CALSTRS.

FISCAL YEAR 2019-20

SUSTAINABILITY REPORT

CALIFORNIA STATE TEACHERS' RETIREMENT SYSTEM

In accordance with Global Reporting Initiative Standards



MISSION

Securing the financial future and sustaining the trust of California's educators

VISION

Your reward—a secure retirement Our reward—getting you there



and

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A MESSAGE FROM CEO JACK EHNES

Corporate sustainability requires balancing stability with predicting and reacting to unexpected shifts. Events in 2020 tested the world. The economic and social impacts of the COVID-19 pandemic and societal tragedies regarding race deeply affected our nation and California. The state's 2020 fire season caused massive evacuations and the destruction of more than 4 million acres. Many in our communities have lost loved ones, jobs, homes and businesses.

With governmental stay-at-home directives aimed at reducing the spread of COVID-19, the lives of our members, California's public-school students and the CaISTRS organization changed overnight. As many educators and students moved to virtual education, CaISTRS rapidly transformed into a telework-based organization.

For this, our seventh annual *Sustainability Report*, we've updated our key topics to reflect our approach to corporate sustainability and business continuity during this extraordinary time.

Managing enterprise risk

We regularly review enterprise-level risks related to the accomplishment of our strategic goals and objectives, while considering internal and external factors that could be catalysts for emerging risks.

Preparing for potential disaster scenarios, including a pandemic, is a fundamental responsibility of operations management within CalSTRS. Even before the first stay-at-home directive was issued, CalSTRS activated our Emergency Operations Center team. We effectively executed our existing emergency business continuity plans to ensure core business functions—paying benefits, collecting contributions and managing investments were maintained while shifting most staff to working from home.

Within a day we were able to respond to inquiries via *my*CalSTRS. Shortly after, we were successfully answering

calls and meeting our members' service needs. Our Investments team has managed the portfolio with most staff working remotely, and we have conducted board meetings virtually. We continuously update risk assessments and mitigations as the current situation and our business evolve.

Path to full funding

Despite volatility in the first half of 2020, financial markets saw the quickest rebound in U.S. history. We remain focused on our funding plan established by the California Legislature and Gov. Jerry Brown in June 2014, with the expectation to reach near full funding by 2046.

Member retirement preparedness

Assisting our members with retirement preparedness is essential to our mission. As life expectancies increase, we continue to educate members about their defined benefit and supplemental savings options.

Transition to a low-carbon economy

In fiscal year 2019–20, we embarked on a Low-Carbon Transition Work Plan that seeks to reduce climate-related risk and identify opportunities to invest in solutions for maximum benefit to our members. We have intensified our efforts to secure strong commitments from companies to reduce emissions and manage low-carbon transition risks. As more companies make net zero emission commitments, we are at the apex of sustainability discussions between corporations and investors.



"Over CalSTRS' more than 100 years, we have seen the fund weather several recessions, two world wars, and the pandemic of 1918. This crisis is unique in many ways, but for CalSTRS, this is the first time we have gone into a recession with a plan for full funding in place. We are ready and able to guide the fund through times of uncertainty."

–Jack Ehnes

However, the world is far from achieving the Paris Agreement expectations. CalSTRS is stepping forward to manage low-carbon transition risks, and we ask our colleagues and the companies in which we invest to do the same.

Diversity and inclusion

Our corporate governance program challenges companies to strengthen diversity in senior management and on boards of directors. Within CalSTRS we are having conversations about race and social injustice. Acknowledging and confronting difficult issues can be uncomfortable. As colleagues, we strive to understand the experiences and thoughts of one another and identify where our inclusion efforts succeed and seek to improve when they fall short.

CalSTRS has served our members since 1913. Our strength lies in the expertise and commitment of employees who believe in our mission—securing the financial future and sustaining the trust of California's educators. It's been my honor to serve as the CEO of CalSTRS since 2002. I'll retire in June 2021, and the Teachers' Retirement Board will select a new CEO to lead our strong, knowledgeable and experienced CalSTRS team. I have full confidence the talented leaders and staff will continue to build upon our foundation of sustainability and carry the organization through the coming decades.

Thank you to the entire CalSTRS team, the Teachers' Retirement Board, our stakeholder organizations and advisors for your work. Your dedication creates organizational sustainability which contributes to the financial security of our members. Most importantly, I express a deeply felt thank you to the educators who have undertaken a career to serve generations of California's youth. You're creating an informed, educated society capable of creatively and productively contributing to global solutions.

Sincerely,

Jack Three

CEO Jack Ehnes

ABOUT THIS REPORT

We are pleased to present CalSTRS' seventh annual *Sustainability Report.* This report has been prepared in accordance with the GRI Standards: Core option. It includes our sustainability approach, engagement and data for the fiscal year, July 1, 2019, through June 30, 2020. Information outside the fiscal year is noted.

Global Stewardship at Work

CalSTRS practices sustainable stewardship of the Teachers' Retirement Fund for the financial security of California's educators.

We prepare a series of reports under the umbrella **Global Stewardship at Work**, united by long-term value creation and use of national and international reporting standards.



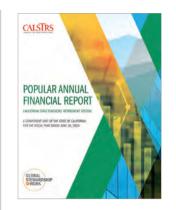
Sustainability Report

Details CalSTRS' impacts in accordance with the Global Reporting Initiative Standards. The GRI Standards are used for economic, environmental and social impact reporting.



Comprehensive Annual Financial Report

Details CalSTRS' financial performance for the fiscal year beginning July 1, 2019, and ended June 30, 2020.



Popular Annual Financial Report

Contains information extracted from the *Comprehensive Annual Financial Report* and is designed to be understandable to readers without a background in public finance.





bit.ly/ 3tc5YAO



Green Initiative Task Force Report

Highlights CaISTRS' environmental-themed investments and environmental risk management efforts. As of 2019, the report aligns with Task Force on Climate-Related Financial Disclosure reporting guidance.



bit.ly/ 3a6G2Od

Sustainability Vision and Guiding Beliefs

Shortly after celebrating our 100th year, we adopted our Sustainability Vision and Guiding Beliefs in 2014. The purpose was to establish an enterprisewide understanding of how the decisions we make and actions we take determine our long-term viability, contributing to organizational sustainability and securing the future financial security of our members. The concept of sustainability is now well integrated within CalSTRS culture. In 2020, we updated our Guiding Beliefs to match our understanding of sustainability as it has developed over time.

Sustainability Vision

CalSTRS advances sustainability practices that promote long-term value creation, responsible investment strategies, stewardship of our natural resources and engagement with our stakeholder community.

Sustainability Guiding Beliefs

A focus on stewardship drives long-term organizational stability to secure the financial future of California's educators.

- 1. We believe an enterprise based on sustainable values creates a blueprint for strong governance that protects the fund's assets.
- 2. We influence and lead on environmental, social and governance issues to mitigate risk and capture opportunities that contribute to sustainable economic development.
- 3. We know sustainability depends on committed employees operating in an engaging culture.

- 4. We actively manage risk and establish internal controls for the long-term viability of CalSTRS.
- 5. We identify sustainability topics and report performance data as part of our commitment to transparency.
- 6. We engage with a diverse group of stakeholders to understand their perspectives and build a culture of trust.

Stakeholder engagement and key topic identification

CalSTRS engages a wide range of stakeholders in conversations related to fund and organizational sustainability. Our staff has developed a comprehensive strategy to communicate with stakeholders who are affected by the fund's activities and those whose activities affect the fund.

Our engagements help build value within our investment portfolio, provide timely and essential member services, minimize operating costs and inspire innovation.

CalSTRS has dedicated stakeholder engagement staff for benefits and services, public and investor relations, and governance.

Additionally, our Investments Branch has a mature model for corporate engagements and marketwide governance initiatives. As a large and long-term investor, CalSTRS is well positioned to influence corporations in which it has invested. With prudence and care, we take the opportunity to vote on decisions affecting the guidance and well-being of those investments. The Teachers' Retirement Board operates with transparency in conducting the people's business and welcomes public participation on matters before it in recognition of the importance and value such participation brings.

CalSTRS uses stakeholder engagement to help identify issues that shape the Teachers' Retirement Board work plans, our Strategic Plan, investment strategies and the sustainability key topics covered in this report.

From 2014 to 2018, we conducted biennial materiality surveys to determine *Sustainability Report* topics. Surveys were anonymous and asked members, employees and external stakeholders to prioritize topics based on their importance to CaISTRS meeting our mission.

In 2019–20, we developed our report topics using input from executives and the CalSTRS Corporate Sustainability advisory team. This team, sponsored by our chief operating officer and composed of senior leaders from each organizational branch, uses the Ceres Roadmap and GRI Standards as a framework for corporate sustainability.

