spectrum of approaches to sustainable investing. As investors seek new ways to identify and measure ESG exposures within their unique portfolios, applications for understanding and effectively integrating sustainable investing become increasingly murky.

A SIMPLISTIC VIEW OF THE ESG SCREENING SPECTRUM

In simplified terms, approaches to ESG investing may range from negative screening to positive screening. There are infinite points along the spectrum where investors may combine elements of either or both of these approaches to meet their objectives. Using negative screening approaches, investors may choose to exclude certain types of investments from their portfolios based on one or more ESG factors. On the other end of the spectrum, investors may employ positive screening approaches to include certain types of investments in their portfolios based on one or more ESG factors.

Personal Values-Based Investing

Both divestment and impact investing are personal values-based approaches to ESG investing. The aim of divestment is to withhold financing from firms that do not adhere to an investor’s personal values. Vice versa, the aim of impact investing is to supply financing to firms that adhere to an investor’s personal values. As such, the subject of divestment or impact investing may have more emotional benefits than material financial implications for individual investors. That is, investors may choose to sacrifice traditional investment theory and potential investment gains in favor of maintaining their personal ideals about the natural environment, society, or business governance.

A popular example of negative screening is divestment. In the context of ESG investing, divestment refers to selling and abstaining from investments in firms or products that are deemed adverse to an overriding philosophical ideal, based on one or more ESG factors.

A popular example of positive screening is impact investing. In the context of ESG investing, impact investing refers to investing in firms or products that are deemed to align with an overriding philosophical ideal, based on one or more ESG factors.
PERA VALUES FINANCIAL CONSIDERATIONS FIRST AND FOREMOST

We use divestment and impact investing as examples at either end of the spectrum to illustrate how these approaches do not suit the objectives of all investors. While some investors may tailor their portfolios to suit their personal values, PERA invests on behalf of more than 630,000 individuals who rely on our professional investment expertise to ensure their retirement security. As such, we do not invest to suit the personal beliefs of any individual entity. An investment strategy based on personal value systems may be impossible to implement in a way that reflects all our members’ individual beliefs. Furthermore, such a strategy would be imprudent in fulfilling our fiduciary responsibility due to high implementation costs and imposed limits on PERA’s ability to effectively seek the best risk-adjusted returns. Instead of investing based on personal values, PERA invests according to strong financial diligence.

PERA’S DIVESTMENT POLICY

The PERA Board explains the issue of divestment in their Statement on Divestment, which was updated in January 2019, and begins:

“The world faces many critical issues today including genocide, pollution, terrorism, human and animal rights violations, and public health crises. As individual Americans, we enjoy the political and philosophical freedom to speak out against atrocities and join in those causes which are aligned with our personal beliefs. As an organization however, PERA does not have the authority to determine social policy, foreign policy, economic policy, or any other policy beyond the operation of the retirement system. PERA serves the singular purpose of ensuring the retirement security of Colorado’s current and former public servants. Because global issues are difficult to prioritize and proper recourse falls beyond the duty of the retirement system, PERA will implement the divestment mandates passed by the Colorado General Assembly but would recommend the legislature thoughtfully consider such proposals with caution and fiduciary care.”

The Statement on Divestment provides further discussion on PERA’s fiduciary duty, divestment costs, as well as the “slippery slope” perspective of divestment and its potential limitations. PERA believes there are approaches beyond the scope of impact investing or divestment which may better help us achieve our investment objectives and long-term financial sustainability.

THE PERADVANTAGE SOCIALLY RESPONSIBLE INVESTMENT FUND

To serve members who are interested in directing their individual retirement savings to sustainable investing, PERA offers the option to invest in the PERAdvantage SRI Fund. This is an investment vehicle available through our 401(k), 457 Deferred Compensation, and Defined Contribution Plans (CAPs). As a retirement tool for our members, the fund is designed for long-term performance through investment in sustainable companies that demonstrate strong environmental, social, and governance practices.

In 2019, PERA refreshed the PERAdvantage SRI Fund. We selected new asset managers with portfolios offering a greater breadth of market coverage and a stronger focus on ESG leadership. In choosing these managers, we also considered the investment costs for participants. Through PERA’s cost stewardship, we are proud to offer the PERAdvantage SRI Fund to participants at an annual cost of 0.22% of assets invested. We believe the SRI Fund offers interested members the opportunity to invest sustainably while pursuing retirement security.
OBSTACLES TO EVALUATING THE FINANCIAL IMPACT OF SUSTAINABILITY

As investors increasingly seek ways to integrate sustainability into their portfolios, the material financial impacts of sustainability can be difficult to calculate. In part, calculating financial impact may be difficult because sustainable practices can have an intangible value that may be challenging for investors to measure. International reporting mandates may or may not include compulsory non-financial disclosures pertaining to sustainable practices in business. Intangible assets can also be qualitative and subjective in nature, so objective and quantitative data demonstrating their impact on a firm may be unavailable to investors. These obstacles are amplified by traditional accounting standards that have struggled to keep pace with market participants in valuing non-financial assets.

