Cassandra Lichnock
Chief Executive Officer

California State Teachers'
Retirement System
Post Office Box 15275
Sacramento, CA 95851-0275

916.414.2200 Tel
www.calstrs.com

CALSTRS
HOW WILL YOU SPEND YOUR FUTURE?

May 21, 2024

Senate Committee on Labor, Public Employment and Retirement
Assembly Committee on Public Employment and Retirement

Dear Committee Members:

Thank you for the opportunity to participate in the joint informational hearing of the Senate Labor, Public Employment and Retirement Committee and the Assembly Public Employment and Retirement Committee. Our presentation will include remarks from:

- Cassandra Lichnock, Chief Executive Officer
- Scott Chan, Deputy Chief Investment Officer
- Kirsty Jenkinson, Investment Director for the Sustainable Investment and Stewardship Strategies (SISS)

Please find enclosed background materials for you regarding CalSTRS' benefits, investments, and funding. We hope to express, as fiduciaries, the responsibility we have, and the value we provide, to our more than one million members and beneficiaries. CalSTRS also plays a unique role in seeking opportunities to address the risk of climate change to the Teachers' Retirement Fund, and we look forward to sharing about our investments in emerging climate initiatives.

I invite you to review the attached materials and contact Joycelyn Martinez-Wade, Director of Governmental Relations, for further information or assistance. She can be reached at (916) 414-1980.

Sincerely,

C M Lichnock

Cassandra Lichnock
Chief Executive Officer

Attachments

1

CalSTRS by the numbers

1,022,056
members and beneficiaries
20,007 increase over last year

72.5%
female
active members

1,801
number of employers

2

2

Retired members by the numbers (all retirees)

61.8
average age at retirement

25.2
average years of service

$4,674
average monthly benefit
(285,704 recipients)

55.8%
median income
replacement ratio

3

3

Value of defined benefit plans

Guaranteed income to help members have a secure retirement

Greater security through disability and survivor benefits

2% annual increase

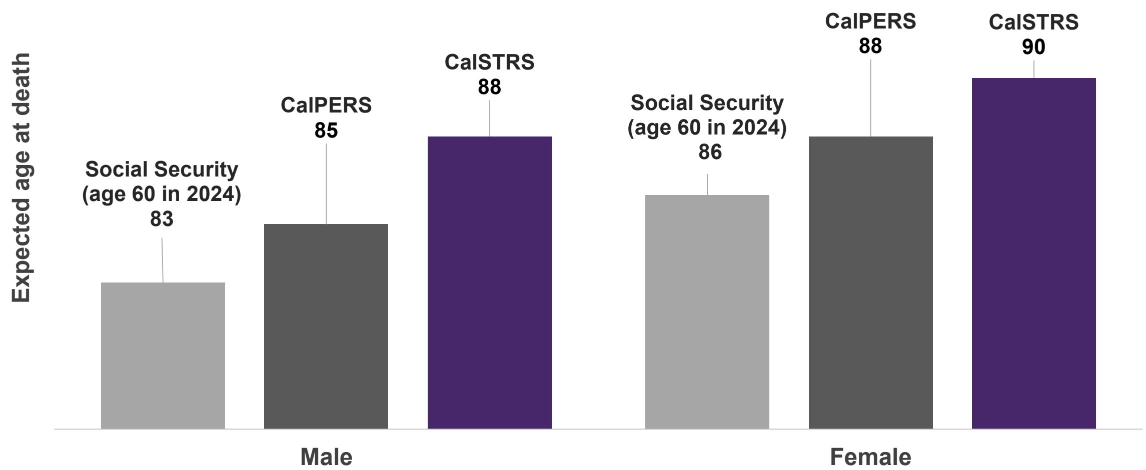
One-time death benefit

4

4

Life expectancy rates
CalSTRS, CalPERS and Social Security

For a member retiring at age 60



CalSTRS retired members over 100 years old

As of June 30, 2023

430 retired members over 100 years old

356 women

74 men

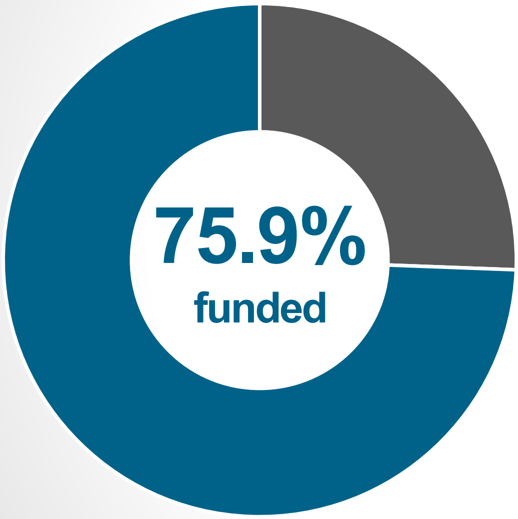
23.01 average years of service credit

9,915 total years of service credit

108 age of oldest retired member

The CalSTRS Funding Plan

Funded status as of June 30, 2023



- CalSTRS Defined Benefit Program on path to full funding by 2046 or sooner.
- Teachers' Retirement Board has limited authority to adjust employer and state contribution rates.