Groups in engagement	Key issues	Communication channels
Active and retired	Member benefits	Annual member survey
members	Contribution rates	Annual Retirement Progress Report
	Retirement security	 Benefits planning sessions, workshops and webinars
		CalSTRS ombudsman
		 myCalSTRS web portal
		 Newsletters, publications and videos
		Pension Sense blog
		Social media
Employers	Contribution rates	Advisory meetings
School districts,	 School funding and budgets 	Employer directives, circulars and newsletters
county offices of	 CalSTRS funding status 	Employer helpline and mailbox
education and	 Employer reporting 	Secure Employer Website
community colleges	Audits	• Training
	 Pension system technology project 	

Groups in engagement	Key issues	Communication channels
Labor representatives	Member benefits	Advisory meetings
and member	CalSTRS funded status	Constituent meetings
organizations	Preserving public pensions	Email updates
Employees and	Employee engagement	All-staff emails and videos
labor relations	 California budget impact 	Employee surveys
	on pay and raises	Anonymous internal feedback tool
	Career development	Intranet site and newsletter
	Employee working conditions and benefits	Town Hall meetings
California Governor's	 California budget 	Legislative and regulatory letters
administration,	 CalSTRS funding status 	Legislative hearings
Legislature, Congress and federal regulatory	 State and employer contributions 	Meetings
agencies	 Legislative and regulatory changes 	
	 Environmental, social and governance issues 	
Companies in which	Investment returns	Coalitions and industry events
we invest	 Investor and shareholder 	Engagements
	relationships	Proxy voting
	Risk mitigation	
Public and local	 Investment decisions 	Calls, emails and letters to CalSTRS and
community	 Climate change activism 	the Teachers' Retirement Board
	 Social equality and justice 	Public board agendas and opportunity for comments
		CalSTRS ombudsman
	0.10720.0	Submissions to CEO using CalSTRS.com
News and media outlets	CalSTRS funding status	CalSTRS news releases
outiets	Contributions	Interviews with media outlets
	Pension commentaryInvestments	 Monitoring of news outlets and social media for issues related to CalSTRS, investments and retirement
Peer retirement	Preserving public pensions	 Consultant services and benchmarking studies
systems, groups	 Operational analysis of 	 Member organization meetings
supporting retirement systems	costs, service quality and customer service	Pension and retirement coalitions

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Key topics

The CalSTRS Corporate Sustainability advisory team used information from surveys, executives, stakeholder engagement activities and the impact of worldwide events to determine our key topics for the 2019–20 *Sustainability Report*:

- Managing enterprise risk
- Path to full funding
- Member retirement preparedness
- Transition to a low-carbon economy
- Diversity and inclusion

MANAGING ENTERPRISE RISK

In 2020, nearly every organization worldwide faced its own sustainability crisis because of the COVID-19 pandemic. The way CalSTRS operates changed significantly.

California Gov. Gavin Newsom declared a state of emergency on March 4, 2020. The velocity of the pandemic and swift measures taken by state and local governments in directing Californians to stay home required CalSTRS to transition nearly all staff to work remotely within a matter of days. The stay-at-home order also affected CalSTRS members and employers as many school districts and community colleges closed for onsite education and adopted alternative delivery and distance learning.

We continued to serve our members remotely and without interruption, achieving exceptional service levels even in comparison to our normal work environment.

How we manage enterprise risk

CalSTRS strives to reduce the risks inherent in our work. We continuously monitor and address known and newly recognized risks, revising our risk mitigation strategies.

Our executive team carefully reviews and discusses risks and mitigation activities on a quarterly basis and provides a semiannual *Enterprise Risk Management Report* to the Teachers' Retirement Board. We actively manage 11 categories of enterprise risks such as investment, reputational, transformational change, and operational.

State Leadership Accountability Act

The State Leadership Accountability Act was enacted to reduce the waste of resources and strengthen internal controls, requiring each state agency to:

- Maintain effective systems of internal controls.
- Evaluate and monitor the effectiveness of these controls on an ongoing basis.
- Biennially report on the adequacy of the agency's systems of internal controls.

CalSTRS' Enterprise Risk Management Program prepares and submits these reports.

The 2019 Leadership Accountability Report for the biennial period ending December 31, 2019, was accepted by the Department of Finance on March 24, 2020, and is posted on CalSTRS.com.



Risks and sub-risks are scored using three metrics: impact, probability and velocity. Using a calculation, risks are scored and positioned on a heat map to show overall priority and scale. The heat map and the accompanying *Risk Score Report* is reviewed by the CalSTRS Executive Risk Committee and presented to the Teachers' Retirement Board.

Effective management of enterprise risk ensures the economic viability of the fund and the financial future of our members. Our ability to execute an emergency business continuity plan in response to a pandemic was not by accident or chance. The approach and velocity of how CaISTRS responds to relative disasters is directed by emergency and business continuity program plans established for our organization. The plans are reviewed, practiced and updated on a regular basis to ensure our core business functions continue and our employees are able to perform in a safe work environment.

Our Incident Management Plan contains the CalSTRS Pandemic Response Plan, first developed in 2009, which provides a structure for responding to an infectious disease outbreak based on the Centers for Disease Control and Prevention guidelines.

The Incident Management Plan contains information to facilitate decision-making processes and timely responses to any disruption of normal business operations and services. The plan is designed to protect employees, property and information assets during a major event or disaster until normal business operations are resumed. With the additional risk mitigation strategies in place due to the COVID-19 pandemic, CaISTRS' risk profile remains stable. Staff continuously monitors the effects of the pandemic through recognizing, assessing and managing this risk and the resulting effect on all enterprise-level risks.

Technological readiness

Several digital applications and technology projects completed prior to or near the beginning of the pandemic helped CalSTRS quickly transform to a remote workforce, including:

- Enterprisewide transition to laptops with the latest operating system.
- Online fax solutions allowing remote processing and reduced risk associated with paper processing.
- Implementation of DocuSign to streamline document review/approval and contract execution.
- Migration of essential business systems to a virtual desktop platform for secure processing from remote locations and expanded server capacity.
- Skype and Zoom, which allowed staff and stakeholders to meet virtually, reducing travel and the need to be in the office.

Managing information security risks

Information security was a priority as we moved to a telework environment. We quickly provided additional security education and communications to ensure staff conducted business safely and information remained secure. To help protect data, we designed a schedule to complete work that could not be accomplished remotely—such as receiving, printing and mailing—while limiting staff onsite.

Due to the current climate of data breaches and highly persistent hackers, information security remains a high risk in the remote work environment. Our staff are confident in the mitigation efforts to control this risk including ongoing monitoring of CalSTRS systems and employee education. The board is regularly briefed on information security in closed sessions.

Managing risk through ethics, integrity

A strong culture of ethics and integrity helps guard CaISTRS against reputational risks and damage that could result in members, stakeholders and the public losing confidence in CaISTRS as a respected fiduciary of public funds.

Our employees are subject to various policies, laws and regulations that relate to ethical conduct, with the responsibility to understand and abide by them all. California statutes dictate:

- Public servants are required to serve the public's interest and may not use their employment to serve private or political interests.
- Public officials who conduct themselves according to a standard that exceeds the minimum requirements set in the ethics laws help to maintain the public's faith in government.

CalSTRS' goal is not to simply comply with the laws, regulations, policies and standards that apply to our business—we want all our employees to act with the highest levels of business ethics in service to the public and our members.

The CalSTRS compliance program serves as a foundation of good corporate governance, providing each staff member with a clear, consistent set of practices and expectations for appropriate personal and professional conduct.

The Code of Ethics and Business Conduct serves as the cornerstone of the compliance program. The code applies to our employees, contractors and board. The principles

contained in this code serve as guidelines for making sound decisions and conducting business ethically, sustaining CalSTRS over the long term.

All staff are encouraged to report any activity that may harm CalSTRS' reputation to their managers, executive staff or Human Resources. Allowing confidential and anonymous avenues for our staff to report suspicious activities increases the chance of uncovering allegations that may go unreported otherwise and potentially affect our reputation.

In 2020, CalSTRS implemented a new Compliance and Ethics Hotline—a safe, secure and confidential way to report unethical acts or pension abuse. This single hotline number, supported by an outside vendor to provide assurance of anonymity, replaced two separate hotlines and is available 24 hours a day, seven days a week. Any member of the public or CalSTRS employee can make anonymous reports online or by phone. Complaints submitted to the Compliance and Ethics Hotline are reported to the CalSTRS Legal Ethics and Accountability Attorney and routed for investigation.

Maintaining and extending trust

CalSTRS pays vigilant attention to ethical practices. Members of the CalSTRS executive team take their role seriously in modeling ethical behavior and supporting the ethics and compliance program. Responsibility for ethical, compliant practices creates organizational sustainability, maintaining and extending trust within CalSTRS and with the members we serve.

Ethics and compliance policies and training

To ensure full understanding and accountability, CaISTRS requires new hires to review specific policies on the date of hire, and all employees are subject to a mandatory policy recertification process each year. CaISTRS employees in certain designated positions listed in the Conflict of Interest code are required to file the *Statement of Economic Interests* (Form 700) upon assuming their position, annually thereafter and when leaving office.

In addition, certain policies, statutes and regulations require disclosure filings and acknowledgments.

Subject	Summary/action	
Confidentiality, Non-Disclosure and Acceptable Use Agreement	Employees review and sign the Confidentiality, Non-Disclosure and Acceptable Use Agreement annually.	
Gift Policy	Employees review the Gift Policy and sign an attestation stating compliance with the policy annually.	
Incompatible Activities Agreement	Employees review and sign the Incompatible Activities Agreement annually.	
Internet Access Policy and Acknowledgment	Employees review and sign the Internet Access Policy and Acknowledgment annually.	
Policy Prohibiting Insider Trading	Employees review the Policy Prohibiting Insider Trading and sign an attestation stating compliance with the policy annually.	
Risk and Internal Controls Awareness Training	Employees complete Risk and Internal Controls Awareness Training annually.	
Security Awareness Training	Employees complete Security Awareness Training annually.	
Statement of Economic Interests (Form 700)	CalSTRS employees in designated positions file a <i>Statement of Economic Interests</i> (Form 700) annually and upon assuming and leaving office.	
State Ethics Training	CalSTRS employees and contractors in designated positions participate in State Ethics Training biennially.	

PATH TO FULL FUNDING

Today, CalSTRS is financially stronger and better positioned than 10 years ago to react to a potential recession and achieve full funding, thanks to the adoption of the funding plan through AB 1469.

