

DIVERSITY

in the Management of Investments

2019 ANNUAL PROGRESS REPORT







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MESSAGE FROM CHRISTOPHER J. AILMAN

CalSTRS Chief Investment Officer



Thank you for taking the time to read the *Diversity in the Management of Investments 2019 Annual Progress Report*. I am pleased to share the most recent information available on behalf of the CalSTRS Investments Branch.

At CalSTRS, we value diversity and inclusion and believe bringing a variety of backgrounds, perspectives and experiences to all the decisions we make is important. We also make it our priority to consistently recognize those partners and professionals who contribute to our investment management.

Conversations about diversity and inclusion are taking place across the nation and in every sector. Data consistently ties profitability to the higher collective intelligence generated by diverse teams. The top diverse and inclusive companies produce higher financial returns, successfully launch more new products and services, and perform better at complex problem solving. If diversity and inclusion yields a competitive advantage in the private sector, it stands to reason that making it a priority in all aspects of CalSTRS' operations—especially in investment management—should go without saying. And with half our assets now managed internally, diversity is more important than ever.

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. There is no better choice: California remains the most diverse state in the United States, and the California teachers we represent—our members—reflect that diversity.

Our mission is to secure the financial future and sustain the trust of California's educators. We do this by focusing on the long term and making the right investment decisions so we can continue to provide benefits to these hardworking educators and their families. We aim to meet our mission by engaging creative and qualified talent to help us.

We recognize we must always strive to communicate our diversity and inclusion efforts clearly to our members and stakeholders. Our internal achievements include:

- Nearly half, 47%, of CalSTRS' nonadministrative investment staff identify as ethnically diverse.
- Establishment of an internal diversity committee composed of members of all asset classes within the Investments Branch, which meets to discuss and formulate ideas to promote diversity within our organization and the industry more broadly.
- Implementation of a program to bring young adults from diverse backgrounds to CalSTRS and engage them in an interactive job-shadowing experience in order to potentially open new career pathways.

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- Requirement for all staff to participate in a full day of diversity and inclusion training that demonstrates the power of difference by empowering staff to respect, value and include different perspectives.

CalSTRS has also hosted several events that provide us the opportunity to reinforce our mission, standards and expectations to a diverse pool of potential investment industry partners so they're well-equipped to work with us. In 2018, we hosted:

- An open house at CalSTRS Headquarters for emerging investment managers seeking pension fund backing. Staff expended extra effort in recruiting diverse investment managers for these events.
- Beyond Talk workshops throughout California and on the East Coast focused on gender diversity and inclusion within the investment management industry.

At the direction of the Teachers' Retirement Board, we launched the Enhanced Diversity Initiative to engage companies on pipeline diversity of staff and C-suite executives with the goal of growing the number of potential candidates to serve on corporate boards, particularly in the financial and information technology sectors. This initiative included:

- California Initiative—CalSTRS staff engaged portfolio companies headquartered in California that do not have a woman on their board.
- Thirty Percent Coalition—CalSTRS, along with 24 other institutional investors with more than \$3.2 trillion assets under management, continued to engage companies on board diversity.

CalSTRS remains committed to outreach and communication with emerging managers. Our goal is to equip a diverse pool of investors with proper tools and preparation to successfully work with us.

We will continue to build on these efforts and find new ways to strengthen our operations in order to attract highly qualified talent to join our workforce—including considering anyone who is qualified and supports our mission. I hope you'll let us know how we can improve our efforts. Thank you for your interest.

Sincerely,



Christopher J. Ailman
Chief Investment Officer
California State Teachers' Retirement System



MISSION

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

VISION

Your Reward – A Secure Retirement
Our Reward – Getting You There

CORE VALUES

The CalSTRS core values are a set of attitudes, beliefs and behaviors that define CalSTRS and its 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.

INVESTMENTS BRANCH CORE VALUES

The CalSTRS Investments Branch core values align with the organization's and serve to further unify our team in pursuit of our mission.



Respect – We strive to not only treat others as we would like to be treated, but to go the extra mile and treat others as they would like to be treated.



Personal Development – We support an individual's career and personal goals.



Balance – We encourage employees to balance a strong work ethic with interests outside of the office.



Worth – We strive to recognize everyone's efforts and contributions to the organization.



Challenge – We are honored to accept the challenges placed upon us and strive to create an innovative work environment.



Purpose – We work toward a common goal, thereby making a difference for others and ourselves.



Honesty – We are truthful to ourselves, to peers, to supervisors, to the board, and to the organization; our word is our bond.