Many investors seek decision-useful disclosures on sustainability metrics from the companies in which they invest. In instances where firms do not proactively enact or report sustainable practices, some investors may exercise ownership rights to encourage firms to do so. As investors engage with firms to evaluate how corporate stewardship impacts firm quality, firms should in turn react to stakeholder demand by establishing or reiterating material sustainability practices and publishing metrics on their financial impact. This feedback loop can be an important way for investors to overcome reporting deficiencies to effectively value material sustainability. Likewise, it can be a powerful tool for quality firms to align themselves with stakeholders’ interests for long-term success.

There is still a dearth of clarity, consensus, and disclosure surrounding ESG factors and their real or potential impacts on investors. It is difficult to effectively identify and measure the impacts of individual factors with a persistent lack of material data and metrics. As more investors seek material sustainability, we expect standardized approaches and metrics will become available to help inform investment decisions.

PERA WORKS TO STANDARDIZE FINANCIALLY MATERIAL SUSTAINABILITY DISCLOSURES

PERA seeks disclosures on business practices and financial impacts that are timely, accurate, reliable, comparable and decision-useful. To that end, we are actively engaged in advocating for efficient and material disclosures. PERA has been a long-term supporter of the Sustainable Accounting Standards Board (SASB). This board is actively developing a set of standardized metrics to help investors analyze a firm’s ability to operate in a sustainable fashion. PERA participates in SASB’s mission through working groups to discuss, evaluate, and propose sustainable accounting standards. PERA also encourages the management teams of our public investments to adopt the SASB reporting structure. We believe that independently standardized reporting metrics will go a long way in helping investors weigh the financial impacts of sustainable business practices.
ONGOING STEWARDSHIP FOR A FINANCIALLY SUSTAINABLE FUTURE

PERA believes the path of stewardship is actively created, rather than achieved. As sustainable technologies evolve, they shape the way market participants develop sound business practices, and in turn, these practices inform new technologies. Evolving technologies and practices raise awareness of the impact of stewardship on outcomes.

With that awareness, financial and regulatory boards may continue to develop standards that integrate the intangible values of stewardship. That accountability translates into transparency and publicly available information. In turn, these yield knowledgeable investors, stronger competition, healthier markets, and profitable stakeholder gains.

As conversations around global stewardship evolve, PERA continues to focus on our investment stewardship. In fulfilling our fiduciary duty to our members, we remain committed to seeking the best risk-adjusted returns in diverse asset classes for long-term financial sustainability. We continue to weigh the risks and opportunities for reward presented by global stewardship.

We remain vigilant in first-hand engagement with our investment partners to advocate for stronger practices that lead to stronger returns. In doing so, we uphold financial sustainability as our top priority in our investment stewardship. The financial sustainability of the Total Fund will ultimately support the retirement success of all our members.

“We don’t look one or two years down the road; we look out 15 or 20 years, and concentrate on the long-term viability of a company’s business model.”

—JARED GOODMAN
PERA Senior Equity Portfolio Manager
DISCLOSURES

LEED®
The United States Green Building Council’s LEED® green building program is the preeminent program for the design, construction, maintenance, and operations of high-performance green buildings. Learn more at www.usgbc.org/LEED.

ENERGY STAR®
1. ENERGY STAR and the ENERGY STAR mark are registered trademarks owned by the United States Environmental Protection Agency.
2. ENERGY STAR products are third-party certified by an EPA-recognized Certification Body.
3. ENERGY STAR certified new homes are verified by independent Home Energy Raters.
4. ENERGY STAR units in certified multifamily high-rise buildings are verified by a professional engineer or registered architect.
5. ENERGY STAR certified buildings and plants earn a score of 75 or higher on EPA’s 1–100 energy performance scale and are verified by a licensed Professional Engineer (PE) or Registered Architect (RA).
6. Products/Homes/Buildings that earn the ENERGY STAR prevent greenhouse gas emissions by meeting strict energy efficiency requirements set by the United States Environmental Protection Agency.

MSCI ESG RESEARCH LLC
This report contains certain information (the “Information”) sourced from MSCI ESG Research LLC, or its affiliates or information providers (the “ESG Parties”). The Information may only be used for your internal use, may not be reproduced or re-disseminated in any form, and may not be used as a basis for or a component of any financial instruments or products or indices. Although they obtain information from sources they consider reliable, none of the ESG Parties warrants or guarantees the originality, accuracy, and/or completeness, of any data herein and expressly disclaim all express or implied warranties, including those of merchantability and fitness for a particular purpose. None of the MSCI information is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such, nor should it be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. None of the ESG Parties shall have any liability for any errors or omissions in connection with any data herein, or any liability for any direct, indirect, special, punitive, consequential, or any other damages (including lost profits) even if notified of the possibility of such damages.
ENDNOTES

1 PERA data as of December 31, 2020, unless otherwise noted.

2 Costs are calculated as a weighted average of investment management fees and administration fees across all funds offered in the PERA 401(k) Plan. 2011 costs are represented as a percentage of average investments at fair value between January 1, 2011, and September 30, 2011, prior to the inception of the white label fund structure. Costs for 2020 are represented as a percentage of average investments at fair value between January 1, 2020–December 31, 2020.

3 https://ilpa.org/reporting-template/.


6 Learn more at: https://www.usgbc.org/leed.


8 See for example:


10 See for example:


12 See for example:


19 In June 2021, SASB and the International Integrated Reporting Council merged to form the Value Reporting Foundation which will support the SASB Standards through a SASB Standards Board.