7

7

Financial inflows and outflows (2022–23)

8

8

9

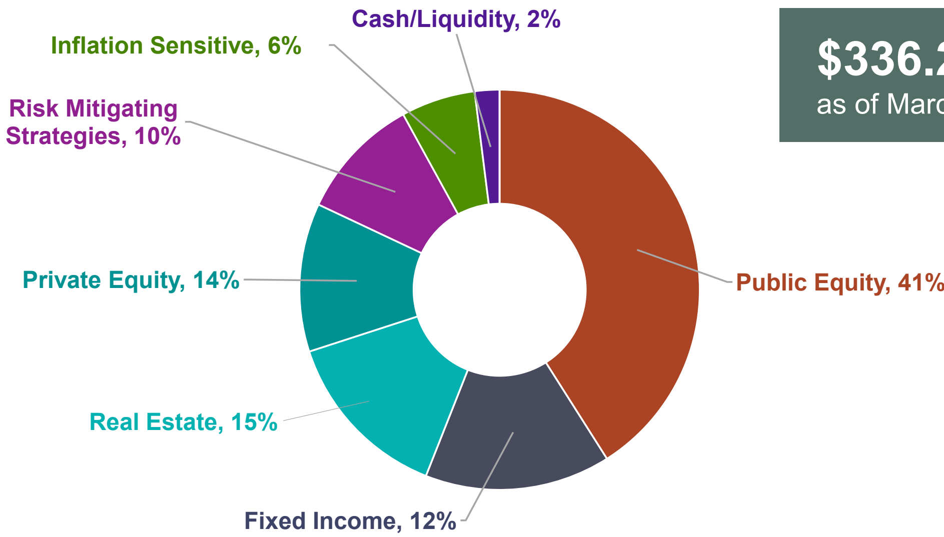
Sources of benefit payments

10

10

Asset allocation

Current target asset allocation



$336.2 billion
as of March 31, 2024

11

11

Diversification
Key to the portfolio

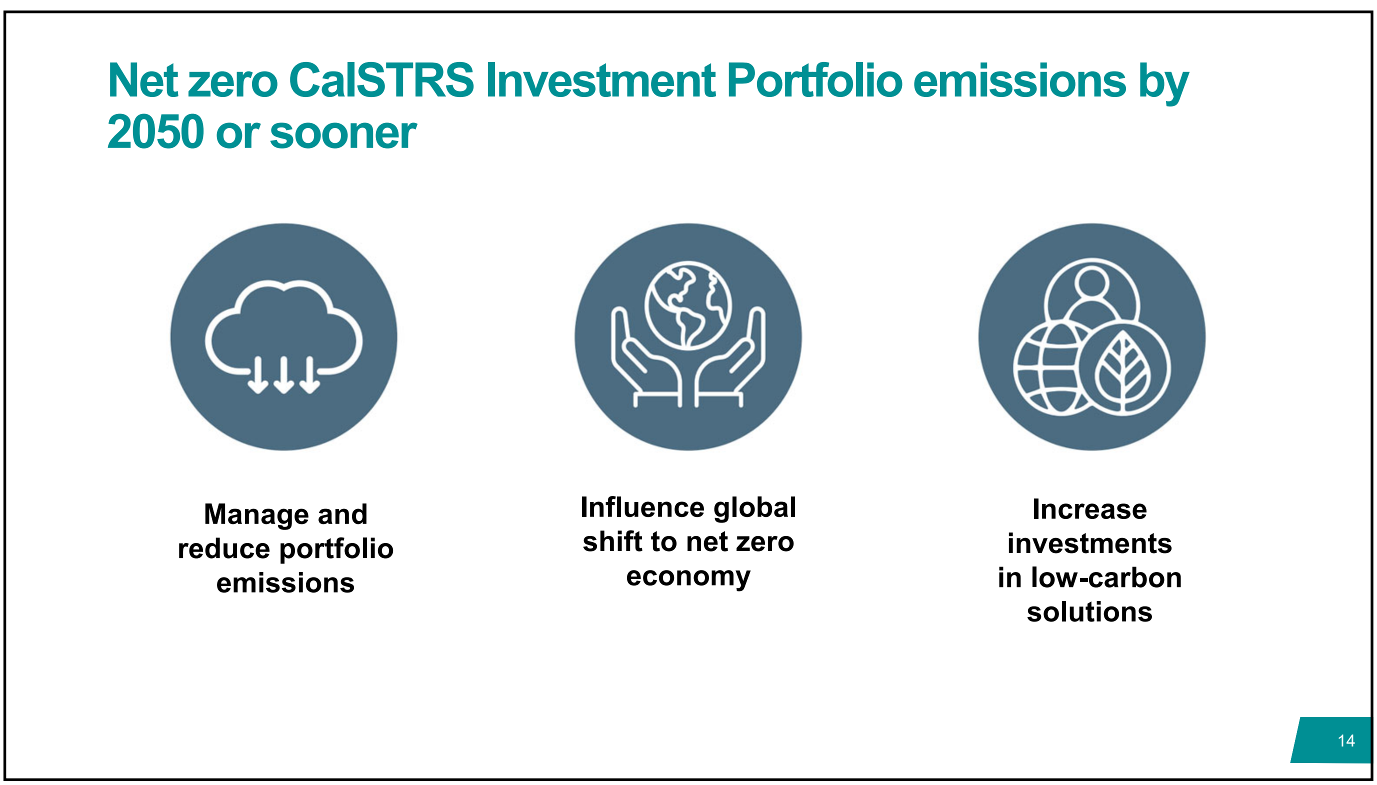
- Required by the California Constitution subject to the fiduciary responsibility and plenary authority of the board.
- Reduces risk by protecting the fund in different market conditions brought on by economic, social and political events.
- Maximizes returns by allocating investments among various financial instruments, industries, regions and sectors.

