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.
TABLE OF CONTENTS

Diversity in the Management of Investments
2017 Annual Progress Report

2 CalSTRS Mission, Vision and Core Values
4 Investments’ Core Values
5 Introduction
7 Consistency of Philosophy and Action
8 2016 Strategic goals

10 A CalSTRS Investment Staff
13 Exhibit 1: CalSTRS Investments: A Gender Diverse Workforce
14 Exhibit 2: CalSTRS Investments: An Ethnically Diverse Workforce

16 B Engagement
Why Diversity Matters (Pg 16)
Portfolio Companies (Pg 21)
Advocacy In Action (Pg 25)

32 C External Managers

41 Appendix 1: CalSTRS Emerging Manager Definitions

43 Appendix 2: Process for Considering Investments with Emerging Managers
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, the board, and to the organization; our word is our bond.
The Diversity in the Management of Investments report is submitted as requested by the California State Teachers' Retirement System's Investment Committee. In addition, Senate Bill 294 (Chapter 701, Statutes of 2011), by Senator Curren D. Price, Jr., required the Teachers' Retirement Board to define the term emerging investment manager, provide a 5-year strategic plan for emerging investment manager participation across all asset classes and submit an annual report regarding the progress of the strategic plan to the Legislature. The mandated report illustrated CalSTRS progress toward achieving the goals of the plan. In February 2011, the board also approved a 5-year strategic plan, which was completed at year-end 2015.

This report reflects CalSTRS efforts relative to a new “evergreen” strategic plan approved by the California State Teachers’ Retirement System’s Investment Committee in July of 2016. Throughout the coming years, CalSTRS Investments Branch will work to advance diversity in internal staff, external investment managers and portfolio companies. Staff will do so through their work within each respective asset class and the diversity team, which includes collaborating with CalSTRS internal and external partners, as well as engagement with, and outreach to, schools, affinity groups, portfolio companies, external investment managers and service providers. These relationships will be leveraged to assist staff in continuing to foster a culture of diversity and inclusion at the internal staff level and outside CalSTRS.

Throughout 2016, CalSTRS maintained committed capital to emerging managers in all portfolios. Internal investment staff continued to reflect a diverse population, both in gender and ethnicity throughout 2016. Additionally, staff supported diversity in the investment management industry by directly engaging with external managers and portfolio companies, and attending and speaking at conferences and events throughout the year.

The CalSTRS Diversity in the Management of Investments Team, representing every asset class and program, worked together preparing this report to capture the efforts and results of all Investments Branch programs in 2016.
CalSTRS Chief Operating Investment Officer Receives National Coalition of 100 Black Women’s 2016 Leadership in Business Award

Debra Smith lauded for her achievements in addressing gender inequality in business

CalSTRS staff model diversity and inclusion in their everyday activities and business practices. And because of this commitment and consistency in action, our staff are often recognized for their efforts.

In November, Chief Operating Investment Officer Debra Smith, was recognized as the 2016 Black Woman in Business Leadership by the National Coalition of 100 Black Women’s Sacramento Chapter. This award honors the accomplishments of black women in the financial investment services industry.

“There are very few people who look like me in investments and financial leadership. One of my goals is to work to help change that,” said Debra Smith. “I’m thankful for this award, and I accept it on behalf of every woman who is currently modeling the way and mentoring young women in their future career paths.”

The National Coalition of 100 Black Women, Inc. was founded in 1970 in New York City and now includes more than 63 chapters nationwide. Its membership includes a diverse group of women including physicians, attorneys, educators, journalists, accountants, municipal court judges, entrepreneurs, university administrators, corporate managers and vice presidents, artists, media personalities, labor leaders, public relations specialists, consultants, and elected officials.

“Debra is a respected, dynamic, and forward-thinking member of the CalSTRS Investments team, and I’m proud of her ability to move forward with bold, well-informed decisions,” said CalSTRS Chief Investment Officer Christopher J. Ailman. “She makes a powerful impression on people—young women especially—when they not only see the diversity in our staff, but also experience it firsthand with the vast array of thought leadership in people like Debra who they can emulate and look up to.”

Ms. Smith added, “I’m proud to support initiatives at CalSTRS that advance diversity in the investments industry. A diverse workforce motivates, inspires and eradicates group thinking.”
CalSTRS seeks to honor the philosophy of diversity and inclusion, long practiced by California educators, while maintaining a financially sound retirement system. Diversity in the Management of Investments (DMI) is interwoven throughout the investment business goals and is consistent with the objective to invest in strategies that enhance returns at a prudent level of risk. And, it is in accordance with CalSTRS Investments Policies, as well as California’s Constitution and Education Code.

To ensure Diversity in the Management of Investments, CalSTRS must obtain exposure to a wide spectrum of investment opportunities and talent. Appropriate exposure must be accessed in a comprehensive, strategic manner, under the leadership of the chief investment officer, and consistent with the direction given by the CalSTRS board based on its core values. Specifically, Diversity in the Management of Investments operates under the CalSTRS’ core value of:

**CONSISTENCY OF PHILOSOPHY AND ACTION**

DMI is accomplished with an investment staff of 145 people who are multi-ethnic, multi-cultural, and possess myriad worldviews and investment perspectives. Part of this strategy includes our involvement in communities of color through strategic partners. The accomplishments of the Investments Branch in this area reflect a teamwork approach and the support of the entire leadership and staff, who all share the highest dedication and commitment to meeting the retirement needs of more than 914,000 California educators.

**STRENGTH**

We ensure the strength of our system by embracing a diversity of ideas and people.
CalSTRS Investments Branch worked to increase awareness and advance understanding of diversity and inclusion internally and externally among staff, external managers, portfolio companies, and service providers through ongoing education, relationship building, networking and direct engagement.

A  CALSTRS INVESTMENT STAFF
Increase understanding and improve staff recruitment strategy.

B  ENGAGEMENT
Carry out focused engagement with affinity groups, external managers and portfolio companies.

C  EXTERNAL MANAGERS
Restructure emerging manager programs.
INVESTMENT STAFF
Diversity within the CalSTRS organization is increased by continuing to educate staff, implement recruitment strategies, including the student intern program, and further development of the mentor program.

STUDENT INTERN PROGRAM
Since 2004, the CalSTRS Investments Branch has mentored students from many diverse backgrounds, making certain to include ethnic and gender diverse students. CalSTRS continued to build on the success of its student intern program in 2016. Through a collaborative partnership with the Human Resources and Investments staff, outreach was initiated with hundreds of students at colleges and universities at all levels of higher education — post graduate, undergraduate and community college. The majority of the students involved in the program are from diverse groups, which tend to be underrepresented on Wall Street.

In 2016, out of 164 total applicants, 16 were interviewed and seven finalists (one community college student, one international graduate student, and five undergraduate students) were hired as part of the CalSTRS Investments Branch internship program. These students were ethnic and gender diverse, and represented a variety of experience levels, backgrounds and unique skillsets.

The students were organized in two cohorts, one for the CSU/community college system and one for the UC system. Chris Ailman, Chief Investment Officer, had a student “shadow” him for five weeks from each cohort; Monica Wan, from the UC group and Jacob Thompson, from the CSU/community college group. Additionally, each student was able to work with a director, portfolio manager or investment officer from each asset class. Most importantly, all seven students completed the 500 hours of work experience required for them to take the Investment Officer I exam upon graduation from college.

Due to the success of this partnership between Human Resources and the Investments Branch staff, CalSTRS will continue to expand these outreach efforts over the next year.

