

## **Annual Investment Report**

Fiscal Year July 1, 2018 - June 30, 2019

10 Years After the Global Financial Crisis...
Accomplishments & Lessons Learned





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## TO THE TRUSTEES OF THE STATE BOARD OF ADMINISTRATION OF FLORIDA, AND HONORABLE MEMBERS OF THE FLORIDA SENATE AND FLORIDA HOUSE OF REPRESENTATIVES:

It is my privilege to submit the annual Investment Report of the State Board of Administration of Florida (SBA) for the fiscal year ended June 30, 2019, pursuant to the requirements of Florida Statutes, Section 215.44(5). The statutory mandate of the SBA is to invest, manage, and safeguard assets of the Florida Retirement System (FRS) Trust Fund – its largest mandate – as well as the assets of a variety of other funds.

The fiscal year ending June 30, 2019 marks an important milestone for all investors including the SBA. It marks the tenth anniversary of the great financial crisis of 2008-09 and a decade of the evolution of the SBA. This year is also a significant year to me personally, as it is the tenth anniversary of my current service as Executive Director and Chief Investment Officer at the State Board of Administration.

#### 10 Years - Accomplishments and Lessons Learned

As always, this report focuses on our annual performance. But, because of the significance of the financial crisis of 2008-09 it will also highlight the ten-year performance and accomplishments throughout this report. All charts and graphics, when relevant, will highlight statistics for the ten-year period to illustrate the recovery and progress since the financial crisis.

The financial crisis and the opportunities it created, also precipitated a multitude of non-financial improvements at the SBA worthy of review. I believe these changes not only accelerated our financial recovery, but they have positioned the SBA for improved performance and oversight in the future.

After many successive years of benchmark beating performance, clean audits, consistent adherence to risk and compliance standards, low cost of service delivery and wide recognition for thought leadership and professional excellence among industry peers, investment partners and stakeholders, it would be easy to become complacent. That would be a serious mistake. Those unfamiliar with history might presume the SBA has always been in the enviable posture we now enjoy. With the tenth anniversary of the Great Financial Crisis falling during fiscal year 2018-19, a look back at the SBA's journey over the decade provides a reminder that excellence in organizations, cultures, the individuals that comprise them and what they accomplish, is fragile and must be earned and constantly nurtured to be sustained.

The differences between today's SBA and the SBA of late 2008 when I returned essentially reflect a complete reconstruction of the control environment and extensive enhancement of the investment side. The first priority was to upgrade the control environment across our "businesses" and portfolios, a foundational responsibility in any investment organization. Consistent with "tone at the top" a new Risk and Compliance unit was created, a new COO/CFO was brought in, together with a new Chief Audit Executive and upgrades to the Internal Audit team. I worked closely with the IAC, Audit Committee, Participant Local Government Advisory Committee (self-repealed 2015) and Trustees on the premise that the resources required were the foundation for coming enhancements on both the investment side that would prudently drive net returns and lower the likelihood of avoidable errors that can lose money, breach security, impair performance and erode trust, and the recruitment and retention of qualified personnel.

Developing the SBA has not been without cost, but the net benefits are clear. Looking across the entire organization, including the FRS Pension Plan, Investment Plan and the Florida Hurricane Catastrophe Fund, from July 1, 2008 to July 1, 2019, total headcount has grown by 52 people, to a total of 220. Of these, 44 are investment and investment support including Accounting, Financial Operations, IT, Risk & Compliance, Legal, and HR. Headcount in the Investment Plan (DC) has grown by one person and the Cat Fund has grown by four. Focusing on the trailing 10 year period from June 30, 2019, Florida Retirement System Trust Fund assets under management grew from \$99.58 billion to \$162.95 billion (estimated), net of \$61.33 billion in benefit payments, for an estimated total investment gain of \$124.70 billion. Total FRS Pension Fund trailing ten year performance is 9.79% (unaudited), 96 bps ahead of benchmark. That out-performance amounts to \$11.74 billion, a very generous multiple of the entire SBA budget.

#### **FRS Pension Trust Fund**

We are always pleased to post positive returns, and this year is no exception. For the fiscal year ended June 30, 2019, the FRS Pension Plan earned a net return of 6.26%, beating its total fund benchmark by 59 basis points (0.59%). All asset classes beat their benchmarks earning returns, led by Private Equity with 15.46%, followed by Real Estate with 7.13%, Fixed Income with 6.82%, Strategic Investments with 5.20%, Global Equity with 4.98%, and Cash & Cash Equivalents with 2.33%.

However, it is just as important and worth repeating, understanding the context in which to view performance is just as important as the performance numbers themselves. As always, our focus remains on the long-term sustainability of the plan. Therefore, performance for any one year should always be assessed:

Relative to benchmark(s) – Performance should be compared to that of an appropriate, pre-established benchmark suitable to the assets and strategies to which it applies. Capable investment managers can often add value relative to an underlying benchmark; doing so consistently over time is unusual but not impossible.

Relative to a long-term real return objective — As a pension fund, our focus is on the long-term because our liabilities, i.e. pension distributions, extend decades into the future. Each year we review our assets and liabilities and identify a long-term real (net of inflation) return that, if attained, will cover our liabilities as they come due. Short-term variance, positive or negative, from the long-term real return objective is expected, but it is our long-term performance compared with our long-term objective that matters.

Relative to risk — All performance is not created equal; a return captured consistent with carefully controlled risk is more desirable than the same return captured through a strategy whose risk could lead to ruin. The SBA is a disciplined institutional investor; we use a "risk budget" to consciously apportion where we choose to take risk. All returns are considered on a risk-adjusted basis.

Relative to peers – Do the SBA's risk-adjusted returns compare favorably to our large pension fund peers, or does the comparison suggest their strategy and execution offer an advantage?

#### 10 Years - Accomplishments and Lessons Learned

Actuarial Assumption changes - In September 2014, October 2016, October 2017, October 2018 and October 2019, the Actuarial Assumption Conference took initial positive steps in helping to ensure the sustainability of the FRS Pension Plan by adopting modest reductions in the actuarial investment return assumption.

Expected capital market investment returns (i.e., equity, equity risk premium, and fixed income) will remain lower than in previous years. In the wake of the 2008-09 decline in capital markets, and Great Recession, global interest rates and inflation have remained low by historic standards, due partly to so-called quantitative easing of central banks in many industrialized economies, including the U.S. Now in their tenth year, these low interest rates, along with low rates of projected global economic growth, have led to reductions in projected returns for most asset classes. Further, given that current equity markets are now near all-time highs, the continuation of higher returns in this space appears increasingly unlikely. For these reasons, effective July 1, 2018, the SBA, in consultation with the IAC, reduced its targeted real rate of return for the FRS-PP to 4.0% from 4.5%. This action was formally approved by the SBA Trustees on June 13, 2018.

Additionally, since the statutory change in the plan choice (DB or DC) default provision took effect, experience suggests a more pronounced shift to DC than originally expected. This in turn has negative implications for the DB plan's future capacity for volatile or illiquid investments. Given the substantial return contributions of Private Equity, Real Estate, Emerging Markets, Venture Capital, Opportunistic/Distressed credit, all of which are illiquid, volatile, or both, potential future reduction of exposure to these areas places a greater importance on a realistic, or conservative, return assumption.

Florida Growth Fund - The Florida Growth Fund initiative, a result of the Florida Technology and Growth Act of 2008, allows the SBA to invest up to 1.5% of Florida Retirement System Pension Fund (FRS) assets in technology and growth enterprises that have significant presence in Florida. Technology and growth investments include, but are not limited to, space technology, aerospace and aviation engineering, computer technology, renewable energy, and medical and life sciences. In implementing the fund, the SBA developed a best-practices program that is true to our fiduciary requirements,

and embeds a process that is accessible, consistent, transparent and fair.

One requirement of the fund is that it be audited annually by the Florida Legislature's Office of Program Policy Analysis & Government Accountability (OPPAGA). According to reports released by OPPAGA, as of June 30, 2018, the Florida Growth Fund Program had committed to invest \$621.6 million in 46 technology and growth companies and 33 private equity funds. Florida investments were dispersed across 13 counties, with amounts ranging from \$6.8 million in Manatee County to \$165.1 million in Palm Beach County. As of June 30, 2018, the program had distributed \$363.4 million to the Florida Retirement System. Additionally, companies receiving investments reported creating 17,174 jobs and made \$754.6 million in capital investments since the Program's inception. Reports can be viewed on OPPAGA's website here OPPAGA SBA REPORTS.

#### **FRS Investment Plan**

The FRS Investment Plan was established to provide Florida's public employees with a flexible alternative to the traditional pension plan. The one-year return based on aggregate employee fund selection was 5.24%, meeting its benchmark. The benchmark is based on the weighted average of the performance of various indices representing the aggregation of each member's chosen asset allocation. The three-, five-, and 10- year returns were 9.34%, 5.86%, and 8.41%, beating the benchmarks by 0.51%, 0.29%, and 0.38% respectively.

As one of the top ten public defined contribution plans in the United States, the fiscal year ended June 30, 2019, the Investment Plan had a record high 213,213,664 member accounts, of which 148,161 were for active employees. The Plan's year-end assets were \$11.24 billion, also the fund's highest fiscal year-end value ever.

#### 10 Years - Accomplishments and Lessons Learned

Asset growth
Participant growth
Cumulative # of seminars, workshops, etc

The implementation of and transition to Target Date Funds in Fiscal-Year 2013-2014 went smoothly. Target Date Funds serve beneficiary interests by simplifying investment decision-making and reducing the number and complexity of actions required of the plan participants. Target Date Funds make it easy for participants to make the right allocation decisions by building them into each strategy; appropriately reflecting their stated retirement intentions and related risk tolerances. Avoiding common investment mistakes such as market timing, too little or too much risk, or holding excessive cash is helpful in preserving and growing retirement savings over time.

Fiscal-Year 2017-18 brought significant legislative changes to the Investment Plan as well. Members in classes other than the Special Risk Class who are killed in the line of duty will have monthly survivor benefit payments payable for the surviving spouse's lifetime or on behalf of dependent children until the youngest child reaches age 18. The annual benefit is 50 percent of the member's base pay at the time of death. Members who previously were considered retired from the Investment Plan are now allowed to become renewed members of the Investment Plan as of July 1, 2017. Also, effective January 1, 2018, new employees started having eight calendar months after the month of hire to make an active election between the Pension Plan and the Investment Plan. If members do not make an active election by the end of the election period, members in classes other than the Special Risk Class will default to the Investment Plan, and members in the Special Risk Class will default to the Pension Plan.

#### Florida PRIME™

Florida PRIME™, the SBA managed statewide government investment pool, provided investment services to 737 governmental clients in the fiscal year. The fund remains the leading local government investment pool available in Florida by offering superior liquidity, transparency, low-fees, and performance.

At the end of the fiscal year, on June 30, 2019, Florida PRIME™ participant yield was 2.13% beating its benchmark by 25 basis points and ended the year with a market value of \$10.51 billion. The pool's net asset value grew by 12.7 percent, or approximately \$1.02 billion, all while distributing \$170.7 million in gross investment earnings to its investors. Much

of the excess performance can be attributed to our industry-low fee structure, which is approximately 75% lower than peer funds. The net yield of the Pool ended June at 2.13%, reflecting back-to-back interest rate hikes by the Federal Open Market Committee (FOMC) in March 2018 and June 2018.

#### 10 Years - Accomplishments and Lessons Learned

Growth of AUM Growth of Participants

September 2014, the SBA transferred \$6,316,941 million from Fund B to Florida PRIMETM, representing the final portion of original principal for all fund participants. These funds were transferred in proportion to participants' original adjusted Fund B balances. Since its inception in December 2007, the total accumulated distribution from Fund B has amounted to 100 percent of the original participant principal. Ultimately, due to remaining interest and Fund B proceeds, a final distribution was made in July of 2015 to original Fund B participants in proportion to their share of total November 2007 interest earned in the Local Government Surplus Funds Trust Fund (predecessor to Florida PRIMETM).

## Florida Hurricane Catastrophe Fund (FHCF)/ State Board of Administration Finance Corporation

The Florida Hurricane Catastrophe Fund (FHCF) was created to protect and advance the state's interest in maintaining insurance capacity in Florida by providing reimbursements to insurers for a portion of their catastrophic hurricane losses. The Florida Catastrophe Fund is financially stronger than it has ever been, through a combination of good luck and good leadership driving prudent policy.

The State Board of Administration Finance Corporation (Corporation) provides the mechanism for the cost effective issuance of pre-event bonds to provide a source of additional funds to reimburse insurers for hurricane losses related to future covered events. The Corporation has the same investment objectives as the FHCF; therefore, the investment returns and allocation of securities also reflect the short-term, high quality, and highly liquid nature of the portfolio.

The FHCF again took advantage of record low reinsurance and interest rates this year to transfer \$920 million dollars of potential loss away from Florida's insurance policyholders for the 2019 hurricane season. These actions have provided the Cat Fund full liquidity to meet its maximum single-season risk liability. The FHCF's claims paying reserves achieved a 3.53% actual return, versus a benchmark of 3.63%.

The Corporation issued \$2 billion in pre-event bonds in 2013, with \$500 million maturing in 2016, \$500 million in 2018 and \$1 billion in 2020. The \$1 billion remaining in the 2013 series earned 2.97% for the fiscal year ending June 30, 2019, meeting its benchmark. In addition, the Corporation issued \$1.2 billion in pre-event bonds in 2016, with \$550 million maturing in 2019 and \$650 million in 2021. The 2016 series earned 3.28% for the fiscal year ending June 30, 2019, outperforming its benchmark by 6 basis points.

#### 10 Years - Accomplishments and Lessons Learned

Early termination of emergency assessment (13-14) - In order to provide sufficient funds to pay reimbursements from the 2005 hurricanes, the FHCF issued three series of tax-exempt, post-event revenue bonds. To support these bonds, assessments were levied on all Florida property and casualty insurance premiums except for those exempted by statute (workers' compensation, medical malpractice, and national flood insurance). The assessments applied to policies issued both by admitted insurers and by surplus lines insurers.

The FHCF was able to provide for payment in full of the outstanding bonds due to beneficial growth in its assessment base and the final settlement of all 2005 insurer claims. Therefore, emergency assessments were terminated approximately 18 months earlier than originally anticipated. The Florida Office of Insurance Regulation issued two Orders terminating the emergency assessments on all policies issued or renewed on or after January 1, 2015.

Pre-event bonding - In 2013 and again in 2016, the State Board of Administration Finance Corporation (formerly the Florida Hurricane Catastrophe Fund Finance Corporation) issued \$2.0 billion and \$1.5 billion respectively in pre-event bonds to

ensure liquidity in the event of a future hurricane. The funds are invested in highly liquid investments until needed.

Reinsurance – In 2016, the Fund took advantage of record low reinsurance and interest rates to transfer \$1 billion dollars of potential loss away from Florida's insurance policyholders for the 2016, 2017 and 2018 hurricane season. For the 2019 hurricane season, \$920 million in risk was transferred to the private markets.

#### **Lawton Chiles Endowment Fund (LCEF)**

Florida statutes created the Lawton Chiles Endowment Fund to provide a perpetual source of enhanced funding for state children's health programs, child welfare programs, children's community-based health and human services initiatives, elder programs, and biomedical research activities related to tobacco use.

The law directs the SBA to manage the LCEF as an annuity with the investment object of the preservation of the real value of the net contributed revenue and a sustainable spending rate. In fiscal year 2018-2019, the proportion of the preservation objective increased from 80.62% to 82.48% of its target. This fiscal year's return on the endowment was 4.89% versus a benchmark return of 5.55%.

#### **Cost Controls**

Initiatives in efficiencies, infrastructure, and operations continue to be motivated and accelerated by internal budget processes that subject each business unit's budget request to peer review. This process brings relative priorities into focus quickly and gives the entire management team ownership of resource allocation decisions.

Low cost provider – The most recent information available indicates the SBA continues to be a low cost provider among our peers as measured by CEM Benchmarking, a leading independent external cost and performance analysis firm, an important distinction that will become even more valuable in low market-return environments. Operating efficiencies and asset allocation make up a large part of our cost savings. Additionally, the evolution toward increasing the portion of assets managed in-house, careful stewardship of our external manager relationships and the prudent use of passive investing have also been contributors to effective cost management.

Internal Investment Activities – One of the advantages of managing a large pool of capital is having the scale to cost-effectively build a competent professional team capable of prudently managing portfolios in-house. While there will always be strategies inappropriate for internal management and net of cost performance is more important than cost alone, experience has proven that we can accomplish excellent results in a number of strategies, at significantly lower cost (from 75% – 90% lower) compared to commercial asset management fees.

For the fiscal year ended June 30, 2019, the SBA increased the total amount managed internally to 44.6% of total assets, or \$72.8 billion. This is primarily in public liquid markets, global equities and fixed income, with portfolios totaling \$41.0 billion and \$20.0 billion respectively. We also internally manage a \$9.7 billion real asset portfolio in our Real Estate asset class. All of these portfolios operate under specific investment policies, portfolio guidelines and risk budgets. These define strategy, relevant third party benchmarks, allowable investments and risk tolerances. All asset classes and investment activities report key metrics reflecting performance, compliance and risk regularly and are subject to several levels of oversight internally and externally in real-time through regular meetings of the SBA's internal oversight committees, external advisory bodies and third party fiduciary consultants.

Revamped budgeting process

#### **Audits/Best Practice Reviews/Regulations**

Transparency and oversight are of vital public interest for the State Board of Administration (SBA), an institution responsible for more than \$210 billion. The Florida Legislature recognized this importance, and created and maintains extensive and thorough oversight for the SBA fashioned after international standards and best practices for financial institutions and public pensions.

Every indication is that the SBA's current oversight model is serving the public and our beneficiaries in an exemplary

manner. In 2010, the legislature gave statutory status to SBA's Audit Committee (originally created by the SBA Trustees in 2003) with audit responsibilities similar to, and in many cases more extensive than, those outlined for inspectors general in section 20.055. In addition to employing an inspector general responsible for investigations, the SBA has an independent Risk Management and Compliance unit responsible for identifying, assessing, monitoring and ultimately managing risk.

We continue to make progress implementing necessary contractual, process and technology changes in the wake of numerous and costly post financial-crisis regulatory reforms. During the past year, the SBA increased the breadth and depth of its clearing counterparties and implemented necessary collateral management processes to facilitate new requirements under Dodd Frank and other applicable regulations. We anticipate even greater activity in this area over the next year as additional regulatory requirements become required.

External review of Governance, Risk and Compliance (2018)

#### **Human Capital**

As Executive Director and CIO, my priority has been and continues to be building and maintaining our team, culture, reputation, credibility and resources at a strength that empowers mission and vision fulfillment. This is consistent with the Trustees' delegation of authority to the Executive Director & CIO. Our most visible output is investment results. What is less visible is the team and partnership building, policy and strategy formation, risk management and execution. If the team, culture, processes and resources are right, the probability of investment outcomes that earn trust, enhance reputation and build brand value is vastly enhanced.

Talent recruitment, motivation and retention continues to be very effective. Over the fiscal-year just ended, we had 15 terminations, a normal level driven by a mix of factors and offering no particular cause for concern. Five of the terminations involved investment staff, and only one involved compensation. We completed related new hires with solid talent. We continue to have succession exposure, with 33% of SBA employees eligible to retire over the next five years. Nearly 60% of this group is supervisory/management level staff, and we are managing the succession risk through a formal succession management program, which is working well. We have increased recruiting capability with the addition of a dedicated staff person in HR for this purpose. The progress made in mitigating human capital risk is very significant to the continued ability of the SBA to fulfill our mission. We are grateful to the IAC and Trustees for their sustained focus and support.

Like any successful organization, in order to continue our winning record in this environment, we must evolve as an organization. In addition to normal changes experienced above, several structural changes to the organization chart have been made over the years. We have seen a complete change in leadership at the asset class leadership level in the past ten years, the creation of the CFO/COO position. We have upgraded the SBA's legal department, and created a complete Risk and Compliance department. This is considered a best practice in the financial industry.

#### Governance

The SBA actively engages portfolio companies throughout the year, addressing corporate governance concerns and seeking opportunities to improve alignment with the interests of our beneficiaries. Highlights from the 2018 proxy season included the continued focus on proxy access by U.S. companies, the initial disclosures of the CEO Pay Ratios, and increasing dissent on executive compensation practices.

A Decade of Proxy Voting - The SBA strives to improve the corporate governance practices of companies in which it invests. The SBA routinely votes proxies and engages companies on behalf of Florida Retirement System (FRS) beneficiaries. Over the last 10 years, the SBA has devoted resources to optimize the voting of corporate proxy ballots, meeting with members of management and the board of directors, collaborating with other institutional investors, and researching corporate governance best practices. We've done this in a prudent fashion in compliance with our fiduciary responsibility, always aimed at improving the financial value of our investments and reducing both company-level and equity market risks. The volume of SBA corporate proxy votes has nearly quadrupled over the last decade, from just over 3,300 in FY2009 to over 11,300 in FY2019. Likewise, SBA staff cast votes on over 880,000 individual ballot items over the same timeframe. The following table presents key SBA global voting statistics during each fiscal year:

Fiscal Year Meetings Ballot Items FOR Votes AGAINST Management FOR Directors

```
2009
      3,383 29,000 71.3% 31.1% 71.0%
2010
      3,566 28,284 73.3% 26.1% 73.2%
      6,138 56,536 75.6% 20.1% 76.7%
2011
      9,420 84,881 76.7% 19.2% 80.4%
2012
      9,820 89,060 80.4% 18.2% 81.6%
2013
2014
      10,038 92,519 78.7% 19.4% 79.8%
      10,296 99,320 75.6% 23.3% 75.1%
2015
      10,300 97,000 76.5% 22.2% 78.5%
2016
2017
      10,445 100,847
                          78.7% 19.1% 79.2%
                          79.2% 19.4% 78.0%
2018
      11,026 102,367
2019
      11,341 106,793
                          79.4% 19.3% 77.9%
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Long-Term Incentive Compensation Plans Study - In 2013, the SBA completed an in-depth study on the effectiveness of performance measures within long-term incentive compensation plans (LTIPs). The study found that a number of companies operating within a variety of industries utilized performance metrics poorly correlated to shareowner value. The study provided the most definitive answer to a critical question—are companies choosing their long-term incentive metrics wisely for the most sustainable benefit to shareowners? Data from 1998-2011 were used in the research, capturing the top 750 companies in market capitalization for each year covered, for what comprised a database of over 1,800 companies. Using the study's results, SBA staff have advocated for boards of directors to communicate with investors and explain how various measures of performance will lead to enhanced shareowner value. SBA staff also incorporated the results of the research into its policy framework and proxy voting decision-making on executive compensation items.

Valuing the Vote Study - In 2015, a first-of-its-kind study was published demonstrating the efficacy of SBA proxy voting and its impact on portfolio value, indicating \$572 million (\$5.3 million per vote) in added value related to SBA voting decisions. The study analyzed the effectiveness of its proxy voting decisions on director elections where there were dual nominees (i.e., proxy contests). The results of the study demonstrated added value when voted shares involved proxy contests, whether the SBA supported the management or dissident slate of directors. The study also quantified the impact on stock price performance related to these votes, showing positive double digit increases in nominal and industry-relative total-stockholder-returns (TSR), over 1, 3, and 5 year time periods.

Other publications by the Governance team at the SBA include:

- Time is Money (2018)
- Controlled Companies (2011)
- Dual Class Shares (2010)

#### Cyber-Security/IT/Business Continuity

Information Security - The SBA continues to focus on the seriousness of cyber risk and systematically harden the SBA as a target. You will recall that over the past couple of years we have brought in a new IT Head and Director of IT Security. This year we brought in a Director of Vendor Management, a recommendation from the GRC review. Outside of investment managers, our largest vendor relation-ships and spending is with IT related service providers. The Vendor Management position formalizes and focuses our oversight of the security and business continuity of our service providers to maximize value from these relationships. Numerous other IT security initiatives underway will better protect the SBA's information, processes and assets.

Cloud Migration - The SBA has mapped a strategic plan and budgeted for cloud migration. This simple statement belies a complex set of opportunities, risks and counter-dependencies we are evaluating and balancing toward a goal of having a more secure, efficient and robust platform for SBA operations.

Robotic Process Automation - Additionally, the SBA is currently analyzing processes that could be automated to free up existing staff resources, increase accuracy and reduce costs. Experiences of our Master Custodian and other business partners suggest this is a promising area.

Disaster Recovery and Business Continuity plans have been substantially improved. Hard and soft infrastructure to support

SBA operations in the event of extended power or communications disruptions has been improved. We also have conducted training, such as table top exercises simulating a major hurricane in the Gulf, so that the practical aspects of disruption and steps for preparation and recovery are understood and documented.

#### **Awards and Recognition**

In 2011, the SBA was recognized by aiCIO, a leading industry publication, as an industry innovator in the category of Public Pension Plans over \$15 billion for: "innovation for preservation of capital, understanding and acting upon material risks, long-term consistent results, and establishing a solid foundation for future returns."

The SBA's Defined Contribution Program earned a Second Place award in the 2012 Pensions & Investments Annual Eddy Awards—"Ongoing Education Program" category. The award was for excellent work educating participants in response to last year's legislative changes to the retirement system.

aiCIO magazine recognized the SBA's John Mogg, Senior Portfolio Manager-Strategic Investments, as an "Under Forty - Public Plan All-Star" in its March/April 2012 issue.

The Florida Hurricane Catastrophe Fund's 2005 Commutation Team won the Top Level Prudential Davis Productivity Award for closure of insurer claims from the 2005 hurricane season efficiently, fairly and economically.

At the 2012 Hedge Fund Industry Awards, Institutional Investor magazine awarded SBA Executive Director & CIO, Ash Williams, an "Outstanding Achievement Award for significant contributions to hedge fund management and investing, having displayed the highest professional and ethical standards and helping raise the standard for hedge fund managers and investors."

In 2017, Ash Williams, chief investment officer and executive director of the Florida State Board of Administration (SBA), received the 2017 Lifetime Achievement Award from Chief Investment Officer Magazine at their annual Industry Innovation Awards event. Need to explain award

The Florida Retirement Investment Plan received multiple recognitions for work products during the past year, including recognitions from the Hermes Creative Awards, The Communicator Awards, and PR Daily's 2017 Digital PR and Social Media Awards.

The Hermes Creative Awards is an international competition for creative professionals involved in the concept, writing and design of traditional materials and programs, and emerging technologies. In 2017, the Investment Plan earned the Platinum award for ChooseMyFRSPlan.com and Honorable Mentions for the Overall New Hire Experience and the Welcome Brochure.

The Communicator Awards is the leading international awards program recognizing big ideas in marketing and communications. The Florida Retirement System Investment Plan received the Communicator Awards Award of Distinction in 2017 for the MyFRS New Hire Choice Program.

PR Daily's 2017 Digital PR and Social Media Awards recognize digital natives and social media experts who capitalize on fleeting trends and know how to make them stick. The Florida Retirement System Investment Plan received Honorable Mention for Multi-Channel Campaigns for the MyFRS New Hire Choice Program.

Munnell quote

#### (Closing)

The SBA continues to be in its strongest position ever, reflecting the performance of a stable, highly competent team under thoughtful, consistent leadership that recognizes and rewards merit and embraces constructive change. Examples include:

• SBA clearly has historically performed well, continually adding value relative to benchmarks. Initial estimated investment performance numbers for FY 18-19 are also sound. Total pension fund return was 6.17%, 83 bps

(unaudited) ahead of target, and we grew the FRS Trust Fund by \$2.5 billion, net of distributing \$7.0 billion in benefit payments. The FRS Investment Plan (DC) also had a good year, returning 5.24% (unaudited) and meeting its benchmark for the year. All other major mandates beat their benchmarks.

- Controls and risk management were effective; all asset classes and the total fund remained within budgeted risk tolerances.
- While adding value the SBA has done so with all in costs of 45.8 bps, among the lowest of our US large pension fund peers.
- The portion of SBA asset managed in house continues to increase, currently 44.6% across the global equity, fixed income, and real estate asset classes, up from 36% since 2009. Successfully growing internal management reflects competent, stable professional talent and support for portfolio and risk analytics, trading, systems, portfolio accounting, compliance, etc. The value of these resources is captured in the cost savings of internal vs. external management. Internally managed assets have achieved desired investment results within stated risk tolerances.
- Control and compliance are sound; the SBA achieved desired investment results consistent with ethical, legal, regulatory, compliance and fiduciary bounds. These standards are extended to our external investment partners, who are required to annually certify compliance with a range of relevant policies and statutory obligations. Annually, the SBA undergoes numerous audits among our business units and investment holding companies. FY 18/19 was another year of clean financial statements and no material exceptions in any audits. Following last year's very positive external review of our "Governance, Risk and Compliance (GRC)" structure, processes and execution; we have advanced on a number of recommendations.
- The Florida Hurricane Catastrophe Fund remains financially strong. Loss reserves totaling \$5.2 billion are in place for hurricanes Irma and Michael; Irma losses continue to develop, which could lead to a reserve increase of approximately \$750 million. Net of these reserves and the maturing pre-event debt issuance, the Cat Fund's cash balance is \$12.4 billion. Despite the recent firming in global reinsurance pricing, we successfully executed \$920 million of risk transfer through private reinsurance for the 2019 hurricane season, at the same rate (adjusted for exposure) and attachment point as last year. Other transactions show Florida hurricane risk transfer costing an average of 15% more than the 2018 season. In addition to capturing a price advantage, the SBA deliberately came to market after the June 1 hurricane season start to ensure that capacity was not taken from Florida's primary insurers. Legislative interest in the Cat Fund and its assets remains high; contrary to our recommendations, the law was changed in the 2019 session to double the Fund's allowance for loss adjustment expenses from 5% to 10%.
- Florida PRIME AUM ended FY 18-19 at \$13.45 billion, growing by \$2.48 billion. PRIME was again certified to
  be operating in accordance with all applicable laws and regulations. Looking ahead, we are reviewing possible
  operational changes that could improve disaster recovery and security for PRIME operations. PRIME is the top
  performing, lowest cost, and most liquid and transparent cash management option for Florida governments.

Florida's unusual approach to pension fund governance is a direct contributor to SBA's success; it provides a very effective balance of flexibility, accountability, oversight and transparency. In addition to our Trustees and the Florida Legislature, none of our successes would be possible without the members of SBA's Investment Advisory Council, and Audit Committee, all whom have generously shared their talent, wisdom, and time, making contributions that strengthen our organization and improve decision-making. I would like to recognize and thank those whose efforts empower the SBA to fulfill our fiduciary responsibility and provide top-quality, low-cost investment and trust services.

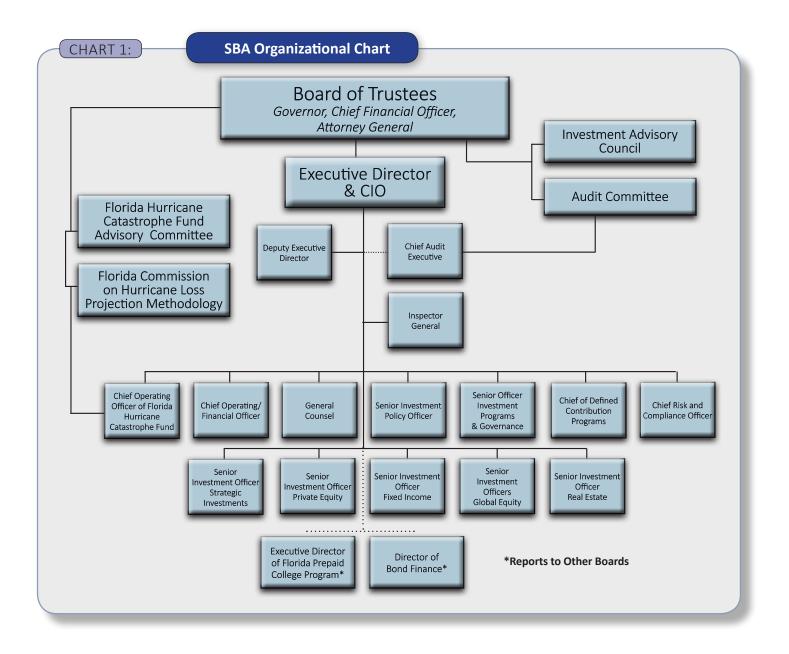
Respectfully submitted,

Ashbel C. Williams

**Executive Director & Chief Investment Officer** 

## SBA Organizational Structure and Oversight

The SBA is mandated by the Florida Constitution and is governed by a three-member Board of Trustees, comprised of the Governor as Chairman, the Chief Financial Officer, and the Attorney General. The Trustees, in concert with legislative directives, have ultimate oversight of strategy. They delegate authority to the Executive Director & Chief Investment Officer (CIO) to carry out the strategic direction in the day-to-day financial investments and operations of the agency. The Executive Director & CIO manages over 200 professional investment and administrative support staff.



## Advisors, Consultants and Auditors

To assist the Trustees and staff with their responsibilities, the Trustees appoint members who have specific knowledge and expertise to several councils, advisory boards, and commissions.

#### **Investment Advisory Council (IAC)**

The IAC meets quarterly, or additionally as needed, to provide independent oversight of the SBA's general objectives, policies and strategies, while more broadly covering topics related to the general economic outlook. The IAC provides independent oversight of the SBA's funds and major investment responsibilities, ranging from the Florida Retirement System to the Lawton Chiles Endowment Fund and Florida PRIME™. The Board of Trustees appoints nine members to serve on the IAC for four-year terms pursuant to Section 215.444(2), Florida Statutes.

#### **Audit Committee (AC)**

The AC exists to assist the Trustees of the State Board of Administration in fulfilling their oversight responsibilities. The primary duties and responsibilities of the AC are to serve as an independent and objective party to monitor the SBA's processes for financial reporting, internal controls and risks assessment, compliance and review, and to appraise the audit efforts of the SBA's independent auditors and Office of Internal Audit. The Board of Trustees appoints three members to serve four-year terms.

## Florida Hurricane Catastrophe Fund (FHCF) Advisory Council

The FHCF statute requires the SBA Trustees to appoint a nine-member FHCF Advisory Council "to provide the board [SBA] with information and advice in connection with its duties" under the FHCF statute. The Advisory Council is required to include an actuary, a meteorologist, an engineer, a representative of insurers, a representative of insurance agents, a representative of reinsurers, and three consumer representatives.

The practice of the FHCF is to seek Advisory Council approval for each proposed rule revision prior to bringing the proposal before the SBA Trustees. The Advisory Council also reviews claims-paying capacity reports.

## Florida Commission on Hurricane Loss Projection Methodology

The Commission was statutorily created as a panel of experts to provide actuarially sophisticated guidelines and standards for the projection of hurricane losses and is administratively housed within the SBA. The Commission consists of the following 12 members: the insurance consumer advocate, the senior employee of the State Board of Administration responsible for operations of the Florida Hurricane Catastrophe Fund, the Executive Director of the Citizens Property Insurance Corporation, the Director of the Division of Emergency Management, the actuary member of the Florida Hurricane Catastrophe Fund Advisory Council, an employee of the Office of Insurance Regulation who is an actuary responsible for property insurance rate filings and who is appointed by the Director of the Office of Insurance Regulation, a licensed professional structural engineer who is a full-time member of the State University System with expertise in wind mitigation techniques appointed by the Governor, and five members appointed by the Chief Financial Officer, as follows: an actuary employed full-time by a property and casualty insurer which was responsible for at least 1% of the aggregate statewide direct written premium for homeowner's insurance in the calendar year preceding the member's appointment to the commission, an expert in insurance finance who is a full-time member of the faculty of the State University System and has a background in actuarial science, an expert in statistics who is a fulltime member of the faculty of the State University System and has a background in insurance, an expert in computer system design who is a full-time faculty member of the State University System, and an expert in meteorology who is a full-time member of the faculty of the State University System and specializes in hurricanes. The Board of Trustees annually appoints one of the members of the Commission to serve as chair.

The State Board of Administration uses investment, legal and other independent consultants on both a retainer and special project basis. Consultants generally serve as fiduciaries, which allows the SBA to obtain best-in-class talent and objective external advice and oversight. Investment consulting services for special projects are engaged on a competitive basis by soliciting proposals from a pool of pre-qualified consultants.

#### **Investment Consultants**

The SBA's investment consultants are required to act as fiduciaries under the Investment Advisers Act of 1940 and according to the requirements of Florida Statutes (i.e., essentially the ERISA fiduciary standards of care) in fulfilling their contractually assigned duties. Furthermore, the SBA requires investment consultants to submit an annual independence and disclosure compliance certification.

#### **Performance Measurement**

The SBA maintains relationships with firms that provide independent performance measurement services to assist in evaluating the cost effectiveness of certain components of the SBA's investment programs.

#### **Special Projects**

The SBA utilizes independent specialists and legal experts for special project work on a regular basis.

#### **External Auditors**

The SBA utilizes an external audit protocol whereby the Audit Committee, through the Chief Audit Executive and the Executive Director & CIO, engages and oversees external auditors. The SBA obtains annual commercial audits of FRS Pension Plan, FRS Investment Plan and Florida Hurricane Catastrophe Fund financial statements. All other funds are subject to audit by the Auditor General of the State of Florida. The Audit Committee employs a pool of external auditors to be used for special project audits.

### **SBA Mandate Overview**

uring the year, assets under SBA management increased by \$4.9 billion to \$206.4 billion. Table 1 shows details for each SBA fund.

#### TABLE 1:

#### Change in Assets Under Management - Fiscal Year 2018-19

	Market Value June 30, 2018	Investment Gain (Loss)	Net Contributions (Withdrawals)	Market Value June 30, 2019
FRS Pension Plan	\$160,438,424,775	\$9,729,169,633	\$(7,032,388,495)	\$163,135,205,913
FRS Investment Plan	10,830,238,257	546,814,001	(128,875,131)	11,248,177,127
Lawton Chiles Endowment Fund	763,121,861	37,136,547	(6,650,000)	793,608,408
Debt Service	829,784,651	34,989,848	422,166,694	1,286,941,192
FDOT Financing Corporation <sup>1</sup>	0	110,037	12,300	122,338
Gas Tax Clearing Fund <sup>2</sup>	1,659,583	249,291	(1,908,872)	2
Florida PRIME <sup>3</sup>	9,939,546,758	293,991,587	2,522,958,320	12,756,496,665
Florida Hurricane Catastrophe Fund	14,462,339,384	494,216,152	(1,395,028,379)	13,561,527,157
State Board of Administration Finance Corporation	2,784,763,985	70,118,480	(543,239,706)	2,311,642,758
Department of the Lottery Fund	290,631,964	25,106,177	(13,956,360)	301,781,781
Retiree Health Insurance Subsidy Trust Fund	181,604,634	6,006,596	61,860,151	249,471,380
Police and Firefighters' Premium Tax Trust Fund	225,653,578	4,032,701	45,763,159	275,449,438
Florida Prepaid College Plan Administrative Expens		53,727	635,633	2,341,752
Florida Prepaid College Plan	185,958,766	5,649,743	37,097,596	228,706,105
Florida College Investment Plan Administrative Exp		19,067	197,592	952,420
Florida College Investment Plan	92,258,888	2,191,133	8,077,560	102,527,582
Florida ABLE, Inc. Administrative Expense	1,084,192	63,224	2,035,784	3,183,200
Florida ABLE, Inc.	2,128,945	69,202	1,123,274	3,321,422
SBA Administrative Fund	52,315,977	1,403,331	1,385,144	55,104,452
PEORP Administrative Fund	18,576,882	442,263	(2,108,342)	16,910,804
Bond Fee Trust Fund	5,973,736	161,613	132,627	6,267,975
Arbitrage Compliance Trust Fund	2,612,936	67,944	(6,188)	2,674,692
Bond Proceeds Trust Fund <sup>2</sup>	4,937,928	90,864	(1,852,318)	3,176,474
Florida Division of Blind Services	5,713,060	481,652	0	6,194,712
Insurance Capital Build-up Program	4,938,828	77,507	280,296	5,296,630
Inland Protection Financing Corporation	2,132	41	(561)	1,612
University of Miami <sup>4</sup>	21,544,277	405,308	(21,949,585)	0
Burnham Institute for Medical Research Fund <sup>5</sup>	0	691	(691)	0
Torrey Pines Institute for Molecular Studies Fund <sup>5</sup>	0	182	(182)	0
SRI International Fund <sup>5</sup>	0	2,931	(2,931)	0
FSU Research Foundation⁵	0	2,015	(2,015)	0
Pinellas Suncoast Transit Authority <sup>5</sup>	0	305	(305)	0
Florida Endowment for Vocational Rehabilitation <sup>5</sup>	0	456	(456)	0
McKnight Doctoral Fellowship Program⁵	0	234	(234)	0
Total Assets Under Management	\$201,148,204,131	\$11,253,124,481	\$(6,044,244,622)	\$206,357,083,990

Source: SBA

<sup>&</sup>lt;sup>1</sup> Fund strategy opened during the fiscal year.

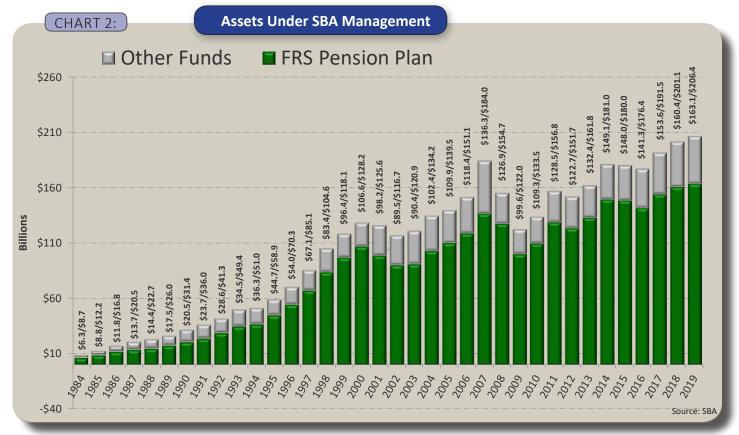
<sup>2</sup> Fund market value is periodically zero due to cash flows.

<sup>3</sup> Florida PRIME fund values at June 30, 2018, and June 30, 2019, have been reduced by \$573,321,321 and \$681,589,635, respectively. These values represent amounts that are reported by other SBA funds as investments in Florida PRIME (i.e., other funds managed by SBA that are invested in Florida PRIME). Amounts reported for Net Contributions (Withdrawals) and Investment Gain(Loss) have been reduced by \$94,015,370 and \$14,252,944, respectively, for the same reason.

<sup>4</sup> Fund strategy closed during the fiscal year.

<sup>5</sup> Fund strategy closed in a prior fiscal year. Transaction amounts reflect residual activity.

Numbers may not total due to rounding



From 1984 to 1992, the total assets under SBA management reported for "Other Funds" were equal to the original cost value of investments, plus accrued interest receivable, plus or minus any pending sales or purchases of investments. Beginning in 1993, investments are reported at fair market value rather than original cost.

### **Asset Allocation**

The SBA's exposure to various major asset types or classes is considered its asset allocation. Because over 90% of the return of a diversified investment portfolio is attributable to its asset allocation, determining the proper asset allocation (i.e., the desired relative exposure to each asset class) is the most fundamental way in which the SBA pursues its investment objective. Likewise, managing actual asset class exposure over time (i.e., managing asset allocation) is important if the SBA is to avoid unnecessary risk. For example, if 60% exposure to stocks is determined to be necessary to meet a long-term return objective, exposures below that, if persistent or poorly timed, will cause the actual return to fall short of the objective. Conversely, an exposure to stocks greater than necessary will subject the portfolio to higher levels of volatility than necessary, which can also result in disappointing returns, particularly when equity markets are stressed.

	CHAR	Related Asset Class Performance of FRS Pension Plan by Fiscal Year								
	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19
4	Strategic Investments	Global Equity	Real Estate	Global Equity	Global Equity	Private Equity	Real Estate	Global Equity	Private Equity	Private Equity
	Private Equity	Strategic Investments	Fixed Income	Strategic Investments	Private Equity	Real Estate	Private Equity	Private Equity	Global Equity	Real Estate
Performing	Global Equity	Real Estate	Private Equity	Real Estate	Real Estate	Strategic Investments	Fixed Income	Strategic Investments	Strategic Investments	Fixed Income
Better Perf	Fixed Income	Private Equity	Strategic Investments		Strategic Investments		Strategic Investments	Real Estate	Real Estate	Strategic Investments
Be	Cash	Fixed Income	Cash		Fixed Income	Global Equity	Cash	Cash	Cash	Global Equity
	Real Estate	Cash	Global Equity	Cash	Cash	Cash	Global Equity	Fixed Income	Fixed Income	Cash
										Soul

A thoughtfully constructed portfolio will provide diversification across a sufficiently broad range of investments so that the portfolio has a high probability of meeting the investment objective, notwithstanding the wide distribution of performance often associated with individual investments. In other words, some individual investments may be poor performers during a specific time frame but, in a highly diversified portfolio, their overall impact on the portfolio will often be offset by other investments that, at the time, are better performers.

In practice, maintaining an exact asset allocation is difficult given the dynamic nature of markets and security prices. The SBA typically determines reasonable limits above and below desired asset allocations (known as the target or policy allocation) within which it accepts deviations from the target. This tolerance reflects the fact that trading in securities markets is not free. The SBA must balance the risk of disappointment from misallocation (i.e., not consistently holding their target asset mix) against the performance drag resulting from transaction costs. The scale tips when an asset class moves outside its tolerance range. At this point, the SBA is no longer willing to accept the risk from misallocation, so the portfolio will be rebalanced. This involves selling assets from classes in overweight status and using the proceeds to purchase assets that are underweight. Rebalancing is governed by specific policies that establish target ranges and rebalancing procedures for each asset class.

From time to time, the SBA may temporarily choose to adjust the target asset allocation. This is typically done based upon consideration of near-term market performance, but unusual liquidity needs or other unanticipated factors could also play a role in this decision. Temporary intentional deviation from target asset allocation exposures is known as tactical asset allocation. Most institutional investors recognize that tactical allocations based on a market view are high-risk propositions because of the difficulty of accurately predicting market movements (i.e., "timing" the market). The SBA agrees with this view and generally avoids tactical asset allocation.

The SBA has a long-standing practice of periodically adjusting its target asset allocation based on a formal reevaluation of capital market assumptions, fund liabilities, and the investment objectives.

### Risk and the Investment Process

nvesting involves a tradeoff between return and risk. Investments expected to produce a higher rate of return over time are associated with a higher level of risk. The first step in the investment process is to develop a clear investment objective. Once a clear investment objective has been formulated, risks posing a threat to achieving that investment objective are identified, analyzed, and ultimately managed.

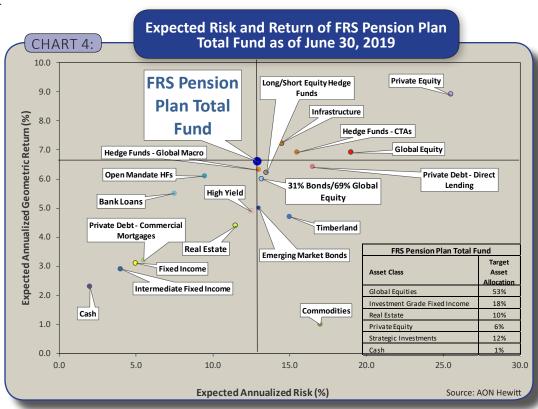
The process of risk management involves identifying risks that should be avoided or mitigated, and those which must be accepted. The SBA has developed a risk framework to identify and categorize risks impacting the SBA. The framework considers a wide range of factors including risks which are specific to the investments themselves, operational processes used to manage the investments, and the environment in which the SBA operates.

