# STATE OF CONNECTICUT

# 2018



ANNUAL REPORT OF THE TREASURER For the fiscal year ended June 30, 2018

# STATE OF CONNECTICUT Office of the State Treasurer



The State Motto, "Qui Transtulit Sustinet" (He Who Transplanted Still Sustains), has been associated with various versions of the state seal from the creation of the Saybrook Colony Seal.

# STATE OF CONNECTICUT

# 2018



ANNUAL REPORT OF THE TREASURER For the fiscal year ended June 30, 2018



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Introduction





DENISE L. NAPPIER TREASURER State of Connecticut Office of the Treasurer

December 31, 2018

The Honorable Dannel P. Malloy Governor State Capitol 210 Capitol Avenue Hartford, CT 06106

Dear Governor Malloy:

I am pleased to present for your review the Annual Report of the State Treasurer's Office for the fiscal year ended June 30, 2018, in accordance with Section 3-37(a) of the Connecticut General Statutes. This Annual Report includes quantitative data, explanatory comments, and financial information regarding the Connecticut Retirement Plans and Trust Funds ("CRPTF" or "Funds"); the Short-Term Investment Fund; and the Connecticut Higher Education Trust, Connecticut's 529 College Savings Program. In addition, the operations of the divisions of Cash Management, Debt Management, Pension Funds Management, Second Injury Fund, and Unclaimed Property are presented and the annual report of the Achieving A Better Life Experience ("ABLE") Trust is included.

The CRPTF generated a net investment return of 7.03 percent for Fiscal Year 2018. The State's three largest pension funds – the Teachers' Retirement Fund, the State Employees' Retirement Fund, and the Municipal Employees' Retirement Fund – posted net investment results of 7.04 percent, 7.30 percent, and 6.14 percent, respectively. Longer term, the five-year returns for the funds were 7.85 percent, 7.89 percent and 7.17 percent, respectively.

The CRPTF's performance for Fiscal Year 2018 added \$1.8 billion of market value to pension assets. After paying fees and expenses, including \$466 million of benefit payments in excess of total contributions received, the CRPTF ended the fiscal year with net assets of \$34.4 billion – a 5.5 percent increase from the previous fiscal year.

The strongest investment performances at the asset class level were realized in both the public and private equity investment portfolios. For Fiscal Year 2018, returns were: Private Investment Fund, 15.5 percent, well above the public S&P 500 benchmark of 14.4 percent; Mutual Equity Fund, 14.7 percent, in line with the Russell 3000 benchmark; and Real Estate Fund, 8.7 percent, above the NCREIF property index return of 7.1 percent.

The fundamental purpose of the CRPTF – to help the State pay its pension obligations – deserves underscoring: Since July 1, 1999 (the start of Fiscal Year 2000), the Funds have paid out \$26.9 billion in pension benefits, received \$13.4 billion in contributions, earned \$27.3 billion in investment income and increased total net assets by \$14.4 billion -- all during a time of significant market volatility and uncertainty. Overall, during my administration, the CRPTF grew its asset base by 73 percent, achieving investment returns that exceeded the average performance of its peers while taking on less risk.

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#### 2018 TREASURER'S LETTER

Market volatility picked up noticeably during the second half of the fiscal year, contributing to CRPTF's single-digit performance and slower growth, compared with the double-digit results achieved in Fiscal Year 2017.

Other Pension Funds Management activity included significant new investment commitments totaling in excess of \$2 billion, representing 19 opportunities: nine in the Private Investment Fund; two in the Real Estate Fund; six in the Alternative Investment Fund, including the first commitment to a global infrastructure fund; and two in the Core Fixed Income Fund. Moreover, restructuring of hedge fund allocations within the Alternative Investment Fund during the year will generate annual fee savings in excess of \$12 million.

In addition, two fixed income fund managers in the public market portion of the Connecticut Horizon Fund ("CHF") graduated to the broader CRPTF portfolio. The CHF, developed to diversify the management of the state's pension assets and enhance portfolio returns while providing opportunities for minority-owned, women-owned, Connecticut-based and emerging investment management firms, has more than \$1.3 billion in assets in its fund-of-funds public market program, a \$155 million private equity allocation and a \$170 million alternative investment allocation.

Beyond the State's pension funds, the Office of the Treasurer achieved a number of accomplishments and key milestones in Fiscal Year 2018 that inured to the benefit of state residents and businesses, including the following:

**Short-Term Investment Fund outperforms benchmark** – The Short-Term Investment Fund ("STIF") earned 1.39 percent in Fiscal Year 2018, while its benchmark returned 1.27 percent. Consequently, STIF investors earned an additional \$7 million in interest income. STIF's superior performance has earned the State and local governments and their taxpayers an additional \$216 million in interest income during my administration. In addition, S&P Global Ratings reaffirmed STIF's AAAm rating.

**Community Bank and Credit Union Initiative** – During Fiscal Year 2018, a monthly competitive bidding process was held for the Community Bank and Credit Union Initiative, through which \$30.5 million was invested at an average interest rate of 1.69 percent. Since inception, 13 banks and one credit union have earned the opportunity to receive Treasury investments totaling \$518.9 million, which generated an average yield of 2.23 percent through June 30, 2018. The initiative supports Connecticut-based banks and credit unions – with assets not exceeding \$1 billion – through investments in their certificates of deposit.

Debt refinancing transactions in Fiscal Year 2018 will save Connecticut taxpayers \$39.3 million over the next eleven years – Over the length of my administration through June 2018, \$13.8 billion in bonds have been refinanced or defeased, resulting in savings to taxpayers of more than \$1.2 billion over the life of the bonds. This was accomplished through the execution of multiple financing transactions that refunded outstanding General Obligation bonds, Special Tax Obligation bonds for transportation infrastructure, State Revolving Fund bonds (Clean Water Fund and Drinking Water Fund), University of Connecticut bonds, and Bradley International Airport bonds.

**New Tax-Secured Bonding Program Adopted** – The Treasury's proposed Credit Revenue Bond program backed by the withholding portion of the State's personal income tax was approved by the General Assembly. This new bonding program is estimated to achieve savings of approximately \$980 million over the next ten years from higher credit ratings, lower borrowing costs, and a bond structure commonly used for tax-backed revenue bonds. As proposed by the Treasury, the statute requires that the annual debt service savings from the new bonding program be dedicated to the State's Budget Reserve Fund, which is expected to improve the credit ratings on the State's General Obligation bonds over time.

**Support for the City of Hartford** – As co-chair of the Municipal Accountability Review Board, I worked with the Office of Policy and Management on a contract assistance plan for the City of Hartford. The plan commits the State to pay the City's debt service on its outstanding General Obligation bonds, while requiring that the City manage its finances in a fiscally responsible manner. The agreement is consistent with the State's bipartisan budget bill adopted in October 2017. It helps Hartford gain a path toward fiscal sustainability and gives the State strong oversight capabilities.

**Unclaimed Property Division Returned \$58 Million to Rightful Owners** – Unclaimed property receipts topped \$138.7 million during Fiscal Year 2018, exceeding the \$115 million projection by more than \$23 million, or 20 percent, and surpassing the \$129.2 million collected the previous fiscal year. Of the total, the Office deposited \$63.4 million into the State's General Fund -- \$12.4 million, or 24 percent, more than was projected -- and transferred \$11.6 million to the Citizens' Election Fund. The Office returned \$58 million in unclaimed assets to 18,472 rightful owners -- \$17 million, or 42 percent, more than the previous fiscal year. During the length of my administration nearly \$730 million in unclaimed property has been returned to more than 320,000 claimants.

Second Injury Fund Assessment Rates Decreased by 0.50 Percentage Point – Assessment rates were decreased for insured and self-insured employers, effective July 1, 2018. The rate for insured employers was reduced from 2.75 percent to 2.25 percent, and the rate for self-insured employers declined from 3.25 percent to 2.75 percent. This marks the twentieth consecutive year in which the Second Injury Fund either reduced or maintained assessment rates -- the longest period without an assessment rate increase in the more than 70-year history of the Fund. The cumulative savings to Connecticut businesses since 1999 is estimated at \$1.3 billion, including \$102 million in projected savings for Fiscal Year 2019.

**Unfunded Liabilities for Injured Workers Have Declined** – Since 1999, unfunded liabilities in the Second Injury Fund for injured workers have declined 63 percent from \$838 million to \$307 million, as of June 30, 2018. The Fund's open claims have dropped by more than half, from 5,644 to 2,762.

Assets Recovered from Claims and Litigation – During Fiscal Year 2018, the Treasury recovered \$2.5 million in class action lawsuits. The Office has regained \$53.7 million since 2000 by closely monitoring and participating in class action settlements. Since the inception of the overall Asset Recovery and Loss Prevention program, this Office has recovered approximately \$1.4 billion (including actual cash recovery, lower fees and cancellation of other obligations). Beyond the dollars, the Treasury has provided national leadership with respect to asset recovery, encouraging other public pension investors to view asset recovery as a fiduciary responsibility, which virtually all public pension funds have now done.

**Connecticut's College Savings Plan Nears \$3.7 Billion in Assets** – The Connecticut Higher Education Trust ("CHET") continued its steady growth, surpassing \$3.66 billion in assets under management and more than 152,000 accounts in two plans: CHET Direct (marketed directly to individuals) and CHET Advisor (available through financial advisors). This compares with just over 4,000 accounts and \$18.5 million in assets under management in 1999, when I took office. Since CHET's inception, more than \$1.8 billion in qualified withdrawals have been taken to cover college costs for approximately 51,000 students attending nearly every public and private college in Connecticut and several out-of-state schools.

**College Scholarships Awarded** – During Fiscal Year 2018, 100 high school freshmen and 100 high school seniors won scholarships of up to \$2,500 in the fifth year of the CHET Advance Scholarship program. The winners hail from all eight counties in Connecticut. Since 2013, the Treasury has awarded \$2.5 million in scholarships to 1,000 students through the CHET Advance Scholarship program, at no cost to the State.

The CHET Baby Scholars program enrolled 2,487 babies during the fiscal year, bringing the total number of participants since inception in 2015 to 8,344 babies and the total distributed to CHET accounts in excess of \$2 million. As of June 30, 2018, the value of all CHET Baby Scholars accounts was approximately \$20 million.

In December, CHET was recognized as one of the top five 529 college savings plans in the nation by Savingforcollege.com, a privately-owned company with a mission to help individuals, professional advisors and providers understand how best to meet the challenge of paying higher education costs. CHET ranked fourth in the top ten performing 529 college savings plans for one-year performance, based on Savingforcollege.com rankings through September 30, 2017.

#### 2018 TREASURER'S LETTER

**During Fiscal Year 2018, the Treasurer's Office focused on a number of corporate governance issues,** including the quality and diversity of boards of directors and disclosures related to the distribution of opioids and climate change. The CRPTF filed or co-filed shareholder resolutions with 13 portfolio companies. Eleven proposals were withdrawn following successful engagement with the affected companies and two went to a shareholder vote.

**Financial Reports Receive Excellence Awards** – The Government Finance Officers Association ("GFOA") of the United States and Canada awarded the Treasury *Certificates of Achievement for Excellence in Financial Reporting* for two comprehensive annual financial reports ("CAFRs") for the fiscal year that ended June 30, 2017. The Certificates were awarded for the CAFRs of the STIF – the \$7 billion government investment pool for the State Treasury, state agencies and participating local governments; and the Combined Investment Funds, in which the State's \$34 billion pension plans and trust funds are invested. Under my administration, the Treasury has received the GFOA's annual award each year for its financial reports for STIF and the Combined Investment Funds. The 2017 certificates mark the 18th consecutive year of this distinction.

The preparation of this Annual Report involves the dedicated effort of Treasury employees who work diligently throughout the year to manage the State's financial resources prudently and responsibly in the public's best interest. I acknowledge their work with sincere gratitude, and trust that this Report will prove both informative and useful. I also want to acknowledge the contributions of so many others who make the exceptional work of the Treasury possible. The independent Investment Advisory Council, under the leadership of Interim Chair Carol M. Thomas, has demonstrated continued vigilance in its oversight of the investment program of the CRPTF. The Council has been unwavering in its service to the 219,000 participants and beneficiaries of the CRPTF and the taxpayers and residents of our State. And last, I commend our service providers for their utmost care and diligence in the conduct of our State's financial business.

In accordance with our practice, this Report will be available in PDF via the Treasury's website, www.ott.ct.gov, along with past annual reports and additional information about the Office.

It has been an honor to serve the citizens of Connecticut over the past two decades.

Sincerely,

Denise h. Rappin

Denise L. Nappier State Treasurer

#### OFFICE OF THE TREASURER OVERVIEW

#### **Mission Statement**

To serve as the premier State Treasurer's Office in the nation through effective financial management of public resources, high standards of professionalism and integrity, and expansion of opportunity for the citizens and businesses of Connecticut.

#### Duties of the Office of the Treasurer

The duties and authority of the Office of the Treasurer are set out in Article Four, Section 22 of the Connecticut State Constitution and in Title 3 of the Connecticut General Statutes. In general, the Treasurer is responsible for the safe custody of the property and money belonging to the State.

The Treasurer receives all money belonging to the State, makes disbursements as directed by statute, and manages, borrows, and invests all funds for the State.

The Treasurer, as chief elected financial officer for the State, oversees the prudent preservation and management of State funds, including the investment of a \$34.4 billion portfolio of pension and trust fund net assets, \$6.8 billion in total state and local short-term investments, and \$3.7 billion of assets in the Connecticut Higher Education Trust. The Treasurer maintains an accurate account of all funds through sophisticated security measures and procedures.

#### Boards, Committees, and Commissions

By law, the State Treasurer serves as a member of the following:

State Bond Commission	Investment Advisory Council
Banking Commission	Finance Advisory Committee
Connecticut Lottery Corporation	Standardization Committee
Connecticut Higher Education Trust Advisory Committee	Connecticut Innovations
Teachers' Retirement Board	Connecticut Green Bank
Connecticut Higher Education Supplemental Loan Authority	Connecticut Health and Educational Facilities Authority
Connecticut Housing Finance Authority	Connecticut Student Loan Foundation
Connecticut Port Authority	Municipal Accountability Review Board
Connecticut Data Analysis Technology Advisory Board	Connecticut Airport Authority
State Employees' Retirement Commission	Connecticut Retirement Security Authority
Nitrogen Credit Advisory Board	Pension Sustainability Commission
Transportation Policy Advisory Council	

During Fiscal Year 2018, the Treasurer served on the Teachers' Retirement System Viability Commission. Additional information on responsibilities of each is provided on Supplemental pages S-57 to S-59.

#### Office of the Treasurer Organization

The Office of the Treasurer consists of an executive office and five divisions, which are as follows:

The Executive Office has responsibility for policy-setting, investor and corporate relations, legal and legislative affairs, compliance, public education and information, business and information services, human resources and special projects.

#### **OFFICE OF THE TREASURER OVERVIEW**

The Executive Office ensures that the Treasury adheres to the highest order of public values, fiscal prudence and ethics in the conduct of the public's business.

The Pension Funds Management Division, under the direction of the Chief Investment Officer, manages the investment portfolios of the State's six pension funds and nine trust funds. The portfolios are invested in various asset classes ranging from domestic and international stocks to fixed income securities, real estate, alternative investments and private equity. Beneficiaries and participants include approximately 219,000 teachers, state and municipal employees, retirees and survivorships, and trust funds that support academic programs, grants, and initiatives throughout the state. The Pension Funds Management Division also serves as staff to the Investment Advisory Council.

The Cash Management Division, under the direction of an Assistant Treasurer, has responsibility for cash accounting and reporting, cash positioning and forecasting, bank reconciliation, bank administration, check processing and short-term investments. Over three million banking transactions are accounted for and reconciled annually. The Division maintains accountability over the state's internal and external cash flows through the Treasury's bank accounts. The division manages clients' cash within the Short-Term Investment Fund for the state, state agencies and authorities, and local government entities.

**The Debt Management Division**, under the direction of an Assistant Treasurer, administers the State's bond and debt financing program, including the sale of State bonds. Monitoring the bond markets, financing structures and economic trends that affect interest rates are critical requirements for favorable bond issuances. The Division oversees the issuance of bonds to finance State capital projects, refinances outstanding debt when appropriate, manages debt service payments and cash flow borrowing, provides information and data to credit rating agencies, and administers the Clean Water and Drinking Water grant and loan programs.

The Second Injury Fund Division, under the direction of an Assistant Treasurer, is a workers' compensation insurance program for certain injured worker claims. The Second Injury Fund adjudicates those qualifying workers' compensation claims fairly and in accordance with applicable law, insurance industry standards and best practices. Where possible, the Second Injury Fund seeks to help injured workers return to gainful employment or will seek settlement of claims, which will ultimately reduce the burden of Second Injury Fund liabilities on Connecticut businesses.

**The Unclaimed Property Division**, under the direction of an Assistant Treasurer, collects and safeguards all financial assets left unclaimed by owners for specific periods of time, generally three years. Unclaimed assets include, but are not limited to: savings and checking accounts; uncashed checks; deposits; stocks, bonds or mutual fund shares; travelers checks or money orders; and proceeds from life insurance policies. The Division publicizes the names of rightful owners in an attempt to return unclaimed property to them.

## 2018 Annual Report Year at a Glance, as of June 30

#### **COMBINED INVESTMENT FUNDS**

Investments in Securities at Fair Value	\$ 34,368,676,287
Net Position Held in Trust for Participants	\$ 34,392,057,794
Total Net Return	7.03%
Total Investment Returns for the Fiscal Year	\$ 2,313,396,851
Total Management Fees for the Fiscal Year	\$ 138,724,699
Total Number of Advisors	113
CONNECTICUT HIGHER EDUCATION TRUST	
Direct Plan Number of Participant Accounts	122,885

Direct Plan Net Position Advisor Plan Number of Participant Accounts Advisor Plan Net Position 122,885 \$ 3,103,746,202 29,824 \$ 564.822,237

#### OFFICE OF THE TREASURER OVERVIEW

#### DEBT MANAGEMENT

Total Debt Outstanding	\$	25,291,035,027
General Obligation Debt included above	\$	16,791,210,027
General Obligation Debt Issued included above	\$	1,868,545,000
Total Debt Retired and Defeased During the Fiscal Year	\$	2,350,817,299
General Obligation Debt Retired and Defeased included above	\$	1,845,487,299
Total Debt Service Paid on Outstanding Debt During the Fiscal Year	\$	3,039,896,127
General Obligation Debt Service Paid included above	\$	2,162,298,064
CASH MANAGEMENT		
Total Cash Inflows During the Fiscal Year	\$	124,739,903,416
Total Cash Outflows During the Fiscal Year		124,810,060,679
SHORT-TERM INVESTMENT FUND		
	•	
Total Net Position of the Fund	\$	6,796,653,375
One-Year Total Return		1.39%
Five-Year Compounded Annual Total Return		0.51% 0.49%
Ten-Year Compounded Annual Total Return Weighted Average Maturity		35 days
Number of Participant Accounts		920
Number of Participant Accounts		920
SECOND INJURY FUND		
Second Injury Fund Estimated Unfunded Liability (expressed as reserves)	\$	307,000,000
Number of Claims Outstanding		2,762
Number of Claims Settled During the Fiscal Year		205
Total Cost of Claims Settled and Paid	\$	3,901,219
UNCLAIMED PROPERTY		
	¢	120 705 100
Dollar Value of Gross Unclaimed Property Receipts Dollar Value of Claims Paid	\$ \$	138,725,122 58,182,884
Number of Property Claims Paid	φ	18,472
		10,472

Division Overview





State of Connecticut Investment Advisory Council Hartford

December 31, 2018

The Honorable Dannel P. Malloy Governor State of Connecticut Executive Chambers Hartford, Connecticut

Dear Governor Malloy:

As Chair of the Investment Advisory Council (IAC), I am pleased to present this report on the activities of the IAC for the fiscal year ending June 30, 2018.

Over the course of the fiscal year, implementation continued for the investment pacing plans designed for private equity, real estate, and alternative investment opportunities. The IAC was requested to consider diverse investment-related proposals put forth by State Treasurer Denise L. Nappier and rendered advice on numerous opportunities. Brought forward for consideration and endorsed were nine private investment partnerships totaling \$615 million, two commitments to real estate investment partnerships totaling \$140 million, and six alternative investment partnerships totaling \$1.1 billion. In addition, the IAC endorsed commitments totaling \$200 million to two fixed-income managers in the liquid core fixed income portfolio. At fiscal year end, the IAC had endorsed new investments of \$2 billion.

The IAC worked alongside the Treasurer and the executive search consultant in vetting candidates for a new Chief Investment Officer (CIO). Consistent with its statutory requirement to consent to the Treasurer's recommended appointment and salary range of a CIO, the IAC approved the Treasurer's recommendation to hire Laurie Martin as CIO, who began her assignment in May 2018. Martin joined the Treasury as Deputy Chief Investment Officer in October 2016 and had served as Interim CIO since February 2017. In addition, the IAC consulted on, and endorsed, the Treasurer's recommended appointments of Principal Investment Officers for the Real Estate, Private Investment, and Alternative Investment Funds.

Throughout the fiscal year, the IAC continued its practice of reviewing fund performance at each meeting and conducted extensive reviews of fund performance on a quarterly basis. Treasurer Nappier presented for the IAC's review and consideration reports regarding Corporate Governance, compliance policy updates concerning statutory investment restrictions, and adopted amendments to the Investment Policy Statement. Additionally, the IAC endorsed Treasurer Nappier's project plan and search criteria for the Emerging Markets International Stock Fund manager search.

There were no changes to the membership comprising the IAC over the course of Fiscal Year 2018; a member vacancy was fulfilled by the statutory appointing authorities in the first weeks of Fiscal Year 2019.

c/o 55 Elm Street, Hartford, Connecticut 06106-1773, Telephone: (860) 702-3000

#### INVESTMENT ADVISORY COUNCIL

As Chair of the IAC, and having served as a member of the IAC for nearly twenty years, I am privileged to work with my fellow council members to ensure the highest degree of care, skill, prudence and loyalty to beneficiaries of the Connecticut Retirement Plans and Trust Funds. Working with one another to provide advice to the Treasurer is a contribution that we are very proud of in light of increased pressure on pension funding and significant market volatility.

We take seriously our commitment to ensure the soundness of our State's investment program for the benefit of not only our current and future pension beneficiaries, but also the taxpayers of Connecticut, and it is with this sense of duty that I submit this summary on behalf of the IAC.

Sincerely,

Carol Mr. Thomas

Carol M. Thomas, Interim Chair Investment Advisory Council

c/o 55 Elm Street, Hartford, Connecticut 06106-1773, Telephone: (860) 702-3000

#### INVESTMENT ADVISORY COUNCIL

The Investment Advisory Council (IAC) consists of the State Treasurer and the Secretary of the Office of Policy and Management (as ex-officio members of the Council); five public members, all of whom shall be experienced in matters relating to investments, appointed by the Governor and legislative leadership; three representatives of the State teachers' unions and two representatives of the State employees' unions (CGS Sec. 3-13b).

Pursuant to C.G.S. Sec.3-13b, the IAC annually reviews the Investment Policy Statement (IPS) recommended by the Treasurer, which outlines the standards governing investment of the Connecticut Retirement Plans and Trust Funds (CRPTF) assets by the Treasurer. The IPS includes, with respect to each plan and trust fund, (A) investment objectives; (B) asset allocation policies and risk tolerances; (C) asset class definitions, including specific types of permissible investments within each asset class and any specific limitations or other considerations governing the investment of any funds; (D) investment and money manager guidelines; (E) investment performance evaluation guidelines; (F) guidelines for the selection and termination of providers of investment related services, which shall include, but not be limited to, external investment and money managers, investment consultants, custodians, broker-dealers, legal counsel, and similar investment industry professionals; and (G) proxy voting guidelines. The Treasurer shall thereafter adopt the IPS, including any such changes recommended by the IAC the Treasurer deems appropriate, with the approval of a majority of the members appointed to the IAC. The latest IPS was adopted by the Treasurer and approved by the IAC in August 2012, and amended four times, reflecting revisions including the projected capital market returns, the liquidity needs of each plan and trust fund and other financial scenarios for the CRPTF, emanating from the 2012 Asset Liability Study that the Treasurer led, with the assistance of IAC members.

All plan and trust fund investments by the State Treasurer shall be reviewed by the IAC along with all information regarding such investments provided to the IAC which the Treasurer deems relevant to the Council's review and such other information as may be requested by the Council. The IAC shall also review the report provided by the Treasurer at each regularly scheduled meeting of the IAC as to the status of the plan and trust funds and any significant changes which may have occurred or which may be pending with regard to the funds. The Council shall promptly notify the Auditors of Public Accounts and the Comptroller of any unauthorized, illegal, irregular or unsafe handling or expenditure of plan and trust funds or breakdown in the safekeeping of plan and trust fund assets or contemplated action to do the same within their knowledge.

At the close of the fiscal year, the IAC shall make a complete examination of the security investments of the State and determine as of June thirtieth, the value of such investments in the custody of the Treasurer and report thereon to the Governor, the General Assembly and beneficiaries of plan and trust fund assets administered, held or invested by the Treasurer (CGS Sec. 3-13b(c) (2)).

Council members who contributed their time and knowledge to the IAC during Fiscal Year 2018 include:
CAROL M. THOMAS, Interim Chairperson, as appointed by the Governor; Representative of State Employees' unions; Retiree, Department of Developmental Services
BENJAMIN B. BARNES, Secretary, State Office of Policy and Management (Ex officio member)
JOSHUA HALL, Representative of State Teachers' unions; Hartford Federation of Teachers
DAVID HIMMELREICH, Principal, Hynes, Himmelreich, Glennon & Company
MICHAEL LeCLAIR, Senior Vice President/Investments, Stifel (served from January, 2016)
STEVEN MUENCH, Representative of State Teachers' unions; NEA, Danbury
DENISE L. NAPPIER, Treasurer, State of Connecticut (Ex officio member) and Council secretary

# pension funds management division Division Overview Introduction

As principal fiduciary of six state pension funds and nine trust funds (known collectively as the Connecticut Retirement Plans and Trust Funds (CRPTF), the Treasurer is responsible for managing investment assets for retirement plans serving approximately 219,000 state and municipal employees, teachers, retirees and survivorships, as well as trust funds that support academic programs, grants, and initiatives throughout the state.

Prudent investment management requires the proper safeguard of the CRPTF assets to ensure the retirement security of the beneficiaries and to support the spending policies of the trust funds. Funding of the pension benefit liability is dependent upon state contributions, investment returns and the contribution requirements of eligible retirement plan participants. The spending requirements of the trust funds are met through the generation of investment income and capital gains with a focus on the preservation of capital.

The Combined Investment Funds (CIFs) were established pursuant to Connecticut General Statutes Section 3-31b as a means to invest pension and other trust fund assets in a variety of investment classes. The CIFs are comprised of the following separate pooled investment funds: Liquidity Fund; Mutual Equity Fund; Core Fixed Income Fund; Emerging Markets Debt Fund; High Yield Debt Fund; Inflation Linked Bond Fund; Developed Markets International Stock Fund; Emerging Markets International Stock Fund; Real Estate Fund; Private Investment Fund; and Alternative Investment Fund.

Over the last ten years, the net asset value of the CRPTF investments under Treasury management has grown from \$25.9 billion to approximately \$34.4 billion. The Teachers' Retirement Fund, with approximately \$17.9 billion of assets under management at June 30, 2018, is the largest participating plan. The State Employees' Retirement Fund and the Connecticut Municipal Employees' Retirement Fund have approximately \$12.5 billion and \$2.6 billion of assets, respectively. For the fiscal year ended June 30, 2018, total investment income (comprised of interest income, dividends, securities lending income, realized and unrealized capital gains, net of operating expenses) before allocation of administrative expenses, was approximately \$2.3 billion.

	Fair	% of Total Fund
	Value (1)	Fair Value
Liquidity Fund (LF) <sup>(2)</sup>	\$ 709,844,344	2.07%
Mutual Equity Fund (MEF)	7,760,012,682	22.58%
Developed Markets International Stock Fund (DMISF)	7,071,927,935	20.58%
Emerging Markets International Stock Fund (EMISF)	2,779,562,524	8.09%
Real Estate Fund (REF)	2,283,139,537	6.64%
Core Fixed Income Fund (CFIF)	3,292,563,253	9.58%
Inflation Linked Bond Fund (ILBF)	1,382,416,735	4.02%
Emerging Market Debt Fund (EMDF)	1,844,542,809	5.37%
High Yield Debt Fund (HYDF)	2,109,564,213	6.14%
Alternative Investment Fund (AIF)	2,422,737,099	7.05%
Private Investment Fund (PIF)	2,712,365,156	7.89%
Total Fund	\$34,368,676,287	100.00%

CRPTF's total investment in the CIFs at fair value as of June 30, 2018 was:

(1) "Fair value" includes securities and cash invested in the Liquidity Fund (LF), and excludes receivables (FX contracts, interest, dividends due from brokers, foreign tax, securities lending receivables, reserve for doubtful accounts, invested securities lending collateral and prepaid expenses), payables (FX contracts, due to brokers, income distribution, securities lending collateral and accrued expenses), and cash not invested in the LF.

(2) The fair value of the LF represents the pension and trust assets allocated to the LF (excluding receivables and payables); the LF balances of the other combined investment funds are shown in the fair value of each fund.

#### **Fund Management**

Under the supervision of a Chief Investment Officer, appointed by the Treasurer with the consent of the Investment Advisory Council (IAC), the Pension Funds Management Division (PFM) executes and manages the investment programs of the pension and trust funds with a 13 member professional staff. Internal resources are augmented by several outside consulting firms that provide research and analytical expertise to the Treasurer, the Chief Investment Officer and PFM professionals. During Fiscal Year 2018, The Bank of New York Mellon (BNY Mellon) served as the custodian of record for the CRPTF, maintaining custody of and safeguarding plan assets. BNY Mellon also provided recordkeeping services under the supervision of PFM, and Deutsche Bank was the provider of securities lending services.

The Treasurer employs external investment managers to manage the portfolios underlying each CIF. Investment managers are selected based upon asset class expertise, investment performance and style. Investment managers are expected to comply with the parameters, guidelines, and restrictions set forth in the CRPTF Investment Policy Statement (IPS). As of June 30, 2018, 113 external investment managers were employed by the Treasury to invest the pension and trust assets (See Figure 1-5).

All operating overhead is allocated directly to the earnings of the pension and trust fund assets under management. The Treasury manages assets in a cost-effective manner, to maximize long-term investment returns.

#### **Investment Policy**

One of the immutable principles of investment management is that asset allocation decisions are responsible for as much as 90 percent of investment returns. In September 2012, the IAC approved the Treasurer's adopted IPS, including the asset allocation plan, which governs the CRPTF investment portfolios and each of the CIFs. Subsequently, in December 2012, January 2013, April 2013, July 2013, and December 2017 the IAC approved the Treasurer's adopted modifications.

