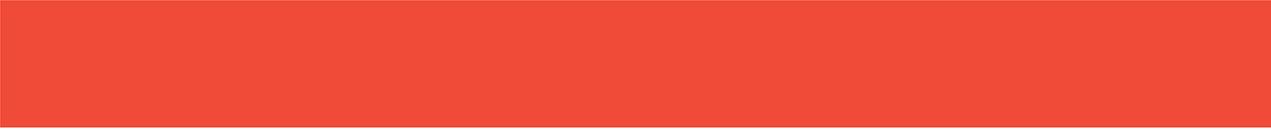


**CALIFORNIA STATE TEACHERS' RETIREMENT SYSTEM
CORPORATE GOVERNANCE PRINCIPLES**



Table of Contents

I.	Introduction.....	3
II.	Stewardship Code for Engagement.....	3
	A. Publicly Disclosing the CalSTRS Principles and Proxy Votes.....	3
	B. Monitoring Portfolio Companies.....	4
	C. Escalating Engagement Activities.....	4
	D. Working Collectively with Other Investors.....	4
III.	Corporate Governance Principles.....	4
	A. Board of Directors.....	4
	1. Board Composition.....	5
	2. Board Structure.....	5
	3. Roles and Responsibilities.....	6
	B. Auditors and Audit-Related Issues.....	8
	1. Non-Audit Services.....	8
	2. Auditor Liability.....	8
	3. Auditor Ratification.....	8
	4. Auditor Tenure/Rotation.....	9
	C. Principles for Executive Compensation.....	9
	1. Philosophy.....	9
	2. Total Compensation, Plan Elements, and Mix.....	9
	3. Incentive Metrics.....	10
	4. Compensation Structure.....	10
	5. Accountability.....	12
	D. Director Compensation.....	12
	E. Employee Stock Purchase Plans.....	13
	F. Governance Structure.....	13
	1. Anti-takeover Measures.....	13
	2. Shareholder Rights.....	13
	3. Capital Structure.....	14
	4. Other Governance Matters.....	14
	G. Sustainability.....	15
IV.	Conclusion.....	15
	Appendix A Statement of Shareowner ESG Responsibility.....	17
	Appendix B: CalSTRS 21 Risk Factors.....	24



I. Introduction

The California State Teachers' Retirement System (CalSTRS) was established for the benefit of California's public school teachers in 1913 and is the largest educator-only pension fund in the world. CalSTRS administers a hybrid retirement system, consisting of traditional defined benefit, cash balance and voluntary defined contribution plans. CalSTRS also provides disability and survivor benefits. The CalSTRS mission is to secure the financial future and sustain the trust of California's educators. CalSTRS seeks to accomplish this goal by prudently managing the investment portfolio to provide long-term retirement benefits with the least amount of risk.

The system is administered by the 12-member Teacher Retirement Board. The Teachers' Retirement Board is charged with maintaining a strong, stable fund in order to pay benefits to CalSTRS members and their survivors. To fulfill that responsibility, the Board oversees the Investment Office staff responsible for the day-to-day management of the portfolio. CalSTRS believes an essential part of managing the portfolio is an attention to good corporate governance. CalSTRS not only sees good corporate governance practices as a way to add value but also to mitigate risk in the portfolio.

The principles described in this document establish a framework for the System's proxy voting activities. Not only is the voting of proxies a fiduciary duty, CalSTRS also believes that the execution of proxies is an important shareholder right and we always seek to exercise the right in a consistent fashion that is in the best interests of the beneficiaries. These guidelines should not be regarded as mandatory, and are not designed as a substitute for analysis and judgment, which should be exercised as circumstances dictate. It is the intent of CalSTRS to exercise its voting authority in accordance with its financial interests, whenever possible. While logistics or other factors may sometimes interfere with this intent, it is the ultimate goal of CalSTRS to work with the indicated parties to remove the barriers to voting.

The principles described in this document not only lay the foundation for the System's proxy voting, but all the activities of the Corporate Governance program, which include corporate engagements and market-wide governance initiatives. CalSTRS principles are based on what we believe are best practices in the marketplace and we conduct corporate engagements in order to move the marketplace towards these best practices. Similarly, CalSTRS supports market wide governance initiatives that will improve the investing landscape for shareholders and our beneficiaries.

II. Stewardship Code for Engagement

The principles described in this document not only guide CalSTRS proxy voting activities but also establish a framework of what we consider good corporate governance. Transparency and disclosure are the underlying tenets of all the CalSTRS Corporate Governance Principles and therefore we think it is important to describe the process for engaging the companies in which CalSTRS invests.

A. Publicly Disclosing the CalSTRS Principles and Proxy Votes

As stated above, we think disclosure is of utmost importance. Therefore, CalSTRS is committed to disclosing its Corporate Governance principles and its proxy voting. We believe by publicly



disclosing our principles we can not only use the principles to advocate for better corporate governance but also provide a framework for our engagement activities. The principles allow for constructive dialogue and healthy debates between us as investors and the companies in which we invest.

B. Monitoring Portfolio Companies

As a predominantly passive investor, we consider our investments long-term, patient capital. Since our investment strategy is heavily weighted towards passive investments, we often do not have the flexibility to simply sell an investment because of governance concerns. We feel it is our duty as fiduciaries to actively monitor and engage the investments in our portfolio for financial, strategic, governance, sustainability risks, and other risks.

C. Escalating Engagement Activities

All of CalSTRS engagement activities begin with private contact with the company. We are always open to having dialogue with the companies in which we invest and hope companies seek our input on matters important to shareholders, as we are the ultimate long-term shareholder. At times we do submit shareholder proposals at companies, but once again are very open to having a dialogue with companies on issues that are important to us. In fact, we see the withdrawal of our shareholder proposals as a measure of success as together CalSTRS and the company have come to a mutually agreeable solution. It is only in very rare circumstances where CalSTRS will take engagement to the public landscape or media. These cases are generally the most egregious cases of poor governance or where companies have been completely unresponsive to our inquiries.

D. Working Collectively with Other Investors

Periodically CalSTRS may work collaboratively with other investors, if our interests are aligned. CalSTRS is an active member of the Council of Institutional Investors (CII), International Corporate Governance Network (ICGN), and other groups that work toward the common goal of advocating for good governance. In all instances, we strive to work with other investors who share our common goals and our philosophy for engagement.