INTERNAL INVESTMENTS STAFF



INTERNAL DIVERSITY

The Strength of CalSTRS Investment Staff

At CalSTRS, we believe that a highly diverse workforce leads to better financial performance and business outcomes. Diversity in the management of investments at CalSTRS is accomplished with an investment staff of 160 individuals who are multiethnic, multicultural and possess myriad worldviews and investment perspectives. The accomplishments of the Investments Branch reflect a teamwork approach and the support of the entire leadership and staff who share the highest dedication and commitment to meeting the retirement needs of more than 964,000 California public school educators and their beneficiaries.

Part of our long-term investment strategy is to enable our diverse investment

staff to manage more assets in house. This provides the benefit of reducing costs and allowing staff greater control of the portfolio and crucial investment decisions. As we look ahead to implement the CalSTRS Collaborative Model, we expect the number of staff to increase as a larger proportion of the portfolio becomes managed internally. This significant growth further emphasizes the importance of attracting, recruiting and retaining a highly qualified workforce. We will continue to look for innovative solutions to build an inclusive culture that will draw the best talent from the investment industry.

The current breakdown of CalSTRS Investments staff is on the following page.

The CalSTRS Collaborative Model is an internally led approach to engaging in the investment marketplace. This approach enables CalSTRS to embrace partnership and collaboration with world-class investment institutions, along with building direct investing capabilities to achieve the benefits of internally managed assets. This model intends to help reduce costs, increase investment returns, control portfolio risk and expand investment opportunities.

2018 Demographic Information for Investments: A Gender Diverse Workforce

Notes on classification titles:

Investment Director category consists of:

- » Chief Investment Officer, Deputy Chief Investment Officer, Investment Director and Investment Operations Director

Portfolio Manager category consists of:

- » Portfolio Manager and Associate Portfolio Manager

Administrative Support category consists of:

- » Staff Services Analyst, Associate Governmental Program Analyst, Staff Services Manager I, Staff Services Manager II
- » Administrative Assistant I, Administrative Assistant II, Executive Assistant
- » Pension Program Manager I

Source: CalSTRS personnel data as of December 31, 2018

Investment Director



Portfolio Manager



Investment Officer III



Investment Officer II



Investment Officer I



Administrative Support



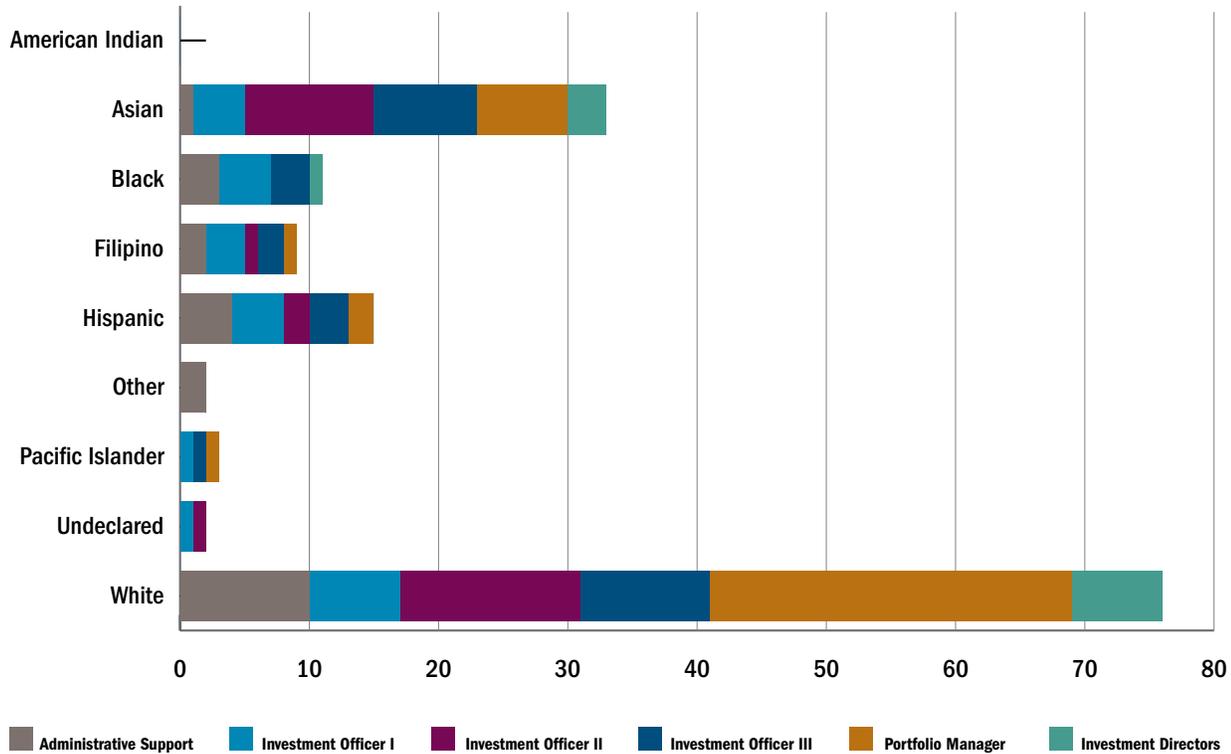
Investment Staff Total (Non-Admin)