The asset allocation plan is customized for each plan and trust with the main objective being the maximization of investment returns over the long term at an acceptable level of risk, primarily through asset diversification. Risk, in this context, is defined as volatility of investment returns. (See Understanding Investment Performance under Supplemental Information.)

Diversification across asset classes is a critical component in structuring portfolios to maximize return at a given level of risk. In developing an asset allocation strategy, there is thorough analysis of the expected risk/return tradeoffs under different economic scenarios predicated on established correlations of investment returns and the diversification benefits of the available asset classes (i.e., those not restricted by statute).

As shown in Figure 1-4, the number and complexity of asset classes comprising the asset allocation policy have fluctuated during the last ten years. As of June 30, 2018, multiple asset classes were integrated in the IPS, including global public market equities and fixed income, as well as alternative investments such as real estate, private equity, hedge funds and real asset investment strategies.

At fiscal year-end, domestic, international developed and emerging markets equities (stocks) comprised the largest percentage of the total CRPTF, at approximately 52 percent. Publicly traded equities have an established record of maximizing investment returns over the long term. Fixed income, real estate and alternative investments were also included to enhance portfolio returns during highly inflationary or deflationary environments, to mitigate the effects of volatility in the stock market and to provide current income.

#### **Asset Classes**

To realize the asset allocations set forth in the IPS for each plan and trust, the Treasurer administers the CIFs as a series of mutual funds in which the various retirement plans and trusts may invest through the purchase of ownership interests. The asset mix for each of the 15 plans and trusts is established by the Treasurer, with approval of the independent IAC, based upon (1) capital market theory, (2) financial and fiduciary requirements and (3) liquidity needs. However, there are instances in which the asset mix for a trust is set by the trust's governing document.

The asset classes which make up the CRPTF's portfolio include:

#### **Domestic Equity**

The Mutual Equity Fund (MEF) assets are allocated across the broad U.S. stock market to ensure diversification by market capitalization and investment style, such as value and growth. The MEF may opportunistically invest up to 30 percent of assets to take advantage of shifts in the investment landscape or opportunities that offer diversification and risk-return benefits, and may include investments in any market capitalization and investment style as well as an allocation to stocks outside the U.S. As of June 30, 2018, the MEF structure was approximately 78.86 percent invested in large-cap stocks, 10.69 percent in small/ mid-cap stocks, 9.49 percent in all-cap, and 0.97 percent in cash equivalents and other net assets. The MEF's ten largest holdings, aggregating 16.81 percent of Fund investments, included a variety of blue chip companies and were broadly diversified, with the largest holding of 2.92 percent in Apple Inc. Performance of the MEF is measured against the Russell 3000 Index (R3000).

Management of the MEF includes the use of pure indexing, enhanced indexing, active management, and opportunistic strategies executed by external investment managers. Index and enhanced index strategies are referred to as passive strategies since their investment portfolios are similar to the index. The goal of enhanced indexing is to generate a return slightly in excess of the selected index. Indexing is particularly appropriate for the "large-cap" segment of the equity markets, which is defined as the securities of the largest capitalized public companies. Given the overall efficiency of the domestic equity market, approximately 79 percent of the portfolio is invested in passive strategies. The balance of the portfolio is actively managed, primarily in the less efficient small and mid-capitalization sectors of the equity markets. These securities are issued by companies that are smaller and not as closely monitored, researched or analyzed as the larger capitalization companies. As a result of this relative inefficiency, active investment managers have the potential to outperform these markets over the long term, while earning an acceptable level of return per unit of risk.

#### International Equity

Exposure to international equities is provided through two funds: the Developed Markets International Stock Fund (DMISF) and the Emerging Markets International Stock Fund (EMISF), each of which has distinct risk/return profiles. Stocks from developed market countries tend to offer lower risk and return potential compared to emerging market securities as a result of generally more stable economic and political environments and the depth and liquidity of their financial markets. The foreign currency exposure in the DMISF is partially hedged back to the U.S. dollar. DMISF and EMISF assets are allocated across foreign markets so that there is diversification by country, sector, capitalization and style, in a mix that is structured to replicate the characteristics of the comparable non-U.S. developed and emerging stock market indices to which each combined investment fund is benchmarked.

External investment managers invest DMISF assets primarily in common stocks issued by companies in developed market countries domiciled outside of the U.S. The benchmark for DMISF is the Morgan Stanley Capital International Europe Australasia and Far East Investable Market Index (MSCI EAFE IMI) 50 percent hedged. The DMISF is comprised of passive indexing, core developed markets and opportunistic strategies. As of June 30, 2018, the DMISF structure was approximately 74.79 percent invested in large-cap stocks, 18.91 percent in small-cap stocks, and 6.31 percent in cash equivalents and other net assets. Mandates for active growth/value and small cap developed market strategies represent roughly 21.69 percent and 18.91 percent of the DMISF, respectively. The currency exposure of the DMISF investments is managed through a currency hedging overlay strategy.

The EMISF invests primarily in the common stocks of non-U.S. corporations domiciled in countries included in the EMISF benchmark, which is the Morgan Stanley Capital International Emerging Markets Investable Market Index (MSCI EM IMI). EMISF investments are made through portfolios managed by external investment managers. The EMISF is invested 100 percent in active, unhedged emerging market strategies.

#### Fixed Income

Fixed income assets are diversified across four funds: the Core Fixed Income Fund (CFIF), the Inflation Linked Bond Fund (ILBF), the Emerging Markets Debt Fund (EMDF), and the High Yield Debt Fund (HYDF). Investments in the various fixed income CIFs serve to reduce the overall volatility of CRPTF returns under numerous economic scenarios. Further, the fixed income CIFs provide cash flow to the CRPTF in the form of interest and principal payments.

The CFIF consists of externally managed, primarily investment grade, fixed income portfolios that include debt instruments issued by the U.S. Government and its agencies, quasi-government agencies, U.S. corporations and any other public or private U.S. corporation whose debt security is regulated by the Securities and Exchange Commission (including Eurobonds and quasi or sovereign debt). Assets are diversified across sectors, industries, credit quality and duration, and up to 30.0 percent may be opportunistically invested based on changes in the investment landscape that may improve diversification, reduce risk or enhance return. As of June 30, 2018, the CFIF structure approximated 28.0 percent invested in Treasury/agency securities, 32.6 percent in corporate securities, 17.6 percent in mortgage-backed securities, 14.0 percent in asset-backed securities, and 7.8 percent in cash equivalents and other net assets. The benchmark for CFIF is the Barclays U.S. Aggregate Bond Index.

The ILBF consists of externally managed fixed income portfolios containing domestic and foreign developed market sovereign bonds. These government bonds are primarily inflation-linked securities. Inflation-linked bonds offer protection against inflation and contribute to overall portfolio diversification. As of June 30, 2018, the ILBF structure was comprised of securities from the following countries or regions: 46.1 percent in the U.S., 19.2 percent in the U.K., 15.6 percent in the Eurozone, 8.9 percent in Australia and New Zealand, 3.4 percent in Mexico and 6.8 percent in other countries and cash equivalents. The benchmark for ILBF is the Barclays World Government Inflation-Linked Bond Index.

The EMDF consists of externally managed fixed income portfolios that contain debt instruments issued by governments and companies located in emerging countries as defined by the benchmark and The World Bank. The benchmark for EMDF is the J.P. Morgan Emerging Markets Bond Index Global Diversified/J.P. Morgan Government Bond Index - Emerging Markets Global Diversified (50 percent/50 percent). As of June 30, 2018, the EMDF structure approximated 34.8 percent invested in Latin America, 27.0 percent in Europe, 13.9 percent in Asia, 9.3 percent in Africa, 6.0 percent in the Middle East and 9.0 percent in cash equivalents, foreign currency, and other markets and net assets. The benchmark accounts for U.S. dollar-denominated debt and for debt issued in local currencies. The local currency debt is not hedged as the foreign currency is considered an additional source of alpha, or return in excess of that predicted by its benchmark.

The HYDF consists of externally managed fixed income portfolios that include debt instruments rated below investment grade by a nationally recognized rating agency service. The assets are diversified by sector, industry, credit quality and duration. The majority of the bonds are U.S. dollar-denominated. As of June 30, 2018, the HYDF structure approximated 94.3 percent invested in corporate securities, 2.1 percent in Treasury securities, and 3.7 percent in cash equivalents and other net assets. The benchmark for HYDF is the Citigroup U. S. High Yield Market Capped Index.

#### **Liquidity Fund**

The Liquidity Fund (LF) consists of externally managed fixed income portfolios intended to provide a liquid source of funds for investment operations and earn a return greater than money market instruments, with minimal exposure to risk of principal. The LF is invested in money market instruments. As of June 30, 2018, the benchmark for the LF is the one month London Interbank Offered Rate (LIBOR) Index.

#### Real Estate

The Real Estate Fund (REF) is the vehicle by which the CRPTF invests in the real estate asset class and may consist of a number of different investment strategies and investment vehicles, including externally managed commingled funds, open-end funds, separate accounts, and publicly traded real estate securities. The REF invests in real estate properties and mortgages and is designed to dampen the volatility of overall

returns through diversification and to generate attractive risk-adjusted rates of return. The REF will invest in the following: core strategies; value added strategies (investments involving efforts to increase property value through repositioning, development and redevelopment); opportunistic strategies (strategies that target niche opportunities, market inefficiencies, or special purpose markets); and publicly traded securities (primarily Real Estate Investment Trusts and Real Estate Operating Companies). Leverage at the aggregate of the REF is limited to 60 percent of REF's total valuation. These investments also adhere to the Responsible Contractor Policy. As of June 30, 2018, the REF structure was approximately 63.6 percent invested in core, 21.7 percent in value-added, 11.4 percent in opportunistic and 3.3 percent in cash equivalents and other net assets. The benchmark for REF is the National Council of Real Estate Investment Fiduciaries National Property Index (NCREIF-NPI), lagged by one quarter.

#### Private Investments

The Private Investment Fund (PIF) is the vehicle used to invest in private equity. PIF investments generally are made in externally managed limited partnerships or through separate accounts that focus on private investments. These vehicles include investments in both venture capital and corporate finance investment strategies. Venture capital typically involves equity capital invested in young or development stage companies, and may include start-up, early, mid or late-stage companies. Corporate finance typically involves equity and debt capital invested in growth, mature or distressed stage companies, often through the financing of acquisitions, spin-offs, mergers or changes in capitalization. As of June 30, 2018, the PIF structure was approximately 76.0 percent invested in Corporate Finance and 24.0 percent in Venture. The benchmark for PIF is the S&P Global Ratings (S&P 500).

#### Alternative Investments

The Alternative Investment Fund (AIF) invests in strategies that offer the potential to enhance return and/or reduce risk. The AIF provides a vehicle for investment in portfolio strategies which are not easily classified, categorized, or described in other CIFs. Hybrid strategies which contain multiple asset classes are also considered part of the opportunity set. As of June 30, 2018, the AIF structure was approximately 91.5 percent invested in hedge fund of funds, 4.9 percent in real assets, 3.6 percent in opportunistic strategies, and 1.8 percent in cash equivalents and other net assets. AIF's benchmark is the 90-day Treasury Bill.

#### Securities Lending

The CRPTF maintains a securities lending program designed to provide incremental risk adjusted returns. This program involves the lending of portfolio securities to broker/dealers in return for payment. Each loan is secured by collateral valued slightly in excess of the market value of the loaned securities. To further mitigate the risks of securities lending transactions, the CRPTF's securities lending bank carefully monitors the credit ratings of each counter-party and overall collateral levels.

Deutsche Bank was responsible for marketing the program, lending the securities, and obtaining adequate collateral during Fiscal Year 2018. As of June 30, 2018, securities with a market value of approximately \$2.6 billion had been loaned against collateral of approximately \$2.6 billion. Income generated by securities lending totaled \$13.6 million for the fiscal year

#### The Year in Review Total Fund Performance

For the fiscal year ended June 30, 2018, the CRPTF achieved an annual total return of 7.03 percent, net of all fees and expenses. The three largest pension plans, the Teachers' Retirement Fund, the State Employees' Retirement Fund, and the Connecticut Municipal Employees' Retirement Fund -- which represent 96 percent of total assets -- returned 7.04 percent, 7.30 percent and 6.14 percent and underperformed their benchmarks by 66, 46 and 39 basis points, respectively. The CIFs' investment performance for Fiscal Year 2018 added \$1.8 billion of market value to pension assets.

After paying fees and expenses, including \$466 million of benefit payments in excess of contribution receipts, the CIFs ended the fiscal year with assets of \$34.4 billion.

The AIF, which invests in hedge funds, real assets and other opportunistic investments, returned 4.69 percent, outperforming its 90-day T-Bill benchmark return of 1.36 percent. Gains in equity and credit drove positive returns as the public equities markets continued its advance. For the trailing three-, five- and seven-year periods, the AIF compounded returns, net of all fees and expenses, were 2.45 percent, 3.58 percent and 3.22, respectively.

The REF returned 8.69 percent, outperforming its benchmark return of 7.12 percent. Market fundamentals in most real estate sectors were strong during the fiscal year led by industrial and multi-family sectors. For the trailing three-, five-and seven-year periods, the REF compounded returns, net of all fees and expenses, were 9.18 percent, 10.22 percent and 9.79 percent, respectively.

The PIF returned 15.50 percent, outperforming its public market S&P 500 benchmark return of 14.37 percent. Utilizing the institutional standard for measuring private equity performance, Internal Rate of Return (IRR), PIF generated a net IRR of 12.7 percent. The PIF portfolio continued to generate positive cash flow with investment distributions exceeding contributions by approximately \$418 million for the year. For the trailing three-, five- and seven-year periods, the PIF compounded returns, net of all fees and expenses, were 11.75 percent, 13.05 percent and 11.50 percent, respectively.

The LF returned 1.63 percent, outperforming its benchmark return of 1.51 percent benefiting from rising interest rates environment resulting from the Federal Reserves' rate hikes. For the trailing three-, five- and seven-year periods, the LF compounded returns, net of all fees and expenses, were 1.09 percent, 0.54 percent and 0.46 percent, respectively.

The EMD returned -1.78 percent, outperforming its blended benchmark return of -1.89 percent. Fears of trade wars and the rise of the U.S. dollar versus foreign currencies had a meaningful impact on emerging markets performance. For the trailing three-, five- and seven-year periods, the EMD compounded returns, net of all fees and expenses, were 4.34 percent, 2.35 percent and 2.61 percent, respectively.

The MEF returned 14.74 percent, slightly underperforming its benchmark return of 14.78 percent. Domestic equity was the best performer for the year across all asset classes. Strong corporate earnings, solid economic growth and federal tax cuts passed earlier in the fiscal year contributed to the returns. For the trailing three-, five- and seven-year periods, the MEF compounded returns, net of all fees and expenses, were 11.67 percent, 13.36 percent and 12.94 percent, respectively.

The ILBF returned 3.21 percent, slightly underperforming its benchmark return of 3.32 percent. The increase in the price of oil and other commodities fueled by global growth caused an uptick in inflation expectations contributing to the ILBF's performance. For the trailing three-, five- and seven-year periods, the ILBF compounded returns, net of all fees and expenses, were 2.05 percent, 1.47 percent and 2.06 percent, respectively.

The HYDF returned 2.58 percent, underperforming its benchmark return of 2.82 percent. Higher interest rates and commodity prices, supportive corporate earnings, strong economic data, and low defaults contributed to the positive returns for the year. For the trailing three-, five- and seven-year periods, the HYDF compounded returns, net of all fees and expenses, were 4.81 percent, 4.99 percent and 5.69 percent, respectively.

The CFIF returned -0.89 percent, underperforming its benchmark return of -0.40 percent. Corporate bonds and U.S. Treasury bonds struggled throughout the year as interest rate yields across all time periods increased in response to normalization of monetary policy by the Federal Reserve. For the trailing three-, five- and seven-year periods, the CFIF compounded returns, net of all fees and expenses, were 1.47 percent, 2.10 percent and 2.55 percent, respectively.

The DMISF returned 6.53 percent, trailing its benchmark return of 8.26 percent. Overall performance for the fiscal year was positive for developed international markets. The first half of the year was strong as markets continued to benefit from positive corporate earnings and accommodative monetary policy but the second half of the year was negative as geopolitical risks increased. For the trailing three-, five-and seven-year periods, the DMISF compounded returns, net of all fees and expenses, were 7.30 percent, 8.75 percent and 7.28 percent, respectively.

The EMISF returned 4.66 percent, underperforming its benchmark return of 7.90 percent. Overall performance for the fiscal year was positive for emerging markets. Similar to developed international markets the first half of the year was positive, but was offset by appreciation in the U.S. dollar and escalating global trade tensions. For the trailing three-, five- and seven-year periods, the EMISF compounded returns, net of all fees and expenses, were 6.13 percent, 4.40 percent and 1.39 percent, respectively.

#### 2018 Management Initiatives

Over the course of the fiscal year, the CRPTF made significant new investment commitments totaling in excess of \$2 billion, representing 19 opportunities; nine in the Private Investment Fund, two in the Real Estate Fund, six in the Alternative Investment Fund, including the first commitment to a top quartile global infrastructure fund, and two in the Core Fixed Income Fund. Moreover, restructuring of hedge fund allocations within the Alternative Investment Fund completed during the year will generate annual fee savings in excess of \$12 million.

The Connecticut Horizon Fund, an initiative developed by Treasurer Nappier to diversify the management of the state's pension assets and enhance portfolio returns while providing opportunities for minority-owned, women-owned, Connecticut-based and emerging investment management firms, has greater than \$1 billion in assets in its fund-of-funds public market program, including a \$155 million private equity allocation and a \$170 million alternative investment allocation. During the fiscal year, two exceptional, top tier fixed income fund managers in the public market portion of the program graduated to the broader CRPTF portfolio.

#### **Corporate Governance**

In carrying out her fiduciary responsibilities, and in conformance with state law, the Treasurer considers the financial implications for long-term shareholder value of a portfolio company's environmental, social and governance structure and practices. The primary method the Treasurer's Office utilizes to address corporate governance at publicly-traded companies in which the CRPTF invests is through proxy voting. These companies hold annual general meetings at which shareholders vote to approve or reject proposals presented by the company's management or by shareholders on significant transactions or activities at a company. The Treasurer's Office uses comprehensive guidelines approved by the independent Investment Advisory Council when casting proxy votes at these meetings. The guidelines incorporate best practices on corporate structure, administration and control to reduce risk, encourage sustainability and increase opportunities for growth.

The Office also engages directly with portfolio companies on corporate governance issues that may positively impact the value of the pension fund's investments. Engagement often begins with discussions between the Treasury and board members, chief executive officers and senior management of portfolio companies, and may last for several years. The CRPTF has also utilized the shareholder resolution process as an engagement tool with portfolio companies. During Fiscal Year 2018, the Treasury filed or co-filed shareholder resolutions at 14 companies, and reached agreement with 11 companies on issues raised in shareholder resolutions related to four broad categories of corporate governance best practices: (i) board structure and composition; (ii) governance reforms directed at manufacturers and distributors of opioids; (iii) climate-related disclosure; and (iv) board accountability to shareholders. Two resolutions went to a shareholder vote, and one resolution was withdrawn given that a similar resolution was previously filed with the company. To support our efforts, The Treasurer's Office worked with a broad cross section of investors representing public pension funds, investment firms, labor funds and faith-based investors.

Treasurer Nappier also was signatory to letters sent to 36 companies held in the CRPTF's portfolio regarding executive compensation plans; 70 companies with boards that lacked gender or racial diversity; 10 companies that manufacture or distribute opioids urging adoption of corporate governance reforms. Two of the nation's largest distributors of opioids – Cardinal Health and McKesson -- committed to fuller disclosure of the measures their boards are taking to monitor and manage financial and reputational risks related to the opioid crisis.

#### **Investment Restrictions**

The Treasurer's Office is charged with administering three laws that authorize investment restrictions on companies doing business in Northern Ireland, Sudan and Iran. Connecticut's MacBride law, set forth in Section 3-13h of the Connecticut General Statutes, is based on the MacBride Principles, which are a

corporate code of conduct for companies doing business in Northern Ireland designed to address religious discrimination in the workplace. During Fiscal Year 2018, the CRPTF restricted its managers from investing in two companies for failure to adopt these principles: Domino's Pizza Inc. and Yum Brands, Inc.

The Treasurer's Office monitored companies doing business in Sudan pursuant to Section 3-21e of the Connecticut General Statutes. The Sudan law, adopted in 2006, authorizes the Treasurer to engage companies doing business in Sudan and potentially divest holdings in those companies if their business is contributing to the government's perpetuation of genocide in Sudan. As of the end of Fiscal Year 2018, the Treasurer's Office prohibited direct investment in eighteen companies: Bharat Heavy Electricals Ltd.; China North Industries Group; China North Industries Corporation a.k.a. NORINCO; NORINCO International Cooperation Ltd.; North Huajin Chemical Industries Co. Ltd.; North Navigation Control Technology Co. Ltd.; China Petroleum and Chemical Corp.; CNPC (Hong Kong); Dongfeng Motor Corporation; Jiangxi Hongdu Aviation Industry Ltd.; Oil and Natural Gas Corp.; Mangalore Refinery and Petrochemicals Ltd.; ONGC Nile Ganga BV, Amsterdam; ONGC Videsh Limited; ONGC Videsh Vankorneft; PetroChina Co. Ltd.; Petronas Capital Ltd.; and Sinopec Shanghai Petrochemical Corp.

Connecticut's Iran law, Connecticut General Statutes Section 3-13g, authorizes the Treasurer to engage with companies doing business in Iran, and potentially divest holdings in such companies if she determines such companies, by their business activities, may be contributing to the Iranian government's development of its nuclear program and its support of global terrorism. As of the end of Fiscal Year 2018, the Treasurer's Office prohibited direct investment in fourteen companies: Bongaigaon Refinery & Petrochemicals; Ca La Electricidad de Caracas; Chennai Petroleum Corp.; China Bluechemical; China National Offshore Oil Corporation; China Oilfield Services Ltd.; CNOOC; Daelim Industrial Co. Ltd.; IBP Co. Ltd.; Indian Oil Corporation Ltd.; Lanka loc Plc; Offshore Oil Engineering Co.; Oil India Ltd.; and Petroleos de Venezuela S.A..

#### **Asset Recovery and Loss Prevention**

The Treasurer's Legal Unit works to manage risk by limiting opportunities for loss due to the malfeasance of others. Extensive pre-contracting due diligence helps the Office of the Treasurer select the best available vendors and suitable products to meet the needs of the Office. Careful contract negotiation, coupled with periodic review, development and implementation of best practice contract language, helps to ensure clarity with respect to the obligations of the Office of the Treasurer and its vendors and investment partners. The Office maintains regular contact with other similar governmental offices and institutional investors, sharing ideas for enhancement of contract language, frequently sharing advice with counterparts in other states.

The Office of the Treasurer deters malfeasance with its reputation for active and diligent pursuit of all opportunities to recover assets lost due to the misfeasance or malfeasance of others.

The Office of the Treasurer believes that most disputes can be resolved through dialogue designed to enforce contract terms or clarify misunderstanding. The Office is however prepared, when necessary, to pursue judicial solutions where negotiation is unsuccessful. Although very limited as a percentage of all investments, the Office, like all other investors, experiences losses due to corporate malfeasance. In these instances, the Office believes that litigation managed by investors is more effectively negotiated, efficiently litigated and achieves larger settlements for the benefit of all investors. As such, the Office is committed to taking on its fair share of the management responsibility of such litigation and will consider making application to serve as lead plaintiff in class action litigation where appropriate. From time to time, the Office has used litigation to encourage corporate governance enhancements. Although rare, the Office has filed individual and group actions to pursue specific rights where disputing parties are unwilling or unable to reach an extrajudicial conclusion. Since the U.S. Supreme Court's 2010 decision in *Morrison v. National Australia Bank*, the Office has experienced an increase in its participation in group actions as a means of seeking recovery of lost assets. The Office works with other institutional investors to collaborate and monitor *Morrison*-related matters.

#### **Class Action Securities Litigation**

The Combined Investment Funds recovered \$2.47 million from class action settlements in the fiscal year ended June 30, 2018. The Office continues to closely monitor opportunities to recover lost assets through participation in class action litigation. As of the close of the fiscal year, the class action filing portion of the asset recovery program has exceeded \$53 million since inception.

The Office of the Treasurer, as the Trustee for the CRPTF, served as lead plaintiff in the matter known as In Re Amgen, Inc. Securities Litigation, filed in the federal district court for the Southern District of California. The case, settled for \$95 million prior to the commencement of the trial. The court has approved the terms of the settlement and the claims filing process is underway.

#### **Corporate Governance Related Litigation**

Litigation has not been recommended for corporate governance matters in the 2018 Fiscal Year. The Office of the Treasurer has focused on engagement of companies to promote good corporate citizenship. The Office is judicious in its consideration of the merits of litigation.

#### **Other Litigation**

The Office of the Treasurer continues its participation in group action in Belgium adverse Ageas SA/NV (f/k/a Fortis, N.A.), France adverse Vivendi, S.A., Japan adverse Olympus, Denmark adverse O.W. Bunker, Germany adverse Volkswagen and Porsche and in Texas' state court adverse BP. The Fortis and Olympus matters have announced settlements. Connecticut received ¥11,236,470 as its share of the settlement of the Olympus lawsuit. Connecticut's counsel, Ageas SA/NV and other claimant groups entered into an Amended Settlement Agreement for the benefit of Fortis investors. The Dutch court approved the settlement amount of €1.3 billion. The Office evaluated the merits of joining other foreign group action during the fiscal year. Participation in foreign group action became necessary as the Supreme Court's decision in Morrison foreclosed all other avenues of recovery in matters of securities fraud.

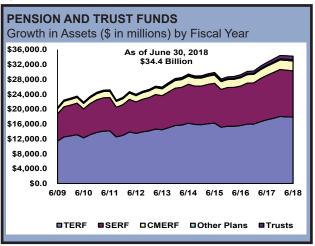
#### Figure 1-1

### PENSION AND TRUST FUNDS ASSET ALLOCATION

TERF					SERF					CN	IERF	
		Targe	t Lowe	r Upper		Target	Lower	Upper		Target	Lower	Upper
	Actual	Polic	y Range	e Range	Actual	Policy	Range	Range	Actual	Policy	Range	Range
U.S. EQUITY												
Mutual Equity Fund (MEF)	23.2%	21.0%	17.0%	25.0%	22.8%	21.0%	17.0%	25.0%	17.6%	16.0%	13.0%	19.0%
INTERNATIONAL EQUITY												
Developed Market Intl Stock Fund (DMISF)	20.4%	18.0%	14.0%	22.0%	20.4%	18.0%	14.0%	22.0%	14.4%	14.0%	11.0%	17.0%
Emerging Market Intl Stock Fund (EMISF)	8.4%	9.0%	7.0%	11.0%	8.3%	9.0%	7.0%	11.0%	6.5%	7.0%	6.0%	8.0%
REAL ESTATE												
Real Estate Fund (REF)	6.5%	7.0%	5.0%	9.0%	6.3%	7.0%	5.0%	9.0%	6.3%	7.0%	5.0%	9.0%
FIXED INCOME												
Core Fixed Income Fund (CFIF)	8.0%	7.0%	6.0%	8.0%	9.0%	8.0%	6.0%	10.0%	9.3%	8.0%	6.0%	10.0%
Inflation Linked Bond Fund (ILBF)	3.3%	3.0%	2.0%	4.0%	4.9%	5.0%	4.0%	6.0%	5.4%	5.0%	4.0%	6.0%
Emerging Market Debt Fund (EMDF	) 5.8%	5.0%	4.0%	6.0%	4.8%	4.0%	3.0%	5.0%	8.0%	8.0%	6.0%	10.0%
High Yield Debt Fund (HYDF)	5.4%	5.0%	4.0%	6.0%	5.1%	5.0%	4.0%	6.0%	14.3%	14.0%	11.0%	17.0%
Liquidity Fund (LF)*	5.2%	6.0%	5.0%	7.0%	3.8%	4.0%	3.0%	5.0%	2.6%	3.0%	2.0%	4.0%
PRIVATE EQUITY												
Private Investment Fund (PIF)	6.7%	11.0%	8.0%	14.0%	8.1%	11.0%	8.0%	14.0%	8.4%	10.0%	7.0%	13.0%
ALTERNATIVE INVESTMENT												
Alternative Investment Fund (AIF)	7.1%	8.0%	6.0%	10.0%	6.5%	8.0%	6.0%	10.0%	7.2%	8.0%	6.0%	10.0%
TOTAL	100.0%	100.0%			100.0%	100.0%			100.0%1	100.0%		

\*Additional LF balances are included in actual allocations of other investment funds.

#### Figure 1-2



TERF - Teachers' Retirement Fund

SERF - State Employees' Retirement Fund

CMERF - Connecticut Municipal Employees' Retirement Fund

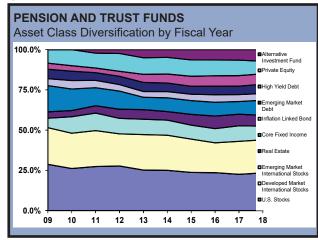
Figure 1-3 PENSION AND TRUST FUNDS Investment Returns (\$ in millions) by Fiscal Year \$6,000.0 ■Trusts \$4,000.0 Other \$2,000.0 Plans \$0.0 (\$2,000.0) SERF (\$4,000.0) TERF (\$6,000.0) 09 10 11 12 13 14 15 16 17 18

TERF - Teachers' Retirement Fund

SERF - State Employees' Retirement Fund

CMERF - Connecticut Municipal Employees' Retirement Fund

#### Figure 1-4



#### Figure 1-5

#### PENSION AND TRUST FUNDS

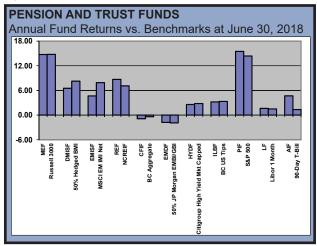
#### Advisor Breakdowr

	June 30,	June 30,	
Fund	2018	2017	
MEF	6	6	
DMISF <sup>(1)</sup>	9	9	
EMISF	2	3	
PIF	39	61	
CFIF	8	7	
ILBF	3	3	
EMDF	4	4	
HYDF	7	9	
REF	21	42	
LF	1	5	
AIF	13	10	
Total <sup>(2)</sup>	113	159	

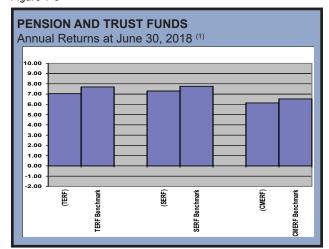
(1) Does not include the Currency Overlay Manager.