12

12


Net zero
transition

13


Net zero CalSTRS Investment Portfolio emissions by 2050 or sooner
Manage and reduce portfolio emissions
Influence global shift to net zero economy
Increase investments in low-carbon solutions
14

14

Manage and reduce portfolio emissions

Public Equity

20% allocation to low-carbon target index

Fixed Income

15% low-carbon credit-related optimization strategy

Observations:

- Data & systems challenges abound
- Key driver: emissions reductions per unit of active risk

Climate-oriented solutions across the portfolio

SIGNIFICANT LOW-CARBON INVESTMENTS

Global Equity

$12.5 BILLION to a Low-Carbon Index as of December 31, 2023

Fixed Income

12% target emissions reduction within the corporate credit portfolio

Inflation Sensitive

$2.1 BILLION as of June 30, 2023

SISS

$6.8 BILLION as of June 30, 2023

Real Estate

$16.4 BILLION as of June 30, 2023

Stewardship

SISS uses our influence as a significant global investor to promote sustainable business practices and public policies.

Proxy Voting	Portfolio Company Engagement	Regulatory and Policy Engagement

Example priorities we focus on:

- Diversity, equity and inclusion of company boards and their workforces
- Net zero transition

17

17

Why we prioritize engagement

Influence sustainable business practices

Improve financial market landscape

→ Better relationships and outcomes

18

18

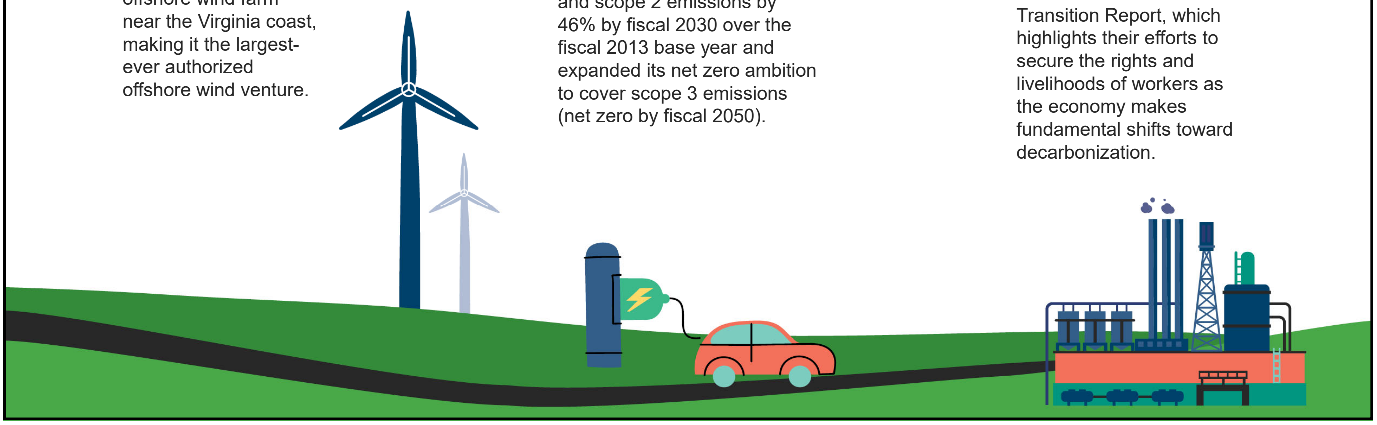
Influencing the transition: Engaging companies

CalSTRS is an active contributor to the Climate Action 100+ initiative, leading direct engagement with the world's most significant corporate carbon contributors to help align their policies with the Paris Climate Agreement and the global net zero emissions transition.

Dominion Energy
Secured permission to build a 2.6-gigawatt offshore wind farm near the Virginia coast, making it the largest-ever authorized offshore wind venture.

Eneos
Plans to reduce its scope 1 and scope 2 emissions by 46% by fiscal 2030 over the fiscal 2013 base year and expanded its net zero ambition to cover scope 3 emissions (net zero by fiscal 2050).

Southern Company
Released its first Just Transition Report, which highlights their efforts to secure the rights and livelihoods of workers as the economy makes fundamental shifts toward decarbonization.