III. Corporate Governance Principles

A. Board of Directors

CalSTRS believes the board has the fiduciary duty to represent and protect the interests of shareholders as it exercises oversight and management of the company's business needs and strategic direction. In CalSTRS' view, an effective board would be comprised of directors with a diverse mix of skills, experience, expertise, perspectives and, would focus on the company's business needs and challenges. The directors should be free of conflicts and ensure they devote sufficient time and energy to their board. Additionally, the board should have an effective means of evaluating its collective performance, the individual director's contributions and management performance on a regular basis. Periodically, the board should have an independent outside evaluation/assessment of its performance. The board is expected to be responsible for the



oversight and proper disclosure of all important issues.

Accordingly, CalSTRS supports the following:

1. Board Composition

- a. **Director Qualifications:** The board should be comprised of diverse individuals with the skills, education, experiences, expertise and personal qualities that are appropriate to the company's current and long-term business needs.

This diversity is critical in order for the board to properly oversee management, business strategy and risk mitigation. The board should establish a format to disclose the various skills, experience and backgrounds of Board members and how those attributes enhance the long term strategy of the company. The skills/experience needed, include but are not limited to, financial and/or accounting, industry expertise, business management, governance, customer service, leadership, risk management, including climate risk management and cyber risk management, and strategic planning.

Board members should stay current in their knowledge and expertise either through continuing education or some other mechanism, to ensure they are carrying out their fiduciary duty and properly overseeing management on shareholder's behalf.

- b. **Board Independence:** The board should be comprised of at least two-thirds of independent directors who do not have a material or affiliated relationship with the company, its chairperson, CEO or any other executive officers. Directors should seek to avoid the appearance of a conflict of interest by not engaging in any related party transactions with the company. Directors are not considered independent if they own 20 percent or more of the company, they are employed by a company that owns 20 percent or more interest in the company or they engage in related party transactions in excess of \$120,000.
- c. **Comprehensive Director Service:** CalSTRS will consider service on other boards when evaluating a director.

2. Board Structure

- a. **Independent Chair:** The board should be chaired by an independent director. The independent chair should be someone who has not had a substantive employment relationship with the company in the past five years.
- b. **Board Size:** The appropriate size for the board should depend on the size and complexity of the business operations. The board size should be large enough to accommodate at least three board members on the key board committees.
- c. **Board Committees:** Companies should have audit, nominating and compensation



committees. Those committees should be comprised of at least three independent directors.

- d. **Annual Board Elections:** The board is expected to be declassified and not have staggered terms. CalSTRS supports annual election of all directors and believes directors should be accountable to the shareholders they represent and therefore should stand for election every year.
- e. **Board Refreshment:** The board should have a mechanism to evaluate and refresh itself on a regular basis to ensure there is proper board composition to meet the current and long-term business needs of the company. Regular board refreshments should provide the board with the opportunities to increase its board diversity and allow fresh perspectives on the board.
 - i. **Board Evaluations:** The board should establish and disclose the process used to evaluate the board dynamics and the performance of the directors. Periodically, the board should have an independent evaluation/assessment of its performance.
 - ii. **Board Succession Planning:** The board should implement and disclose a board succession plan that addresses future board retirements, committee rotations, committee chair nominations, skills and experience relevant to the company's strategic direction and operating environment.
 - iii. **Director Tenure:** An effective board should have both short- and long-tenured directors to ensure that fresh perspectives are provided and that experience, continuity and stability exist on the board. CalSTRS does not support limiting director tenure but believes the board should review the director's years of board service as part of the annual board review.
 - iv. **Board Diversity:** Board diversity should be considered by the board or the nominating committee. The director nomination process and policy should consider a diverse mix of skills, background, experience, age, gender, sexual orientation and identification, cultural and ethnic composition that are most appropriate to the company's long-term business needs. The board should disclose the policies or procedures used to ensure board diversity. Diversity goals should include cultural diversity in addition to gender and/or race diversity. CalSTRS may hold members of the Nominating and Governance Committee accountable if, after engagement about the lack of board diversity, sufficient progress has not been made in this regard.

3. Roles and Responsibilities

- a. **Fiduciary Duty:** The ultimate responsibility of the board is to serve the interests of its shareholders. Directors should provide the necessary oversight to protect the assets and interests of the shareholders.

- 
- b. **Director Time Commitment:** It is CalSTRS' view that a director's responsibilities and duties are increasingly complex, demanding and time-consuming. CalSTRS believes that directors must be able to devote the time and energy necessary to responsibly fulfill their commitment to the company and effectively represent shareholders' interests. Generally, CalSTRS believes that CEOs should not serve on more than one other public board and directors should not serve on more than four public boards.
 - c. **Director Attendance:** CalSTRS believes that directors need to make a substantial time commitment to adequately fulfill the board's responsibilities and duties to the company. CalSTRS expects directors who have been on the board for a full year to attend at least 75 percent of the board meetings and key board committee meetings, absent extraordinary circumstances.
 - d. **Board Oversight:** The board should be responsible for providing oversight of the company, which includes overseeing management actions as well as the company's strategic plans, business conduct and risk management. The board should identify and monitor all major risks in these areas and ensure mitigation plans are in place. The board should adequately disclose and communicate its oversight role and responsibilities to shareholders on a regular basis.
 - i. **Role in Risk Oversight:** The board should disclose its risk oversight process and responsibilities to ensure that the company is effectively managing, evaluating and mitigating its risk profile and risk management plan. The board should regularly review and approve the risk management plan that management will implement.
 - ii. **Board Oversight of Political Contributions:** The board should have a policy on its oversight of the company's charitable and political contributions and that policy should be readily accessible to shareholders. The board should annually review, monitor and disclose charitable and political contributions to ensure they are in alignment with the interests of shareholders and are in compliance with applicable state and federal laws. The disclosure should include the annual contributions, both monetary and non-monetary, made to trade associations and/or other tax-exempt organizations involved in political activities. Political activities include, but are not limited to, funding election campaigns intended to influence the public with regard to candidates, public officials or ballot measures.
 - e. **CEO Evaluations and Succession Planning:** One of the primary duties of boards is to hire and fire management. As part of its governing of management, the board should be responsible for the CEO evaluation and CEO succession planning.
 - i. **CEO Evaluations:** The board should be responsible for conducting CEO evaluations because they provide important feedback for job



performance and continued skill development for the CEO. The board should have and disclose the process to annually evaluate the CEO performance.