(2) Terminated managers with nonmaterial balances and Private Investment partnerships with nonmaterial balances are not included.

#### Figure 1-7



#### Figure 1-6



(1) Each Plan benchmark composite represents the Plan's policy allocation weights times each investment Fund's return.

#### Combined Investment Funds Total Return Analysis (%)

	Fiscal Years Ended June 30,					Annualized 3 5 10		
	2018	2017	2016	2015	2014	Years	Years	Years
(Investment performance is calculated using a time-weighted rate of return	based on the	market rate c	of return.)					
PLANS								
Teachers' Retirement Fund (TERF) TERF Custom Benchmark	7.04 7.70	14.38 13.24	0.25 (0.06)	2.79 3.21	15.67 15.09	7.07 6.82	7.85 7.68	6.20 6.31
State Employees' Retirement Fund (SERF) SERF Custom Benchmark	7.30 7.76	14.32 13.17	0.26 (0.01)	2.84 3.24	15.62 15.15	7.14 6.84	7.89 7.71	6.13 6.34
CT Municipal Employees' Retirement Fund (CMERF) CMERF Custom Benchmark	6.14 6.53	13.05 12.07	1.15 0.77	2.57 2.32	13.58 13.85	6.67 6.36	7.17 6.99	5.80 6.12
U.S. Stocks								
Mutual Equity Fund Russell 3000 Index	14.74 14.78	19.26 18.51	1.75 2.14	7.32 7.29	25.28 25.22	11.67 11.58	13.36 13.29	9.71 10.23
International Stocks Developed Markets International Stock Fund	6.53	24.81	(7.09)	0.67	22.31	7.30	8.75	5.19
MSCI EAFE IMI 50% Hedged	8.26	24.01	(9.26)	3.79	22.31	6.34	8.63	4.89
Emerging Markets International Stock Fund	4.66	23.00	(7.15)	(6.93)	11.50	6.13	4.40	2.08
MSCI Emerging Market Investable Market Index	7.90	22.82	(12.16)	(4.41)	14.31	5.19	4.93	2.52
Equity Commercial Real Estate								
Real Estate Fund NCREIF (1 Qtr. Lag)	8.69 7.12	7.38 7.27	11.51 11.84	12.93 12.72	10.66 11.18	9.18 8.72	10.22 10.00	2.43 6.09
U.S. Fixed Income								
Core Fixed Income Fund	(0.89)	1.89	3.46	1.85	4.28	1.47	2.10	3.70
Barclays Aggregate Bond Index	(0.40)	(0.31)	6.00	1.86	4.37	1.72	2.27	3.72
Emerging Market Debt 50% JP Morgan EMBI/50% JPM GBI EMBI	(1.78)	9.11 6.26	6.01 5.96	(7.57)	6.99 7.61	4.34 3.37	2.35 1.87	5.13 5.35
High Yield Debt	(1.89) 2.58	12.59	(0.31)	(7.72) (1.31)	12.24	4.81	4.99	7.37
FTSE High Yield Market Capped Index	2.82	12.00	0.82	(0.80)	11.25	5.13	5.10	7.54
Inflation Linked Bonds	3.21	0.66	2.29	(2.85)	4.17	2.05	1.47	3.17
Barclays World Gov't Inflation Linked Bond Index	3.32	0.81	2.76	(3.21)	4.44	2.29	1.59	2.99
Commercial Mortgage Fund <sup>(1)</sup>	N/A	N/A	N/A	0.25	10.17	N/A	N/A	N/A
Barclays Aggregate Bond Index	N/A	N/A	N/A	1.86	4.37	N/A	N/A	N/A
Alternative Assets Private Investment Fund	15.50	10.97	8.87	14.04	16.06	11.75	13.05	9.68
S & P 500	15.50	17.90	8.87 3.99	7.42	24.61	11.75	13.05	9.00 10.17
Liquidity Fund				(1.0=)	a = (			
<sup>(2)</sup> Liquidity Fund LIBOR 1 Month Index	1.63 1.51	0.96 0.72	0.68 0.32	(1.07) 0.17	0.54 0.17	1.09 0.85	0.54 0.57	0.69 0.54

(1) The Commercial Mortgage Fund was liquidated in 2017.

(2) The Liquidity Fund includes all cash balances, including manager cash. However all fund returns still reflect cash balances.



#### Fund Facts at June 30, 2018

**Investment Strategy/Goals:** The purpose of the Liquidity Fund (LF) is to: (1) provide a liquid source of funds for investment operations and (2) earn a return greater than that of money market investments.

Date of Inception: November 1, 2007	Total Net Position: \$2,003,180,852
<b>Performance Objective:</b> A net return that matches the benchmark, over rolling three to five year periods.	Management Fees: \$2,296,629
<b>Benchmark:</b> One Month London Interbank Offered Rate (LIBOR)	Operating Expenses: \$865,887
Number of Advisors: 1 external	Expense Ratio: 0.13%

#### **Description of the Fund**

The Liquidity Fund contains high quality money market instruments and enables CRPTF to meet the cash outflow requirements of the plans and trusts while maintaining positive investment returns.

#### **Portfolio Characteristics**

The Liquidity Fund allowable investments include money market instruments such as U.S. Treasury and government agency securities, commercial paper, certificates of deposit, repurchase agreements and corporate securities. (See Figure 2-3). As of June 30, 2018, the average maturity of the LF was 88 days and the average quality rating was AA-3. (See Figure 2-4)

#### **Market Review**

During the twelve month period ending June 30, 2018, yields on short-term instruments rose notably. One month LIBOR increased by 87 basis points to 2.09 percent and 3-month LIBOR rose by 104 basis points to 2.34 percent over the period. The 2-year U.S. Treasury yield increase by 117 basis points to 2.53 percent The longer end of the curve also rose, but to a lesser extent, thereby flattening the yield curve. U.S. economic data continued to be favorable, and the Federal Reserve increased the overnight lending rate by 25 basis points three times during the fiscal period. It ended the year at 1.75 percent - 2.00 percent. The Fed began reducing its balance sheet and some foreign central banks followed suit along with hiking their interest rates. Thus, interest rates moved higher across the globe, but subdued volatility persisted as investors searched for yield.

The LIBOR-Overnight Index Swap spread, which is regarded as a measure of credit conditions, increased from 10 basis points to a high of 59 basis points in February 2018. The acceleration transpired over several months, driven predominantly by issuance of Treasury bills following resolution of the debt ceiling impasse, and by reduced demand for short-term securities as tax reform incentivized U.S. corporations to repatriate high quality corporate paper and cash that had been invested overseas.

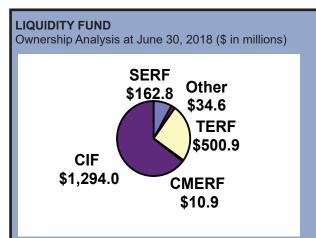
#### **Performance Summary**

For the fiscal year ended June 30, 2018, the LF generated a return of 1.63 percent, outperforming one month LIBOR's return by 12 basis points (See Figure 2-5). For the trailing three-, five- and seven-year periods, the LF compounded returns, net of all fees and expenses, were 1.09 percent, 0.54 percent and 0.46 percent, respectively.

#### **Risk Profile**

Given the LF's investment policies and objectives, the Fund is exposed to some risks. Interest rate risk is somewhat mitigated by the Fund's 88 days average maturity and credit risk is moderated by investments being concentrated in high quality securities. Other potential risks include reinvestment risk and inflation risk. Counter party risk is managed by dealing only with reputable, high quality firms.

Figure 2-1



TERF - Teachers' Retirement Fund SERF - State Employees' Retirement Fund CMERF - Connecticut Municipal Employees' Retirement Fund CIF - Combined Investment Funds

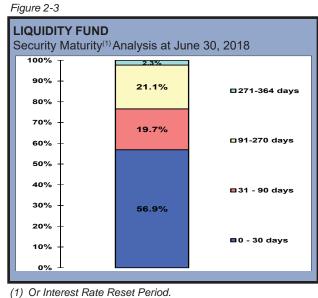


Figure 2-2

LIQUIDITY FUND Risk Profile at June 30, 2018 <sup>(1)</sup>				
	Standard Deviation R2 Beta Alpha	0.64 0.17 0.10 0.08		

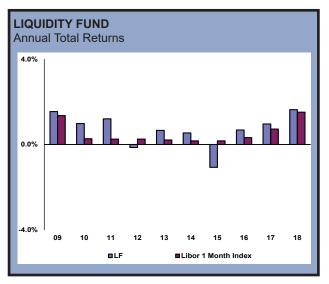
(1) Based upon returns over the last five years.

### Figure 2-4

	<b>LIQUIDITY FUND</b> Comprehensive Profile at June 30, 2018							
Date 2018 2017 2016 2015 2014 2013 2012 2011 2010 2009	Number of Issues 136 788 776 742 767 495 329 337 244 162	Yield <sup>(1)</sup> 1.63% 0.96% 0.68% -1.07% 0.54% 0.66% -0.14% 1.20% 0.98% 1.54%	Average Maturity 88 days 475 days 387 days 347 days 343 days 631 days 482 days 321 days 202 days 36 days	Average Quality AA-3 AA-2 AA-2 AA-2 AA-2 AA-2 AA+ AA-2 AA-1 AA-1 AA-1 AA-2				

(1) Represents annual total return of the Fund for year ended June 30.

#### Figure 2-6



## Figure 2-8

<b>LIQUIDITY FUND</b> Ten Largest Holdings* at Ju	une 30, 20	)18	
Security Name Ma	aturity Date	e Market Value	e %
HSBC BANK TRI REPO	7/2/2018	\$218,025,433	10.88%
CITIGROUP GLOBAL TRI REPO	7/2/2018	200,023,444	9.98%
BANK OF NY REPO TRI REPO	7/2/2018	95,011,136	4.74%
MERRILL LYNCH TRI REPO	7/2/2018	59,006,883	2.94%
ING BANK NV C/D	10/9/2018	35,000,807	1.75%
DZ BANK AG DISC	7/2/2018	29,998,425	1.50%
WESTPAC BANKING IB NT	1/18/2019	25,127,706	1.25%
NATIXIS NY INSTL C/D	9/4/2018	25,102,514	1.25%
BNP PARIBAS NY BRH C/D	9/17/2018	25,072,188	1.25%
NATIONAL BK CANADA IB NT	8/6/2018	25,037,899	1.25%
Top Ten		\$737,406,435	36.80%

A complete list of portfolio holdings is available upon request from the Office of the Treasurer, in accordance with the Connecticut Freedom of Information Act.

#### LIQUIDITY FUND Periods ending June 30, 2018 1 YR 3 YRS 5 YRS 10 YRS Compounded, Annual Total Return (%) LF 1.63 1.09 0.54 0.69 LIBOR 1 MONTH INDEX 1.51 0.85 0.57 0.54 Cumulative Total Return (%) 1.63 3.29 2.73 7.15 ١F LIBOR 1 MONTH INDEX 1.51 2.57 2.91 5.49

#### Figure 2-7

LIQUIDITY FUND Investment Advisor Tiers at C	June 30, 2018	
Investment Advisor	Net Asset Value	% of Fund
State Street Global Advisors	\$2,003,180,852	100.00%
Total LF	\$2,003,180,852	100.00%

OFFICE OF THE STATE TREASURER, DENISE L. NAPPIER

# atternative investment fund

## Fund Facts at June 30, 2018

**Investment Strategy/Goals:** The purpose of the Alternative Investment Fund (AIF) is to invest CRPTF assets in investment strategies that offer the potential to enhance overall portfolio expected returns, reduce risk, or a combination of both in a variety of market conditions. Additionally, the AIF is expected to provide diversification benefits and a degree of inflation protection. The AIF serves as a vehicle for strategies that are not easily classified, categorized, or described in the other Combined Investment Funds. Hybrid strategies that cut across multiple asset classes are also considered part of the opportunity set.

Total Net Position: \$2,422,650,044

Expensed Management Fees: \$0

Operating Expenses: \$1,377,354

Capitalized and Netted Fees: \$11,387,627

Date of Inception: February 1, 2011

**Performance Objective:** To outperform the 90 day T-Bill Rate ("T-Bills") by 300 basis points net of all expenses.

Benchmark: 90 Day T-Bills

 Number of Advisors:
 13 external
 Expense Ratio:
 0.06%

 \* Expense ratio is calculated using the management fee and operating expense totals.
 0.06%

# **Description of the Fund**

The AIF represents a unique investment exposure that differs from traditional, long-only funds. The strategies employed within the AIF represent a broad set of investment styles, mandates and products that focus primarily on the liquid equity, fixed income and derivatives markets, and may also include allocations to non-traditional investments, including illiquid securities and investments. AIF strategies may target absolute returns without reference to a traditional benchmark using a wide range of investment tools such as short-selling, leverage, derivatives and complex securities.

The AIF may invest in strategies that do not fit the constraints of existing Combined Investment Funds. Such strategies could include, but are not limited to, absolute return strategies, managed futures strategies, commodities, real assets and other alternative asset strategies.

The AIF mandate is executed through external investment advisors and money managers who actively manage fund of funds portfolios or through direct investments in single manager funds.

# **Portfolio Characteristics**

As of June 30, 2018, the AIF was invested in six absolute return oriented fund of hedge funds, including two fund of funds participating in the Connecticut Horizon Fund program, with a combined market value of \$2.4 billion. The portfolio also includes four real asset oriented private equity style funds that invest in infrastructure with a combined market value of \$151.2 million and three new opportunistic credit partnerships representing capital commitments of \$225 million.

# **Market Review**

Hedge funds experienced returns of 5.5 percent for the 12 months ending June 30, 2018 (as measured by the HFRI Fund-of-Funds Composite Index) in line with long-term expectations. Most strategies had positive returns during the year. While equity and credit exposure contributed most positively to performance, global macro strategies (discretionary and systematic) had flat results.

From a sector perspective, growth-oriented strategies such as technology and healthcare rallied strongly, while value-oriented sectors were relatively weak. From a geographic perspective U.S. exposure performed much better than non-US developed and emerging markets, as U.S. GDP growth outpaced the rest of the world.

During the year ended March 31, 2018, private energy performance as measured by the Cambridge Associates Energy Index generated modest positive performance (5.9 percent) while private infrastructure returns were strong (14.8 percent gain for the Cambridge Associates Infrastructure Index). These returns were notably higher than their public market equivalents, which posted low or negative returns during the year.

# **Performance Summary**

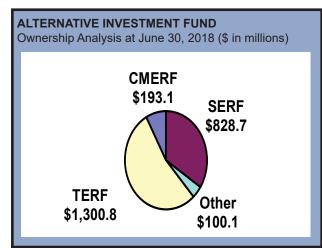
For the fiscal year ended June 30, 2018, the AIF generated a return of 4.69 percent, net of all expenses, which outperformed the 90-day Treasury bill return of 1.36 percent by 333 basis points (see Figure 3-2). For the trailing three-, five- and seven year periods, the AIF compounded returns, net of all fees and expenses, were 2.45 percent, 3.58 percent and 3.22, respectively. These returns outperformed the compounded 90-day Treasury bill return by 177, 316 and 289 basis points, respectively.

Within the AIF, the fund of hedge funds portfolio returned 4.12 percent as of June 30, 2018. The consolidated hedge fund portfolios underperformed their fund of funds peer group (Hedge Fund Research, Inc. Fund of Funds Composite Index), which increased by 5.49 percent over the same period. It also underperformed the broader Hedge Fund Research, Inc. Fund Weighted Composite Index, which increased by 5.67 percent.

# **Risk Profile**

Given the AIF's investment policy and objectives, the Fund is exposed to several forms of risk. These include, but are not limited to, risks attendant with alternative investments, such as management, operations and product risk, overall liquidity risk, leverage, short selling, derivative use, and transparency. Assuming these risks as part of a prudent, total portfolio strategy assists the AIF in achieving its investment objectives.

#### Figure 3-1

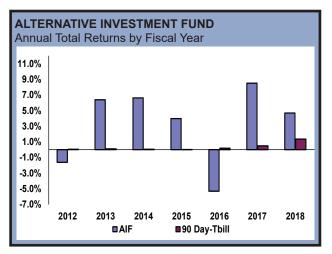


TERF - Teachers' Retirement Fund

SERF - State Employees' Retirement Fund

CMERF - Connecticut Municipal Employees' Retirement Fund

#### Figure 3-3



#### Figure 3-5

### ALTERNATIVE INVESTMENT FUND Investment Advisors at June 30, 2018

Investment Advisor	Net Asset Value	% of Fund
Anchorage	\$7,539,420	0.31%
Arclight Energy Partners Fund V	49,473,619	2.04%
Arclight VI	77,051,205	3.18%
Crescent II	17,931,494	0.74%
EIG Energy Fund XV Limited Partnership	33,011,940	1.36%
ISQ II	4,249,661	0.18%
Marathon European Credit Opportunity	9,628,710	0.40%
Owl Rock	26,131,651	1.08%
Prudence Crandall I Permal Limited Partnership	19,154,591	0.79%
Prudence Crandall II Prisma Limited Partnership	333,672,871	13.77%
Prudence Crandall III LLC-C	293,058,881	12.10%
Prudence Crandall III Rock Creek Limited Partnership	325,958,511	13.45%
Prudence Crandall III D - Liquid Strategy	389,578,681	16.08%
Prudence Crandall IV K2 Limited Partnership	321,674,793	13.28%
Prudence Crandall IV LLC-C	301,518,897	12.45%
Thomas Welles Fund I	89,394,492	3.69%
Thomas Welles Fund II	88,572,379	3.66%
Other (1)	35,048,249	1.45%
Total AIF	\$2,422,650,044	100.00%

(1) Other represents cash equivalents and other net assets.

#### Figure 3-2

### ALTERNATIVE INVESTMENT FUND Period ending June 30, 2018

	-,			
	1 YR	3 YRS	5 YRS	_
Compounded, Ann	ual Total R	eturn (%	)	
AIF	4.69	2.45	3.58	
90 Day T-Bill	1.36	0.68	0.42	
Cumulative Total R AIF 90 Day T-Bill	eturn (%) 4.69 1.36	7.55 2.05	19.23 2.13	



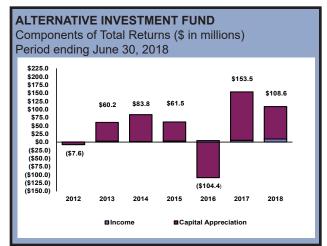


Figure 3-6

#### **ALTERNATIVE INVESTMENT FUND** Ten Largest Holdings\* at June 30, 2018 Partnership Name Type Market Value % \$389,578,681 16.08% PC III D Liquid Strat. Hedge F-o-F PC II Prisma LP 333,672,871 13.77% Hedge F-o-F PC III Rock Creek LP Hedge F-o-F 325,958,511 13.45% PC IV K2 LP 321,674,793 13.28% Hedge F-o-F PC IV LLC-C Hedge F-o-F 301,518,897 12.45% PC III LLC-C 293,058,881 12.10% Hedge F-o-F 89,394,492 3.69% Thomas Wells Fund I Hedge F-o-F Thomas Wells Fund II Hedge F-o-F 88,572,379 3.66% Arclight VI Real Assets 77,051,205 3.18% Arclight Energy Prtnrs V Real Assets 49,473,619 2.04% \$2,269,954,328 93.69% Top Ten

 A complete list of portfolio holdings is available upon request from the Office of the Treasurer, in accordance with the Connecticut Freedom of Information Act.

# mutual equity fund

### Fund Facts at June 30, 2018

**Investment Strategy/Goals:** The purpose of the Mutual Equity Fund (MEF) is to (1) achieve a long term, real rate of return significantly above the inflation rate; and (2) provide a source of diversification from other asset classes within the CRPTF during different economic environments.

Date of Inception: July 1, 1972

**Total Net Position:** \$7,754,897,097

Management Fees: \$15,772,324

**Performance Objective:** A net return that, at a minimum, matches the benchmark over rolling three- to five-year periods.

Benchmark: Russell 3000 Index

Number of Advisors: 6

Operating Expenses: \$13,188,659 Expense Ratio: 0.39%

# **Description of the Fund**

The MEF assets are allocated across the U.S. stock market to ensure diversification by market capitalization and investment style, such as value and growth. The MEF may opportunistically invest up to 30 percent of assets to take advantage of shifts in the investment landscape or opportunities that offer diversification and/or risk-return benefits, and may include investments in any market capitalization and/or investment style as well as an allocation to stocks outside the U.S.

# **Portfolio Characteristics**

The MEF invests primarily in the common stock of U.S. corporations. The largest industry weightings at June 30, 2018 were information technology (21.7 percent) followed by financials (19.9 percent) and consumer discretionary (14.3 percent) (See Figure 4-3).

The MEF's ten largest holdings, aggregating 16.8 percent of Fund investments, included a variety of blue chip companies and were broadly diversified, with the largest holding of 2.9 percent in Apple Inc. (See Figure 4-9).

# **Market Review**

U.S. equities posted strong returns for the year ended June 30, 2018. Shares were propelled by strong corporate earnings growth, solid economic growth, and federal tax cuts passed in late 2017 that helped shift the economy in the last few months. Market volatility picked up noticeably in early 2018, in part because of rising interest rates as the Federal Reserve pressed ahead with normalizing monetary policy, and the 10-year Treasury note yield reached a seven-year high in May. More concerning, however, was an increase in global trade tensions in the last few months stemming from proposed tariffs on imports from various trading partners, including Mexico, Canada, the European Union, and China. Many countries retaliated or threatened to retaliate with their own tariffs on U.S. goods. These actions sparked fears that global commerce and the worldwide economic expansion could be hurt by continued trade actions.

Small-cap shares outperformed their larger peers. The small-cap Russell 2000 Index returned 17.6 percent, versus 14.4 percent and 13.5 percent for the large-cap S&P 500 Index and the S&P MidCap 400 Index, respectively. Returns were strong despite a sharp but short-lived pullback in late January and early February that resulted in the S&P 500 decline of approximately 10.0 percent. Additionally, growth stocks soundly outperformed value stocks across all market capitalizations.

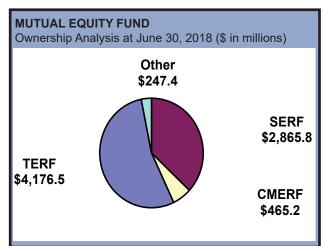
## **Performance Summary**

For Fiscal Year 2018, the MEF generated a return of 14.74 percent, net of all expenses, which slightly underperformed the Russell 3000 Index return by 4 basis points (See Figure 4-4). For the trailing three-, five- and seven-year periods, the MEF compounded returns, net of all fees and expenses, were 11.67 percent, 13.36 percent and 12.94 percent, respectively. MEF outperformed its benchmark for the three-, five -year periods, and underperformed the benchmark for the seven-year period.

# **Risk Profile**

Based on returns over the last five years, MEF has exhibited a similar degree of risk as that of its benchmark, the Russell 3000 Index. With the portfolio volatility (Beta) of 0.99, the MEF's volatility is approximately the same as the market. The Fund's active return, or its excess returns over the last five years, adjusted for risk, has been a 0.17 (See Figure 4-2).

#### Figure 4-1



TERF - Teachers' Retirement Fund

SERF - State Employees' Retirement Fund

CMERF - Connecticut Municipal Employees' Retirement Fund

#### Figure 4-3

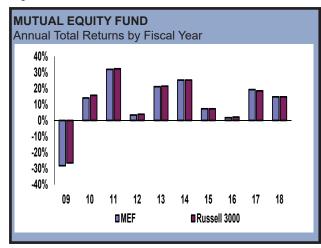
#### **MUTUAL EQUITY FUND**

Fiscal 2018 Industrial Sector vs. Index (%) Based on Investments in Securities, at Value (1

Dased on investments in Se	cuniies, at vai	ue
At 6/30/2018:	<u>MEF</u> % of Mrkt Value	<u>Russel 3000</u> %of Mrkt Value
Energy	5.5	6.0
Materials	4.3	3.6
Producer Durables	10.9	10.4
Consumer Discretionary	14.3	14.4
Consumer Staples	5.4	5.5
Health Care	13.6	13.4
Financials	19.9	21.0
Information Technology	21.7	20.9
Utilities	4.3	4.7
	100.0	100.0

(1) Excludes the Liquidity Fund.

#### Figure 4-5



OFFICE OF THE STATE TREASURER, DENISE L. NAPPIER

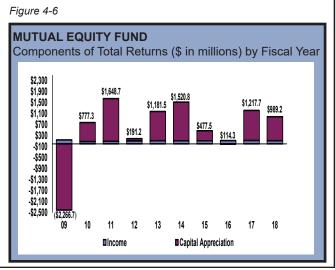
## Figure 4-2

<b>FUAL EQUITY FUND</b> Profile at June 30, 2018 <sup>(1)</sup>		
Standard Deviation R <sup>2</sup> Beta Alpha	9.79 1.00 0.99 0.17	

(1) Based upon returns over the last five years.

#### Figure 4-4

MUTUAL EQUITY F Periods ending June				
	1 YR	3 YRS	5 YRS	10 YRS
Compounded, Annua	I Total Retur	'n (%)		
MEF	14.74	11.67	13.36	9.71
Russell 3000	14.78	11.58	13.29	10.23
Cumulative Total Retur MEF Russell 3000	m (%) 14.74 14.78	39.24 38.93	87.19 86.66	152.58 164.83



#### Figure 4-7

# MUTUAL EQUITY FUND

Comprehensive Profile for the Fiscal Years ending June 30, 2018	Comprehensive	Profile for the Fis	cal Years ending	June 30, 2018
---	---------------	---------------------	------------------	---------------

	20	18	20	17	20	16	20	15	2	014
	MEF	Russell								
# of Issues	1,737	3,000	1,756	3,000	1,706	3,000	1,807	3,000	1,806	3,000
Cap (\$ Bil)	\$175.8	\$179.9	\$137.0	\$140.2	\$114.1	\$114.6	\$108.1	\$108.9	\$102.1	\$101.7
P/E	25.3	25.0	25.0	24.3	22.8	22.1	22.0	21.7	21.2	20.8
Div Yield	1.68%	1.84%	1.73%	1.89%	1.92%	2.06%	1.81%	1.93%	1.74%	1.84%
ROE	16.1%	16.1%	16.2%	16.2%	16.6%	16.4%	17.7%	17.5%	16.9%	17.0%
P/B	2.8	2.6	3.0	3.0	2.6	2.4	2.8	2.8	2.8	2.7
Cash & Equiv.	1.7%	0.0%	5.7%	0.0%	1.2%	0.0%	1.1%	0.0%	0.9%	0.0%

Source: Custodian Bank

### Figure 4-8

MUTUAL EQUITY FUND Investment Advisors at June	30, 2018	
Investment Advisor	Net Asset Value	% of Fund
Large Cap	\$6,115,530,413	78.86%
T. Rowe Price Associates	2,620,992,391	33.80%
State Street Global Advisors	3,494,538,022	45.06%
All Cap	735,853,288	9.49%
Capital Prospects	383,066,200	4.94%
FIS Group, Inc.	352,787,089	4.55%
Small/Mid Cap	828,677,442	10.69%
Frontier Capital Mgmt Co	456,625,174	5.89%
Bivium	372,052,268	4.80%
Other <sup>(1)</sup>	74,835,954	0.97%
TOTAL MEF	\$7,754,897,097	100.00%

Figure 4-9

MUTUAL EQUITY F Ten Largest Holding		2018	
Security Name	Sector	Market Value	%
Apple Inc	Information Tech	\$226,909,689	2.92%
Microsoft Corp	Information Tech	201,686,244	2.60%
Amazon.Com, Inc.	Consumer Discr	195,601,085	2.52%
Facebook Inc	Information Tech	134,587,198	1.73%
Exxon Mobil Corp.	Energy	100,344,541	1.29%
JPMorgan Chase & C	oFinancials	98,141,604	1.26%
Alphabet IncCL C	Information Tech	96,402,201	1.24%
Alphabet IncCL A	Information Tech	95,523,828	1.23%
Johnson & Johnson	Health Care	81,038,739	1.04%
Wells Fargo & Co.	Financials	74,401,921	0.96%
Top Ten	\$	1,304,637,050	16.81%

\* A complete list of portfolio holdings is available upon request from the Office of the Treasurer, in accordance with the Connecticut Freedom of Information Act.

(1) Other represents cash equivalents and other net assets.

# core fixed income fund

## Fund Facts at June 30, 2018

**Investment Strategy/Goals:** The purpose of the Core Fixed Income Fund (CFIF) is to: (1) achieve a long-term real rate of return above the inflation rate; (2) generate a stream of income and (3) provide a source of diversification from other asset classes within the CRPTF during different economic environments.

Date of Inception: November 1, 2007

**Performance Objective:** A net return that matches its benchmark, over rolling three-to-five year periods.

Benchmark: Barclays U.S. Aggregate Bond Index

Number of Advisors: 8 external

**Total Net Position:** \$3,117,615,280

Expensed Management Fees: \$3,349,330 Operating Expenses: \$4,283,842 Expense Ratio: 0.27%

# **Description of the Fund**

The CFIF assets are invested across debt instruments issued by the U.S. Government and its agencies, U.S. or international corporations, high quality quasi or sovereign debt and any other public or private U.S. regulated debt securities. The CFIF may invest up to 30 percent of its assets opportunistically to take advantage of shifts in the investment landscape or opportunities which offer diversification and/or risk-return benefits.

# **Portfolio Characteristics**

At the end of fiscal year 2018, the composition of the CFIF was: corporate bonds 32.6 percent, mortgagebacked securities 17.6 percent, U.S. Treasuries 25.1 percent, asset-backed securities 14.0 percent, and government agency securities 2.9 percent. The remaining assets were invested in the Liquidity Fund and other assets. As of June 30, 2018, the CFIF was overweight asset-backed securities and corporate bonds compared to the Barclays U.S. Aggregate Bond Index, and underweight mortgage-backed securities and U.S. Treasuries. (See Figure 5-4) Fifty six percent of the CFIF was invested in AAA-rated securities. (See Figure 5-5) The duration of the Fund was 4.38 years, compared to 6.30 years for the benchmark. The yield to maturity was 3.40 percent for the CFIF versus 3.30 percent for the Barclays U.S. Aggregate Bond Index. (See Figure 5-11)

# **Market Review**

The U.S. investment grade fixed income market as measured by the Bloomberg Barclays U.S. Aggregate Index had a negative return of 40 basis points for the fiscal year ending June 30, 2018. Investment grade corporate bonds and U.S. Treasuries, two of the largest sectors in the index, each generated negative returns. Escalating geopolitical tensions supported core government bonds over the first half of the period and U.S. Treasury yields declined. However, the anticipated inflationary impact of U.S. trade tariffs coupled with continued monetary policy normalization pushed Treasury yields higher over the second half of the period. Plans for more government spending were also tailwinds for growth. The yield curve flattened dramatically over the course of the period.