Investment management risk is one risk in the SBA's risk framework and encompasses those forms of risk that directly arise in the pursuit of an investment return. Other types of risk consider threats to the organizational and managerial infrastructure that supports a prudent investment process and effective delivery of services. These are the risks that the SBA mitigates or avoids to the degree it can do so cost-effectively.

Inherent risk is one sub-category of investment management risk identified in the SBA's risk management framework. All securities carry inherent risk, which is common to financial instruments. This risk is knowingly assumed by the investor, and sets the foundation for the risk/return tradeoff. Inherent risk includes those risks that relate to performance of the financial markets as a whole (market risk or systematic risk), as well as risks which can be diversified away (idiosyncratic or unsystematic risk).

While each investment in a portfolio may have widely varying returns, a thoughtfully constructed portfolio will diversify sufficiently across a broad range of investments so that the portfolio has a high probability of meeting the investment objective. In a highly diversified portfolio, the goal is for strongly performing securities to more than offset the impact of poorly performing securities in any given time period.

Chart 4 presents examples of how various asset classes and investment strategies carry different risk/return tradeoffs. For example, investing in a mix of 31% Bonds and 69% Global Equity has slightly higher risk and a lower return than the target allocation for the overall FRS Pension Plan.



The SBA uses the following classifications to describe inherent risk:

#### **MARKET RISK**

This is the risk that the SBA may experience a loss from unexpected price fluctuations due to overall market movements. Market risk is a characteristic of all financial instruments. Generally speaking, the price of a security fluctuates due to market exposure and security-specific risk factors, collectively driven by the forces of supply and demand. Like any commodity in a freely functioning marketplace, the price of a security is directly proportional to its demand relative to its supply. There are numerous circumstances that can cause the demand for a particular security to increase or decrease. The demand for a stock, for example, is influenced by revised earnings expectations. Demand can also depend on a number of other factors including changing economic conditions, geopolitical events, inclusion in a particular market index, availability of similar securities, perceptions regarding specific industries, or company-specific factors.

#### **CREDIT RISK**

Credit risk is a characteristic of debt instruments. It is the risk that an issuer or borrower of debt securities may default on financial obligations. Changes in investor perceptions of the possibility of a default by the issuer cause a bond's prices to fluctuate and may increase credit risk. For example, a credit rating downgrade by agencies such as Standard & Poor's and Moody's will, typically, cause the market price of the issuer's bonds to fall because of perceived increases in the possibility of a default. As with interest rate risk, this risk does not affect the bond's interest payments (provided the issuer does not actually default), but increases the volatility of the market price, which is of consequence to holders who may have to sell.

#### **INTEREST RATE RISK**

This is the risk that an investment's value will change due to a change in interest rates. Interest rate risk affects bondholders more than stockholders. Due to the inverse relationship between interest rates and price, fixed-rate debt instruments are subject to interest rate risk, meaning their market prices will decrease in value when generally prevailing interest rates rise. This allows the SBA the ability to earn a higher interest rate on its money elsewhere, perhaps by purchasing a newly issued bond that already features the higher current interest rate.

Prepayment risk is a special form of interest rate risk. It applies to callable bonds which are debt instruments that include an option for the issuer to "call" in the bond and repay debt early. In practice, bonds are most often called when interest rates are falling, resulting in higher reinvestment risk for the SBA. Once a bond is called, issuers can reissue the bonds at a lower interest rate. Thus, the SBA may not actually experience the larger cash flows it expected and must reinvest at lower market interest rates.

#### **INFLATION RISK**

This is the risk that investment returns will be lower than the rate of inflation, a reduction in the purchasing power of money. It can arise from expansionary monetary policy, economic supply shock, or as a result of behavioral responses to general perceptions about future price growth. The SBA seeks financial gains in real terms; that is, to increase the inflation adjusted value of the FRS Pension Plan funds under management to keep up with liability growth. Because investment gains are commonly presented in nominal (e.g., not inflation adjusted) terms, the SBA will meet this goal only if nominal investment gains exceed the rate of inflation.

Since inflation is a phenomenon affecting an economy's unit of exchange, inflation risk affects nearly every type of financial security. Equity instruments of certain companies are more resistant to this risk than those of others, depending on the pricing power of the company. Pricing power is the ability to charge a higher price without suffering a proportional reduction in sales volume. Real bonds (e.g., Treasury Inflation-Protected Securities) are an exception. They are not subject to inflation risk since their stated yield and face value at maturity are adjusted to compensate for the contemporaneous rate of inflation.

#### **LIQUIDITY RISK**

This is the risk of having limited access to funds, a failure to meet liquidity needs, or a loss resulting from a lack of market liquidity. The SBA may find that, under certain circumstances, there is no ready buyer for a security it wishes to sell. The term "liquidity risk" distinguishes a form of market risk which typically occurs when demand for a given security is weak, or the supply of a security is low.

#### **CURRENCY RISK**

This is the risk that an investment's value may change due to a change in exchange rates. In addition to other risks, the value in United States dollars of securities of foreign companies (denominated in foreign currencies) varies based on fluctuations in the value of the applicable foreign currency relative to the dollar. Currency risk arises from differences in current or expected real growth, interest rates, inflation, and macro-policies between the countries.

#### **SYSTEMIC RISK**

This is the risk that material portions of the global financial system will collapse or cease to function adequately. Systemic risk is the possibility of potentially catastrophic financial system instability, typically caused or exacerbated by idiosyncratic events or conditions among financial intermediaries. It results from interlinkages and interdependencies in the financial system or securities markets, where the failure of a single company or cluster of companies (e.g. the financial sector) could cause a cascading failure, potentially bankrupting or bringing down the entire system or market. All investments bear systemic risk.

#### **IDIOSYNCRATIC RISK**

This is the risk specific to an individual security. It may be based on the company itself or the industry in which the company operates. Otherwise known as "specific" or "unsystematic" risk, this risk can be mitigated through proper portfolio diversification.

## **Compliance with Investment Strategy**

Although there are numerous definitions of "Investment Strategy," the SBA considers the term to mean the result of careful planning to determine the allocation of capital among various asset types including stocks, bonds, private equity, strategic investments, real estate, and cash equivalents, in order to achieve investment objectives. In addition to the asset allocation decision, investment strategy also includes selecting the appropriate benchmark indices (indicating baseline return and risk) and determining allowable deviations from targeted allocations for the major asset types. Investment Policy Statements or Investment Portfolio Guidelines are developed to provide a framework within which to execute investment strategies by clearly stating the investment objectives and benchmarks, as well as the required portfolio parameters such as permissible securities and exposure limits.

The SBA takes a systematic approach to monitoring compliance with investment guidelines to ensure that investment strategy is executed as intended for each of the funds under management. Organizationally, the SBA has a dedicated Risk Management and Compliance unit under the direction of a Chief Risk & Compliance Officer, whose responsibility is to assist the Executive Director & CIO in promoting and enhancing prudent risk management, accountability, and compliance with investment guidelines, SBA policies, rules, and regulations.

Investment Oversight Groups for each asset class and for the Total Fund serve as the primary mechanism for the escalation, review, and resolution of compliance violations. These groups regularly review any compliance exceptions and the associated risks that may have a material impact on portfolios, develop and document responses to exceptions and, in the case of material compliance violations, provide recommendations to the Executive Director & CIO for final determination. Membership includes the Chief Risk & Compliance Officer as chairman, the designated asset class compliance officer, the Senior Investment Officer for the applicable asset class, and the Director of Enterprise Risk Management. Investment Oversight Groups meet routinely and may also meet on an ad hoc basis.

Investment Policy Statement limitations on asset allocation are routinely monitored, as are more stringent internal rebalancing policy requirements for the FRS Pension Plan, the FRS Investment Plan, and the Lawton Chiles Endowment Fund. SBA staff routinely monitor the limitations including permitted securities and authorized ranges contained in Section 215.47, Florida Statutes.

For internally managed public market portfolios, SBA staff perform routine testing to determine compliance with portfolio guidelines and with the internal policies which govern trading practices. Tests may be conducted on parameters such as eligible securities, credit quality, concentration limits, liquidity, authorized traders, and approved counterparties. Results of compliance testing on internally managed public market portfolios are routinely reviewed by the respective Investment Oversight Groups.

SBA staff also perform routine compliance testing on externally managed public market portfolios. Tests may be conducted on parameters such as eligible securities, credit quality, concentration limits, and liquidity. The results of compliance testing on externally managed public market portfolios are regularly reviewed by the applicable Investment Oversight Groups. External investment managers are required to notify the SBA in writing of a failure to comply with any term of the Investment Management Agreement, and on an annual basis, they must certify compliance with the terms and provisions of their contracts.

In the case of private market investment funds and limited partnerships, compliance testing is performed by SBA staff through a variety of means, depending upon the structure of the investment. The SBA monitors investment guideline compliance, reviews manager certifications, and completes acquisition checklists to ensure proper documentation is in place prior to committing funds. The results of compliance testing on private market funds are regularly reviewed by the applicable Investment Oversight Groups. In addition, external manager oversight staff conduct site visits with selected managers and general partners throughout the year.

## SBA's Non-Investment Management Responsibilities

#### **MyFRS Financial Guidance Program**

The award-winning MyFRS Financial Guidance Program helps FRS members make an informed retirement plan choice, understand their plan, and prepare for retirement. The program provides all FRS members access to a variety of retirement planning services online, by phone, in person, and at no cost.

*MyFRS.com* is the official FRS education website. The site is home to FRS plan choice information and personalized retirement planning applications, including the CHOICE SERVICE and the ADVISOR SERVICE. Members can enroll in the plan of their choice and manage their benefits via the portal's secure single-sign-on architecture.

**ChooseMyFRSplan.com** is home to the guided experience decision tool. This interactive video asks a few questions and suggests which plan may make the most sense based on the responses provided. The site includes people-like-me videos and access to helpful information and resources, such as an online retirement plan enrollment form.

The toll-free MyFRS Financial Guidance Line offers employees personalized and confidential assistance. Members can call to discuss their FRS options and retirement planning issues with experienced and objective financial planners from EY (formerly known as Ernst & Young) or with counselors from the Florida Division of Retirement.

**Educational workshops**, delivered both in person and online, are led by EY throughout Florida. Topics include FRS retirement plan choice, retirement planning, financial planning, education planning, insurance planning, cash and debt management, and estate planning. All workshops are available on MyFRS.com.

**Personalized choice statements and reminders** help new employees make an informed plan choice by their deadline. Additional materials covering FRS plan choice, retirement planning, and investing for retirement can be accessed through MyFRS.com and the MyFRS Financial Guidance Program.

#### **Plan Choice**

New employees have eight months to choose either the Investment Plan or the Pension Plan. The FRS Investment Plan is a defined contribution plan. With its lower vesting requirement, it provides a portable retirement benefit that is more attractive to mobile workers. In fact, statistics show that more than one-half of new FRS hires will leave their jobs before meeting the eight-year requirement to qualify for FRS Pension Plan benefits. The FRS Pension Plan, a defined benefit plan, offers formula-based pension benefits that are based on salary and years of service.

A welcome kit provides members with their Personal Identification Number, their plan choice deadline, and important information about their choice. The kit directs employees to other helpful resources, such as ChooseMyFRSplan.com, the toll-free MyFRS Financial Guidance Line, and the online 1st Election CHOICE SERVICE that allows them to run personalized benefit comparisons. During the 2018-19 fiscal year, approximately 56,000 members received a personalized welcome kit.

Effective January 1, 2018, employees who do not make an active plan choice by their deadline are automatically enrolled in (defaulted to) the FRS Investment Plan, except employees who are in the Special Risk Class, who default to the FRS Pension Plan. As a percentage of overall elections during the 2018–19 fiscal year, active enrollments in the Investment Plan decreased by approximately 5%, and Pension Plan enrollments increased by approximately 4%. Default enrollments increased by approximately 2% from the prior fiscal year. Employees are given one 2nd Election opportunity during their active FRS career to change plans. As a percentage of overall 2nd Elections during the 2018-19 fiscal year, 2nd Elections from the Investment Plan to the Pension Plan increased by approximately 8%, from 16% to 24%.

#### Non-FRS Plan Assistance

The SBA provides prudent and cost-effective investment consulting to assist the Plan Administrators of the State of Florida Deferred Compensation Program (FDCP), the State University System Optional Retirement Program (SUSORP) and the Senior Management Service Optional Annuity Program (SMSOAP) in fulfilling their fiduciary responsibilities to select investment products.

#### **Corporate Governance**

As part of the SBA's mission to invest, manage, and safeguard the assets of its various mandates, the SBA plays a vital role in supporting initiatives to ensure that public companies meet high standards of independent and ethical corporate governance. The SBA acts as a strong advocate on behalf of FRS members and beneficiaries, retirees, and other clients to strengthen shareowner rights and promote leading corporate governance practices at U.S. and international companies in which the SBA holds stock.

The SBA's governance philosophy encourages companies to adhere to responsible, transparent practices that correspond with increasing shareowner value and to appropriately consider the input of their shareowners. The SBA's corporate governance activities are focused on enhancing share value and ensuring that public companies are accountable to their shareowners with independent boards of directors, transparent disclosures, accurate financial reporting, and ethical business practices designed to protect the SBA's investments.

During fiscal year 2018-19, SBA staff cast votes at 11,049 companies worldwide, voting on ballot items including director elections, audit firm ratification, executive compensation plans, mergers & acquisitions, and a variety of other management and shareowner proposals. These votes involved 102,462 distinct voting items—voting 79.1% "For" and 18.6% "Against", with the remaining 2.3% involving abstentions. Of all votes cast, 19.4 percent were "Against" the management-recommended-vote. SBA proxy voting was conducted across 80 countries, with the top five countries comprised of the United States (2,856 votes), Japan (1,354), China/Taiwan (882), South Korea (492), and the United Kingdom (420). The SBA actively engages portfolio companies throughout the year, addressing corporate governance concerns and seeking opportunities to improve alignment with the interests of our beneficiaries. Highlights from the 2019 proxy season included the continued focus on proxy access by U.S. companies, the initial disclosures of the CEO Pay Ratios, and increasing dissent on executive compensation practices.

In addition to proxy voting, the SBA actively engages companies it invests in throughout the year, at times maintaining a year-round dialogue and analysis of corporate governance issues and other reforms. Engagement by investors can be a very effective way to advocate for positive changes and improve reporting by the companies in which the SBA invests. Improved corporate disclosures are a key objective of SBA engagement, as transparent and improved comparability can help all shareowners make better investment decisions. The SBA's corporate engagement activity addresses corporate governance concerns and seeks opportunities to improve alignment with the interests of our beneficiaries.

The SBA's Corporate Governance unit prepares a separate annual report detailing its activities and additional reports on corporate governance topics covering a wide range of shareowner issues. Historical information, including prior reports, can be found within the governance section of the SBA's website, available at www.sbafla.com.

#### **Corporate Officer/Trustee Services**

By statute, the Executive Director of the SBA serves as the Chief Executive Officer of the Inland Protection Financing Corporation and the Florida Water Pollution Control Financing Corporation.

The CEO directs and supervises the administrative affairs and the operations of the two corporations. These two public purpose corporations work with the Department of Environmental Protection to finance underground petroleum tank cleanup projects and water pollution control project construction loans to local governments in Florida through the issuance of bonds. Employees of the SBA also serve as corporate officers and provide administrative support for the day-to-day operation of the corporations.

#### **Administrative Services**

The SBA provides administrative support to the **Division of Bond Finance** and the **Florida Prepaid College Board** programs, including accounting, financial reporting, accounts receivable, accounts payable, cash management, facilities management, human resource management, purchasing, receiving, courier, mailroom, copy center, and technology infrastructure support services. The SBA works very closely with each program, interacting on a daily basis to ensure timely, accurate performance. The SBA analyzes all services and costs on a biannual basis to determine their cost effectiveness, and modifies the fees it charges for these services, as appropriate. In both daily interactions and biannual reviews, the Division of Bond Finance and Florida Prepaid College Programs have expressed high levels of satisfaction with these services.

# Investment Policy Statements, Portfolio Guidelines and Trust Agreements

The State Board of Administration maintains Investment Policy Statements, Investment Portfolio Guidelines, and Trust Agreements for funds it manages. The purposes of these are to describe the role and control elements of investment activities. The following funds' guidelines were changed during Fiscal Year 2017-18:

#### • Florida Retirement System Investment Plan

To view changes made during the fiscal year and all Investment Policy Statements, Investment Policy Guidelines, and Trust Agreements, please visit the Funds We Manage section of the SBA's website at www.sbafla.com.

## Florida Retirement System Pension Plan

#### **Overview and Investment Objective**

The Florida Retirement System (FRS) Pension Plan, a defined benefit plan, is one of the largest public retirement plans in the U.S. At year-end, it comprised over 80% of total assets under SBA management. The FRS Pension Plan serves a working and retired membership base of nearly one million public employees.

The SBA follows statutory guidelines and a substantial body of internal policies and procedures in investing the FRS Pension Plan assets. It has a robust governance and control structure in place, utilizes a wide array of professional consultants and external analysts, and employs a highly qualified staff of investment professionals. In keeping with the SBA's commitment to disciplined investment management services, the Investment Advisory Council provides independent oversight of the FRS Pension Fund's general objectives, policies and strategies.

The Pension Plan's long-term financial health rests on three legs: solid long-term investment performance, receipt of actuarially required annual contributions, and a reasonable benefit package.

The SBA's commitment to obtaining solid long-term performance is vital to ensuring that the FRS Pension Plan continues to help participating retirees meet their financial goals and that fund assets are invested prudently. However, investment gains alone are not sufficient to maintain the fund's financial health. Annually determined actuarially sound rates of contribution into the fund are critical to ensure that the investment base is large enough to meet future Pension Plan benefit obligations. Contribution rates are set by the state legislature, along with plan structure and benefit levels. The Division of Retirement in the Department of Management Services administers the Pension Plan, directs actuarial studies, and makes benefit payments.

Historically, assigning funding and design responsibility to the legislature, benefit management to the Department of Management Services, and investment management to the SBA has proven to be a productive partnership, with approximately 60%+ paid to a retiree coming from investment gains, not from taxpayers or participants through contributions.

Chart 5 shows the funded ratio, a comparison of a pension fund's assets to its projected liabilities, of the Florida Retirement System Pension Plan. A funded ratio at or above 100% indicates that the fund is fully able to cover its accumulated benefit obligations.

During the 11 years ending in 2008, the Pension Fund enjoyed an actuarial surplus, meaning that it was ahead of schedule in building wealth in order to fund its future projected benefit payment obligations. This allowed contribution rates to be lower than normal. Actuarial deficits (a funded ratio below 100%) mean that the Fund has fewer assets than necessary to pay all current and projected accumulated benefit obligations. Actuaries agree that contributions should be higher than the normal cost level in order to pay down any projected deficit.

#### **Performance**

The SBA's investment policy objective for the FRS Pension Plan portfolio is to provide investment returns sufficient for the plan to be maintained in a manner that ensures the timely payment of promised benefits to current and future participants and to keep costs at a reasonable level, given actuarially required contributions. The SBA's investment objective is to earn a compounded return of 4.0% plus the rate of inflation per annum over the long run.

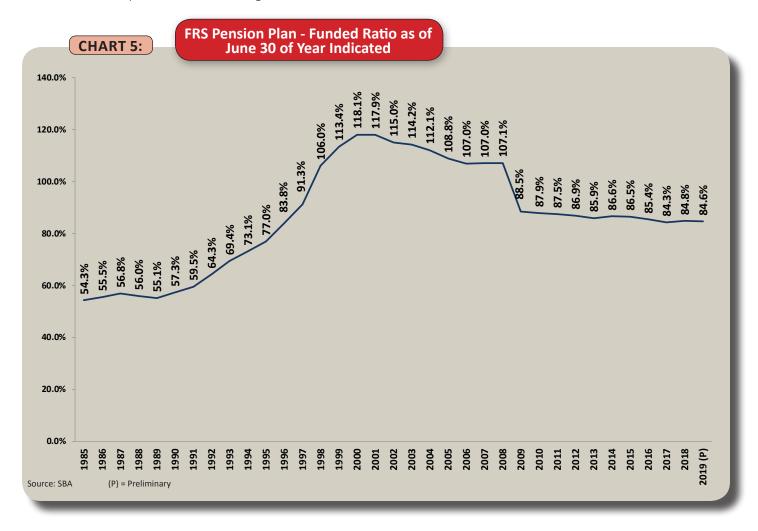
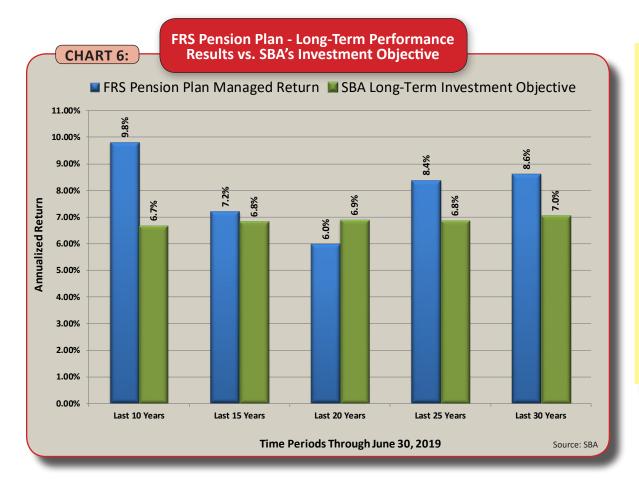


Chart 6 compares the SBA's actual return on Pension Plan assets to its investment objective of 4.0% real growth (inflation plus 4.0%) for the fund. This objective is derived from an asset/liability analysis of expected benefit growth, contribution levels, market performance, and a risk tolerance for the fund.

In addition to its investment objective for the Pension Plan, the SBA measures its investment performance relative to market-based benchmarks. Table 2 compares actual returns to the total fund benchmark for various periods ending June 30, 2019.



The SBA's actual returns on Pension Plan assets have met or exceeded the long-term investment objective of the fund for the 10-, 15-, 25-, and 30-year periods.

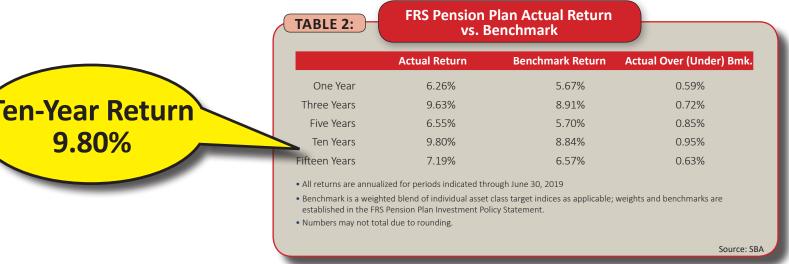


Chart 7 provides the historical one-year returns earned by the Pension Plan.

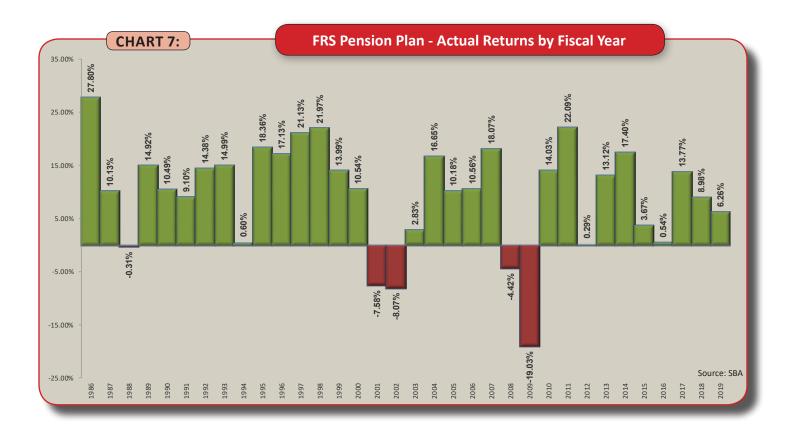


Chart 8 presents the key drivers of growth in the FRS Pension Plan's asset base. Over the period shown, investment returns (green bars) have generally been positive, with two notable exceptions: the bursting of the tech bubble in the early part of this century and the mortgage crisis that began in 2008. Benefit payments (the red bars falling downward, representing outflows) have grown steadily over the period. This is typical of a mature plan. Contributions into the fund (purple bars) shrank during the early 2000's, reflecting the surplus the fund had at the time.



#### TABLE 3:

#### FRS Pension Plan - External Investment Management Fees for Fiscal Year 2018-19

Asset Class	Dollar Amount	Return Basis <sup>1</sup>
Global Equity	\$ 139,346,542	0.29%
Strategic Investments	164,635,168	1.29%
Fixed Income	7,588,793	0.07%
Real Estate	87,541,840	0.60%
Private Equity	140,547,352	1.25%
Total	\$ 539,659,694	0.56%

<sup>1</sup>Return Basis expresses external management fees as a percent of the average of the month-end net asset value of externally managed portfolios in each asset class (including month-ends from June 30, 2018 through June 30, 2019). This measure is comparable to an annual expense ratio.

Source: SBA