Investments Branch Total (Including Admin)



2018 Demographic Information for Investments: An Ethnically Diverse Workforce



Ethnicity Breakdown of Investments Branch Staff at CalSTRS										
	American Indian	Asian	Black	Filipino	Hispanic	Other	Pacific Islander	Undeclared	White	Totals
Investment Director	0	4	1	0	0	0	0	0	5	10
Portfolio Manager	0	8	1	1	2	0	1	0	29	42
Investment Officer III	0	11	2	2	4	0	1	0	13	33
Investment Officer II	0	7	0	3	1	0	0	1	10	22
Investment Officer I	0	6	4	2	5	0	1	1	9	28
Administrative Support	0	3	2	2	6	2	0	0	10	25
Investments Staff Totals (Non-Admin)	0	36	8	8	12	0	3	2	66	135
Investments Branch Totals (Including Admin)	0	39	10	10	18	2	3	2	76	160

Source: CalSTRS personnel data as of December 31, 2018

2018 Demographic Information for Investments: An Age Diverse Workforce

Staff Count, State Service and Age Breakdown of Investments Branch Staff at CalSTRS					
Class Title	Number of Staff	Average Years State Service	Average Age	Average Age Female	Average Age Male
Investment Director	10	19.0	54.1	51.3	56.0
Portfolio Manager	42	16.1	49.7	48.2	50.3
Investment Officer III	33	10.6	42.1	46.2	39.4
Investment Officer II	22	6.9	37.9	36.6	38.1
Investment Officer I	28	4.9	36.2	35.2	36.7
Administrative Support	25	8.3	38.4	39.8	28.3
Investments Staff Totals (Non-Admin)	135	11.3	43.4	43.1	43.5
Investments Branch Total (Including Admin)	160	10.7	42.6	42.1	43.0

Source: CalSTRS personnel data as of December 31, 2018



STUDENT INTERN PROGRAM

Since 2004, the CalSTRS Investments Branch has mentored students from diverse backgrounds, being certain to include ethnically and gender diverse students, who tend to be underrepresented on Wall Street. In 2019, we continued to build on the success of our Student Intern Program. Through a collaborative partnership between Human Resources and Investments staff, we reached out to hundreds of students at colleges and universities at the community college, undergraduate and postgraduate levels.

Out of 129 total applicants, we interviewed 23 students and hired 10 finalists (two community college students, two graduate students and six undergraduate students) as part of the Student Intern Program. These students were ethnically and gender diverse, and represented various experience levels, backgrounds and unique skill sets.

One of the undergraduate students was an intern from Girls Who Invest, which was founded in 2015 and is dedicated to increasing the number of women in portfolio management and executive leadership in the asset management industry. Their on-campus Summer Intensive Program consists of a 10 week investments education course at the University of Pennsylvania or the University of Notre Dame. Each Girls Who Invest scholar then participates in a paid, six week internship at a leading investment management firm. In each of the last three years, CalSTRS has

welcomed one of the Girls Who Invest scholars to participate in our summer Student Intern Program. Additionally, CalSTRS Director of Global Equity, June Kim, serves on the Girls Who Invest Advisory Board.

Another undergraduate student was an intern from Seizing Every Opportunity. SEO Career is the nation's premier professional development program for Black, Hispanic and Native American undergraduates. With more than 35 years of experience, SEO Career has a proven track record of helping students secure competitive summer internships with top firms. In addition to access to internships, students also receive virtual and in-person training, interview preparation, one-on-one coaching, and networking workshops and events.

The students were organized in two cohorts: one for the California State University and California Community College systems, and one for the University of California system. Each student shadowed our Chief Investment Officer, Christopher J. Ailman, for a week and worked with a director, portfolio manager or investment officer from each asset class. Most importantly, seven of the 10 students completed the 500 hours of work experience required to take the Investment Officer I exam upon graduation from college.

Due to the success of this program, we will continue to expand these outreach efforts.



MENTOR PROGRAM

The Investment Mentor Program was designed and implemented to support both protégés and mentors in achieving their career goals.

Mentors are expected to be professional role models, providing guidance to protégés to help them achieve their professional and personal goals. Mentors actively participate by encouraging questions and listening to protégés' needs and expectations, providing honest feedback and sharing professional experiences.