These seven talented interns spent their summer shadowing investments staff at CalSTRS, getting to know each asset class. We see a bright future ahead for each of them.

Front: Monica Wan, Jessica Padolina and Jacob Thompson.
Back: Farooq Malik, Ari Friedman, CIO Chris Ailman, Ramon Hernandez and Tyler Mah.

Photo by Clarissa Resultan, CalSTRS
A powerful success story comes directly from one of Chris Ailman’s prior student interns in 2014, **Adriana Gutierrez**, who now works in CalSTRS Global Equity asset class.

“I came across the CalSTRS CIO Student Intern vacancy on the Sacramento State University Enterprises, Inc. website. I was a junior at the time and was still trying to figure out what my career path was going to be once I received my bachelor’s degree in economics, but I knew I wanted to work in finance. I figured it was going to be a highly coveted position given that it was going to be shadowing the CIO of the largest teachers’ pension fund in the U.S., so I was very excited when I received the call that I had gotten the position. Chris Ailman was very welcoming and gave me a tour of the office and introduced me to the CalSTRS Investments staff. I attended Chris Ailman’s meetings, read a lot of articles and research, shadowed investment officers and portfolio managers and regularly wrote down questions and terms that I was not familiar with. Chris met with me one-on-one to answer my questions and clarify the terms I did not understand; similar to how a teacher would with a student. After completing the internship, I knew I wanted my career to not just be in finance, but specifically in investments. I made it my goal to come back to the CalSTRS Investments office, and was lucky to find a position working in the asset class that intrigued me the most during my internship, the Global Equity unit.

I continue to expand my knowledge in investments by reading research and articles from various sources, and also by studying for the CFA Institute Investment Foundations exam. My goal is to become an Investment Officer at the CalSTRS Investments office and eventually a portfolio manager.”
INVESTMENTS BRANCH MENTOR PROGRAM

In addition to the Student Intern Program, CalSTRS Investments Branch also uses a mentoring approach to provide career and personal development opportunities. The Mentor Program (MPro) 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, provide honest feedback and share professional experiences.

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

The MPro 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 as a whole from well-seasoned employees, while mentors also benefit from valuable leadership development. “Reverse mentoring” allows protégés to gain new insight and provides the mentor with a fresh perspective.

All MPro participants are able to 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.
INVESTMENTS BRANCH
STAFF DIVERSITY

Exhibits 1 and 2 highlight the diverse characteristics of CalSTRS internal investment staff as of December 31, 2016.

EXHIBIT 1

CalSTRS Investments:
A Gender Diverse Workforce

Source: CalSTRS personnel data as of December 31, 2016

* Investment director consists of the following California State Teachers’ Retirement System classifications: Chief Investment Officer, Deputy Chief Investment Officer, Chief Operating Investment Officer, Investment Director and Investment Operations Director.

** Administrative support consists of the following classifications: Staff Services Manager I, Associate Governmental Program Analyst, Staff Services Analyst, Administrative Assistant II, Administrative Assistant I, Executive Assistant, and Office Technician.
EXHIBIT 2
CalSTRS Investments: An Ethnically Diverse Workforce

Ethnicity Breakdown of Investments Staff at CalSTRS

<table>
<thead>
<tr>
<th></th>
<th>American Indian</th>
<th>Asian</th>
<th>Black</th>
<th>Filipino</th>
<th>Hispanic</th>
<th>Other</th>
<th>Pacific Islander</th>
<th>Undeclared</th>
<th>White</th>
<th>Totals</th>
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<tbody>
<tr>
<td>Administrative Support**</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>22</td>
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<td>Investment Officer I</td>
<td>0</td>
<td>5</td>
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<td>3</td>
<td>1</td>
<td>0</td>
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<td>2</td>
<td>7</td>
<td>22</td>
</tr>
<tr>
<td>Investment Officer II</td>
<td>0</td>
<td>9</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>13</td>
<td>27</td>
</tr>
<tr>
<td>Investment Officer III</td>
<td>0</td>
<td>10</td>
<td>3</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>Portfolio Managers</td>
<td>0</td>
<td>7</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>27</td>
<td>38</td>
</tr>
<tr>
<td>Investment Directors*</td>
<td>0</td>
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<td>3</td>
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<td>0</td>
<td>7</td>
<td>11</td>
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<tr>
<td>Investments Staff Totals (Non-Admin)</td>
<td>0</td>
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<td>7</td>
<td>7</td>
<td>7</td>
<td>0</td>
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<td>2</td>
<td>64</td>
<td>123</td>
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<tr>
<td>Investments Branch Totals (Including Admin)</td>
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<td>36</td>
<td>9</td>
<td>9</td>
<td>10</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>75</td>
<td>145</td>
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</tbody>
</table>

Source: CalSTRS personnel data as of December 31, 2016

* Investment director consists of the following California State Teachers’ Retirement System classifications: Chief Investment Officer, Deputy Chief Investment Officer, Chief Operating Investment Officer, Investment Director and Investment Operations Director.

** Administrative support consists of the following classifications: Staff Services Manager I, Associate Governmental Program Analyst, Staff Services Analyst, Administrative Assistant II, Administrative Assistant I, Executive Assistant, and Office Technician.
There is growing evidence that board and workplace diversity is critical to an organization’s ability to innovate and adapt in a fast-changing environment. Diversity is good for business and specifically good for CalSTRS investments. Diversity is not only a social issue, rather it is also a risk that should be mitigated, as well as an opportunity which provides improved returns. CalSTRS supports board and staff diversity as an important business goal that can be properly addressed in the marketplace, and more specifically at the company level within CalSTRS portfolio company investments.

It is vital in today’s global economy, that boards and companies include diversity of thought and perspectives to avoid being affected by “group think.” Companies need to ensure there is depth and breadth of experience, skills, knowledge, backgrounds, age, gender, sexual orientation and identification, cultural and ethnic composition, personal qualities and historically underrepresented groups that are most appropriate to the company’s long-term business needs and strategy.

"Diversity and independence are important because the best collective decisions are the product of disagreement and contest, not consensus or compromise."

- James Surowiecki

The business case for diversity is evident in the rapidly changing demographic profile of the United States as well as the continuing rise in purchasing power of women and various ethnic/racial groups. Diversity appears to offer companies asymmetric protection – superior upside in growth markets to allow companies to make better decisions about strategy and managing risk.
There is growing evidence and solid research that companies with diversity in their management staff and on their corporate boards attain better financial results on average than other companies. The 2015 McKinsey & Co. study, “Why Diversity Matters,” shows that gender-diverse companies and ethnically diverse companies are 15% and 35%, more likely to outperform.¹

Gender diversity on corporate boards is not a new issue. The 2014 Credit-Suisse Research Report, “Women’s Positive Impact on Corporate Performance,” links board diversity to better stock market and financial performance (higher return on equity, lower leverage, higher price/book ratios and improved growth prospects). It suggests several explanations for this better performance including a stronger mix of leadership skills, improved understanding of consumer preferences, a larger candidate pool from which to pick top talent, and more attention to risk. In its 2016 update, “The CS Gender 3000: The Reward for Change,” Credit-Suisse observed similar results. This table demonstrates higher return on equity when companies have at least one woman on their boards.

Why it Pays Off to have Women in the Boardroom:

Companies with more than 1 woman in the board outperform those with none in the board

<table>
<thead>
<tr>
<th>Year</th>
<th>World &gt; 1 WoB</th>
<th>World = No WoB</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>60</td>
<td>20</td>
</tr>
<tr>
<td>2012</td>
<td>80</td>
<td>30</td>
</tr>
<tr>
<td>2016</td>
<td>100</td>
<td>40</td>
</tr>
</tbody>
</table>

Progress toward greater diversity in boardrooms is being achieved

- Percentage of women on boards:
  - 2010: 9.6%
  - 2015: 14.7%

...however, substantial female representation is still a mark of differentiation rather than the norm.