#### Cost

Tables 3 and 4 present elements of the SBA's cost structure that have historically been of interest to stakeholders.

Chart 9 puts the cost-effectiveness of the Pension Plan into perspective. The chart compares the SBA's cost to those of similar-sized public retirement plans, selected by the independent firm CEM [Cost Effectiveness Measurement] Benchmarking Inc., as appropriate peer organizations.

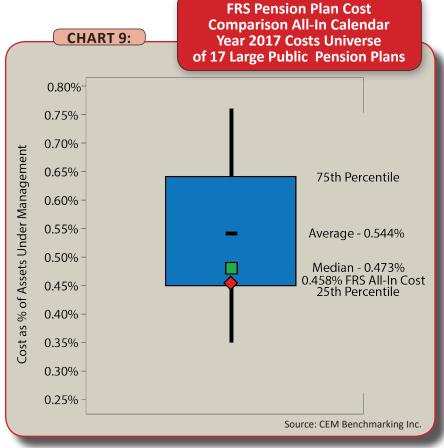
#### TABLE 4:

## FRS Pension Plan - Net Brokerage Commissions for Fiscal Year 2018-19

Asset Class	Dollar Amount <sup>1</sup>
Global Equity <sup>2</sup>	\$ 21,164,713
Fixed Income	279,347
Real Estate	1,136,636
Strategic Investments	780
Private Equity	3,728
Total	\$ 22,585,204

- <sup>1</sup> Brokerage commission amounts for the entire fiscal year are presented in the appropriate year-end asset class.
  <sup>2</sup> The amount reported for the Global Equities asset class does not include broker commission amounts paid in
- <sup>2</sup> The amount reported for the Global Equities asset class does not include broker commission amounts paid in commingled funds.
- Numbers may not total due to rounding.

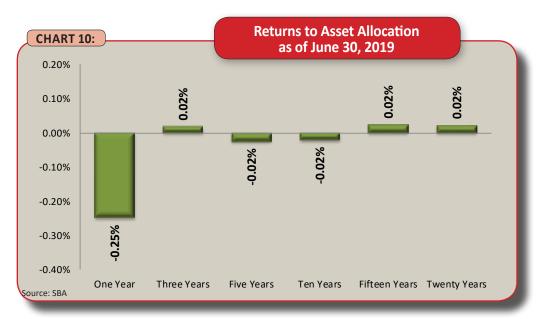
Source: SBA



Numbers may not total due to rounding.

#### **Asset Allocation**

Returns attributed to asset allocation arise from differences between asset class actual and target allocations as percentages of the Total Fund. During the 12-month period ending June 30, 2019, returns to asset allocation lagged the target return by 25 basis points. Longer term differences are shown in Chart 10.



#### **Asset Classes**

The Pension Plan portfolio is currently divided into six asset classes: Global Equity, Fixed Income, Real Estate, Private Equity, Strategic Investments, and Cash Equivalents. Asset class performance is measured against a broad market index appropriate to the asset class. The indices identified in Table 5 are used as the primary benchmarks for the asset classes. The benchmarks provided in Table 5 were in effect on June 30, 2019.

TABLE 5:	Authorized Target Indices as of June 30, 2019
Asset Class	Index
Global Equity	A custom version of the MSCI All Country World Investable Market Index (ACWI IMI), in dollar terms, net of withholding taxes on nonresident institutional investors, adjusted to reflect the provisions of the Protecting Florida's Investments Act
Fixed Income	The Barclays Capital U.S. Intermediate Aggregate Index
Real Estate	The core portion of the asset class is benchmarked to an average of the National Council of Real Estate Investment Fiduciaries (NCREIF) Fund Index – Open-ended Diversified Core Equity, NET of fees, weighted at 76.5%, and the non-core portion of the asset class is benchmarked to an average of the National Council of Real Estate Investment Fiduciaries (NCREIF) Fund Index – Open-ended Diversified Core Equity, NET of fees, weighted at 13.5%, plus a fixed return premium of 150 basis points per annum, and the FTSE EPRA/NAREIT Developed Index, in dollar terms, net of withholding taxes on nonresident institutional investors, weighted at 10%.
Private Equity	The MSCI All Country World Investable Market Index (ACWI IMI), in dollar terms, net of withholding taxes on non-resident institutional investors, adjusted to reflect the provisions of the Protecting Florida's Investments Act, plus a fixed premium return of 300 basis points per annum.
Strategic Investments	A weighted-average of individual portfolio level benchmark returns
Cash & Cash Equivalents	Bank of America Merrill Lynch 3-Month US Treasury Index
	Source: S

#### Rebalancing

The investment strategy for the Pension Plan is to implement the policy allocation within relatively narrow bands around policy target weights. The SBA manages this strategy through asset allocation and risk-budgeting policies.

#### FRS Pension Plan - Returns by Asset Class for Periods Ending June 30, 2019

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		Actual Return	Benchmark Return	Actual Over (Under) Bmk
Global Equity <sup>1</sup>				
	One Year	4.98%	4.55%	0.43%
	Three Years	11.88%	11.42%	0.46%
	Five Years	6.70%	6.06%	0.64%
	Ten Years	11.25%	10.41%	0.84%
	Fifteen Years	7.31%	6.75%	0.55%
Fixed Income				
	One Year	6.82%	6.73%	0.09%
	Three Years	2.30%	2.03%	0.27%
	Five Years	2.64%	2.46%	0.18%
	Ten Years	4.54%	3.54%	1.00%
	Fifteen Years	4.39%	4.09%	0.29%
Real Estate				
	One Year	7.13%	6.95%	0.18%
	Three Years	7.69%	7.01%	0.68%
	Five Years	9.50%	9.00%	0.50%
	Ten Years	9.57%	8.61%	0.97%
	Fifteen Years	9.19%	5.89%	3.30%
Private Equity <sup>2</sup>	One Year	15.46%	6.08%	9.38%
	Three Years	17.03%	14.23%	2.80%
	Five Years	14.21%	8.54%	5.67%
	Ten Years	14.63%	15.71%	(1.08%)
	Fifteen Years	10.38%	12.25%	(1.87%)
Strategic Investme	ents			
	One Year	5.20%	5.06%	0.14%
	Three Years	7.56%	6.08%	1.48%
	Five Years	6.23%	4.46%	1.77%
	Ten Years	10.98%	6.92%	4.05%
Cash & Cash Equi				
	One Year	2.33%	2.31%	0.01%
	Three Years	1.45%	1.38%	0.07%
	Five Years	0.98%	0.86%	0.11%
	Ten Years	0.80%	0.49%	0.31%
	Fifteen Years	1.01%	1.52%	(0.51%)

## **Ten-Year Return** 9.80%

Source: SBA

#### SBA CONTRACTS WITH PRIVATE EQUITY PARTNERSHIPS REQUIRE THE FOLLOWING DISCLOSURE:

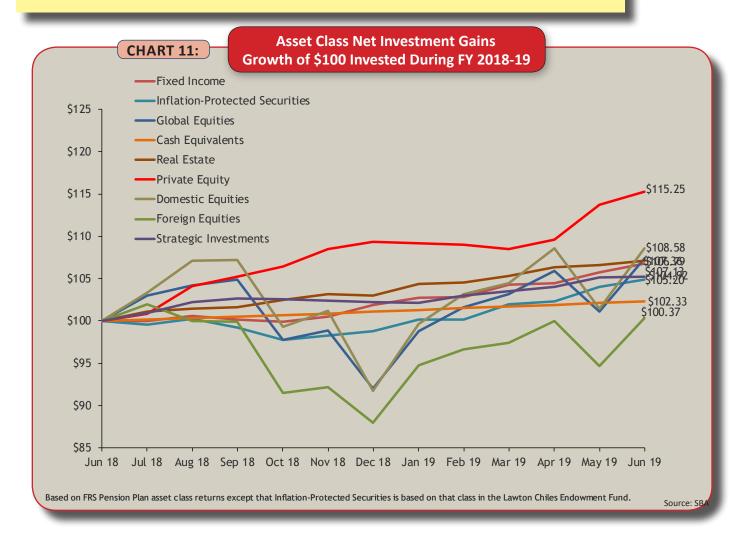
- Because of the long-term nature of investing in private equity, funds can produce low or negative returns in the early years of the partnership. In the first few years of the partnership, management fees are drawn from partner's capital, and portfolio companies are held at cost, leading to a potential understatement of ultimate value.
   Due to numerous factors, including limited valuation and reporting standards, the return information for private equity in this report may not reflect the expected return of the partnerships. The returns contained in this report are calculated by the SBA or its agent and have not been reviewed by the general partners.
- Interim returns may not be meaningful or indicative of ultimate performance during the early stages of the investment life cycle.

 $<sup>^{1}</sup>$  Global Equity became an asset class in July 2010. The historical return series prior to July 2010 was derived from the underlying Domestic, Foreign and Global Equities components.

<sup>&</sup>lt;sup>2</sup> Per industry convention, Private Equity returns are presented on a dollar-weighted basis.

<sup>•</sup> Numbers may not total due to rounding.

#### Chart 11 illustrates how returns over the year performed for each class.



#### **TABLE 7:**

## FRS Pension Plan - Change in Market Value for Fiscal Year 2018-19

	Market Value 6/30/2018	Net Contributions (Withdrawals)	Investment Gain (Loss)	Market Value 6/30/2019
Global Equity	\$ 89,983,300,682	\$ (4,877,344,032)	\$ 4,367,870,970	\$ 89,473,827,619
Fixed Income	30,069,866,619	(1,361,692,242)	2,007,074,410	30,715,248,788
Real Estate	14,340,904,468	(83,500,000)	1,009,327,804	15,266,732,271
Private Equity	11,429,720,173	(1,186,693,212)	1,659,292,302	11,902,319,264
Strategic Investments	12,917,535,335	439,999,846	671,832,528	14,029,367,709
Cash/Short-Term Securities <sup>1</sup>	1,697,097,498	36,841,144	13,771,619	1,747,710,261
Total FRS Pension Plan	\$ 160,438,424,775	\$ (7,032,388,495)	\$ 9,729,169,633	\$ 163,135,205,913

<sup>&</sup>lt;sup>1</sup> The investment gain (loss) reported for the Cash/Short-Term Securities asset class includes \$36,009,544 in SBA investment service charges and bank fees paid in several cash expense accounts on behalf of the entire FRS Pension Plan. Excluding these expenses, the reported gain (loss) would have been a positive \$49,781,163.

Source: SBA

Numbers may not total due to rounding.

#### **Passive vs Active Investing**

Investment management can be divided into two broad categories of management style, each reflecting a fundamentally different view regarding how modern capital markets behave. These two schools of thought are generally referred to as passive and active management.

Passive managers attempt to construct their portfolios to closely approximate the performance of well-recognized market indices such as the Russell 1000 Index (large U.S. companies), Russell 3000 Index (large & small U.S. companies) or MSCI World ex-US Investable Market Index (international companies). Passive investing typically has the lowest management costs. Additional savings can be realized when these portfolios are managed internally.

Active managers build a stock portfolio utilizing a wide variety of strategies for identifying companies believed to offer above-average prospects, i.e., those that can "beat the market." Regardless of the approach, all active managers share a common thread: they buy and sell securities selectively based on their evaluation of future events. Active investing, because of research and time requirements, tends to be more costly.

The SBA employs an active investment strategy where the probability of being paid for assuming the increased cost and risk of active investing is greatest. Conversely, where there is the least likelihood to outperform market indices, the SBA tends to passively invest and save management costs associated with active management. One of the SBA's historical strengths has been operating at a very low cost. The SBA's size and significant proportion of passive investments are contributors to the SBA's cost advantage.

Table 8 shows internal versus external management and the passive versus active management of the funds' resources.

Asset Class		Internal		External		Passive		Active	% of Total
Global Equity		45.8%		54.2%		48.2%		51.8%	54.8%
Fixed Income		65.2%		34.8%		43.5%		56.5%	18.8%
Cash & Cash Equivalents		100.0%		0.0%		9.1%		90.9%	1.2%
Real Estate		63.3%		36.7%		0.0%		100.0%	9.3%
Private Equity		1.1%		98.9%		0.0%		100.0%	7.3%
Strategic Investments		0.2%		99.8%		0.0%		100.0%	8.6%
Total Fund		44.6%		55.4%		34.7%		65.3%	100.0%
Asset Class	Inte	rnal (\$m)	Exte	rnal (\$m)	Pas	sive (\$m)	Ac	tive (\$m)	Total (\$m)
Global Equity	\$	40,977	\$	48,497	\$	43,085	\$	46,389	\$ 89,474
Fixed Income		20,027		10,689		13,375		17,340	30,715
Cash & Cash Equivalents		1,944		0		178		1,766	1,944
Real Estate		9,660		5,607		0		15,267	15,267
Private Equity		130		11,772		0		11,902	11,902
Strategic Investments		35		13,994		0		14,029	14,029
Total Fund	\$	72,773	\$	90,558	\$	56,637	\$	106,694	\$ 163,331

### **Portfolios by Asset Class**

The following tables show the beginning and ending market values for each individual Pension Plan portfolio, together with net contributions and transfers, and investment gain or loss. The portfolios are grouped into separate tables by asset class.

	FRS Pension Plan - Global Equity
TABLE 9:	Change in Market Value for Fiscal Year 2018-19

	Market Value	Net Contributions	Investment	Market Value
Account Name	6/30/2018	(Withdrawals)	Gain (Loss)	6/30/2019
Domestic Equities				
Active Large Cap:				
- AJO, LP \$	1,151,527,740	\$ 0 \$	\$ 31,215,028	\$ 1,182,742,769
- BMO US Large Cap Growth	1,198,162,568	(105,462,948)	110,883,331	1,203,582,952
- Quantitative Management Associates	1,097,929,370	0	19,635,221	1,117,564,591
- Smith Asset Management Large Cap Enhanced Active Small Cap:	1,319,735,321	(245,455,308)	87,663,709	1,161,943,722
- AQR R2000 Equity	188,132,458	(12,075,137)	(13,397,440)	162,659,881
- BMO US Small Cap Value	170,000,739	0	(12,160,936)	157,839,803
- Cortina Asset Management	200,177,948	(33,271,836)	(27,379)	166,878,733
- Delta	170,986,600	0	(10,737,039)	160,249,561
- Fisher Investments	192,703,609	(10,296,252)	(6,430,155)	175,977,202
- Los Angeles Capital	190,210,193	(5,030,503)	2,437,175	187,616,865
- Mondrian US Small Cap Equity	168,272,695	0	(3,812,355)	164,460,340
- PanAgora Asset Management	191,300,439	(5,283,311)	(9,446,231)	176,570,896
- Stephens Investment Management Group	232,791,899	(43,394,335)	19,989,408	209,386,972
- Vaughan Nelson Investment Management	189,430,877	(45,554,555)	877,482	190,308,359
Active Micro Cap:	103,430,077	0	077,402	130,300,333
- Acuitas	248,141,204	(58,540,801)	(13,911,777)	175,688,626
- Friess <sup>1</sup>	248,141,204	23,365,683	(13,311,777)	24,162,187
- Walthausen <sup>1</sup>	0	35,173,890	0	31,269,387
Passive:	U	33,173,690	U	31,209,367
- Avatar R1000 Index Fund	11 201 011 626	(166,641,600)	1 /22 250 700	1
	14,281,814,636		1,433,250,788	15,548,423,824
- Nova Portfolio	5,721,957,796 15,439,638,593	(53,055,200)	576,141,263	6,245,043,859
- Phoenix Portfolio	15,439,638,593	(2,355,937,393)	1,319,439,162	14,403,140,363
Other:	121 156	F FF7 40F	/F C71 11F\	7.440
- Domestic Equity Asset Class Transition - Global Equity Suspended Asset Account	121,156 1	5,557,405 0	(5,671,115) 19	7,446 20
Total Domestic Equities	42,353,035,840	(3,030,347,643)	3,525,938,159	42,845,518,356
	, , ,	, , , ,	, , ,	, , ,
Foreign Equities Developed Markets:				
- Acadian Asset Management	1 620 071 205	(40,000,000)	/E1 11/ 070\	1 520 056 517
- Acadian Asset Management - Alliance Bernstein	1,629,971,395	(40,000,000)	(51,114,878) (71,612,095)	1,538,856,517
	1,289,671,908	(15,000,000)	. , , , ,	1,218,059,814
- AQR Capital Management Small Cap	522,264,165	, , , , ,	(55,712,320)	451,551,845
- Artisan Partners - Ballie Gifford Overseas Limited	1,539,367,413	(200 500 110)	149,633,458	1,689,000,870
	1,553,284,865	(200,508,110)	(84,272,923)	1,268,503,833
- BlackRock Global Inv. Index Plus	3,934,506,834	(398,000,000)	56,275,327	3,592,782,161
- BlackRock Global Inv. Small Cap Strategy	1,394,605,178	(30,000,000)	(77,768,254)	1,286,836,924
- BlackRock Global Inv. World Ex-US	4,124,972,053	(733,666,977)	51,820,273	3,443,125,349
- BlackRock Global Inv. World Ex-US Alpha Tilts	1,593,223,770	(886)	13,230,822	1,606,453,706
- BlackRock Restructuring	_0	(2,509)	2,509	0
- Dimensional Fund Advisors	483,464,176	0	(53,524,990)	429,939,186
- Epoch Investment Partners <sup>2</sup>	91,014	(1,716)	(2,439)	86,859
- Fidelity Institutional <sup>2</sup>	421,112	(16,839)	(32,196)	372,077
- Foreign Equity Internal Active Tax Reclaim	1,222	(17,628)	17,598	1,192
- Franklin Templeton Small Cap <sup>2</sup>	1,777,218	(458,700)	(502,802)	815,716
- GMO	1,288,283,998	0	(25,810,017)	1,262,473,981
- Mondrian Investment Partners Small Cap	532,595,138	(75,000,000)	(11,842,292)	445,752,846
- Morgan Stanley Investment Management	1,713,488,924	(45,000,000)	67,799,525	1,736,288,448
- Numeric Investors <sup>1</sup>	0	348,204,994	(40,389,435)	307,815,560
- Principal Global Investors- FE	520,939,856	(55,000,000)	(27,609,200)	438,330,656
- Sprucegrove Investment Management	1,606,583,395	Ô	20,602,530	1,627,185,925
		(190,000,000)	(89,342,133)	1,335,748,879
- Templeton Investment Counsel LLC	1,013,091,012	(130,000,000)		1,555,770,675
•	1,615,091,012 457,939,475	(150,000,000)		
- Templeton Investment Counsel LLC - TS&W Florida Retirement System - Walter, Scott & Partners, Ltd.	457,939,475 1,657,600,141	, , , , , , , , , , , , , , , , , , , ,	(33,596,045) 176,786,526	424,343,430 1,889,765,295

Continued on next page

	Market Value	Net Contributions	Investment	
Account Name - continued	6/30/2018	(Withdrawals)	Gain (Loss)	6/30/2019
Emerging Markets:				
- Aberdeen Asset Management	895,721,635	(85,000,000)	94,756,289	905,477,924
-Acadian Asset Management Inc.	939,507,157	0	(3,764,080)	935,743,077
-AQR Capital Mgt. Emerging Markets Small Cap	271,931,430	0	(21,999,269)	249,932,161
- BlackRock Emerging Markets Index Plus	453,624,298	0	5,100,333	458,724,631
- Dimensional Fund Advisors EM	452,333,502	0	6,661,675	458,995,177
- Genesis Emerging Markets	925,091,301	0	50,397,605	975,488,906
- M&G Investment Management <sup>3</sup>	964,116,032	(918,999,493)	(45,113,645)	2,894
- Mondrian Investment Partners Ltd.	933,959,069	0	44,415,405	978,374,473
- Somerset Capital	941,414,082	0	40,740,830	982,154,912
- Sophus Capital <sup>1</sup>	0	781,784,754	90,395,100	872,179,853
- State Street Global Advisors	268,767,934	0	(11,395,701)	257,372,232
- Wellington Emerging Markets Small Cap <sup>1</sup>	0	201,330,741	740,728	202,071,469
- Wells Capital Management Emerging Markets	969,398,454	0	22,036,213	991,434,667
- William Blair & Company, LLC	860,304,448	0	(11,629,822)	848,674,626
- William Blair Emerging Markets Small Cap	269,292,458	0	(18,673,064)	250,619,393
<u>Frontier Markets</u> :				
- Aberdeen Frontier Markets	124,346,752	0	(15,637,239)	108,709,513
- First State Frontier Markets	120,930,054	0	(14,156,460)	106,773,594
- HSBC Global Frontier Markets	133,774,050	0	8,336,974	142,111,024
Total Foreign Equities	37,035,760,866	(1,429,973,740)	141,363,015	35,747,150,141
Dedicated Clabel Emily				
Dedicated Global Equities				
<u>Active</u> : - Epoch Investment Partners Global	904,266,475	116,178,109	73,880,383	1,094,324,967
- Franklin Templeton <sup>2</sup>	904,200,473	(63,220)	63,220	1,034,324,307
- Hexavest Inc.	862,330,218	(03,220)	47,102,735	909,432,952
- Intech Investment Management	1,752,345,697	(229,985,092)	103,706,267	1,626,066,873
- MFG Asset Management	963,860,699	(229,983,092)	150,506,072	1,114,366,771
- Schiehallion Fund <sup>1</sup>	0	190,873,717	33,433,798	224,307,515
- Schröders Investment Management	933,437,194	130,873,717	58,590,263	992,027,457
- Trilogy Global Advisors <sup>2</sup>	1,322,754	(523,518)	16,001	815,237
Passive:	1,522,754	(323,310)	10,001	013,237
- Atlas Portfolio	2,018,878,959	0	139,700,142	2,158,579,101
- Sinesis	904,776,771	0	45,463,286	950,240,057
Total Dedicated Global Equities	8,799,158,242	76,479,997	618,866,121	9,494,504,360
'	, , ,	, , , , ,	, ,	, , ,
Currency Overlay				
- CIBC Global Managed	(4,989,428)	(4,835,566)	8,343,115	(1,481,879)
- P/E Global Managed	(2,300,247)	(14,006,847)	11,494,234	(4,812,860)
- Quaesta Managed	7,912,039	(3,168,449)	(9,235,369)	(4,491,779)
- Record Managed	1,051,070	(3,665,138)	3,294,053	679,984
Total Currency Overlay	1,673,434	(25,676,000)	13,896,033	(10,106,533)
Other				
Other	20 012 057	(27 577 206)	0 662 450	8
- Cash Equitization Portfolio - Citigroup Global Transition	28,913,857	(37,577,306)	8,663,458 (6,380,754)	
- Global Equity Cash	349,913,151	(234,009,914)	4,008,649	109,522,483
' '	652,915	(3,802,139)	, ,	859,425
- Global Equitive Liquidity Portfolio	558	2,181,405	(2,181,938)	1 206 245 270
- Global Equity Policy Transition Portfolio	1,414,050,274	(201,631,094)	73,926,098	1,286,345,278
- Global Equity Policy Transition Portfolio 1	0	(1,870)	1,870	0
- Global Equity Policy Transition Portfolio 2	39	(80,814)	80,776	1
- Global Equity Policy Transition Portfolio 3,4	141 506	7 005 000	(7 202 517)	0 24.077
- Global Equity Transition Account 1 Total Other	141,506	7,095,088	(7,202,517)	34,077 1 396 761 396
Total Ottle	1,793,672,300	(467,826,645)	70,915,641	1,396,761,296
Total Global Equity \$	89,983,300,682	\$ (4,877,344,032)	\$ 4,370,978,969	\$ 89,473,827,619
· · · · · · · · · · · · · · · · · · ·	,,	, . , ,	. , , , , , , , , , , , , , , , , , , ,	, , , ,

 $<sup>^{\</sup>rm 1}\mbox{Account}$  opened during the fiscal year.

<sup>&</sup>lt;sup>2</sup> Strategy terminated in a prior fiscal year. Residual activity occurred in the current fiscal year.

<sup>&</sup>lt;sup>3</sup> Strategy terminated during the fiscal year. Remaining balances reflect residual activity.

 $<sup>^{\</sup>rm 4}\mbox{Account}$  inactive during the fiscal year.

 $<sup>\</sup>bullet$  Totals may not foot due to rounding.

TABLE 10:

# FRS Pension Plan - Fixed Income Change in Market Value for Fiscal Year 2018-19

Account Name	Market Value 6/30/2018	Net Contributions (Withdrawals)	Investment Gain (Loss)	Market Value 6/30/2019
Aggregate:				
- Active Core	6,104,755,086	\$ 0 9	\$ 424,297,130	\$ 6,529,052,216
- Amundi Pioneer Investments	2,908,698,012	0	197,963,901	3,106,661,91
- BlackRock Core Bond Enhanced Index	2,814,877,455	0	194,011,546	3,008,889,003
- Investment Grade AA Account	112,608,272	0	3,596,802	116,205,07
- Neuberger Berman Core	1,785,610,575	0	119,170,942	1,904,781,51
- Prudential Conservative Core	1,208,135,786	0	81,827,503	1,289,963,28
- Taplin, Canida & Habacht	1,290,718,038	0	87,653,271	1,378,371,30
Government/Corporate:				
- Fixed Income Gov't./Corp. Passive Account	8,369,019,030	(834,000,000)	557,462,655	8,092,481,68
Mortgage:				
- Fixed Income MBS Passive	4,212,559,378	(525,000,000)	264,371,002	3,951,930,38
Other:				
- Fixed Income Cash Expense Account	0	323,830	(323,830)	
- Fixed Income Liquidity Portfolio	1,255,050,317	0	75,458,483	1,330,508,80
- Fixed Income Transition <sup>1</sup>	0	0	0	
- Fixed Income Policy Transition <sup>1</sup>	0	0	0	
- Fixed Income Transition II <sup>1</sup>	0	0	0	
- STIPFRS Reserve Liquidation Fund	7,834,670	(3,016,072)	1,585,005	6,403,60
Total Fixed Income \$	30,069,866,619	\$ (1,361,692,242)	\$ 2,007,074,410	\$ 30,715,248,78

Numbers may not total due to rounding

Source: SBA

# **TABLE 11:**

# FRS Pension Plan - Private Equity Change in Market Value for Fiscal Year 2018-19

Account Name	Market Value 6/30/2018	Net Contributions (Withdrawals)	Investment Gain (Loss)	Market Value 6/30/2019
Partnerships:				
- ABRY Partners VII, L.P.2	\$ 28,940,596	\$ (29,442,239)	\$ 501,643	\$ 0
- ABRY Partners VIII, L.P.2	58,720,438	(66,011,539)	7,291,101	0
- Accel-KKR Capital Partners V, L.P.	12,430,894	9,851,840	1,025,990	23,308,723
- Accel-KKR Growth Capital Partners II, L.P.	10,441,352	4,164,505	2,313,044	16,918,901
- Advent International GPE VI	27,687,170	(17,284,160)	821,236	11,224,246
- Advent International GPE VII, L.P.	97,148,584	(23,588,330)	9,225,218	82,785,471
- Advent International GPE VIII, L.P.	76,758,700	52,425,000	16,655,331	145,839,031
- American Industrial Partners Capital Fund V	I, L.P. 29,831,115	15,268,019	3,389,647	48,488,781
- Apax VIII, L.P. <sup>2</sup>	176,894,470	(196,720,742)	19,826,272	0
- Apollo Investment Fund VIII, L.P.	175,857,117	(16,374)	(3,103,851)	172,736,892
- Apollo Investment Fund IX, L.P.	0	19,142,643	(3,258,335)	15,884,308
- Ardian LBO Fund VI, L.P.	49,404,380	28,531,796	6,944,178	84,880,353
- Ares Corporate Opportunities Fund III, L.P.	97,179,172	(24,502,628)	(5,921,178)	66,755,365
- Ares Corporate Opportunities Fund IV, L.P.	186,462,849	(1,085,895)	501,220	185,878,174
- Ares Corporate Opportunities Fund V, L.P.	61,855,113	64,759,350	6,955,076	133,569,539
- ASF VI, L.P.	93,579,225	(10,721,610)	9,389,419	92,247,034
- ASF VII, L.P.	52,134,103	(360,293)	4,442,969	56,216,779
- ASF VIII, L.P. <sup>1</sup>	0	20,000	675,824	695,824
- Asia Alternatives FL Investor, L.P.	169,123,875	8,501,194	28,587,068	206,212,137
- Asia Alternatives FL Investor II, LLC	6,711,956	45,548,546	(1,218,694)	51,041,808
- Atlas Capital Resources II, L.P.	12,185,398	(2,220,384)	6,020,972	15,985,986
- Atlas Capital Resources III, L.P. <sup>1</sup>	0	4,913,061	(536,281)	4,376,780
- AXA LBO Fund V, L.P.	54,896,020	(28,692,181)	10,195,019	36,398,859
- AXA Secondary Fund V, L.P.	19,741,735	(3,889,931)	(816,513)	15,035,291
- Berkshire Fund VIII, L.P. <sup>2</sup>	30,866,265	(46,620,887)	15,754,622	0
- Berkshire Fund IX, L.P. <sup>2</sup>	37,417,111	(50,479,462)	13,062,351	0
- Blackstone Capital Partners VI, L.P.	197,690,542	(43,781,769)	22,180,266	176,089,039

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Balestone Capital Partners VII, LP.	Account Name - continued	Market Value 6/30/2018	Net Contributions (Withdrawals)	Investment Gain (Loss)	Market Value 6/30/2019
- Carlyle Ania Crowth Farthers N, L.P. 1,943,633 (175,616) (210,260) 1,557,757 (-arlyle Partners V), L.P. 1,943,633 (175,616) (210,260) 1,557,757 (-arlyle Partners V), L.P. 1,943,633 (175,616) (210,260) 1,557,757 (-arlyle Partners V), L.P. 1,943,633 (175,616) (201,260) 1,255,757 (-arlyle Partners V), L.P. 1,943,633 (175,616) (201,260) 1,235,933 (175,192,111) 1,185,1152 (-arrelian Energy Capital II, L.P. 6,616,777 (175,616) 1,296,0992) 1,099,950 (23,337,229) 1,233,933 14,789,222 (-Charlesbank Equity Fund VII, L.P. 75,272,827 (32,405,122) (18,951,315) 1,273,128 (175,128) 1,273,128	Account Name - Continued	0/30/2018	(withtialawais)	Gaill (LOSS)	0/30/2019
- Carlyke Partners W, L.P Carlyke Partners VI, L.P Carlesbank Equity Fund VII, L.P Carlesbank Equity Fund VIII, L.P Charlesbank Tund IX Overage Allocation Program - Ge28,834 - Cortec Group VI, L.P Cortec Group Cortec Group	- Blackstone Capital Partners VII, L.P.	48,562,522	48,684,771	14,738,617	111,985,910
- Carriyle Partners VII, L.P.	- Carlyle Asia Growth Partners IV, L.P.	30,685,155	(5,076,457)	(6,695,006)	18,913,692
- Carriellam Fenery Capital IL, P. 6,616,777	- Carlyle Partners IV, L.P.	1,943,633	(175,616)	(210,260)	1,557,757
- Carnelian Energy Capital II, L.P. 6,616,777 (5,936,512 1,235,933 14,789,222 Charlesbank Equity Fund VIII, L.P. 73,377,877 (37,030) (19,860) 922) (10,694,920) (3,372,29) Charlesbank Equity Fund VIII, L.P. 73,377,877 (37,030) (19,80) 922) (10,694,920) (3,372,29) Charlesbank Equity Fund VIII, L.P. 73,377,877 (37,037) (23,037,712) (1,619,1381) (1,279,178) (1,619,1381) (1,279,178) (1,619,1381) (1,279,178) (1,619,1381) (1,279,178) (1,619,1381) (1,	· · · · · · · · · · · · · · · · · · ·	185,054,635			
- Charlesbank Equify Fund Wil, L.P. 32,503,301 (19,860,992) (10,694,920) (23,337,229) (26,1421,1421,1421,1421,1421,1421,1421,14					
- Charlesbank Equity Fund Wil, L.P. (257,073) (23,037,172) (1691,381) (1791,791,784) (1691,381) (1791,791,784) (1691,381) (1791,791,784) (1691,381) (1791,791,784) (1691,381) (1791,791,784) (1691,381) (1791,791,784) (1691,381) (1791,791,784) (1691,381) (1691,381) (1691,391,791,791,791,791,791,791,791,791,791,7					
- Charlesbank Equity Fund IX, L.P Charlesbank Equity Fund IX, L.P Charlesbank Fund IX Overage Allocation Program - 6,529,834 - Cortec Group V, L.P 167,674,955 - Cortec Group V, L.P 33,341,149 - 20,338,141 - 20,380,540 - 20,380,	. , , , , , , , , , , , , , , , , , , ,				
- Cortex Group V, L.P Cressey & Company Fund V, L.P Cressey & Company Overage Fund V, L.P 74, 217, 675 - (1,039,637) - CVC Capital Partners VII, L.P (954,050) - CVC Garbal Partners VIII, L.P (9				· · · · · · · · · · · · · · · · · · ·	
-Cortee Group VI, LP. 167,674,955 (64,037,952) 4,103,614 107,740,617   -Cortee Group VI, LP. 33,341,149 20,303,814 3,884,314   -Corsesy & Company Fund VI, LP. 36,348,873 (15,309,401) 3,115,270 24,154,742   -Cressey & Company Fund VI, LP. 76,558,333 (16,606,046) 1,47,05,012 20,486,058   -Cressey & Company Fund VI, LP. 0 2,803,600 (16,642,002) 20,438,058   -Cressey & Company Fund VI, LP. 74,217,675 (1,039,637) 15,244,971 88,443,008   -CVC Capital Partners VI, LP. 29,574,198 (26,165,482) 15,337,629 18,846,346   -CVC Capital Partners VI, LP. 29,574,198 (26,165,482) 15,337,629 18,846,346   -DCPF VI Oil and Gas Cinwestment Fund, LP. 39,729,240 (4,677,640) 4,104,859 39,156,459   -Denham Commodity Partners Fund VI, LP. 79,714,668 13,886,474 (367,570) 76,533,859   -Denham Commodity Partners Fund VI, LP. 23,575,960 (1,664,612) 43,723,955   -EnCap Energy Capital Fund VIII, LP. 79,792,774 (6,878,379) 4,218,490 (1,664,612) 24,487,134   -EnCap Energy Capital Fund VII, LP. 70,972,774 (6,833,793) 4,183,877 86,000,493   -EnCap Energy Capital Fund VII, LP. 12,669,934 19,105,115 2,652,842 41,027,891   -EnCap Energy Capital Fund VII, LP. 12,269,934 19,105,115 2,652,842 41,027,891   -EnCap Energy Capital Fund WII, LP. 12,269,934 19,105,115 2,652,842 41,027,891   -EnCap Energy Capital Pund WII, LP. 12,269,934 19,105,115 2,652,842 41,027,891   -EnCap Energy Capital Pund WII, LP. 12,269,934 19,105,115 2,652,842 41,027,891   -EnCap Energy Capital Pund WII, LP. 12,269,934 19,105,115 2,652,842 41,027,891   -Encap Enterck Midstream Fund III, LP. 13,269,934 19,105,115 2,652,842 41,027,891   -Encap Enterck Midstream Fund VII, LP. 2,399,421 16,434,092 1,366,657 13,465,797   -Encap Enterck Midstream Fund VII, LP. 2,399,421 16,434,092 1,366,657 13,466,797   -Encap Enterck Midstream Fund VII, LP. 2,399,421 16,434,092 1,366,657 13,466,797   -Encap Enterck Midstream Fund VII, LP. 2,391,431 (1,393,305) (3,395,494) (3,395,494) (3,205,488) (3,395,494) (3,205,488) (3,395,494) (3,205,488) (3,205,488) (3,205,488) (3,205,488) (3,205,488) (3,205,488) (3,					