Investment grade credit spreads tightened to 85 basis points in February, the lowest level since 2007, as optimism around tax cuts and the strong growth environment supported the market. Volatility in the equity markets then spread and the credit curve moved wider across the board. Contributing further to this credit spread widening were concerns over the increased leverage and additional supply related to merger and acquisition activity. Credit spreads ended the fiscal year at 123 basis points over comparable U.S. Treasuries. Energy, REITs and basic materials were the strongest performing industries.

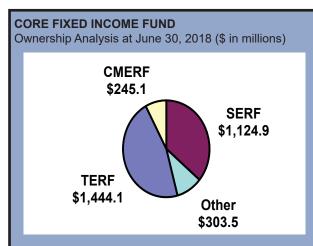
## **Performance Summary**

For the fiscal year ended June 30, 2018, the CFIF underperformed the Barclays U.S. Aggregate Bond Index by 49 basis points, a -0.89 percent net return compared to a -0.40 percent return for the benchmark (See Figure 5-8). For the trailing three-, five- and seven-year periods, the CFIF compounded returns, net of all fees and expenses, were 1.47 percent, 2.10 percent and 2.55 percent, respectively.

# **Risk Profile**

Given the CFIF's investment policies and objectives, the Fund is exposed to several forms of risk, such as credit default risk, interest rate risk, liquidity risk, inflation risk, reinvestment risk, counter party risk and geopolitical risk. These risks are monitored on an ongoing basis, and actions are taken to mitigate identified risks. External rating agencies assign credit ratings to individual securities reflecting their views of the underlying firm's credit worthiness or the underlying assets in the case of securitized debt. As of fiscal year end, over half of the CFIF was rated AAA.

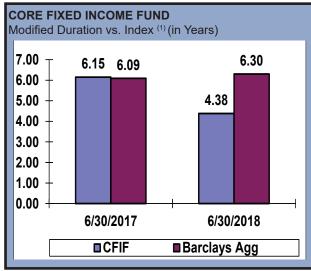
#### Figure 5-1



TERF - Teachers' Retirement Fund SERF - State Employees' Retirement Fund

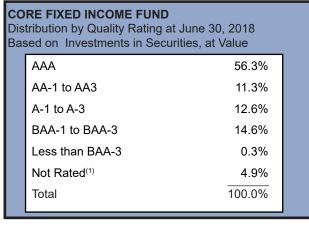
CMERF - Connecticut Municipal Employees' Retirement Fund

#### Figure 5-3



(1) Computed without the effect of Cash and other Net Assets.

#### Figure 5-5



(1) Represents securities for which ratings are unavailable.

#### Figure 5-2

Standard Deviation	2.19
R <sup>2</sup>	0.93
Beta	0.79
Alpha	0.21

(1) Based upon returns over the last five years.

#### Figure 5-4

Figure 5-6

CORE FIXED INCO Distribution by Secto Based on Investme	or at June 3	,	Э
	CFIF	Barclays Aggregate	Variance
Treasury	25.1%	37.5%	-12.4%
Agency	2.9%	3.2%	-0.3%
Corporate	32.6%	25.0%	7.6%
Mortgage-Backed	17.6%	28.1%	-10.5%
Asset-Backed	14.0%	0.5%	13.5%
Other <sup>(1)</sup>	<u>7.8%</u>	<u>5.7%</u>	2.1%
TOTAL	100.0%	100.0%	

(1) Other category includes Liquidity Fund and other assets.

# CORE FIXED INCOME FUND Distribution by Coupon at June 30, 2018 Based on Investments in Securities, at Value Liquidity Fund 5.6% 6.01-8.00% 0.3% 4.01-6.00% 12.6% 0.0% 0.0% 0.00-4.00% 79.2%

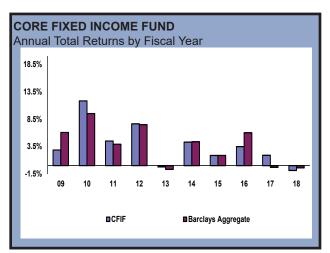
## OFFICE OF THE STATE TREASURER, DENISE L. NAPPIER

### Figure 5-7

0-3 Years 56.1%	I	<b>CORE FIXED INCOME FUND</b> Duration Distribution at June 30, 20 Based on Investments in Securities	
3-5 Years       17.9%         5-7 Years       17.5%         7-10 Years       4.2%         10+ Years       4.1%         Undetermined <sup>(1)</sup> 0.2%         Total       100.0%		3-5 Years 5-7 Years 7-10 Years 10+ Years Undetermined <sup>(1)</sup>	17.9% 17.5% 4.2% 4.1% 0.2%

(1) Represents securities for which the duration could not be calculated by the custodian.

#### Figure 5-9



#### Figure 5-8

## CORE FIXED INCOME FUND

Periods	ending	June	30,	2018	
---------	--------	------	-----	------	--

	1 YR	3 YRS	5 YRS	10 YRS
Compounded, Annual Tot	tal Return (	%)		
CFIF	-0.89	1.47	2.10	3.70
Barclays Aggregate	-0.40	1.72	2.27	3.72
Cumulative Total Return	(%)			
CFIF	-0.89	4.48	10.97	43.75
Barclays Aggregate	-0.40	5.25	11.89	44.09

#### Figure 5-10

CORE FIXED INCOME FUND Investment Advisors at June 30, 2018						
Investment Advisor	Net Asset Value	% of Fund				
State Street Global Advisors	\$148,954,851	4.78%				
BlackRock Financial Management, Inc.	434,307,915	13.93%				
Wellington	750,871,746	24.08%				
Conning-Goodwin Capital	363,455,130	11.66%				
Colchester	297,322,850	9.54%				
Payden and Rygel	546,134,896	17.52%				
РІМСО	431,258,300	13.83%				
Progress	118,655,940	3.81%				
Other <sup>(1)</sup>	26,653,653	0.85%				
TOTAL CFIF	\$3,117,615,280	100.00%				

(1) Other represents Liquidity Fund, other assets and terminated advisor balances.

## Figure 5-11

<b>CORE FIXED INCO</b> Comprehensive Pro for the Fiscal Year of	ofile		18							
	20	)18	2	2017	2	2016	20	15	20	014
	CFIF	BC AGG	CFIF	BC AGG*	CFIF	BC AGG*	CFIF	BC AGG*	CFIF	LBAI*
Number of Issues	4,615	10,011	4,129	9,355	3,844	9,804	3,448	9,496	3,080	8,818
Average Coupon	1.97%	3.17%	3.37%	3.11%	3.35%	3.21%	3.54%	3.31%	3.47%	3.41%
Yield Maturity	3.40%	3.30%	2.91%	2.46%	2.20%	1.74%	2.59%	2.29%	2.31%	2.10%
Average Maturity	6.21	8.49	8.40	8.00	7.78	7.85	8.73	7.57	8.05	7.29
Modified Duration	4.38	6.30	6.15	6.09	5.86	5.76	6.15	5.72	5.85	5.58
Average Quality	AA-2	AA-2	AA-2	AA-2	AA-2	AA-2	AA-2	AA-2	AA-2	AA-2
Liquidity Fund*	5.6%	0.0%	5.8%	0.0%	3.8%	0.0%	7.2%	0.0%	6.5%	0.0%

### Figure 5-12

#### **CORE FIXED INCOME FUND** Ten Largest Holdings\* at June 30, 2018

Security Name	Maturity	Market Value	%
FNMA TBA	7/1/2048	\$37,760,528	1.15%
FHLMC TBA	7/1/2048	35,450,590	1.08%
U S TREASURY NOTE	9/30/2019	24,954,294	0.76%
GNMA TBA	7/20/2048	22,960,941	0.70%
U S TREASURY NOTE	8/31/2019	22,342,946	0.68%
U S TREASURY NOTE	12/31/2019	22,235,806	0.68%
U S TREASURY NOTE	5/31/2025	21,366,313	0.65%
U S TREASURY NOTE	3/31/2022	19,624,495	0.60%
U S TREASURY NOTE	6/30/2021	18,136,513	0.55%
SINGAPORE GOVERNMENT BOND	10/1/2019	18,018,266	0.55%
Top Ten		\$242,850,693	7.38%

A complete list of portfolio holdings is available upon request from the Office of the Treasurer, in accordance with the Connecticut Freedom of Information Act.

#### Figure 5-13

	6/30/2018	3/31/2018	12/31/2017	9/30/2017	6/30/2017
CORE FIXED INCOME	3.29	3.35	3.33	3.46	3.24
Barclays Aggregate	3.12	3.06	2.97	2.94	2.92
Barclays Treasury	2.27	2.20	2.11	2.06	2.05
Barclays Agency	2.36	2.27	2.21	2.17	2.16
Barclays Mortgage	3.52	3.49	3.42	3.43	3.44
Barclays Corporate	3.86	3.77	3.65	3.67	3.69
Barclays Asset Backed	2.32	2.14	2.03	1.98	1.97

(1) Current Yield represents annual coupon interest divided by the market value of securities.

# inflation linked bond fund

## Fund Facts at June 30, 2018

**Investment Strategy/Goals:** The purpose of the Inflation Linked Bond Fund (ILBF) is to (1) achieve a long- term, real rate of return above the inflation rate; (2) provide protection against rampant inflation; and (3) offer a source of diversification relative to other asset classes within the CRPTF during different economic environments.

Date of Inception: November 1, 2007	<b>Total Net Position:</b> \$1,399,476,192
<b>Performance Objective:</b> A net return, which n the benchmark, over rolling three- to five-year p	
<b>Benchmark:</b> Barclays World Government Infla Bond Index	tion-Linked <b>Operating Expenses:</b> \$5,266,750
Number of Advisors: 3 external	Expense Ratio: 0.56%

# **Description of the Fund**

Inflation linked bonds are high-quality securities issued primarily by governments in their home country currencies. While the benchmark for this Fund is unhedged, investment managers have discretion to hedge foreign currency exposure back to the U.S. dollar. Inflation-linked bonds carry a fixed interest rate and the principal of the bonds is adjusted semi-annually for any rise or decline in the inflation rate.

# **Portfolio Characteristics**

At June 30, 2018, the ILBF was well diversified with issues of inflation-linked and nominal sovereign bonds from eight countries plus the United Kingdom and the Eurozone. (See Figure 6-3) The average coupon of this Fund was 1.72 percent compared to 0.84 percent for the benchmark. Duration of the ILBF at 11.11 years was longer than the 7.68 years of the benchmark. Credit quality of the Fund was AA-2 on June 30, 2018 compared to AAA for the benchmark. (See Figure 6-9)

# **Market Review**

The global inflation-linked bond market returned 3.3 percent for the fiscal year ending June 30, 2018. Monetary tightening by many developing countries' central banks and a weaker U.S. dollar marked more than the first half of the period. The increase in the price of oil and other commodities filtered into expectations for higher inflation in many countries. In the U.S., the 10-year Treasury yield bottomed near 2 percent in August on North Korea tensions and rose above 3 percent by May, before retreating slightly near fiscal year end. The back-up in yields and corresponding yield curve flattening were mainly driven by tightening monetary policy of the Federal Reserve, concerns that tax cuts could over-heat the economy, and fears that Treasury supply would need to increase to cover the budget deficit.

U.S. TIPS outperformed nominal Treasuries with a return of 2.3 percent. With the exception of the U.K., the linkers of countries in the global linker index all outperformed their nominal counterparts. Rising oil prices and expanding global growth combined to exert upward pressure on both realized inflation as well as inflation expectations, helping the linker market to perform well.

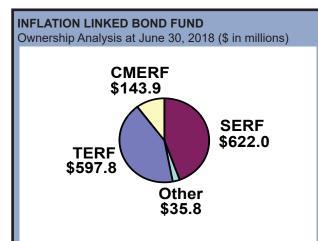
## **Performance Summary**

For the fiscal year ended June 30, 2018, the ILBF underperformed the Barclays World Government Inflation-Linked Bond Index by 11 basis points, generating a 3.21 percent net return compared to a 3.32 percent return for the benchmark (See Figure 6-7). For the trailing three-, five- and seven-year periods, the ILBF compounded returns, net of all fees and expenses, were 2.05 percent, 1.47 percent and 2.06 percent, respectively.

# **Risk Profile**

Given the ILBF's investment policies and objectives, the Fund is exposed to various risks such as interest rate risk, deflation risk, currency risk, geopolitical risk, and credit risk.

#### Figure 6-1



TERF - Teachers' Retirement Fund SERF - State Employees' Retirement Fund CMERF - Connecticut Municipal Employees' Retirement Fund

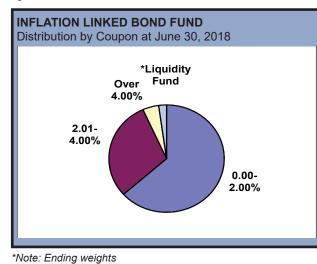
#### Figure 6-3

## INFLATION LINKED BOND FUND

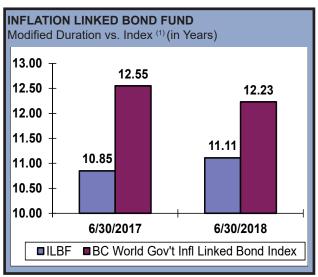
Distribution by Country at June 30, 2018 Based on Investments in Securities, at Value

	E	BC World Gov	ťt
	ILBF	Infl Linked	Variance
U.S.	46.1%	42.8%	3.3%
U.K.	19.2%	28.8%	-9.6%
Eurozone	15.6%	21.1%	-5.5%
Mexico	3.4%	0.0%	3.4%
Malaysia	1.4%	0.0%	1.4%
Canada	1.1%	2.0%	-0.9%
Poland	1.2%	0.0%	1.2%
Japan	2.1%	2.7%	-0.6%
Australia	4.3%	1.1%	3.2%
New Zealand	4.6%	0.4%	4.2%
Other	<u>0.9%</u>	<u>1.1%</u>	-0.2%
TOTAL	100.0%	100.0%	

Figure 6-5







(1) Computed without the effect of Cash and other Net Assets. Figure 6-4

## INFLATION LINKED BOND FUND

Distribution by Quality Rating at June 30, 2018 Based on Investments in Securities, at Value

AAA	49.6%
AA-1 to AA-3	30.0%
A-1 to A-3	9.2%
BAA-1 to BAA-3	7.0%
Less than BAA-1	4.2%
Total	100.0%

#### Figure 6-6

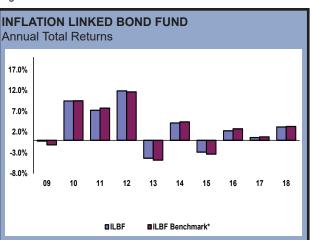
INFLATION LINKED BOND FUND Duration Distribution at June 30, 2018 Based on Investments in Securities, at Value							
0-3 Years	25.6%						
3-5 Years	8.4%						
5-7 Years	26.8%						
7-10 Years	5.0%						
10+ Years	34.2%						
Total	100.0%						

#### Figure 6-7

INFLATION LINKED BOND FUND Periods ending June 30, 2018								
	1 YR	3 YRS	5YRS	10YRS				
Compounded, Annual Tot ILBF BC World Gov't Infl Linked	3.21	2.05	1.47	3.17*				
Bond Index <sup>(1)</sup>	3.32	2.29	1.59	2.99				
Cumulative Total Return ( ILBF	<b>%)</b> 3.21	6.27	7.55	36.59*				
BC World Gov't Infl Linked Bond Index <sup>(1)</sup>	3.32	7.03	8.19	34.23				

(1) The benchmark was changed during Fiscal Year 2015 from BC U.S. TIPS to BC World Government Inflation Linked Bond Index. \*Represents historical returns at the portfolio composite level.

## Figure 6-8



\*Note: 2015 and forward, the Benchmark is BC World Government Inflation Linked Bond Index; for prior years the benchmark is BC U.S. TIPS Index.

#### Figure 6-9

## INFLATION LINKED BOND FUND Comprehensive Profile for the Fiscal Year ending June 30, 2018

•			0	· · · · · ·						
	<u>20</u> ILBF	1 <u>18</u> BC World Gov't Infl	<b>2</b> ILBF	<u>017</u> BC World Gov't Infl	2 ILBF	<u>016</u> Barclays US TIPS	<u>20</u> ILBF	<u>15</u> Barclays US TIPS	<u>20</u> ILBF	014 Barclays US TIPS
Number of Issues	529	39	382	136	587	134	418	131	37	35
Average Coupon	1.72%	0.84%	1.41%	1.15%	1.65%	1.23%	2.08%	1.35%	1.53%	1.22%
Average Maturity	12.64	8.40	11.70	13.68	13.71	13.49	12.63	13.40	8.68	8.57
Modified Duration	11.11	7.68	10.85	12.55	11.73	12.36	11.32	12.07	7.31	7.72
Average Quality	AA-2	AAA	AA-2	AA-2	AA-2	AA-1	AA-2	AA-1	AAA	AAA
Liquidity Fund (1)	2.2%	0.0%	2.8%	0.0%	3.1%	0.0%	2.4%	0.0%	5.6%	0.0%
1										

(1) Ending Weights

Figure 6-10

INFLATION LINKED BOND FUND Investment Advisors at June 30, 2018								
Investment Advisor	Net Asset Value	% of Fund						
BlackRock	\$535,129,762	38.24%						
Colchester	627,844,915	44.86%						
New Century	216,232,717	15.45%						
Other <sup>(1)</sup>	20,268,798	1.45%						
TOTAL ILBF	\$1,399,476,192	100.00%						

(1) Other represents Liquidity Fund, other assets and terminated advisor balances.

## Figure 6-11

INFLATION LINKED BOND FUND Ten Largest Holdings <sup>(1)</sup> at June 30, 2018								
		Market						
Security Name	Maturity	Value	%					
US TREAS-CPI INFLAT	4/15/2029	\$68,820,250	4.98%					
US TREAS-CPI INFLAT	7/15/2022	54,862,660	3.97%					
US TREAS-CPI INFLAT	1/15/2027	54,808,441	3.96%					
ITALY BUONI POLIENNALI DE REGS	9/15/2023	56,875,656	4.11%					
US TREAS-CPI INFLAT	2/15/2042	52,512,551	3.80%					
US TREAS-CPI INFLAT	1/15/2021	43,015,573	3.11%					
UNITED KINGDOM GILT								
INFLA REGS	3/22/2044	41,288,878	2.99%					
NEW ZEALAND GOV'T								
IN REGS	9/20/2030	35,950,387	2.60%					
US TREAS-CPI INFLAT	4/15/2022	33,778,377	2.44%					
MEXICAN UDIBONOS	11/15/2040	23,167,704	1.68%					
Top Ten		\$465,080,479	33.64%					

 A complete list of portfolio holdings is available upon request from the Office of the Treasurer, in accordance with the Connecticut Freedom of Information Act.

# emerging market debt fund

## Fund Facts at June 30, 2018

**Investment Strategy/Goals:** The purpose of the Emerging Market Debt Fund (EMDF) is to (1) achieve long-term, real rates of return above the inflation rate and (2) provide some diversification relative to other asset classes within CRPTF given the different global economic environments.

Date of Inception: November 1, 2007

**Performance Objective:** A net return that matches the benchmark, over rolling three- to five-year periods.

**Total Net Position:** \$1,901,511,335

Management Fees: \$7,076,439

**Operating Expenses:** \$1,557,425

**Benchmark:** J.P. Morgan Emerging Markets Bond Index Global Diversified (JPM EMBI GD) (50%) J.P. Morgan Government Bond Index Emerging Markets Global Diversified (JPM GBI EM GD) (50%)

Number of Advisors: 4 external

Expense Ratio: 0.49%

# **Description of the Fund**

The EMDF invests primarily in debt instruments issued by governments and companies operating in developing countries as identified by the benchmark, the World Bank, or the United Nations. The EMDF is generally weighted 50 percent to U.S. dollar-denominated securities and 50 percent to securities issued in local currencies. For performance measurement purposes, the dollar-denominated securities are benchmarked to the JPM EMBI GD and the local currency securities are benchmarked to the JPM GBI EM GD.

# **Portfolio Characteristics**

The EMDF is well diversified with broad geographic and currency exposures. Latin America and Europe have the highest representation; while the Middle East and Africa have the lowest exposure, relatively consistent with the benchmark. (See Figure 7-3) The Fund had an overall yield to maturity of 8.50 percent compared to the EMBI benchmark yield of 6.95 percent. The average quality of EMDF was BA-1 versus the EMBI benchmark average of BAA-3. The duration of the EMDF was 5.40 years versus 5.39 years for the benchmark. (See Figure 7-11)

# **Market Review**

Strong and accelerating global economic growth, demand for emerging market assets, U.S. dollar weakness and few political elections supported both strong investment performance of and net inflows into emerging debt markets during the first three quarters of the fiscal year. Investor risk appetite reversed amid fears of trade wars, U.S. dollar strength, and foreign central banks' defense of their currencies causing fixed income emerging markets to decline in the fourth fiscal quarter.

U.S. dollar-denominated emerging market debt had a negative return of 1.6 percent for the fiscal year ending June 30, 2018, driven by spread widening against U.S. Treasuries. There was wide dispersion in returns across countries. Oil-exporting countries and those with sound economic fundamentals performed well, while countries with high inflation, external financing needs or unstable political conditions did poorly. In contrast, local currency investments returned a positive 3 percent in their own currencies. However, when converted back to U.S. dollars, local currency bonds had a loss of 2.3 percent. The Argentine peso and the Turkish lira were down 42 percent, and 23 percent, respectively, against the U.S. dollar. During the first three fiscal quarters, non-investment grade investments outperformed their higher quality counterparts, until the final two months of the fiscal year when investor sentiment shifted towards risk aversion and asset outflows increased.

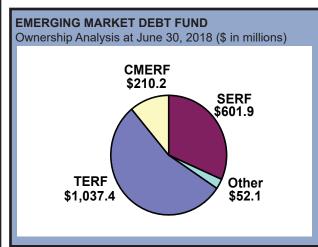
# **Performance Summary**

For the fiscal year ended June 30 2018, the EMDF generated a return of -1.78 percent, net of all expenses, outperforming the benchmark return of -1.89 percent by 11 basis points (See Figure 7-7). For the trailing three-, five- and seven-year periods, the EMDF compounded returns, net of all fees and expenses, were 4.34 percent, 2.35 percent and 2.61 percent, respectively.

# **Risk Profile**

Given the EMDF's investment policies and objectives, the Fund is exposed to multiple types of risk. These risks include, but are not limited to, credit risk, currency risk, interest rate risk, liquidity risk, inflation risk and geopolitical risk. Approximately half of the Fund is rated as investment grade.

#### Figure 7-1



TERF - Teachers' Retirement Fund SERF - State Employees' Retirement Fund CMERF - Connecticut Municipal Employees' Retirement Fund

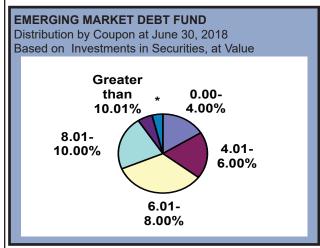
#### Figure 7-3

#### EMERGING MARKET DEBT FUND Distribution by Region at June 30, 2018

	EMDF	50% JPM EMBI/ 50% JPI GBI EM GD	M Variance
Asia	13.9%	18.6%	-4.8%
Africa	9.3%	9.0%	0.3%
Europe	27.0%	25.9%	1.0%
Latin America	34.8%	43.2%	-8.4%
Middle East	6.0%	3.2%	2.8%
United States (1)	<u>9.0%</u>	<u>0.0%</u>	9.0%
TOTAL	100.0%	100.0%	

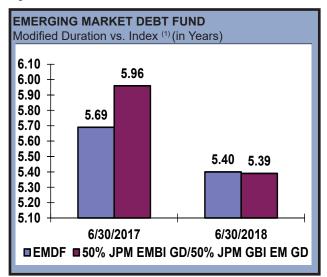
(1) Mainly Liquidity Fund and Foreign Currency Contracts.

#### Figure 7-5



\*Liquidity Fund and other assets.

#### Figure 7-2



(1) Computed without the effect of Cash and other Net Assets.

#### Figure 7-4

Dis	ERGING MARKET DEBT FL tribution by Quality Rating at sed on Investments in Securi	June 30, 2018
	Aaa	5.4%
	AA-1 to AA3	0.8%
	A-1 to A-3	13.1%
	BAA-1 to BAA3	26.1%
	Less than BAA-3	44.4%
	Not Rated (1)	10.3%
	Total	100.0%

(1) Represents securities for which ratings are unavailable.

#### Figure 7-6

EMERGING MARKET DEBT FL Duration Distribution at June 30, Based on Investments in Securi	2018
0-3 Years	39.5%
3-5 Years	26.7%
5-7 Years	12.1%
7-10 Years	13.2%
10+ Years	8.4%
Unknown <sup>(1)</sup>	0.1%
Total	100.0%

(1) Represents securities for which the duration could not be calculated by the custodian.

#### Figure 7-7

EMERGING MARKET DI Periods ending June 30, 2		ND		
	1 YR	3 YRS	5YRS	10 YRS
Compounded, Annual Tot	al Retur	n (%)		
EMDF 50% JPM EMBI GD/	-1.78	4.34	2.35	5.13*
50% JPM GBI EM GD	-1.89	3.37	1.87	5.35
Cumulative Total Return (	%)			
EMDF	-1.78	13.60	12.34	64.86*
50% JPM EMBI GD/ 50% JPM GBI EM GD	-1.89	10.46	9.69	68.47

\* Represents historical returns at the portfolio composite level.

Figure 7-9

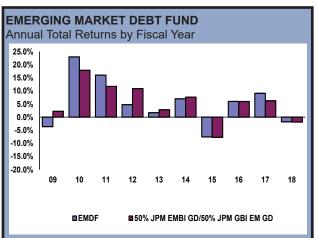
Figure 7-11

**EMERGING MARKET DEBT FUND** 

EMERGING MARKET DEBT FUND Investment Advisors at June 30, 2018								
Net Asset         % of           Investment Advisor         Value         Fund								
Ashmore Investment Mgt. Ltd.	\$562,035,658	29.56%						
Payden & Rygel	759,912,413	39.96%						
Fidelity Institutional Asset Mgt.								
Trust Co.	472,297,829	24.84%						
Lazard	98,898,275	5.20%						
Other <sup>(1)</sup>	8,367,161	0.44%						
TOTAL EMDF	\$1,901,511,336	100.00%						

(1) Other represents Liquidity Fund, other assets and terminated advisor balances.

#### Figure 7-8



#### Figure 7-10

EMERGING MARKET DEBT FUND Ten Largest Holdings* at June 30, 2018								
Security Name	Maturity	Market Value	%					
Brazil Notas Do Tesouro	1/1/2021	\$39,709,525	2.15%					
Mexican Bonds	12/5/2024	27,417,050	1.49%					
South Africa Gvmt Bond	2/28/2031	26,264,324	1.42%					
Colombian TES	5/4/2022	23,817,748	1.29%					
Colombian TES	7/24/2024	18,477,017	1.00%					
Russian Fed Bond-OFZ	2/3/2027	18,359,629	1.00%					
Argentine Rep Gvmt	4/22/2026	17,603,931	0.95%					
Brazil Notas Do Tesouro	1/1/2023	17,091,923	0.93%					
JPM Chase Bank NA	9/17/2026	16,130,070	0.87%					
Russian Fed Bond-OFZ	4/14/2021	15,233,210	0.83%					
Top Ten		\$220,104,429	11.93%					

A complete list of portfolio holdings is available upon request from the Office of the Treasurer, in accordance with the Connecticut Freedom of Information Act..

	2018		2018 2017		2	2016		2015		2014	
	EMDF	EMBI	EMDF	EMBI	EMDF	EMBI	EMDF	EMBI	EMDF	EMBI	
Number of Issues	1,364	879	1,114	818	978	714	968	686	880	631	
Yield to Maturity	8.50%	6.95%	6.72%	5.58%	7.56%	5.81%	8.54%	6.68%	5.32%	5.86%	
Average Maturity	9.83	8.47	8.69	9.11	9.25	9.28	9.23	9.23	7.57	8.60	
Modified Duration	5.40	5.39	5.69	5.96	6.30	6.02	6.17	5.87	5.69	5.74	
Average Quality	BA-1	BAA-3	BA-1	BAA-3	BA-1	BAA-3	BA-1	BAA-2	BAA-3	BAA-2	
*Liquidity Fund	3.8%	0.0%	2.9%	0.0%	2.7%	0.0%	3.0%	0.0%	3.2%	0.0%	

\* Note: Ending weights

# high vield debt fund

## Fund Facts at June 30, 2018

**Investment Strategy/Goals:** The purpose of the High Yield Debt Fund (HYDF) is to (1) achieve a long-term, real rate of return above the inflation rate; and (2) provide diversification to other asset classes within the CRPTF under different economic environments.

Date of Inception: November 1, 2007	Total Net Position: \$2,131,830,669
<b>Performance Objective:</b> A net return that matches its benchmark, over rolling three- to five-year periods.	Management Fees: \$7,408,647
Benchmark: Citigroup U.S. High Yield Market Capped Index	<b>Operating Expenses:</b> \$6,082,831
Number of Advisors: 7 external	Expense Ratio: 0.65%

# **Description of the Fund**

The HYDF invests primarily in debt instruments rated below-investment grade by one or more nationally recognized rating agencies.

# **Portfolio Characteristics**

The HYDF is well diversified across a range of corporate high yield bonds and bank loans. These securities are predominantly U.S. based. The Fund's average quality rating was B-1 on June 30, 2018, matching the average quality of the benchmark, and had a yield to maturity of 7.08 percent compared to 6.67 percent yield for the benchmark. As of June 30, 2018, the duration of the HYDF was 4.42 years, compared to the benchmark duration of 4.67 years. (See Figure 8-10)

# **Market Review**

The high yield market return of 2.6 percent for the fiscal year ending June 30, 2018 was driven by higher interest rates and commodity prices, supportive corporate earnings, strong economic data, and low defaults. As the reach for yield continued, lower quality (CCC) securities outperformed higher quality (B/BB) securities throughout the year. Returns were sometimes volatile during the period with 40-50 basis point monthly swings. However, by the end of the fiscal year, high yield spreads were only one basis point lower than where they had begun the period.