19

The Value of a Defined Benefit for California's Educators

A defined benefit retirement plan is a form of deferred compensation. In the case of CalSTRS' defined benefit plan, California's public school educators forgo a percentage of today's salary for the security of a lifetime retirement benefit in the future. In contrast, a defined contribution 401(k)-style plan builds up a lump sum, including contributions and accrued interest, which may or may not provide income throughout the worker's lifetime.

The CalSTRS Defined Benefit Program is the cornerstone of retirement savings for educators in California.

California's educators do not contribute to Social Security, so they rely much more on their defined benefit pension than other types of public sector workers. On average, the CalSTRS retirement benefit replaces 50% to 60% of a career educator's salary. The majority of classroom teaching in California is performed by career educators, and for six out of seven teachers, a defined benefit plan provides a larger and more secure retirement income than a defined contribution plan.

Defined benefit plans serve as an important recruitment and retention tool for public educators.

The security of a lifetime retirement benefit helps attract and retain qualified educators. Due to the structure of a defined benefit plan, teachers have an incentive to stay in the classroom, which helps retain seasoned educators and is correlated to higher student achievement. Approximately three quarters of CalSTRS-covered public school teachers will work at least 20 years, and almost half will work a full 30-year career in California public education.

Conversely, a 2019 national survey of public school teachers found that 58% would be more likely to leave their job if their pension was switched to an individual retirement plan, and 73% would be more likely to leave if their pension was reduced.

Defined benefit plans provide disability, death and survivor benefits, which are less common in defined contribution plans.

In addition to providing lifetime benefits in retirement, defined benefit plans also provide income protection to teachers and their beneficiaries through disability and survivor benefits, which are less common within defined contribution plans. If a member is eligible for disability retirement, CalSTRS provides educators with half of their final compensation, and dependent children may also receive a benefit if the member is unable to perform creditable service. California's retired educators also have the peace of mind knowing their beneficiaries will be provided for through optional survivor benefits.

Employees under a defined contribution plan may not have a safety net if they suffer a long-term disability. In addition to a loss of income, employees are also no longer able to contribute to their defined contribution plan. When a defined contribution plan does provide disability benefits, it usually gives participants a lump-sum payment, which is more often used for immediate health care costs rather than future needs.

For 6 out of 7 teachers, a defined benefit plan provides a larger and more secure retirement than a defined contribution plan.

It's less expensive to administer a defined benefit plan than a defined contribution plan.

Pensions can provide the same benefit as a 401(k) retirement account at about half the administrative cost, and studies have shown that investment returns on defined benefit plans outperform defined contribution plans. As a result, defined benefit plans are less expensive to administer due to cost savings from pooling longevity risk, optimal asset allocation, and higher returns and lower fees.

While contribution rates for members, employers and the state have increased over the past several years under the CalSTRS Funding Plan, investment returns have historically accounted for approximately 60% of the resources necessary to fund CalSTRS benefits.

Defined benefit plans provide a more secure retirement than a defined contribution plan.

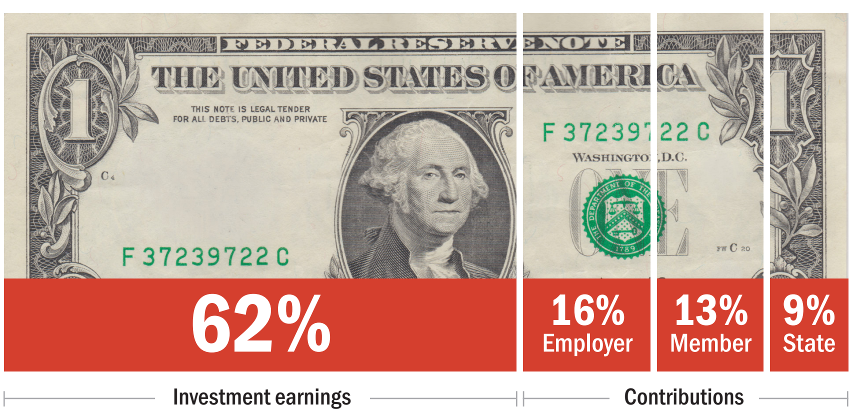
Compared to defined contribution plans, defined benefit plans are able to pool investment and longevity risks over a longer period of time and a greater number of people, protecting educators from those risks. Defined benefit plans are also structured to shield educators from the risks of investment because their retirement benefit is set by a formula, not by the amount of contributions provided by the member. On average, CalSTRS members deplete the contributions they made to their account within three to four years of retirement.

A member cannot outlive their savings in a defined benefit plan because the plan is guaranteed over the course of the member's life. This consistent income can be important in providing peace of mind as well as stabilizing local economies during economic downturns.

In contrast, participants in defined contribution plans must ensure their individual balance remains sufficient to cover their maximum life expectancy or risk running out of money during retirement. In economic downturns, these retirees may be reluctant to spend money from their 401(k) account if their savings would be negatively impacted.