Protégés schedule monthly meetings over the course of nine months and develop career goals with mentors while actively participating and maintaining regular contact. They also share professional information, experiences, successes and failures, as well as ask questions and provide feedback to mentors throughout the program.

The Investment Mentor Program provides the opportunity to develop a mentoring relationship that will inspire personal and professional success by encouraging participants to identify and share professional and personal skills. Protégés gain a broader perspective about the organization from well-seasoned employees, while mentors benefit from valuable leadership development. Reverse mentoring allows protégés to gain new insight and provides mentors with a fresh perspective.

All program participants add value and equip others to better succeed in their career goals, which also supports further diversity within the branch and the organization as a whole.





INVESTMENT INDUSTRY EVENTS

Diversity & Inclusion: The Power of Difference

At CalSTRS, diversity and inclusion is supported in our core value of strength: “We ensure the strength of our system by embracing a diversity of ideas and people.” Based on staff feedback, CalSTRS created a learning workshop for staff to interact with one another by providing insight and ideas for what diversity and inclusion means for each individual. In 2018, the all-day, interactive workshop titled Diversity and Inclusion: The Power of Difference was introduced and all employees were expected to participate. During the workshops, employees participated in facilitated discussions to:

- Reflect on our similarities and differences and their impact on the work of the organization as a whole.
- Explore tools for seeing the world through different lenses.
- Learn skills for communicating across differences.
- Understand what an inclusive organization looks like and the path to get there.

Emerging Manager Reception

In November 2018, more than 100 guests representing 59 emerging manager firms attended CalSTRS’ third Emerging Manager Reception where managers learned more about CalSTRS’ asset classes from key personnel. Prior to the reception, the Teachers’ Retirement Board also hosted a panel of industry participants to discuss diversity in the investment industry. The event was supported by all asset classes with participation of senior leadership that included asset class directors and portfolio managers.

BeyondTalk

Since 2016, CalSTRS has hosted five Beyond Talk events in places such as Los Angeles, Boston and New York. Using a workshop setting, these events bring together members of the investment industry to examine unintended bias using academic research and data. Participants bring tools back to their companies in order to make internal changes and move “beyond talk.” We continue our commitment to host these events and promote awareness of diversity and inclusion within the investment industry.



PORTFOLIO COMPANY ENGAGEMENT



WHY DIVERSITY MATTERS

Diversity is good for business. Not just from the ethical standpoint but from the perspective of a company's bottom line, according to McKinsey & Company.

Evidence on the power of diversity continues to grow as corporate leaders recognize the strong business case for board and company diversity. Diversity is good for business and, specifically, good for CalSTRS investments. Engagement is a critical component used by CalSTRS to influence change that supports long-term value creation within our portfolio companies. As a long-term shareholder, we seek to influence companies to adopt best practices in managing environmental, social and governance issues in order to create sustainable businesses with long-term value.

Diversity has been a priority for the CalSTRS Sustainable Investments & Stewardship Strategies Unit and the Investments Branch since 2011. We continue to be active owners and engage our portfolio companies to mitigate risk and create opportunities for improved performance. We accomplish this through proxy voting, engaging companies via our staff, external activist and sustainability managers, industry associations and collaborations with other investors to maximize long-term risk-adjusted returns to ensure retirement benefits for California's pre-kindergarten through community college educators.

CalSTRS is committed to setting best practice precedents, implementing innovative diversity and inclusion principles, motivating positive change, and advancing the world's investment markets. We do this by establishing collaborative relationships across a vast network of institutional investors, investment managers, portfolio companies and industry associations.

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**



Through these engagements, we ask companies to:

- 1.** Actively assess and disclose in their proxy their board's current skills and backgrounds and how they align with their long-term strategy to create and sustain value. Board self-evaluations may enable the company to proactively identify prospective desired skill sets for upcoming board recruitment opportunities.
- 2.** Affirm their commitment to identify qualified candidates of diverse gender, racial and ethnic backgrounds for board nomination in board governance policies, such as the nominating and governance committee charter.
- 3.** Incorporate procedures by which women and diverse racial and ethnic backgrounds are identified for consideration in every search for a board nominee—a practice commonly known as the Rooney Rule after its successful use in the National Football League.
- 4.** Attest in governing documents that director searches will consider suitable nominees from corporate backgrounds beyond the executive suite, and noncorporate backgrounds (academia, government, nonprofit organizations and others) where additional diverse talent may be identified.

In addition, we encourage companies to consider candidates from a variety of fields: search firms, diversity databases, board networking, industry-specific candidate lists and others. Allowing C-suite members to join boards is an effective way for them to receive knowledge, gain exposure and increase the overall pipeline of board candidates.

In 2018–19, the California Board Diversity Initiative, the Cross-Border Coalition of 6 and the Thirty Percent Coalition engaged 285 companies, resulting in 131 companies (46%) appointing 147 women to their boards.