“Rewarding change in the boardroom: Progress toward greater diversity in boardrooms is being achieved with a 16% increase in female representation since our last survey. However, the starting point is a low one and the pattern of improvement uneven. Substantial female representation is still a mark of differentiation rather than the norm.”

-Credit Suisse Research Institute, Sept 2016, The CS Gender 3000: The Reward for Change

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2 Credit Suisse Research Institute, Sept 2016, The CS Gender 3000: The Reward for Change
Gender Parity on Fortune 500 Boards:

Despite women making up 50% of the workforce, earning over 10 million more college degrees than men since 1982, and accounting for more than 85% of all consumer purchases, the Committee for Economic Development believes it will take 75 years to reach gender parity on Fortune 500 boards.  

The Committee for Economic Development believes it will take 75 years to reach gender parity on Fortune 500 boards.

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The Credit Suisse Gender 3000: The Reward for Change outlines the percentage of women on boards by country. Table 1 below highlights the slow progress globally and the need for the United States to accelerate its push for more women on boards.

**TABLE 1**
Percentage of women on boards by country

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Global average</td>
<td>9.6%</td>
<td>10.3%</td>
<td>11.3%</td>
<td>12.7%</td>
<td>13.7%</td>
<td>14.7%</td>
</tr>
<tr>
<td>Norway</td>
<td>36.6%</td>
<td>38.7%</td>
<td>37.2%</td>
<td>39.7%</td>
<td>41.2%</td>
<td>46.7%</td>
</tr>
<tr>
<td>France</td>
<td>16.1%</td>
<td>21.6%</td>
<td>25.1%</td>
<td>29.6%</td>
<td>31.4%</td>
<td>34.0%</td>
</tr>
<tr>
<td>Italy</td>
<td>5.5%</td>
<td>4.6%</td>
<td>9.2%</td>
<td>17.5%</td>
<td>21.7%</td>
<td>30.8%</td>
</tr>
<tr>
<td>Belgium</td>
<td>15.2%</td>
<td>15.8%</td>
<td>18.9%</td>
<td>23.2%</td>
<td>24.5%</td>
<td>27.9%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>17.2%</td>
<td>19.2%</td>
<td>22.3%</td>
<td>24.5%</td>
<td>26.4%</td>
<td>26.2%</td>
</tr>
<tr>
<td>Germany</td>
<td>11.8%</td>
<td>14.0%</td>
<td>18.5%</td>
<td>23.0%</td>
<td>21.1%</td>
<td>21.1%</td>
</tr>
<tr>
<td>India</td>
<td>5.5%</td>
<td>5.8%</td>
<td>6.2%</td>
<td>6.7%</td>
<td>10.2%</td>
<td>11.2%</td>
</tr>
<tr>
<td>Sweden</td>
<td>28.9%</td>
<td>27.8%</td>
<td>27.3%</td>
<td>30.3%</td>
<td>28.2%</td>
<td>33.6%</td>
</tr>
<tr>
<td>Finland</td>
<td>26.4%</td>
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</tr>
<tr>
<td>Denmark</td>
<td>16.9%</td>
<td>18.2%</td>
<td>20.6%</td>
<td>25.0%</td>
<td>23.5%</td>
<td>28.5%</td>
</tr>
<tr>
<td>UK</td>
<td>10.1%</td>
<td>11.9%</td>
<td>15.5%</td>
<td>17.9%</td>
<td>21.0%</td>
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</tr>
<tr>
<td>Canada</td>
<td>12.5%</td>
<td>13.5%</td>
<td>14.9%</td>
<td>15.9%</td>
<td>18.7%</td>
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<tr>
<td>Australia</td>
<td>10.8%</td>
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<td>15.5%</td>
<td>17.5%</td>
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</tr>
<tr>
<td>South Africa</td>
<td>18.1%</td>
<td>17.8%</td>
<td>18.8%</td>
<td>20.0%</td>
<td>19.2%</td>
<td>19.9%</td>
</tr>
<tr>
<td>Austria</td>
<td>11.4%</td>
<td>14.0%</td>
<td>14.4%</td>
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<td>17.0%</td>
<td>19.5%</td>
</tr>
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<td>Switzerland</td>
<td>8.6%</td>
<td>8.9%</td>
<td>9.3%</td>
<td>11.3%</td>
<td>12.9%</td>
<td>14.6%</td>
</tr>
<tr>
<td>US</td>
<td>12.7%</td>
<td>12.8%</td>
<td>13.3%</td>
<td>13.7%</td>
<td>15.5%</td>
<td>16.6%</td>
</tr>
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<td>China</td>
<td>8.8%</td>
<td>9.0%</td>
<td>9.6%</td>
<td>10.7%</td>
<td>9.1%</td>
<td>9.2%</td>
</tr>
<tr>
<td>Russia</td>
<td>6.8%</td>
<td>7.1%</td>
<td>7.7%</td>
<td>8.1%</td>
<td>6.6%</td>
<td>6.5%</td>
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<tr>
<td>South Korea</td>
<td>0.7%</td>
<td>0.9%</td>
<td>0.7%</td>
<td>2.4%</td>
<td>1.6%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Japan</td>
<td>0.9%</td>
<td>1.1%</td>
<td>1.2%</td>
<td>1.6%</td>
<td>3.5%</td>
<td>3.5%</td>
</tr>
</tbody>
</table>

- **By Law mandated % of women on boards**
- **Best Practices Guidelines**
- **No Law or mandate in place**

Source: Credit Suisse Research – sample size 27,000 directors

* Credit Suisse, Research Institute, The CS Gender 3000: The Reward For Change, Sept. 2016.
http://publications.credit-suisse.com/tasks/render/file/index.cfm?fileid=5A7755E1-EFDD-1973-0B5C64AFF3FB0A5
CalSTRS has long focused on corporate accountability and improving long-term returns in its portfolio. Corroborative and auxiliary research studies highlight that diverse human capital serving on corporate boards and in corporate leadership positions can significantly increase profitability at publicly listed companies. This in turn, may provide a higher risk adjusted rate of return to CalSTRS as we continually uphold our promise to fulfill our mission in securing the financial future of California’s educators.

Based on this research, board and corporate leadership diversity continues to be a top priority for the CalSTRS Corporate Governance team through collaboration with like-minded institutional investors, company engagement, shareholder proposals, and advocacy through involvement as speakers and panelists. In addition, we are actively involved with affinity groups taking a leadership/board role in a number of organizations as well as encouraging different avenues to source diverse candidates for corporate boards.

The following section outlines the Corporate Governance role, initiatives and accomplishments over the last year in improving Diversity in the Management of Investments within CalSTRS portfolio companies. CalSTRS believes a multi-faceted approach is the most effective method to transform the market, including:

- Thirty Percent Coalition
- California Initiative
- Coalition of Four
- Enhanced Diversity Initiative
- Development of a Diverse Director DataSource (3D)
Thirty Percent Coalition

Staff from 20 large Institutional Investors are currently engaging 81 companies to foster greater board diversity by:

- Strengthening Nominating and Corporate Governance policies/Charter by embedding a commitment to diversity inclusive of gender, race, ethnicity, etc.
- Committing to include women and underrepresented minority candidates in every pool from which board nominees are chosen;
- Expanding board director searches to include nominees from both corporate positions beyond the executive suite and non-traditional environments including government, academia, and non-profit organizations; and
- Reporting on progress and any challenges experienced along the way.