Defined benefit plans can provide the same benefit as a 401(k) plan at about half the cost.

Source for each benefit dollar



Defined benefit plans are better equipped to engage in shareholder activism than individual investors.

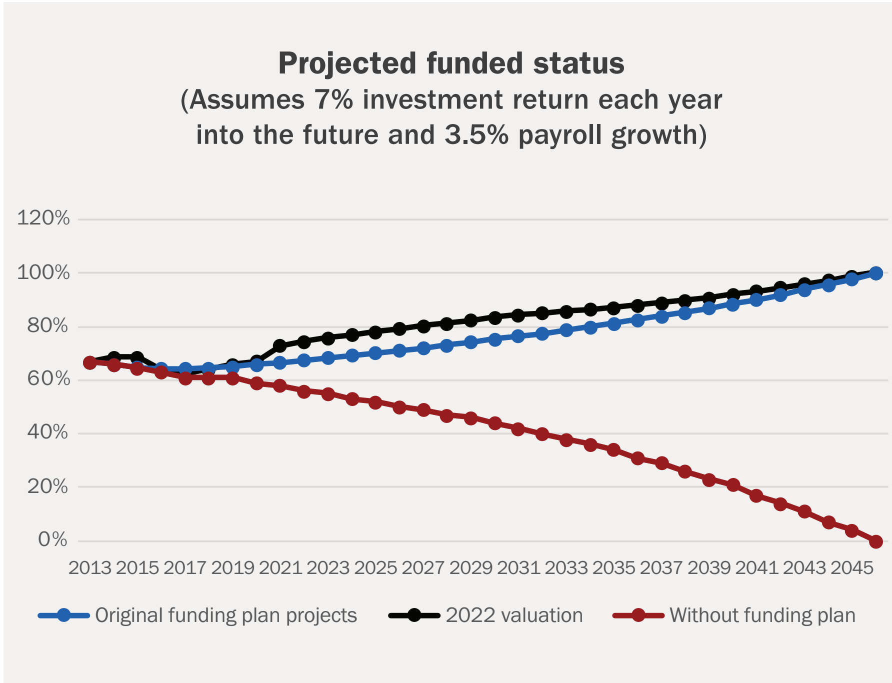
CalSTRS and other institutional investors have a unique ability to exercise their shareholder voice where individuals cannot. Institutional investors hold approximately 80% of U.S. equities in the stock market and are long-term investors, which gives them the ability to influence business practices, vote on leadership and drive change within the companies they invest. Individual shareholders in defined contribution plans do not have the necessary backing and clout to drive change in publicly traded or private companies.

CalSTRS Funding Plan

The CalSTRS Funding Plan enacted by Chapter 47, Statutes of 2014 (Assembly Bill 1469–Bonta), puts the CalSTRS Defined Benefit Program on the path to full funding by June 30, 2046, through incremental shared contribution increases among the program's three contributors: CalSTRS members, employers and the State of California.

The funding plan gives the Teachers' Retirement Board limited authority to adjust employer and state contribution rates to ensure the Defined Benefit Program remains on track to reach full funding by 2046.

As of June 30, 2022, the CalSTRS Funding Plan is slightly ahead of its initially projected schedule to achieve its funding goals by 2046.



CalSTRS member contribution rates

Prior to this historic legislation, the contribution rate for members was 8% and had not been increased since 1972. Member contribution rate increases were phased in as shown in the table below.

Effective date	CalSTRS Funding Plan increases	
	CalSTRS 2% at 60 members	CalSTRS 2% at 62 members[1]
July 1, 2014	8.15%	8.15%
July 1, 2015	9.20%	8.56%
July 1, 2016	10.25%	9.205%
July 1, 2017	10.25%	9.205%
July 1, 2018–Present	10.25%	10.205%

[1] 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.

Neither CalSTRS members nor their employers contribute to Social Security for CalSTRS-covered service.

CalSTRS employer contribution rates

Increases in the employer contribution rate were phased in over seven years. Starting in 2021–22, the funding plan provides the board limited authority to adjust the employer contribution rate, if necessary, to fully fund the remaining unfunded liability by 2046. Those adjustments are limited to 1% annually, not to exceed 20.25% of creditable compensation.

In May 2023, the board voted to keep the employer contribution rate at 19.1% of creditable compensation for the third year in a row since having the authority to set the employer rate. The rate allows employers to remain on track to eliminating their share of the unfunded actuarial obligation by 2046 and provides rate stability going forward.

On behalf of employers, the state made supplemental pension payments to CalSTRS in 2019–20 of $2.2 billion to provide short-term rate relief in 2019–20, 2020–21 and 2021–22. As a result, the employer contribution rates for those years were reduced from the rates originally established in the funding plan or set by the board. This short-term rate relief has since expired and is not scheduled to continue.