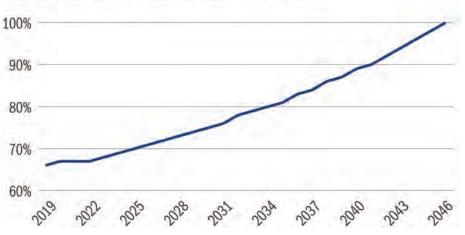
Legislative plan

CalSTRS' primary goal is to ensure a financially sound retirement system. In June 2014, Assembly Bill 1469 (Bonta) created a plan to fully fund the CalSTRS Defined Benefit Program by 2046.

The CalSTRS Funding Plan reflects a shared commitment by members, employers and the state to incrementally increase contributions to CalSTRS in a predictable manner to fully fund the Defined Benefit Program and ensure the long-term sustainability of CalSTRS. The funding plan provides the Teachers' Retirement Board with limited authority to increase or decrease both the state and employer contribution rates to ensure the plan remains on track and is able to respond as necessary to unexpected changes in CalSTRS' economic and demographic situations.

Prior to the adoption of the funding plan, the Defined Benefit Program was expected to run out of assets by 2046. CalSTRS expects the Defined Benefit Program to make progress toward full funding, with both the state and employers expected to be able to eliminate their share of CalSTRS unfunded liability by 2046.

Projected funded status



Based on the June 30, 2019, actuarial valuation, the 2019–20 investment return and the 2020–21 State of California budget.

Contribution rates

The contribution rate for CalSTRS 2% at 62 members is based, in part, on the normal cost of benefits and may increase or decrease in future years.

Contributor	July 1, 2020	July 1, 2019	July 1, 2018
Employers	16.15%	17.1%	16.28%
CalSTRS 2% at 60 members	10.25%	10.25%	10.25%
CalSTRS 2% at 62 members	10.205%	10.205%	10.205%
State of California	10.328%	10.328%	9.828%

COVID-19 impacts

In July 2020, CalSTRS reported a 3.9% investment return for 2019–20. The return was 3.1% lower than the assumed investment return of 7%. Although large fluctuations in the annual investment return are normal and expected based on CalSTRS' target asset allocation, investment return fluctuations can have a significant impact on projected funding levels and contribution rates, especially the state contribution rate.

In addition to creating a volatile investment environment, the COVID-19 crisis also resulted in budgetary challenges for the State of California. To address an anticipated budget shortfall, the Governor and Legislature approved redirecting supplemental payments previously intended to address long-term liabilities, to instead help school districts with contributions in the short term.

Districts will receive contribution rate relief for two fiscal years, while member rates are not affected. The state contribution rate will remain at the 2019–20 level through the 2020–21 fiscal year.

To ensure CalSTRS is made whole, on July 1, 2020, the state transferred \$297 million of Proposition 2 revenues to CalSTRS, which is more than the missed contributions from freezing the state contribution rate. Over the short term, the 2020–21 California budget is not expected to impact funding levels when compared to projected funding levels under the terms of the funding plan.

Funding reports

CalSTRS continuously monitors the funding plan and the financial health of the fund. Continuous monitoring of funding plan risks is key to identifying trends that could impact the long-term funding of the system.

Additionally, as a public agency, we provide transparent public reporting of our monitoring through board meeting agenda items and minutes, formal reports and studies, and reports to the Legislature.

Actuarial assumptions adopted

In the 2019–20 fiscal year, CalSTRS took several actions that contributed to our sustainability and our goal of achieving full funding. One of these actions was to complete a review of the actuarial assumptions used in the funding of the system.

When performing projections, actuaries rely on various demographic and economic assumptions. It is important to monitor these assumptions to ensure they are reasonable, reflect the actual experience of the system, and are appropriate for assessing funding levels and determining contribution levels needed to achieve full funding.

In January 2020, the Teachers' Retirement Board adopted new actuarial assumptions to be used in the funding of the system. These assumptions were used to complete the June 30, 2019, actuarial valuation that was presented to the board in May 2020.

It is unclear whether the COVID-19 pandemic will have lasting consequences on actuarial assumptions. The pandemic could potentially impact long-term actuarial assumptions such as price inflation, wage growth, investment return and member longevity. Even though actuarial assumptions are formally reviewed every four years, with the most recent review completed in January 2020, CaISTRS constantly monitors the appropriateness of the actuarial assumptions adopted by the board. If any events or changes warrant an adjustment to actuarial assumptions, the issue would be brought to the board for discussion, even if it meant such discussion would occur ahead of the normal four-year review cycle.

Spring 2020 annual actuarial valuation

In May 2020, the board adopted the actuarial valuation based on June 30, 2019, data. The Defined Benefit Program funded ratio—the amount of assets on hand to pay for obligations—improved to approximately 66% as of the June 30, 2019, valuation, up from the June 30, 2018, valuation of 64%.

66% funded As of June 30, 2019

Review of Funding Levels and Risks report

The most recent report, presented to the board in December 2020, is based on the June 30, 2019, annual valuation of the Defined Benefit Program and reflects the key events that have occurred since the valuation, including the:

- 3.9% investment return reported for the 2019–20 fiscal year.
- 2020–21 budget for the State of California, which redirected supplemental payments already contributed to the Teachers' Retirement Fund in 2019 away from reducing the unfunded liability to instead provide short-term rate relief for employers.

The report provides an update to several of the stress tests and risk measures introduced in previous *Review of Funding Levels and Risks* reports.

The report highlights:

- Long-term contribution levels for both employers and the state are expected to be higher than previously estimated in the most recent actuarial valuation.
- Some of the improvements in 2019 funding levels that resulted from additional supplemental contributions made by the state were reduced through changes in contribution rates adopted as part of the 2020–21 budget for the State of California.

- Changes made to contribution rates through the adoption of the 2020–21 budget for the State of California have slightly weakened the funding plan long term by increasing the risk it may not be able to react adequately to a potential recession.
- The CalSTRS Defined Benefit Program continues to mature, which increases the fund's sensitivity to investment volatility, especially for the state contribution rate.
- The largest risk facing CalSTRS' ability to reach full funding remains risk from investment volatility.
- Lower-than-anticipated increases in future payroll could put significant strain on CalSTRS' ability to achieve full funding, especially if caused by a recession that also results in a period of lower investment returns.

The next few years will be critical for the CalSTRS Funding Plan. The full impact of the COVID-19 pandemic on the economy, employment patterns and employers' budgets remains uncertain. The pandemic has the potential to affect investment performance, the number of teachers working in California and the longevity of CalSTRS members—the three main risks to the funding plan. We will continue to monitor the COVID-19 pandemic and how it may impact funding over the next few years, particularly how investment markets react under current recession scenarios.

"CalSTRS had never seen the level of volatility the U.S. and global financial markets exhibited over the short period from late February to May 2020. We evaluated risk daily, and sometimes multiple times a day, and were able to manage the portfolio remotely during shelter in place. We adapted quickly and rose to the occasion during a year when the entire world has been called upon to go above and beyond."

-Chief Investment Officer Christopher J. Ailman

\$248.3 billion

Net position for CalSTRS as of June 30, 2020, an increase of approximately \$8.3 billion (3.5%) since the previous fiscal year.

Financial performance and the value of investments

Under the CalSTRS Funding Plan and current assumptions, we expect investment returns to be the largest contributor to our ability to pay benefits and reach full funding over the next 30 years and beyond for California's more than 975,000 educators and their beneficiaries.

State, member and employer contributions comprise approximately 40% of the projected funding sources. Investment returns are projected to make up the remaining 60% of the resources necessary to fund CaISTRS benefits.

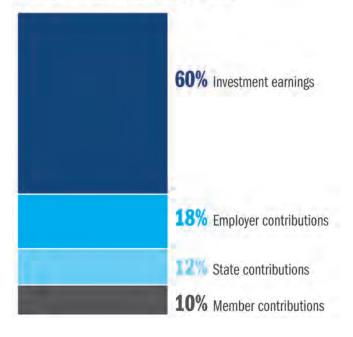
CalSTRS is committed to investing responsibly over the long term while continuing to add value to the portfolio. For the 2019–20 fiscal year, we posted a 3.9% return (net of fees), which reflected the impact of COVID-19 on global financial markets.

We are a long-term investor with a goal of achieving an average return of 7% over a multiyear horizon to meet our pension obligations. The 25-year, 10-year and five-year fund performance levels are all above or near the 7% investment return assumption at 7.5%, 9.3% and 6.8%, respectively. The three-year fund performance landed at 6.5%.

For full information on our financial performance, refer to the *Comprehensive Annual Financial Report* available at CalSTRS.com. The basic financial statements and the related notes are prepared in accordance with accounting principles generally accepted in the United States, and are independently audited in accordance with auditing standards generally accepted in the U.S. and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the U.S.

CalSTRS projected benefit funding sources

This projection is based on an expected investment return of 7% each year through 2046.



CalSTRS Investment Fund performance



Long-term, historical perspective (net of feesas of June 30, 2020).

CalSTRS Collaborative Model

The CalSTRS Collaborative Model is an investment strategy to manage more assets internally across all asset classes—to reduce costs, control risks and increase expected returns—and leverage our external partnerships to achieve similar benefits.

The main strategy is to search for long-term cost savings and hybrid opportunities through investment management and by leveraging existing relationships. These efforts are projected to reduce costs and generate higher returns to support a strong investment portfolio in line with our mission—all for the benefit of California educators and their beneficiaries.