- Cortec Group VI, L.P Cressey & Company Fund IV, L.P Cressey & Company Fund VI, L.P Cressey & Company Pund IV, L.P Cressey & Company Pund IV, L.P CVC Capital Partners VII, L.P (954, 050) - CVC Capital Partners VIII, L.P (954, 050) - CVC Capital Partners VIII, L.P (954, 050) - Denham Commodity Partners Fund VII, L.P (954, 050) - Denham Commodity Partners Fund VII, L.P (954, 050) - Denham Commodity Partners Fund VII, L.P (954, 050) - Encipa Energy Capital Fund VII, L.P (954, 050) - Encipa Energy Capital Fund VII, L.P (954, 050) - Encipa Energy Capital Fund VII, L.P (954, 050) - Encipa Energy Capital Fund VII, L.P (954, 050) - Encipa Energy Capital Fund VII, L.P (954, 050) - Encipa Energy Capital Fund VIII, L.P (954, 050) - Encipa Energy Capital Fund VIII, L.P (954, 050) - Encipa Energy Capital Fund VIII, L.P (954, 050) - Encipa Energy Capital Fund VIII, L.P (954, 050) - Encipa Energy Capital Fund VIII, L.P (954, 050) - Encipa Energy Capital Fund VIII, L.P (954, 050) - Encipa Energy Endial Partners III, L.P (954, 050) - Energy Capital Partner III, L.P (954, 050) - Energy Capita					
- Cressey & Company Fund IV, L.P.	· · ·				
- Cressey & Company Fund VI, LP					
- Cressey & Company Fund VI, LP1					
- Cressey & Company Overage Fund VI, L.P CVC Capital Partners VI, L.P CVC Capital Partners VI, L.P (954,050) - CVC Capital Partners VI, L.P (954,050) - CVC Curponan Equity Partners VI, L.P (954,050) - CVC European Equity Partners VI, L.P 29,674,198 - CVC European Equity Partners VI, L.P 21,575,786 - Denham Oil & Gas Investment Fund, L.P 48,832,176 - CVC European VIII, L.P 21,575,960 - CVC European VIII, L.P 21,599,421 - Encap Energy Capital Fund XI, L.P 21,599,421 - Encap Energy Capital Fund XI, L.P 21,599,421 - Encap Energy Capital Fund XI, L.P 21,599,421 - Encap Energy European Fund IV, L.P 21,500,421 - Energy European Fund VIII, L.P 21,600,421 - Englistone Partners Europee Fund VIII, L.P 21,600,422 - Energy European					, , , , , , , , , , , , , , , , , , ,
-CVC Capital Partners VI, L.P. (95,4050) 1,75,94,945 5,458,113 22,053,558 CVC European Equity Partners V, L.P. (95,4050) 1,75,94,945 5,458,113 22,053,558 CVC European Equity Partners V, L.P. (95,4050) 1,75,94,945 5,458,113 22,053,558 CVC European Equity Partners Fund L.P. (97,4198 (26,165,482) 15,337,629 18,846,346 9,000 1					
- CVC Capital Partners VII, L.P.		74,217,675			
- CVC European Equity Partners V, L.P DCPF VI Oil and Gas Convestment Fund, L.P DCPF VI Oil and Gas Convestment Fund, L.P Denham Commodity Partners Fund VI, L.P Partner Very Capital Fund VII, L.P Partner Very Capital Fund VIII, L.P Partner Very Capital Fund X, L.P Partner Very Capital Fu					
- Denham Commodity Partners Fund, I.P. 46,832,176 - Denham Oil & Gas Investment Fund, L.P. 46,832,176 - EnCap Energy Capital Fund VIII, L.P. 23,575,960 - EnCap Energy Capital Fund VIII, L.P. 54,077,136 - EnCap Energy Capital Fund XI, L.P. 70,972,774 - EnCap Energy Capital Fund XI, L.P. 19,269,934 - EnCap Energy Capital Fund XI, L.P. 19,269,934 - EnCap Flatrock Midstream Fund III, L.P. 19,269,934 - EnCap Flatrock Midstream Fund III, L.P. 19,269,934 - EnCap Flatrock Midstream Fund III, L.P. 19,399,421 - Energy Ray Minerals Group Fund III, L.P. 68,337,484 - Energy Capital Partners III, L.P. 19,303,335,675 - Energy Capital Partners III, L.P. 147,009,291 - Energy Capital Partners III, L.P. 147,009,291 - Enery Septimal Mil-A, L.P. 201,612 -	- CVC European Equity Partners V, L.P.	29,674,198			
- Denham Oil & Gas Investment Fund, L.P. 23,575,960 (1,64,612) 24,487,134   - EnCap Energy Capital Fund VII, L.P. 23,575,960 (1,64,612) 24,487,134   - EnCap Energy Capital Fund X, L.P. 54,077,136 (7,893,779) 4,218,490 50,401,847   - EnCap Energy Capital Fund X, L.P. 66,67,757 9,815,849 (1,663,553) 14,820,053   - EnCap Flatrock Midstream Fund III, L.P. 19,269,934 19,105,115 2,652,842 41,027,891   - EnCap Flatrock Midstream Fund III, L.P. 29,769,934 19,105,115 2,652,842 41,027,891   - Encap Flatrock Midstream Fund III, L.P. 30,355,675 (9),912,863 (8,911,292) 12,411,520   - Energy Capital Partners III, L.P. 30,355,675 (9),912,863 (8,911,292) 12,411,520   - Energy Capital Partners III, L.P. 147,009,791 (24,481,170) 12,958,676 135,486,797   - Energy Capital Partners III, L.P. 201,612 0 64,216 265,828   - Energy Capital Partners III, L.P. 74,266,823 (3,894,784) (4,491,321) 65,880,719   - Equistone Partners Europe Fund V, L.P. 74,266,823 (3,894,784) (4,491,321) 65,880,719   - Equistone Partners Europe Fund V, L.P. 89,225,143 7,412,320 (2,447,523) 14,189,940   - Fairview Special Opportunities Fund II, L.P. 9,225,143 7,412,330 (2,447,523) 14,189,940   - Fairview Ventures Fund III, L.P. 61,309,948 15,564,822 17,726,135 94,100,905   - Fairview Ventures Fund III, L.P. 5405,309 (2,490,470) 1,980,546 4,895,385   - Fairview Ventures Fund III, L.P. 9,5405,309 (2,490,470) 1,980,546 4,895,385   - First Reserve Fund XII, L.P. 9,5405,309 (2,490,470) 1,980,546 4,895,385   - First Reserve Fund XII, L.P. 9,759,1392 (3,995,648) 29,772,25 39,906,873   - Francisco Partners III, L.P. 9,759,1392 (3,995,648) 29,772,39 3,906,873   - Francisco Partners VII, L.P. 9,759,1392 (3,995,648) 29,772,39 3,936,626   - Francisco Partners Will, L.P. 9,759,1392 (3,995,648) 9,972,23 3,936,626   - Francisco Partners VIII, L.P. 9,759,1392 (3,995,648) 9,972,23 3,936,626   - Francisco Partners Will, L.P. 9,759,1392 (3,995,650) 7,860,505 3,897,609   - Francisco Partners Will, L.P. 9,769,1392 (3,995,650) 9,924,811 (3,995,656   - Francisco Partners Will, L.P. 9,	- DCPF VI Oil and Gas Coinvestment Fund, L.P.	39,729,240	(4,677,640)	4,104,859	39,156,459
- EnCap Energy Capital Fund VII, L.P.	- Denham Commodity Partners Fund VI, L.P.	73,014,681	3,886,474	(367,570)	76,533,585
- EnCap Energy Capital Fund IX, L.P. 70,972,774 6,893,779 4,218,490 50,401,847 - EnCap Energy Capital Fund X, L.P. 70,972,774 6,893,943 8,183,775 86,050,493 - EnCap Energy Capital Fund XI, L.P. 19,269,934 19,105,115 2,652,842 41,027,891 - EnCap Flatrock Midstream Fund III, L.P. 19,269,934 19,105,115 2,652,842 41,027,891 - EnCap Flatrock Midstream Fund III, L.P. 19,269,934 110,105,115 2,652,842 41,027,891 - EnCap Flatrock Midstream Fund III, L.P. 18,303,5675 (19,012,863) (1,192) 1,2411,520 - Energy Capital Partners III, L.P. 147,009,291 (24,481,170) 12,958,676 135,486,797 - Energy Capital Partners III, L.P. 147,009,291 (24,481,170) 12,958,676 135,486,797 - Enerey State Energy Fund XII-A, L.P. 93,210,917 (27,421,857) 5,853,178 71,642,238 - Equistone Partners Europe Fund XII-A, L.P. 93,210,917 (27,421,857) 5,853,178 71,642,238 - Equistone Partners Europe Fund XII-B, 147,944) 15,580,873 (732,165) 14,702,754 - European Private Equity Opportunities I, L.P. 9,225,143 7,412,320 (2,447,523) 14,189,940 - Fairview Special Opportunities Fund II, L.P. 61,309,948 15,064,822 17,726,135 94,100,905 - Fairview Special Opportunities Fund II, L.P. 81,803,881 (15,574,930) (3,205,458) 0 - Fairview Ventures Fund III, L.P. 54,053,099,481 (15,574,930) (3,205,458) 0 - Fairview Ventures Fund III, L.P. 54,053,099,481 (15,574,930) (3,205,458) 0 - Fairview Ventures Fund III, L.P. 54,053,099,481 (15,574,930) (3,205,458) 0 - Fairview Ventures Fund III, L.P. 54,053,099,481 (15,574,930) (3,205,458) 0 - Fairview Operator Fund XII, L.P. 9,759,1392 (39,563,648) 2,977,235 (39,506,873) - Francisco Partners III, L.P. 9,759,1392 (39,563,648) 2,977,235 (39,506,873) - Francisco Partners III, L.P. 9,759,1392 (39,563,648) 2,977,235 (39,506,875) 9,394,666 (37,578,578) 9,394,666 (37,578,578) 9,394,666 (37,578,578) 9,394,666 (37,578,578) 9,394,666 (37,578,578) 9,394,666 (37,578,578) 9,394,666 (37,578,578) 9,394,666 (37,578,578) 9,394,666 (37,578,578) 9,394,666 (38,578,578) 9,394,666 (38,578,578) 9,394,666 (38,578,578) 9,394,666 (38,578,578) 9,394,666 (38,578	- Denham Oil & Gas Investment Fund, L.P.	46,832,176		5,672,223	
- EnCap Energy Capital Fund X, L.P.					, ,
- EnCap Energy Capital Fund XI, L.P EnCap Flatrock Midstream Fund III, L.P 19,269,934 - 10,105,115 - 2,652,842 - 20,605,138 - Encap Flatrock Midstream Fund IV, L.P 2,399,421 - 16,343,092 - 1,362,624 - 20,605,138 - Energy Capital Partners III, L.P 30,335,675 - (9,012,863) - (9,911,263					
- EnCap Flatrock Midstream Fund III, L.P.				, , , , , , , , , , , , , , , , , , ,	
- Enicap Flatrock Midstream Fund IV, L.P.					, ,
- Energy & Minerals Group Fund III, L.P.					
- Energy Capital Partners II, L.P.					
- Energy Capital Partners III, L.P. 147,009,291 (24,481,170) 12,958,676 135,486,797   - EnerVest Energy Fund XII-A, L.P. 201,612 0 64,216 265,828   - EnerVest Energy Institutional Fund XIV-A, L.P. 93,210,917 (27,421,857) 5,853,178 71,642,238   - Equistone Partners Europe Fund V, L.P. 74,266,823 (3,894,784) (4,491,321) 65,880,719   - Equistone Partners Europe Fund V, L.P. (145,944) 15,580,873 (732,165) 14,702,764   - European Private Equity Opportunities I, L.P. 9,225,143 7,412,320 (2,447,523) 14,189,940   - Fairview Special Opportunities Fund, L.P. 278,189,146 (40,774,887) 75,583,563 313,267,822   - Fairview Special Opportunities Fund II, L.P. 61,309,948 15,064,822 17,726,135 94,100,905   - Fairview Ventures Fund III, L.P. 18,80,388 (15,574,930) (3,205,458) 0   - Fairview Ventures Fund III, L.P. 5,405,309 (2,490,470) (12,759,268) 0   - Fairview Ventures Fund XI, L.P. 44,559,445 (3,999,4419) (12,759,268) 0   - First Reserve Fund XI, L.P. 44,559,445 (3,999,449) (12,759,268) 0   - First Reserve Fund XII, L.P. 44,559,445 (3,999,449) (10,925,194 33,990,6873   - Francisco Partners IVI L.P. 97,591,392 (39,563,648) 29,672,235 87,699,979   - Francisco Partners IVI L.P. 99,406,25 (27,937,946 2,284,179 40,162,750   - FS Equity Partners VI, L.P. 99,406,25 (27,937,946 2,284,179 40,162,750   - FS Equity Partners VII, L.P. 69,393,645 (23,798,909) 7,860,505 36,419,894   - FO Sequity Partners VIII, L.P. 69,393,645 (25,85,037) 17,148,380 183,162,823   - Grove Street Partners Buyouts II, LLC 172,272,480 (6,258,037) 17,148,380 183,162,823   - Grove Street Partners Ventures, II, L.C 287,074,852 (41,430,817) 67,242,975 312,887,010   - Grove Street Partners Ventures III, L.P. 190,501,217 75,491 30,148,653 221,404,784   - Hellman & Friedman Capital Partners VII, L.P. 190,501,217 75,491 30,148,653 221,404,784   - Hellman & Friedman Capital Partners VII, L.P. 190,501,217 75,491 30,148,653 221,404,784   - Hellman & Friedman Capital Partners VIII, L.P. 190,501,217 75,491 30,148,653 221,404,784   - Hellman & Friedman Capital Partners VIII,					
- EnerVest Energy Fund XII-A, L.P EnerVest Energy Institutional Fund XIV-A, L.P Equistone Partners Europe Fund V, L.P European Private Equity Opportunities I, L.P European Private Equity Opportunities I, L.P European Private Equity Opportunities I, L.P P9.225,143 - Fairview Special Opportunities Fund, L.P Fairview Special Opportunities Fund II, L.P Fairview Ventures Fund III, L.P 5,405,309 - First Reserve Fund XII, L.P 5,405,309 - First Reserve Fund XII, L.P 5,6628,706 - First Reserve Fund XII, L.P 97,591,392 - Francisco Partners IV, L.P 97,591,392 - Francisco Partners IV, L.P 99,40,625 - Francisco Partners VI, L.P 99,40,625 - FS Equity Partners VI, L.P 99,40,625 - FS Equity Partners VII, L.P 99,40,625 - FS Equity Partners VII, L.P 99,40,625 - FS Equity Partners VII, L.P 99,40,625 - Grove Street Partners Buyouts II, L.C - 52,358,298 - Grove Street Partners Buyouts II, L.C - 172,272,480 - Grove Street Partners Buyouts II, L.C - 172,272,480 - Grove Street Partners Buyouts II, L.C - 285,544,085 - Grove Street Partners Ventures, II, L.P 99,204 - GS Partners Ventures III, L.P 190,501,217 - Grove Street Partners Ventures II, L.P 190,501,217 - Grove Street Partners Ventures II, L.P 190,501,217 - Grove Street Partners Ventures III, L.P 190,501,217 - Grove Street Partners Ven					
- Enerviest Energy Institutional Fund XIV-A, L.P.					
Equistone Partners Europe Fund V, L.P. 74,266,823 (3,84,784) (4,491,321) 65,880,719 Equistone Partners Europe Fund VI, L.P. (145,944) 15,580,873 (732,165) 14,702,764 European Private Equity Opportunities I, L.P. 9,225,143 7,412,320 (2,447,523) 14,189,940 Fairview Special Opportunities Fund, L.P. 278,189,146 (40,774,887) 75,853,563 313,267,822 Fairview Special Opportunities Fund II, L.P. 61,309,948 15,064,822 17,726,135 94,100,905 Fairview Ventures Fund III, L.P. 18,780,388 (15,574,930) (3,205,458) 0 Fairview Ventures Fund III, L.P. 5,405,309 (2,490,470) (12,759,268) 0 Fair Reserve Fund XI, L.P. 5,405,309 (2,490,470) 1,980,546 4,895,385 First Reserve Fund XII, L.P. 56,628,706 (13,961,692) 10,925,194 53,592,208 Francisco Partners III, L.P. 97,591,392 (39,563,648) 29,672,235 87,699,979 Francisco Partners V, L.P. 97,591,392 (39,563,648) 29,672,235 87,699,979 Francisco Partners VI, L.P. 91,555,473 (21,235,620) (13,186,213) 57,133,640 FS Equity Partners VIII, L.P. 69,393,645 25,167,412 10,159,280 104,720,337 FS Equity Partners Will, L.P. 69,393,645 25,167,412 10,159,280 104,720,337 FS Equity Partners Buyouts II, LLC 52,358,298 (23,798,909) 7,860,505 36,419,894 Grove Street Partners Buyouts II, LLC 172,272,480 (6,258,037) 17,148,380 183,162,823 Grove Street Partners Ventures, II, L.C 287,074,852 (41,430,817) 67,242,975 312,887,010 GS Partners Ventures III, L.P. 190,501,217 754,914 30,148,653 221,404,784 Hellman & Friedman Capital Partners VII, L.P. 299,304 (1,091,628) 99,324 Hellman & Friedman Capital Partners VII, L.P. 299,304 (1,091,628) 99,324 Hellman & Friedman Capital Partners VII, L.P. 299,305 (1,514,279) 1,784,615 38,229,528 Hellman & Friedman Capital Partners VII, L.P. 7,689,817 4,349,719 1,795,656 13,835,192 Hellman & Friedman Capital Partners IVI, L.P. 7,689,817 4,349,719 1,795,656 13,835,192 Hellman & Friedman Capital Partners IVI, L.P. 7,689,817 4,349,719 1,795,656 13,835,192 Hellman & Friedman Capital Partners IVI, L.P. 7,689,817 4,349,719 1,795,656 13,835,192 Hellman & Friedman Capital Fund I, L.P. 17,65		,			
Equistone Partners Europee Fund VI, L.P. European Private Equity Opportunities I, L.P. 9,225,143 7,412,320 (2,447,523) 14,189,940 Fairview Special Opportunities Fund, L.P. 278,189,146 (40,774,887) 75,853,563 313,267,822 Fairview Special Opportunities Fund II, L.P. 61,309,948 15,064,822 17,726,135 94,100,905 Fairview Ventures Fund III, L.P. 61,309,948 15,574,930) (3,205,458) 0 Fairview Ventures Fund III, L.P. 63,753,687 (50,994,419) First Reserve Fund XI, L.P. 5,405,309 (2,490,470) 1,980,546 4,895,385 First Reserve Fund XI, L.P. 97,591,392 Francisco Partners III, L.P. 97,591,392 Francisco Partners IV, L.P. 97,591,392 Francisco Partners VI, L.P. 99,940,625 27,937,946 2,284,179 40,162,750 FS Equity Partners VII, L.P. 69,393,645 FS Equity Partners VIII, L.P. 69,393,645 Grove Street Partners Buyouts ILC 172,272,480 Grove Street Partners Buyouts II, LLC 172,272,480 Grove Street Partners Ventures, ILC2 85,544,085 Grove Street Partners Ventures, ILC2 85,544,085 Grove Street Partners Ventures, ILC2 85,544,085 Grove Street Partners Ventures, ILC2 85,640,85 Hellman & Friedman Capital Partners VII, L.P. 99,304 Hellman & Friedman Capital Partners VII, L.P. 190,501,217 754,914 30,148,653 221,404,784 Hellman & Friedman Capital Partners VII, L.P. 190,501,217 754,914 30,148,653 321,404,784 Hellman & Friedman Capital Partners VII, L.P. 190,501,217 754,914 30,148,653 321,404,784 Hellman & Friedman Capital Partners VII, L.P. 190,501,217 754,914 30,148,653 321,404,784 Hellman & Friedman Capital Partners VII, L.P. 190,501,217 754,914 30,148,653 321,404,784 Hellman & Friedman Capital Partners VII, L.P. 190,501,217 754,914 30,148,653 321,404,784 Hellman & Friedman Capital Partners VII, L.P. 190,501,217 754,914 30,148,653 321,404,784 Hellman & Friedman Capital Partners VII, L.P. 190,501,217 754,914 30,148,653 321,404,784 Hellman & Friedman Capital Partners VII, L.P. 190,501,217 754,914 30,148,653 321,404,784 Hellman & Friedman Capital Partners VII, L.P. 190,501,217 754,914 30,148,653 321,404,784 40,127,502 40,625 41,430,817 41,430,817					
European Private Equity Opportunities I, L.P. 9,225,143 7,412,320 (2,447,523) 14,189,940 Fairview Special Opportunities Fund, L.P. 278,189,146 (40,774,887) 75,853,563 313,267,822 Fairview Special Opportunities Fund II, L.P. 61,309,948 15,064,822 17,726,135 94,100,905 Fairview Ventures Fund II, L.P. 18,780,388 (15,574,930) (3,205,458) 0 Fairview Ventures Fund III, L.P. 63,6308 (15,574,930) (12,759,268) 0 Fairview Ventures Fund III, L.P. 54,05,309 (2,490,470) 1,980,546 4,895,385 First Reserve Fund XII, L.P. 54,05,309 (2,490,470) 1,980,546 4,895,385 First Reserve Fund XII, L.P. 56,628,706 (13,961,692) 10,925,194 53,592,208 Francisco Partners III, L.P. 97,591,392 (39,563,648) 29,672,235 87,699,979 Francisco Partners V, L.P. 99,406,625 27,937,946 2,284,179 40,162,750 FS Equity Partners VI, L.P. 91,555,473 (21,235,620) (13,186,131) 57,133,640 FS Equity Partners VII, L.P. 69,393,645 25,167,412 10,159,280 104,720,337 FS Equity Partners VIII, L.P. 0 9,924,381 (529,755) 9,394,626 Grove Street Partners Buyouts II, LLC 172,272,480 (6,258,037) 17,148,380 183,162,823 Grove Street Partners Ventures III, LLC 287,074,852 (41,430,817) 67,242,975 312,887,010 Grove Street Partners Ventures III, L.P. 190,501,217 754,914 30,148,653 221,404,784 Hellman & Friedman Capital Partners VII, L.P. 299,304 (1,091,628) 99,324 0 (2,09,237) Friedman Capital Partners VIII, L.P. 299,304 (1,091,628) 99,324 0 (2,09,237) Friedman Capital Partners VIII, L.P. 299,174,587 (59,505,590) 63,857,694 263,526,691 Findixion Buyout Fund IV, L.P. 37,959,192 (1,514,279) 1,784,615 38,229,528 Findixion Enterprise Fund IV, L.P. 17,633,053 (1,520,509) 2,084,807 18,257,351 Finsight Venture Partners III, L.P. 105,356,962 (58,607,968) 2,4111,443 70,860,437 Finsight Venture Partners III, L.P. 105,356,962 (58,607,968) 2,4111,443 70,860,437 Finsight Venture Partners III, L.P. 105,356,962 (58,607,968) 2,4111,443 70,860,437 Finsight Venture Partners III, L.P. 105,356,962 (58,607,968) 2,4111,443 70,860,437 Finsight Venture Partners III, L.P. 105,366,962 (58,607,968) 2,4111,44					
Fairview Special Opportunities Fund, L.P. 278,189,146 (40,774,887) 75,853,563 313,267,822 Fairview Special Opportunities Fund II, L.P. 61,309,948 15,064,822 17,726,135 94,100,905 Fairview Ventures Fund II, L.P. 18,780,388 (15,574,930) (3,205,458) 0 Fairview Ventures Fund III, L.P. 63,753,687 (50,994,419) (12,759,268) 0 Fairview Ventures Fund III, L.P. 5,405,309 (2,490,470) 1,980,546 4,895,385 First Reserve Fund XI, L.P. 5,405,309 (2,490,470) 1,980,546 4,895,385 First Reserve Fund XI, L.P. 56,628,706 (13,961,692) 10,925,194 53,592,208 Francisco Partners III, L.P. 97,591,392 (39,563,648) 29,672,235 87,699,979 Francisco Partners V, L.P. 97,591,392 (39,563,648) 29,672,235 87,699,979 FS Equity Partners VI, L.P. 91,555,473 (21,235,620) (13,186,213) 57,133,640 FS Equity Partners VII, L.P. 91,555,473 (21,235,620) (13,186,213) 57,133,640 FS Equity Partners VIII, L.P. 69,393,645 25,167,412 10,159,280 104,720,337 FS Equity Partners Buyouts LLC 52,358,298 (23,798,909) 7,860,505 36,419,894 Grove Street Partners Buyouts II, LLC 172,272,480 (6,258,037) 17,148,380 183,162,823 Grove Street Partners Ventures II, LLC 287,074,852 (41,430,817) 67,242,975 312,887,010 GS Partners Ventures III, L.P. 190,501,217 754,914 30,148,653 221,404,784 Hellman & Friedman Capital Partners V, L.P. 992,304 (1,091,628) 99,324 DHIlman & Friedman Capital Partners V, L.P. 190,501,217 754,914 30,148,653 221,404,784 Hellman & Friedman Capital Partners VIII, L.P. 299,174,587 (59,505,590) 63,857,694 263,526,691 Hellman & Friedman Capital Partners VIII, L.P. 299,174,587 (59,505,590) 63,857,694 263,526,691 Hellman & Friedman Capital Partners VII, L.P. 37,959,192 (1,514,279) 1,784,615 38,229,528 Inflexion Partners Fund IV, L.P. 37,959,192 (1,514,279) 1,784,615 38,229,528 Inflexion Partners Fund IV, L.P. 37,959,192 (1,514,279) 1,784,615 38,229,528 Inflexion Partners III, L.P. 105,356,962 (58,607,968) 2,4111,443 70,860,337 (1,502,507) 1,002,337 (1,502,507) 1,002,337 (1,502,507) 1,002,337 (1,502,507) 1,002,337 (1,502,507) 1,002,337 (1,502,507) 1,002,337 (1,502,5	•				
- Fairview Ventures Fund III, L.P.2 18,780,388 (15,574,930) (3,205,458) 0 - Fairview Ventures Fund III, L.P.2 63,753,687 (50,994,419) (12,759,268) 0 - First Reserve Fund XII, L.P. 5,405,309 (2,490,470) 1,980,546 4,895,385 - First Reserve Fund XII, L.P. 44,559,445 3,099,048 (8,597,620) 39,060,873 - Francisco Partners III, L.P. 56,628,706 (13,961,692) 10,925,194 53,592,208 - Francisco Partners IV, L.P. 97,591,392 (39,563,648) 29,672,235 87,699,979 - Francisco Partners VI, L.P. 9,1555,473 (21,235,620) (13,186,213) 57,133,640 - FS Equity Partners VII, L.P. 69,393,645 25,167,412 10,159,280 104,720,337 - FS Equity Partners Buyouts LLC 52,358,298 (23,798,909) 7,860,505 36,419,894 - Grove Street Partners Buyouts II, LLC 172,272,480 (6,258,037) 17,148,380 183,162,823 - Grove Street Partners Ventures, LLC 85,544,085 (76,285,709) (9,258,377) 0 - Grove Street Partners Ventures, LLC 87,074,852 (41,430,817) 67,242,975 312,887,010 - GS Partners Ventures III, L.P. 190,501,217 754,914 30,148,653 221,404,784 - Hellman & Friedman Capital Partners VII, L.P. 992,304 (1,091,628) 99,324 - Hellman & Friedman Capital Partners VIII, L.P. 190,501,217 754,914 30,148,653 221,404,784 - Hellman & Friedman Capital Partners VIII, L.P. 190,501,217 754,914 30,148,653 221,404,784 - Hellman & Friedman Capital Partners VIII, L.P. 259,174,587 (59,505,590) 63,857,694 263,526,691 - Hellman & Friedman Capital Partners VIII, L.P. 7,689,817 4,349,719 1,795,656 13,835,192 - Inflexion Buyout Fund IV, L.P. 7,689,817 4,349,719 1,795,656 13,835,192 - Inflexion Partners Fund II, L.P. 105,356,962 (58,607,968) 24,111,443 70,860,437 - Insight Venture Partners Growth-Buyout - Coinvest Fund, L.P. 105,356,962 (58,607,968) 24,111,443 70,860,437 - Insight Venture Partners Growth-Buyout - Coinvest Fund, L.P. 18,774,366 (20,044,814) (854,938) 37,964,242					313,267,822
- Fairview Ventures Fund III, L.P First Reserve Fund XI, L.P First Reserve Fund XII, L.P First Reserve Fund XIII, L.P First Reserve Fund XIII. L.P First Resever Fund XIII. L.P First Reserve Fund XIII. L.P First Resev	- Fairview Special Opportunities Fund II, L.P.	61,309,948	15,064,822	17,726,135	94,100,905
First Reserve Fund XI, L.P. 5,405,309 (2,490,470) 1,980,546 4,895,385 First Reserve Fund XII, L.P. 44,559,445 3,099,048 (8,597,620) 39,060,873 Francisco Partners III, L.P. 56,628,706 (13,961,692) 10,925,194 53,592,208 Francisco Partners IV, L.P. 97,591,392 (39,563,648) 29,672,235 87,699,979 Francisco Partners V, L.P. 9,406,625 27,937,946 2,284,179 40,162,750 FS Equity Partners VI, L.P. 91,555,473 (21,235,620) (13,186,213) 57,133,640 FS Equity Partners VIII, L.P. 69,393,645 25,167,412 10,159,280 104,720,337 FS Equity Partners Buyouts LLC 52,358,298 (23,798,909) 7,860,505 36,419,894 Grove Street Partners Buyouts II, LLC 172,772,480 (6,258,037) 17,148,380 183,162,823 Grove Street Partners Ventures, LLC 85,544,085 (76,285,709) (9,258,377) 0 Grove Street Partners Ventures III, L.P. 190,501,217 754,914 30,148,653 221,404,784 Hellman & Friedman Capital Partners V, L.P. 299,2304 (1,091,628) 99,324 0 Hellman & Friedman Capital Partners VIII, L.P. 299,174,587 (59,505,590) 63,857,694 263,526,691 Hellman & Friedman Capital Partners VIII, L.P. 142,977,534 52,677,542 13,005,289 208,660,365 Hellman & Friedman Capital Partners VIII, L.P. 142,977,534 52,677,542 13,005,289 208,600,365 Hellman & Friedman Capital Partners VIII, L.P. 17,693,053 (1,514,279) 1,784,615 38,229,528 Inflexion Buyout Fund IV, L.P. 7,689,817 4,349,719 1,795,656 13,835,192 Inflexion Partners III, L.P. 17,693,053 (1,520,509) 2,084,807 18,257,351 Insight Venture Partners IX, L.P. 105,356,962 (58,607,968) 24,111,443 70,860,437 Insight Venture Partners RG cowth-Buyout Coinvest Fund, L.P. 62,632,924 177,672 24,503,029 87,313,625 Investindustrial VI, L.P. 18,774,366 20,044,814 (854,938) 37,964,242	- Fairview Ventures Fund II, L.P. <sup>2</sup>	18,780,388	(15,574,930)	(3,205,458)	0
- First Reserve Fund XII, L.P. 44,559,445 3,099,048 (8,597,620) 39,060,873   - Francisco Partners III, L.P. 56,628,706 (13,961,692) 10,925,194 53,592,208   - Francisco Partners IV, L.P. 97,591,392 (39,563,648) 29,672,235 87,699,979   - Francisco Partners V, L.P. 9,940,625 27,937,946 2,284,179 40,162,750   - FS Equity Partners VII, L.P. 91,555,473 (21,235,620) (13,186,213) 57,133,640   - FS Equity Partners VIII, L.P. 69,393,645 25,167,412 10,159,280 104,720,337   - FS Equity Partners VIII, L.P.¹ 0 9,942,381 (529,755) 9,394,626   - Grove Street Partners Buyouts II, LLC 172,272,480 (6,258,037) 17,148,380 183,162,823   - Grove Street Partners Ventures, LLC² 85,544,085 (76,285,709) (9,258,377) 0   - Grove Street Partners Ventures III, L.P. 190,501,217 754,914 30,148,653 221,404,784   - Hellman & Friedman Capital Partners VII, L.P. 259,174,587 (59,505,590) 63,857,694 263,526,691   - Hellman & Friedman Capital Partners VIII, L.P. 142,977,534 52,677,542 13,005,289 208,660,365   - Hellman & Friedman Capital Partners IX, L.P.¹ 0 0 (209,237) (209,237) (209,237)   - Inflexion Buyout Fund IV, L.P. 37,689,817 4,349,719 1,784,615 38,229,528   - Inflexion Partnership Capital Fund I, L.P. 17,693,053 (1,520,509) 2,084,807 18,257,351   - Insight Venture Partners Growth-Buyout Coinvest Fund, L.P. 62,632,924 177,672 24,503,029 87,313,625   - Investindustrial VI, L.P. 62,632,924 177,672 24,503,029 87,313,625   - Investindustrial VI, L.P. 18,774,366 20,044,814 (854,938) 37,964,242					
- Francisco Partners III, L.P. 56,628,706 (13,961,692) 10,925,194 53,592,208 Francisco Partners IV, L.P. 97,591,392 (39,563,648) 29,672,235 87,699,979 Francisco Partners V, L.P. 9,940,625 27,937,946 2,284,179 40,162,750 FS Equity Partners VI, L.P. 91,555,473 (21,235,620) (13,186,213) 57,133,640 FS Equity Partners VII, L.P. 69,393,645 25,167,412 10,159,280 104,720,337 FS Equity Partners VIII, L.P. 0 9,924,381 (529,755) 9,394,626 Grove Street Partners Buyouts LLC 52,358,298 (23,798,909) 7,860,505 36,419,894 Grove Street Partners Buyouts II, LLC 172,272,480 (6,258,037) 17,148,380 183,162,823 Grove Street Partners Ventures, LLC 85,544,085 (76,285,709) (9,258,377) 0 Grove Street Partners Ventures III, L.P. 190,501,217 754,914 30,148,653 221,404,784 Hellman & Friedman Capital Partners VII, L.P. 299,304 (1,091,628) 99,324 0 Hellman & Friedman Capital Partners VIII, L.P. 259,174,587 (59,505,590) 63,857,694 263,526,691 Hellman & Friedman Capital Partners VIII, L.P. 142,977,534 52,677,542 13,005,289 208,660,365 Hellman & Friedman Capital Partners VII, L.P. 142,977,534 52,677,542 13,005,289 208,660,365 Hellman & Friedman Capital Partners VII, L.P. 142,977,534 52,677,542 13,005,289 208,660,365 Hellman & Friedman Capital Partners VII, L.P. 142,977,534 52,677,542 13,005,289 208,660,365 Hellman & Friedman Capital Partners VII, L.P. 142,977,534 52,677,542 13,005,289 208,660,365 Hellman & Friedman Capital Partners VII, L.P. 17,693,053 (1,520,509) 2,084,807 18,257,351 Insight Venture Partners VIII, L.P. 17,693,053 (1,520,509) 2,084,807 18,257,351 Insight Venture Partners KI, L.P. 99,551,369 (3,975,379) 35,344,536 130,920,527 Insight Venture Partners Growth-Buyout Coinvest Fund, L.P. 62,632,924 177,672 24,503,029 87,313,625 Investindustrial VI, L.P. 18,774,366 20,044,814 (854,938) 37,964,242					