Specifically, Anne Sheehan, CalSTRS Director of Corporate Governance, is a board member and co-chair of the Investors Subcommittee of the Thirty Percent Coalition. This year, coalition members filed a number of shareholder proposals with companies on the topic of greater board diversity.

On a quarterly basis, staff participate in the board call of the Thirty Percent Coalition Summit, bringing together members to update the Strategic Plan and discuss activities of the various subcommittees for the upcoming year. Also, in March, staff joined a Diversity Officers’ Roundtable led by the Thirty Percent Coalition with the goal of developing a Diversity Officers’ Pledge that corporations could adopt. This pledge encourages companies to thoughtfully develop a diverse pipeline of human capital as part of its executive talent management process. Staff will consider use of this tool in its ongoing diversity engagement of portfolio companies.

In April, staff also participated in a coalition meeting and presented on behalf of the Institutional Investors Committee. Additionally, in August, CalSTRS led the Thirty Percent Coalition’s initiative to re-engage the 2015 initiative involving Russell 1000 companies with no women on their board of directors. And in October, at the annual Thirty Percent Coalition Summit, staff proposed a number of additional companies the Coalition should consider engaging to improve board gender diversity.

In May, Anne Sheehan participated in multiple Thirty Percent Coalition meetings to work with Executive Search Firms. The meetings focused on creating an Executive Search Firm voluntary code of conduct to advance board diversity, and asked search firms to request that company boards include a diverse set of candidates in every board slate search.
Due to this year’s engagement, nine companies have nominated one or more women to their board and/or amended the company’s corporate governance policies/charter committing to diversity of gender, race, and ethnicity as well as expanding their search and nominating processes to include women and underrepresented minority candidates. Since 2012, more than 100 companies, most for the first time, have appointed a woman to their boards. Following the Thirty Percent Coalition’s 5th Annual Summit, the Coalition congratulated 111 public companies that have added women to their boards of directors since the “Adopt a Company Campaign” launched in 2012.5

California Initiative

The Graduate School of Management at the University of California, Davis, in partnership with Watermark, published its 11th annual study “California Women Business Leaders: A Census of Women Directors and Highest-Paid Executives.”6 CalSTRS Staff, in conjunction with the California Public Employees’ Retirement System (CalPERS), continues to use this study to engage California companies with no women directors. In August 2016, staff sent letters focused on improving board diversity to 87 companies in order to engage their Nominating and Corporate Governance Committee Chairs. As a result of this year’s engagement, 10 companies nominated one or more women to their boards and/or amended the company’s corporate governance policies/charter committing to diversity of gender, race, and ethnicity as well as expanding their search and nominating processes to include women and underrepresented minority candidates.

Coalition of Four

In November, CalSTRS, along with two international institutional investors and a U.S.-based pension fund, collectively representing assets under management of more than $2.5 trillion, wrote letters to 60 companies to gain a better understanding of their various practices to ensure maximum board effectiveness and promote diversity. The 60 S&P 500 companies either had no women on their board or only one woman, while also having a significant proportion of their directors serving on the board for lengthy periods of time. The companies with no women on their boards are outliers in the S&P 500 where more women are being appointed to boards on a regular basis. Staff is currently receiving responses and plans to engage these companies, not only on board diversity, but to learn how they promote diversity at senior management levels and throughout their organization. It is imperative that companies invest today to develop a diverse pipeline of talent.

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Enhanced Diversity Initiative

In April 2016, the Investment Committee approved the Corporate Governance “Enhanced Diversity Initiative.” The goal is for CalSTRS staff to have in-depth discussions with a select number of companies to understand their diversity programs and overall impact in developing diverse senior executive staff as well as increasing the pipeline of diverse candidates to serve on their boards. Staff continues to compile information and engage companies on a regular basis. In fact, staff showcased some of the companies currently in the SSGA Gender Diversity Index for modeling diversity initiatives as best practice examples for other organizations. Additionally, in December, staff sent letters to 10 financial and technology companies. Historically, within these industry sectors, ethnic and gender diverse individuals have been underrepresented in executive positions.

Diverse Director DataSource – 3D:
Diverse talent to serve on corporate boards

In 2011, CalSTRS and CalPERS worked with leading corporate governance experts to develop a new digital resource devoted to finding untapped diverse talent to serve on corporate boards. The Diverse Director DataSource, known as 3D, offers shareholders, companies and other organizations a resource from which to locate and recruit diverse individuals whose experience, skills and knowledge qualify them to be a candidate for a director’s seat.

Recently, CalSTRS and CalPERS announced that 3D will now be available through the Equilar Diversity Network. Launching 3D on Equilar’s Diversity Network showcases the depth and availability of qualified, diverse directors. The Diversity Network is designed to connect candidates from various diversity organizations with corporate boards.

Moving 3D to Equilar comes as CalPERS and CalSTRS continue to make strides in exercising their shareholder positions to strongly reinforce corporate board diversity. Sourcing candidates from multiple Equilar databases, including 3D, should further expand outreach and consideration of diverse candidates.
A key to staff’s multi-faceted approach is advocating and sharing research to advance diversity across portfolio companies and in the investment management industry. Throughout 2016, CalSTRS Investments Branch executives, directors and staff continued to engage with and offer expertise to a variety of professional organizations, all of which work to attract, encourage and collaborate on diversity initiatives through the following events:

**Allianz Global Investors Center for Behavioral Finance** — This Center was founded in June 2010 with the goal of empowering people to make better financial decisions and achieve better financial outcomes. To accomplish this, the Center transforms academic research into actionable ideas and practical tools for financial professionals and plan sponsors to use with their clients and employees. Behavioral finance is a relatively new field that seeks to combine behavioral and cognitive psychological theory with conventional economics and finance to provide explanations for why people make irrational financial decisions. This field deals with cognitive biases and diversity issues. On February 10, Travis Antoniono, Corporate Governance Investment Officer, attended Professor Shlomo Benartzi’s presentation on behavioral finance which also touched upon diversity issues and cognitive biases.

**Ascend Pan-Asian Leaders** is the largest, non-profit Pan-Asian organization for business professionals in North America. Ascend has grown to serve professionals and corporations across multiple industries, offering robust career development programs designed to cultivate Pan-Asian talent. Aeisha Mastagni, Corporate Governance Portfolio Manager, spoke at the National Ascend convention on July 29, 2016 in Anaheim, CA, sharing CalSTRS role and impact on board diversity.

**The Association of Asian American Investment Managers** is dedicated to elevating and increasing the visibility of Asian American investment professionals to institutional funds. On June 1-2, 2016, Global Equity Director, June Kim, Fixed Income Director, Glen Hosokawa, Fixed Income Investment Officer, Deb Ng, and Innovation and Risk Director, Steven Tong, attended the 10th annual AAAIM Conference.

**Executive Leadership Council and the NY City Comptroller’s office** — The Executive Leadership Council (ELC) is the preeminent membership organization committed to increasing the number of black executives in C-Suites, on corporate boards and in global enterprises. Mary Morris, Corporate Governance Investment Officer, participated in a collective strategy session on August 24, 2016 to determine how organizations could work collectively to improve board diversity.
Hispanic Heritage Foundation’s Leaders On Fast Track — CalSTRS is a partner with the Hispanic Heritage Foundation’s LOFT Finance Track. The main objective of the Finance Track is to ensure that every Latino interested in working in the financial services industry has at least one Latino to speak to about their relevant area of interest. In addition, LOFT hosts finance boot camps, leadership trainings, and facilitates internships and jobs in the industry for interested Latinos. LOFT also has an online community where active members can connect. (http://loftnetwork.org). On June 1-2, 2016, CalSTRS was well represented at the 2016 LOFT Investors Forum by Travis Antoniono and Geraldine Jimenez, Engagement Portfolio Manager.