Moving additional assets under internal management has already led to significant cost savings. In the 2019 peer comparison study provided by a third-party cost measurement service, our Investments Branch saved \$222 million over expected investment costs compared to peers, given the same asset mix. A cross-functional initiative is underway to add investment staff and bolster foundational processes to support the structure. According to the 2019 *Cost Report*, CalSTRS managed roughly 48% of its assets internally, 40% externally and 12% as hybrid-private managed, which include joint ventures and co-investments, where we partnered with external managers. In 2019, the costs to manage our internal assets amounted to \$39 million. External management cost \$1.4 billion (including incentive fees). Hybrid-private managed assets cost \$327 million and have a significantly lower cost structure than externally managed private assets.

Our decision to pursue this collaborative investment approach saved the fund close to \$294 million over the last two years. This does not consider the savings in carried interest, which is expected to more than double this figure.

Based on these clear economic drivers, we have a significant opportunity and fiduciary responsibility to continue to manage and increase the number of assets under internal management.



Estimated cost benefits

\$200 million-\$300 million

If fully implemented, the CalSTRS Collaborative Model may produce this amount of cost saving and increased returns annually over the next 10 to 15 years. Present value of future savings through 2046 is estimated to be approximately **\$3.5 billion**.

Asset allocation

In November 2019, the board's Investment Committee adopted new asset allocations and updated the Investment Policy and Management Plan. This decision is one of the committee's most important functions and is key to achieving full funding. The year-long process leading up to the allocation decision was comprehensive, involving thorough collaboration among staff from the Investments and Financial Services branches, including Actuarial Resources, along with the board's Investment Committee and external consultants.

The Investment Committee decreased the target allocation for Global Equity and increased the targets for Real Estate, Inflation Sensitive and Risk Mitigating Strategies. The new targets improve diversification, offer better drawdown protection and take advantage of private asset risk premiums, as well as the evolution of the CaISTRS Collaborative Model.

Asset Liability Management Study

An Asset Liability Management Study is conducted every four years. The study helps the Investment Committee adopt an asset allocation that meets the fund's pension liabilities. The study ensures responsible investment practices and strategies are used in recommending asset allocations.

In 2019, the study timeline aligned with the review of the fund's Actuarial Experience Study, using the same assumptions for both assets and liabilities and the latest financial and demographic assumptions. The next Asset Liability Management Study is scheduled for November 2023.

Prepared for volatility

The Risk Mitigating Strategies asset class became a part of CalSTRS' total plan asset allocation in 2016. The asset class is constructed to perform well during deep and extended equity market downturns in order to protect the total fund. The asset class performed as expected during the sudden market drop in March 2020, cushioning some of the losses in public equity. The Private Equity, Real Estate, Inflation Sensitive and Fixed Income asset classes all performed better than their custom benchmarks.

Long-term asset allocation policy targets

Adopted November 2019

Strategic class	Asset class	Long-term target
Economic growth	Global Equity	42%
	Private Equity	13%
Real assets	Real Estate	15%
	Inflation Sensitive	6%
Diversifying	Fixed Income	12%
	Risk Mitigating Strategies	10%
	Cash/Liquidity	2%

MEMBER RETIREMENT PREPAREDNESS

To prepare for retirement, our members must consider their future income needs and how much their Defined Benefit will provide. Other important factors for retirement planning include career longevity, Social Security considerations, member life expectancy and other income sources.

Career longevity

The longer a member works, the greater their retirement benefit will be. For the average member, the CalSTRS benefit replaces a little more than half of their preretirement salary.

Members at all career stages are encouraged to understand their retirement benefits and the need for supplemental savings.

Social Security

California's public school educators do not pay into Social Security for CalSTRS-covered employment. Social Security is a federal program, and neither CalSTRS nor the State of California have control over eligibility requirements or benefit calculations. Members need to be aware that if they expect to receive a Social Security benefit through other employment or their spouse, two federal rules the Windfall Elimination Provision and the Government Pension Offset—may leave them with a smaller Social Security benefit or possibly no benefit at all.

CalSTRS helps members understand potential impacts for non-CalSTRS covered employment of the member or member's spouse. More information is available on the fact sheet *Social Security, CalSTRS and You*.

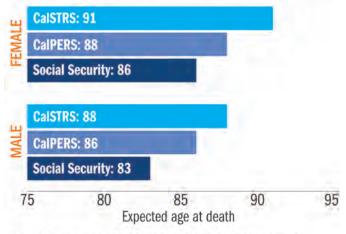
Member life expectancy

Life expectancy is a key factor in calculating funds needed for retirement. On average, CalSTRS members live longer than recipients of other systems.

Since 1990, our members have seen an almost 2.5 year increase in life expectancy, which follows national trends. Awareness of longevity helps members effectively plan their careers and retirement.

Life expectancy for CaISTRS members

Expected age at death for members of Social Security, CalPERS* and CalSTRS who retired at age 62 in 2020.



* CalPERS includes some county, city and safety retirement systems, and state employees.

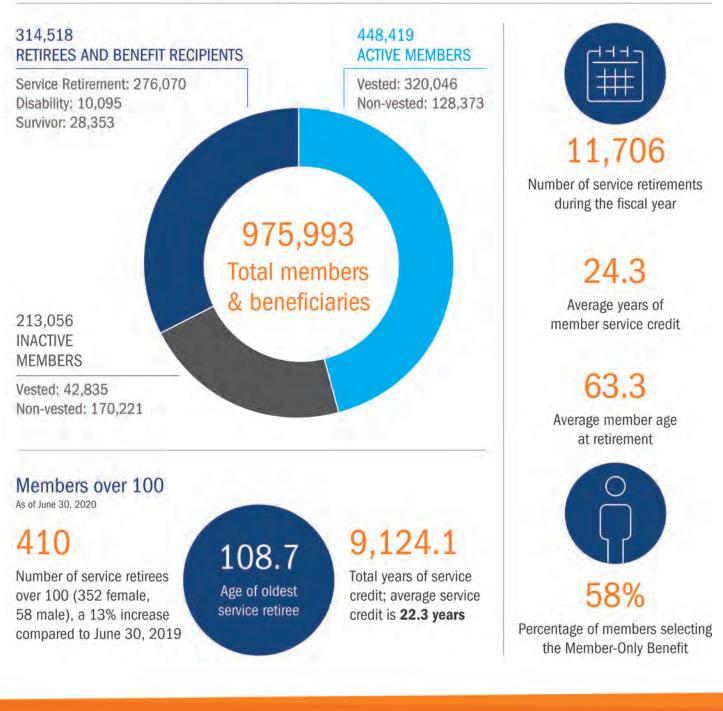
Members and beneficiaries at a glance



\$15.9 billion

Benefits paid, which include service retirement benefits, disability benefits, survivor benefits and purchasing power supplemental payments

\$4,614 Average monthly Member-Only Benefit for those retiring in 2019-20



CaISTRS hybrid retirement system

CalSTRS administers a hybrid system as part of a comprehensive financial security package for members.

Defined Benefit Program

The CalSTRS Defined Benefit Program is a traditional defined benefit plan that provides retirement, survivor and disability benefits. The benefit is based on a formula set by law using a member's service credit, age at retirement and final compensation.

The CalSTRS retirement benefit is a strong foundation. On average, the benefit replaces 50% to 60% of a career educator's salary. According to financial professionals, members may need 80% to 90% of their final salary to retire comfortably.

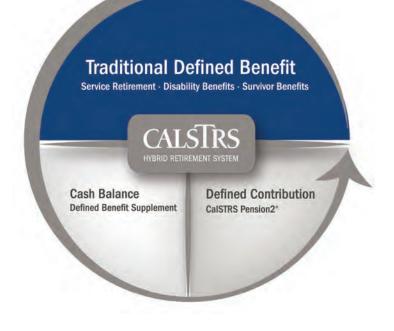
CalSTRS provides additional retirement savings tools to help members prepare to meet their retirement goals.

Cash balance plans

Defined Benefit Supplement Program

CalSTRS Defined Benefit Program members have a Defined Benefit Supplement account that provides additional income for their retirement. Since members cannot earn more than one year of service credit in a school year, contributions on earnings in excess of one

CalSTRS Defined Benefit Program formula



year of service, up to the compensation cap, are credited to this account instead of the Defined Benefit Program.

Full-time educators build their Defined Benefit Supplement accounts when they take on extra-pay assignments such as summer school or coaching. Contributions earn a guaranteed interest rate, and members can choose to receive the funds as an annuity or lump sum at retirement.

Service credit 🗙	Age factor	Final compensation	Member-Only Benefit
The number of school years, including partial years, members have worked and contributed to CaISTRS.	A percentage based on age at retirement.	The highest average annual compensation earnable for 36 consecutive months, or the highest 12 consecutive months for CaISTRS 2% at 60 members who have more than 25 years of qualified service credit.	If members wish to provide a lifetime benefit to a spouse or other qualified beneficiary after their death, they may choose a Modified Benefit.

Cash Balance Benefit Program for part-time and adjunct educators

The Cash Balance Benefit Program, an Internal Revenue Code 401(a) defined benefit plan, is an optional program designed specifically for part-time educators and adjunct faculty. The program accumulates funds based on dollars contributed by the employee and the employer, plus interest, similar to a defined contribution plan.

Defined contribution plan

CalSTRS Pension2®

CalSTRS Pension2, a voluntary defined contribution plan, is an important piece of the CalSTRS hybrid retirement plan designed to complement our Defined Benefit Program and support our members' goals for a secure financial future.

Pension2 offers the opportunity to invest through tax-advantaged payroll deductions in low-cost 403(b), 457(b), Roth 403(b) plans for additional retirement savings.