- Francisco Partners IV, L.P. 97,591,392 (39,563,648) 29,672,235 87,699,979 - Francisco Partners V, L.P. 9,940,625 27,937,946 2,284,179 40,162,750 - FS Equity Partners VI, L.P. 91,555,473 (21,235,620) (13,186,213) 57,133,640 - FS Equity Partners VIII, L.P. 69,393,645 25,167,412 10,159,280 104,720,337 - FS Equity Partners Buyouts LLC 0,9,924,381 (529,755) 9,394,626 - Grove Street Partners Buyouts II, LLC 172,272,480 (6,258,037) 17,148,380 183,162,823 - Grove Street Partners Ventures, LLC 85,544,085 (76,285,709) (9,258,377) 0 - Grove Street Partners Ventures II, LLC 287,074,852 (41,430,817) 67,242,975 312,887,010 - GS Partners Ventures III, L.P. 190,501,217 754,914 30,148,653 221,404,784 - Hellman & Friedman Capital Partners VII, L.P. 259,174,587 (59,505,590) 63,857,694 263,526,691 - Hellman & Friedman Capital Partners VIII, L.P. 142,977,534 52,677,542 13,005,289 208,660,365 - Hellman & Friedman Capital Partners IX, L.P. 142,977,534 52,677,542 13,005,289 208,660,365 - Hellman & Friedman Capital Partners IX, L.P. 17,689,817 4,349,719 1,784,615 38,229,528 - Inflexion Buyout Fund IV, L.P. 7,689,817 4,349,719 1,784,615 38,229,528 - Inflexion Partnership Capital Fund I, L.P. 17,693,053 (1,520,509) 2,084,807 18,257,351 - Insight Venture Partners IX, L.P. 99,551,369 (3,975,379) 35,344,536 130,920,527 - Insight Venture Partners IX, L.P. 62,632,924 177,672 24,503,029 87,313,625 - Investindustrial VI, L.P. 62,632,924 177,672 24,503,029 87,313,625 - Investindustrial VI, L.P. 18,774,366 20,044,814 (854,938) 37,964,242	,				
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- FS Equity Partners VII, L.P. 69,393,645 25,167,412 10,159,280 104,720,337 - FS Equity Partners VIII, L.P.¹ 0 9,924,381 (529,755) 9,394,626 - Grove Street Partners Buyouts LLC 52,358,298 (23,798,909) 7,860,505 36,419,894 - Grove Street Partners Buyouts II, LLC 172,272,480 (6,258,037) 17,148,380 183,162,823 - Grove Street Partners Ventures, LLC² 85,544,085 (76,285,709) (9,258,377) 0 Grove Street Partners Ventures III, L.P. 190,501,217 754,914 30,148,653 221,404,784 - Hellman & Friedman Capital Partners V, L.P.² 992,304 (1,091,628) 99,324 0 - Hellman & Friedman Capital Partners VIII, L.P. 259,174,587 (59,505,590) 63,857,694 263,526,691 - Hellman & Friedman Capital Partners IX, L.P.¹ 142,977,534 52,677,542 13,005,289 208,660,365 - Hellman & Friedman Capital Partners IX, L.P.¹ 0 (209,237) (209,237) - Inflexion Buyout Fund IV, L.P. 37,959,192 (1,514,279) 1,784,615 38,229,528 - Inflexion Enterprise Fund IV, L.P. 7,689,817 4,349,719 1,795,656 13,835,192 - Inflexion Partnership Capital Fund I, L.P. 105,356,962 (58,607,968) 24,111,443 70,860,437 Insight Venture Partners IX, L.P. 99,551,369 (3,975,379) 35,344,536 130,920,527 - Insight Venture Partners Growth-Buyout Coinvest Fund, L.P. 62,632,924 177,672 24,503,029 87,313,625 - Investindustrial VI, L.P. 18,774,366 20,044,814 (854,938) 37,964,242					
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- Grove Street Partners Buyouts LLC - Grove Street Partners Buyouts II, LLC - Grove Street Partners Buyouts II, LLC - Grove Street Partners Ventures, LLC <sup>2</sup> - Grove Street Partners Ventures, LLC <sup>2</sup> - Grove Street Partners Ventures II, LLC - Grove Street Partners Ventures III, L.P Grove Street Partners Ventures III, L.P GS Partners Ventures III, L.P GS Partners Ventures III, L.P Hellman & Friedman Capital Partners V, L.P. <sup>2</sup> - Grove Street Partners Ventures III, L.P Hellman & Friedman Capital Partners V, L.P. <sup>2</sup> - GS Partners Ventures III, L.P Hellman & Friedman Capital Partners VIII, L.P Hellman & Friedman Capital Partners IX, L.P. <sup>1</sup> - O - O - Grove Street Partners Ventures III, L.P Hellman & Friedman Capital Partners VIII, L.P Hellman & Friedman Capital Partners VIII, L.P Hellman & Friedman Capital Partners IX, L.P. <sup>1</sup> - O - O - Grove Street Partners VIII, L.P Hellman & Friedman Capital Partners IX, L.P. <sup>1</sup> - O - O - Grove Street Partners VIII, L.P Hellman & Friedman Capital Partners IX, L.P. <sup>2</sup> - Inflexion Buyout Fund IV, L.P T,689,817 - H,349,719 - Inflexion Partnership Capital Fund I, L.P T,689,817 - H,349,719 - Inflexion Partnership Capital Fund I, L.P T,689,817 - H,349,719 - Inflexion Partnership Capital Fund I, L.P T,689,817 - H,349,719 - Inflexion Partnership Capital Fund I, L.P T,689,817 - H,349,719 - T,795,656 - H,349,719 - T,795,65					
- Grove Street Partners Buyouts II, LLC - Grove Street Partners Ventures, LLC² - S5,544,085 - Grove Street Partners Ventures, LLC² - S5,544,085 - Grove Street Partners Ventures II, LLC - G8,7074,852 - G8, Partners Ventures III, L.P G9,301,217 - G8, Partners Ventures III, L.P Hellman & Friedman Capital Partners V, L.P.² - G92,304 - Hellman & Friedman Capital Partners VII, L.P Hellman & Friedman Capital Partners VIII, L.P Hellman & Friedman Capital Partners IX, L.P.¹ - O - O - (209,237) - Inflexion Buyout Fund IV, L.P Inflexion Enterprise Fund IV, L.P Inflexion Partners Fund IV, L.P Inflexion Partners Fund IV, L.P Inflexion Partners VIII, L.P Inflexion Partners VIII, L.P Insight Venture Partners VIII, L.P Insight Venture Partners IX, L.P Insight Venture Partners Growth-Buyout - Coinvest Fund, L.P G2,632,924 - Investindustrial VI, L.P 18,774,366 - 20,044,814 - (6,258,037) - 17,148,380 - 17,148,380 - 17,148,380 - (17,148,380 - (17,242,975 - 312,887,010 - (17,242,975 - 312,887,010 - (17,242,975 - 312,887,010 - (17,242,975 - 312,887,010 - (17,242,975 - 312,887,010 - (17,242,975 - 312,887,010 - (17,242,975 - 312,887,010 - (17,242,975 - 312,887,010 - (17,242,975 - 312,887,010 - (17,242,975 - 312,887,010 - (17,242,975 - 312,887,010 - (17,242,975 - 312,887,010 - (17,242,975 - 312,887,010 - (17,242,975 - 312,887,010 - (17,242,975 - 312,887,010 - (17,242,975 - 312,887,010 - (17,914,816 - (17,914,81					, ,
- Grove Street Partners Ventures, LLC <sup>2</sup> 85,544,085 (76,285,709) (9,258,377) 0 - Grove Street Partners Ventures II, LLC 287,074,852 (41,430,817) 67,242,975 312,887,010 - GS Partners Ventures III, L.P. 190,501,217 754,914 30,148,653 221,404,784 - Hellman & Friedman Capital Partners V, L.P. <sup>2</sup> 992,304 (1,091,628) 99,324 0 - Hellman & Friedman Capital Partners VIII, L.P. 259,174,587 (59,505,590) 63,857,694 263,526,691 - Hellman & Friedman Capital Partners VIII, L.P. 142,977,534 52,677,542 13,005,289 208,660,365 - Hellman & Friedman Capital Partners IX, L.P. <sup>1</sup> 0 0 (209,237) (209,237) - Inflexion Buyout Fund IV, L.P. 37,959,192 (1,514,279) 1,784,615 38,229,528 - Inflexion Enterprise Fund IV, L.P. 7,689,817 4,349,719 1,795,656 13,835,192 - Inflexion Partnership Capital Fund I, L.P. 17,693,053 (1,520,509) 2,084,807 18,257,351 - Insight Venture Partners VIII, L.P. 105,356,962 (58,607,968) 24,111,443 70,860,437 - Insight Venture Partners Growth-Buyout Coinvest Fund, L.P. 62,632,924 177,672 24,503,029 87,313,625 - Investindustrial VI, L.P. 18,774,366 20,044,814 (854,938) 37,964,242	· · · · · · · · · · · · · · · · · · ·				
- Grove Street Partners Ventures II, LLC 287,074,852 (41,430,817) 67,242,975 312,887,010 - GS Partners Ventures III, L.P. 190,501,217 754,914 30,148,653 221,404,784 - Hellman & Friedman Capital Partners V, L.P. 992,304 (1,091,628) 99,324 0 - Hellman & Friedman Capital Partners VII, L.P. 259,174,587 (59,505,590) 63,857,694 263,526,691 - Hellman & Friedman Capital Partners VIII, L.P. 142,977,534 52,677,542 13,005,289 208,660,365 - Hellman & Friedman Capital Partners IX, L.P. 0 0 (209,237) (209,237) - Inflexion Buyout Fund IV, L.P. 37,959,192 (1,514,279) 1,784,615 38,229,528 - Inflexion Enterprise Fund IV, L.P. 7,689,817 4,349,719 1,795,656 13,835,192 - Inflexion Partnership Capital Fund I, L.P. 17,693,053 (1,520,509) 2,084,807 18,257,351 - Insight Venture Partners VIII, L.P. 105,356,962 (58,607,968) 24,111,443 70,860,437 - Insight Venture Partners Growth-Buyout Coinvest Fund, L.P. 99,551,369 (3,975,379) 35,344,536 130,920,527 - Insight Venture Partners Growth-Buyout Coinvest Fund, L.P. 18,774,366 20,044,814 (854,938) 37,964,242	· · · · · · · · · · · · · · · · · · ·				<i>' '</i>
- GS Partners Ventures III, L.P. 190,501,217 754,914 30,148,653 221,404,784 - Hellman & Friedman Capital Partners V, L.P. 992,304 (1,091,628) 99,324 0   - Hellman & Friedman Capital Partners VII, L.P. 259,174,587 (59,505,590) 63,857,694 263,526,691   - Hellman & Friedman Capital Partners VIII, L.P. 142,977,534 52,677,542 13,005,289 208,660,365   - Hellman & Friedman Capital Partners IX, L.P. 10 0 (209,237) (209,237)   - Inflexion Buyout Fund IV, L.P. 37,959,192 (1,514,279) 1,784,615 38,229,528   - Inflexion Enterprise Fund IV, L.P. 7,689,817 4,349,719 1,795,656 13,835,192   - Inflexion Partnership Capital Fund I, L.P. 17,693,053 (1,520,509) 2,084,807 18,257,351   - Insight Venture Partners VIII, L.P. 105,356,962 (58,607,968) 24,111,443 70,860,437   - Insight Venture Partners IX, L.P. 99,551,369 (3,975,379) 35,344,536 130,920,527   - Insight Venture Partners Growth-Buyout   Coinvest Fund, L.P. 62,632,924 177,672 24,503,029 87,313,625   - Investindustrial VI, L.P. 18,774,366 20,044,814 (854,938) 37,964,242	· · · · · · · · · · · · · · · · · · ·		. , , , ,		
- Hellman & Friedman Capital Partners V, L.P. <sup>2</sup> 992,304 (1,091,628) 99,324 0 - Hellman & Friedman Capital Partners VII, L.P. 259,174,587 (59,505,590) 63,857,694 263,526,691 - Hellman & Friedman Capital Partners VIII, L.P. 142,977,534 52,677,542 13,005,289 208,660,365 - Hellman & Friedman Capital Partners IX, L.P. <sup>1</sup> 0 0 (209,237) (209,237) - Inflexion Buyout Fund IV, L.P. 37,959,192 (1,514,279) 1,784,615 38,229,528 - Inflexion Enterprise Fund IV, L.P. 7,689,817 4,349,719 1,795,656 13,835,192 - Inflexion Partnership Capital Fund I, L.P. 17,693,053 (1,520,509) 2,084,807 18,257,351 - Insight Venture Partners VIII, L.P. 105,356,962 (58,607,968) 24,111,443 70,860,437 - Insight Venture Partners IX, L.P. 99,551,369 (3,975,379) 35,344,536 130,920,527 - Insight Venture Partners Growth-Buyout Coinvest Fund, L.P. 62,632,924 177,672 24,503,029 87,313,625 - Investindustrial VI, L.P. 18,774,366 20,044,814 (854,938) 37,964,242					· · · · · · · · · · · · · · · · · · ·
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- Hellman & Friedman Capital Partners IX, L.P.¹ 0 0 (209,237) (209,237) - Inflexion Buyout Fund IV, L.P. 37,959,192 (1,514,279) 1,784,615 38,229,528 - Inflexion Enterprise Fund IV, L.P. 7,689,817 4,349,719 1,795,656 13,835,192 - Inflexion Partnership Capital Fund I, L.P. 17,693,053 (1,520,509) 2,084,807 18,257,351 - Insight Venture Partners VIII, L.P. 105,356,962 (58,607,968) 24,111,443 70,860,437 - Insight Venture Partners IX, L.P. 99,551,369 (3,975,379) 35,344,536 130,920,527 - Insight Venture Partners Growth-Buyout Coinvest Fund, L.P. 62,632,924 177,672 24,503,029 87,313,625 - Investindustrial VI, L.P. 18,774,366 20,044,814 (854,938) 37,964,242					
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- Inflexion Enterprise Fund IV, L.P. 7,689,817 4,349,719 1,795,656 13,835,192 - Inflexion Partnership Capital Fund I, L.P. 17,693,053 (1,520,509) 2,084,807 18,257,351 - Insight Venture Partners VIII, L.P. 105,356,962 (58,607,968) 24,111,443 70,860,437 - Insight Venture Partners IX, L.P. 99,551,369 (3,975,379) 35,344,536 130,920,527 - Insight Venture Partners Growth-Buyout Coinvest Fund, L.P. 62,632,924 177,672 24,503,029 87,313,625 - Investindustrial VI, L.P. 18,774,366 20,044,814 (854,938) 37,964,242		37,959,192	(1,514,279)		
- Insight Venture Partners VIII, L.P.       105,356,962       (58,607,968)       24,111,443       70,860,437         - Insight Venture Partners IX, L.P.       99,551,369       (3,975,379)       35,344,536       130,920,527         - Insight Venture Partners Growth-Buyout       Coinvest Fund, L.P.       62,632,924       177,672       24,503,029       87,313,625         - Investindustrial VI, L.P.       18,774,366       20,044,814       (854,938)       37,964,242	·	7,689,817	4,349,719	1,795,656	13,835,192
- Insight Venture Partners IX, L.P. 99,551,369 (3,975,379) 35,344,536 130,920,527 - Insight Venture Partners Growth-Buyout Coinvest Fund, L.P. 62,632,924 177,672 24,503,029 87,313,625 - Investindustrial VI, L.P. 18,774,366 20,044,814 (854,938) 37,964,242					
- Insight Venture Partners Growth-Buyout Coinvest Fund, L.P. 62,632,924 177,672 24,503,029 87,313,625 - Investindustrial VI, L.P. 18,774,366 20,044,814 (854,938) 37,964,242	,				
Coinvest Fund, L.P.       62,632,924       177,672       24,503,029       87,313,625         - Investindustrial VI, L.P.       18,774,366       20,044,814       (854,938)       37,964,242	,	99,551,369	(3,975,379)	35,344,536	130,920,527
- Investindustrial VI, L.P. 18,774,366 20,044,814 (854,938) 37,964,242					
- JH WIIIINEY VII, L.P. 53,746,081 387,066 9,529,103 63,662,250	· · · · · · · · · · · · · · · · · · ·				
	- JH Whitney VII, L.P.	53,746,081	387,066	9,529,103	63,662,250

	Market Value	Net Contributions	Investment	Market Value
Account Name - continued	6/30/2018	(Withdrawals)	Gain (Loss)	6/30/2019
- KKR Asia Fund II, L.P.	111,517,164	(7,791,376)	5,238,578	108,964,366
- KKR Asia Fund III (EEA) SCSp	7,963,029	44,418,658	5,579,683	57,961,370
- KPS Special Situations Fund III, L.P KPS Special Situations Fund IV, L.P.	15,074,140 56,170,812	(17,003,310) 11,756,159	10,716,031 5,375,179	8,786,861 73,302,150
- LCP FSBA Co-Invest Account L.P.	51,302,161	16,267,983	13,599,351	81,169,495
- Lexington Capital Partners V, L.P.	3,606,373	(2,318,370)	(691,637)	596,366
- Lexington Capital Partners VI-B, L.P.	12,349,931	(3,837,520)	524,812	9,037,223
- Lexington Capital Partners VII, L.P.	66,030,394	(17,096,044)	2,175,996	51,110,346
- Lexington Capital Partners VIII, L.P.	141,573,552	34,646,459	4,884,812	181,104,823
- Lexington Capital Partners IX, L.P.1	0	54,302	11,703,062	11,757,364
- Lexington Co-Invest Partners Pools III & IV, L.P.	35,963,717	(21.726.480)	(13,219,049)	22,744,668
<ul> <li>Lexington Co-Invest Partners 2005, L.P.</li> <li>Lexington Co-Invest Partners 2005 Pool III, L.P.</li> </ul>	108,757,775 478,523,561	(31,726,489) (109,388,439)	27,877,708 19,843,890	104,908,994 388,979,013
- Lexington Co-Invest Partners 2005 Pool IV, L.P.	189,302,254	162,145,954	33,188,461	384,636,669
- Lexington Middle Market Investors III, L.P.	61,255,438	(6,092,674)	4,415,345	59,578,109
- Liberty Partners VI	275,000	(252,528)	(9,472)	13,000
- Liberty Partners VII	8,849,530	(5,818,931)	(470,973)	2,559,626
- Liberty Partners Group II	(1,224)	1,815	(297)	294
- LightBay Capital Partners, L.P.	0	3,441,946	(2,039,243)	1,402,703
- Montagu Private Equity Fund IV, L.P.	28,637,266	(22,528,805)	5,299,865	11,408,326
- Montagu V, L.P. - New Mountain Partners II, L.P.	34,368,550 1,566,656	30,387,187 0	8,941,228 (846,758)	73,696,965 719,898
- New Mountain Partners III, L.P.	67,211,359	(4,934,508)	4,904,514	67,181,365
- New Mountain Partners IV, L.P. <sup>2</sup>	89,117,128	(104,029,615)	14,912,487	0
- OpCapita Consumer Opportunities Fund II, L.P.	17,298,322	8,275,278	(704,979)	24,868,622
- OpenView Venture Partners IV, L.P.	22,512,583	2,441,384	13,128,418	38,082,385
- OpenView Venture Partners V, L.P.	7,574,770	1,181,859	4,163,925	12,920,554
- Pantheon Global Secondary Fund IV, L.P.	21,289,738	(1,578,259)	891,029	20,602,508
- Pantheon Venture Partners II, L.P. <sup>2</sup>	41,392,847	(31,816,810)	(9,576,037)	0
- Peak Rock Capital II, L.P. - Peak Rock Capital Credit Fund II, L.P.	3,356,552 437,109	14,972,214 1,240,645	2,373,880 (229,894)	20,702,646 1,447,860
- Permira V, L.P.	87,004,488	(10,773,293)	26,001,346	102,232,541
- Platinum Equity Capital Partners II, L.P.	8,098,363	(5,834,911)	2,996,051	5,259,503
- Platinum Equity Capital Partners III, L.P.	142,549,605	(60,737,898)	(8,135,602)	73,676,105
- Pomona Capital VI, L.P.	6,711,596	(2,549,284)	(795,075)	3,367,237
- Pomona Capital VII, L.P. <sup>2</sup>	190,537	(172,501)	(18,036)	0
- Post Oak Energy Partners II, L.P.	33,089,434	318,804	(3,516,583)	29,891,655
- Post Oak Energy Partners III, L.P.	43,805,986	(20,511,624)	9,055,873	32,350,235
<ul> <li>Post Oak Energy Partners IV, L.P.</li> <li>Providence Equity Partners VII, L.P.<sup>2</sup></li> </ul>	797,144 216,464,480	13,044,745 (231,092,826)	(1,177,045) 14,628,346	12,664,844 0
- RCP Advisors Fund IV, L.P.	16,527,844	(7,985,103)	2,322,081	10,864,823
- RCP Advisors Fund V, L.P.	28,503,500	(8,239,904)	3,691,549	23,955,145
- RCP Advisors Fund VI, L.P.	31,578,958	(19,943,192)	13,541,902	25,177,668
- RCP Advisors Fund VII, L.P.	52,837,195	(17,411,564)	10,736,193	46,161,824
- RCP Advisors Fund VIII, L.P.	42,948,077	(6,380,638)	10,113,712	46,681,152
- RCP Advisors Fund IX, L.P.	36,374,102	2,500,000	6,420,863	45,294,965
- RCP Advisors Fund X, L.P.	19,003,652	15,000,000	1,545,221	35,548,873
- Rise Fund, L.P. (The)	3,560,612 62,208,875	8,514,587	2,029,918	14,105,117
<ul> <li>Riverside Capital Appreciation Fund VI, L.P.<sup>2</sup></li> <li>Rubicon Technology Partners, L.P.</li> </ul>	46,486,986	(62,831,830) (52,571,708)	622,955 20,202,740	0 14,118,018
- Rubicon Technology Partners II, L.P.	13,123,295	27,429,912	2,351,750	42,904,957
- Searchlight Capital II, L.P.	53,955,650	16,287,244	4,430,708	74,673,602
- Silver Lake Partners IV, L.P.	116,991,828	(19,375,079)	39,511,270	137,128,019
- Silver Lake Partners V, L.P.	9,998,383	45,889,589	3,292,537	59,180,509
- Siris Partners III, L.P.	57,313,606	(17,474,177)	2,684,299	42,523,728
- Siris Partners IV, L.P.	0	11,446,415	(854,068)	10,592,347
- Summa Equity Fund II AB <sup>1</sup>	0	675.000	(39,587)	(39,587)
- SVB Capital Partners III, L.P SVB Capital Partners IV, L.P.	20,718,198 5,591,965	675,000 2,200,000	6,109,878 (869,434)	27,503,076 6,922,531
- SVB Strategic Investors Fund V-A, L.P.	169,369,962	(32,350,419)	53,796,290	190,815,833
- SVB Strategic Investors Fund V-A, E.F.	76,801,092	(10,331,229)	22,345,134	88,814,997
- SVB Strategic Investors VI-A, L.P.	144,108,107	(8,891,563)	52,284,914	187,501,458
- SVB Strategic Investors Fund VII-A, L.P.	105,472,556	11,625,000	33,228,031	150,325,587
- SVB Strategic Investors Fund VIII-A, L.P.	27,250,503	26,140,000	11,376,628	64,767,131
- SVB Strategic Investors Fund IX-A, L.P.	0	7,912,633	(940,203)	6,972,430
- Thoma Bravo Discover Fund I. L.P.	47,359,122	3,774,604	8,841,293	59,975,020
- Thoma Bravo Discover Fund II, L.P.	0	17,505,144	(1,386,092)	16,119,052

40 Continued on next page

Account Name - continued	Market Value 6/30/2018	Net Contributions (Withdrawals)	Investment Gain (Loss)	Market Value 6/30/2019
		0	36,971	
- Thoma Bravo Fund IX, L.P. - Thoma Bravo Fund X, L.P.	1,139,046 61,490,919	(37,384,247)	24,675,921	1,176,017 48,782,593
- Thoma Bravo Fund XI, L.P.	186,919,400	(103,065,608)	70,728,209	154,582,001
- Thoma Bravo Fund XII, L.P.	100,556,296	45,001,519	26,044,004	171,601,819
- Thoma Bravo Fund XIII, L.P. <sup>1</sup>	0	53,586,862	(892,819)	52,694,043
- Thoma Bravo Special Opportunities Fund I, L.P.	40,429,760	(22,829,772)	14,183,189	31,783,178
- Thoma Bravo Special Opportunities Fund II, L.P.		(3,130,152)	15,409,750	72,139,114
- Thoma Cressey Fund VIII, L.P.	1,095,488	(993,464)	224,947	326,970
- Tiger Iron Special Opportunities Fund, L.P.	30,087,048	56,306,318	8,564,808	94,958,174
- Tiger Iron Special Opportunities Fund II, L.P. <sup>1</sup>	0	5,690,174	(14,286)	5,675,889
- Top Tier Special Opportunities Fund, L.P.	2,302,684	(701,681)	394,601	1,995,605
- Top Tier Venture Capital II, L.P.	14,998,749	(4,749,177)	(120,170)	10,129,402
- Top Tier Venture Capital III, L.P.	24,124,334	(5,206,826)	550,822	19,468,330
- Top Tier Venture Capital IV, L.P. <sup>2</sup>	90,693,405	(81,785,545)	(8,907,860)	15,400,550
- TowerBrook Investors II, L.P.	5,819,904	(2,887,721)	1,226,428	4,158,611
- TowerBrook Investors III, L.P.	24,428,204	(5,070,156)	(3,018,975)	16,339,073
- TowerBrook Investors IV, L.P.	113,598,675	21,677,586	20,153,795	155,430,056
- TowerBrook Investors V, L.P. <sup>1</sup>	0	89,418	(89,418)	155,450,050
- TPG Growth II, L.P.	121,364,293	(5,197,067)	17,696,043	133,863,269
- TPG Growth III, L.P.	80,796,229	(20,931,698)	16,593,990	76,458,521
- TPG Growth IV, L.P.	(1,340,099)	41,665,129	42,989	40,368,019
- Trident V, L.P.	61,564,699	(23,734,040)	8,937,056	46,767,714
- Trident VI, L.P.	74,111,852	(17,348,729)	18,938,254	75,701,377
- Trident VII, L.P.	23,267,427	26,791,101	6,019,963	56,078,492
- TrueBridge Capital FSA, LLC	22,774,968	19,243,396	5,547,938	47,566,302
- TrueBridge Capital Partners V, L.P.	2,235,422	15,800,000	332,721	18,368,143
- TrueBridge/FLSBA Special Purpose, LLC	73,775,602	(11,527,290)	21,834,403	84,082,715
- Truebridge/FLSBA Special Purpose II, LLC	24,458,724	743,836	8,109,465	33,312,025
- TrueBridge-Kauffman Fellows Endow Fund II, L.P.		(18,429,704)	30,235,815	170,269,684
- TrueBridge-Kauffman Fellows Endow Fund III, L.F		(1,150,000)	46,464,409	187,346,771
- TrueBridge-Kauffman Fellows Endow Fund IV, L.F	, ,	30,000,000	26,206,900	120,143,259
- TSG Capital Fund III, L.P. <sup>3</sup>	14,275	0	0	14,275
- Venture Overage Fund, L.P.	92,353,768	3,725,000	6,041,741	102,120,509
- W Capital Partners III, L.P.	66,031,111	(5,241,959)	144,750	60,933,902
- Warburg Pincus China, L.P.	42,654,808	11,991,800	6,852,540	61,499,148
- Warburg Pincus China-Southeast Asia II, L.P. <sup>1</sup>	0	2,380,000	0	2,380,000
- Warburg Pincus Private Equity IX, L.P.	7,121,070	(1,657,622)	(851,582)	4,611,866
- Warburg Pincus Private Equity X, L.P.	69,042,510	(15,618,515)	3,575,884	56,999,879
- Warburg Pincus Private Equity XI, L.P.	184,803,435	(30,184,919)	24,833,513	179,452,029
- Warburg Pincus Private Equity XII, L.P.	52,289,491	19,788,930	6,258,063	78,336,484
- Waterland Private Equity Fund VII, C.V.	0	14,979,371	(5,499,633)	9,479,737
- Wellspring Capital Partners V, L.P. <sup>2</sup>	65,519,699	(66,285,639)	765,940	, ,
- WindRose Health Investors V, L.P. <sup>1</sup>	0	301,670	(368,271)	(66,601
- WPEF VI Feeder Fund, L.P.	36,687,246	5,867,395	12,382,087	54,936,728
- WPEF VI Overflow Feeder Fund, L.P. <sup>2</sup>	4,683	0	(4,683)	, , , , , , , , , , , , , , , , , , ,
Other:			, , , ,	
- Private Equity Cash	79,823,290	48,793,185	1,690,463	130,306,939
- Private Equity Cash Expense	0	4,215,291	(4,215,291)	, , , , , , , , , , , , , , , , , , ,
- Private Equity Transition <sup>4</sup>	0	0	Ó	(
Total Private Equity \$ 1	1,429,720,173	\$ (1,186,693,212)	\$ 1,659,292,302	\$ 11,902,319,264

 $<sup>^1</sup>$ Account opened during the fiscal year.  $^2$ Account assets sold or partnership interest sold during the fiscal year. Account will be closed unless residual activity occurs.  $^3$ Account assets sold or partnership interest sold during the prior fiscal year. Balances and activity reflect residual activity.

Account was inactive during the fiscal year.
 Private Equity market values are estimates of value which may or may not represent what would be actually realized in arm's-length sales transactions. The market values self-reported by the external managers of these accounts and incorporate their estimate of the value of illiquid publicly traded securities and private market holdings.
 Totals may not foot due to rounding.

**TABLE 12:** 

# FRS Pension Plan - Real Estate **Change in Market Value for Fiscal Year 2018-19**

	Market Value	Net Contributions		Investment		Market Value
Account Name	6/30/2018	(Withdrawals)		Gain (Loss)		6/30/2019
loint Vontures.						
Joint Ventures: - Ramco <sup>2</sup>	\$ 430,280	\$ 0	\$	(17,681)	\$	412,599
Pooled Funds:	7 450,200	, o	Y	(17,001)	Y	412,333
- AEW Senior Housing Investors III, L.P.	25,465,314	13,858,193		2,080,630		41,404,137
- AEW Value Investors Asia III	20,167,372	54,235,007		756,895		75,159,275
- Beacon Capital Strategic Partners Fund V, L.P. <sup>4</sup>	81,875	(34,150)		(47,725)		0
- BlackRock Diamond Property Fund, Inc. <sup>4</sup>	108,385	(91,956)		(16,429)		0
- BlackRock Europe Property Fund IV	12,141,829	(1,986,712)		4,294,151		14,449,268
- BlackRock Europe Fund V <sup>1</sup> - Blackstone Real Estate Partners Asia, L.P.	0 158,716,278	1,158,711		(535,785)		622,926
- Blackstone Real Estate Partners Europe V, L.P.	47,714,815	(13,688,608) 20,095,395		12,978,529 2,474,283		158,006,198 70,284,493
- Blackstone Real Estate Partners VI, L.P.	24,611,869	(8,257,955)		1,719,537		18,073,451
- Blackstone Real Estate Partners VII, L.P.	240,445,552	(71,745,733)		8,326,245		177,026,065
- Blackstone Real Estate Partners VIII, L.P.	59,060,617	16,999,842		7,914,710		83,975,170
- Blackstone Real Estate Partners IX, L.P.1	0	82,166		(82,166)		0
- Brookfield-Fairfield US Multifamily Fund I, L.P.	696,694	0		(42,389)		654,305
- Brookfield-Fairfield US Multifamily Fund II, L.P.	71,288,322	(62,503,243)		16,825,624		25,610,703
- CapMan Nordic Real Estate Fund	39,643,336	(2,846,388)		4,564,081		41,361,028
- CapMan Nordic Real Estate II	9,150,776	12,313,715		955,494		22,419,984
- Carlyle Property Investors, L.P Carlyle Realty Partners VI, L.P.	99,362,732	(4,496,781)		7,794,133		102,660,085
- Carlyle Realty Partners VI, L.P.	14,956,631 33,189,605	(3,529,514) (9,340,196)		(542,990) 4,599,235		10,884,127 28,448,644
- Carlyle Realty Partners VIII, L.P.	(232,156)	8,845,951		(585,821)		8,027,974
- CIM Fund VIII, L.P.	42,309,584	6,605,690		4,872,150		53,787,424
- EMI Pooled Fund Expenses Account <sup>3</sup>	0	0		0		0
- Europa Fund IV, L.P.	47,408,041	(11,304,556)		4,139,780		40,243,264
- Heitman-SBAF GP Co-Invest JV <sup>1</sup>	0	353,548		(353,548)		0
- Heitman Value Partners III, L.P.	32,087,019	(14,246,290)		4,299,918		22,140,647
- Heitman Value Partners IV, L.P.	(545,740)	14,011,825		707,110		14,173,195
- Hines Value Added Fund II, L.P.	3,273,966	(2,536,554)		(622,066)		115,346
<ul> <li>- JP Morgan EOP Fund III</li> <li>- JP Morgan European Opportunistic Property Fundament</li> </ul>	39,719,496 d IV <sup>1</sup> 0	(12,960,567) 6,289,025		9,736,312 (4,450,919)		36,495,240 1,838,106
- JP Morgan Special Situation Property Fund	191,735,775	(6,421,812)		12,960,982		198,274,945
- JP Morgan Strategic Property Fund	356,943,867	(27,058,797)		17,014,664		346,899,734
- Landmark Real Estate Fund VIII, L.P.	8,152,991	6,556,256		900,251		15,609,498
- Prime Property Fund, LLC	392,481,631	(15,665,599)		27,847,194		404,663,226
- Principal US Property Fund	393,750,294	0		27,666,493		421,416,788
- Prologis USFL, L.P.	191,986,440	(6,650,870)		29,421,717		214,757,286
- Prudential PRISA	345,702,756	(11,265,739)		25,288,079		359,725,095
- Prudential PRISA Fund III	249,821,271	(23,950,094)		22,996,731		248,867,908
<ul> <li>Rockpoint Real Estate Fund III, L.P.</li> <li>Rockpoint Real Estate Fund IV, L.P.</li> </ul>	7,995,193	(3,126,156)		282,009 537,458		5,151,046
- Rockpoint Real Estate Fund V, L.P.	42,233,078 58,178,176	(10,560,199) 17,430,346		8,574,408		32,210,337 84,182,930
- RREEF America REIT II Pooled Fund	319,669,017	(10,234,841)		20,307,132		329,741,308
- RREEF Core Plus Industrial Fund <sup>1</sup>	0	22,500,000		0		22,500,000
- Starwood Distressed Opp. Fund IX Global, L.P.	52,215,010	(17,814,782)		(414,187)		33,986,041
- Starwood Opportunity Fund X Global, L.P.	74,696,405	(21,485,593)		8,826,048		62,036,860
- Starwood Global Opportunity Fund XI, L.P.	417,360	5,073,582		1,527,709		7,018,650
- Tristan EPISO 3, L.P.	48,897,456	(9,742,558)		(1,769,116)		37,385,783
- Tristan EPISO 4, L.P.	29,621,469	11,301,585		3,855,379		44,778,433
- UBS Pooled Fund, L.P.	196,506,807	(115,233,156)		622,124		81,895,776
Principal Investments: Real Estate Investment Trusts (REITs):	8,869,892,235	194,795,666		563,535,772		9,628,223,673
- AEW Global REIT	388,544,247	0		36,019,121		424,563,368
- CohenSteers Global REIT	314,043,761	0		37,215,491		351,259,253
- Invesco Global REIT	373,694,261	0		33,229,140		406,923,402
- RREEF Global REIT	383,698,190	0		41,013,301		424,711,491
Other:						
- Real Estate Cash Account	28,774,283	2,249,558		651,945		31,675,787
- Real Estate Cash Expense Account	0	523,339		(523,339)		0
- Real Estate Transition Account <sup>3</sup>	0	0		0		0
Total Real Estate Investments \$	14,340,904,468	\$ (83,500,000)	\$	1,009,327,804	Ś	15,266,732,271
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<sup>&</sup>lt;sup>1</sup> Account opened during the fiscal year.

<sup>2</sup> Strategy terminated or account closed during a prior fiscal year. Balances and activity reflect residual activity.

<sup>3</sup> Account inactive during the fiscal year.

<sup>4</sup> Strategy terminated or account closed during the fiscal year.

• For certain real estate accounts, market values are estimates of value which may or may not represent what would be actually realized in arm's-length sales transactions. In such cases the market values are self-reported by the external managers of these accounts and incorporate their estimate of the value of illiquid publicly traded securities and private market holdings.