- ii. **CEO Succession Planning:** The board should have and disclose the process on CEO succession planning to ensure companies are well-prepared to have a successor in the event of a planned or an unexpected departure of the CEO. The CEO succession plan should include a development process that considers leadership skills, experiences and competencies in identifying and assessing internal and external candidates to achieve the company's future business strategy. The CEO succession plan should address short and long-term succession scenarios.

f. **Accountability to Shareowners**

- i. **Director Election Standard:** Charters and by-laws should provide that directors in uncontested elections are to be elected by a majority of the votes cast. In contested elections, plurality voting should apply.
- ii. **Proposals Receiving Majority Vote:** The board should have a process for reviewing proposals that receive significant shareholder support. The board should implement proposals that receive the majority of votes cast. It is important that directors are held accountable for listening to the will of shareholders.
- iii. **Director Indemnification and Limitation of Liability:** Directors should be afforded some form of reasonable protection such as limitation of liability or indemnification due to damage cause by violations of the duty of care, as long as the director's conduct satisfies a "good faith" standard.

B. Auditors and Audit-Related Issues

The external auditor is to be independent and should avoid conflicts of interest when auditing the company's financial statements. The external auditor is to provide reasonable assurance that the financial statements are free from material misstatements, whether due to fraud or error.

The Audit Committee plays a critical role in providing oversight of the company's financial reporting processes, internal controls and independent auditors. The Audit Committee should be proactive in promoting auditor independence and audit quality. Additionally, the Audit Committee should regularly evaluate the external and internal auditors and review management reports related to compliance with laws, regulations and internal procedures. The Audit Committee should be governed by a formal, written charter stating its responsibilities and there should be disclosure in the proxy statement stating that Audit Committee has complied with the charter responsibilities. The Audit Committee is to be composed entirely of independent directors with the necessary financial skills and experience to perform its oversight duties.

Accordingly, CalSTRS supports the following:

- 
1. **Non-Audit Services:** The non-audit services should be limited to 30 percent of total fees, including tax services, but should not include consulting services.
 2. **Auditor Liability:** The external auditors should not receive indemnification from the company. Contracts with the external auditors should not require the company to use alternative dispute resolution.
 3. **Auditor Ratification:** Shareholders should be able to annually ratify the selection of the company's independent external auditor.
 4. **Auditor Tenure/Rotation:** CalSTRS supports limiting external auditor firms to seven consecutive years of providing audit service to a company. Companies should have a policy on audit firm rotation.

C. Principles For Executive Compensation

CalSTRS is a long-term investor and has been involved in corporate governance issues such as executive compensation for over two decades.

The following executive compensation principles are intended to serve as an intellectual framework for a fuller discussion of the matter and as an aid in more effective evaluation/regulation of executive compensation. CalSTRS believes that a thorough review of pay practices is an important fiduciary duty that both boards of directors of corporations and institutional investors should exercise with diligence and care.

1. **Philosophy/Policy:** Companies should have a clear overarching compensation philosophy that clearly communicates the key considerations it makes when setting pay. The philosophy should promote an alignment of interests between management and shareholders. The company's compensation philosophy should intend to create long-term value while not incentivizing excessive risk taking and should be flexible enough to allow for reasonable and fair compensation in challenging market conditions. Companies should provide full disclosures that are easily understood and presented in plain English. This may include graphical representations that depict the sensitivity of relative pay vs. relative performance, compensation mix, equity-vesting schedule, etc.
2. **Total Compensation, Plan Elements, and Mix:** The design of the company's compensation structure should be comprehensive and discuss in detail all relevant components, including the mix of base, bonus and long-term incentive compensation. A significant portion of plans should be performance-based. Discussion should include why certain elements were used as well as why certain elements were not incorporated, including the relative strengths and weaknesses of the various forms of compensation in relation to the company's business objectives and situation.
 - a. **Salary:** CalSTRS believes an over-whelming majority of an executive's compensation should be performance-based. Since salary is one of the few components that is not "at risk" it should be set at a level that yields the highest value for the company at



the least cost. In general, salaries should be set to be as tax efficient as possible for the company.

- b. **Annual Incentive Awards:** CalSTRS believes there is a role for short-term incentive compensation as part of a bigger compensation program. Companies should describe and disclose the metrics that were used to determine awards for executives and if any changes were made from prior years.
 - c. **Equity Compensation:** CalSTRS believes the predominate form of compensation should come in the form of long-term incentives. Companies should address each form of equity and equity- like compensation and the company's overall objectives in utilizing these tools. Discussion of award structures, including the size, timing, valuation, and terms of grants should be included. Additionally, the company's approach to equity ownership and retention guidelines should be included. CalSTRS believes that on balance, equity awards should be structured in such a way so that the amount salable in any particular period (e.g. through vesting or retention schedules) is at reasonable levels and remain relatively consistent over an executive's tenure so as to not overly incentivize one period over another.
 - d. **Risk Management:** The company philosophy should address the risks to compensation expenditures as well as risk posed by compensation metrics. Part of this risk analysis should include the issue of unintended drivers or consequences related to incentive compensation. The role of risk in the context of the executive compensation program, should include both a defensive perspective (how the committee ensures potential compensation does not incentivize excessive risk), and an offensive perspective (how the program is designed to incentivize appropriate risk and aligns the interests of management with those of long-term owners).
 - e. **One-off awards:** One-off awards outside of the normal incentive plan, such as retention awards or other discretionary compensation, are scrutinized closely and judged on a case-by-case basis as CalSTRS believes such awards indicate a lack of proper structuring of the normal incentive plan.
3. **Incentive Metrics:** A well designed compensation plan will be structured around financial and qualitative metrics that drive sustainable long-term value in the business. Companies should describe and disclose the types of metrics that are used in the short-term and long-term, and articulate how those metrics link to the strategy of the company. Careful consideration should be given to ensure short and long-term incentives are linked but not duplicative.
- a. **Adjusted Performance Metrics:** If the company intends to use any adjusted performance measures (non-GAAP or not conforming to accepted accounting principles) the company should provide a detailed rationale, including a line-item reconciliation of each metric and the impact on the program.
 - b. **Non-financial Metrics:** CalSTRS understands that not all value-drivers can be



captured in quantifiable metrics and in many cases it may be crucial to include qualitative or line-of-site metrics. If non-financial metrics are used, companies should describe and disclose their total weight in the overall plan and how the company will measure the performance of those non-financial metrics.