CalSTRS ADVOCACY THROUGH PARTNERSHIP

Successful results:
65 companies
appointed 77 women
to their boards.

Of the 33 percent
of the companies
engaged, 52
companies
appointed 61 women
to their board.



California Board Diversity Initiative

Partnering with the University of California's Office of the Chief Investment Officer and the Los Angeles County Employees Retirement Association, CalSTRS engages portfolio companies headquartered in California that do not have women on their board. In October 2018, this group through the California Board Diversity Initiative, sent 91 letters to California companies focused on board diversity composition.

With the tailwinds from subsequent California legislation, Senate Bill 826 (Jackson), 65 of the engaged companies have added 77 women directors within the span of just over a year, including 12 companies that added two or more female directors. Furthermore, 10 of the 77 female directors were minority females and seven were from nontraditional backgrounds such as academia, nonprofit health care or other public service. Beyond the appointments of new directors, numerous companies revised nominating and governance committee charters to expand their commitment to board diversity inclusive of gender, race and ethnicity, and sexual orientation. Over a half dozen firms incorporated provisions to ensure that any director recruitment would encompass a diverse set of candidates for consideration.



Thirty Percent Coalition

CalSTRS, along with 35 other institutional investors with more than \$5 trillion assets under stewardship, make up the Thirty Percent Coalition Institutional Investors Committee. The Thirty Percent Coalition encourages companies with zero or one-woman boards to embrace diversity in order to secure needed skill sets for long-term strategy and business plans.

Since 2012, the Thirty Percent Coalition's institutional investors have collaboratively engaged with more than 400 companies that have added a woman to their board of directors following the coalition's landmark initiative Adopt a Company Campaign. During our 2018-19 engagement, CalSTRS, as a member and co-chair of the Institutional Investors Committee, along with 35 other large institutional investors, sent 157 letters, which included 118 initial engagement letters and 39 reminder letters, to companies on improving board diversity. Of these 157 companies, 97 did not have any women on their board and 60 companies had one woman on their board.



Of 37 companies engaged, 14 appointed 16 women to their boards.



Cross-Border Coalition of 6—U.S. Board Diversity Initiative

In 2018–19, a global group of institutional investors composed of CalSTRS, APG, Legal & General Investment Management, PGGM, RailPen and the Ohio Public Employees Retirement Systems, collectively representing assets under management of more than \$2.5 trillion, engaged 37 S&P 500 companies with long-tenured boards.

The companies we contacted had only one woman on their board and a significant proportion of their directors serving on the board for lengthy periods of time. The discussions revealed the challenges each company encountered and their desire to improve their board’s diversity.

This initiative’s purpose is to improve board refreshment, composition and diversity in order to maximize board effectiveness. The Cross-Boarder Coalition of 6 emphasizes that each board appointment is also an opportunity for boards to evaluate any skill set gaps linked to the company’s long-term strategy and plan.

In our engagements, we share current research that indicates diverse boards lead to higher company returns, which provides a strong business case for our discussions. This link between diversity and company financial performance reinforces the need for companies to craft better inclusion strategies for a competitive edge. Additionally, we discuss the need for companies to promote diversity at the senior management level and build a diverse pipeline of talent.



Human Capital Management Coalition

Led by the UAW Retiree Medical Benefits Trust, the HCM Coalition is a group of 27 institutional investors with over \$3 trillion in assets under management working to elevate human capital management as a critical component in company performance and improve human capital management to increase shareholder returns. CalSTRS, along with these institutional investors, filed a petition with the U.S. Securities and Exchange Commission on better reporting, including financial reporting, of human capital management.

CalSTRS remains actively involved with the Human Capital Management Coalition,



which engages portfolio companies to elevate the issue of human capital management as a critical component of a company’s economic performance. We seek to encourage better disclosure of how companies manage the demographics, composition, knowledge, motivation, skills and experience of their workforce—a company’s most valuable asset. In 2018–19, the coalition engaged 34 companies overall, and CalSTRS led engagements at three of the companies. The coalition petitioned the U.S. Securities and Exchange Commission to advocate for better metric disclosures on human capital management. In March, after engagement with the HCM, the SEC’s Investor Advisory Committee recommended the SEC consider developing a rule to mandate improved human capital management disclosures.