With Pension2, members belong to a plan with low and transparent costs—there are no commissions, no load fees and no surrender charges—along with flexible investment options that match all levels of investment knowledge.

403bCompare

403bCompare.com is a website provided by CalSTRS that gives members an easy and transparent way to compare investment fees, performance and services for the 403(b) plans their district offers. Using 403bCompare, members can:

- Learn the advantages of a 403(b) account.
- Find an employer's approved list of 403(b) vendors.
- Compare 403(b) products side by side.
- Understand how to enroll and start contributions from their paycheck.

Pension2 plans are included in 403bCompare.

\$1.3 billion

Approximate total assets under management in Pension2 as of June 30, 2020, with more than 21,000 participants.

Pension2 portfolio options

The CalSTRS Pension2 program offers investment options. The choice depends on a participant's comfort in managing their retirement portfolio.

Easy Choice Portfolio

- Relieves participants of the need to make complicated investment, portfolio reallocation and readjustment decisions as time and risk horizons change.
- Provides a ready-made mix of the Pension2 core investments.
- Combines risk tolerance and retirement target dates to simplify investment decision-making.
- Offers broad diversification and oversight by CalSTRS and our Investment Advisory Committee.

Build Your Own Portfolio

- Allows participants to build and manage their own portfolio that matches their time horizon and tolerance for risk, and adjust their portfolio over time.
- Provides access to investment options that cover several different asset classes.
- Includes access to the core lineup of funds.

Helping members prepare

Our surveys find that members who are more engaged with CalSTRS and our products report higher levels of retirement preparedness. Because of this, we continuously expand and deepen our engagement efforts and stakeholder partnerships to increase contact with our members and encourage their involvement in retirement planning earlier in their career.

CalSTRS offers a suite of products and outreach efforts to help members of all career stages better understand their benefits and plan for their retirement. These services include new educator events, financial awareness workshops, individual and group benefits planning sessions, and career stage-specific member kits and workbooks to assist with targeted activities for early career, midcareer and near-retirement planning.

Members learn strategies to:

- Project their retirement income and expenses.
- Withdraw their invested dollars.
- Mitigate common retirement savings obstacles like inflation and rising health care costs.

Onboarding tools for new members

To help our younger members understand their benefits, we debuted a new educator onboarding and retention toolkit on CalSTRS.com. Set up as facilitated sessions in a lesson plan framework, the toolkit features a series of videos and documents featuring the fundamentals of the CalSTRS Defined Benefit Program. Topics include how to calculate a retirement benefit, how to pick a beneficiary and how to fill the retirement income gap between the educator's defined benefit and supplemental savings.

In conjunction with the toolkit, we launched a new educator onboarding pilot program in 20 school districts throughout California to demonstrate how to effectively facilitate the lesson plans.



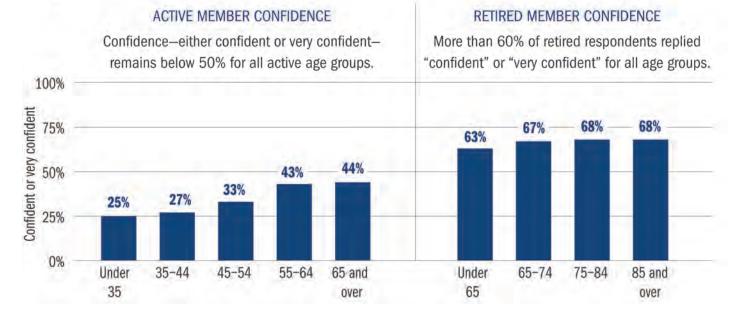


Onboarding & retention toolkit bit.ly/3iQ6f7J

The Benefit of a Lifetime brochure bit.ly/2M1xZKI

Retirement confidence increases with age

Active and retired members were asked to rate their confidence that they would have enough money to live comfortably throughout their retirement years.



Understanding member retirement confidence

For the general U.S. population, demographic variables such as a person's gender or race correlate with social and financial outcomes in life.

In spring 2019, CalSTRS performed our first Member Demographic Study, a voluntary survey to help us understand and engage with our stakeholders more deeply.

Surveys were sent to all CalSTRS active and retired members who had a valid email address with us. We received 42,111 responses representing 11,685 active members and 30,426 retired members. Topics included demographic characteristics, employment, education, finances and retirement preparedness.

Our members are a unique subset of the U.S. population:

- CalSTRS serves only the state of California.
- Our members typically have five years of higher education in order to teach in public schools.
- The education profession has a progressive compensation structure.

These factors may change the influence of other demographic characteristics on financial outcomes from what we see in the broader population.

When comparing active and retired respondents, retired respondents are much more confident their retirement income will meet their needs.

Retired respondents are also more consistent across all measures. Active respondents are less consistent, reporting they feel they are increasingly on track to meet their retirement income goals by age group, but have much lower confidence in their retirement income meeting their needs. It could be that active respondents experience more uncertainty, especially at younger ages. Upon retirement, members have more clarity of their financial reality and rate their preparedness more favorably. However, despite this increased clarity, retired females remain less confident than their male counterparts. While the Member Demographic Study reinforced our understanding of retirement preparedness from our prior surveys of members, the study results highlighted new membership data. For example, married individuals are consistently more confident than their divorced peers, a finding that would not have been possible without this new research. Continued demographic research exploring groupings such as gender, age and marital status can be used to further understand how these variables may impact the financial well-being, retirement preparedness and confidence of members.

CalSTRS will use this information to tailor communications, publications and workshops, and meaningfully reinforce the importance of members' engagement with their retirement benefits and planning.

Serving members during COVID-19

Responding to state and community directives related to COVID-19, CaISTRS transitioned to working remotely in March 2020. To protect the health and safety of members and employees, our member service centers remain closed to in-person visits as of December 2020.

In early July 2020, CalSTRS sent an email and video to members assuring them we will continue paying benefits as scheduled and offering the same high level of customer service despite adjusting the way we do business.

While our physical offices are closed, our benefits specialists are available for individual benefit planning sessions via telephone.



Sandy Blair, CalSTRS director of Retirement Readiness and past president of the National Association of Government Defined Contribution Administrators, was featured in a video to our members regarding COVID-19. bit.ly/2Lqs0i7

We also offer online group benefit planning workshops.

We transformed into an organization capable of remote delivery and adopted practices and technologies tailored to a shifting demographic of our next generation of members, demonstrating our flexibility and viability as an organization.

TRANSITION TO A LOW-CARBON ECONOMY

CalSTRS views climate change as a significant risk faced by investors and recognizes that society is transitioning away from fossil fuels and toward renewable energy sources.

As part of our commitment to providing a secure retirement to our members, we seek to capitalize on new investments that are additive to the total fund and support this low-carbon economy transition.

CalSTRS Low-Carbon Transition Work Plan

In May 2019, CalSTRS established the Low-Carbon Transition Work Plan across our entire portfolio with the goal of reducing risk and identifying opportunities to expand investments in low-carbon solutions.

Later in the year we held education and discussion sessions with external climate experts. Topics included the impacts of the low-carbon economic transition on the CaISTRS Investment Portfolio and actions that staff could take to best manage the transition.

We prioritized three work plan activities:

- Establish a low-carbon transition investment belief.
- Assess transition readiness across asset classes.
- Expand investments in low-carbon solutions.

In January 2020 the board adopted low-carbon Investment Belief 9 which reflects our views on global markets, along with our other investment beliefs.

Investment Belief 9

Investment risks associated with climate change and the related economic transition physical, policy and technology driven materially impact the value of the CalSTRS Investment Portfolio.

CalSTRS believes that public policies, technologies and physical impacts associated with climate change are driving a transition to a lower-carbon economy. As a prudent fiduciary and diversified global investor, we need to understand the transition's impacts on companies, industries and countries, and consider actions to mitigate risk and identify investment-related opportunities. We recognize the critical role that carbon pricing frameworks may play in integrating the costs of carbon emissions into the global economy to accelerate an orderly low-carbon transition and avoid exacerbating economic inequality and related geopolitical risks. As a significant investor with a long-term investment horizon, engagement is a critical tool used by the CaISTRS Sustainable Investment and Stewardship Strategies team to influence changes in public policies and corporate practices.



With Investment Belief 9 in mind, we are expanding low-carbon investment strategies across asset classes. This includes a dedicated sustainability-focused Public Equity Portfolio of \$2.2 billion.

For the period ending June 30, 2020, this portfolio beat its one-, three-, five-, and 10-year benchmarks. In addition, we have \$2.8 billion, as of June 30, 2020, invested in a Low-Carbon Index.

Looking beyond the capabilities and methodologies of the current CalSTRS Low-Carbon Index, we intend to evaluate and pursue additional investments that further align the fund with the transition to a low-carbon economy.

The value of engagements

We engage companies through meetings, letters, shareholder proposals, investor coalitions and proxy voting to encourage best practices in managing

Information about engagements

Read our quarterly newsletter *The Value of CalSTRS Engagements.* **bit.ly/39tyRPY**

The CalSTRS perspective on fossil fuel divestment. **bit.ly/39oPDzv**

environmental, social and governance issues to create sustainable businesses. We also engage policymakers to codify strong governance practices that improve the financial market landscape for long-term investors and their beneficiaries.

Our Sustainable Investments and Stewardship Strategies team engages with companies for net-zero or reduced-carbon commitments. We vote more than 8,000 proxies each year and engage carbon-intensive companies individually and through collaborations with investor groups like CERES and Climate Action 100+. Staff serves on the CERES Carbon Pricing Policy Working Group and Valuing Water Task Force. We provide updates on these engagements in a quarterly newsletter on CalSTRS.com.