After the Federal Reserve raised rates at the end of the second fiscal quarter, the market turned negative on concerns about increasing inflation and the pace of future monetary tightening. As a result, longer-dated bonds underperformed the shorter end of the curve. Asset class outflows were modest for the first half of the period, but turned sharply negative in early 2018. A spike in volatility, negative equity market returns and uncertainty around escalating threats of trade war contributed to negative returns at that time. Offsetting some of the weakened demand, was lower supply. New issuance was subdued and refinancing continued to be the primary use of proceeds.

The Energy sector outperformed as oil prices increased, driven by declining inventories, OPEC production limits and lower production from Venezuela. Utilities, Transportation, Financial Services also outperformed, while Automotive, Consumer Goods, Media, and Banking produced negative returns.

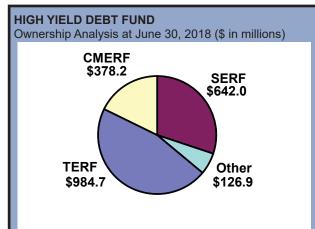
## **Performance Summary**

For the fiscal year ended June 30, 2018, the HYDF generated a return of 2.58 percent, net of all expenses, underperforming the Citigroup U.S. High Yield Market Capped Index return of 2.82 percent by 24 basis points (See Figure 8-8). For the trailing three-, five- and seven-year periods, the HYDF compounded returns, net of all fees and expenses, were 4.81 percent, 4.99 percent and 5.69 percent, respectively.

# **Risk Profile**

Given the HYDF's investment policies and objective, the Fund is exposed to several forms of risk. These risks include, but are not limited to, credit default risk, interest rate risk, liquidity risk, pre-payment risk, reinvestment risk and inflation risk. In addition, the Fund is occasionally exposed to political, economic and currency risk resulting from investments in international high yield securities. The average quality of the Fund is B-1, which matches the benchmark.





TERF - Teachers' Retirement Fund SERF - State Employees' Retirement Fund

CMERF - Connecticut Municipal Employees' Retirement Fund

Figure 8-3

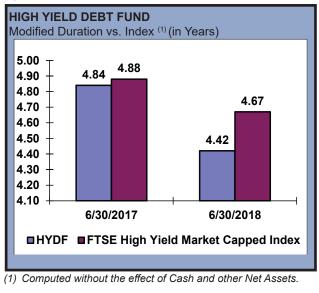


Figure 8-2

	H YIELD DEBT FUND Profile at June 30, 2018 <sup>(1)</sup>					
	Standard Deviation	4.95				
	R <sup>2</sup>	0.98				
	Beta	0.94				
	Alpha	0.14				
	ased upon returns over the last fi					

(1) Based upon returns over the last five years.

#### Figure 8-4

HIGH YIELD DEBT FUND Distribution by Sector at June 30, 2018 Based on Investments in Securities, at Value					
	HYDF	Citigroup	Variance		
Treasury	2.1%	0.0%	2.1%		
Corporate	94.3%	100.0%	-5.7%		
Asset-Backed	0.1%	0.0%	0.1%		
Other(1)	<u>3.6%</u>	<u>0.0%</u>	3.6%		
TOTAL	100.0%	100.0%			

(1) Other category includes non fixed-income securities such as common and preferred stock and convertible securities, Real Estate Investment Trust, Business Development Corporation, Liquidity Fund and other assets.

#### Figure 8-5

#### **HIGH YIELD DEBT FUND**

Distribution by Quality Rating at June 30, 2018 Based on Investments in Securities, at Value

AAA to A3	3.4%
BAA1 to BAA3	3.4%
BA1 to BA3	28.6%
B1 to B3	40.1%
CAA1 to CAA3	18.5%
CA to C	0.9%
Not Rated(1)	5.2%
Total	100.0%

(1) Represents securities for which ratings are unavailable.

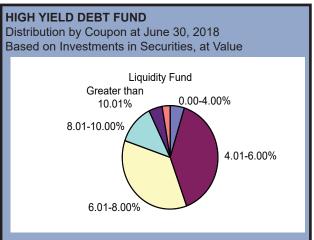
#### Figure 8-7

<b>HIGH YIELD DEBT FUND</b> Duration Distribution at June 30, 2018 Based on Investments in Securities, at	Value
0-3 Years	69.3%
3-5 Years	25.2%
5-7 Years	2.6%
7-10 Years	1.6%
10+ Years	0.3%
Unknown <sup>(1)</sup>	1.0%
Total	100.0%

(1) Represents securities for which the duration could not be calculated by the custodian.

#### Figure 8-9 **HIGH YIELD DEBT FUND** Annual Total Returns by Fiscal Year 29.0% 24.0% 19.0% 14.0% 9.0% 4.0% -1.0% -6.0% 11.0% -16.0% -21.0% -26.0% 09 10 11 12 13 14 15 16 17 18 ■HYDF ■FTSE High Yield Market Capped Index

#### Figure 8-6



#### Figure 8-8

<b>HIGH YIELD DEBT FUND</b> Periods ending June 30, 2018						
	1 YR	3 YRS	5 YRS	10 YRS		
Compounded, Annual To	tal Retur 2.58	n (%) 4.81	4.99	7.37		
FTSE High Yield	2.00	4.01	4.55			
Market Capped Index	2.82	5.13	5.10	7.54*		
Cumulative Total Return	(%)					
HYDF	2.58	15.14	27.54	103.64*		
FTSE High Yield Market Capped Index	2.82	16.19	28.23	106.91		

\*Represents historical returns at the portfolio composite level.

#### Figure 8-10

HIGH YIELD DEBT FUND Comprehensive Profile for the Fiscal Year ending June 30, 20 18										
Number of Issues	<u>20′</u> H <u>YDF</u> 1,700	<u>18</u> FTSE 1,992		1 <u>7</u> Citigroup 2,043	<u>4 HYDF</u> 1,016	016 Citigroup 2,179	<u>20</u> <u>HYDF</u> 972	15 Citigroup 2,220	<u>2</u> <u>HYDF</u> 884	<u>014</u> <u>Citigroup</u> 2,183
Average Coupon	5.88%	6.36%	5.60%	6.45%	5.67%	6.54%	5.80%	6.73%	5.88%	7.08%
Yield Maturity	7.08%	6.67%	5.51%	6.02%	6.87%	7.32%	6.34%	6.77%	5.13%	5.73%
Average Maturity	5.50	5.49	5.33	5.71	6.17	5.64	6.29	5.74	5.99	5.04
Modified Duration	4.42	4.67	4.84	4.88	5.12	4.77	5.36	4.95	5.42	5.12
Average Quality	B-1	B-1	B-1	B-1	B-1	B-1	B-1	B-1	B-1	B-1
Liquidity Fund	2.5%	0.0%	7.5%	0.0%	4.4%	0.0%	4.6%	0.0%	6.6%	0.0%

#### Figure 8-11

HIGH YIELD DEBT FUND						
Investment Advisors at June 30, 2018						
	Net Asset	% of				
Investment Advisor	Value	Fund				
Loomis Sayles & Co., Inc.	\$391,634,857	18.37%				
Stone Harbor Investment Partners	2,687	0.00%				
Shenkman Capital Management, Inc.	238,199,178	11.17%				
Oaktree Capital Management, LLC	414,963	0.02%				
AllianceBernstein, LP	321,676,184	15.09%				
DDJ Capital Management, LLC	263,149,399	12.34%				
Columbia Mgmt Investment Advisers, LLC	372,909,831	17.49%				
Nomura Corp. Research & Asset Mgmt, Ir	nc469,510,728	22.02%				
TCG BDC, Inc.	55,926,710	2.62%				
Other (1)	18,406,131	0.86%				
TOTAL HYDF	\$2,131,830,669	100.00%				

(1) Other represents Liquidity Fund, other assets and terminated advisor balances.

#### Figure 8-12

HIGH YIELD DEBT FUND Ten Largest Holdings* at June 30, 2018						
		Market				
Security Name	Maturity	Value	%			
U S Treasury Bill	9/6/2018	\$19,931,200	0.94%			
U S Treasury Bill	11/15/2018	14,886,600	0.71%			
U S Treasury Note	5/31/2019	11,285,347	0.53%			
Indnesia Gvmt Bond	1/15/2024	9,441,770	0.45%			
Polaris Int. Corp 144A	12/1/2022	9,487,964	0.45%			
Altice France SA/	- / - /0000					
France144A	5/15/2022	8,746,445	0.41%			
Tenet Healthcare Corp	11/15/2031	8,190,047	0.39%			
New Star Metals Inc	6/22/2022	8,179,421	0.39%			
MEG Energy Corp144A	3/31/2024	8,130,056	0.39%			
New Albertsons LP	8/1/2029	8,099,231	0.38%			
Top Ten		\$106,378,081	5.04%			

\* A complete list of portfolio holdings is available upon request from the Office of the Treasurer, in accordance with the Connecticut Freedom of Information Act.

# developed markets international stock fund

## Fund Facts at June 30, 2018

**Investment Strategy/Goals:** The purpose of the Developed Markets International Stock Fund (DMISF) is to (1) achieve a long-term, real rate of return above the US inflation rate; and (2) provide additional measures of diversification to other asset classes within the CRPTF under different economic scenarios.

Date of Inception: November 1, 2007Total Net Position: \$7,152,742,976Performance Objective: A net return that matches<br/>the benchmark, over rolling three-to-five year periods.Management Fees: \$24,221,682Benchmark: Benchmark: Morgan Stanley Capital International Europe,<br/>Australasia and Far East Investable Market Index<br/>(MSCI EAFE IMI)<sup>(1)</sup> 50% HedgedOperating Expenses: \$4,118,900Number of Advisors: 9 externalExpense Ratio: 0.42%

(1) The CRPTF signed a licensing agreement with MSCI to provide benchmark data commencing in fiscal year 2015. For the three, five and ten year performance periods, the CRPTF is using the prior benchmark, S&P/Citigroup Broad Market Index Europe, Pacific and Asia Composite Index 50% Hedged.

# **Description of the Fund**

DMISF assets are allocated across foreign developed equity markets to provide diversification by country, market capitalization and style. Non-U.S. equities are issued by companies domiciled outside of the United States. The DMISF may invest up to 30 percent of assets opportunistically to take advantage of shifts in the investment landscape, or opportunities that offer diversification and/or risk-return benefits within non-U.S. equity markets.

# **Portfolio Characteristics**

At fiscal year-end, the DMISF was invested in the developed markets across Europe, Asia and Australia, with the two largest allocations in Japan (20.2 percent) and the United Kingdom (13.3 percent) (see Figure 9.5). The portfolio's largest country overweight positions relative to the benchmark were Canada (1.9 percent vs. the benchmark's 0.0 percent) and the Netherlands (5.2 percent vs. the benchmark's 3.4 percent). The largest underweights were Japan (20.2 percent vs. the benchmark's 25.1 percent) and United Kingdom (13.3 percent vs. the benchmark's 18.1 percent).

# **Market Review**

International developed equities made modest gains over the 12 month period with the MSCI EAFE Index up 6.8 percent. Smaller companies outperformed this with the MSCI EAFE Small Cap Index rising 12.4 percent. Small cap outperformance has been evident in all regions with continental Europe making the strongest contribution to relative returns. Small caps also benefitted from their higher weighting in Japan (the strongest performing region) and lower weighting in continental Europe (the weakest performing region). Across sectors, information technology, financials, health care and consumer staples have been the strongest drivers of relative outperformance with only partial offset from energy.

The first half of the fiscal year saw international equity markets produce strong returns as economic growth indicators were positive overall as stable expansion and benign inflation backed by positive earnings releases were very supportive. Markets in the second half of the fiscal year took a more negative note with investors unnerved by concerns about the path of U.S. interest rate rises, worries over trade, and an unsettling geopolitical backdrop. Despite this, economic and earnings data has remained resilient.

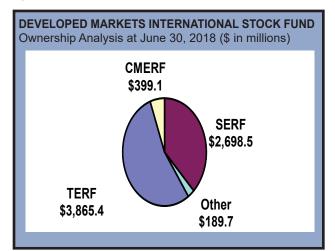
## **Performance Summary**

For the fiscal year ended June 30, 2018, the DMISF generated a return of 6.53 percent, net of all expenses, which underperformed the benchmark return of 8.26 percent by 173 basis points (See Figure 9-3). For the trailing three-, five-and seven-year periods, the DMISF compounded returns, net of all fees and expenses, were 7.30 percent, 8.75 percent and 7.28 percent, respectively.

# **Risk Profile**

Given the DMISF's investment policies and objectives, the Fund is exposed to several forms of risk. These include, but are not limited to, political and economic risk, currency risk, market risk, and individual company risk. A 50 percent currency hedging strategy is employed to reduce the portfolio's currency risk over time. The Fund's portfolio volatility (Beta) over a five year period is only slightly lower than the market at 0.97. On a risk adjusted basis, the Fund has generated excess return of 0.68, which indicates that it is producing a higher risk adjusted return than the benchmark.

#### Figure 9-1



TERF - Teachers' Retirement Fund SERF - State Employees' Retirement Fund

CMERF - Connecticut Municipal Employees' Retirement Fund

Figure 9-3

DEVELOPED MARKETS INTERNATIONAL STOCK FUND Periods ending June 30, 2018					
	1 YR	3 YRS	5YRS	010YRS	
Compounded, Annual T	otal Retur	n (%)			
DMISF	6.53	7.30	8.75	5.19*	
MSCI EAFE					
IMI 50% Hedged	8.26	6.34	8.63	4.89	
Cumulative Total Return DMISF MSCI EAFE IMI 50% Hedged	<b>ו (%)</b> 6.53 8.26	23.55 20.24	52.11 51.30	65.91* 61.16	

\*Represents historical returns at the portfolio composite level.

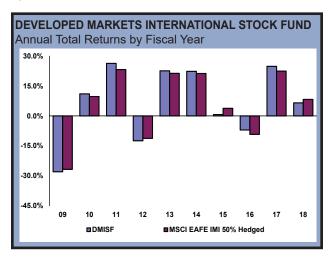
# Figure 9-2

**DEVELOPED MARKETS INTERNATIONAL STOCK FUND** Risk Profile at June 30, 2018 <sup>(1)</sup>

Standard Deviation	9.84
R <sup>2</sup>	0.98
Beta	0.97
Alpha	0.68

(1) Based upon returns over the last five years.

#### Figure 9-4



#### Figure 9-5

#### **DEVELOPED MARKETS INTERNATIONAL STOCK FUND** Diversification by Benchmark Country at June 30, 2018<sup>(1)</sup>

	DMISF % of Net Assets 6/30/18	Benchmark % of Net Assets 6/30/18	Variance
Japan	20.2	25.1	-4.9
United Kingdom	13.3	18.1	-4.8
Korea	0.2	0.0	0.2
Hong Kong	2.6	3.4	-0.8
United States	0.3	0.0	0.3
France	9.0	9.9	-0.9
Germany	7.7	9.0	-1.3
Switzerland	7.3	7.3	0.0
Australia	5.1	7.0	-1.9
China	0.5	0.0	0.5
Netherlands	5.2	3.4	1.7
Italy	2.5	2.6	-0.1
Spain	2.2	3.0	-0.8
Sweden	2.4	3.0	-0.6
Singapore	1.6	1.3	0.3
Canada	1.9	0.0	1.9
Turkey	0.0	0.0	0.0
Other <sup>(2)</sup>	18.2	7.0	11.2
Japan United Kingdom Korea Hong Kong United States France Germany Switzerland Australia China Netherlands Italy Spain Sweden Singapore Canada Turkey Other <sup>(2)</sup> <b>Total</b>	100.0	100.0	

## Figure 9-6

# DEVELOPED MARKETS INTERNATIONAL STOCK FUND

Investment Advisor	Net Asset Value	% of Fund
Index	\$1,947,913,436	27.23%
State Street Global Advisors	1,947,913,436	27.23%
Core	1,849,815,018	25.86%
AQR Capital Management	818,980,240	11.45%
Acadian Asset Management	875,506,681	12.24%
Progress	155,328,097	2.17%
Active-Growth	984,321,964	13.76%
MFS Institutional Advisors, Inc.	984,321,964	13.76%
Active-Value	567,380,455	7.93%
MSCI EAFE ETF	567,380,455	7.93%
Small Cap	1,352,262,314	18.91%
Schroder Investment Mgmt.	457,058,321	6.39%
DFA	433,138,250	6.06%
William Blair & Company	462,065,743	6.46%
Other <sup>(1)</sup>	451,049,789	6.31%
TOTAL DMISF	\$7,152,742,977	100.00%

(1) Other represents Liquidity Fund, other assets and terminated advisor balances, as well as, currency overlay balances for the DMISF (managed by First Quadrant).

(1) Based upon currency exposures of the underlying securities.

(2) Includes Liquidity Fund and MSCI EAFE ETF with multiple domiciles.

Figure 9-7

DEVELOPED MARKETS INTERNATIONAL STOCK FUND Ten Largest Holdings* at June 30, 2018						
Security Name	Country	Market Value	%			
IShares Core MSCI EAFE ETF	Multiple Domicile	\$556,352,226	7.87%			
Nestle SA REG	Switzerland	86,435,658	1.22%			
Roche Holding AG Genusschein	Switzerland	72,589,764	1.03%			
Novartis AG REG	Switzerland	47,599,689	0.67%			
SAP SE	Germany	45,419,353	0.64%			
Bayer AG REG	Germany	45,084,855	0.64%			
Novo Nordisk A/S	Denmark	43,143,999	0.61%			
AIA Group Ltd	Hong Kong	42,166,399	0.60%			
DBS Group Holdings Ltd	Singapore	38,769,433	0.55%			
LVMH Moet Hennessey Louis Vuitt	France	37,647,375	0.53%			
TOP TEN	Ş	51,015,208,749	14.36%			

\* A complete list of portfolio holdings is available upon request from the Office of the Treasurer, in accordance with the Connecticut Freedom of Information Act.

# emerging markets international stock fund

## Fund Facts at June 30, 2018

**Investment Strategy/Goals:** The purpose of the Emerging Markets International Stock Fund (EMISF) is to (1) achieve a long-term, real rate of return above the US inflation rate; and (2) provide additional measures of diversification within the CRPTF under different economic scenarios.

Date of Inception: November 1, 2007

**Performance Objective:** A net return that matches the benchmark, over rolling three- to five-year periods.

**Benchmark:** Morgan Stanley Capital International Emerging Markets Investable Market Index (MSCI EM IMI)<sup>(1)</sup>

Number of Advisors: 2 external

**Total Net Position:** \$2,790,994,726

Management Fees: \$12,571,177

**Operating Expenses:** \$4,760,903

Expense Ratio: 0.60%

(1) The CRPTF signed a licensing agreement with MSCI to provide benchmark data commencing in fiscal year 2015. For the three, five and ten year performance periods, the CRPTF is using the prior benchmark, S&P/Citigroup Broad Market Index Europe, Pacific and Asia Composite Index 50% Hedged.

# **Description of the Fund**

EMISF assets are allocated across foreign emerging equity markets and are diversified by market, capitalization and style. Emerging market equities are defined as common stocks issued by companies domiciled in developing countries, including the 23 companies in the MSCI EM IMI.

# **Portfolio Characteristics**

At fiscal year-end, the EMISF's portfolio holdings were diversified over a number of emerging market countries (see Figure 10.6). Notable overweight position versus the benchmark included Hong Kong (4.9 percent versus the benchmark's 0.0 percent). Underweight positions include China (16.6 percent versus the benchmark's 30.6 percent), Taiwan (6.6 percent versus the benchmark's 12.6 percent), and India (4.1 percent versus the benchmark's 9.4 percent). EMISF portfolio also held MSCI Emerging Markets ETF with geographic exposure across multiple domiciles' at June 30, 2018. (See Figure 10.6)

# **Market Review**

Emerging markets equities recorded a positive return overall for the fiscal year. Increases in global growth and trade proved supportive, as did U.S. dollar weakness in the first half of the fiscal year. However, a revival in the U.S. dollar, amid policy normalization from the Federal Reserve, and escalating U.S.-China trade tensions weighed on returns in the second half of the fiscal year.

In response to the increase in the U.S. dollar, central banks in countries such as Argentina, Turkey, Indonesia and Mexico have had to raise local interest rates. Country specific issues such as high inflation in Argentina, political uncertainty in Turkey and the economic impact of a truckers strike in Brazil added to the negative sentiment towards emerging markets.

# **Performance Summary**

For the fiscal year ended June 30, 2018, the EMISF generated a return of 4.66 percent, net of all expenses, which underperformed the benchmark return of 7.90 percent by 324 basis points (See Figure 10-4). For the trailing three-, five- and seven-year periods, the EMISF compounded returns, net of all fees and expenses, were 6.13 percent, 4.40 percent and 1.39 percent, respectively.

# **Risk Profile**

Given the EMISF's investment policies and objectives, the Fund is exposed to several forms of risk. These include, but are not limited to, political and economic risk, currency risk, market risk, and individual company risk. Based on returns over the last five years, the Fund's risk profile closely equaled that of the benchmark as evidenced by portfolio volatility (Beta) of 0.97. The EMISF's annualized alpha over the five-years on a risk adjusted basis was -0.39. (See Figure 10.2)

# EMERGING MARKETS INTERNATIONAL STOCK FUND Ownership Analysis at June 30, 2018 (\$ in millions) CMERF \$171.7 SERF \$1,045.7 TERF \$1,512.9 Other \$60.7

TERF - Teachers' Retirement Fund

SERF - State Employees' Retirement Fund

CMERF - Connecticut Municipal Employees' Retirement Fund

#### Figure 10-3

Figure 10-1

## EMERGING MARKETS INTERNATIONAL STOCK FUND Fiscal Year 2018 Economic Sector vs. Index (%)

	EM	MSCI	Vari-
	ISF	Index	ance
Energy	8.3	6.6	1.7
Materials	4.8	8.2	-3.4
Industrials	2.1	6.3	-4.1
Consumer Discretionary	8.2	10.5	-2.3
Consumer Staples	5.1	6.7	-1.7
Health Care	0.9	3.9	-2.9
Financials	32.2	21.3	10.9
Information Technology	34.5	26.4	8.0
Telecommunication Servic	es 3.3	3.9	-0.7
Utilities	0.6	2.6	-2.0
Other	<u>0.0</u>	3.6	-3.5
	100.0	100.0	

## Figure 10-2

## **EMERGING MARKETS INTERNATIONAL STOCK FUND** Risk Profile at June 30, 2018<sup>(1)</sup>

Standard Deviation	14.21
R <sup>2</sup>	0.98
Beta	0.97
Alpha	-0.39

(1) Based upon returns over the last five years.

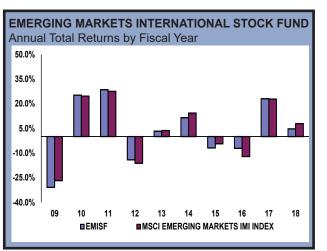
### Figure 10-4

## EMERGING MARKETS INTERNATIONAL STOCK FUND Periods ending June 30, 2018

	1 YR	3 YRS	5 YRS	10 YRS
Compounded, Annual To	tal Retur	m (%)		
EMISF	4.66	6.13	4.40	2.08*
MSCI EMERGING				
MARKETS IMI INDEX	7.90	5.19	4.93	2.52
Cumulative Total Return	(%)			
EMISF	4.66	19.53	24.04	22.86*
MSCI EMERGING				
MARKETS IMI INDEX	7.90	16.40	27.18	28.26

\*Represents historical returns at the portfolio composite level.

#### Figure 10-5



#### Figure 10-6

### **EMERGING MARKETS INTERNATIONAL STOCK FUND** Diversification by Benchmark Country at June 30, 2018 <sup>(1)</sup>

	EMISF	Benchmark
	Percent of	Percent of
	Net Assets	Net Assets
	6/30/18	6/30/18
Brazil	4.1	5.7
Korea	12.5	15.1
Hong Kong	4.9	0.0
Russia	4.5	3.2
China	16.8	30.6
Taiwan	6.6	12.6
United States	2.7	0.0
Mexico	0.4	2.9
Thailand	1.6	2.3
South Africa	3.0	6.4
Turkey	0.5	0.8
Indonesia	0.0	2.0
Malaysia	0.0	2.5
India	4.1	9.4
Philippines	0.0	0.9
United Kingdom	0.1	0.0
Multiple Domicile*	31.5	0.0
Other Countries	6.7	5.7
Total	100.0%	100.0%

(1) Includes Liquidity Fund and cash equivalents at each country level.

\* Multiple Domicile represents MSCI EMERGING ETF

#### Figure 10-8

Top Ten

#### **EMERGING MARKETS INTERNATIONAL STOCK FUND** Ten Largest Holdings\* at June 30, 2018 Security Name Country Market Value % IShares Core MSCI Multiple Domicile \$878,969,563 31.62% Emerging ETF Tencent Holdings LTD China 146,824,514 5.28% Samsung South Korea 130,190,950 4.68% Electronics Co LTD Alibaba Group Holding LTD China 111,528,948 4.01% Taiwan Semiconductor Manufacture Taiwan 96,755,872 3.48% China Construction Bank Co China 77,226,461 2.78% Lukoil PJSC 1.85% Russia 51,515,378 1.78% AIA Group LTD Hong Kong 49,557,050 HDFC Bank LTD India 46,689,178 1.68% Infosys LTD India 43,841,852 1.58%

A complete list of portfolio holdings is available upon request from the Office of the Treasurer, in accordance with the Connecticut Freedom of Information Act.

\$1,633,099,766 58.75%

#### Figure 10-7

### EMERGING MARKETS INTERNATIONAL STOCK FUND Investment Advisors at June 30, 2018

Investment Advisor	Net Asset Value	% of Fund
Schroders Investment Mgt	\$1,882,153,750	67.44%
MSCI Emerging ETF	879,343,899	31.51%
Other (1)	29,497,077	1.06%
TOTAL EMISF	\$2,790,994,726	100.00%

(1) Other represents Liquidity Fund, other assets and terminated advisor balances.

# real estate fund

## Fund Facts at June 30, 2018

**Investment Strategy/Goals:** The purpose of the Real Estate Fund (REF) is to (1) provide diversification to the overall CRPTF investment program, (2) preserve investment capital, (3) generate attractive risk-adjusted rates of return, (4) provide consistent current income and (5) act as a hedge against inflation under different economic scenarios.

Date of Inception: July 1, 1982

Performance Objective: A net return that matches the benchmark over rolling three-to five-year periods.
Benchmark: National Council of Real Estate Investment Fiduciaries - National Properties Index ("NCREIF-NPI")

**Total Net Position:** \$2,285,030,519

**Management Fees** <sup>(1)</sup>: \$6,850,149

Capitalized and Netted Fees: \$16,524,996 Operating Expenses: \$1,867,387

Expense Ratio: 0.38%

Number of Investment Advisors: 21

(1) See note 1 to the Financial Statements for a discussion of similar fees incurred at the investment level.

# **Description of the Fund**

The REF is the vehicle by which the CRPTF makes investments in the real estate asset class. The REF may invest in real estate properties, real estate related equity investments, or real estate related debt and mortgages. The REF consists of a number of investment strategies and vehicles including externally managed commingled funds, open-end funds, separate accounts, publically traded real estate securities, limited partnerships, and other indirect ownership structures managed by professional real estate investment managers.

# **Portfolio Characteristics**

For fiscal year 2018, the Fund generated a total return of 8.69 percent net of all expenses, outperforming its benchmark NCREIF-NPI, which posted a gross return of 7.12 percent (See Figure 11-8). The one-year return reflects an ongoing positive trend in the REF portfolio, which can be attributed to recent accretive commitments to open-ended core and core-plus funds, as well as a number of new value-add strategies in the Fund.

For the trailing three-, five-and seven-year periods, the REF compounded returns, net of all fees and expenses, were 9.18 percent, 10.22 percent and 9.79 percent, respectively. The Fund has continued to invest through the recent real estate cycle, with new commitments in value-add and opportunistic strategies during the fiscal year, which has helped to maintain diversification in the Fund.

# **Market Review**

The U.S. economy continues to grow at a measured pace. Economic growth, measured by the Gross Domestic Product (GDP), has averaged 2.2 percent since the recovery began and accelerated in the beginning of 2018 to reach 4.1 percent by the second quarter 2018. Similarly, job growth, averaging 1.6 percent per year since the beginning of the recovery, has been solid but measured consistent with the general pace of the expansion and sufficient to meet the demand of the growing labor force. Despite employment gains and a declining unemployment rate - down to 3.9 percent at the end of June 2018 - wage growth has been muted. However, the tightening labor market is expected to eventually put upward pressure on wages as employers will be forced to raise wages to attract and keep talent.

The overall positive U.S. economic environment and labor market as well as low interest rates have provided a favorable back drop for real estate investment activity. The U.S. real estate capital markets environment remains balanced, with capital continuing to flow into real estate resulting in a steady volume of transaction activity. With rising rates, however, the spread available on real estate has condensed and investment volume showed signs

of leveling off during the first half of 2018. In addition returns have stabilized across all sectors and performance is being driven primarily by positive income growth, as opposed to yield compression.

Market fundamentals in most real estate sectors were strong during the fiscal year. While a growing economy and tightening labor market continued to generate demand for real estate, supply growth remained in check across most sectors and markets due to stricter lending standards and increasing construction costs. By property type, the industrial sector driven by the E-commerce boom, continues to lead the property sectors in returns and has seen the highest year-over-year growth in transaction volume. Demand in the multifamily sector remains strong, bolstered by favorable demographics. However, a robust supply pipeline focused on luxury apartments in urban locations has started to weaken rent growth in the high-end segment and performance has underperformed the mid-tier segment. Office and retail have both lagged other property sectors; however, with solid employment growth in the U.S., Central Business District office is seeing strong demand albeit with smaller space requirements. In the retail sector, despite pressure from E-commerce causing power centers and lower quality malls to suffer, well-located, higher quality malls and convenience-oriented, necessity retail are both bright spots in the sector.

# **Performance Summary**

For Fiscal Year 2018, the Fund generated a total return of 8.69 percent net of all expenses, outperforming its benchmark NCREIF-NPI, which posted a gross return of 7.12 percent. The one-year return reflects an ongoing positive trend in the REF portfolio, which can be attributed to recent accretive commitments to open-ended core and core-plus funds, as well as a number of new value-add strategies in the Fund.

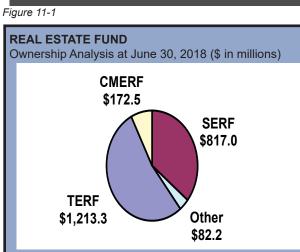
For the trailing three- and five-year periods, the REF's compounded annual returns, net of all expenses, were 9.18 percent and 10.22 percent, respectively (See Figure 11.8). REF's net returns have outperformed the gross benchmark for the three- and five-year periods. The Fund has continued to invest through the recent real estate cycle, with new commitments in value-add and opportunistic strategies during the fiscal year, which has helped to maintain diversification in the Fund.