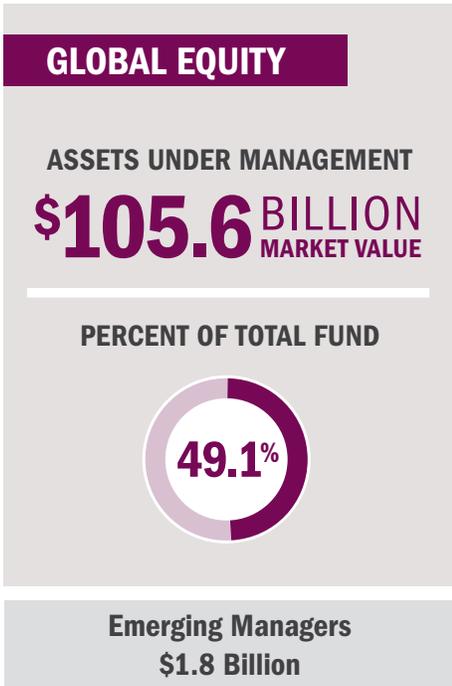


Diverse Director DataSource–3D

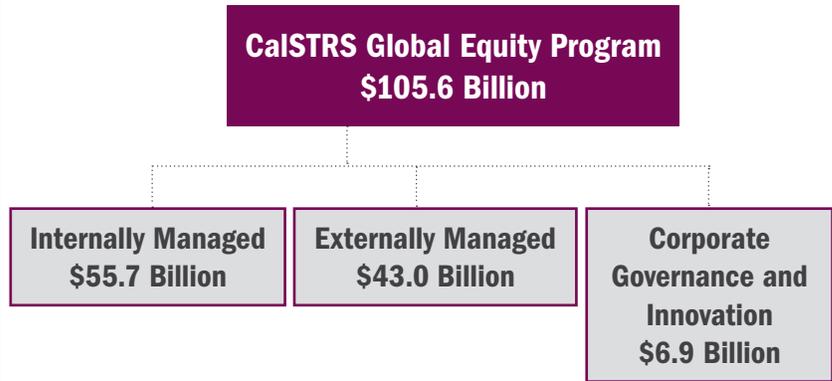
This 3D database of more than 400 diverse board-ready candidates is currently housed within Equilar’s BoardEdge, which includes more than 20 diversity networks. This is an additional source where boards can identify potential board candidates.



PORTFOLIO MANAGEMENT



Overview of Global Equity



Source: AUM and percent of total fund from MyStateStreet as of December 31, 2018

Global Equity

Global Equity's Approach to Working With Emerging Managers

Within the CalSTRS Global Equity Portfolio, diversification is a key consideration, not only in terms of achieving returns and mitigating risk, but also in terms of benefits that different backgrounds, experiences and ideas bring to the overall performance of the portfolio.

CalSTRS invests with developing managers to seek alpha potential, to provide more opportunities for newer, smaller firms, and to access new talent and future manager capacity. In addition to incorporating developing managers into our Global Equity Portfolio, our ultimate goal is to allow managers that have performed well in terms of investments and overall business operations to move to direct relationships with us when there is need for a specific sub-asset class or investment style in the portfolio.

To complement internal resources and optimize staff efforts to meet CalSTRS' investment goals, staff now works with four managers-of-managers who design

manager portfolios to fulfill U.S. small cap mandates and non-U.S. developed markets mandates. An additional goal of the developing manager program is to provide managers that have delivered good performance and have sound business operations an opportunity to move toward a direct relationship with CalSTRS when there is a need for a specific investment strategy or style in the portfolio.

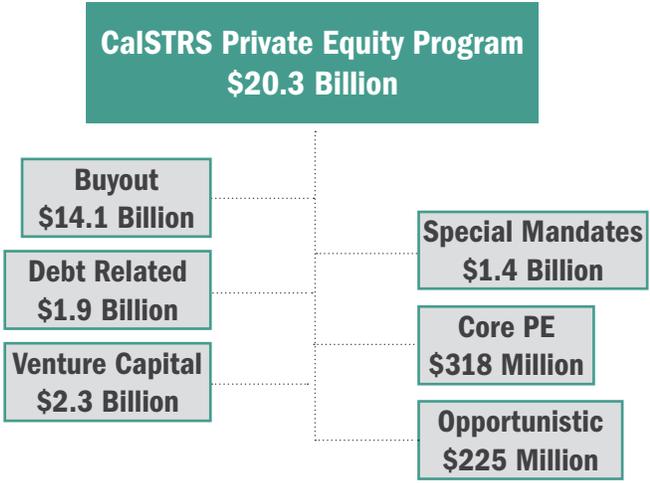
Global Equities Emerging Manager Qualifications

In order to qualify as a Global Equities emerging manager, firms must:

- Have \$5 billion or less in assets under management.
- Have a maximum of 67% nonemployee ownership.
- Be a legally structured entity with a Corporate Tax Identification Number.
- Have a private placement memorandum in place or have a similar proposal in the event of a separate account relationship.