Invesco Private Capital’s Tools for Success — Throughout 2016, Private Equity staff continued to reach out to multiple funds with diverse managers. Deanna Winter, Private Equity Portfolio Manager, and Jean Kushida-Uda, Private Equity Investment Officer, represented CalSTRS at this special event hosted by Invesco to encourage networking and collaboration among funds.

Johns Hopkins – School of Advanced International Studies — The 7th Annual SAIS Global Conference on Women, held on September 6–7, brought together corporate executives, board chairs, institutional investors, venture capitalists, government officials, international experts and business leaders to assess the progress to promote women and minority directors to serve on publicly traded company boards. Mary Morris participated as a panelist and shared CalSTRS perspective on improving company board diversity. She also participated in a closed session roundtable to provide an institutional investor’s perspective on board diversity.

National Association of Investment Companies (NAIC) 46th Annual Private Equity and Hedge Fund Conference — Solange Brooks, Private Equity Portfolio Manager, and Geraldine Jimenez attended this event on behalf of CalSTRS. The conference is a platform by which advocacy, business opportunities, and investment strategies are explored. NAIC hosts events where emerging domestic market managers, limited partners, investment officers and other industry professionals come together for networking and insight into industry trends. NAIC’s Annual Roadshow was hosted at CalSTRS Headquarters in West Sacramento, CA on December 7, 2016 where CalSTRS asset class directors and DMI team members joined NAIC executives and members in a discussion about the current state of the private equity industry as well as opportunities for investing with emerging private equity firms.

The National Association of Securities Professionals is a professional organization whose mission is to serve as a resource for the minority community at-large to share information about securities and investments, including a data repository on current trends, facilitated education seminars and extensive networking opportunities. At the 6th Annual Day of Education in Private Equity, CalSTRS was represented by Christopher Ailman, Chief Investment Officer, Margot Wirth, Private Equity Director, Paul Shantic, Inflation Sensitive Director, Solange Brooks, April Wilcox, Operations Director, and Geraldine Jimenez.
New America Alliance is dedicated to advancing economic development of the American Latino Community. The Alliance is organized on the principle that American Latino business leaders have a special responsibility to lead the process of building various forms of capital most crucial to Latino progress, including economic capital, political capital, human capital and various philanthropic efforts. On an annual basis, CalSTRS hosts a meeting with the NAA CEO, Maria del Pilar Avila, and a group of NAA members to discuss the state of both organizations, projects for the year and ways in which collaboration can be increased. The 2016 meeting was held on May 6 with representatives from each of CalSTRS’ asset classes as well as members of the Diversity in the Management of Investments team. Additionally, Solange Brooks and Paul Shantic represented CalSTRS at the New America Alliance 16th Annual Wall Street Summit event on October 5–6, 2016, along with June Kim, Glenn Hosokawa, Geraldine Jimenez, and April Wilcox.

Plan Sponsor & Minority Manager

Consortium — The Consortium, initiated in 2004, now consists of two annual events sponsored by the California, woman-owned firm of RG + Associates. Each year the event draws more than 300 top Institutional Investors and emerging managers. RG + Associates launched the event in partnership with key business collaborators, including CalSTRS, CalPERS, and New York Common, among many others. Many CalSTRS staff have been members of the advisory committee and/or speakers at the Consortium events over the years. At the ConsortiumEAST 2016 event, more than 300 people participated in general sessions and small group discussions, including over 135 new attendees and speakers. CalSTRS Real Estate Portfolio Manager, Greg Nyland participated in this event. At the ConsortiumWEST 2016 event, Global Equity Portfolio Manager, Candace Ronan, served on the Advisory Committee, and Ms. Ronan, along with Real Estate Director, Mike DiRe, and Solange Brooks, served as facilitators of various investment discussions.

Robert Toigo Foundation —

The Toigo Foundation, whose mission is to foster the career advancement and increased leadership of underrepresented talent by creating mechanisms for greater inclusion from the classroom to the boardroom, hosts an annual event: Women in Leadership: Groundbreakers, a Toigo Institute Summit. Groundbreakers provides a unique opportunity for professional women across industries to network and learn while blazing a path forward. It is the only event in the investments industry which provides such a unique forum for tomorrow’s female leaders. CalSTRS has been associated with the Toigo Foundation for many years, dating back to its beginning. And CalSTRS CIO, Christopher Ailman, continues to be a member of the advisory board. Real Estate Portfolio Manager, Greg Nyland, Real Estate Investment Officer, Josh Kawai-Bogue, and Corporate Governance Director, Anne Sheehan, attended the 2016 event.

Rock Center for Corporate Governance, Stanford University

— The Arthur and Toni Rembe Rock Center for Corporate Governance is a joint initiative of Stanford Law School and Stanford Graduate School of Business. The Center advances the understanding and practice of corporate governance in a cross-disciplinary environment where leading academics, business leaders, policy makers, practitioners and regulators can meet and work together. The December 1–2 conference, Achieving Diversity in the Boardroom and C-Suite: Barriers,
Biases and Breakthroughs, sponsored by the Rock Center, the California State Controller, CalPERS and CalSTRS, brought together practitioners, publicly listed companies, institutional investors, regulators and academics to discuss the latest research and strategies for improving diversity on corporate boards and in the C-suite. Anne Sheehan participated as a panelist providing CalSTRS perspective on different initiatives to improve board diversity through portfolio company engagement.

**Skytop Strategies ESG2 Summit** — Skytop Strategies provides a platform for market-moving dialogue by connecting decision makers through actionable exchange, revolutionizing the way 21st Century companies create value. The ESG2 Summit was held at Baruch College in New York City on June 20-21, 2016. Travis Antoniono moderated the “Filling the Talent Gap on Boards” panel focused on board diversity and the potential use of proxy access to increase representation of women and people with climate change related risk management experience on public company boards.

**Stanford University Michelle R. Clayman Institute for Gender Research** — This organization creates knowledge and seeks to implement change that promotes gender equality. CalSTRS is a member of the Corporate Program, which brings together top academics and senior executives who are advancing women’s opportunities in their organizations. Mary Morris and Tejdeep Kochhar, CalSTRS Diversity Coordinator, attended a quarterly meeting on April 28, 2016, discussing ways to create a more level playing field where diverse talent can innovate and excel. Also, on October 6, Mary Morris participated as a panelist on the topic, “Leveraging Activists & Outside Change Agents for Change,” where she shared CalSTRS current initiatives to improve board diversity and engage companies in their efforts to ensure diversity in the C-Suite and staff pipeline. Also, CalSTRS staff, Candace Ronan, Sarah Maile and Tejdeep Kochhar participated in the full one day conference, Leveraging Change Agents within Organizations.

**UAW Human Capital Meeting** — The Human Capital Management Coalition is a cooperative effort among a diverse group of influential institutional investors to further elevate human capital management as a critical component in company performance. The Coalition engages companies to understand and improve how human capital management contributes to the creation of long-term shareholder value. Travis Antoniono attended this conference in Michigan, where he met with other institutional investors to discuss CalSTRS diversity engagements and explore potential collaborations.