Perspective on fossil fuel divestment

CalSTRS acknowledges there are interested parties and stakeholders calling for fossil fuel divestment. Divestment is a last resort action that can have a lasting negative impact on the health of the Teachers' Retirement Fund, while also eliminating our ability to shape corporate behavior for long-term sustainable growth.

We share a sense of urgency regarding climate change and are focused on understanding and responding to the risks it presents, both to the CalSTRS Investment Portfolio and to sustainable economic growth. That's why it's imperative we continue to use our influence with policy makers and companies—including those in the fossil fuel industry—to help ensure an equitable and prosperous low-carbon world for future generations.

Our engagement with companies, bolstered by partnerships with the world's largest global investors, continues to result in more companies monitoring and committing to carbon emissions reductions. We must prudently and responsibly address risks from both the physical impacts of a changing climate and the transition to a low-carbon economy.

For detailed information, see the CalSTRS perspective on fossil fuel divestment on CalSTRS.com.

CalSTRS Green Initiative Task Force

The CalSTRS Green Initiative Task Force, known as the Green Team, was established in 2007 to identify, analyze and propose investment opportunities and risk-control strategies addressing climate change. Since then, the focus has pushed beyond carbon emissions to consider risks and opportunities related to issues such as land use, water sourcing, mineral extraction and waste disposal.

In 2019, CalSTRS published our 13th annual Green Initiative Task Force report highlighting our environmentally focused investment efforts. We made significant changes to the report content and structure. In response to California Senate Bill 964 (Allen) (Chapter 731, Statutes of 2018), the report detailed our analysis of our climate-related financial risks and how we are mitigating them. We became one of the first global pension funds to align our report format with the Task Force on Climate-related Financial Disclosure framework recommendations.

An update scheduled for 2021 will continue to focus on our Low-Carbon Transition Work Plan and enhanced stewardship activities.



An update to the 2019 report is scheduled for spring 2021.



bit.ly/3a6G20d

DIVERSITY AND INCLUSION

CalSTRS welcomes and embraces diversity of thinking, background and experience to enhance our culture and drive business success. By working together to respect, value and include each individual's perspectives, CalSTRS empowers staff to perform their best work toward the fulfillment of our mission.

CalSTRS Core Values

The CalSTRS Core Values are a set of attitudes, beliefs and behaviors that define CalSTRS and our employees.

Customer Service: We never compromise on quality as we strive to meet or exceed the expectations of our customers.

Accountability: We operate with transparency and accept responsibility for our actions.

Leadership: We model best practices in our industry and innovate to achieve higher standards.

Strength: We ensure the strength of our system by embracing a diversity of ideas and people.

Trust: We conduct ourselves with integrity, acting ethically in every endeavor.

Respect: We respect the needs of our members, co-workers and others, treating everyone with fairness, honesty and courtesy.

Stewardship: We recognize our fiduciary responsibility as the foundation for all decision-making.

The value of open conversation

Diversity and inclusion are fundamental to CalSTRS culture and are reflected in our Core Values of Strength and Respect.

We've re-emphasized the importance of living these Core Values through our commitment to inclusion. The death of George Floyd in Minneapolis, in addition to other deaths and violence toward members of the Black community, ignited national and international protests against racial injustice. These protests, which occurred in communities throughout California, deeply affected our staff and members.

This prompted conversations about the meaning of inclusion and how our employees experience it. In a video to all CaISTRS staff, CEO Jack Ehnes underscored the role of CaISTRS culture in supporting open conversation in our workplace. He said discussing race and inequality is an important responsibility to living our Core Values, which affects all our employees.

To openly address social forces and prejudicial biases that may cause divisive behaviors and run counter to our Core Values, CalSTRS debuted several opportunities for employees to increase their knowledge and create informed dialogue. Our nation experienced social and civil unrest in 2020. We choose not to ignore intricate and complex topics.



The first event was an open conversation with four of our Black employees and our CEO, "Getting Deep: Black Voices on Race." The purpose was to hear personal experiences from these employees about how recent social events affected them and their families. All CaISTRS employees were invited to watch the event online and submit questions and comments.

This was followed by Stanford University's educational webinar series, "Moving Allyship from Talk to Action: Addressing the Barriers of Power and Privilege," as an offering for all employees. Ongoing events are planned to continue our learning and understanding of inclusion within CalSTRS culture. Today, CalSTRS has a robust diversity and inclusion effort focused on culture enhancement including a dedicated coordinator and advisory council, employee surveys, formal training, and an internal website for employee education on a range of historical and current events related to inclusion topics.

We ensure that we learn from best practices in the field of diversity and inclusion. CalSTRS staff attend inclusion conferences, partner with learning institutions and learn lessons from both private and public agencies.

We are a continuous-learning organization that seeks expertise from forward-thinking and innovative resources.

"As stewards of CalSTRS culture, our goal is to create and foster diversity and inclusion through a lens of respect, understanding and compassion where all employees feel valued and heard." —Tejdeep Kochhar, CalSTRS Diversity & Inclusion specialist

Measuring employee engagement

Engagement is promoted through a safe, respectful work environment where employees feel valued and their ideas heard. This contributes to organizational sustainability with our employees as stakeholders.

Every two years, CalSTRS conducts our All-Employee Survey anonymously through a third-party vendor. The survey's purpose is to:

- · Assess the experience of employees.
- Determine levels of employee satisfaction and engagement.
- Identify opportunities for organizational improvement.

In February 2020, 80% of our employees responded to the All-Employee Survey and answered "agree" or "strongly agree" to the following questions:

- 74% Manager demonstrates that diversity is important.
- 73% Easy for people from diverse backgrounds to fit in.
- 66% Individuals and their differences are valued.

Two significant drivers of employee engagement are "feeling valued" and "finding my work meaningful." CaISTRS leaders participate in internal leadership forums focused on building relationships and communication skills critical to an inclusive and safe working environment. These forums feature assessments, workshops and discussions to help leaders understand employees' needs and value the diversity of contributions.

By listening to employee feedback, leadership can make improvements that increase employee engagement and satisfaction to help us better serve our members.

Diversity & Inclusion effort at CaISTRS



 Hosted internal dialogues and educational speakers regarding race, equity and allyship.

Diversity in the management of investments

We are proud of our long-standing support of diversity, equity and inclusion in corporations and the investment profession.

CalSTRS continues to engage portfolio companies to promote greater diversity on corporate boards. We focus on board composition, the skill sets of directors, and how members are nominated and evaluated. We believe a multifaceted and concerted effort, with like-minded investors, increases our ability to improve long-term returns resulting from greater diversity. These partnerships include:

- California Board Diversity Initiative
- Cross-Border Coalition of 6: U.S. Board
 Diversity Initiative
- Thirty Percent Coalition
- Human Capital Management Coalition
- Diverse Director DataSource (3D)

Additionally, CaISTRS has been associated with the Toigo Foundation since its inception more than three decades ago. The foundation's mission is to transform the performance of forward-thinking organizations through education and strategies that drive greater inclusion and the ongoing development and promotion of exceptional, diverse leaders.

CalSTRS partnered with CalPERS, the California Public Employees' Retirement System, to host the 2019 Diversity Forum in Sacramento. This event set the stage

Diversity in the Management of Investments

Since 2014, CalSTRS has published a *Diversity in the Management of Investments* report. This progress report highlights our diversity efforts within our Investments Branch and external engagement with the investment community.





bit.ly/ 3sYH6wa

for a dialogue on diversity and inclusion and explores the issues that impact the investment industry. Hosts included CaISTRS CIO Christopher J. Ailman and CaISTRS board member Sharon Hendricks, with participation from several CaISTRS and CaIPERS staff members.

"CalSTRS has been at the forefront of the global diversity and inclusion conversation, and I'm proud of the role we've played in both raising awareness and implementing industry best practices."

-Chief Investment Officer Christopher J. Ailman



About CalSTRS

The California State Teachers' Retirement System was established by law in 1913 to provide retirement benefits to California's public school educators from prekindergarten through community college.

Today, CalSTRS is the largest educator-only pension fund in the world and the second largest pension fund in the U.S.

CalSTRS provides retirement, disability and survivor benefits for full-time and part-time California public school educators through a hybrid retirement system consisting of a traditional defined benefit plan, cash balance plans and a voluntary defined contribution plan.

The Teachers' Retirement Fund is a special trust fund established by law that holds the assets of the CalSTRS Defined Benefit, Defined Benefit Supplement and Cash Balance Benefit programs. The assets come from contributions by employees, employers and the State of California. The fund's investments provide a stream of income to add to those assets.

EXECUTIVE STAFF

As of January 31, 2021



Jack Ehnes Chief Executive Officer



Christopher J. Ailman Chief Investment Officer



Brian J. Bartow General Counsel



Cassandra Lichnock Chief Operating Officer



Julie Underwood Chief Financial Officer



Lisa Blatnick Chief of Administrative Services



Ashish Jain Chief Technology Officer



William Perez Chief Benefits Officer



Teresa Schilling Chief Public Affairs Officer

TEACHERS' RETIREMENT BOARD

As of December 31, 2020



Harry M. Keiley Board Chair K-12 Classroom Teacher



Joy Higa Public Representative



Sharon Hendricks Board Vice Chair Community College Instructor



Denise Bradford K–12 Classroom Teacher



Karen Yamamoto Retiree Representative



William Prezant Public Representative



Jennifer Urdan Public Representative



Vacant School Board Representative



Keely Bosler Director of Finance Ex Officio Member



Betty Yee State Controller Ex Officio Member



Tony Thurmond State Superintendent of Public Instruction Ex Officio Member



Fiona Ma State Treasurer Ex Officio Member

Leading the direction in sustainable finance

CalSTRS executives and senior-level staff provide leadership to vital organizations that drive strategic direction of corporate sustainability and responsible long-term investing.