Effective date	CalSTRS Funding Plan increases	
	Rate	Year-over-year change
July 1, 2013	8.25%	No increase since 1986
July 1, 2014	8.88%	0.63%
July 1, 2015	10.73%	1.85%
July 1, 2016	12.58%	1.85%
July 1, 2017	14.43%	1.85%
July 1, 2018	16.28%	1.85%
July 1, 2019	17.10%[2]	0.82%
July 1, 2020	16.15%[3]	-0.95%
July 1, 2021	16.92%[4]	0.77%
July 1, 2022	19.10%	2.18%
July 1, 2023	19.10%	0.00%

[2] In 2019–20, the employer rate reflects a 1.03% reduction from the rate that was originally required in the funding plan.

[3] In 2020–21, the employer rate reflects a 2.95% reduction from the rate that was originally required in the funding plan.

[4] In 2021–22, the employer rate is 2.18% less than the rate set by the board.

State contribution rates

The funding plan maintained the state's base contribution rate of 2.017% and the Supplemental Benefit Maintenance Account (SBMA) contribution of 2.5%. It replaces the portion of the state contribution rate that was formerly dedicated to paying for the 1990 benefit structure with an amount that eliminates the state's share of CalSTRS' unfunded liability by June 30, 2046. The funding plan provides the board limited authority to adjust the state contribution rate; however, the rate cannot be increased by more than 0.5% each year.

In May 2023, taking into consideration the sensitivity of the state's contribution rate to investment volatility and the commitment to improve funding levels and reduce risk in the event of future adverse investment outcomes, the board decided to maintain the state's contribution rate at 10.828% for 2023–24. This rate includes the 2.5% contribution to the SBMA.

Other provisions of the CalSTRS Funding Plan

- CalSTRS submitted its first funding status report—*Report to the Legislature on the Progress of the CalSTRS Funding Plan*—to the Legislature in June 2019 and is required to report on the progress of the plan every five years. The next report is planned for June 2024.
- The 2% annual benefit adjustment (also known as the improvement factor) cannot be reduced for members who retire on or after January 1, 2014. For members who retired prior to January 1, 2014, the legislation did not change the benefit.
- Increased contributions under the funding plan are only payable for compensation that is creditable to the Defined Benefit Program.
- Excess contributions received by CalSTRS for service creditable under the Defined Benefit Supplement Program that are also attributable to increases under the funding plan are returned to employers. Employers are responsible for returning excess member contributions to their employees, and the returned pretax contributions are considered taxable income in the year they are received by the employee. This occurs regardless of when the contribution was initially paid.

CALSTRS
HOW WILL YOU SPEND YOUR FUTURE?

CALSTRS MISSION: TO SECURE THE FINANCIAL FUTURE OF CALIFORNIA'S PUBLIC SCHOOL EDUCATORS

Fulfilling our mission while addressing climate change | SPRING 2024

Climate change is one of the greatest threats to our future—impacting our planet, the environment, the global economy and everyone's health and safety. Our climate-related strategies support the retirement security of our members.

Net zero strategy pillars

REDUCING PORTFOLIO EMISSIONS

We've allocated $12.5 billion as part of our two-year implementation plan to allocate 20% of our Public Equity Portfolio to a low-carbon target index to manage risk and reduce emissions by approximately 14%. Additionally, the Teachers' Retirement Board approved reducing emissions in the corporate credit portion of the Fixed Income Portfolio by 12% while preserving expected returns.

USING OUR INFLUENCE

We increased the scrutiny of our votes against boards that are not appropriately managing and addressing sustainable business practices. We also wrote multiple letters to the U.S. Environmental Protection Agency in response to the proposed rules advocating for strong methane emissions performance standards. Additionally, we contacted 46 oil and gas companies with assets in the United States subject to the proposed regulations urging them to also submit clear, specific and constructive comments to the EPA.

INVESTING IN SOLUTIONS

We've committed $2 billion to a dedicated low-carbon solutions private assets portfolio managed by the Sustainable Investment and Stewardship Strategies (SISS) team. This portfolio identifies opportunities that demonstrate positive contributions to a more sustainable global economy, including strategies that support the energy transition by funding energy and transport infrastructure and providing technology solutions.

CALSTRS INVESTMENT PORTFOLIO

- Globally diversified
- Covers all financial markets
- All asset classes affected by climate risk
- Total fund approach to climate change

TOP 4 GLOBAL GREENHOUSE GAS EMITTERS BY INDUSTRY

- Electricity & heat
- Transportation
- Manufacturing & construction
- Agriculture

SIGNIFICANT LOW-CARBON INVESTMENTS

Global Equity

$12.5 BILLION to a Low-Carbon Index as of December 31, 2023

Fixed Income

12% target emissions reduction within the corporate credit portfolio

Inflation Sensitive

$2.1 BILLION as of June 30, 2023

SISS

$6.8 BILLION as of June 30, 2023

Real Estate

$16.4 BILLION as of June 30, 2023

MAJOR CALSTRS MILESTONES

2004

Began investing in climate solutions

2006

Established climate change stewardship program to influence companies and governments