**Vision 2020 Think Tank: Women in Corporate Governance** — This 10-year non-partisan national campaign focuses on advancing American women’s economic and social equality. Delegates from all 50 states collaborate to: increase the number of women in senior leadership; advance women’s economic security and pay equity; educate young people to value gender equality, shared leadership and civic engagement; and engage and educate women voters to increase women’s participation in the political process. On May 17, Anne Sheehan presented at the event to share CalSTRS perspective and innovative Corporate Governance leadership practices.
Watermark is a community of executive women in the San Francisco Bay Area, whose mission is to increase the representation of women at executive levels to drive innovation, human development and economic growth. Mary Morris attended the conference in San Jose on April 20, 2016 and collaborated and shared ideas with numerous attendees, including women from State Street Global Advisors who were also in attendance.

Women in Governance Week was held in New York City the week of June 20, 2016. This conference brought together women executives from many institutional investors to advocate for more women in the investment field and on corporate boards. Anne Sheehan and other event participants came away with an action plan to improve board accountability and board diversity.

Women in Institutional Investment Network (WIIIN) is a Los Angeles-based forum for women in institutional investing. WIIIN strives to achieve the goal of sharing knowledge and connecting through a combination of educational and philanthropic endeavors. Anne Sheehan is an active member of WIIIN and attended this event on March 11, 2016.
CalSTRS demonstrated its ongoing commitment to “moving the needle” on gender diversity by spearheading the “Beyond Talk: Taking Action to Achieve Gender Balance in the Financial World” networking workshop, along with State Street Global Advisors, on March 8, 2016 in San Francisco. “Beyond Talk” was inspired by CalSTRS’ efforts to advance diversity in the investments industry, as well as the 72-percent female composition of over 914,000 of California’s educators. Additionally, the event focused on establishing a firm commitment among attendees and stakeholders to pledge future dates for continued networking to build relationships and advance women in professional leadership. The workshop was well-attended by CalSTRS Investment Branch staff including CIO, Chris Ailman, Deputy CIO, Michelle Cunningham, COIO, Debra Smith, Directors, Anne Sheehan, June Kim, Paul Shantic, Glenn Hosokawa, and other staff including Mami Wong, Aeisha Mastagni, Nick Chladek, Tiffany Vispetto, Mary Morris, Deanna Winter, Kari Salazar-Maynard, Geraldine Jimenez, Rosie Lucchesini-Jack, Candace Ronan, Carrie Lo and Angela Tran.

On September 7, 2016 over 100 emerging manager firms attended CalSTRS’ first ever Emerging Manager Reception where managers learned more about CalSTRS asset classes from key personnel. The event was supported by all asset classes; Global Equity – Candace Ronan, June Kim, Helena Posner; Private Equity – Margot Wirth, Nick Chladek and Rob Ross; Real Estate – Mike DiRe; RMS, Innovation & Risk – Steven Tong, Carrie Lo; Inflation Sensitive – John-Charles Gish; Corporate Governance – Aeisha Mastagni; Fixed Income – Debra Ng, Geetha Arani; Operations – Pedro De Morais, Mami Wong, Michael Lawrence; Administrative Unit – Alex Kinanahan; and student interns – Ari Friedman, Jessica Padolina; and Executive Unit – Sarah Maile, Geraldine Jimenez.
EXTERNAL MANAGERS
Corporate Governance

As part of our Corporate Governance activist strategy, we encourage our managers to consider diversity of corporate boards within their engagements. Specifically one of our external managers, Cartica was founded in 2008 by a team of emerging markets and corporate governance experts and is majority woman-owned. Headquartered in Washington, D.C. the firm had $2.7 billion of assets under management as of September 30, 2016.
Fixed Income

Over 80% of CalSTRS Fixed Income Assets are managed internally. With respect to diversity, CalSTRS has a long-standing “open door” policy of using a diverse group of broker/dealers to execute trades, and as a result, currently does business with approximately 15 emerging firms. All trades are done in a competitive environment. Since the financial crisis in 2008, the trading environment has gone through many changes. With the added risks and increased regulations, broker/dealers in general are not making markets like they did. Liquidity is hard to find as broker/dealers have moved from principal trading to agency trading. This change has impacted smaller firms by making it harder to compete.

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 billion or 7.3 percent of trades with emerging broker/dealers.

The CalSTRS Fixed Income External Manager Program is comprised of five managers and one emerging manager, for a total of six managers. 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 are indicative of a successful asset management business partner.
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 capture 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 its Global Equity Portfolio, CalSTRS ultimate goal is to allow managers who have performed well in terms of the investments and overall business operations to move to direct relationships with CalSTRS when there is a need for a specific sub-asset class or investment style in the portfolio. After successfully competing in the most recent Global Equity search, Geneva Capital Management, a prior developing manager, was transitioned to the core portfolio and awarded a $250 million small cap U.S. mandate.

The developing manager portfolio is dynamic, changing to meet ongoing demands of the overarching global equity portfolio. During 2016, CalSTRS Investments staff implemented the 2015 Asset Allocation Policy, which proposed a modest reallocation of capital to better diversify the portfolio and preserve capital. Decisions made as a result of the study were to reduce equity exposure by about 8% of the total fund, or around $14 billion, and reduce U.S. equity exposure, while increasing holdings in non-U.S. equities. As a part of this asset allocation change, the global equity developing manager portfolio was restructured to better position it for success by shifting investment dollars from U.S. equities to non-U.S. equities, which are less efficient markets and have more opportunity for performance growth.

To complement internal resources and optimize staff’s efforts to meet CalSTRS investment goals, staff now works with four managers-of-managers who design manager portfolios to fulfill a small cap mandate and non-U.S. developed markets mandates. All of these firms are minority and/or women-owned and have underlying relationships with approximately 23 developing managers; eight of which are minority-owned firms, and five which are women-owned firms. Of the $1,704,265 invested with developing managers, 43% is invested in minority-owned firms and 25% in women-owned firms.
Inflation Sensitive

This asset class currently consists of the Global Linkers portfolio and the Infrastructure portfolio with allocations to agriculture, commodity, and timber sectors planned to be added over time. The asset class provides improved diversification to the total fund and invests in strategies that are intended to protect against inflation while taking reasonable and prudent risk.

The Global Linkers portfolio has been 100% internally managed since its inception in 2010. The portfolio uses a risk-controlled strategy with minimal tracking error. This strategy represents a relatively efficient, cost-effective way to provide market-like returns over time. The performance objective for the portfolio is to exceed the benchmark over a full market cycle, generally lasting 3 to 5 years.

The Infrastructure investment policy was established by the board in 2008, a dedicated team was put in place in 2010, and the first investment was made in 2011. The Infrastructure portfolio consists of investments which generally include a relatively stable return stream, have a higher correlation to inflation than equity or fixed income investments, and provide a hedge against long-term liabilities and inflation. Approximately $396 million in new infrastructure commitments were made in 2016.

The CalSTRS Infrastructure Program seeks to construct a portfolio with fund managers from diverse backgrounds and continues to meet with new managers. Although the Infrastructure Unit has committed to managers of diverse nationalities, it often has difficulty identifying funds owned or operated by women and ethnic minorities that meet the program’s requirements.

Though certain issues related to identifying these managers are unique to the Infrastructure sector, others apply more broadly to the asset management industry. Infrastructure is a relatively new asset class and there are a limited number of asset management companies with meaningful track records. As is seen throughout the asset management industry, only a few of these management companies are owned or operated by women or ethnic minorities. The Infrastructure program is further constrained by scale. Because of resource limitations and the program’s size, CalSTRS must target larger funds in order to make investment commitments of sufficient scale to efficiently deploy capital.