Members of our staff proudly serve in the following roles:



Jack Ehnes

Chief Executive Officer

- Ceres Board, member
- Financial Industry Regulatory Authority, public governor
- FTSE Russell Green Industries Advisory Committee, chair
- FTSE Russell Sustainable Investment Advisory Committee, vice chair
- Global Reporting Initiative Board, vice chair
- National Council on Teacher Retirement Executive Committee, member and past president



Christopher J. Ailman Chief Investment Officer

- 300 Club International, member
- 300 Club North American Chapter, co-chair
- Bloomberg ESG Advisory Group, member
- CFA Institute Diversity and Inclusion Steering Committee, member
- EDHEC-Risk Institute International Advisory Board, member
- Institutional Investor Roundtable for Public Funds Advisory Board, member
- MSCI Barra Index Editorial Advisory Board, member
- Milken Global Capital Markets Advisory Council, co-chair
- Pacific Center for Asset Management Advisory Council, chair
- Principles for Responsible Investment Asset Owners Advisory Committee, member
- Sustainability Accounting Standards Board Investor Advisory Group, chair
- Toigo Foundation Advisory Board, member



Scott Chan

Deputy Chief Investment Officer

- Alternative Investment Forum Advisory Group, member
- Chartered Alternative Investment Analyst Association Allocators Advisory Council, member
- Institutional Investor Roundtable Advisory Council, member
- Institutional Investor Roundtable for Public Funds Advisory Board, member
- Pacific Pension & Investment Institute, member
- Toigo Foundation Governing Board, member

Kirsty Jenkinson

Director, Sustainable Investment and Stewardship Strategies

- Business and Human Rights Resource Centre Board, member
- Sustainability Accounting Standards Board, Investor Advisory Group, member
- World Resources Institute, Sustainable Investment Advisory Council, member



Sharon Hendricks Vice Chair, Teachers' Retirement Board

• Principles for Responsible Investment, Association Board, member

HEADQUARTERS' ENVIRONMENTAL PERFORMANCE

CalSTRS' environmental performance is driven by our commitment to sustainability and stewardship of natural resources. We comply with State of California Executive Orders B-18-12 and N-19-19 for state facilities, regulations from CalRecycle and certification guidelines for LEED v4.1. Staff regularly monitors performance and communicates results internally and to the State of California.

In 2020, CaISTRS Headquarters in West Sacramento was proudly recertified as LEED v4.1 Operations and Maintenance Platinum based on performance scores across five categories: energy, water, waste, transportation and human experience. Additionally, we certified an Energy Star rating of 98 out of 100. Based on Gov. Gavin Newsom's March 19 stay-at-home directive, we adopted telework for employees who could perform their essential work remotely. As of June 30, 2020, less than 10% of CaISTRS staff worked in the office one or more times a week to complete essential work that could not be accomplished remotely.

Green bonds for headquarters expansion

CalSTRS has been a significant and active investor in the U.S. municipal bond market. In 2019, CalSTRS made its debut as a borrower with the sale of tax-exempt bonds to finance a headquarters expansion.

The project is being financed through tax-exempt lease-revenue green bonds issued through a conduit issuer, the California Infrastructure and Economic Development Bank. The bonds, sold in December 2019, raised \$340.6 million and were 7.3 times oversubscribed. The Series 2019 Bonds were certified as meeting the robust Climate Bonds Initiative standards.



This rendering depicts our headquarters expansion in West Sacramento.

This bond was named Green Project Bond of the Year by *Environmental Finance* magazine in March 2020. It was chosen by a panel of 30 judges from the world's largest green, social and sustainability bond investors. The project, estimated for completion in 2022, supports sustainable green building practices: employee wellness, green technologies, sustainable construction and integrated energy efficiency measures.

Janitorial infectious disease certification

Janitorial staff plays a critical role in protecting the safety of our workplace and the health of our building occupants. CalSTRS participated in the Green Janitor Program in 2018, featured in our 2018–19 *Sustainability Report*.

The recognition of janitorial workers as an essential workforce has moved to the forefront during the 2020 public health crisis and will continue to serve an important function as we reopen society to business and movement. In 2020, 10 members of the CaISTRS janitorial staff completed the Infectious Disease Certification Program to adapt cleaning and maintenance practices to today's rapidly evolving health and safety measures.

Building Skills Partnership, a California nonprofit dedicated to improving the lives of workers in low-wage industries and their families, developed the program to educate the janitorial staff on how to protect their health and safety while providing valuable services to building occupants.

CalSTRS is partnering with the leasing agents of our member service center locations to ensure the health and safety of our employees and members upon reopening.

Headquarters' environmental performance

With an 11-year history at our current headquarters location, engineering staff operates the building at optimal efficiency. Energy use, both electrical and natural gas, and water usage decreased as a result of fewer building occupants from March 2020 to June 2020. Environmental performance targets will be evaluated based on building occupancy as we move beyond the pandemic and invite additional staff to return to the building.

Category	FY 2019-20	FY 2018-19	FY 2017-18	Notes
Energy				
Electricity (kWh)	4,545,158	4,745,814	4,854,847	
Natural gas (therms)	24,962	29,476	29,665	
Water (gallons used)	4,873,108	6,040,100	5,872,548	
Waste diversion	86%	88%	_	As of January 2019, more accurate methods of measuring our waste stream were implemented by our waste management vendor. As a result, we will be using the 2019–20 diversion rate to establish a new baseline measurement.
Alternative transportation (% employees, contractors using)	34%	29%	32%	The Alternative Transportation survey was administered in November 2019 using the LEED v4.1 Arc criteria and platform. Previous surveys were internally administered using different criteria.
Environmentally preferred purchasing	57%	43%	36%	This is the procurement of goods and services that have a reduced impact on human health and the environment compared to competing products serving the same purpose.

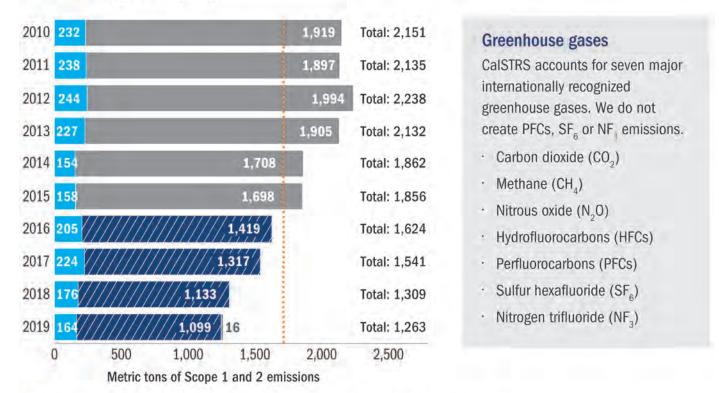
Greenhouse gas emissions

Since 2005, CalSTRS has been reporting headquarters' greenhouse gas emissions to The Climate Registry, a North American nonprofit organization. We report emissions annually for the prior calendar year.

CalSTRS, in partnership with California Environmental Protection Agency, follows Executive Order N-19-19 to ensure we align with state agency greenhouse gas requirements.

Scope 1 and Scope 2 emissions

CalSTRS has decreased Scope 1 and 2 combined emissions each year since 2012. We have met and exceeded the goals set by Executive Order B-18-12 to reduce Scope 1 and 2 combined emissions by 20% by 2020, compared to calendar year 2010. We achieved this each year since 2016. Additionally, CalSTRS has purchased Renewable Energy Credits (RECs).



Scope 1 direct emissions: Natural gas, mobile combustion and fugitives, including stored refrigerants

Scope 2 indirect emissions: Purchased electricity

Purchased Renewable Energy Credits

Target by 2020 (1,720.8 metric tons)

Scope 2 net emissions

RECs are purchased using an estimation based on the previous year's electricity use. The estimate and purchase of RECs for 2019 was slightly lower than the actual kilowatt-hours used.

	Emissions in metric tons of CO ₂ e (per calendar year)			
	2019	2018	2017	2016
Scope 1 direct emissions	164	176	224	205
Scope 2 indirect emissions	1,099	1,133	1,317	1,419
Purchased Renewable Energy Credits	-1,083	-1,133	-1,317	-1,419
Total net emissions	180	176	224	205

Scope 3 emissions

CalSTRS measures Scope 3 business travel emissions, such as airline flights, rental cars, trains and use of the California Green Lodging Directory of green-certified hotels.