- 4. Compensation Structure:** Structural pay elements are often discussed as part of a company's overall philosophy. CalSTRS believes that well-structured plans can help drive value, while poorly structured pay packages can harm shareholder value by unfairly enriching executives at the expense of shareholders.
- a. Dilution:** Companies should clearly articulate their philosophy in regards to the dilution associated with all equity compensation programs, addressing the intended life of individual programs/plans including optimal yearly and long-term run rates. The dilution plan should provide the rationale for projected run rates, and how the company will evaluate the effectiveness of the plan over time. This should include a detailed analysis of intended dilution from a return-on-investment perspective, supporting an optimal run rate and equity plan based on its contribution to long-term performance and other objectives as may be appropriate. Simple peer group analysis to support a targeted run rate is not adequate.
 - b. Repricing:** Repricing represents a potential fundamental shift in the relationship between long-term performance and compensation. In its basic form, repricing materially undermines this relationship by altering the impact of poor performance on plan participants, thus altering the risk reward profile of the plan, and the alignment with long-term owners. CalSTRS recognizes that issues surrounding compensation plans are complex, and will consider proposals to reprice or otherwise alter the performance characteristics of a plan on a case-by-case basis. In any case, decisions to reprice should only be done with the explicit approval of shareholders.
 - c. Contractual Agreements:** Companies should clearly articulate the parameters by which they would utilize employment agreements, severance arrangements or other contractual arrangements, if at all. Special care should be taken to explain the rationale for these arrangements within the overall purpose of the compensation program.
 - d. Perquisites:** Companies should clearly articulate the rationale for including perquisites in the company's compensation program, including the expected weight of perquisites in relation to total compensation and how the perquisites relate to the program's overall objectives. CalSTRS believes certain perquisites, such as tax gross-ups, have a detrimental impact on alignment when considered in the context of the overall plan. Care should be taken to consider the benefit to long-term shareholders in relation to the potential cost and the impact on alignment when providing rationale for perquisites.
 - e. Post-Employment Benefits:** Companies should disclose the use of all post-employment benefits and the parameters under which they are used, including limitations placed and eligibility of other beneficiaries to receive benefits. Post-employment benefits



include all forms of health care coverage, any deferred compensation programs, or retirement benefits. Like other forms of compensation, care should be taken to consider the benefit to long-term shareholders in relation to the potential cost and impact on alignment. In this context, certain benefits, such as post-death benefits (golden coffins) for example, would significantly weaken alignment with shareholders and should be avoided.

- f. **Hedging and Pledging:** Companies should develop and disclose their policies around executives and directors ability to hedge or pledge against equity awards received as part of compensation or other stock holdings. CalSTRS believes that hedging in particular, removes the alignment of interest between the executive and the long-term shareholders and therefore should be avoided.
 - g. **Clawback Policies:** Companies should adopt policies which provide significant flexibility to recoup incentive compensation in circumstances where it is later determined to have been unearned. CalSTRS believes these policies should extend beyond the basic protections in law, and should include circumstances beyond intentional misconduct. In addition to adopting and disclosing their clawback policies, a company should also disclose those instances when they have recouped compensation under this policy.
 - h. **Peer Benchmarking:** Companies should describe and disclose the process for using peer relative analysis or benchmarking, and how the compensation committee will ensure these factors do not dominate the justification for the plan design or compensation levels. This should also include the procedure and rationale for the selection of the peer group(s). Peer analysis should be used as a reasonableness check and not as a starting point for determining pay, and justification should be provided if target total compensation is significantly above median.
 - i. **Guaranteed Compensation:** Companies should provide disclosure, if under any circumstance, they provide for guaranteed bonuses or compensation. The rationale should include the frequency with which shareholders may expect this practice, how it fits into the context of the total plan, and its impact on performance-based compensation.
 - j. **Tax Gross-ups:** Companies should definitively state their position regarding tax gross-ups or any other form of tax payment on behalf of employees. In any case where a company's policy permits gross-ups or tax payments, the company should include a justification for this benefit and how it relates to the company's overall compensation philosophy.
5. **Accountability:** CalSTRS believes that the compensation committee is ultimately responsible for designing, implementing, monitoring and evaluating the executive compensation program, therefore, votes against compensation plans or advisory votes will generally result in votes against compensation committee members.
- a. **Roles and Responsibilities:** Clearly defined responsibilities of the compensation committee demonstrate rigor in creating and implementing compensation plans.



The Compensation Committee charter should clearly outline these roles and responsibilities.

- b. **Shareholder Approval:** Compensation plans, repricing of awards within plans, and an annual advisory vote on compensation should always be submitted for shareholder approval.
- c. **Measuring Effectiveness:** Compensation committees should have a process to monitor and evaluate the effectiveness of the program over time, specifically the integrity of the performance metrics. In addition, committees should conduct a total compensation analysis and describe and disclose which tools are used, such as tally sheets.

D. Director Compensation

- 1. **Director Compensation:** It is CalSTRS' general belief that independent directors' compensation should be in the form of cash salary or restricted stock. Other forms of compensation such as retirement benefits or options are not warranted because they could create perverse incentives.
- 2. **Director Insiders:** Company insiders who sit on the board should not receive additional compensation for their service on the board.
- 3. **Director Equity Ownership:** CalSTRS believes independent directors should be required to own a minimum level of equity ownership in the company they are serving on to ensure the alignment of their long-term interests with those of the shareholders. The board should set and disclose the minimum stock ownership requirements and guidelines for the directors.

E. Employee Stock Purchase Plans

Generally, employee stock purchase plans, savings, or investment plans are to receive a positive vote, so long as it is a broad-based plan, the exercise or purchase price is not less than 85 percent of fair market value on the date of grant or purchase, and no loans are made for the purposes of settling payment for shares or any tax liability arising from exercise or purchase of such shares. Shares issued and reserved with respect to such plans shall only be done when necessary and for the specific use of the plan.

F. Governance Structure

1. Anti-takeover Measures

- a. **Poison Pills:** CalSTRS generally supports poison pills that are applied equitably to all shareholders, have at least 20 percent trigger threshold and have a sunset provision of no more than three years. CalSTRS believes that all poison pills should be approved by shareholders within twelve months or the next shareholder meeting, whichever comes first.