# **Risk Profile**

The REF takes both a total portfolio and asset class specific approach to risk management. Risk is managed at the portfolio level through diversification and strategic asset allocation and the implementation of strategy. Risks attendant to alternative investments, such as management, operations, local/regional property markets, and liquidity risk, are managed at the asset class level with additional risk management focused on financing, geography, and property type risks specific to a fund manager's portfolio investments.

The REF's large allocation to core funds which most closely track NPI generally has lower leverage than value-add and opportunistic strategies resulting in reduced risk. NPI is comprised of a portfolio of 6,000+ properties, many of which are levered, but for purposes of constructing the NPI benchmark, are de-levered for the index. The REF volatility is typical and not excessive relative to a benchmark comprised of unlevered core properties.





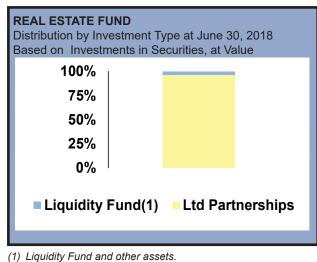
TERF - Teachers' Retirement Fund SERF - State Employees' Retirement Fund CMERF - Connecticut Municipal Employees' Retirement Fund

#### Figure 11-3

REAL ESTATE FUND Investments Analysis (1)							
At	No. of REF Investments	REF Book Value	REF Market Value				
6/30/2018	33	1,970,639,550	2,210,907,863				
6/30/2017	42	1,917,730,506	2,156,493,225				
6/30/2016	42	1,798,740,547	2,065,132,526				
6/30/2015	38	1,646,736,485	1,732,052,523				
6/30/2014	33	1,398,172,794	1,429,069,066				
6/30/2013	30	1,366,354,620	1,227,275,238				
6/30/2012	36	1,376,611,668	1,180,717,977				
6/30/2011	36	1,310,614,926	1,057,213,580				
6/30/2010	35	1,097,439,251	715,310,010				
6/30/2009	34	996,474,812	745,643,849				
6/30/2008	31	920,921,272	968,885,960				

 Number of investments in annuities, partnerships, corporations, and trusts, excluding the Liquidity Fund.

#### Figure 11-5



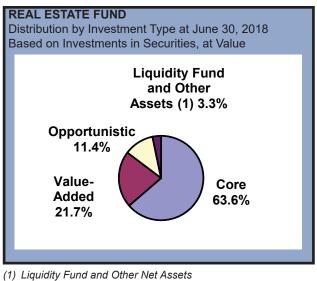
OFFICE OF THE STATE TREASURER, DENISE L. NAPPIER

## Figure 11-2

REAL ESTATE FUND Risk Profile at June 30, 2018 <sup>(1)</sup>					
	Standard Deviation	4.16			
	R <sup>2</sup>	0.22			
	Beta	-0.47			
	Alpha	13.73			

(1) Based upon returns over the last five years.

#### Figure 11-4



#### Figure 11-6

#### **REAL ESTATE FUND** Distribution by Geographic Location at June 30, 2018

E	Based on Investments in Securities, at Value					
		REF	NCREIF	Variance		
	East	27.0%	32.8%	-5.8%		
	Midwest	10.0%	8.7%	1.3%		
	South	26.0%	19.9%	6.1%		
	West	34.0%	38.3%	-4.3%		
	International	3.0%	0.0%	3.0%		
	Other assets	<u>0.0%</u>	<u>0.3%</u>	-0.3%		
		100.0%	100.0%			

### Figure 11-7

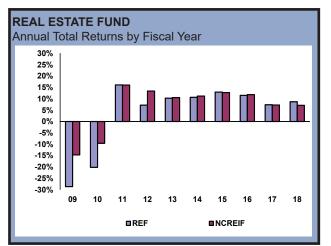
## REAL ESTATE FUND

Diversification by Property Type at June 30, 2018 Based on Investments in Securities, at Value

	REF	NCREIF	Variance
Apartment	29.0%	23.8%	5.2%
Office	28.0%	37.0%	-9.0%
Retail	25.0%	23.2%	1.8%
Industrial	13.0%	15.2%	-2.2%
Hotel	2.0%	0.8%	1.2%
Other Assets <sup>(1)</sup>	<u>3.0%</u>	<u>0.0%</u>	3.0%
	100.0%	100.0%	

(1) Includes senior living, real estate/mixed use and land..

## Figure 11-9

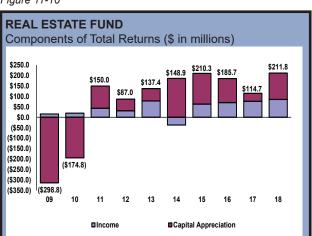


## Figure 11-8

#### **REAL ESTATE FUND**

#### Periods ending June 30, 2018

r onodo onding odno ot	, 2010			
	1 YR	3 YRS	5 YRS	10 YRS
Compounded, Annual T	otal Retur	n (%)		
REF	8.69	9.18	10.22	2.43
NCREIF Property	7.12	8.72	10.00	6.09
Cumulative Total Return	ו (%)			
REF	8.69	30.15	62.64	27.11
NCREIF Property	7.12	28.51	61.05	80.68



## Figure 11-10

### Figure 11-11

### **REAL ESTATE FUND** Funds at June 30, 2018

	Net Asset	% of
Fund	Value	Fund
American Realty Advisors	165,301,184	7.23%
Blackstone Real Estate Partner Europe III	LP 15,344,939	0.67%
Blackstone Real Estate Spec Sit II LP	2,193,832	0.10%
Blackstone Real Estate VI LP	12,517,217	0.55%
Blackstone Real Estate Partners VIII LP	60,816,226	2.66%
Blackstone Real Estate Partners EURO V	23,054,319	1.01%
Clarion Lion Industrial Trust	130,172,102	5.70%
Cornerstone Patriot Fund LP	253,473,430	11.09%
Covenant Apartment Fund VIII	23,908,070	1.05%
Crow Hldgs Realty Partners VII LP	62,374,096	2.73%
Cypress Acquisition Prtnrs Retail FD LP	55,727,475	2.44%
Gerding Edlen Green Cities II	29,219,191	1.28%
Gerding REF III	44,555,714	1.95%
Hart Realty Advisors	218,377,677	9.56%
IL & FS India Realty Fund II LLC	12,034,582	0.53%
JP Morgan Strategic Property	104,322,514	4.57%
Landmark RE Partners VII LP	26,223,304	1.15%
Landmark VIII REF	6,989,311	0.31%
Lone Star Real Estate Part II LP	4,586,286	0.20%
Prime Property Fund LLC	274,974,063	12.03%
PRISA	207,845,289	9.10%
Rockwood Capital VI Limited Partnership	192,727	0.01%
Rockwood Capital VII Limited Partnership	11,037,052	0.48%
Starwood Opportunity Fund VII	3,449,609	0.15%
Starwood Opportunity Fund VIII	9,614,245	0.42%
Starwood Opportunity Fund IX	26,281,169	1.15%
Starwood Opportunity Fund X	53,228,501	2.33%
UBS-Trumbull Property Income	60,465,980	2.65%
UBS-Trumbull Property G&I (TPG)	70,749,203	3.10%
UBS-Trumbull Property Fund LP	89,494,498	3.92%
Urban Strategy America Fund LP	4,351,251	0.19%
USAA Eagle RE Fund	140,600,644	6.15%
WLR IV PPIP Co Invest LP	6,774,355	0.30%
Other <sup>(1)</sup>	74,780,465	3.27%
TOTAL REF	2,285,030,519	100.00%

(1) Other represents moneys earmarked for distribution to participants, reinvestment, and expenses as well as terminated advisor balances.

Figure 11-12

### **REAL ESTATE FUND**

Ten Largest Holdings\* at June 30, 2018

			Market	
Property Name	Туре		Value	%
Prime Property Fund LLC	Core	\$	274,974,063	12.04%
Cornerstone Patriot Fund LP	Core		253,473,430	11.10%
Hart Realty Advisors	Core		218,377,677	9.56%
PRISA	Core		207,845,289	9.10%
American Realty Advisors	Core		165,301,184	7.24%
USAA Eagle RE Fund	Core		140,600,644	6.16%
Clarion Lion Industrial Trust	Value	Added	130,172,102	5.70%
JP Morgan Strategic Property	Core		104,322,514	4.57%
UBS-Trumbull Property Fund LP	Core		89,494,498	3.92%
UBS-Trumbull Property G&I (TPG)	Core		70,749,203	3.10%
Top Ten		\$1,	655,310,603	72.50%

A complete list of portfolio holdings is available upon request from the Office of the Treasurer, in accordance with the Connecticut Freedom of Information Act.

### Figure 11-13

REAL ESTATE FUND	
New Investments Made in Fiscal Year 2018 (in Excess of \$3 Mill	ion)

Partnership Name	Commitment Amount	Investment Type
Landmark Real Estate Partners VIII, LP	\$65 million	Opportunistic
Crow Holdings Realty Partners VIII, LP	\$75 million	Value-Add
Total	\$140 million	

# private investment fund

### Fund Facts at June 30, 2018

**Investment Strategy/Goals:** The purpose of the Private Investment Fund (PIF) is to: (1) earn returns in excess of the public equity markets, (2) generate attractive risk-adjusted rates of return, and (3) provide diversification for the CRPTF under different economic environments.

**Date of Inception:** July 1, 1987 **Performance Objective:** A net return that outperforms the Standard & Poor Index (S&P 500) over rolling ten year periods.

Benchmark: S&P 500

Number of Advisors: 39

Total Net Position: \$2,726,105,801 Management Fees<sup>(1)</sup>: \$942,012 Capitalized and Netted Fees: \$29,045,992 Operating Expenses: \$7,570,614 Expense Ratio: \*0.30%

(1) See Note 1 to the Financial Statements for a discussion of similar fees incurred at the investment level. \*Expense ratio is calculated using the management fee and operating expense totals.

# **Description of the Fund**

The PIF invests in externally managed funds that are executing strategies divided into two sub-asset classes: venture capital and corporate finance. Venture capital invests equity into young or development stage companies. Corporate finance encompasses several underlying strategies, including leveraged buyout, mezzanine debt, and special situations.

# **Portfolio Characteristics**

The PIF invests in private equity funds either directly as a limited partner to a specific fund or indirectly as a limited partner to a fund of funds vehicle. Fund-of-funds invest in multiple private equity partnerships that invest in underlying companies and are typically used to execute a strategic objective within the PIF. Private equity investments include two general areas of strategic focus.

# **Corporate Finance**

- Buyout focused investments are defined as controlling or majority investments in private equity or equity-like securities of more established companies on the basis of the company's asset value and/or cash flow.
- Mezzanine debt focused investments are defined as investments in securities located between equity and senior debt in the company's capital structure. Mezzanine debt investments offer higher current income than senior debt securities and often offer equity participation features that may take the form of warrants or contingent equity interests.
- Special situation focused investments are defined as investments in a variety of securities (debt, preferred equity and/or common equity) in portfolio companies at a variety of stages of development.
- International private equity focused investments are defined as investments in private equity or equity-like securities in companies located outside the continental United States. International private equity investments provide the benefit of geographic and economic diversification and may include exposure to higher growth economies in select markets.

# Venture Capital

Venture capital focused investments can be narrowly defined as investments in private equity
or equity-like securities of developing companies in need of growth or expansion capital. These
investments can range from early-stage financing, where a company has little more than a marketable
idea, to expansion financing, where a company has a marketable product but requires additional
capital to bring the product to market.

The PIF had 67 active funds and aggregate capital commitments totaling \$9.1 billion as of June 30, 2018. Approximately 86 percent, or \$7.8 billion, had been "drawn down" for investment purposes as of that date while the balance of approximately \$1.3 billion, or 14 percent, was committed but not drawn (See Figure 13-6.

## **Market Review**

Global private equity markets continued to enjoy favorable overall conditions with economic growth and accommodative credit markets more than compensating for a variety of potential concerns, including high valuations, political and regulatory uncertainty, and a changing interest rate environment. While the broader private equity markets benefitted from generally positive fundamentals, variations by strategy, size and region were present during the year. Investor interest in private equity, as evidenced by a strong fundraising market for general partners, particularly for buyout focused managers.

In the U.S., buyout volumes increased due to the persistent demand of well-capitalized strategic buyers seeking to acquire growth as well as private equity firms looking to deploy record levels of uncalled capital, or dry powder. The combination of heightened demand for quality assets and accommodative debt markets, despite concerns over Federal Reserve interest rate hikes, led to higher purchase price and leverage multiples during 2017, which had abated slightly by June 2018. However, U.S. private equity activity moderated from recent levels as managers may have been challenged by high valuations and uncertainty involving changing trade regulations. Meanwhile, the value of international buyouts expanded faster than in the U.S., due primarily to several larger deals completed across Asia with a significant uptick in Japan's buyout volume in 2017. While private equity managers continued to generate significant realizations, the number and value of U.S. private equity-backed exits continued to trend downward from recent highs.

The venture capital industry continued to demonstrate a brisk pace of capital deployment, with the value of U.S. investments made during the first half of 2018 surpassing any comparable period of the last decade. While the U.S. venture capital industry has been investing more capital recently, there has been a downward trend in the number of companies receiving venture funding. This dynamic has been driven by an increase in the average size of early stage deals as well as the significant growth in funding rounds of \$100 million or more. The value and number of U.S. venture capital exits remained steady during the year despite a modest improvement in the number of venture-backed companies executing initial public offerings.

### **Performance Summary**

For the fiscal year ended June 30, 2018, PIF generated a net compounded annual rate of return of 15.50 percent. (See Figure 13-5) This return was measured using a time weighted return calculation methodology.

While short-term returns are reviewed, longer term (e.g., three- five- ten years) returns are more meaningful in evaluating private equity portfolio performance. Long-term horizons better reflect the illiquid nature of PIF's holdings and the time it takes for investments to realize their potential. PIF's performance is benchmarked against the S&P 500. Over the three- five- ten years through June 30, 2018, PIF's performance has kept pace with the S&P 500. (See Figure 13-5)

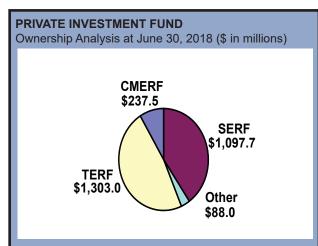
The institutional standard for measuring private equity performance is the Internal Rate of Return (IRR). IRR is a dollar-weighted annualized return that considers both cash flows and time. Since its inception in 1987, PIF has generated a 9.2 percent IRR. A tool commonly used by institutional investors to benchmark IRR performance is the public market equivalent (PME). From inception through June 30, 2018, PIF has generated 198 basis points of annual performance in excess of its S&P 500 PME.

During Fiscal Year 2018, eight partnership commitments were made, including seven to new partnerships and one increased commitment to an existing partnership. (See Figure 13-10)

## **Risk Profile**

PIF's risk profile is complex given the valuation judgments and liquidity constraints placed on it consistent with an alternative investment strategy. Over the last five years, the Fund has returned an annual alpha, or return relative to that predicted by its benchmark, of 12.30. (See Figure 13.2)

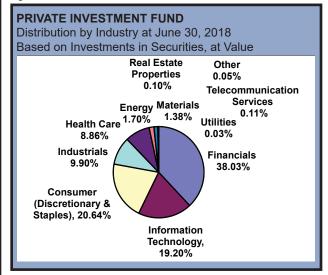
#### Figure 13-1



TERF - Teachers' Retirement Fund

SERF - State Employees' Retirement Fund

CMERF - Connecticut Municipal Employees' Retirement Fund Figure 13-3



### Figure 13-5

	1 YR	3 YRS	5 YRS	10 YRS
Compounded, Ani	nual Total Retur	n (%)		
PIF		11.75	13.05	9.68
S & P 500	14.37	11.93	13.42	10.17
Cumulative Total I	<b>Return (%)</b> 15.50	39.54	84.68	152.00
S & P 500	14.37	40.23	87.71	163.40

#### Figure 13-2

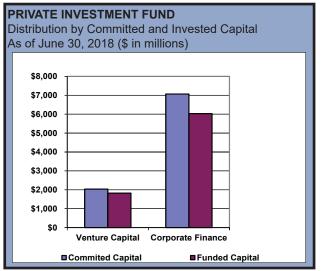
 <b>VATE INVESTMENT FUND</b> A Profile at June 30, 2018 <sup>(1)</sup>		
Standard Deviation	5.15	
R <sup>2</sup>	0.00	
Beta	-0.02	
Alpha	12.30	

(1) Based upon quarterly returns over the last five years.

#### Figure 13-4

<b>PRIVATE INVESTMENT FUND</b> Distribution by Geographic Location at June 30, 2018 Based on Investments in Securities, at Value				
Region	%			
Northeast (Excludes Connecticut)	17.6%			
International	8.3%			
West Coast	21.1%			
Other	1.9%			
Southeast	14.9%			
Mid-Atlantic	3.4%			
MidWest	12.8%			
Southwest	11.2%			
Connecticut	7.8%			
Northwest	1.0%			
TOTAL	100.0%			

### Figure 13-6



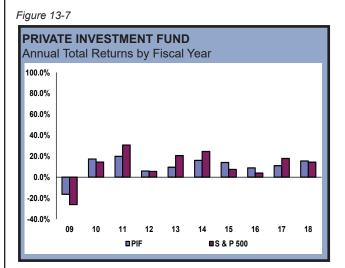


Figure 13-8

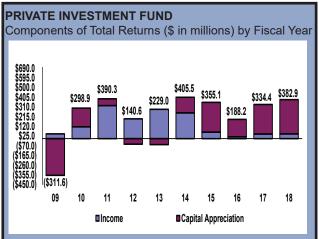


Figure 13-9

PRIVATE INVESTMENT FUND			
Ten Largest Holdings* at June 30, 2018			
		Market	
Partnership Name	Partnership Type	Value	%
FAIRVIEW CONSTITUTION III	Fund of Funds	\$311,760,899	11.49%
FAIRVIEW CONSTITUTION IV	Fund of Funds	167,477,196	6.17%
APOLLO INVESTMENT FUND VIII	Special Situations	111,757,366	4.12%
YUCAIPA AMERICAN ALLIANCE FUND	Buyout	98,652,129	3.64%
FS EQUITY PARTNERS VI	Buyout	90,812,149	3.35%
NUTMEG OPPORTUNITIES FUND	Fund of Funds	83,933,116	3.09%
VISTA VI	Buyout	81,666,443	3.01%
STEPSTONE PIONEER CAPITAL II	Fund of Funds	80,469,570	2.97%
M 2 CT EMERGING	Fund of Funds	74,873,926	2.76%
LEVINE LEICHTMAN CAPITAL PARTNERS	Special Situations	71,613,885	2.64%
Top Ten		\$1,173,016,679	43.25%
-			

\* A complete list of portfolio holdings is available upon request from the Office of the Treasurer, in accordance with the Connecticut Freedom of Information Act.

Figure 13-10

### PRIVATE INVESTMENT FUND New Commitments Made in Fiscal Year 2018

Partnership Name	Commitment Amount	Investment Type	Investment Date
Landmark Equity Partners XVI, L.P.	\$100 million	Secondaries	12/21/2017
Wellspring Capital Partners VI, L.P.	75 million	Buyout	1/3/2018
Clearlake Capital Partners V, L.P.	60 million	Buyout	1/12/2018
BC European Capital X, L.P. <sup>(1)</sup>	92 million	Buyout	1/15/2018
EQT VIII SCSp <sup>(1)</sup>	83 million	Buyout	2/13/2018
Leeds Equity Partners VI, L.P <sup>(2)</sup>	25 million	Buyout	5/31/2018
Aldrich Capital Partners, L.P.	50 million	Growth	6/4/2018
Siris Partners IV, L.P.	50 million	Buyout	6/22/2018
Total:	\$535 million	-	

(1) Fund commitments denominated in Euros; approximate US dollar equivalents shown here.
 (2) Incremental commitment made in FY18; total commitment to fund is \$75 million.

### Figure 13-11

### **PRIVATE INVESTMENT FUND** Investment Advisors at June 30, 2018

Investment Advisor	Net Asset	% of	Marraying	40 900 470	4 0004
Investment Advisor Buyout	Value 1,036,283,222	Fund 38.01%	Mezzanine	49,802,476	1.83%
Altaris Health Partners II, L.P.	15,371,147	0.56%	Audax Mezzanine Fund III, L.P.	22,900,921	0.84%
Altaris Health Partners III. L.P.	50,196,527	1.84%	Connecticut Growth Capital LLC GarMark Partners II, L.P.	20,339,318 4,766,813	0.75% 0.17%
Altaris Constellation Partners IV LP	3,067,317	0.11%	,	, ,	
Altaris Health Partners IV LP	8,270,111	0.11%	Ironwood Mezzanine Fund IV LP	1,795,424	0.07%
Boston Ventures Limited Partnership VII	29,093,861	1.07%	International	74,017,593	2.72%
Charterhouse Equity Partners IV, L.P.		0.04%	BC European Capital Fund X LP	20,880,786	0.77%
	1,201,977	0.04%	GGEP/CPM Holdings, LLC	50 400 007	4.050/
Court Square Capital Partners II, L.P. Court Square Capital Partners III, L.P.	22,952,144		fka Gilbert Global Equity Partners, L.P.	53,136,807	1.95%
	30,058,378	1.10%	Fund of Funds	980,944,127	35.98%
Ethos U.S. Dollar Fund V-B		0.100/	CT Horizon Legacy Fund, L.P.	3,032,286	0.11%
(OPIC Jersey & Non-OPIC Jersey), L.P.		0.19%	GCM Grosvenor - CT Cleantech	F FF0 040	0.000
FS Equity Partners V, L.P.	5,277,696	0.19%	Opportunities Fund LP	5,552,346	0.20%
FS Equity Partners VI, L.P.	90,812,149	3.33%	M2 - Connecticut Emerging Private	74 979 000	0.750
GenNx360 Capital Partners II, L.P.	23,320,772	0.86%	Equity Fund-of-Funds, L.P.	74,873,926	2.75%
ICV Partners II, L.P.	7,455,410	0.27%	Fairview Constitution II, L.P.	67,921,100	2.49%
JFL Equity Investors III, L.P.	42,526,837	1.56%	Fairview Constitution III, L.P.	311,760,899	11.44%
JFL Equity Investors IV, L.P.	36,449,948	1.34%	Fairview Constitution IV, L.P.	167,477,196	6.14%
KKR 2006 Fund L.P.	44,578,444	1.64%	Constitution Fund V, LLC Series A & B	63,520,577	2.33%
KKR Millennium Fund L.P.	3,193,566	0.12%	Constitution Liquidating Fund, L.P.	32,650,028	1.20%
Leeds Equity Partners V, L.P.	37,743,576	1.38%	Nutmeg Opportunities Fund II LLC	13,432,258	0.49%
Leeds Equity Partners VI, L.P.	19,904,861	0.73%	Nutmeg Opportunities Fund L.P.	83,933,116	3.08%
RFE Investment Partners VII, L.P.	6,417,634	0.24%	PineBridge Global Emerging	1 005 005	
RFE Investment Partners VIII, L.P.	31,083,939	1.14%	Markets Partners, L.L.C.	1,685,093	0.06%
TA XI, L.P.	51,771,336	1.90%	Landmark Equity Partners XIV, L.P.	25,658,937	0.94%
Thomas H. Lee Equity Fund VI, L.P.	36,505,871	1.34%	Landmark Equity Partners XV, L.P.	47,725,225	1.75%
Vista Equity Partners Fund III, L.P.	13,963,411	0.51%	Landmark Equity Partners XVI LP	1,239,368	0.05%
Vista Equity Partners Fund IV, L.P.	61,571,257	2.26%	StepStone Pioneer Capital I, L.P.	12,202	0.00%
Vista Equity Partners Fund VI, L.P.	81,666,443	3.00%	StepStone Pioneer Capital Buyout		
Wellspring Capital Partners V, L.P.	33,145,750	1.22%	Fund II, L.P.	80,469,570	2.95%
Wellspring Capital Partners VI, L.P.	2,526,476	0.09%	Special Situations	467,693,295	17.16%
Welsh, Carson, Anderson & Stowe X, L.P.	203,794	0.01%	Apollo Investment Fund VIII, L.P.	111,757,366	4.10%
Welsh, Carson, Anderson & Stowe XI, L.P.	56,272,120	2.06%	Castlelake II, L.P. fka TPG		
Welsh, Carson, Anderson & Stowe XII, L.F	. 68,124,111	2.50%	Credit Strategies Fund II, L.P.	29,659,138	1.09%
Yucaipa American Alliance Fund II, LP	98,652,129	3.62%	Clearlake Capital Partners III, L.P.	67,780,725	2.49%
Yucaipa American Alliance Fund III, LP	17,828,635	0.65%	Clearlake Capital Partners IV, L.P.	44,661,112	1.64%
Venture Capital	6,301,707	0.23%	Clearlake Capital Partners V, L.P.	14,666,655	0.54%
Crescendo III, L.P. Liquidating Trust	1,156,486	0.04%	Levine Leichtman Capital Partners IV, L.P.	29,059,852	1.07%
Syndicated Communications Venture	,,		Levine Leichtman Capital Partners V, L.P.	71,613,885	2.63%
Partners V, L.P.	5,145,221	0.19%	Pegasus Partners IV, L.P.	27,825,959	1.02%
·	-, -,		Pegasus Partners V L.P.	61,557,225	2.26%
			WLR Recovery Fund IV, L.P.	9,111,378	0.33%
			Other <sup>(1)</sup>	111,063,380	4.07%
			TOTAL PIF	2,726,105,801	100.00%

(1) Other includes partnerships with nonmaterial balances, as well as moneys earmarked for distribution to participants, reinvestment, expenses and other net assets.

# debt management division

# **Division Overview**

The Office of the Treasurer, through its Debt Management Division, is responsible for the cost-effective issuance and management of the State of Connecticut's bonded debt. The State's strategic investments in local school construction, roads, bridges, airports, higher education, clean water, and economic development are the foundation of Connecticut's physical and social infrastructure.

A primary responsibility of the Division is obtaining the lowest cost of funds possible for the State. This is achieved by deftly managing relationships with the investment community and the major credit rating agencies: Moody's Investors Service, S&P Global Ratings, Fitch Ratings, and Kroll Bond Rating Agency. The Division is conservative and innovative in utilizing the latest financial instruments available in the public finance market. Relationships with institutional and retail investors are also maintained and cultivated in an effort to promote investor confidence in State of Connecticut bonds on the most advantageous terms possible for State taxpayers.

The Division supports the legislative and executive branches of government as well as other agencies in understanding the impact of changes to the State's debt structure, providing advice and analysis for drafting new laws and initiatives. This has resulted in the design of new bonding programs as well as modifications to existing programs that have been well received in the financial markets, while ensuring that federal tax and other compliance matters continue as high priorities. Specific examples include: Economic Recovery Notes; the establishment of a Housing Trust Fund; the authorization of bonding backed by future federal transportation funds; a program designed to improve the funding of the Teachers' Retirement Fund including the issuance of bonds; the creation of a new quasi-public agency, the Connecticut Airport Authority, to manage Bradley International Airport; enabling legislation providing the Connecticut Green Bank with bonding powers; a program to eliminate the State's accumulated GAAP deficit; a transportation lockbox; enabling legislation that allows the State to access certain federal loans; and enabling legislation that allows for an alternative tax-secured bonding program expected to reduce interest costs while adding to the State's Budget Reserve Fund.

The Debt Management Division supports the Treasurer's statutory responsibilities for bond issuance by the State's quasi-public authorities, including Connecticut Innovations, Connecticut Health and Educational Facilities Authority, Connecticut Housing Finance Authority, Materials Innovation and Recycling Authority, Connecticut Higher Education Supplemental Loan Authority, Capital Region Development Authority, Connecticut Green Bank, and Connecticut Airport Authority.

The Debt Management Division consists of ten professionals under the direction of an Assistant Treasurer.

# The Year in Review

During Fiscal Year 2018, the Debt Management Division actively managed the State's \$25.3 billion debt portfolio, and significant accomplishments included:

- <u>New Money Bonds</u> A total of \$2.6 billion of new money bonds were issued to continue funding the State's capital programs including local school construction grants, economic development initiatives, transportation infrastructure, improvements at the University of Connecticut, and Clean Water and Drinking Water grants. These projects and other purposes help bolster the local economy, improve the lives of Connecticut citizens, and strengthen the State's fiscal standing.
- <u>Refunding Bonds</u> As interest rates continued to remain low, the Division refunded outstanding debt through the issuance of \$368.5 million of General Obligation refunding bonds for an aggregate savings of \$39.3 million. A total of \$1.2 billion in debt service savings will be achieved over the life of the bonds from debt refunding and defeasances completed since January 1, 1999.
- <u>New Tax-Secured Bonding Program</u> Treasurer Nappier's proposed alternative bonding program backed by the withholding portion of the State's personal income tax was approved by the General Assembly. This new bonding program is expected to achieve higher credit ratings and lower borrowing

costs for the State. As proposed by the Treasurer, the statute contains language requiring that any debt service savings from the new bonding program be dedicated to the State's Budget Reserve Fund, which is expected to improve the credit ratings on the State's General Obligation bonds over time.

- Successful Launch of New General Obligation Bond Covenant In June 2018, the Treasurer sold \$492.1 million of tax-exempt General Obligation bonds that included – for the first time – a State commitment to four distinct financial measures adopted by the General Assembly to guarantee fiscal restraint. Every General Obligation bond issued between May 15, 2018 and July 1, 2020 will include a pledge that the State will address its long-term liabilities, rein in spending and borrowing, and rebuild its Budget Reserve Fund. The covenant comprises four caps: the "Volatility Cap," which provides a mechanism for funding the Budget Reserve Fund; the "Revenue Cap," which constrains the percent of revenues that can be allocated to the budget; the statutory "Spending Cap," which limits the growth in spending to the growth of personal income or inflation; and the "Bond Cap," which restricts bond issuance to \$1.9 billion per year, adjusted for inflation.
- <u>City of Hartford Support</u> Treasurer Nappier, as co-chair of the Municipal Accountability Review Board, is working with the City of Hartford in its efforts to regain financial sustainability through a contract assistance agreement with the State that gives the State strong oversight capabilities over City finances, compelling the City to achieve balanced operations and a viable long-term fiscal plan in exchange for the State making the City's General Obligation bond debt service payments.
- <u>Transportation Bonding Program</u> The Division issued \$800 million of Special Tax Obligation bonds to fund new and ongoing transportation infrastructure improvements this fiscal year and continued to work with the State's Department of Transportation and the Office of Policy and Management on bonding matters related to the funding of the State's transportation infrastructure improvement programs.
- <u>Clean Water Fund State Revolving Fund (SRF) Program</u> The Division worked closely with the State's Department of Energy and Environmental Protection and the Department of Public Health to successfully commit low-cost funding for program participants throughout the State and interfaced with federal governing officials. The program maintains AAA ratings with three major rating agencies.
- <u>University of Connecticut (UConn 2000) Program</u> The Division worked in conjunction with the University of Connecticut to issue University of Connecticut General Obligation Debt Service Commitment bonds totaling \$276.1 million and University of Connecticut Special Obligation Student Fee Revenue bonds totaling \$141.7 million, and on various leasing, and credit rating agency matters.