2015

Signed Paris Pledge for Action in support of the Paris Climate Agreement

2016

Created low-carbon index to reduce portfolio emissions

2018

Joined Climate Action 100+ to engage companies

2020

Adopted climate-related Investment Belief

2021

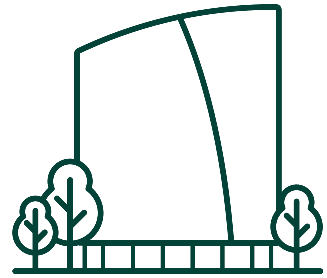
Pledged to achieve a net zero investment portfolio by 2050 or sooner

2022/2023

Adopted measures to further reduce portfolio emissions

Net zero climate action plan

In 2021, CalSTRS pledged to achieve net zero greenhouse gas emissions in our investment portfolio by 2050 or sooner. Net zero means the amount of greenhouse gases emitted by humans is offset by the amount taken away, either by natural means, such as forests, or by technology, such as carbon capture and storage.



OUR COMMITMENT TO NET ZERO BUILDS ON NEARLY 20 YEARS OF INFLUENCING GLOBAL SUSTAINABLE BUSINESS PRACTICES AND PUBLIC POLICIES.

STEWARDSHIP HIGHLIGHTS

We are an active contributor to the Climate Action 100+ initiative, leading direct engagement with the world's most significant corporate carbon contributors to help align their policies with the Paris Climate Agreement and the global net zero emissions transition.

DOMINION ENERGY

Secured permission to build a 2.6-gigawatt offshore wind farm near the Virginia coast, making it the largest-ever authorized offshore wind venture.

ENEOS

Plans to reduce its scope 1 and scope 2 emissions by 46% by fiscal 2030 over the fiscal 2013 base year and expanded its net zero ambition to cover scope 3 emissions (net zero by fiscal 2050).

SOUTHERN COMPANY

Released its first Just Transition Report, which highlights their efforts to secure the rights and livelihoods of workers as the economy makes fundamental shifts toward decarbonization.

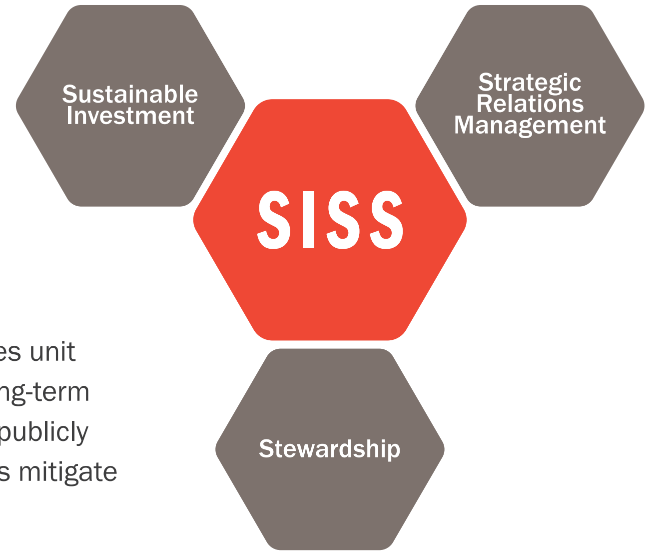
Our commitment

We will continue our long-term commitment of achieving net zero portfolio emissions by 2050 or sooner through our comprehensive strategy and a series of short-term goals focused on reducing emissions, investing in climate solutions and accelerating the global economic shift to net zero through our influence as an institutional investor.

CALSTRS

CALIFORNIA STATE TEACHERS' RETIREMENT SYSTEM

February 2024



Stewardship Priorities

Why we engage

The CalSTRS Sustainable Investment and Stewardship Strategies unit uses our influence as a significant global investor to promote long-term sustainable business practices and public policies. We engage publicly traded companies to support long-term value creation as well as mitigate risk to our portfolio and the financial market as a whole.

Our priorities

We focus on three overarching priorities to achieve measurable outcomes.

Corporate and market accountability

Influence regulators, standard setters and policymakers to promote sustainable markets.

- Effective and diverse boards
- Sustainability disclosures
- Shareholder rights

Net zero transition

Engage the highest greenhouse gas emitting companies to reduce emissions in the global economy.

- Highest carbon emitters within the CalSTRS Investment Portfolio
- Methane mitigation

Workforce and communities

Influence portfolio companies to be good stewards in the communities they operate in and ensure a healthy and engaged workforce.

- Workforce culture and engagement
- Just transition in the utility sector
- Responsible firearms

Why we prioritize specific stewardship activities

Before we decide to engage on a particular issue, we consider three factors:

- The issue must be relevant to the long-term performance of our portfolio.
- We must have the capacity and the tools to influence meaningful change.
- We must be able to deliver measurable outcomes.

Determine the long-term relevance

To decide whether an issue will impact the long-term performance of the fund, we initially look to the International Sustainability Standards Board's standards. These standards help investors understand the most important environmental, social and governance risks. Our **Investment Policy for Mitigating Environmental, Social and Governance Risks** also guides our decisions. In addition, we look through systemic and idiosyncratic risk lenses to determine how an issue might affect the long-term performance of the fund.