- 
- b. **Supermajority Vote Requirements:** CalSTRS supports proposals seeking to reduce or eliminate the supermajority requirements to amend bylaws or charter provisions.
 - c. **Majority Vote Requirements:** CalSTRS supports a simple majority vote requirement for all matters that require shareholder approval.

2. Shareholder Rights

- a. **Act by Written Consent and/or Call a Special Meeting:** Shareholders should have the right to act by written consent and/or call a special meeting. CalSTRS supports proposals to establish this right or to set the threshold to a reasonable level enabling shareholders to act outside of the regularly scheduled annual meeting.
- b. **Proxy Access:** Companies should allow shareholder access to the director nomination process and to the company's proxy statement. Generally, CalSTRS believes that a long-term investor or group of investors owning in aggregate at least three percent of the company's voting stock for three years should be able to nominate a minority of the directors on the company's proxy statement.

3. Capital Structure

- a. **Mergers and Acquisitions:** CalSTRS evaluates mergers and acquisitions on a case-by-case basis utilizing a total portfolio view. The merger analysis considers the sales process, the valuation and deal price, the strategic rationale behind the merger, the market reaction to the merger, the change in control payments and governance issues.
- b. **Golden Parachutes:** CalSTRS evaluates advisory votes on change-in-control benefits (golden parachutes) on a case-by-case basis. CalSTRS supports golden parachutes that are not excessive in absolute amount or relative to the total transaction value and do not include auto acceleration of unvested equity awards.
- c. **Authorization of Shares:** CalSTRS generally supports common stock increases up to 15% of current outstanding shares. CalSTRS may support additional authorization of increased shares if the company demonstrates a reasonable need for those shares.

4. Other Governance Matters

- a. **Bylaw Adoption or Amendment without Shareholder Approval:** CalSTRS expects a shareholder vote on the adoption or amendment of substantive changes to the company's bylaw or charter provisions, especially if it may materially affect or limit shareholder's rights. CalSTRS may hold directors accountable for any unilateral actions that disenfranchise shareholders.

- 
- b. **Bundled Proposals:** Individual voting issues, especially those related to the company's bylaws or charter, should be voted on separately instead of as a bundled proposal.
 - c. **Cumulative Voting:** Whenever possible, CalSTRS will support cumulative voting proposals as required for governmental pension funds under California law (Section 6900, Government Code).
 - d. **Unequal Voting Rights:** CalSTRS supports the one-share, one-vote principle. CalSTRS does not support voting structures in which voting rights are not aligned with economic interests. CalSTRS does not support time-phased voting, which provides unequal voting rights based on the length of ownership in the stock. Companies with existing unequal voting structures should disclose and implement processes to move to a one-share, one-vote structure.
 - e. **Shares Cast vs. Shares Outstanding:** CalSTRS believes matters presented to shareholders for vote should be counted based on shares cast, not on votes outstanding.
 - f. **Meeting Adjournments:** CalSTRS does not support the adjournment of a special meeting allowing company more time to solicit more support for any voting item.
 - g. **Other Governance Issues:** CalSTRS will use judgment and analysis to evaluate and determine the vote on various miscellaneous governance issues on a case-by-case basis. The voting items are to be executed in a manner consistent with CalSTRS financial interests and Corporate Governance Principles as well as with best corporate governance practices.

G. Sustainability

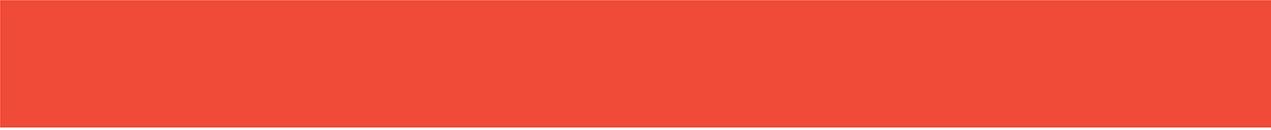
CalSTRS believes that environmental, social and governance (ESG) issues can affect the performance of our investments. CalSTRS believes it is important for companies to consider ESG issues to ensure they are long-term sustainable companies and have considered and addressed all risks that could affect the livelihood of the business. Appendix A of this document, CalSTRS Statement of Shareowner ESG Responsibility, details how CalSTRS identifies ESG-related risks and how these risks are expected to be managed.

In addition to Appendix A, CalSTRS developed the CalSTRS 21 Risk Factors (Appendix B) as a tool to use when evaluating and existing and new investments. CalSTRS investment activities impact other facets of the economy and the globe. As a significant investor with a long-term investment horizon, the success of CalSTRS is linked to global economic growth and prosperity. Actions and activities that detract from the likelihood and potential of global growth are not in the long-term interests of the Fund. As an active owner, CalSTRS incorporates ESG into all of its ownership policies and practices.

IV. Conclusion

By presenting the CalSTRS Corporate Governance Principles, CalSTRS hopes to advance best practices in corporate governance. As the ultimate long-term shareholder it is important that our investments are sustainable for generations to come and we want to encourage corporate companies, investors and stakeholders to have a continued dialogue on principles like these and others.

Approved by Board on June 11, 1982
Amended by Investment Committee: June 7, 1985
Amended by Investment Committee on July 19, 1985
Amended by Subcommittee on Financial Proxies on August 5, 1988
Amended by Investment Committee on October 7, 1988
Ratified by Teachers' Retirement Board on October 22, 1988
Amended by Subcommittee on Corporate Governance on March 11, 1992
Approved by Investment Committee on April 1, 1992
Ratified by Teachers' Retirement Board on April 2, 1992
Amended by Subcommittee on Corporate Governance on October 6, 1995
Approved by Investment Committee on October 6, 1995
Ratified by Teachers' Retirement Board on October 6, 1995
Amended by Investment Committee on November 5, 1997
Approved by Investment Committee on November 6, 1997
Ratified by Teachers' Retirement Board on November 6, 1997
Amended by Subcommittee on Corporate Governance on April 3, 2002
Approved by Investment Committee on April 3, 2002
Ratified by Teachers' Retirement Board on April 4, 2002
Amended by Subcommittee on Corporate Governance on July 10, 2002
Approved by Investment Committee on July 10, 2002
Ratified by Teachers' Retirement Board on July 11, 2002
Amended by the Subcommittee on Corporate Governance on July 9, 2003
Approved by the Investment Committee on July 9, 2003
Ratified by the Teachers' Retirement Board on July 10, 2003
Adopted by the Investment Committee on September 7, 2005
Ratified by the Teachers' Retirement Board on September 7, 2005
Approved by the Subcommittee on Corporate Governance on February 7, 2008
Adopted and Ratified by the Investment Committee on February 7, 2008
Approved by the Subcommittee on Corporate Governance on June 4, 2008
Adopted and Ratified by the Investment Committee on June 4, 2008
Amend to add ESG, Climate Change Governance Checklist, the Global Sullivan Principles and PRI on September 9, 2009
Reorganized by Corporate Governance Committee on April 2011
Amended to add disclosure of Political Contribution on September 7, 2011
Approved by Investment Committee on November 2, 2011
Approved by the Investment Committee on February 6, 2015
Approved by the Investment Committee on April 3, 2015
Approved by the Investment Committee on July 14, 2016