The need for investments in infrastructure is a global phenomenon and draws investment managers on a worldwide scale. Infrastructure investment demand from private capital sources remains strong, and as the infrastructure portfolio expands, it is expected that it will attract and include exceptional managers with diverse teams.
Private Equity

The CalSTRS Private Equity Portfolio’s current components include limited partnership commitments, side-by-side co-investments and secondary transactions. It is a global portfolio with approximately 78 percent in U.S.-based funds. The portfolio is concentrated with 117 active manager relationships. Selection is biased toward partnerships with experienced and stable management teams, strong track records, appropriately sized funds and high levels of side-by-side general partner commitments. Strong alignment of interests and utmost integrity are requisite.

All investment proposals are evaluated in the same manner. The funnel is widened with facilitated access in order to increase diversity; however, once an investment proposal is in the pipeline for consideration, a standard, rigorous evaluation process is followed. All firms are treated the same, and all investment decisions are made by the same committee, based solely on the needs of the portfolio and the merits of the proposal.

Part of the Private Equity Portfolio’s strategy focuses on investing with new and emerging managers, investing in underserved markets, and investing in niche or specialty emerging managers. For first, second or third time institutional private equity funds, CalSTRS developed a feeder program in cooperation with Invesco Private Capital. Invesco has invested $329 million, across diverse led funds in three investment vehicles, the New and Next Generation Funds, on behalf of CalSTRS. For private equity funds specializing in reaching inner U.S. cities or other underserved markets, CalSTRS developed a feeder program, the Horizon strategy, in cooperation with HarbourVest Partners LLC. HarbourVest invested $581 million in 55 funds and $485 million in 43 diverse led funds. Overall, 80% of all funds HarbourVest has invested in on behalf of CalSTRS are led by diverse investment professionals. Lastly, CalSTRS also invested in Muller and Monroe Asset Management, LLC’s commingled fund in the lower middle market which focuses on emerging investment management firms that are niche managers, where women and minority-owned funds are actively considered. Muller and Monroe has invested $112 million in 10 emerging funds, where 50% of the funds have partners that are women and/or ethnically diverse.
Real Estate

CalSTRS has been investing with emerging real estate managers since 2001. Approximately 32 percent of the current U.S.-only real estate portfolio is invested with 26 emerging managers and six are diverse-owned.

Believing there is no single correct method for investing with emerging managers, Real Estate staff use a multi-faceted approach to invest with emerging managers; direct joint venture relationships, manager-of-manager ventures and funds-of-funds, to provide the widest exposure. CalSTRS continues to review and reassess how it invests with emerging real estate managers. In 2016, CalSTRS made continued progress on the Real Estate Emerging Manager Implementation Plan by increasing exposure to diverse real estate managers.

Additionally, staff continued to grow and nurture existing manager relationships, but also made considerable progress on identifying potential funds that specialize in emerging manager investing. Staff completed two new investments with Belay, a majority woman-owned manager-of-managers venture that will invest in smaller emerging managers. In return, Belay completed their first investment with an African-American owned firm in Southern California and are in final due diligence with two other firms. Staff is currently undertaking preliminary due diligence on several vehicles which would provide a complement to its seasoned joint venture portfolio.

REAL ESTATE

ASSETS UNDER MANAGEMENT
$25.7 BILLION MARKET VALUE

PERCENT OF TOTAL FUND:
13.3%

EMERGING MANAGERS
Assets Under Management:
$7.1 BILLION MARKET VALUE

Represents approximately 31.9 percent of the total $22.2 Billion U.S.-only Real Estate Portfolio.

AUM from PrivateEdge® as of September 30, 2016.
Source: My State Street as of December 31, 2016.
RMS, Innovative Strategies and Risk

The RMS, Innovative Strategies and Risk unit (formerly known as Innovation and Risk) was established in 2009. The Risk Mitigating Strategies (RMS) team invests in strategies with potential to provide capital protection during equity market downturns. The Innovative Strategies team researches and incubates strategies that are new to CalSTRS and are expected to improve the overall risk and return characteristics of the total fund. The Risk team monitors and manages risk across asset classes as well as discusses how best to allocate funds going forward.

RMS has a long-term target allocation of 9% of the total fund and will consist of allocations to four strategies: long-duration U.S. Treasuries (40%), trend following (45%), global macro (10%) and systematic risk premia (5%). The allocation to long-duration U.S. Treasuries will be managed internally by CalSTRS staff while the remaining allocations will be managed externally. As of June 30, 2016, $888 million has been allocated across two trend following managers and $948 million has been invested across five global macro managers. The manager selection process for systematic risk premia is expected to begin in early 2017.
RMS, Innovative Strategies and Risk—Continued...

Up to 2.5 percent of the total fund may be invested in Innovative Strategies, and each strategy may account for up to 0.5 percent of the total fund. A strategy that is determined to be potentially beneficial is incubated for up to three years with a small allocation of capital and a few managers. After the three year period, staff and the Investment Committee will discuss whether a strategy should become a larger part of the portfolio, studied further or discontinued. As of June 30, 2016, approximately $1.4 billion has been invested in eight funds encompassing low volatility equity, covered call, risk-based allocation and opportunistic strategies.

Both RMS and Innovative Strategies base their investment decisions on a number of qualitative and quantitative factors, including performance during equity or fixed income drawdowns and volatile periods, correlations to traditional market indices and liquidity. Managers are evaluated based on the quality of the team and organization, track record, willingness to share market information and role in the portfolio, among other considerations. ESG concerns are also taken into account.

Staff consistently seeks to identify the most competitive and experienced partners to achieve each program’s goals. At present the RMS portfolio does not have a dedicated emerging manager program, however the growth of the asset class is expected to provide opportunities to increase diversity over the next several years. Similarly, the Innovative Strategies portfolio does not currently have a dedicated emerging manager program due to its small allocations, potentially brief investment period and early stage of the portfolio.
Investment Operations is an integral part of the Investments Branch. The source of their strength stems from a variety of ideas and people. Investment Operations staff collaborates with a diverse range of external business partners to manage the operations of CalSTRS’ investment plan and to protect investment assets. Their recruiting methods are designed to capture a broad range of academic, gender, and ethnic backgrounds. They participate in the Mentor Program, as well as the Investment internship program. Investment Operations contributes to diversity research, reporting, and events throughout the year. They have two active members on the diversity team.

Investment Operations’ overall goal is to provide middle office support to all asset classes and investment strategies for the successful implementation of the CalSTRS Investment Policy and Management Plan. The following core processes have been identified as mission critical in the Investment Business Continuity Plan:

- Cash forecasting and cash movement.
- Trade processing and settlement.
- Position, cash and trade reconciliation.
- Collateral management.
- Corporate action processing.
- Operational risk management and compliance.
- Investment reporting, portfolio hierarchy and SEC surveys.