# 2018 Division Performance

The Debt Management Division focused on several important initiatives during the fiscal year including taking advantage of continued low interest rates, refunding outstanding bonds for savings, providing expertise to assist with implementing initiatives put forward by the administration and paying off the Economic Recovery Notes issued in 2009. The State's continued slow economic recovery, as well as an increased focus by the rating agencies on long-term liabilities, required significant analysis by the Division to ensure the State's obligations are put in proper context and that the State's strong financial management is emphasized.

One rating agency – S & P Global Ratings – downgraded the State during fiscal year 2018 (April 2018) over concerns about the State's debt ratios, additional borrowing and the State's new commitment to the City of Hartford. However, following the news of a record-setting deposit of \$1.47 billion to the State's Budget Reserve Fund, all four of the major rating agencies have written positive credit remarks about the State.

# Public Financing Programs

Active public financing programs for the State of Connecticut, as of June 30, 2018, include:

### GENERAL OBLIGATION BONDS

General Obligation bonds are paid out of the revenues of the State's General Fund and are supported by the full faith and credit of the State of Connecticut. General Obligation bonds are issued for construction of State buildings, grants and loans for housing, local school construction, economic development, community care facilities, State parks, and open space. Outstanding amount includes \$2,208,066,524 of Teachers' Retirement Fund bonds issued in April 2008 pursuant to Public Act 07-186 and \$459,690,000 of GAAP Conversion bonds issued in October 2013, which were used to fund half of the State's accumulated General Fund GAAP deficit at the time.

#### ECONOMIC RECOVERY NOTES

Economic Recovery notes are paid out of the revenues of the State's General Fund and are supported by the full faith and credit of the State of Connecticut. Economic Recovery notes were issued to finance the State's Fiscal Year 2009 budget deficit. The notes were paid in full during Fiscal Year 2018.

### UCONN 2000 BONDS

The University of Connecticut pays debt service on UConn 2000 bonds from a debt service commitment appropriated from the State General Fund originally under P.A. 95-230 and extended in 2010, 2013 and 2018. Up to \$4.3 billion of Debt Service Commitment bonds will be issued as part of a 32-year \$4.6 billion capital program to rebuild and refurbish the University of Connecticut.

#### OTHER GENERAL FUND APPROPRIATION DEBT

The State has committed to pay interest and principal on these bonds by appropriation from the State's General Fund. This debt consists of the following programs:

Connecticut Health and Educational Facilities Authority (CHEFA) Revenue Bonds, Child Care Facilities Program for a childcare facilities program assumed by the State in July 1999 (\$51,140,000), Connecticut Housing Finance Authority (CHFA) Special Needs Housing Mortgage Finance Program bonds that funded a supportive housing program (\$52,745,000), and CHFA Emergency Mortgage Assistance Program bonds that were issued pursuant to Public Act 08-176 to fund the Emergency Mortgage Assistance Program (\$35,955,000). The State is required to make all debt service payments on these bonds pursuant to a contract assistance agreement between CHFA, the State Treasurer, and the Office of Policy and Management. Other appropriation debt includes Connecticut Innovations, Inc. (CI) Tax Increment Financing, (\$22,610,000) and a Certificate of Participation issue for the Connecticut Juvenile Training School Energy Center Project (\$11,765,000). Figure does not include \$534,715,000 in outstanding City of Hartford General Obligation debt.

### SPECIAL TAX OBLIGATION BONDS

Special Tax Obligation Bonds are special obligations of the State payable solely from the transportation-related revenues pledged in the State's Special Transportation Fund. The bonds are issued for the construction and maintenance of the State's highway and bridge system and mass transportation and transit facilities. The bonds are secured by transportation-related taxes and revenues and a portion of the State's General Retail Sales Tax, and additional security for the bonds is provided by a debt service reserve fund that totaled \$594.0 million on June 30, 2018.

#### STATE REVOLVING FUND (SRF) (CLEAN WATER AND DRINKING WATER FUND) BONDS

The Clean Water Fund and the Drinking Water Fund constitute the SRF program. Revenue bonds provide belowmarket-rate loans to Connecticut municipalities for the planning, design, and construction of wastewater treatment projects and to Connecticut municipalities and private water companies for drinking water quality improvement projects. The bonds are secured by loan repayments from Connecticut municipalities and private borrowers, and general revenues of the program. An interest rate subsidy is provided to borrowers from earnings on the revolving fund and from State General Obligation subsidy bonds. The State also provides grants and some loans for the program through its General Obligation bond program.

### CAPITAL REGION DEVELOPMENT AUTHORITY BONDS

The Capital Region Development Authority (CRDA), formerly known as the Capital City Economic Development Authority, bonds were issued to provide funding for the Adriaen's Landing Development project in Hartford. The State is required to make all debt service payments on the bonds up to a maximum annual amount of \$9 million pursuant to a financial contract assistance agreement between CRDA, the State Treasurer, and the Office of Policy and Management. CRDA is required to reimburse the State for the debt service payments from net parking and central utility plant revenues.

## BRADLEY INTERNATIONAL AIRPORT GENERAL AIRPORT REVENUE BONDS

The airport revenue bonds are payable solely from gross operating revenues from the operation of Bradley International Airport, and proceeds are used for capital improvements at the airport.

0

\$

Amount Outstanding June 30, 2018

\$ 16,791,210,027

\$ 1,661,785,000

\$ 174,215,000

909,420,000

\$ 5,540,495,000

79,315,000

109,330,000

\$

\$

75

BRADLEY INTERNATIONAL AIRPORT PARKING GARAGE REVENUE BONDS

Parking garage bonds are payable from garage parking revenues and by a guarantee from the project developer/ lessee. The bonds financed the design and construction of a parking garage at Bradley International Airport.

### Total debt outstanding at June 30, 2018

\$25,291,035,027

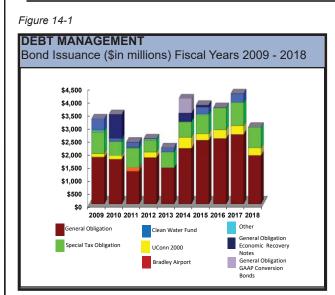
\$

25,265,000

# Bonds issued during Fiscal Year 2018 include:

	Par	True Interest	Average Life	
Bond Type	Amount	Cost <sup>(1)</sup>	(Years)	Issue Date
NEW MONEY BONDS:				
GENERAL OBLIGATION				
2017 Series A Taxable	\$ 450,000,000	3.26%	5.6	12/21/2017
2017 Bond Anticipation Notes	400,000,000	1.48%	0.7	12/21/2017
2018 Series A	250,000,000	3.95%	12.5	04/11/2018
2018 Series C	400,000,000	3.53%	9.2	06/20/2018
SPECIAL TAX OBLIGATION				
2018 Series A	800,000,000	3.56%	11.9	02/08/2018
UCONN 2000				
2018 Series A	276,075,000	3.65%	10.5	05/02/2018
Fiscal Year 2018 Subtotal New Money Issues	\$2,576,075,000			
REFUNDING BONDS:				
General Obligation 2018 Series B Refunding	\$276,440,000	3.04%	5.0	04/11/2018
General Obligation 2018 Series D Refunding	92,105,000	3.09%	6.7	06/20/2018
Fiscal Year 2018 Subtotal Refunding Issues	\$368,545,000			
TOTAL	\$2,944,620,000			

(1) An industry-defined term representing a composite overall present-value based interest rate for an entire bond issue excluding cost of issuance and other costs. For variable rate bonds, if any, the TIC shown is the initial rate, including remarketing and liquidity fees.





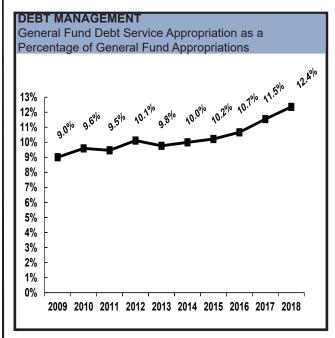
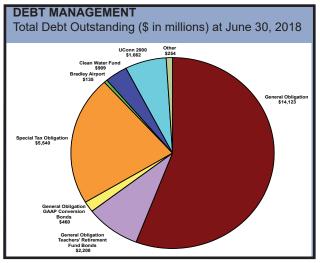


Figure 14-2



# cash management division

# **Division Overview**

The Office of the Treasurer, through its Cash Management Division, is responsible for managing the state's cash movements, banking relationships and short-term investments, including:

- Maintaining maximum investment balances by ensuring more timely deposits, controlling disbursements, minimizing bank balances and banking costs, and providing accurate cash forecasts;
- Earning the highest current income level in the Short-Term Investment Fund (STIF), providing for the safety of principal, first, and the provision of liquidity, second;
- Providing responsive services to STIF investors;
- Prudently investing more stable fund balances for longer periods and higher yields, including banks that meet standards for financial strength and community support;
- Protecting State deposits through well-controlled internal operations and use of banks that meet standards for financial strength;
- Improving operating efficiency by increased use of electronic data communication and funds processing; and
- Providing State agencies with technical assistance on cash management and banking issues.

The Cash Management Division consists of 18 employees under the direction of an Assistant Treasurer, organized into three areas of specific responsibility:

The **Bank Control and Reconciliation** unit maintains accountability for the State's internal and external cash flow. The unit tracks the flow of funds through 19 Treasury bank accounts and authorizes the release of State payroll, retirement and vendor checks. More than three million transactions are accounted for and reconciled annually. The unit also processes stop payments and check reissues. In addition, the unit works with state agencies to speed the deposit of funds and identify mechanisms to reduce banking costs, reviews state agencies' requests to open new bank accounts, maintains records of the State's bank accounts held by individual banks, reviews bank invoices and compensation, and manages the Division's procurement efforts for new bank services. The unit also manages the insurance collateral program in conjunction with the Department of Insurance, which requires companies writing insurance policies in the State to deposit securities and funds totaling a fixed percentage of the policies' value. At June 30, 2018, approximately \$330 million in securities were pledged to the program.

The **Cash Control** unit, on a daily basis, forecasts available cash, funds disbursement accounts, concentrates cash from depository banks, sweeps available cash into short-term investment vehicles to maximize investment balances, and executes electronic transfers. The unit also prepares annual cash flow projections for various State and bond rating credit agencies, monitors actual cash receipts and disbursements, and prepares the monthly cash report for the legislature. During Fiscal Year 2018, the unit controlled the movement of \$33.8 billion to and from state bank accounts and investment vehicles.

The **Short-Term Investments** unit invests STIF assets, monitors custodian activity, and prepares quarterly and annual performance reports on the Fund. During Fiscal Year 2018, the unit managed an average of \$6.5 billion in short-term money market instruments. As of June 30, 2018, the unit administered 920 active STIF accounts for 72 State agencies and authorities and 234 municipalities and local entities. In addition, the unit manages the Grant Express program that enables municipalities to deposit certain grant payments directly into their STIF accounts, and the Debt Express and Clean Water Fund Express programs that allow towns to make debt payments automatically from their STIF accounts. The unit makes longer-term investments for balances that are expected to be available on a more stable basis in the Extended Investment Portfolio program, and, pursuant to CGS 3-24k, the Community Bank and Credit Union Initiative, in which the Office of the Treasurer supports Connecticut-based banks and credit unions with assets not exceeding \$1 billion by allowing them to compete for the investment of State funds in certificates of deposit at the qualifying institutions.

# The Year in Review

During Fiscal Year 2018, the Cash Management Division's noteworthy accomplishments included:

- Total annual return of 1.39 percent in STIF exceeded its primary benchmark by 0.12 percent, resulting in \$7.0 million in additional interest income for Connecticut governments and their taxpayers, while adding \$5.2 million to its reserves. During the past 19.5 years, STIF has earned an additional \$216 million, while increasing the designated surplus reserve by \$33 million
- STIF's credit rating of AAAm, the highest available, was reaffirmed by S & P Global Ratings.
- Seventeen local government accounts were added to STIF, with \$33.9 million in assets.
- STIF's Comprehensive Annual Financial Report (CAFR) was awarded the Certificate of Achievement for Excellence in Financial Reporting for 2017 by the Government Finance Officers Association.
- Investments of \$30.5 million were made with community financial institutions under the Connecticut Community Bank and Credit Union initiative at an average annualized interest rate of 1.69 percent. Since inception, program investments have totaled \$518.9 million.
- Competitive bidding processes covering most state banking services were completed, which will result in annual savings of more than \$370,000.
- A total of \$24,000 in annualized bank overcharges was identified and recaptured, for a total of \$7.7 million over the past 19.5 years.
- The Division expanded electronic payments to municipalities and vendors, working in collaboration with the Office of the State Comptroller, with payments totaling \$ 13.4 billion during the year.
- The 23rd annual meeting of Short-Term Investment Fund investors in concert with the 13th Public Finance Outlook Conference was attended by over 200 state, local government, and private finance professionals.
- The division worked with state agencies to speed the receipt of funds through remote deposits and on-line credit card, electronic check, and Automated Clearing House payments, and to expand the use of payee positive pay services to protect against check fraud.

# short-terminvestment fund

## Fund Facts at June 30, 2018

**Investment Strategy/Goals:** To provide a safe, liquid and effective investment vehicle for the operating cash of the State, municipalities and other Connecticut political subdivisions.

**Performance Objective:** As high a level of current income as is consistent with, first, the safety of principal and, second, the provision of liquidity.

**Benchmarks:** iMoneyNet Money Fund AverageTM - Rated First Tier Institutional Average (MFR) Index, Three-Month Treasury Bills.

Date of Inception: 1972	Total Net Position: \$6.8 billion
Internally Managed	External Management Fees: None

Expense Ratio: Approximately 2-4 basis points (includes internal management and personnel salaries)

# **Description of the Fund**

The Treasurer's Short-Term Investment Fund (STIF or the Fund) is an AAAm rated investment pool of high-quality, short-term money market instruments managed by the Treasurer's Cash Management Division. Created in 1972, it serves as an investment vehicle for the operating cash of the State Treasury, State agencies and authorities, municipalities, and other political subdivisions of the State (See Figure 15-1). STIF's objective is to provide as high a level of current income as is consistent with, first, the safety of principal and, second, the provision of liquidity to meet participants' daily cash flow requirements. During the 2018 fiscal year, STIF's portfolio averaged \$6.5 billion.

STIF employs a top-down approach to developing its investment strategy for the management of its assets. Starting with the objectives of the Fund, STIF considers constraints outlined in its investment policy, which include among other parameters: liquidity management, limitations on the portfolio's weighted average maturity and permissible investment types. Next, an asset allocation is developed to identify securities that are expected to perform well in the current market environment. Over the long-term, STIF continually analyzes expectations of future interest rate movements and changes in the shape of the yield curve to ensure the most prudent and effective short-term money management for its clients. Ongoing credit analysis enables STIF to enhance its yield by identifying high-quality credits in undervalued sectors of the economy.

STIF pays interest monthly based on the daily earnings of the Fund less Fund expenses and an allocation to the Fund's Designated Surplus Reserve. The daily reserve allocations equal one-tenth of one percent of the Fund's daily balances divided by the number of days in the year, until the reserve totals one percent of the Fund's daily balance. The reserve at June 30, 2018, totaled \$61.3 million.

To help the Fund and its investors evaluate performance, STIF compares its returns to various benchmarks. The primary benchmark is the iMoneyNet Money Fund AverageTM - Rated First Tier Institutional Average (MFR) Index. This index represents an average of institutional money market mutual funds rated AAAm that invest primarily in first-tier (securities rated A-1, P-1) taxable securities. While STIF's investment policy allows for somewhat greater flexibility than these SEC-registered funds, the MFR Index is the most appropriate benchmark against which to judge STIF's performance. During the past year, STIF's actual investment strategy has been considerably more conservative than most private money funds and its own investment policy would permit. (See Figure 15-3)

STIF's yields also are compared to the average Federal Reserve three-month T-Bill rate and a three-month certificate of deposit (CD) rate. The former benchmark is used to measure STIF's effectiveness in achieving yields in excess of a "risk-free" investment. The latter is discussed for the benefit of STIF investors, many of whom invest in bank certificates of deposit. In viewing these benchmarks, it is important to keep in mind that yields of CDs will exceed those of the T-Bill index due to a CD's slightly higher risk profile and comparatively lower liquidity. Additionally, it is important to note that the 90-day benchmarks exceed STIF's shorter average maturity. In order to maintain its AAAm rating, the STIF cannot exceed a 60-day weighted average maturity (WAM) limit. Furthermore, these benchmarks are "unmanaged" and are not affected by management fees or

### CASH MANAGEMENT DIVISION

### operating expenses.

Among the Fund's several achievements during the 2018 fiscal year was the reaffirmation and continuation of its AAAm rating by Standard & Poor's. In S&P's view, "a fund rated 'AAAm' demonstrates extremely strong capacity to maintain principal stability and to limit exposure to principal losses due to credit risk."

## **Portfolio Characteristics**

During Fiscal Year 2018, the STIF portfolio continued its conservative investment approach of balancing liquidity and stability while maximizing yield for investors. STIF's conservative investment practices include maintaining abundant liquidity, a well-diversified portfolio, and significant holdings of securities issued, guaranteed or insured by the U.S. government and federal agencies.

Accordingly, at year-end STIF held 41 percent of Fund assets in overnight investments or investments that are available on a same-day basis. During the fiscal year, the Fund's WAM fluctuated between a low of 29 days and a high of 45 days, and ended the year at 35 days. Fifty-eight percent of the Fund's assets were invested in securities with maturities, or interest rate reset dates for adjustable rate securities, of less than 30 days. (See Figure 15-2)

The Fund ended the year with a 39.3 percent concentration in securities issued, guaranteed or insured by the U.S. government or federal agencies (including deposit instruments backed by irrevocable Federal Home Loan Bank letters of credit), in repurchase agreements backed by such securities. In total, 84 percent of STIF's assets are rated A-1+ or have some form of government support. The Fund's three largest security weightings included deposit instruments (46.1 percent), corporate securities (23.8 percent) and agency securities (20.5 percent). (See Figure 15-5)

### **Market Review**

Fiscal Year 2018 can be described as a "path towards normal." During the course of the fiscal year, the Federal Reserve Bank (Fed) continued to tighten monetary policy through hikes in the Federal Funds rate as well as balance sheet normalization.

The Fed tightened monetary policy through Federal Funds rate hikes on three different occasions during the fiscal year, increasing the lower end of the Federal Funds range from 1.0 percent to 1.75 percent and the upper end from 1.25 percent to 2.0 percent. The message from the Federal Reserve has been consistent over this period, essentially stating that the employment market is strong and inflation has increased to the Fed's desired level. Until such time as the employment market softens and inflationary pressures recede, the Fed will continue to increase the Federal Funds rate to a point where it is more "normal" and less accommodative. As a secondary route on the path towards normal, the Federal Reserve has been reducing the size of its balance sheet by reducing the amount of principle and interest payments that are reinvested which, by the end of the fiscal year, amounted to a reduction of \$30 billion a month.

The monetary policy actions undertaken by the Fed were not, however, part of a coordinated global monetary policy action. While the Fed has been raising rates, the European Central Bank (ECB) has left rates intact since 2016, with the Deposit Facility rate at negative 40 basis points and the Refinancing Operations rate at zero percent. The ECB will also continue to increase its balance sheet with purchases of government, corporate and asset-backed securities. Similarly, the Bank of Japan (BOJ) has had a Policy Rate Balance rate of negative ten basis points since 2016 and has continued with its program of buying government and corporate bonds as well as equities through exchange traded funds and real estate investment trusts. Both the ECB and BOJ have targeted a sustained two percent inflation rate as a target of monetary policy, but inflationary pressures are modest and might require an accommodative stance for some time.

The increases in the Federal Funds rate were consistent with market expectations and were generally factored in to pricing in the short-end of the interest rate curve. During the period, the one month London Interbank Offered Rate (LIBOR) increased from 1.22 percent to 2.09 percent, for a change of 87 basis points. This increase reflected the increases in the Federal Funds rate as well as near-term expectations of further tightening by the Fed.

### CASH MANAGEMENT DIVISION

Within the Treasury Bill market, the three-month bill increased 90 basis points during the period to end at 1.91 percent. The one-year bill increased 108 basis points during the period to end the fiscal year at 2.31 percent. Longer-term Treasuries, as reflected by the ten-year note, increased by 56 basis points during the period to end the fiscal year at 2.86 percent after reaching a May 2018 high of 3.11 percent.

Domestic inflation averaged 2.3 percent during the fiscal year, up moderately from 1.8 percent in Fiscal Year 2017. Excluding the more volatile food and energy components, inflation during the fiscal year averaged 1.9 percent, 20 basis points lower than the Fiscal Year 2017 average. Similarly, inflation in the Eurozone was stronger, with an average inflation rate of 1.5 percent, up forty basis points from the Fiscal Year 2017 period, but still shy of the two percent rate that policy makers have targeted.

Domestic growth, as measured by Gross Domestic Product (GDP), experienced modest growth during the fiscal year. For Fiscal Year 2018, GDP (on a year-over-year basis) ranged between 2.3 percent and 2.8 percent. For the entire fiscal year, GDP averaged a 2.6 percent year-over-year rate, up from Fiscal Year 2017's 1.9 percent rate. Meanwhile, the unemployment rate ended the fiscal year at 4.0 percent, down from the 4.4 rate at the end of Fiscal Year 2017. During the course of the fiscal year, approximately 2.4 million people were added to payrolls.

## **Performance Summary**

For the one-year period ending June 30, 2018, STIF reported an annual total return of 1.39 percent, net of all expenses, and \$5.2 million in allocations to Fund reserves. Annual total return measures the total investment income a participant would earn with monthly compounding at the Fund's monthly net earned rate during the year. This figure exceeded that achieved by its benchmark, the MFR Index, which equaled 1.27 percent, by 12 basis points. STIF's performance lagged that of three-month T-Bills by seven basis points, which yielded 1.46 percent. The Fund's performance also fell short of three-month CDs, which yielded, on average, 1.70 percent but lack STIF's daily liquidity and exceed STIF's average maturity. STIF's relative performance was limited by the Fund's more cautious investment strategy that is focused on safety and liquidity.

The principal reasons for STIF's continued strong performance, despite its cautious strategy, was the selective addition of more bank deposit instruments and the active management of maturities within the portfolio as well as the low overall expense rate.

Over the long-term, STIF has performed exceptionally well. For the trailing three-, five-, seven-, and tenyear periods, STIF's compounded annual total return was 0.76 percent, 0.51 percent, 0.41 percent, and 0.49 percent, net of all expenses and contributions to reserves, exceeding returns of its primary benchmark for all time periods. Viewed on a dollar-for-dollar basis, had one invested \$10 million in STIF ten years ago, that investment would have been worth \$10.5 million at June 30, 2018, versus \$10.4 million for a hypothetical investment in the MFR Index. (See Figure 15-6) During the past ten years, STIF has earned \$70.6 million above its benchmark while adding \$34.1 million to its reserves.

During the past 19.5 years of the Nappier administration, the Fund has earned \$216 million in additional income above its benchmark while adding nearly \$33 million to the designated surplus reserve.

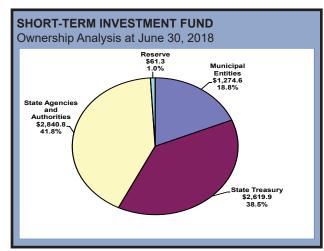
## **Risk Profile**

STIF is considered extremely low risk for several reasons. First, its portfolio is comprised of high-quality, highly liquid securities, which insulate the Fund from default and liquidity risk. (See Figure 15-4) Second, its relatively short average maturity reduces the Fund's price sensitivity to changes in market interest rates. Third, STIF has a strong degree of asset diversification by security type and issuer, as required by its investment policy, strengthening its overall risk profile. And finally, STIF's reserves are available to protect against security defaults or the erosion of security values due to dramatic and unforeseen market changes. As the primary short-term investment vehicle for the operating cash of the State, STIF has the ultimate confidence of the State government.

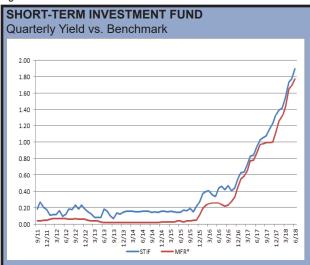
While STIF is managed diligently to protect against losses from credit and market changes, the Fund is not insured or guaranteed by any government. Therefore, the maintenance of capital cannot be fully assured.

### **CASH MANAGEMENT DIVISION**

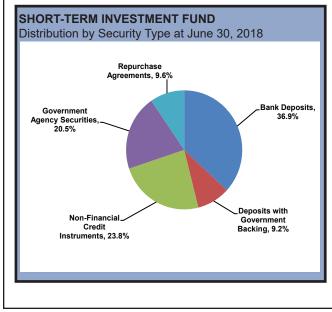
### Figure 15-1



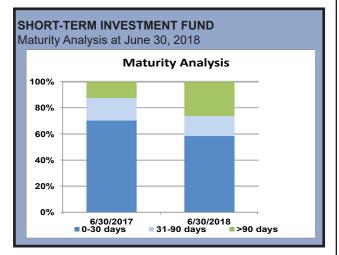
#### Figure 15-3



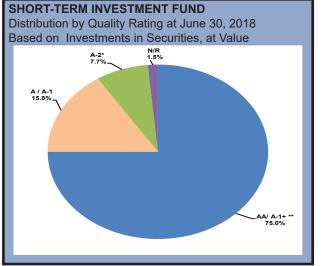




### Figure 15-2



## Figure 15-4



\*A-2 and N/R securities are backed by irrevocable standby letters of credit provided by federal home loan banks.

\*\*AA/A-1+Includes federal agency and U.S. Govt/Govt Guaranteed Securities and repurchase agreements backed by such securities. Figure 15-6

-						
SHORT-TERM INVESTMENT FUND						
Period ending June 30, 2018						
	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	
		0 110	0 110	/ 110	10 110	
Compounded Annual To	otal Ret	urn (%)				
STIF	1.39	0.76	0.51	0.41	0.49	
MFR Index*	1.27	0.64	0.39	0.30	0.35	
Fed. Three-Month T-Bill	1.46	0.74	0.46	0.35	0.32	
Cumulative Total Return (%)						
	• •		~ ~ ~			
STIF	1.39	2.30	2.60	2.93	5.05	
MFR Index*	1.27	1.93	1.98	2.08	3.58	
Fed. Three-Month T-Bill	1.46	2.23	2.30	2.44	3.29	

 $\ensuremath{\mathsf{STIF}}$  uses a time-weighted linked rate of return formula to calculate rates of return.

\*Represents iMoneyNet Money Fund Average<sup>™</sup> - Rated First Tier Institutional Average (MFR) Index.

# unclaimed property division

# **Division Overview**

The Office of the Treasurer's Unclaimed Property Division is responsible for safeguarding assets turned over to the Office in accordance with state law, until the rightful owners are located. The primary objective of the unclaimed property program is to reunite rightful owners or heirs with their unclaimed property, which is remitted to the Office of the Treasurer by business entities after the businesses lose contact with a customer for a period of three to five years. Unclaimed assets include, but are not limited to: deposits in savings or checking accounts, un-cashed checks, matured certificates of deposit, stocks, bonds or mutual funds, travelers' checks or money orders, and proceeds of life insurance policies.

A permanent record of reports of unclaimed property filed annually by holders of such property is maintained by the Division. Unclaimed property holders include banks, credit unions, insurance companies, brokerage firms, utility companies, and other businesses. The Division prescribes holder report forms and monitors reporting by holders. Assets must be reported and remitted within 90 days following the close of each calendar year. These assets are held in the custody of the Treasurer until claimants come forward to claim the property. Rightful owners or their heirs always have the right to claim funds held by the Treasury. There is no time limit to claim funds.

To determine whether a holder is complying with its duties under the law, the Division is permitted to conduct examinations of company records. Upon receipt of unclaimed securities (stocks and mutual funds), the Treasurer may proceed with the sale of the securities and retains the proceeds for the benefit of the owner of the property.

Efforts to locate the owners of unclaimed property include the biannual publication of abandoned property reported and transferred to the Treasurer. The Division also maintains a user friendly website that is updated with new names weekly, called CT Big list at www.ctbiglist.com.

All unclaimed property receipts are deposited into the General Fund until rightful owners come forward to claim the property.

The Unclaimed Property Division consists of 21 employees under the direction of an Assistant Treasurer.

# The Year in Review

- As of June 30, 2018 the unclaimed property website contained \$922 million in escheated property held for 1,657,923 owners.
- There were 6.4 million shares (estimated value of \$3.9 million) (Figure 16-1) in the custodian account as of June 30, 2018.
- All holder reports received through June 30, 2018 were loaded to the database

# 2018 Division Performance

During Fiscal Year 2018, the Unclaimed Property Division:

- Returned \$58 million (Figure 16-2) to 18,472 rightful owners (Figure 16-3).
- Received \$139 million in unclaimed property (Figure 16-4) of which \$89 million was voluntarily reported by businesses, \$6 million came from examinations of company records and \$44 million from the sale of 3.5 million shares of securities.
- Since 1999, the Unclaimed Property Division has received a total of \$1.2 billion in unclaimed property
  voluntarily reported by holders, an additional \$274 million from examinations, and \$541 million from

### **UNCLAIMED PROPERTY DIVISION**

the sale of stocks, bonds or mutual funds, or \$2 billion in total. During the same period, it returned \$711 million to rightful owners.

 In accordance with Connecticut General Statute section 3-69a (a) (2), \$11,634,363 of unclaimed property receipts was deposited into the Citizen's Election Fund and the balance into the General Fund for Fiscal Year 2018.