STATE TEACHERS' RETIREMENT SYSTEM

STATEMENT OF SHAREOWNER ESG RESPONSIBILITY

I. Principles

As institutional investors, CalSTRS has a duty to act in the best long-term interests of our beneficiaries. In this fiduciary role, we believe that environmental, social, and corporate governance (ESG) issues affect the performance of the investment portfolio to varying degrees across companies, sectors, regions, asset classes and through time. CalSTRS is a large investor and as such, is in a position to exert influence on the corporations in which it has invested. Therefore, CalSTRS will actively analyze and exercise its ownership rights in all markets in order to act in a responsible manner to its beneficiaries across multiple generations.

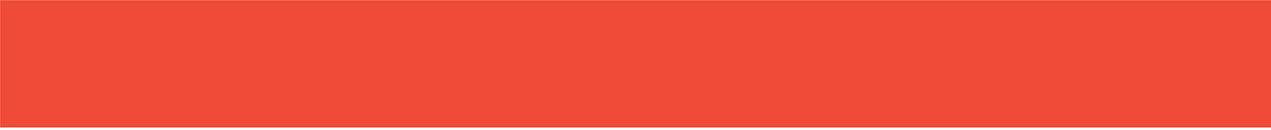
The following criteria are set forth for the voting of proxy issues dealing with matters that fall outside the realm of the CalSTRS Corporate Governance Principles.

The CalSTRS Board has endorsed the United Nations Principles for Responsible Investment, (UNPRI). As such, CalSTRS has incorporated the UNPRI and other ESG principles into its investment policies and investment practices. As part of the Corporate Governance program, CalSTRS has for decades actively engaged companies on a variety of financial and ESG issues. Consistent with the UNPRI, CalSTRS' Corporate Governance program is committed to:

- Participating in the development of policy, regulation, and standard setting (such as promoting and protecting shareholder rights);
- Where appropriate, file shareholder resolutions consistent with long-term ESG considerations;
- Engage with companies on ESG issues;
- Participate in collaborative engagement initiatives with other shareholders;
- Seek standardized reporting by corporations on ESG issues;
- Ask for ESG issues to be integrated within annual financial reports;
- Request information from companies regarding adoption of/adherence to relevant norms, standards, codes of conduct or international initiatives (such as the UN Global Compact); and
- Consistent with CalSTRS Policies, support shareholder initiatives and resolutions promoting ESG disclosure and standards.

II. Policy

Consistent with these findings, the System establishes the following policy to govern the: voting of proxies:



A. Social Injuries Defined

Social injury will be said to exist when the activities of a corporation serve to undermine basic human rights or dignities. Past examples of corporate social injury include; the tobacco industries effort to market to children, child labor in the agricultural industry; and the use of government sponsored forced /slave labor. Basic human rights and dignities include, but are not limited to:

1. Equal Employment

Equal employment opportunity that advances the principles of diversity and inclusiveness, including: fair and equitable recruitment and hiring, equal wages and benefits for equal and comparable work, fair and equitable promotional and training opportunities, and the right to organize and join representative trade unions and associations if a majority of the employees so elect.

2. Housing

Equal access to safe with adequate access to drinking water, sanitation facilities, and provides for a standard of living adequate for the well-being of the occupants.

3. Basic Services

Equal access to basic services including medical care, transportation, recreation and education.

B. Corporate Practices

Social injury may also be said to exist when CalSTRS, having followed the procedure set forth in the ESG policy, that the practices of a corporation result in undesirable side effects for others, and that the side effects are grave in nature. A company may be held responsible for the infliction of social injury by virtue of its agreements or relationships with other (independent) entities engaged in socially injurious activities. Past examples of corporate practices include the Exxon Valdez disaster, the JCO Tokai nuclear plant incident; and the Bhopal chemical spill by Union Carbide. Side effects which may be deemed grave in nature shall include, but not be limited to:

1. Environmental

Practices which are known to endanger the environment, subject to current federal, state and local law, including:

- a. Unsafe nuclear waste disposal;
- b. or inadequate pollution control, including failure to properly account for, disclose, and reduce direct or indirect greenhouse gas emissions;

Practices which do not promote the management of carbon emissions, and thereby do not adequately mitigate climate risk exposure, including:

- I. Inadequate accounting of direct and indirect carbon emissions. Companies should demonstrate that they have analyzed their operations and have measured the



levels of direct and indirect emissions produced at the various stages of the business process, including supply-chain, manufacturing, and product distribution. Companies should use measurement systems such as those developed by the Carbon Disclosure Project and the Global Reporting Initiative.

- II. Improper disclosure of carbon emissions. Companies should publicly disclose the results of their emissions analysis. This disclosure should be made available on both the company website and within the company's annual report and should provide the current emissions, a comparison to past years emissions, and expectations for future year's emissions. Participation in regional, national, or global registries, such as The Climate Registry, should also be considered.
- III. Failure to adequately reduce carbon emissions. Through their on-going measurement of carbon emissions, companies should be able to manage their carbon profile and determine appropriate levels of carbon emission reduction. Realized and anticipated reductions should be evident through a company's disclosure process. Membership in a carbon cap and trade program, such as one provided by the Chicago Climate Exchange, should be considered.
 - a. Improper use of chemicals and contaminants; or
 - b. Any practice which directly or indirectly endangers human health or the environment.