Overview of Private Equity



Source: AUM and percent of total fund from MyStateStreet as of December 31, 2018

Private Equity

Private Equity’s Approach to Working With Emerging Managers

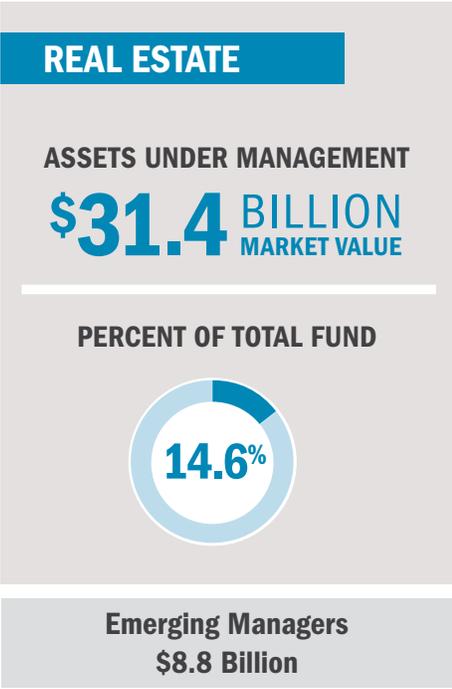
The Private Equity Portfolio is concentrated with 121 active manager relationships. Selection is biased toward partnerships with experienced and stable management teams, solid track records, appropriately sized funds and high levels of side-by-side general partner commitments. Strong alignment of interests and utmost integrity are requisite.

One element of the Private Equity Program’s strategy focuses on investing with new and emerging managers and in underserved markets via Invesco Private Capital, HarbourVest Partners and Muller & Monroe Asset Management. Commitments made through these feeder funds are generally less than \$20 million each.

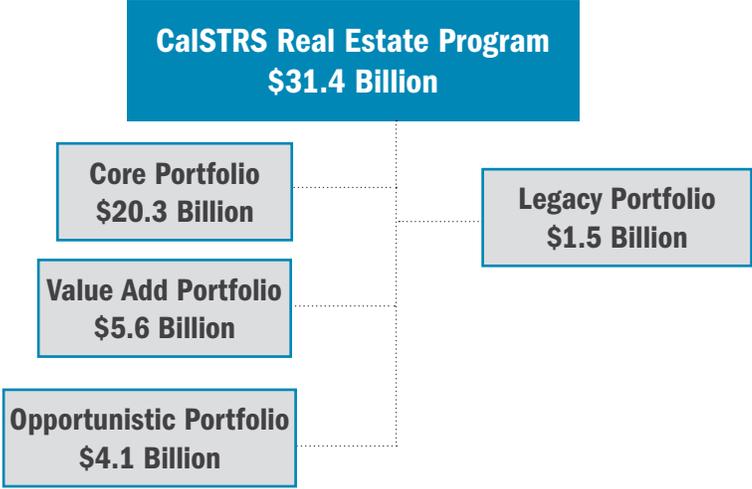
Private Equity Emerging Manager Qualifications

In order to qualify as a Private Equity emerging manager, firms must:

- Be a legally structured entity.
- Have a public placement memorandum in place, and raising their first, second or third institutional fund or qualify as a diverse manager.



Overview of Real Estate



Source: AUM and percent of total fund from MyStateStreet as of December 31, 2018

Real Estate

Real Estate’s Approach to Working With Emerging Managers

Upon determination that an opportunity may be suitable for CalSTRS’ investment objectives, staff decides whether pursuing a direct commitment to the opportunity or referring the opportunity to an existing partner funded with CalSTRS’ capital is appropriate. If an emerging manager has a successful track record and a strong prior background of investing institutional capital, CalSTRS staff may consider a direct investment with that manager. If, however, the emerging manager has yet to garner significant institutional investment experience, staff may refer the firm to one or more of several existing CalSTRS partners, with the aim of funding the emerging manager through the existing partner until enough institutional experience is acquired to merit a direct relationship.

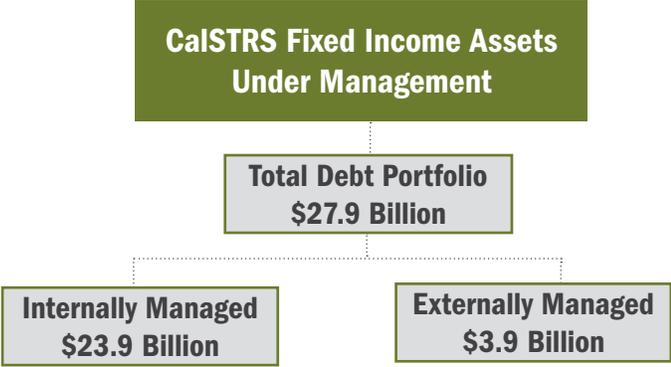
Real Estate Emerging Manager Qualifications

In order to qualify as a Real Estate emerging manager, firms must:

- Have \$1 billion or less in assets under management at the inception of the relationship.
- Have a maximum of 67% nonemployee ownership.
- Be a legally structured entity with a Corporate Tax Identification Number.
- Have a private placement memorandum in place or a similar proposal in the event of a separate account relationship.