	Emissions in metric tons of CO ₂ e (per calendar year)			
	2019	2018	2017	2016
Scope 3 emissions	1,636	1,792	1,042	821

Global Reporting Initiative content index

GRI Standard: 2016 Core option

General disclosures

Disclosure	Description	Response
GRI 102: G	ENERAL DISCLOSURES (2016)	-ORGANIZATIONAL PROFILE
102-1	Name of the organization	CalSTRS, the California State Teachers' Retirement System
102-2 Activities, brands, products		Page 24–30, Member retirement preparedness
	and services	Page 39, About CalSTRS
102-3	Location of headquarters	100 Waterfront Place West Sacramento, CA 95605
102-4	Location of operations	California, United States
102-5	Ownership and legal form	A component unit of the State of California
102-6	Markets served	Page 25, Members and beneficiaries at a glance
		Page 39, About CalSTRS
		Member service centers are located in Fresno, Glendale, Irvine, Riverside, San Diego, Santa Clara and West Sacramento.
102-7 Scale of the organiz	Scale of the organization	1,212: Total employees
		\$248.3 billion: Net position for CalSTRS as of June 30, 2020
		\$15.9 billion: Benefits paid, which include service retirement benefits, disability benefits, survivor benefits and purchasing power supplemental payments in the 2019-20 fiscal year
102-8	Information on employees	Employees by gender: 701 female, 511 male
	and all other workers	Full-time employees: 1,198 (690 female, 508 male)
		Part-time employees: 14 (11 female, 3 male)
		A record of employee information is stored in the CalSTRS Demographics Database.
102-9	Supply chain	See <i>CalSTRS Comprehensive Annual Financial Report</i> for the fiscal year ended June 30, 2020, for detailed financial information.
		Page 26–28, Independent auditor's report
		 Page 90–93, Schedule of investment expenses
		 Page 94–97, Schedule of consultant and professional services expenses
102-10	Significant changes to the organization and its supply chain	Due to public health orders for COVID-19, CaISTRS shifted from providing in-person to remote member services effective March 2020. Similarly, board meetings were conducted via teleconference with opportunity for public comment via phone and email. These practices will be reevaluated as we move beyond the pandemic.

RAL DISCLOSURES (2016)- ecautionary Principle or proach ernal initiatives embership of associations ERAL DISCLOSURES (2016)- atement from senior decision- aker ERAL DISCLOSURES (2016)- lues, principles, standards d norms of behavior	CalSTRS follows California Executive Orders and CalSTRS sustainability policies. Page 7, Sustainability Vision and Guiding Beliefs Page 44–47, Headquarters' environmental performance See The value of engagements on CalSTRS.com. See The value of engagements on CalSTRS.com. Page 42–43, Leading the direction in sustainable finance -STRATEGY Page 4–5, A message from CEO Jack Ehnes See 2019–22 CalSTRS Strategic Plan on CalSTRS.com.
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ernal initiatives mbership of associations RAL DISCLOSURES (2016) - atement from senior decision- aker RAL DISCLOSURES (2016) - ues, principles, standards	Page 44–47, Headquarters' environmental performance See The value of engagements on CalSTRS.com. See The value of engagements on CalSTRS.com. Page 42–43, Leading the direction in sustainable finance -STRATEGY Page 4–5, A message from CEO Jack Ehnes See 2019–22 CalSTRS Strategic Plan on CalSTRS.com.
ERAL DISCLOSURES (2016)- atement from senior decision- aker ERAL DISCLOSURES (2016)- ues, principles, standards	See The value of engagements on CalSTRS.com. See The value of engagements on CalSTRS.com. Page 42–43, Leading the direction in sustainable finance -STRATEGY Page 4–5, A message from CEO Jack Ehnes See 2019–22 CalSTRS Strategic Plan on CalSTRS.com.
ERAL DISCLOSURES (2016)- atement from senior decision- aker ERAL DISCLOSURES (2016)- ues, principles, standards	See The value of engagements on CalSTRS.com. Page 42–43, Leading the direction in sustainable finance -STRATEGY Page 4–5, A message from CEO Jack Ehnes See 2019–22 CalSTRS Strategic Plan on CalSTRS.com.
ERAL DISCLOSURES (2016)- atement from senior decision- aker ERAL DISCLOSURES (2016)- ues, principles, standards	Page 42–43, Leading the direction in sustainable finance -STRATEGY Page 4–5, A message from CEO Jack Ehnes See 2019–22 CalSTRS Strategic Plan on CalSTRS.com.
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iker ERAL DISCLOSURES (2016)- ues, principles, standards	See 2019-22 CalSTRS Strategic Plan on CalSTRS.com.
RAL DISCLOSURES (2016)- ues, principles, standards	-
ues, principles, standards	-ETHICS AND INTEGRITY
d norma of hohoviar	Page 2, Mission and Vision
	Page 7, Sustainability Vision and Guiding Beliefs
	Page 15, Managing risk through ethics, integrity
	Page 16, Ethics and compliance policies and training
	Page 34, CalSTRS Core Values
	See the following on CalSTRS.com:
	CalSTRS Investment Beliefs
	Responsible Contractor Policy
RAL DISCLOSURES (2016)-	-GOVERNANCE
Governance structure	Page 41, Teachers' Retirement Board
	Teacher's Retirement Board's six standing committees:
	Appeals: Provides a dedicated body to hear, deliberate upon and decide appeals of CaISTRS determinations pursuant to the Administrative Procedure Act.
	Audits and Risk Management: Assists the board in fulfilling its fiduciary oversight responsibilities for financial reporting, risk management, internal control, compliance, internal audit, external audit of the financial statements and engagements with other external firms.
	Benefits and Services: Develops and oversees the execution of prudent policies relating to levels of benefits and the delivery of services to CalSTRS members, retirees and beneficiaries.
	Board Governance: Supports the board in promoting the best interests of CaISTRS, its members, retirees and beneficiaries through the implementation of sound board governance policies and practices that enhance good, fair and open decision-making.
	Compensation: Provides oversight to CalSTRS' compensation policies and plan that support the successful recruitment, development and retention of talent to meet the business objectives of CalSTRS.
	Investments: Administers all matters relating to the investment of assets and investment management. The committee is charged to administer assets for the exclusive purpose of providing benefits to the participants and their beneficiaries and maximizing the financial stability of CaISTRS in an efficient and cost-effective manner.
V	ernance structure

Disclosure	Description	Response
GRI 102: G	ENERAL DISCLOSURES (2016)	-STAKEHOLDER ENGAGEMENT
102-40	List of stakeholder groups	Page 8–9, Stakeholder engagement and key topic identification
102-41	Collective bargaining agreements	66% of employees are covered by bargaining units.
102-42	Identifying and selecting stakeholders	Page 8–9, Stakeholder engagement and key topic identification
102-43	Approach to stakeholder engagement	Page 8–9, Stakeholder engagement and key topic identification
102-44	Key topics and concerns	Page 8–9, Stakeholder engagement and key topic identification
	raised	Page 11, Key topics
GRI 102: G	ENERAL DISCLOSURES (2016)	-REPORTING PRACTICE
102-45	Entities included in the consolidated financial statements	See CalSTRS Comprehensive Annual Financial Report for the fiscal year ended June 30, 2020, on CalSTRS.com.
102-46	Defining report content and topic Boundaries	Page 8-9, Stakeholder engagement and key topic identification
102-47	List of material topics	Economic material topics:
		Managing enterprise risk
		Path to full funding
		Transition to a low-carbon economy
		Member retirement preparedness and diversity and inclusion arose as key topics that do not map directly to a GRI Standards material topic. We provide additional information in the report to explain their significance to CaISTRS.
102-48	Restatements of information	We have no material restatements of information provided in previous sustainability reports.
102-49	Changes in reporting	Page 4–5, A message from CEO Jack Ehnes
102-50	Reporting period	July 1, 2019, through June 30, 2020. Information outside the fiscal year is noted.
102-51	Date of most recent report	January 2020 for 2018-19 fiscal year.
102-52	Reporting cycle	Annual
102-53	Contact point for questions regarding this report	Sustainability@CalSTRS.com
102-54	Claims of reporting in accordance with the GRI Standards	This report has been prepared in accordance with the Global Reporting Initiative Standards: Core option.
102-55	GRI content index	The index is organized by GRI Indicators and serves as our GRI Content Index.
102-56	External assurance	CalSTRS strives to provide accurate, transparent information regarding our performance.
		The CalSTRS Internal Audit Services team performed an independent and objective review of the information submitted in this report and has provided a limited level of assurance over measurable statements and facts.

Material topics

Disclosure	Description	Response
GRI 201: ECO	NOMIC PERFORMANCE (2016)	
103-1, 2, 3	Management approach	Page 12–16, Managing enterprise risk
		Page 17–23, Path to full funding
		Page 19–20, Funding reports
		Page 31-33, Transition to a low-carbon economy
		See CalSTRS Comprehensive Annual Financial Report for the fiscal year ended June 30, 2020, on CalSTRS.com.
201-1	Direct economic value generated and distributed	Page 25, Members and beneficiaries at a glance
		Page 21-22, Financial performance and the value of investments
		See CalSTRS Comprehensive Annual Financial Report for the fiscal year ended June 30, 2020, on CalSTRS.com.
201-2	Financial implications and other risks and	Page 31-33, Transition to a low-carbon economy
	opportunities due to climate change	See Sustainable risk management on CalSTRS.com.
201-4	Financial assistance received from government	Page 17–18, Legislative plan

Additional disclosures

Disclosure	Description	Response				
GRI 302: ENE	GRI 302: ENERGY (2016)					
302-1	Energy consumption within the organization	Page 45, Headquarters' environmental performance				
302-4	Reduction of energy consumption	Page 45, Headquarters' environmental performance				
GRI 303: WA	GRI 303: WATER AND EFFLUENTS (2018)					
303-1	Water withdrawal	Page 45, Headquarters' environmental performance				
GRI 305: EM	GRI 305: EMISSIONS (2016)					
305-1	Direct (Scope 1) GHG emissions	Page 46-47, Greenhouse gas emissions				
305-2	Energy (Scope 2) GHG emissions	Page 46–47, Greenhouse gas emissions				
305-3	Other indirect (Scope 3) GHG emissions	Page 47, Scope 3 emissions				
GRI 306: EFF	GRI 306: EFFLUENTS AND WASTE (2016)					
306-2	Waste by type and disposal method	Page 45, Headquarters' environmental performance				



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