2. Suppression of Human Rights

Practices which result in the suppression of human rights including:

- a. The sale of weapons and technology to governments known to engage in the systematic suppression of human rights; and
- b. The sale or purchase of goods from countries known to employ forced labor.
- c. The rendering of services that are used in a manner that denies or suppresses human rights in violation of international law or the Geneva Conventions where the company has failed to take reasonable steps to ensure that the services would not be used in that manner.

3. Human Health

Practices which endanger human health including:

- a. Sale and distribution of known contaminated products, included products that adversely effect human health, contain carcinogens at levels that are directly linked to serious health consequences and loss of life;
- b. Sale and distribution of therapeutically ineffective or dangerous drugs; and
- c. Purchasing goods from or selling goods to companies known to disregard worker safety.



C. CalSTRS Involvement

The extent of the responsibility of the CalSTRS System to engage in activity for the prevention, reduction, and elimination of social injury should be determined by:

- The number of shares held in the corporation;
- The gravity of the social injury

III. Exercise of Shareholder Rights

A. Proxy Voting

1. The System has a duty to cast its votes on all proxy issues related to companies in which it holds securities or to abstain with written notification to the company involved on any proxies it returns. In cases of abstention, where an important social responsibility issue is raised, the System should provide an explanation of its action.
2. The System should vote its shares in favor of resolutions which, if implemented, would prevent, reduce, or eliminate social injury as defined above. The System should oppose resolutions which cause or facilitate social injury.
3. If a resolution places a company at a substantial disadvantage with respect to its direct competitors who are equally guilty of inflicting social injury, the System should ascertain whether the company in question has made reasonable effort to induce voluntary industry-wide compliance. If it is determined that this course of action has been pursued, the System should abstain. In the event that a corporation has not initiated such activity, the explanation accompanying abstention should include an exhortation for compliance.
4. CalSTRS, as a major corporate shareholder, will actively vote its proxies to elect corporate board members who share the interests and philosophy of the System.
5. The System should routinely monitor corporate practices for compliance with the Board's criteria, i.e., monitor corporate compliance with the Global Sullivan principles or the Ceres 14-Point Climate Change Checklist.

B. Other Shareholder Rights

1. For the purpose of insuring that a company may be made aware of any policies, procedures, or products of which the Board does not approve, and for the purpose of prevention, reduction or elimination of social injury, the Board may initiate action to supplement the responsible voting of proxies including but not limited to: (a) correspondence with the company, (b) meet and confer sessions with management or other stockholders, (c) entering into agreements with management or other stockholders, such as making provisions for reporting and other monitoring activities, and (d) the initiation, when determined necessary, of shareholder proposals.



C. Procedure

1. Responsibility for the implementation of social responsibility proxy voting guidelines is delegated to the Board's Investment Committee or Subcommittee on Corporate Governance. Ultimate authority and responsibility rests with the Investment Committee.
2. To assist System in determining whether social injury exists, the Fund should:
 - a. Upon request, permit the presentation of relevant testimony by members of the System and members of the general public during Board or Committee meetings;
 - b. Establish contact with appropriate U.S. or Non-U.S. regulatory agencies, such as Equal Employment Opportunity Commission, Environmental Protection Agency, Occupational Safety and Health Agency, Nuclear Regulatory Commission, Securities Exchange Commission, and others which are covered by laws of the United States Government or the State of California; as others around the globe such as the United Kingdom Financial Services Authority, Japan Financial Services Agency and the European Commission Financial Services.
 - c. Seek input from leading academics, experts in the relevant field and key advocacy groups.
 - d. Contact qualified persons representing parties affected by the corporate practice in question.
3. The first step upon the evidence of the existence of social injury is engagement by CalSTRS Corporate Governance staff directly with the company. CalSTRS will notify the company of the issue and seek a direct dialog with top ranking management and if needed directly with the Board of Directors. Engagement can include various forms and tools; these can include, but are not limited to: establishing a coalition of other shareholders, the introduction of a Shareholder Resolution, directly addressing the issue, including the use of media and proxy solicitation.
4. When the remedies provided in 3 (above) indicate that there is little or no possibility of obtaining from a company a commitment to pursue activities designed to correct practices or policies involving grave social injury, the Corporate Governance staff will report the matter to the Chief Investment Officer who will inform the Investment Committee and then follow the procedures within the Environmental Social and Governance Policy. Factors contributing to such a determination include, but are not limited to:
 - a. Repeated refusal by management and a majority of stockholders to support shareholder proposals which the Board feels are necessary to insure socially responsible behavior;
 - b. Failure of management to comply with Board requests for the disclosure of economic or non-economic information important to making investment decisions, in particular, information pertaining to company practices and policies which might



result in social injury. It is expected that in all cases, the parties will make a good faith effort to get the necessary materials; but it is recognized that, in foreign markets, the means for obtaining planned company meeting notices, dates and agendas, may not be readily available. It is understood that it is the intent of the Teachers' Retirement Board to exercise its voting authority, either directly or through other parties to whom it has delegated responsibility for voting proxies, according to their judgment of its best financial interests, whenever and wherever possible; and that, while logistics or other factors may sometimes interfere with this intent and principle, it is the ultimate goal of CalSTRS to work with the indicated parties to remove the barriers to voting all shares over time.

Adopted by the Teachers' Retirement Board on June 16, 1978
Revised by the Teachers' Retirement Board on September 24, 1982
Revised by the Teachers' Retirement Board on April 27, 1984
Revised by the Teachers' Retirement Board on April 21, 1989
Revised by the Teachers' Retirement Board on January 9, 1990
Revised by the Teachers' Retirement Board on November 5, 1997
Adopted by the Teachers' Retirement Board on November 6, 1997
Revised by the Subcommittee on Corporate Governance on November 3, 2004
Adopted by the Investment Committee on November 3, 2004
Revised based on the ESG Policy by the Investment Committee on November 5, 2008
Amended by the Subcommittee on Corporate Governance on September 3, 2009

CALSTRS 21 RISK FACTORS

Consistent with its fiduciary responsibilities to our members, the Board has a social and ethical obligation to require that the corporations and entities in which securities are held meet a high standard of conduct and strive for sustainability in their operations. As an active owner, CalSTRS incorporates ESG into its ownership policies and practices.

Since CalSTRS is a long-term investor and may hold an investment in a corporation or entity for decade after decade, short-term gains at the expense of long-term gains are not in the best interest of the Fund. Sustainable returns over long periods are in the economic interest of the Fund. Conversely, unsustainable practices that hurt long-term profits are risks to the System's investment.