Investment Operations provides critical cash flow information to investment management to ensure sufficient cash balances are available to pay benefits to CalSTRS members. Additionally, Investment Operations manages strategic business partners such as the global master custodian. They work in conjunction with the custodian to protect investment assets, which enables investment management to concentrate on generating alpha.
## APPENDIX 1

### CalSTRS Emerging Manager Definitions

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<th>Asset Class</th>
<th>Emerging Definition</th>
<th>Minimum Qualifications</th>
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<tr>
<td><strong>Global Equity Investment Managers</strong></td>
<td>Firm must have $2 billion or less in assets under management at initial funding.</td>
<td>Firm must be a legally structured entity with a Corporate Tax Identification Number. Firm must be a Registered Investment Advisor, or must qualify for exemption from registration.</td>
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<td><strong>Private Equity Funds</strong></td>
<td>Firm must be a 1st, 2nd, or 3rd time private equity institutional fund, and raising a fund under $1 billion. Firm must have a maximum of 55 percent nonemployee ownership.</td>
<td>Firm must be a legally structured entity with a Corporate Tax Identification Number. Firm must have a private placement memorandum in place.</td>
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<tr>
<td><strong>Fund of Private Equity Funds</strong></td>
<td>Firm must have $3 billion or less in assets under management. In addition, the firm must:</td>
<td>Firm must be a legally structured entity with a Corporate Tax Identification Number. Firm must have a private placement memorandum in place or a similar proposal, in the event of a separate account relationship.</td>
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<td></td>
<td>a) Have a maximum of 55 percent nonemployee ownership, or</td>
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<td>b) Be a fund that is specifically focused on emerging private equity funds.</td>
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<td><strong>Real Estate Partnerships</strong></td>
<td>Firm must have $1 billion or less in AUM. Firm must have a maximum of 67 percent non-employee ownership.</td>
<td>Firm must be a legally structured entity with a Corporate Tax Identification Number. Firm must have a private placement memorandum in place, or have a similar proposal in the event of a separate account relationship.</td>
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<tr>
<td>Asset Class</td>
<td>Emerging Definition</td>
<td>Minimum Qualifications</td>
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<td>REITs, (Real Estate Investment Trusts)</td>
<td>Firm must have $500 million or less in AUM. Firm must have a maximum of 55 percent non-employee ownership.</td>
<td>Firm must be a legally structured entity with a Corporate Tax Identification Number. Firm must be a RIA or must qualify for exemption from registration.</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Firm must have no more than $3 billion in total AUM and be raising a 1st, 2nd, or 3rd time vehicle which is no larger than $1.5 billion. Non-employee ownership of the Firm cannot exceed 55 percent.</td>
<td>Firm must be a legally structured entity with a Corporate Tax Identification Number. Firm must be headquartered in the U.S. and have a private placement memorandum in place for the investment vehicle being raised. Firm partners must have a demonstrable track record with managing investments on behalf of institutional investors.</td>
</tr>
<tr>
<td>Risk Mitigating Strategies</td>
<td>Firm must have $1 billion or less in AUM or have up to one existing institutional investor. Firm must have a maximum of 55 percent non-employee-owned ownership.</td>
<td>Firm must be a legally structured entity with a Corporate Tax Identification Number.</td>
</tr>
<tr>
<td>Broker- Dealers</td>
<td>Firm must have $25 million or less in annual commissions. Firm must have $50 million or less in Net Equity Capital as defined by the NASD. Firm must have a maximum of 55 percent non-employee ownership.</td>
<td>Firm must be a legally structured entity with a Corporate Tax Identification Number. Firm must be a NASD registered firm.</td>
</tr>
</tbody>
</table>

Source: CalSTRS staff as of December 31, 2016
Fixed Income

Based on 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 opportunities. Each opportunity is reviewed for strategic fit, risk and alpha performance potential. All opportunities, incorporating several different strategies, are reviewed and logged into the opportunities database. Since inception, this database has grown to capture over 368 potential investment. This process was designed not only to facilitate manager access to CalSTRS, but also to serve as a way for CalSTRS to assess future opportunities and market conditions.

Global Equity

After identifying a business need for a specific type of product in the portfolio, CalSTRS posts an advertisement of a solicitation on CalSTRS.com.

- Potential managers are given approximately two weeks to enter or update information in a specified database.

- Staff then screens for qualified managers in the defined database universe based on qualifications specified in the solicitation advertisement. The initial screen is finalized by selecting the top candidates based on CalSTRS defined criteria.

- Those managers who are identified at this stage are invited to submit proposals to CalSTRS. Staff reviews the submitted proposals and verifies the accuracy of the information.

- Staff then scores all of the submitted proposals, and finalists are selected and invited for an interview at CalSTRS. The top scoring managers after the finalist interviews are subject to due diligence on-site inspections and negotiation of contract terms. Managers who are not selected for an initial funding are placed in the pool and may be funded at a future date based on portfolio needs.
Inflation Sensitive

The CalSTRS Infrastructure Program seeks to employ and retain experienced investment managers that possess superior selection and management ability with respect to the targeted investment category. Investment managers are evaluated for selection based on criteria which include the following:

- The suitability of the organization’s investment strategy with respect to CalSTRS’ Infrastructure policy, investment guidelines and objectives, and portfolio needs.
- The quality, stability, integrity, and experience of the management team.
- The ability and willingness of the firm to dedicate sufficient resources and personnel to optimally manage CalSTRS’ investments.
- The reasonableness of investment terms and conditions, including provisions to align interests of management and CalSTRS.
- The appropriateness of management controls and reporting systems.
- The manager’s commitment to responsible contracting policies, and their consideration of environmental, social, and governance (ESG) issues.
- The financial strength of the investment manager.
- The scope and quality of services provided.

The Infrastructure Unit is open to meeting with managers of infrastructure assets, and reviewing potential opportunities that are suitable and meet the needs of the portfolio. Investment managers specializing in infrastructure assets can request a meeting and submit proposals to the following email address:

Infra-Investments@CalSTRS.com.

Private Equity

CalSTRS requires that two independent due diligence tracks and approvals be reached before a direct commitment is made to any fund. One track is by the advisor and the other is by CalSTRS staff. Both must agree or the deal does not get done. Thus, we highly encourage funds to begin with our advisors first as this process is fashioned to be effective and efficient, targeted and make the best use of time. The following is a list of all the advisors to CalSTRS Private Equity:

- U.S. underserved space mandate – Bank of America Merrill Lynch Capital Access Funds. Managers may send their private placement memorandum, to Edward Powers at edward.powers@baml.com.
- U.S. new and next generation managers (first, second or third time funds) – Invesco Private Capital. Managers may send their PPM to Amit Tiwari at amit_tiwari@invesco.com.
- U.S., Latin American and/or Asian Offering – Cambridge Associates, LLC. Managers may send their PPM to: CalSTRSteam@cambridgeassociates.com.

- European and Middle Eastern Offerings – Altius Associates. Managers may send their PPM to: jh@altius-associates.co.uk.

- CalSTRS is also an investor in one of Muller and Monroe’s commingled fund-of-funds vehicle which invests in both emerging managers and niche or specialty private equity managers nationally. Managers may send their PPM to Rendel Solomon at rendel.solomon@m2am.com for further information about this vehicle.

Real Estate

Upon determination that an opportunity may be suitable for CalSTRS’ investment objectives, staff will decide whether it is appropriate to pursue a direct commitment to the opportunity, or to refer the opportunity to an existing partner funded with CalSTRS equity.

- 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 sufficient institutional experience is acquired to merit a direct relationship with CalSTRS.

- CalSTRS Real Estate investment staff has also invested in certain funds of funds and managers of managers which specifically seek to direct CalSTRS capital to emerging managers. Staff will continue to seek out such managers going forward.

- It is expected that emerging managers selected by CalSTRS Real Estate investment staff and their partners will reflect the rich diversity found within the United States as such diversity should bring not only varied skills and investment approaches but also broader perspectives into the investment process.

- The goal of the Real Estate Portfolio is to invest in and with (small) emerging managers who need capital and infrastructure to grow their businesses to an institutional level. CalSTRS intends to provide a link between institutional capital and local, emerging managers, including minority and woman-owned firms to create a diversified, risk-controlled, multi-manager investment portfolio.