Overview of Fixed Income



Source: AUM and percent of total fund from MyStateStreet as of December 31, 2018

Fixed Income

Fixed Income’s Approach to Working With Emerging Managers

Based on the CalSTRS belief that investment opportunities can appear in large, small and start-up firms, Fixed Income has established a process and a team of investment professionals to review all new investment proposals. Each proposal is reviewed for strategic fit, risk and alpha opportunity, and logged into a CalSTRS database that has grown to include more than 422 investment opportunities. This process was designed to facilitate manager access to CalSTRS and serve as a way for us to assess new ideas and market conditions. We have a long-standing open door policy of using a diverse group of broker-dealers to execute

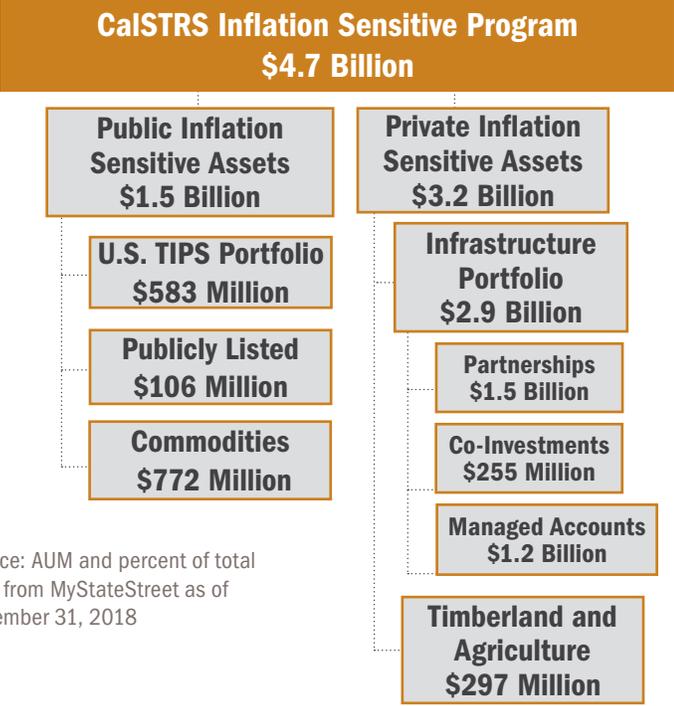
trades. As a result, we currently conduct business with more than 10 emerging firms. All trades occur in a competitive environment. One area of success has been in primary market/new issuance where deals are released at a set price. Last year, the Liquidity Portfolio traded \$2.6 billion, or 7.15% of trades, with emerging broker-dealers.

Fixed Income Emerging Manager Qualifications

Fixed Income does not have a dedicated emerging manager program; however, the selection process has evolved over time to facilitate the consideration of a broad universe of managers regardless of assets under management, based on quantitative and qualitative factors that indicate a successful asset management business partner.



Overview of Inflation Sensitive



Source: AUM and percent of total fund from MyStateStreet as of December 31, 2018

Inflation Sensitive

Inflation Sensitive’s Approach to Working With Emerging Managers

The CalSTRS Inflation Sensitive Unit is working to construct a portfolio with fund managers from diverse backgrounds. Because the Inflation Sensitive asset class is relatively new to the investment industry, there are a limited number of asset management companies with meaningful track records. Consistent with the investment industry at large, a lower ratio of these management companies are owned or operated by women or ethnic minorities.

Our ability to hire emerging managers is further constrained by scale. Because of resource limitations and the program’s size, we must make investment commitments large enough to efficiently deploy capital.

The demand for inflation-linked investments is a growing global trend and draws investment managers on a worldwide scale. As the Inflation Sensitive portfolio expands, we expect to attract and include exceptional managers with diverse teams.

Inflation Sensitive Emerging Manager Qualifications

To qualify as an Inflation Sensitive emerging manager, a firm must:

- Have less than \$3 billion in total AUM.
- Be raising a first, second or third time vehicle no larger than \$1.5 billion.
- Be headquartered in the U.S.
- Be a legally structured entity with a Corporate Tax Identification Number.
- Have a private placement memorandum for the investment vehicle being raised.
- Be at least 45% employee-owned.

In addition, the partners of the firm must have a demonstrable track record of managing investments on behalf of institutional investors.



CALSTRS[®]
HOW WILL YOU SPEND YOUR FUTURE?