To assist CalSTRS Staff and external investment managers in their investment analysis and decision-making, CalSTRS has developed a list of 21 risk factors that should be included within the financial analysis of any investment decision. This list is not exhaustive and does not attempt to identify all forms of risk that are appropriate to consider in a given investment transaction; however they do provide a framework of other factors that might be overlooked. These risk factors should be reviewed for an investment in any asset class whether within the U.S. or across the globe.

CalSTRS expects all investment managers, both internal and external to assess the risk of each of the following factors when making an investment. The manager needs to balance the rate of return with all the risks including consideration of the specific investments exposure to each factor in each country in which that investment or company operates.

Monetary Transparency

The long-term profitability by whether or not a country or company has free and open monetary and financial data, and its observance of applicable laws.

Data Dissemination

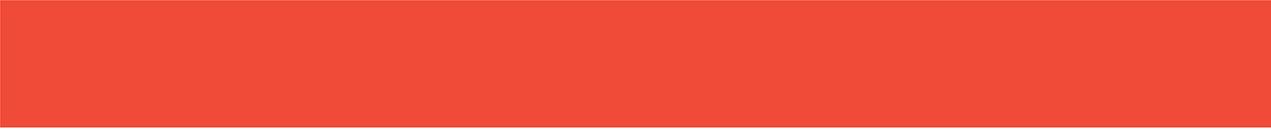
The long-term profitability by whether or not a country is a member of the IMF (or similar organization) and satisfies the conditions for access, integrity, and quality for most data categories.

Accounting

The long-term profitability by whether or not the accounting standards are formulated in accordance with International Accounting Standards or the U.S. Generally Accepted Accounting Principles.

Payment System: Central Bank

The long-term profitability by whether the activities of a country's central bank encompass implementing and ensuring compliance with principles and standards which are established to promote safe, sound, and efficient payment and settlement systems.



Securities Regulation

The investment's long-term profitability by exposure to operations in countries that have not complied with IOSCO objectives, which provide investor protection against manipulation and fraudulent practices.

Auditing

The investment's long-term profitability by whether or not the country uses International Standards on Auditing in setting national standards.

Fiscal Transparency

The investment's long-term profitability by its exposure or business operations in countries that do not have not some level of fiscal transparency such as publication of financial statistics, sound standards for budgeting, accounting, and reporting.

Corporate Governance

The investment's long-term profitability by whether or not the government recognizes and supports good corporate governance practices and whether it generally adheres to OECD principles.

Banking Supervision

The investment's long-term profitability from its exposure to countries that have not endorsed/complied with the Basel Core Principles. An endorsement includes an agreement to review supervisory arrangements against the principles and bring legislation in line with the principles where necessary.

Payment System: Principles

The investment's long-term profitability by whether a country complies with the 10 Core Principles for Systemically Important Payment Systems, which includes operational reliability, efficiency, real time settlement, final settlement in central bank money; and whether rules and procedures are clear and permit participants to understand the financial risks resulting from participation in the system.

Insolvency Framework

The investment's long-term profitability from its business operations and activities in specific countries with regard to bankruptcy reform or insolvency legislation.

Money Laundering

The investment's long-term profitability from exposure and whether or not a country has implemented an anti-money laundering regime in line with international standards; consideration should be given to compliance with the 40 recommendations in the Financial Action Task Force (FATF) on Money Laundering; and whether it is a member of FATF.



Insurance Supervision

Whether or not a country has a regulatory framework in line with International Association of Insurance Supervisors (IAIS) Principles.

Respect for Human Rights

The investment's long-term profitability from its business operations and activities in countries that lack or have a weak judicial System. Assess the risk to an investment's long-term profitability from its business operations and activities in a country that engages in or facilitates the following: arbitrary or unlawful deprivation of life, disappearance, torture and other cruel, inhuman, or degrading treatment or punishment, arbitrary arrest, detention, or exile, arbitrary interference with privacy, family, home, or correspondence, use of excessive force and violations of humanitarian law in internal conflicts. Consideration should be given to governmental attitude regarding international and non-governmental investigation of alleged violations of human rights.

Respect for Civil Liberties

The investment's long-term profitability from operations, activities, and business practices in countries or regions that do not allow freedom of speech and press, freedom of peaceful assembly and association, freedom of religion, freedom of movement within the country, allowance for foreign travel, emigration, and repatriation.

Respect for Political Rights

The investment's long-term profitability from business practices and activities in countries that do not allow their citizens the right to advocate for change to their government.

Discrimination Based on Race, Sex, Disability, Language, or Social Status

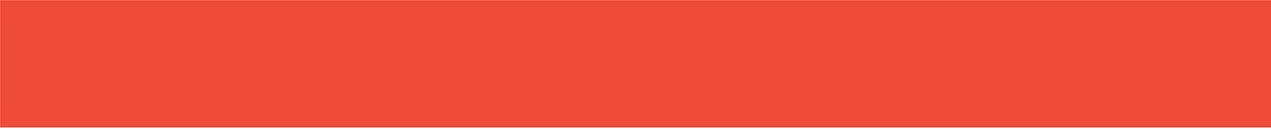
The investment's long-term profitability from business practices and activities on discrimination, such as discrimination against women, children, and persons with disabilities, national/racial/ethnic minorities, or indigenous people.

Worker Rights

The investment's long-term profitability from management and practices globally in the area of worker's rights; specifically the right of association, the right to organize and bargain collectively, prohibition of forced or bonded labor, status of child labor practices and minimum age for employment, acceptable work conditions, or human trafficking.

Environmental

The investment's long-term profitability from activities and exposure to environmental matters such as; depleting or reducing air quality, water quality, land protection and usage, without regard for remediation. Consideration should be given to how a company is dealing with the impact of climate change, including whether the government is taking steps to reduce its impact, exacerbating the problem, or oblivious to the risk.



War/Conflicts/Acts of Terrorism

The investment's long-term profitability from business exposure to a country or region that has an internal or external conflict, war, acts of terrorism or involvement in acts of terrorism, and whether the country is a party to international conventions and protocols.

Human Health

The risk to an investment's long-term profitability from business exposure to an industry or company that makes a product which is highly detrimental to human health so that it draws significant product liability lawsuits, government regulation, United Nations sanctions and focus, and avoidance by other institutional investors.