• Totals may not foot due to rounding.

Source: SBA

# **TABLE 13:**

# FRS Pension Plan - Strategic Investments Change in Market Value for Fiscal Year 2018-19

	Market Value	Net Contributions	Investment	Market Value
Account Name	6/30/2018	(Withdrawals)	Gain (Loss)	6/30/2019
Strategic-Investments: - ABRY Advanced Securities Fund, L.P.	\$ 2,177,839	\$ 471,817 \$	(404,189) \$	2,245,467
- ABRY Advanced Securities Fund II, L.P.	21,898,487	(3,981,366)	(2,290,011)	15,627,110
- ABRY Advanced Securities Fund III, L.P.	93,904,420	7,778,592	329,214	102,012,226
- ABRY Senior Equity III, L.P.	3,264,278	(2,855,851)	2,298,918	2,707,345
- ABRY Senior Equity IV, L.P.	49,673,551	(16,547,522)	10,605,219	43,731,249
- ABRY Senior Equity V, L.P.	12,583,035	787,870	2,097,014	15,467,919
- Aeolus Property Catastrophe Keystone PF Fund, I		100,014,795	2,741,297	102,756,092
- Anchorage Capital Partners, L.P. <sup>2</sup>	165,302,258	(169,144,956)	3,842,697	0
- Apollo Credit Liquidity Fund, L.P. <sup>2</sup>	493,996	(634,505)	140,509	0
- AQR Managed Futures Fund II, L.P.	214,825,744	0	(4,076,067)	210,749,677
- AQR Style Premia Fund	157,922,523	0	(20,833,347)	137,089,176
- Atalaya Special Opportunities Fund VI, L.P.	82,889,574	(9,571,950)	11,406,404	84,724,029
- Atalaya Special Opportunities Fund VII, L.P. <sub>1</sub>	0	34,927,681	(587,354)	34,340,327
- Audax Credit Opportunities, LLC	311,000,109	141,000	11,921,235	323,062,344
- Audax Mezzanine Fund IV-A, L.P.	29,709,662	13,191,824	2,268,128	45,169,614
- Bayview Opportunity Master Fund IIb, L.P.	647,879	(666,464)	18,584	0
- Bayview Opportunity Master Fund IIIb, L.P.	19,619,609	(15,723,963)	4,877,254	8,772,900
- Bayview Opportunity Master Fund IVb, L.P.	84,139,652	(53,497,543)	12,696,654	43,338,763
- Benefit Street Credit Alpha Partners, L.P.	164,340,531	15 506 540	(10,660,994)	153,679,537 89,500,300
<ul> <li>Benefit Street Debt Fund IV, L.P.</li> <li>Benefit Street Partners CRE Conduit Co., L.P.</li> </ul>	68,835,327 995,637	15,596,540 (354,242)	5,068,433 789,804	1,431,199
- BlackRock Carbon Capital V, Inc.	46,745,697	(24,655,636)	3,045,816	25,135,876
- BlackRock Carbon Capital V, IIIc.	58,488,778	25,393,032	5,562,879	89,444,689
- Blackstone/GSO Capital Solutions Fund, L.P.	10,022,049	(3,858,978)	774,048	6,937,119
- Blackstone Tactical Opportunities Fund II, L.P.	123,298,032	(16,696,596)	16,551,619	123,153,054
- Blackstone Tactical Opportunities Fund- FD, L.P. <sup>1</sup>	0	14,583,464	(280,709)	14,302,755
- Blackstone Unit Trusts <sup>2</sup>	6,098,552	(6,311,633)	213,081	0
- Boston Timber Opportunities LLC	305,343,680	(16,608,500)	14,296,580	303,031,760
- Bridgewater Pure Alpha Major Markets, LP PAMN	Λ 0	200,015,606	(14,981,680)	185,033,926
- Caerus DT Fund, LLC	416,832,353	0	10,635,263	427,467,616
- Canyon Value Realization Fund, L.P.	124,047,155	0	3,599,689	127,646,844
- Capula Global Relative Value Fund Ltd, L.P.	169,657,196	(17,744,327)	9,602,126	161,514,995
- Carlyle Mezzanine Partners II, L.P.	8,681,129	(994,236)	(6,598,792)	1,088,101
- Castlelake Aviation II, L.P.	12,046,692	(8,825,821)	7,351,560	10,572,431
- Castlelake III Aviation Stable Yield, L.P.	37,772,951	50,147,751	24,724,023	112,644,725
- Castlelake III, L.P.	72,527,692	(13,502,158)	(2,717,402)	56,308,132
- Castlelake IV, L.P Centerbridge Capital Partners III, L.P.	117,057,869	(11,266,558)	3,078,474	108,869,785
- Certer bridge Capital Farthers III, L.P Cerebus FSBA Levered Loan Opp Fund, L.P.	66,850,928 177,577,241	291,348 0	9,921,756 14,794,897	77,064,032 192,372,138
- Cerberus Institutional RE Partners III, L.P.	84,304,763	(27,629,185)	7,855,968	64,531,546
- Cerberus Institutional RE Partners IV, L.P.	62,749,208	61,166,495	13,144,741	137,060,444
- Cevian Capital II, L.P.	231,629,000	0	(11,826,952)	219,802,048
- Chambers Energy Capital III, L.P.	22,786,070	9,791,323	2,588,844	35,166,238
- Coastline Fund, L.P.	191,173,554	(18,504,289)	12,386,057	185,055,322
- Coastline Fund, L.P. Tranche II	78,356,338	22,455,861	7,584,430	108,396,629
- Colony Distressed Credit Fund II, L.P.	23,068,741	(5,020,002)	132,585	18,181,324
- Colony Distressed Credit & Special Sit Fund III, L.I	P. 101,472,701	(24,942,741)	8,013,223	84,543,183
- Colony Distressed Credit & Special Sit Fund IV, L.I	P. 94,951,403	25,364,440	11,592,209	131,908,052
- Crescent Mezzanine Partners VI, L.P.	73,897,658	(22,597,195)	5,425,428	56,725,891
- Crescent Mezzanine Partners VII, L.P.	42,784,299	16,003,580	2,441,030	61,228,909
- CVI Credit Value Fund A, L.P.	28,089,774	(24,530,077)	2,316,854	5,876,551
- CVI Credit Value Fund II A, L.P.	92,794,998	(58,185,343)	(2,050,394)	32,559,261
- CVI Credit Value Fund III A, L.P.	221,021,127	(67,404,494)	8,557,924	162,174,557
- CVI Credit Value Fund IV A, L.P.	15,354,326	60,002,480	3,231,971	78,588,777
- CVI Global Value Fund A, L.P.	46,767,956	(38,067,356)	1,998,014	10,698,614
- Deerfield Private Design Fund IV, L.P.	37,040,294	23,500,000	(319,286)	60,221,008
<ul> <li>Distressed Managers II FL, L.P.</li> <li>DoubleLine Opportunistic Income</li> </ul>	11,911,710 202,652,750	0	(4,968,518) 17,600,567	6,943,192 220,253,317
- Dymon Asia Macro (US) Fund	105,518,489	0	(4,099,422)	101,419,067
- EIG Energy Fund XVI, L.P.	73,585,174	(5,341,479)	1,579,337	69,823,031
- Elan Fund, L.P.	428,116,254	150,000,000	34,853,435	612,969,689
- Falcon Strategic Partners III, L.P.	27,917,468	(8,402,726)	(1,149,875)	18,364,867
- Falcon Strategic Partners IV, L.P.	94,050,659	(9,306,610)	2,290,010	87,034,059
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	Market Value	Net Contributions	Investment	Market Value
Account Name - continued	6/30/2018	(Withdrawals)	Gain (Loss)	6/30/2019
- Falko Regional Aircraft Opportunities Fund II, L.P. <sup>1</sup>		32,017,057	(887,155)	31,129,902
- Florida Growth Fund, LLC - Florida Growth Fund Credit Tranche, LLC	124,199,315 63,187,930	(7,325,646) 12,104,978	(3,601,785)	113,271,884 77,155,490
- Florida Growth Fund Credit Tranche, LLC - Florida Growth Fund Tranche II, LLC	138,301,451	(18,157,162)	1,862,582 6,090,037	126,234,326
- Florida Growth Fund II, Tranche 1, LLC	133,021,906	40,292,447	1,589,941	174,904,294
- Florida Sunshine State Fund¹	0	9,094,608	(489,275)	8,605,333
- Gallatin Point Capital Partners, L.P. <sup>1</sup>	0	26,287,426	(3,316,486)	22,970,940
<ul> <li>- Garda Fixed Inc. Relative Value Opp Fd (Onshore)</li> <li>- GI Partners Fund III, L.P.</li> </ul>	Ltd. <sup>1</sup> 0 14,797,195	200,071,906 (12,328,895)	5,680,384 (760,516)	205,752,290 1,707,784
- GI Partners Fund IV, L.P.	171,896,279	5,681,486	25,897,605	203,475,370
- Global Infrastructure Partners II, L.P.	163,053,024	(15,585,137)	28,743,673	176,211,560
- Global Infrastructure Partners III, L.P.	76,935,667	28,484,689	15,447,781	120,868,137
- Global Infrastructure Partners IV, L.P. <sup>1</sup> - GOF II Feeder B, L.P. <sup>5</sup>	0	1,857,718 0	(1,857,718)	0
- Graham Absolute Return Trading Ltd.	162,658,041	0	4,073,375	166,731,416
- Grain Communications Opportunity Fund II, L.P. <sup>1</sup>	0	9,946,533	(1,669,499)	8,277,034
- Graticule Asia Macro Fund, L.P.	171,507,610	0	(13,080,039)	158,427,571
- Green Credit Investors, L.P. <sup>3</sup>	0	(156,571)	156,571	0
- Gruss Global Investors (Enhanced) II, L.P. <sup>2</sup> - GSO Capital Opportunities Fund, L.P.	226,247,778 5,498,207	(216,408,689) 0	(6,428,805) (2,175,711)	3,410,284 3,322,496
- GSO Capital Opportunities Fund II, L.P.	74,943,737	(24,418,813)	3,299,295	53,824,219
- GSO Capital Opportunities Fund III, L.P.	51,845,034	45,564,002	8,087,643	105,496,679
- GSO Capital Solutions Fund II, L.P.	67,274,147	(10,608,941)	(6,601,670)	50,063,536
- GSO Capital Solutions Fund III, L.P.	6,972,189	18,238,601	1,479,665	26,690,455
<ul> <li>GSO Energy Select Opportunities Fund, L.P.</li> <li>GSO Energy Select Opportunities Fund II, L.P.</li> </ul>	54,568,940 0	(200,219) 7,779,614	4,141,825 (124,923)	58,510,546 7,654,691
- HBK Fund II, L.P.	176,807,576	7,779,014	6,281,010	183,088,586
- Healthcare Royalty Partners III, L.P.	29,139,834	6,575,037	2,436,375	38,151,246
- Highline Capital Partners, L.P.	224,441,213	0	(13,570,460)	210,870,753
- ICE EM Credit Absolute Return Fund, L.P. <sup>1</sup>	0	75,099,088	721,667	75,820,755
- IFM Global Infrastructure (US), L.P. - ILS Property & Casualty Fund II <sup>1</sup>	442,353,985	0 48,234,335	72,732,192 (3,602,472)	515,086,177 44,631,863
- ITE Rail Fund, L.P.	0	166,827,451	3,745,612	170,573,062
- Jackson Timberland Opportunities, LLC	190,095,483	(7,572,635)	25,600,297	208,123,145
- JHL Capital Group Fund, LLC <sup>2</sup>	46,108,417	(45,883,591)	(224,826)	0
- Juniperus Insurance Opportunity Fund Ltd <sup>1</sup>	0	150,025,355	1,825,445	151,850,800
<ul><li>- King Street Capital Fund, L.P.</li><li>- KV Partners, LLC</li></ul>	31,092,249 757,534	(16,640,120) 36,345	8,748,677 (54,990)	23,200,805 738,889
- Lake Jackson, L.P.	0	15,345	(15,345)	0
- LCM Credit Opportunities Fund III(a), L.P.	81,598,125	7,756,315	8,819,497	98,173,938
- Levine Leichtman Capital Partners IV, L.P.	38,332,771	(18,073,732)	(8,920,063)	11,338,976
- Levine Leichtman Capital Partners V, L.P.	187,699,353	(41,583,979)	22,717,844	168,833,218
<ul> <li>Levine Leichtman Capital Partners VI, L.P.</li> <li>Lexington GP Holdings, L.P.</li> </ul>	38,545,424 143,579,124	30,670,824 (13,756,937)	746,399 30,122,037	69,962,647 159,944,224
- Litespeed Partners, L.P. <sup>2</sup>	10,313,958	(10,314,607)	648	0
- Luxor Capital Partners, L.P.	111,386,045	, , , , , , , , , , , , , , , , , , ,	6,532,978	117,919,023
- Marathon European Credit Opp Fund II, L.P.	69,944,554	(20,860,703)	5,379,617	54,463,468
- Mason Capital Fund, L.P. <sup>3</sup> - MCP Private Capital Fund, III	930,614	(930,789)	175	0 36,425,129
- Mill Road Capital III, L.P. <sup>1</sup>	17,108,414 0	14,540,192 58,942	4,776,523 (58,942)	0
- MKP Opportunity Partners, L.P.	158,485,792	0	15,012,399	173,498,191
- MW Eureka (US)	54,946,099	0	1,182,530	56,128,629
- Oaktree Opportunities Fund VIII, L.P.	10,565,684	(5,878,355)	113,961	4,801,290
<ul> <li>Oaktree Opportunities Fund VIIIb, L.P.</li> <li>Oaktree Opportunities Fund IX, L.P.</li> </ul>	26,488,360 77,394,935	(10,571,709) (10,000,000)	1,808,678 6,055,841	17,725,329 73,450,776
- Oaktree Opportunities Fund Xb, L.F.	5,000,000	20,000,000	(235,504)	24,764,496
- OCM Opportunities Fund VIIb, L.P.	2,970,581	(2,019,139)	166,420	1,117,862
- Orion Mine Finance Co-Investment Fund II, L.P.		18,202,658	3,650,519	24,419,666
- Orion Mine Finance Fund I, L.P.	82,781,808	(2,538,477)	(8,833,637)	71,409,695
- Orion Mine Finance Fund II, L.P.	51,369,775	28,120,264	7,913,418	87,403,457
- OZ Domestic Partners II, L.P. - P2 Capital Fund, L.P.	317,368,763 312,008,461	(120,005,863) 0	8,081,255 (13,918,562)	205,444,155 298,089,899
- Patria Infrastructure Fund IV, L.P. <sup>1</sup>	0	20,458	(20,458)	0
- PCG Special Situation Partners, L.P.	19,644,297	(17,571,071)	790,951	2,864,177
- Primary Wave Music IP Fund 1, L.P.	12,568,580	50,031,205	1,211,092	63,810,877
<ul> <li>Primary Wave Music IP Fund 2, L.P.¹</li> <li>Principal RE Debt (SBAF Mortgage Fund), LLC</li> </ul>	0 166,951,509	46,085 (80,545,270)	(46,085) 10,579,940	0 96,986,178
- Providence Debt (SBAP Mortgage Fund), LLC	146,908,940	(40,606,845)	3,831,211	110,133,306
- Providence Equity Global Group, LLC	142,466,273	(24,211,324)	47,512,338	165,767,287

Account Name - continued	Market Value 6/30/2018	Net Contributions (Withdrawals)	Investment Gain (Loss)	Market Valu 6/30/201
- Providence TMT Debt Opportunity Fund II, L.P.	8,830,652	(7,691,319)	(293,674)	845,659
- Providence TMT Special Situation Fund, L.P.	2,019,281	(846,467)	(192,825)	979,989
- Rubik Holdings LTD	50,905,607	125,000,000	(2,954,149)	172,951,45
- SASOF III, L.P.	34,858,476	(30,296,115)	11,895,620	16,457,980
- SASOF IV, L.P. <sup>4</sup>	36,930,223	(5,125,739)	7,509,447	39,313,930
- Scopia PX, LLC	122,207,944	0	(1,609,480)	120,598,46
- Special Situation Partners II, L.P.	40,753,322	(6,096,620)	(1,893,370)	32,763,333
- Sprott Private Resource Lending (US), L.P.	48,177,807	(9,377,666)	7,349,593	46,149,73
- Sprott Private Resource Lending II, L.P. <sup>1</sup>	0	5,599,177	(309,530)	5,289,64
- Square Mile Partners III, L.P.	3,410,852	(1,587,039)	(1,152,433)	671,38
- Starboard Value and Opportunity Fund, LLC	347,933,086	0	42,699,359	390,632,44
- Taconic Opportunity Fund, L.P.	292,863,025	0	20,614,799	313,477,82
- TCW Crescent Mezzanine Partners V, L.P.	9,930,817	(4,219,288)	(2,132,919)	3,578,61
- Three Bridges Europe Fund, L.P.	102,243,545	0	(4,892,980)	97,350,56
- Tintoretto Partners, L.P.	66,617,258	124,775,000	(2,433,492)	188,958,76
- Tricon Housing Partners I US, L.P.	33,004,469	(2,278,351)	(24,548)	30,701,57
- Tricon Housing Partners II US, L.P.	75,864,340	(34,526,657)	(7,081,496)	34,256,18
- Trigate Property Partners II, L.P.	30,290,959	(11,812,890)	3,200,997	21,679,06
- Trigate Property Partners III, L.P.	18,538,427	12,016,803	4,388,067	34,943,29
- TSSP Adjacent Opportunities Partners, L.P.	131,300,483	(4,362,004)	11,676,146	138,614,62
- Varde Fund X, L.P.	38,324,467	(8,526,809)	1,316,252	31,113,91
- Varde Fund XI, L.P.	215,193,611	(30,229,564)	16,423,417	201,387,46
- Varde Fund XII (c), L.P.	222,253,088	0	18,219,207	240,472,29
- Vine Media Opportunities Fund III, L.P.	85,509,971	(4,374,373)	(20,644,717)	60,490,88
- Vine Media Opportunities Fund IV, L.P.	7,294,479	(1,797,260)	(1,589,529)	3,907,69
- VSS Structured Capital II, L.P.	18,188,579	(11,652,085)	326,007	6,862,50
- Wayzata Opportunities Fund II, L.P.	2,949,855	(2,184,390)	18,504	783,96
- Wayzata Opportunities Fund III, L.P.	36,021,408	(4,877,616)	(2,297,178)	28,846,61
Other:				
- Strategic Investments Cash	67,434,958	(34,566,070)	1,350,079	34,218,96
- Strategic Investment Cash Expense	0	1,860,247	(1,860,247)	
- Strategic Investments Transition	788,061	0	53,797	841,85
Total Strategic Investments \$ 1	2,917,535,335	\$ 439,999,846	\$ 671,832,528	\$ 14,029,367,70

• Totals may not foot due to rounding.

### **TABLE 14:**

# FRS Pension Plan - Miscellaneous Portfolios **Change in Market Value for Fiscal Year 2018-19**

Account Name	Market Value 6/30/2018	Net Contributions (Withdrawals)	Investment Gain (Loss)	Market Value 6/30/2019
- Cash Expense Account <sup>1</sup>	\$ 0	\$ 85,821	\$ (85,821)	\$ 0
- Cash Securities Lending Account <sup>2</sup>	(33,653,338)	0	1,385,688	(32,267,650)
- Central Cash/Short-Term	1,557,297,401	831,674	44,233,888	1,602,362,963
- Centralized Cleared IM Collateral Account	126,313,010	0	3,001,058	129,314,068
- Centralized MSFTA Collateral Account	20,284,556	0	477,730	20,762,285
- Centralized Non-Cleared Cash Collateral	27,070,664	0	618,747	27,689,410
- TF STIPFRS NAV Adjustment Account <sup>3</sup>	(214,795)	0	63,980	(150,816)
Total Fund Cash Expense Account_	0	35,923,650	(35,923,650)	0
Total Cash Asset Class	\$ 1,697,097,498	\$ 36,841,144	\$ 13,771,619	\$ 1,747,710,261

<sup>&</sup>lt;sup>1</sup>The Cash Expense Account and the Total Fund Cash Expense Account are both used to pay various expenses (including SBA investment service charges and bank fees) on behalf of the entire FRS Pension Plan. Excluding these expenses, the reported investment gain (loss) would have been \$0 for the Cash Expense Account and \$73 for the Total Fund Cash Expense Account.

• Totals may not foot due to rounding.

<sup>&</sup>lt;sup>1</sup>Account opened during the fiscal year.
<sup>2</sup>Account assets sold or partnership interest sold during the fiscal year. Remaining balances reflect residual activity.
<sup>3</sup>Account assets sold or partnership interest sold during the prior fiscal year. Balances and activity reflect residual activity.
<sup>4</sup>Account name changed from Apollo Aviation Fund Management, LLC to SASOF IV, L.P.
<sup>5</sup>Account inactive during the fiscal year.

<sup>•</sup> For certain strategic investments accounts, market values are estimates of value which may or may not represent what would be actually realized in arm's-length sales transactions. In such cases the market values are self-reported by the external managers of these accounts and incorporate their estimate of the value of illiquid publicly traded securities and private market holdings.

<sup>&</sup>lt;sup>2</sup>The SBA includes the net unrealized gain (loss) on invested cash collateral in the securities lending program in the total market value of the Cash Securities Lending Account. In fiscal year 2019, the net unrealized loss decreased, resulting in an unrealized gain of \$368,830 that is included in the Investment Gain (Loss) column. The other investment gains in fiscal year 2019 consisted of \$220,461 in realized gain from sales of security lending collateral, \$769,054 in settlement income and \$27,343 in interest on invest-

The TESTIPERS NAV Adjustment Account is used to record the difference between the net market value of the Short-Term Investment Pool (STIPERS) that SBA utilizes to invest cash balances in the FRS Pension Plan and the total STIPERS participant balances (carried at amortized cost) in all the individual portfolios that are invested in the pool.

# FRS Pension Plan Net Securities Lending Revenue by Fiscal Year

44,532,896 38,044,668 41,398,835 49,210,608 41,689,317 31,482,495
38,044,668 41,398,835 49,210,608
38,044,668 41,398,835
38,044,668
44,532,896
48,168,513
43,777,884
43,594,622
(134,528,845)
96,168,151
115,505,817
54,097,509
50,490,779
38,447,917
34,558,808
34,628,432
\$ 49,744,143

<sup>&</sup>lt;sup>1</sup> The loss for 2009-10 resulted from a decline in value of various investments held in the securities lending portfolio. The recovery in value of these investments was not considered probable. Therefore, the underlying securities were written down resulting in a net realized loss. Net income without this loss was \$38,001,712.

- •This table is on an accrual basis, not a cash basis, meaning income is recorded when earned, not when received.
- Numbers may not total due to rounding.

Source: SBA

Securities lending is the short-term loan of securities for a fee. With its large portfolio of assets, the Pension Plan is well suited to such a program. Mutual funds and ETFs typically have lending programs for the same reasons. The demand to borrow shares usually comes from hedge funds or short-sellers. When securities are loaned, borrowers provide collateral, such as cash or government securities, of value equal to, or greater than, the loaned securities. As shown in Table 15, the program has provided significant gains over the long-term. However, fallout from the mortgage crisis resulted in losses during Fiscal Year 2009-10. In response, the program was restructured to a more conservative set of re-investment guidelines.

# Florida Investments

**TABLE 15:** 

In 2008, the Florida Legislature authorized the SBA to invest up to 1.5% of net state retirement system trust fund assets in technology and high-growth investments of certain businesses with a significant presence in Florida.

The legislature made a determination that such investments would economically benefit the state. These investments may include space technology, aerospace and aviation engineering, computer technology, renewable energy, and medical and life sciences. The SBA created the Florida Growth Fund as the vehicle to carry out this mandate.

As part of the initiative, Florida Statutes require the SBA to report the year-end value of all the Pension Plan's Florida-based investments, as well as the component that can be considered growth and technology. Table 16 provides those figures for all Pension Plan investments that meet the criteria.

TABLE 16:	All F	Florida Holdings	Growt	th & Technology <sup>5</sup>
Asset Class		Net Asset Value		Net Asset Value
Separate Accounts - Direct				
Global Equity	\$	945,089,664	\$	578,410,184
Fixed Income		83,868,574		34,358,581
Real Estate- Core <sup>1</sup>		724,739,384		0
Real Estate- Non-Core <sup>1</sup>		128,816,297		0
Sub-Total Separate Accounts	\$	1,882,513,919	\$	612,768,765
Commingled Accounts- Indirect				
Real Estate- Commingled <sup>2</sup>		396,592,812		0
Private Equity- Commingled <sup>3</sup>		150,841,158		77,923,754
Strategic Investments - Commingled		651,466,354		71,660,443
Sub-Total Commingled <sup>4</sup>		1,198,900,323		149,584,196
Total	\$	3,081,414,243	\$	762,352,962

<sup>&</sup>lt;sup>1</sup>Real Estate Core and Non-Core data as of June 30, 2019 net of debt.

<sup>&</sup>lt;sup>2</sup>Real Estate Commingled Account data as of June 30, 2019, net of debt.

<sup>&</sup>lt;sup>3</sup> Private Equity data as of March 31, 2019.

<sup>&</sup>lt;sup>4</sup> The Pension Plan owns Florida investments in commingled funds valued at \$1,198,900,323. The Pension Plan owns shares of each commingled fund, not the underlying assets, i.e., property, equity or debt instruments. The assets are owned by the funds.

<sup>&</sup>lt;sup>5</sup>Included in All Florida Holdings

Numbers may not total due to rounding..

# Florida Retirement System **Investment Plan**

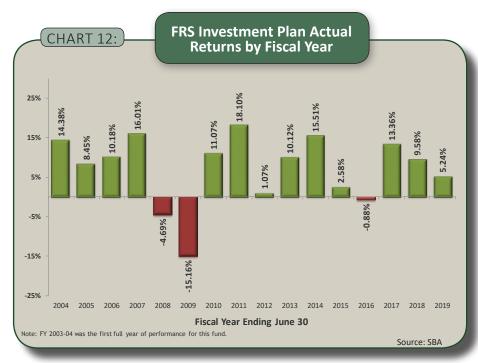
# **Overview and Investment Objective**

he Florida Retirement System (FRS) Investment Plan was established by the legislature to provide Florida's public employees with a portable, flexible alternative to the FRS Pension Plan (a traditional defined benefit plan). Since opening its first employee account in 2002, the Investment Plan has become one of the largest optional public-sector defined contribution retirement plans in the U.S., with more than 190,000 and \$10.8 billion in assets as of June 30, 2019.

The primary objectives of the Investment Plan are to offer investment options that avoid excessive risk, have a prudent degree of diversification relative to broad market indices and provide a long-term rate of return, net of all expenses and fees, which achieves or exceeds the returns on comparable market benchmark indices.

The Executive Director & CIO is responsible for selecting, evaluating, and monitoring performance of the investment options, with a focus on maximizing returns within appropriate risk constraints. The Investment Plan features 22 funds, including 11 funds spread across five asset classes, and 11 retirement date funds that are mixtures of various asset classes. A Self-Directed Brokerage Account is also available.

The SBA follows Florida Statutes' fiduciary standards of care in managing the Investment Plan's options. Investment Advisory Council provides independent oversight of the plan's general objectives, policies, strategies



# Performance

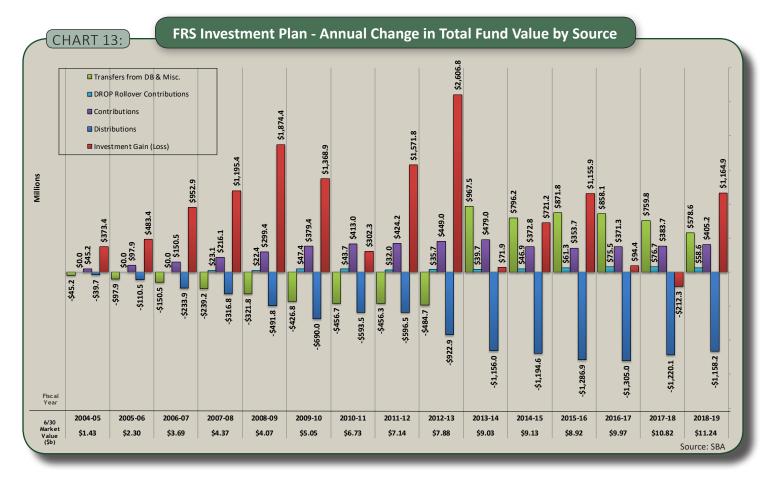
Investment performance in the Investment Plan is measured on an absolute basis (actual returns) and relative to appropriate market benchmarks for each investment option. Performance data is aggregated for the total fund and for each product type, using participant allocations as the weighting factors. Unlike the Pension Plan, asset allocation in the Investment Plan is the responsibility of each individual investor.

#### TABLE 17: FRS Investment Plan Returns vs. Benchmark

	Actual Return	Benchmark Return	Actual Over (Under) Bmk.	
One Year	5.24%	5.24%	0.00%	
Three Years	9.34%	8.83%	0.51%	
Five Years	5.86%	5.57%	0.29%	
Ten Years	8.41%	8.03%	0.38%	
Since Inception	6.95%	6.60%	0.57%	

- All returns are annualized for periods indicated through June 30, 2019
- · Benchmark is a weighted blend of individual asset class target indices as applicable per the FRS Investment Plan Investment
- Policy Statement; weights are based on contemporaneous market valuations, per participant asset allocation choices.

   Inception of the fund is August 2002.
- Numbers may not total due to rounding



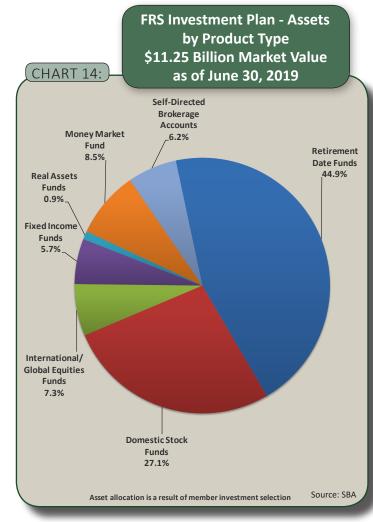
### **Costs**

Total plan cost equals the sum of investment option management fees plus administrative, education, participant advice, and fiduciary costs. According to CEM Benchmarking, the Investment Plan's total plan cost (or expense ratio) for calendar year 2017 was 30 basis points (bps). This exceeded its benchmark cost of 28 bps by 2 bps, or 0.02%. The reason for exceeding the benchmark is the extensive education program and resources offered to FRS members. Without these costs, the Investment Plan would be comparable to all peers.

The benchmark cost equals the Plan's asset mix multiplied by the size-adjusted peer median cost for each asset category.

# **Investment Options**

The Investment Plan offers a diversified array of fund options that span the risk and return spectrum. The investments options include a suite of customized target date funds, along with a money market fund, multi-asset fund, bond funds, US stock funds and foreign and global stock funds. The average fees across all investment funds are highly competitive at 0.17%.



### **Retirement Date Funds**

The FRS Retirement Date Funds invest in a diversified portfolio of other Investment Plan funds and use an asset allocation concept often referred to as "target date funds." The mix of funds in each Retirement Date Fund is based on the amount of time a member in the Investment Plan has before retirement, and the mix gradually changes as the member nears retirement. This gradual change follows a careful investment allocation strategy called a "glide path."

## TABLE 18: FRS Investment Plan - Retirement Date Funds

### Annual Average Investment Returns After Deducting Fees – Data Through June 30, 2019

	Las	t 12 Mor	nths	La	ast 3 Yea	rs	La	ast 5 Yea	rs	La	ıst 10 Yea	ırs	Sin	ce Incept	ion
Fund Name Performance Benchmark	Actual Return	Benchmark Return	Value Added												
	Neturn	Neturn	Added	Return	Return	Added	Return	Return	Added	Return	Return	Added	Return	Neturn	Added
FRS 2060 Retirement Date Fund 2060 Retirement Custom Index	5.05%	4.98%	0.07%	10.85%	10.70%	0.15%	6.29%	6.07%	0.22%	n/a	n/a	n/a	6.29%	6.07%	0.22%
FRS 2055 Retirement Date Fund 2055 Retirement Custom Index	4.99%	4.98%	0.00%	10.85%	10.70%	0.15%	6.29%	6.07%	0.22%	n/a	n/a	n/a	6.29%	6.07%	0.22%
FRS 2050 Retirement Date Fund 2050 Retirement Custom Index	4.99%	4.98%	0.01%	10.89%	10.70%	0.19%	6.31%	6.07%	0.24%	n/a	n/a	n/a	6.31%	6.07%	0.23%
FRS 2045 Retirement Date Fund 2045 Retirement Custom Index	5.12%	5.12%	0.00%	10.87%	10.73%	0.16%	6.30%	6.09%	0.21%	n/a	n/a	n/a	6.30%	6.09%	0.21%
FRS 2040 Retirement Date Fund 2040 Retirement Custom Index	5.28%	5.30%	(0.02%)	10.65%	10.36%	0.29%	6.18%	5.91%	0.27%	n/a	n/a	n/a	6.18%	5.91%	0.27%
FRS 2035 Retirement Date Fund 2035 Retirement Custom Index	5.46%	5.48%	(0.02%)	10.28%	9.79%	0.49%	6.04%	5.66%	0.48%	n/a	n/a	n/a	6.04%	5.66%	0.48%
FRS 2030 Retirement Date Fund 2030 Retirement Custom Index	5.59%	5.62%	(0.03%)	9.44%	9.12%	0.37%	5.69%	5.46%	0.23%	n/a	n/a	n/a	5.69%	5.46%	0.23%
FRS 2025 Retirement Date Fund 2025 Retirement Custom Index	5.66%	5.73%	(0.07%)	8.63%	8.31%	0.32%	5.21%	5.03%	0.18%	n/a	n/a	n/a	5.21%	5.03%	0.18%
FRS 2020 Retirement Date Fund 2020 Retirement Custom Index	5.63%	5.76%	(0.14%)	7.60%	7.30%	0.30%	4.55%	4.49%	0.06%	n/a	n/a	n/a	4.55%	4.49%	0.06%
FRS 2015 Retirement Date Fund 2015 Retirement Custom Index	5.52%	5.77%	(0.25%)	6.52%	6.25%	0.27%	3.91%	3.93%	(0.02%)	n/a	n/a	n/a	3.91%	3.93%	(0.02%)
FRS Retirement Income Fund Retirement Income Custom Index	5.52%	5.78%	(0.26%)	5.90%	5.81%	(0.09%)	3.55%	3.70%	(0.15%)	n/a	n/a	n/a	3.55%	3.70%	(0.15%)

<sup>•</sup> Numbers may not total due to rounding. Inception July 2014.

### **Money Market Fund**

The FRS Money Market Fund invests in short-term securities (financial instruments or obligations) that are high quality and can be sold quickly with little loss of value. Because of these investments, the fund has limited risk of declining in value. However, over the long term, money market investment returns have been modest and may not keep pace with inflation. Money market funds are not FDIC insured or guaranteed.