Ability to influence change

We use tools ranging from proxy voting to activist stewardship when seeking to influence change. We consider how much time and resources an issue will require when deciding how to engage.

Ability to deliver outcomes

We focus on tracking outcomes related to:

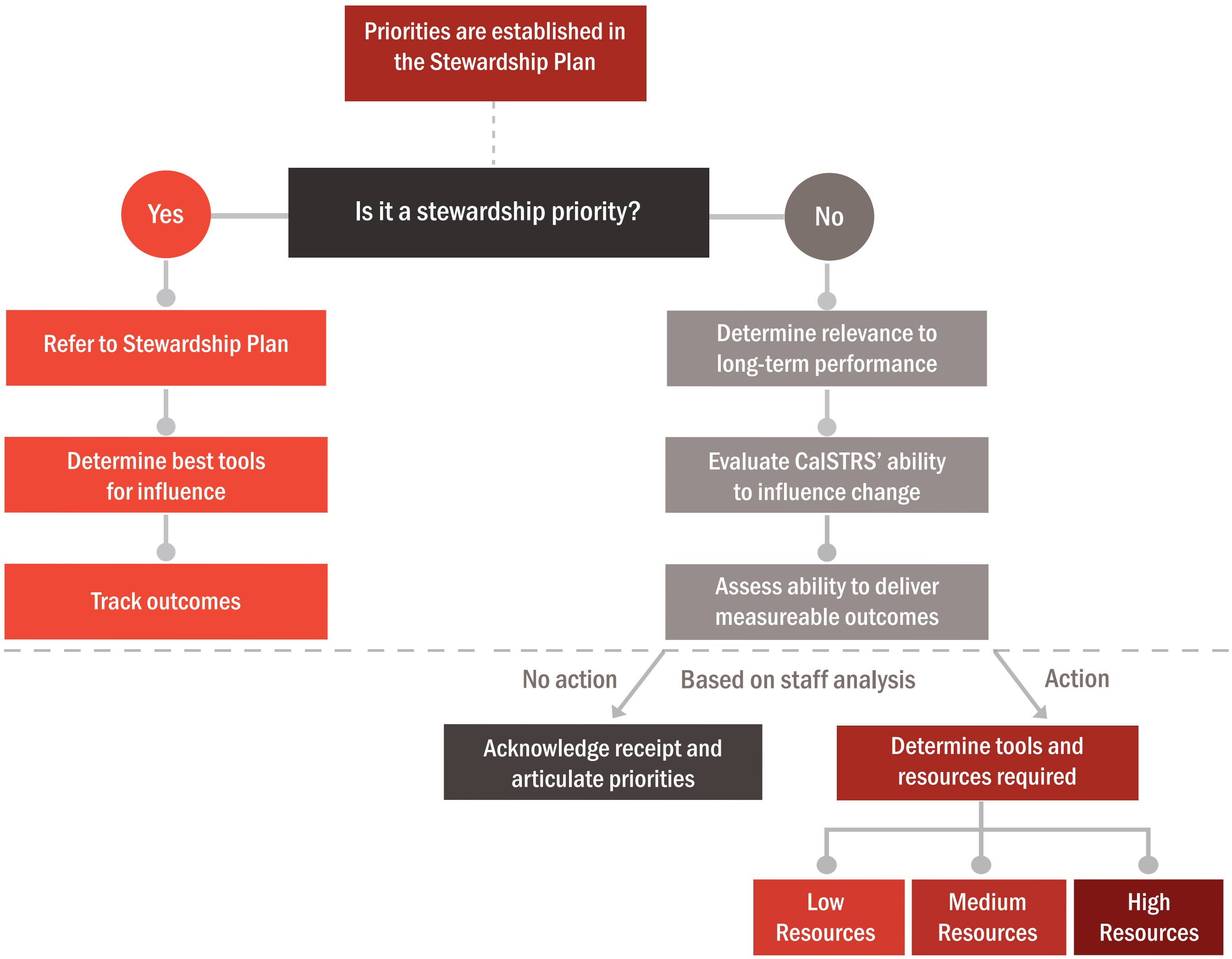
Companies implementing changes to their disclosures, processes and practices.

Market participants influenced by our thought leadership.

Regulators responding to our concerns.

Ad-hoc engagement requests

Teachers' Retirement Board members and CalSTRS staff receive requests from stakeholders, fellow investors and other interested parties to engage on issues that fall outside of the three priorities established in our Stewardship Plan. These ad-hoc requests are analyzed based on the framework below to evaluate whether it's in our best interest to take action on a particular request. In circumstances where we determine engagement should not be pursued, we'll notify the requesting party to acknowledge the inquiry and articulate our engagement priorities.



To learn more about our stewardship efforts, see these CalSTRS reports and guiding principles:

Addressing Climate-Related Financial Risk Report
CalSTRS.com/addressing-climate-related-financial-risk-report

Corporate Governance Principles
CalSTRS.com/corporate-governance-principles

Diversity in the Management of Investments Report
CalSTRS.com/report/diversity-management-investments

Firearms Principles
firearmsprinciples.com