#### **TABLE 19:** FRS Investment Plan - Money Market Fund Annual Average Investment Returns After Deducting Fees - Data Through June 30, 2019 Last 12 Months Last 3 Years Last 5 Years Last 10 Years Since Inception Fund Name Actual Actual Benchmark Actual enchmar Actual enchmarl Value Actual 3enchmar Value Value Value nchma Performance Benchmark Return Return Return Return Added Return Return Added Return Added Return Return Added Return FRS Money Market Fund 2.52% 2.21% 0.31% 1.68% 1.34% 0.34% 1.11% 0.84% 0.27% 0.68% 0.48% 0.20% 1.59% 1.50% 0.09% iMoneyNet Money Fund Average • Numbers may not total due to rounding. Inception August 2002. Source: SBA

### **Multi-Asset Fund**

The FRS Inflation Adjusted Multi-Assets Fund invests in a diversified array of assets that may help offset inflationary pressures. These assets include, but are not limited to, U.S. Treasury inflation-linked securities, commodities, real estate investment trusts, gold, and other securities. The fund seeks long-term real (net of inflation) returns to preserve the future purchasing power of accumulated assets. Members could lose money over short- or long-term periods by investing in this fund and returns may not keep pace with inflation.

TABLE 20:			Annual	Average	FRS In				<b>Julti-A</b>			hrough	June 30	), 2019	
	Last	t 12 Mor	nths	Lä	ast 3 Yea	rs	La	ast 5 Yea	rs	La	st 10 Yea	irs	Sin	ce Incept	tion
Fund Name Performance Benchmark	Actual Return	Benchmark Return	Value Added												
FRS Real Assets Fund FRS Custom Real Assets Index	2.04%	3.53%	(2.49%)	3.71%	3.94%	(0.23%)	0.65%	1.41%	(0.76%)	n/a	n/a	n/a	0.65%	1.41%	(0.76%)
Numbers may not total due to	o rounding	. Inception	August 20	002										So	ource: SBA

### **Bond Funds**

The Investment Plan has three bond funds that invest primarily in fixed income securities. The quality of a bond is reflected in the credit rating of the company or agency that issues the bond. The short-term risk of bond funds is relatively low. However, over time, the value of a bond is affected by interest rates, inflation, and other factors.

TABLE 21:						FRS Ir	nvestn	nent Pl	an - B	ond F	unds				
		,	Annual	Averag	e Invest	ment R	eturns /	After De	ducting	Fees –	Data Th	rough.	June 30	), 2019	
	Las	t 12 Mon	iths	L	ast 3 Yea	rs	La	ast 5 Yea	rs	La	st 10 Yea	ırs	Sin	ce Incept	ion
Fund Name Performance Benchmark	Actual Return	Benchmark Return	Value Added												
FRS U.S. Bond Enhanced Index Fund Barclays Capital Aggregate Bond Index	7.90%	7.87%	0.03%	2.35%	2.31%	0.04%	3.03%	2.95%	0.08%	4.02%	3.90%	0.12%	4.48%	4.33%	0.15%
FRS Intermediate Bond Fund Barclays Capital Intermediate Aggregate Bond Index	7.15%	6.97%	0.18%	2.31%	2.11%	0.20%	2.63%	2.51%	0.12%	3.89%	3.37%	0.52%	3.89%	3.37%	0.52%
FRS Core Plus Fixed Income Fund FRS Custom Core Plus Fixed Income Index	8.52%	8.05%	0.47%	3.98%	3.26%	0.72%	3.64%	3.26%	0.38%	n/a	n/a	n/a	3.64%	3.26%	0.38%
• Numbers may not total due to	o rounding													So	urce: SBA

### **U.S. Stock Funds**

The Investment Plan provides several U.S. Stock Funds including a large US equity, an all cap US equity and a small/mid cap US equity. U.S. Stock Fund invest primarily in stocks issued by U.S. companies. The short-term risk of investing in stocks has been much higher than bonds. However, over long periods of time, stocks have generally performed better than bonds.

			Annu	al Avera	age Inve	stment	Return	s After	Deducti	ng Fees	– Data	Throug	gh June	30, 201	.9
	Las	t 12 Mor	nths	La	ast 3 Yea	rs	La	ast 5 Yea	rs	La	st 10 Yea	ırs	Sino	e Incept	ion
Fund Name Performance Benchmark	Actual Return	Benchmark Return	Value Added												
FRS U.S. Stock Market Index Fund Russell 3000 Index	9.05%	8.98%	0.07%	14.11%	14.02%	0.09%	10.29%	10.19%	0.10%	14.75%	14.67%	0.08%	9.68%	9.61%	0.07%
FRS U.S. Large Cap Equity Fund Russell 1000 Index	5.38%	10.02%	(4.64%)	14.94%	14.15%	0.79%	10.19%	10.45%	(0.26%)	n/a	n/a	n/a	10.19%	10.45%	(0.26%
FRS U.S. Small/Mid Cap Equity Fund FRS Custom Small/Mid Cap	3.76%	1.77%	1.99%	13.87%	12.34%	1.53%	9.29%	7.83%	1.46%	n/a	n/a	n/a	9.29%	7.83%	1.46%

### **Foreign and Global Stock Funds**

The Investment Plan has three Foreign and Global Stock Funds. These funds invest primarily in stocks issued by foreign companies. Compared to U.S. stocks, foreign stocks are affected by additional risk factors such as foreign laws and regulations, differences in accounting practices, political, and currency risks. Over the long-term, foreign stocks have provided additional diversification benefits.

TABLE 23:			—	FRS I	nvestn	nent P	lan - F	oreign	and (	Global	Stock	Funds			
		,	Annual	Average	e Invest	ment R	eturns A	After De	ducting	Fees –	Data Th	nrough	June 30	, 2019	
	Las	st 12 Mon	iths	Lá	ast 3 Yea	rs	La	ast 5 Yea	rs	La	st 10 Yea	ars	Sin	ce Incept	ion
Fund Name Performance Benchmark	Actual Return	Benchmark Return	Value Added												
FRS Foreign Stock Index Fund MSCI All Country World Index ex US IMI Index	0.59%	0.26%	0.33%	9.51%	9.17%	0.34%	2.55%	2.25%	0.30%	7.19%	6.85%	0.34%	7.21%	6.90%	0.31%
FRS Foreign Stock Fund MSCI All Country World ex U.S. Index	1.91%	1.29%	0.62%	10.84%	9.44%	1.40%	4.45%	2.38%	2.07%	8.16%	6.70%	1.46%	6.84%	4.55%	2.29%
FRS Global Stock Fund MSCI All Country World Index	7.35%	5.74%	1.61%	14.66%	11.62%	3.04%	9.41%	6.16%	3.25%	12.58%	10.19%	2.39%	10.59%	7.78%	2.81%
Numbers may not total due to	o roundir	ng.												Sou	ırce: SBA

# **Self-Directed Brokerage Account**

The Investment Plan also offers its members access to a self-directed brokerage account. It does not fall into any single asset class because it allows the member to invest in a vast number of different investments in addition to the Plan's primary investment funds. The Self-Directed Brokerage Account is not suitable for all members and the members who use the Account assume the full risk and responsibility for the investments selected.

# Florida PRIME™

# **Overview and Investment Objective**

Iorida PRIME™ provides eligible participants a cost-effective investment vehicle for their surplus funds. Officially named the Local Government Surplus Funds Trust Fund, its investment strategy emphasizes, in order of importance, preservation of capital (safety), liquidity, and competitive yield. Florida PRIME™ is managed by an industry leader in professional money management and maintains conservative investment policies and a Standard & Poor's 'AAAm' rating. Florida PRIME™ has enhanced transparency and extensive governance oversight, and continues to offer participants exceptional service, including expanded reporting, enhanced web functionality, improved customer service, and strengthened investment guidelines.

Florida PRIME™ is governed by Chapters 215 and 218, Florida Statutes, and Chapter 19-7 of the Florida Administrative Code (collectively referred to as, "applicable Florida law").

The Trustees (comprised of the Governor, the Chief Financial Officer, and the Attorney General of the State of Florida) have delegated the administrative and investment authority to manage Florida PRIME™ to the Executive Director & CIO of the SBA, subject to applicable Florida law.

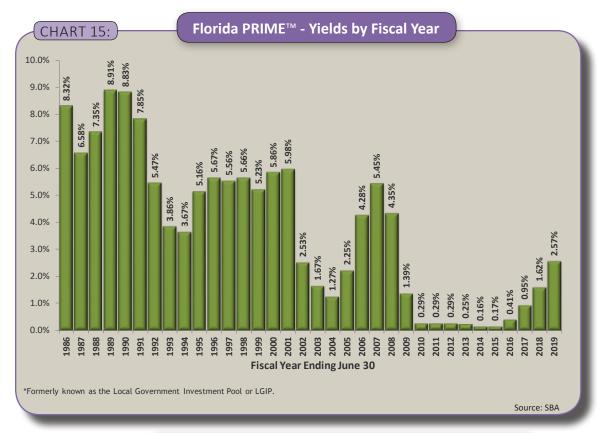
# **Eligible Participants**

Units of local government eligible to participate in Florida PRIME™ include, but are not limited to, any county, municipality, school district, special district, clerk of the circuit court, sheriff, property appraiser, tax collector, supervisor of elections, state university, state college, community college, authority, board, public corporation, or any other political subdivision or direct support organization of the state.

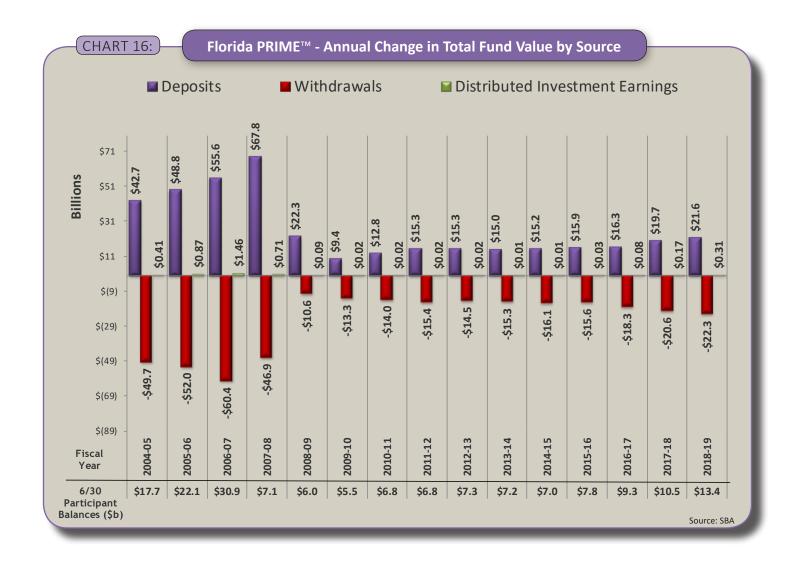
As of June 30, 2019, Florida PRIME™ had a net asset value of \$10.5 billion, comprising assets held in 1,386 investor accounts on behalf of 737 participants. During the fiscal year, the fund's assets increased by approximately \$1.2 billion, representing an 13% increase in net asset value.

### **Performance**

For the fiscal year ending June 30, 2019, Florida PRIME™ delivered an aggregate \$170.7 million in investment earnings to its investors, more than double the amount earned by participants during the prior fiscal year. During fiscal year 2018-19, the pool processed over \$42.2 billion in participant cash flows (including both deposits and withdrawals). Relative performance of Florida PRIME™ has been strong over both short- and long-term time periods. For the period ending June 30, 2019, Florida PRIME™ generated excess returns (performance above the pool's benchmark) of approximately 31 basis points (0.31%) over the last 12 months, 28 basis points (0.28%) over the last three years, and 21 basis points (0.21%) over the last five years. Florida PRIME™ has outperformed all other government investment pools statewide. Through the five-year period ending June 30, 2019, Florida PRIME™ ranked as the highest performing investment vehicle when compared to all registered money market funds within iMoneyNet's First Tier Institutional Fund Universe. By historical standards, absolute returns have been low over the past five years, reflecting the near-zero Federal Funds rate strategy employed as part of the stimulative monetary policy of the Federal Reserve Board of Governors. During the fiscal year the Federal Open Markets Committee (FOMC) raised interest rates twice leading to a steady rise in the pool's yield to end the fiscal year at 2.11%.



#### Florida PRIME™ - Participant Performance Data TABLE 24: Through June 30, 2019 Florida PRIME 30 Day Avg Yield<sup>1</sup> Benchmark Yield<sup>2</sup> Actual Over (Under) Bmk. One Year 2.57% 2.26% 0.31% 1.40% Three Years 1.71% 0.32% Five Years 1.14% 0.89% 0.25% Ten Years 0.70% 0.50% 0.20% Fifteen Year 1.63% 1.43% 0.21% **Twenty Years** 2.08% 1.86% 0.23% Twenty-Five Years 2.75% 2.56% 0.18% All yields are annualized for periods indicated through June 30, 2019. • Yields are net of fees, and reflect the yield calculation pursuant to Chapter 19-7.011, Florida Administrative Code. • Benchmark is the S&P AAA/AA Rated GIP All 30-Day Net Index for all time periods except the period July, 1994 to March, 1995 where an approximation using one month LIBOR was used Numbers may not total due to rounding 1Net of fees. Participant yield is calculated on a 365-day basis and includes adjustments for expenses and other accounting items to reflect realized earnings by participants. Source: SBA



### Cost

As the lowest-cost investment pool in the state, Florida PRIME™ offers the best value for governmental investors, with total fees that are a fraction of the cost of other investment options. The all-in fees of Florida PRIME™ are approximately one-fourth (1/4) those of its closest competitor, by far the lowest of any similar government investment pool ("GIP") in the State of Florida, and lower than most other GIPs nationwide and other institutional money market products. All investors are charged a uniform rate to participate in Florida PRIME™. As of June 30, 2019, the fee charged to Florida PRIME™ investors was 3.33 basis points (or 0.0333%) of account value. This charge covers the cost of investment management, record keeping, legal compliance, maintenance of a fund rating, and fiduciary oversight of the investment pool.

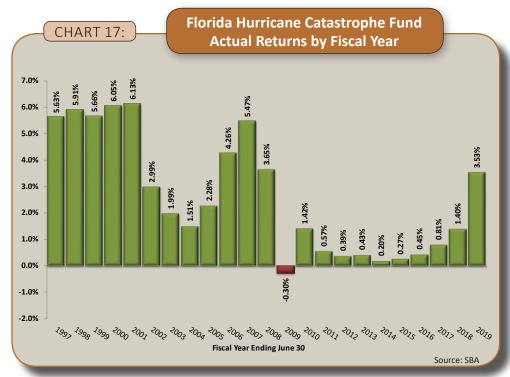
According to the most recent iMoneyNet™ report on GIPs, the average total cost for all types of money market funds was 14.39 basis points. The average fee for GIPs classified as money market funds was 7.59 basis points. These fee levels, approaching three to six times the cost of Florida PRIME™, are roughly commensurate with other statewide GIPs available to local governments in Florida, which range from 11 to 22 basis points, depending on the specific level of temporary fee waiver in effect. According to iMoneyNet™ data, the average fee charged among all taxable, registered money market funds, excluding government-sponsored investment pools, stands at 46 basis points. The average expense ratio among all "prime" institutional money market funds equals 32 basis points (net expense ratio).

# Florida Hurricane Catastrophe Fund/ State Board of Administration Finance Corporation

The Florida Hurricane Catastrophe Fund (FHCF) was created in 1993 in response to Florida's property insurance crisis resulting from Hurricane Andrew. The purpose of this tax-exempt state trust fund is to encourage additional insurance capacity in the state by providing a stable and ongoing source of reimbursement to insurers for a portion of their catastrophic hurricane losses. The FHCF is funded by reimbursement premiums charged to participating insurers, investment earnings, and emergency assessments on most property and casualty insurers.

## **Performance**

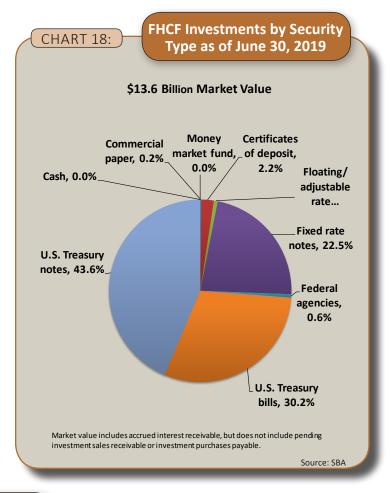
The SBA acts as investment manager for the FHCF. Reimbursing insurers fully for their covered losses in a timely manner is the primary mission of the Therefore, the investment FHCF. objective for the FHCF is defined by the following prioritized goals: (i) liquidity; (ii) safety of principal; and (iii) competitive returns. The investment returns of the portfolio are consistent with the mission of the FHCF. Earnings for the most recent period continue to be modest by historical standards, due to the FHCF's conservative investment policy and the low interest rate environment during the year.

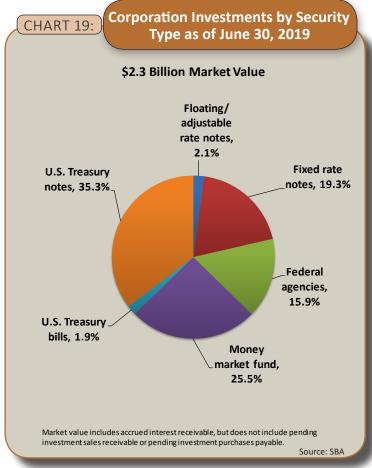


#### Florida Hurricane Catastrophe Fund TABLE 25: **Returns for Periods Ending June 30, 2019 Actual Actual Over Benchmark** (Under) Bmk. Return Return One Year 3.53% 3.63% (0.09%)Three Years 1.91% 1.74% 0.17% Five Years 1.29% 1.19% 0.09% Ten Years 0.94% 0.65% 0.30% 0.09% Fifteen Years 1.64% 1.55% • All returns are annualized for periods indicated through June 30, 2019. Benchmark is a weighted-average of individual portfolio level benchmark returns. Inception of the Fund was July 1996. · Numbers may not total due to rounding Source: SBA

# **Portfolio**

Cash flow needs for the FHCF after a hurricane are difficult to project, but it is prudent to assume that significant amounts of cash could be needed to pay covered losses quickly if there is a large event. Since paying such losses fully and in a timely manner is the primary mission of the FHCF, liquidity and principal stability in the portfolio must be paramount. The SBA invests in short-term, high quality, and highly liquid fixed income securities such as certificates of deposit, commercial paper, U.S. government agency notes, and U.S. Treasury bills.





# **State Board of Administration Finance Corporation**

The State Board of Administration Finance Corporation (Corporation) was created as a public benefits corporation to provide a mechanism for the cost-effective and efficient issuance of bonds to fund hurricane losses for the FHCF.

### TABLE 26:

# State Board of Administration Finance Corporation Series 2013A Returns for Periods Ending June 30, 2019

	Actual Return	Benchmark Return	Actual Over (Under) Bmk.
One Year	2.97%	2.97%	0.00%
Three Years	1.67%	1.50%	0.16%
Five Years	1.15%	1.05%	0.10%
Since Inception	0.96%	0.86%	0.10%
All returns are annualized	for periods indicated throu	gh June 30, 2019.	

- The total return of the portfolio will serve as the benchmark.
- Inception of the fund was April 2013.
- Numbers may not total due to rounding.

Source: SBA

# **Pre-Event Financing**

In order to provide a source of additional funds to reimburse insurers for hurricane losses related to future covered events, the Corporation issued \$2.0 billion taxable, pre-event Series 2013A revenue bonds in Fiscal Year 2012-13 and \$1.2 billion taxable, pre-event Series 2016A revenue bonds in Fiscal Year 2015-16. The proceeds of these bonds are invested and managed by the SBA as a potential source of reimbursement for future hurricane losses. The investment earnings on the bonds, as well as the FHCF's reimbursement premiums, are the funding sources for the payment of interest on the bonds.

The Corporation has the same investment objectives as the FHCF, therefore, the investment returns and allocation of securities also reflect the short-term, high quality, and highly liquid nature of the portfolio.

### TABLE 27:

# **State Board of Administration Finance Corporation** Series 2016 Returns for Periods Ending June 30, 2019

	Actual Return	Benchmark Return	Actual Over (Under) Bmk.
One Year	3.28%	3.22%	0.06%
Three Year	1.78%	1.59%	0.19%
Since Inception	1.66%	1.55%	0.12%

- All returns are annualized for periods indicated through June 30, 2019.
   From June 2017 to January 2018 the benchmark was a blend of 75% of the Bank of America Merrill Lynch 1-Year U.S.
   Treasury Bill Index and 25% of the iMoneyNet First Tier Institutional Money Market Funds Net Index. From February
   2018 to June 2018 the benchmark is the managed return. From July 2018 to September 2018 the benchmark was a blend of 35% Bank of America Merril Lynch 1-3 Year AA US Corporate Bond Index and 65% Bank of America Merril Lynch 1-3 Year US Treasury Index. From October 2018 to present the benchmark is the managed return.
- Inception of the fund was February 2016
  Numbers may not total due to rounding.

# **Lawton Chiles Endowment Fund**

# **Overview and Investment Objective**

Created by the Florida Legislature in 1999, the purpose of the Lawton Chiles Endowment Fund (LCEF) is to invest a portion of the state's tobacco settlement monies to provide a perpetual source of enhanced funding for health maintenance and research programs related to tobacco use. The SBA has the statutory authority and responsibility for the investment of LCEF assets, subject to certain investment limitations and consistent with an Investment Policy Statement approved by the SBA Trustees.

# **Capital Preservation Objective**

Florida law specifies that the LCEF shall be managed as a perpetuity, with an investment objective of long-term preservation of the real value of the principal. The law further requires a specified regular annual cash outflow for appropriation, as nonrecurring revenue.

Chart 20 provides the percentage of the inflation-adjusted value of cumulative net contributions to the LCEF as of June 30, 2019, which increased to 82.48% from 80.62%.

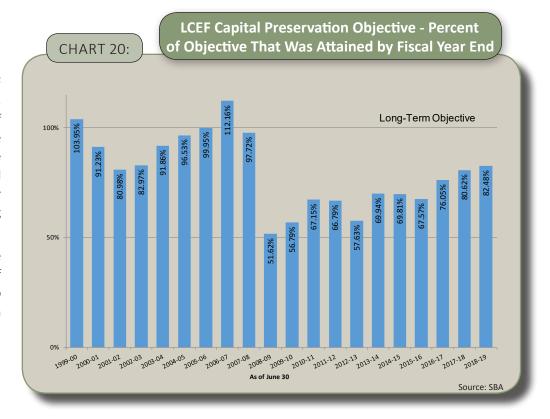
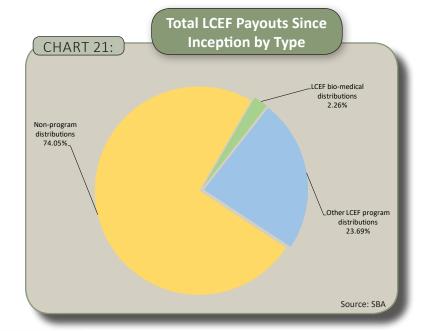
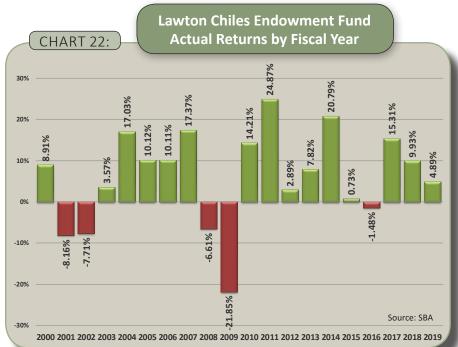


Chart 21 provides the percentage by purpose of the total payouts from the Fund.





### **Performance**

Chart 22 illustrates actual returns for the LCEF for each year since its inception. Negative returns over two years early in the millennium and two years more recently are reflections, respectively, of the bursting of the tech bubble and the more recent financial crisis.

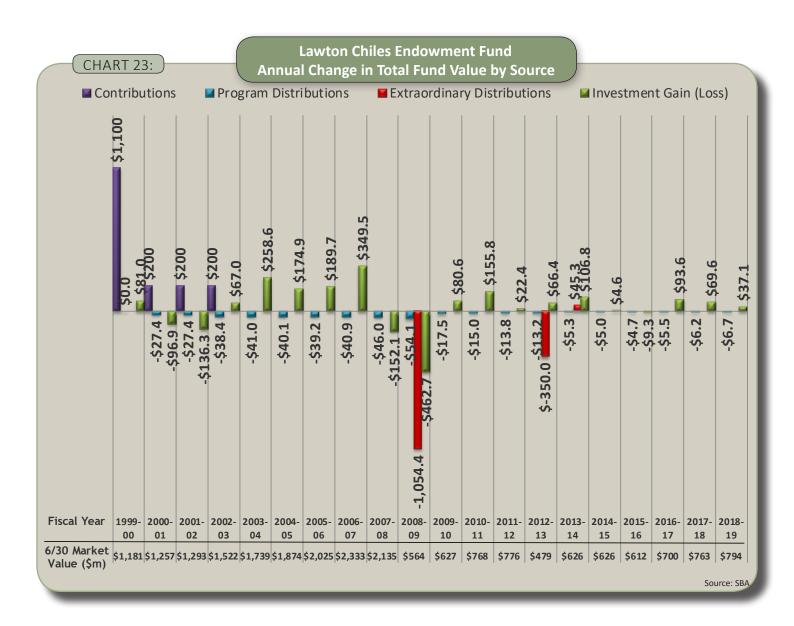
In addition to the statutory investment objective for the Endowment Fund, the SBA measures performance relative to market-based benchmarks. Table 28 compares actual returns to the benchmark return for various periods ending June 30, 2019.

# TABLE 28: Lawton Chiles Endowment Fund Returns for Periods Ending June 30, 2019

	Actual Return	Benchmark Return	Actual Over (Under) Bmk.
One Year	4.89%	5.55%	(0.66%)
Three Years	9.96%	8.99%	0.98%
Five Years	5.70%	5.17%	0.53%
Ten Years	9.69%	8.87%	0.82%
Since Inception	5.52%	4.98%	0.55%

- All returns are annualized for periods indicated through June 30, 2019.
- Benchmark is a weighted blend of individual asset class target indices as applicable; weights and benchmarks are established in the Lawton Chiles Endowment Fund Investment Policy Statement.
- Inception of the Fund was July 1999.
- Numbers may not total due to rounding.

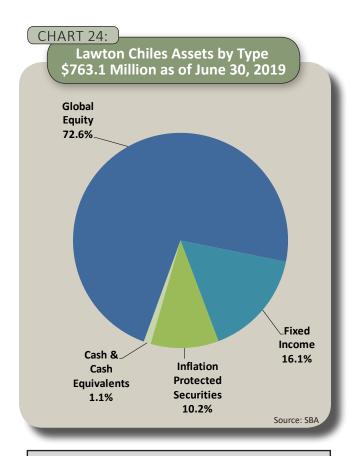
Chart 23 illustrates the components of year-to-year change in the endowment's net asset value. The Fund received external infusions of capital (i.e., contributions) only in the first four years of its existence (purple bars). Since then, the only support for annual payouts (light blue bars) has been earnings on those initial investments (green bars). The Fund's assets were substantially reduced by the extraordinary distributions, and partial repayments (red bars).



# Cost

External investment management fees, by asset class, paid by the Fund are presented in table 29.

#### **External Investment Management Fees TABLE 29:** for Fiscal Year 2018-19 Dollar Amount **Asset Class** Return Basis 1 Foreign Equities 554,179 0.10% Fixed Income 42,389 0.04% 19,472 0.03% Inflation-Indexed Total 616,040 0.08% <sup>1</sup> Return basis expresses external management fees as a percent of the average of the month-end net asset value of externally managed portfolios in each asset class (including month-ends from June 30, 2018 through June 30, 2019). This measure is comparable to an annual expense ratio. •Totals may not foot due to rounding. Source: S Source: SBA



Over its life, the only non-transitional change to the Endowment Fund's asset allocation was the elimination of exposure to Real Estate Investment Trust securities (REITs) at the beginning of Fiscal Year 2009-10. This was part of a general streamlining of the Fund's investment structure, as its net asset base shrank from \$2.13 billion on June 30, 2008 to \$0.56 billion a year later.

### **Asset Allocation**

The principal performance measure of a fund's asset allocation is a weighted composite of the benchmark returns of each of its asset classes, where the weights are the policy allocations for each class. Chart 24 shows the actual asset allocation for the LCEF as of June 30, 2019. Table 30 compares what would have been earned had actual exposures adhered strictly to the target weights and had the Fund earned only the benchmark return for each asset class, and the deviation from the policy weights that occurred in practice added to or detracted from the policy return of the Fund.

TABLE 30:		s to Asset Alloca ding June 30, 20
	Policy Return	Implementation Return
One Year	5.19%	5.55%
Three Years	9.05%	8.99%
Five Years	5.11%	5.17%
Ten Years	8.83%	8.87%
ice Inception	5.14%	4.98%
		Source: SB/

### **Asset Classes**

As of June 30, 2019, assets of the Lawton Chiles Endowment Fund are currently divided into four classes: Global Equity, Fixed Income, Inflation-Protected Securities, and Cash Equivalents. Table 31 presents returns by asset class over various periods ending June 30, 2019.

	Actual Return	Benchmark Return	Actual Over (Under) Bmk.		Actual Return	Benchmark Return	Actual Over (Under) Bmk.
Global Equity				TIPS			
One Year	4.30%	4.70%	(0.42%)	One Year	4.92%	4.84%	0.08%
Three Years	12.89%	11.66%	1.23%	Three Years	2.24%	2.08%	0.16%
Five Years	6.86%	6.06%	0.78%	Five Years	1.88%	1.76%	0.12%
Ten Years	12.66%	11.49%	1.17%	Ten Years	3.78%	3.64%	0.15%
ixed Income				Cash Equivalents			
One Year	7.92%)	7.87%	0.06%	One Year	2.72%	2.26%	0.46%
Three Years	2.37%	2.31%	0.06%	Three Years	1.76%	1.40%	0.37%
Five Years	3.03%	2.95%	0.08%	Five Years	1.23%	0.89%	0.34%
Ten Years	4.06%	3.90%	0.16%	Ten Years	1.19%	0.54%	0.66%

# **Portfolios by Asset Class**

Table 32 shows the beginning and ending market values for each asset class and individual Endowment Fund portfolios, together with net contributions and withdrawals, and investment gain or loss.

# TABLE 32:

# Lawton Chiles Endowment Fund Assets Under Management Market Value Change by Asset Class and Portfolio, Fiscal Year June 30, 2019

Account Name	Market Value 6/30/2018	١	let Contributions (Withdrawals)	Investment Gain (Loss)	Market Value 6/30/2019
Global Equity Portfolios					
Acadian- Chiles (ICEF)-Foreign Equities	\$ 552,686,659	\$	21,848	\$ 23,570,614	\$ 576,279,121
Chiles Domestic Equities Russell 3000 xTobacco Fund <sup>1</sup>	114		(153,193)	153,079	(
Chiles Global Equity Transition	1,171		0	11,423	12,594
Fixed Income Portfolios					
Chiles Barclays Aggregate	118,255,634		(10)	9,373,203	127,628,828
Chiles Fixed Income Cash Expense	0		1,618	(1,618)	(
Inflation-Indexed Bond Portfolios					
BlackRock TIPS Passive	77,439,255		0	3,812,875	81,252,130
Chiles TIPS Cash Expense	0		1,498	(1,498)	(
Cash/Short-Term Portfolios					
Chiles Cash	14,739,026		(6,693,806)	390,514	8,435,735
Chiles Cash Expense	0		1,278	(1,278)	(
Chiles Securities Lending <sup>1</sup>	0		(0)	0	(
Chiles Total Fund Expense	0		170,766	(170,766)	(
Total Lawton Chiles Endowment  Account balance is periodically zero due to cash flows.  Numbers may not total due to rounding	\$ 763,121,861	\$	(6,650,000)	\$ 37,136,547	\$ 793,608,408

Numbers may not total due to rounding

# Other Funds Under Management

n addition to the major mandates and investment pools discussed earlier in this report, the SBA either managed or facilitated the management of assets for several other clients, within four broad categories. The clients and nature of the SBA's responsibilities are enumerated below. Assets may be held in one or more of the SBA's investment pools, as well as in separately managed portfolios. Return data is not calculated individually for these clients either because the client's assets are managed in a pooled investment product, or because returns are not indicative of the SBA's effectiveness in managing the assets.

### **Portfolios Managed Under Fiduciary Discretion**

• Retiree Health Insurance Subsidy Trust Fund

The SBA develops and maintains an investment policy for this Fund, setting forth an investment benchmark, a portfolio style, a risk profile, holding limitations, authorized securities, an investment objective and so forth. The SBA exercises its discretion as an investment fiduciary, cognizant of the risk tolerance of the Fund, in a manner similar to its services for major mandate clients.

### **Portfolios with Dedicated Bond Strategies**

- Department of the Lottery Fund
- University of Miami

Typically, for clients within this category, pursuant to a trust agreement containing investment policy guidelines, the SBA manages a portfolio of laddered fixed income and/or short-term instruments whose maturities are matched to a Principal Disbursement Schedule supplied by the client. For select clients, the SBA utilizes Florida PRIME™ for short-term cash allocations. For all of these clients, the SBA seeks to provide safety of principal and a competitive return within the confines of the payout amounts and dates specified by the client.

For each Lottery winner who chooses annuity payments rather than a lump sum payout, the SBA purchases Treasury STRIPS for the term prescribed with the net winnings allocated.

### **Program Directed Assets – Specific Terms**

- Bond Proceeds Trust Fund
- Debt Service
- Gas Tax Clearing Fund

These portfolios contain assets of state government programs temporarily available for investment. The programs are housed within or closely affiliated with the SBA. Pursuant to specific Investment Portfolio Guidelines, transactions are executed by the SBA's investment staff upon instruction from the program specifying the terms of the investment.

#### **Client Directed Assets – Investment Products**

- Florida Division of Blind Services
- Florida Prepaid College Plan
- Florida Prepaid Investment Plan

For these clients, the SBA has secured certain products of external investment managers deemed cost-effective and suitable to the needs of the client. The clients determine whether and when to invest or withdraw their assets from these investment products.

#### Other

- Police and Firefighters' Premium Tax Trust Fund
- Bond Fee Trust Fund
- Arbitrage Compliance Trust Fund
- Insurance Capital Build-up Program
- Inland Protection Financing Corporation
- Florida ABLE, Inc.
- Florida Prepaid College Plan Administrative Expense
- Florida College Investment Plan Administrative Expense
- SBA Administrative Fund
- PEORP Administrative Fund