#### Figure 16-1

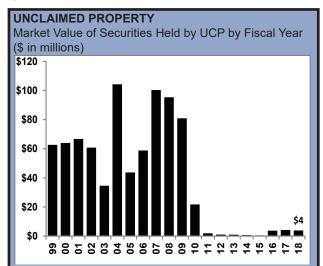
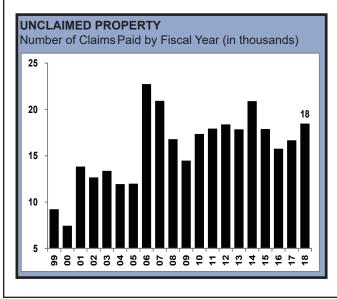
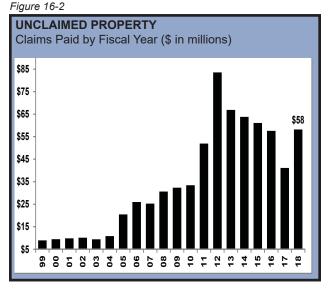
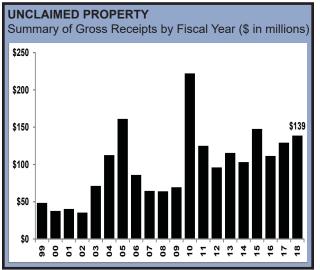


Figure 16-3









OFFICE OF THE STATE TREASURER, DENISE L. NAPPIER

# second injury fund

# **Division Overview**

The Second Injury Fund (SIF or the Fund) is a state operated workers' compensation insurance fund established in 1945 to discourage discrimination against veterans and encourage the assimilation of workers with a pre-existing injury into the workforce. Public Act 95-277 closed the Fund to new "second injury" claims for injuries sustained on or after July 1, 1995 and expanded enforcement, fines and penalties against employers who fail to provide workers' compensation coverage. Prior to July 1, 1995, the Fund provided relief to employers where a worker, who already had a pre-existing injury or condition, was hurt on the job and that second injury was made "materially and substantially" worse by the first injury. Such employers transferred liability for these workers' compensation claims to the Fund if certain criteria were met under the Connecticut Workers' Compensation Act (thus the term "Second Injury Fund").

Today the Fund continues to be liable for those claims transferred prior to the closing of the Fund as well as claims involving uninsured employers, reimbursement of cost-of-living adjustments for certain injuries involving payment of benefits or dependent spouse benefits and, on a pro rata basis, reimbursement claims to employers of any worker who had more than one employer at the time of the injury.

The Fund is responsible for adjudicating qualifying workers' compensation claims fairly and in accordance with applicable law, industry standards and best practices. Where possible, the Fund seeks to return injured workers to gainful employment or seeks settlement of claims, which will ultimately reduce the burden of Fund liabilities on Connecticut businesses.

The Second Injury Fund is financed by assessments on all Connecticut employers. The State Treasurer, as Custodian of the Fund, establishes the assessment rate on or before May 1st of each year.

Insured employers pay a surcharge on their workers' compensation insurance policies based on "standard premiums" calculated and issued by insurance companies who also collect and remit this assessment to the Fund. The assessment for self-insured employers is based on "paid losses" for medical and indemnity benefits incurred in the prior calendar year.

Under the administration of an Assistant Treasurer, the division employs 32 employees.

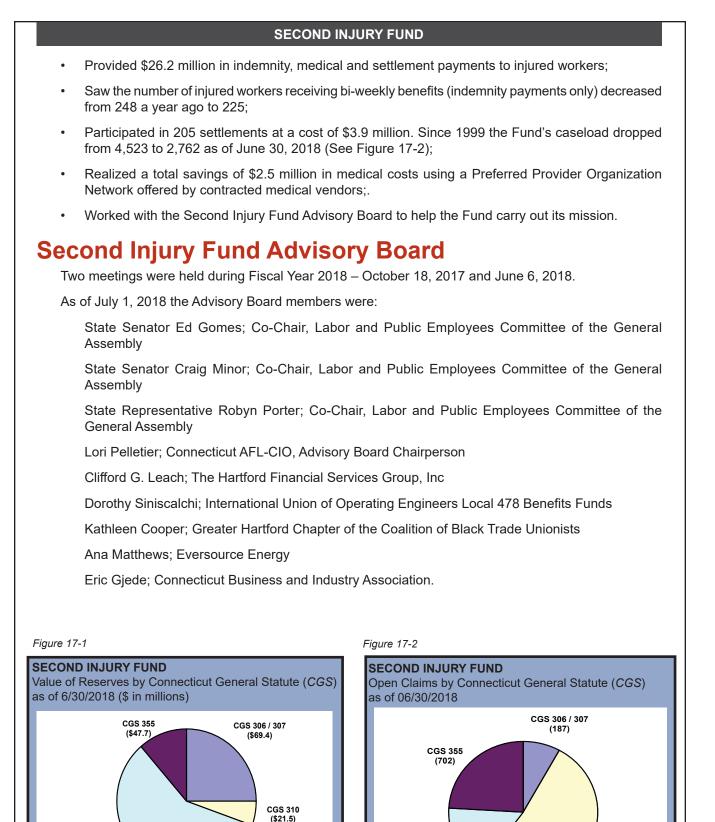
# The Year in Review

- There were four assessments made on insured employers totaling \$29.9 million and self-insured employers were assessed four times totaling \$5.7 million, for a combined assessment on all Connecticut employers of \$35.6 million for Fiscal Year 2018. The assessment rate for insured employers was 2.75 percent and 3.25 percent for self-insured employers in Fiscal Year 2018. Assessment rates on Connecticut businesses went from a high in 1999 of 10 percent to 2.75 percent in Fiscal Year 2018.
- Reserves (estimated unfunded liability) for all open claims total \$307 million, a decrease of \$33 million from a year ago. The Fund expects that unfunded liabilities will continue to decline in Fiscal Year 2019. (See Figure 17-1). The Fund reduced its unfunded liability by 63 percent from a high of \$838 million in 1999.

# **2018 Division Performance**

During fiscal year 2018 the Second Injury Fund:

- Decreased the assessment rate for insured employers from 2.75 percent to 2.25 percent and, concurrently, decreased the assessment for self-insured employers from 3.25 percent to 2.75 percent;
- This marked the twentieth consecutive year in which the Fund either reduced or maintained assessment rates for Connecticut businesses – representing the longest period of time without a rate increase in the history of the Fund;



CGS 349 (343)

CGS 306 / 307

COLA Reimbursement

Employment Reimbursement

CGS 310 Concurrent

OFFICE OF THE STATE TREASURER, DENISE L. NAPPIER

CGS 349

CGS 355

Second Injury

Uninsured Employe

CGS 349 (\$168.4)

CGS 306 / 307

COLA Reimbursemen

Employment Reimburg

CGS 310 Concurrent

CGS 310 (1,530)

CGS 349

CGS 355

Second Injury

Uninsured Employer

# connecticut higher education trust

# Trust Overview Establishment of the Trust

The Connecticut Higher Education Trust (CHET or Trust) is a Qualified State Tuition Program established pursuant to Section 529 of the Internal Revenue Code. CHET was unanimously approved by the Connecticut General Assembly in Public Act No. 97-224 (the Act) and signed into law by the Governor in July 1997. The program began operating on January 1, 1998. While the Trust is considered an instrumentality of the State, the assets of the Trust do not constitute property of the State and the Trust is not a department, institution or agency of the State.

CHET is a trust, available for families to save and invest for higher education expenses. It is privately managed under the supervision of the State Treasurer as Trustee. Current Internal Revenue Service regulations provide that total contributions to an individual account may not exceed the amount determined by actuarial estimates as necessary to pay qualified higher education expenses of the designated beneficiary for five years of undergraduate enrollment at the highest cost institution allowed by the program. CHET's account balance limit for contributions is \$300,000 per beneficiary, whether held in CHET Direct, CHET Advisor, or both.

While money is invested in CHET, there are no federal or state taxes on investment earnings. Amounts may be withdrawn to pay for tuition, room and board, fees, books, supplies and equipment required by the beneficiary for enrollment or attendance at any eligible public or private educational institution. Investment earnings withdrawn for qualified education expenses are exempt from federal and Connecticut State income taxes. Earnings withdrawn for non-qualified expenses are taxable income to the account owner and incur an additional federal tax penalty of 10 percent.

# **State Income Tax Deduction**

The state income tax deduction for CHET, which became effective July 1, 2006, provides Connecticut taxpayers with the ability to deduct program contributions of up to \$5,000 for single filers or \$10,000 for joint filers per year from their Connecticut adjusted gross income.

# **Direct-Sold Program**

Since 1999, TIAA-CREF Tuition Financing, Inc. (TFI), a wholly-owned subsidiary of Teachers Insurance and Annuity Association of America (TIAA), has served as program manager. In 2014, the Treasurer entered into an agreement with TFI for the CHET Direct program for a contract period ending in August 2020.

Under CHET Direct, an individual opens the account directly, names a beneficiary (e.g., a child), and selects the investment option(s) in which the individual wants to invest contributions. Contributions may be allocated among fourteen investment options: the Moderate Managed Allocation Option, the Aggressive Managed Allocation Option, the Conservative Managed Allocation Option, the High Equity Balanced Option, the International Equity Index Option, the Global Equity Index Option, the U.S. Equity Index Option, the Index Fixed-Income Option, the Social Choice Option, the Active Fixed-Income Option, the Money Market Option, the Principal Plus Interest Option, the Active Global Equity Option, and the Global Tactical Asset Allocation Option. These options provide Connecticut families the opportunity to save for future college expenses, with the flexibility to choose investment vehicles that meet their particular risk tolerances and financial need.

Program features of CHET Direct include a low minimum account opening balance of \$25, and the convenience of automated payroll and bank Electronic Funds Transfers (EFT) for contributions, which can be as low as \$15 a pay period if using payroll deduction. The program allows for transferability of account funds to other eligible members of the original beneficiary's family without penalty. In addition, more than 575 Connecticut employers currently offer payroll deduction.

### CONNECTICUT HIGHER EDUCATION TRUST

### Advisor-Sold Program

In 2017, the Treasurer extended the management agreement with The Hartford Life Insurance Company to serve as program manager for CHET Advisor through August 30, 2019. Due to the sale of Hartford Life, the contract was assigned to Hartford Funds Management, a division of The Hartford in 2018. CHET Advisor commenced operation in October 2010. The program is operated in a manner such that it is exempt from registration as an investment company under the Investment Company Act of 1940.

CHET Advisor is not marketed directly to individuals. The Hartford has developed a network of financial advisors through the state that now offers CHET Advisor to clients as an investment option.

Under CHET Advisor there are 18 investment options, including one age-based option, five static portfolios, and 12 individual portfolios. The static portfolios are CHET Advisor Aggressive Growth, Growth, Balanced, Conservative, and a Checks & Balances Portfolio. The 12 Individual Portfolios are Hartford Small Cap Growth, Growth Opportunities, International Opportunities, Core Equity, MidCap, Dividend & Growth, Balanced Income, Equity Income, Inflation Plus, Total Return Bond, World Bond and the CHET Advisor Stable Value 529 Portfolio. The Advisor-Sold plan has three investment classes: A, C, and E. Class A has an up-front sales charge, Class C has no up-front sales charge but has a contingent deferred sales charge for withdrawals made within one year of deposit, and Class E, which is only available to certain groups associated with The Hartford, has no sales charge or deferred sales charge.

There are annual management fees for both CHET Direct and CHET Advisor, which vary based on investment options chosen.

# The Year in Review

CHET continued initiatives aimed at increasing public education and awareness of the importance of saving for college and the advantages of the official state-sponsored 529 college plan for Connecticut families.

Both the CHET Direct program and the CHET Advisor program provide means of accumulating assets to pay for educational opportunities. Each program works to increase the number of new accounts and beneficiaries, even as existing CHET account holders begin to use accumulated savings to pay for the costs of higher education.

As a low-cost, direct-sold 529 college saving plan, CHET Direct annual fees are among the lowest in the country. The fee structure includes a plan manager fee of 0.12 percent plus underlying mutual fund expenses that vary depending on the investment option chosen. There is also a state oversight fee to pay for the administrative expenses of the Trustee which is 0.01 percent for CHET Direct and 0.01 percent for CHET Advisor, which was reduced on September 15, 2017.

The CHET Direct program received high marks during the fiscal year from Morningstar, a leading independent investment research firm that monitors college savings plans across the country. In October 2017 CHET Direct was one of 20 direct-sold plans that received a "Bronze" medal rating, placing it among the top plans in the country.

### **CHET Advisor**

During Fiscal Year 2018, the number of accounts in the CHET Advisor program grew from 25,607 to 29,824. During the same period, total assets grew from \$481.5 million to \$564.8 million, with qualified withdrawals of \$35.6 million.

### CHET Direct

During Fiscal Year 2018, the number of accounts in the CHET Direct program grew from 115,145 to122,885. During the same period, total assets grew from \$2.8 billion to \$3.1 billion, while supporting over \$1.74 billion of qualified withdrawals. Considerable progress has been achieved since 1999 when Treasurer Nappier began to supervise the management of CHET Direct. At that time there were just over 4,000 accounts and \$18.5 million in total assets. In April and June of 2018, TFI, the CHET Direct Plan manager, advised

### CONNECTICUT HIGHER EDUCATION TRUST

the Treasurer, trustee of CHET, that 33 CHET account holders (out of a total of roughly 152,000 accounts) had online access to their accounts established by unauthorized individuals that resulted in withdrawals of approximately \$1.4 million. Of this amount, more than \$442,000 was recovered or stopped. TFI fully restored the accounts of all impacted CHET accounts and provided holders and beneficiaries with two years of identity fraud protection services, identity restoration services and \$1,000,000 in identity theft insurance coverage. Federal, state and local law enforcement agencies are conducting a coordinated investigation. Following these incidents, TFI implemented system enhancements, additional internal controls, and extra manual reviews aimed at preventing fraudulent activity. The Treasury is closely monitoring these security initiatives. In addition, at the Treasurer's request, TFI retained an independent auditor to review this incident and make any further recommendations.

Major marketing milestones in Fiscal Year 2018 included the continuation of CHET Advance Scholarship, a program funded annually by both TFI and The Hartford in accordance with their respective contracts with the Treasurer's Office. In December 2017, a total of \$500,000 in scholarships were awarded to high school seniors and 9th graders, providing a total of 200 scholarships split evenly between the two groups. For the freshmen students, the scholarship includes an incentive savings component, whereby families are encouraged to open an individual CHET account and save at least \$500 by the time the child graduates high school to qualify for the full scholarship of \$2,500.

In addition, the CHET Baby Scholars partnership with the Connecticut Department of Public Health continued to generate new accounts. Connecticut's birth certificate applications include information about CHET Baby Scholars, and resulted in 2,487 new accounts opened during Fiscal Year 2018. Since the program's inception in 2014, over 8,344 CHET Baby Scholars accounts have been opened, representing a total investment of \$18 million by Connecticut families who have started saving early for future college costs.

CHET also continued the annual Dream Big! essay and drawing competition for elementary and middle school students, rounding out CHET's major initiatives and ensuring that the programs reach families with children of all ages from birth to college-age. Integrated advertising and direct marketing campaigns ran throughout the year, focusing on tax time, graduation time, back-to-school and year-end contributions. CHET's advertising and direct marketing efforts served to increase CHET's brand awareness among state residents. The campaigns focused on the value of saving for college and the specific benefits of Connecticut's 529 college savings program.

# **CHET Advisory Committee**

State law created the CHET Advisory Committee, which meets annually pursuant to section 3-22e of the Connecticut General Statutes.

The Committee consists of the State Treasurer; the Executive Director of the Office of Higher Education; the Secretary of the Office of Policy and Management; the co-chairpersons and ranking members of the joint standing committees of the General Assembly having cognizance of matters relating to education and finance, revenue and bonding (or their designees); one student financial aid officer and one finance officer at a public institution of higher education in the state, each appointed by the Board of Regents for Higher Education; and one student financial aid officer and one finance officer at an independent institution of higher education by the Connecticut Conference of Independent Colleges.

One meeting of the Advisory Committee was held in Fiscal Year 2018: on March 30, 2018. At this meeting, both The Hartford and TIAA presented proposed changes to investment options for CHET, and there were discussions around fee savings and the marketing of each program. Minutes of this meeting is available on the Treasury's website.

## CONNECTICUT HIGHER EDUCATION TRUST

Members of the Advisory Committee as of the meeting held on March 30, 2018 were as follows:

DENISE L. NAPPIER, State Treasurer

BENJAMIN BARNES, Office of Policy and Management

KEITH M. NORTON, Executive Director, Office of Higher Education

STATE SEN. GAYLE SLOSSBERG, Senate Chair, Education Committee

STATE SEN. ANDREA STILLMAN, Senate Chair, Education Committee

STATE REP. ANDREW M. FLEISCHMANN, House Chair, Education Committee

STATE SEN. ANTONEIETTA "TONI" BOUCHER, Senate Ranking Member, Education Committee

STATE REP. GAIL LAVIELLE, House Raking Member, Education Committee

STATE SEN. JOHN FONFARA, Senate Chair, Finance, Revenue and Bonding Committee

STATE REP. JASON ROJAS, House Chair, Finance, Revenue and Bonding Committee

STATE SEN. SCOTT FRANTZ, Senate Ranking Member, Finance, Revenue and Bonding Committee

**STATE REP. CHRISTOPHER DAVIS,** House Ranking Member, Finance, Revenue and Bonding Committee

# ABLE program

# Achieving A Better Life Experience (ABLE) Trust

Pursuant to Section 3-39k(e) of the Connecticut General Statutes, set forth below is the annual report of the Achieving a Better Life Experience (ABLE) Trust for the fiscal year ending June 30, 2018.

# Background

In 2014, the U.S. Congress passed the ABLE Act, a framework that would allow persons with disabilities who are on Supplemental Security Income (SSI) to amass assets without putting benefits at risk. The Act created 529(a) accounts as a subset of the 529 college savings program. Many of the tax advantages offered through 529 accounts are available in ABLE 529(a) accounts, including exempting investment earnings from federal and state income taxes. This federal legislation required states to enact their own statutory frameworks for establishing programs for their respective state residents.

Accordingly, in 2015 Connecticut passed Public Act 15-80, An Act Implementing the Recommendations of the Program Review and Investigations Committee Concerning the Federal Achieving a Better Life Experience Act (Public Act). Mirroring the federal legislation, it allows families to accumulate assets for expenses without affecting state and federally mandated maximums to qualify for governmental services. The Public Act designated the State Treasurer as Trustee of the ABLE program with the responsibility to establish a federally qualified ABLE program and administer individual ABLE accounts. The Public Act was passed without an appropriation of funds for implementation.

In an effort to implement an ABLE Program in Connecticut that meets the objectives of the federal mandate, the Office of the Treasurer formed an advisory committee comprised of 20 individuals with relevant experience, including those who have served as disability advocates, representatives of key constituencies and organizations for persons with disabilities, and leaders of state agencies with purview over disability issues.

# Status of Connecticut's ABLE Program

During Fiscal Year 2018, the Office of the Treasurer and the ABLE Advisory Committee met to consider various options for structuring Connecticut's program, including an evaluation of responses to a request for information issued in April of 2017 for partnership with another state-sponsored plan. In October of 2017, the State of Oregon was named the preferred partner, and the Office of the Treasurer commenced contract negotiations soon thereafter.

Connecticut sought to negotiate agreements with Oregon's ABLE program administrator, a challenging endeavor given that no funds have been appropriated by the General Assembly to establish a Connecticut ABLE program. This funding challenge proved insurmountable, given that the Treasurer, as trustee of ABLE, bears a fiduciary responsibility to evaluate the program's investment options on behalf of Connecticut residents and would need resources in order to conduct this evaluation.

Consequently, Connecticut's ABLE Trust has not yet been formally established. There are no ABLE accounts within the Trust, there have been no contributions made or accepted and, as a result, no distributions. Connecticut residents may, however, open ABLE accounts with a program sponsored by another state.

Financial Statements



# STATE OF CONNECTICUT



AUDITORS OF PUBLIC ACCOUNTS State Capitol 210 Capitol Avenue Hartford, Connecticut 06106-1559

ROBERT J. KANE

### INDEPENDENT AUDITORS' REPORT AND STATUTORY CERTIFICATION

Dannel P. Malloy, Governor of Connecticut Members of the General Assembly:

JOHN C. GERAGOSIAN

### Report on the Financial Statements and Schedules included in the Treasurer's Annual Report

We have audited the accompanying financial statements of the Combined Investment Funds, which comprise the statement of net position as of June 30, 2018, the statements of changes in net position for the fiscal years ended June 30, 2018 and 2017, and the related notes to the financial statements. We have audited the accompanying financial statements of the Short-Term Investment Fund, which comprise the statement of net position, including the list of investments as of June 30, 2018, the statements of changes in net position for the fiscal years ended June 30, 2018 and 2017, and the related notes to the financial statements. We have audited the accompanying financial statements of the Second Injury Fund, which comprise the statements of net position as of June 30, 2018 and 2017, and the related statements of revenues, expenses and changes in net position and the statements of cash flows for the fiscal years ended June 30, 2018 and 2017, and the related notes to the financial statements. We have audited the accompanying statements of net position of the other Non-Civil List Trust Funds as of June 30, 2018, together with the related statement of revenue and expenditures, and statement of changes in net position and the statement of cash flows for the other Non-Civil List Trust Funds and the related notes to the financial statements for the fiscal year ended June 30, 2018. We have audited the accompanying schedules of Civil List Funds investments and the summary schedule of cash receipts and disbursements of the Civil List Funds for the fiscal year ended June 30, 2018. We have audited the accompanying schedule of debt outstanding and the changes in debt outstanding for the fiscal year ended June 30, 2018.

### Management's Responsibility

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk

assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

As described in the notes to the financial schedules, management has prepared the schedules of Civil List Funds investments and the summary schedule of cash receipts and disbursements of the Civil List Funds as well as the schedule of debt outstanding and the changes in debt outstanding using accounting practices prescribed by the State Comptroller, which practices differ from accounting principles generally accepted in the United States of America. Management has not included accrued interest earned in the presentation of the Civil List Funds. Management has not presented the current portion of long-term debt obligations in accordance with Generally Accepted Accounting Principles. The effects on the financial schedules of the variances between these statutory accounting practices and accounting principles generally accepted in the United States of America, although not reasonably determinable, are presumed to be material.

### Opinion

### Debt Outstanding and Changes in Debt Outstanding and Civil List Funds

In our opinion, because of the effects of the matter discussed in the preceding paragraph, the schedules of the Civil List Fund investments, the summary schedule of cash receipts and disbursements of the Civil List Funds, the schedule of debt outstanding, and the changes in debt outstanding as of and for the fiscal year ended June 30, 2018, do not present fairly in conformity with accounting principles generally accepted in the United States of America the financial position or changes in financial position for the fiscal year ended June 30, 2018. In our opinion, the schedules of the Civil List Fund investment, the summary schedule of cash receipts and disbursements of the Civil List Funds, the schedule of debt outstanding and the changes in debt outstanding as of and for the fiscal year ended June 30, 2018, are presented fairly in all material respects, in accordance with the financial and budgetary requirements referred to as the statutory basis of accounting and described within the related notes to those schedules.

# Combined Investment, Short-Term Investment Funds, Second Injury Fund and the Other Non-Civil List Trust Funds

In our opinion, the financial statements the financial position of the Combined Investment Funds as of June 30, 2018, and the related statements of changes in net position for the fiscal years ended June 30, 2018 and 2017, the statement of net position of the Short-Term Investment Fund, including the list of investments, as of June 30, 2018, and the related statements of changes in net position for the fiscal years ended June 30, 2018 and 2017, the statements of net position of the Second Injury Fund as of June 30, 2018 and 2017, and the related statements of revenues, expenses and changes in net position and the statements of cash flows for the fiscal years then ended, and the statements of net position of other Non-Civil List Trust Funds as of June 30, 2018, and the related statements of revenue and expenditures, statement of changes in net position and the statement of cash flows for the fiscal year then ended, are presented fairly, in all material respects, in conformity with U.S. generally accepted accounting principles.

### **Emphasis of Matter**

As explained in Note 1B to the financial statements of the Combined Investment Funds, the Real Estate, Private Investment, and Alternative Investment Funds include investments that are carried at the investment advisors' June 30, 2018 fair value, or net asset value equivalent. The Treasurer's staff reviews the estimated fair values provided by the investment advisors for reasonableness. In instances in which an advisor's value appears to be overstated, the Treasurer's staff adjusts this estimated fair value accordingly. We reviewed the Treasury's documentation and procedures used to determine the fair values, and found them to be appropriate and reasonable; however, because of the inherent uncertainty in valuing these investments, determination of

the estimated fair value market values may differ from the actual values had a ready market existed for these investments. Our opinion is not modified with respect to this matter.

As discussed in the notes to the financial statements and schedules, the financial statements or schedules of the Combined Investment Funds, Short-Term Investment Fund, Second Injury Fund, Non-Civil List Trust Funds, and Civil List Funds referred to in the first paragraph are intended to present only the funds and accounts administered by the Office of the State Treasurer. They do not purport to, and do not, present fairly the financial position of the State of Connecticut as of June 30, 2018, and the changes in financial position for the fiscal years end June 30, 2018 and 2017, or where applicable, its cash flows for the fiscal year ended June 30, 2018, in conformity with generally accepted accounting principles in the United States of America. Our opinion is not modified with respect to this matter.

### **Report of Other Auditors**

We did not audit the accompanying financial statements of the Connecticut Higher Education Trust. These financial statements were audited by other auditors whose reports thereon have been included with the accompanying financial statements.

### **Other Matters**

### Required Supplementary Information

Management's Discussion and Analysis, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

### Supplementary Information

Our audit was made for the purpose of forming an opinion on the financial statements of the Combined Investment Funds as a whole. Certain other financial information, which includes the Schedule of Net Position by Investment Fund, Schedules of Changes in Net Position by Investment Fund, Total Net Position Value by Pension Plans and Trust Funds and the Schedules of Investment Activity by Pension Plan and by Trust contained within the supplemental section of this document, is presented for purposes of additional analysis and is not a required part of the financial statements of the combined investment funds. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements of the combined investment funds and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the financial statements taken as a whole.

### Other Information

The introduction, division operation, supplemental information and the statutory appendix sections include information presented for purposes of additional analysis that is not a required part of the basic financial statements. This information has not been subjected to the auditing procedures applied in the audit of the basic financial statements, except as specifically noted in this audit opinion. Accordingly, we do not express an opinion or provide any assurance on it.

### Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated December 31, 2018, on our consideration of the State Treasury's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report will be issued under separate cover in the *Independent Auditors' Report on Internal Control over Financial Reporting and on Compliance and other matters based on an audit of Financial Statements Performed in Accordance with Government Auditing Standards for the fiscal year ended June 30, 2018*, and is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be considered in assessing the results of our audit. This particular certification is issued by the Auditors of Public Accounts and the State Comptroller in accordance with Section 2-90 of the Connecticut General Statutes.

John C. Geragosian State Auditor

Robert J. Kane State Auditor

Kevin Lembo/ State Comptroller

December 31, 2018 State Capitol Hartford, Connecticut

The following Management's Discussion and Analysis (MD&A) provides an overview of the Annual Report of the Office of the Treasurer's financial performance for the fiscal year ended June 30, 2018.

# FINANCIAL STATEMENTS PRESENTED IN THIS REPORT

The State Treasurer is the chief elected financial officer of the State of Connecticut, overseeing a wide variety of activities regarding the prudent conservation and management of State funds. These include as of June 30, 2018 the asset investment administration of a \$34.4 billion portfolio for the Connecticut Retirement Plans and Trust Funds, the \$6.8 billion Short-Term Investment Fund, and the \$3.7 billion Connecticut Higher Education Trust (Direct Plan and Advisor Plan), a qualified state tuition program designed to promote and enhance affordability and accessibility of higher education to State residents.

The organizational structure of the Treasury comprises an Executive Office, which coordinates all financial reporting, administration and support functions within the Treasury, and oversees administration of the Connecticut Higher Education Trust, and five divisions including: Pension Funds Management, responsible for managing the assets of active and retired teachers, state, and municipal employees as well as trust funds financing academic programs, grants, and initiatives throughout the state; Debt Management, the public finance department for the State, responsible for issuing and managing the State's debt including issuing bonds to finance State capital projects and managing debt service payments and cash flow borrowing, administering the Clean Water Fund and maintaining the State's rating agency relationships; Cash Management, responsible for all the State's cash inflows and outflows and managing the State's cash transactions, banking relationships and short-term investments; Unclaimed Property responsible for returning unclaimed property to rightful owners or heirs; and the Second Injury Fund, responsible for managing the workers' compensation claim operation in Connecticut, serving injured workers whose claims are paid by the Fund.

The financial statements include: the Combined Investment Funds (which includes Civil and Non-Civil List Trust Funds), Short-Term Investment Fund, Connecticut Higher Education Trust, Unclaimed Property, and the Second Injury Fund.

**Combined Investment Funds and Short-Term Investment Funds:** The Statement of Net Position and the Statement of Changes in Net Position are two financial statements that report information about the Funds as a whole, and about its activities that should help explain how the Funds are performing as a result of this year's activities. These statements include all assets and liabilities using the accrual basis of accounting. The current year's revenues and expenses are taken into account regardless of when cash is received or paid.

The Statement of Net Position presents assets and liabilities, with the difference between the two reported as "net position held in trust for participants."

The Statement of Changes in Net Position presents information showing how the net assets changed during the most recent fiscal year. All changes in net assets are reported as soon as the underlying events giving rise to the change occur, regardless of the timing of related cash flows.

The Notes to the Financial Statements provide additional information that is essential to a full understanding of the data provided in the financial statements.

<u>Civil And Non-Civil List Trust Funds</u>: The Civil List Pension and Trust Funds schedule includes all cash and investment balances, and activity for the fiscal year. The Non-Civil List Trust Funds Financial Statements include all assets and liabilities, revenues and expenditures, and changes in fund balances using the accrual basis of accounting.

The Notes to the Civil and Non-Civil List Trust Funds Financial Statements provide additional information that is essential to a full understanding of the data provided in the financial statements.

<u>Connecticut Higher Education Trust (Direct Plan and Advisor Plan)</u>: The Statement of Fiduciary Net Position and Statement of Changes in Fiduciary Net Position are two financial statements that report information about the Connecticut Higher Education Trust Program.

The Notes to the Financial Statements provide additional information that is essential to a full understanding of the data provided in the Connecticut Higher Education Trust Program financial statements.

<u>The Second Injury Fund:</u> : The Statement of Net Position and Statement of Revenues, Expenses and Changes in Net Position are financial statements that report information about the Second Injury Fund.

The Notes to the Financial Statements provide additional information that is essential to a full understanding of the data provided in the Second Injury Fund's financial statements.

# **FINANCIAL HIGHLIGHTS OF FISCAL YEAR 2018**

At June 30, 2018, the Combined Investment Funds reported net assets of \$34.4 billion. The Short-Term Investment Fund reported a fund balance of \$6.8 billion. These two funds account for 99 percent of the investments in the fiduciary funds managed by the Office of the Treasurer.

The Connecticut Retirement Plans and Trust Funds (CRPTF) Fiscal Year 2018 performance resulted in a net position of \$34.4 billion at June 30, 2018 increasing from \$32.5 billion at June 30, 2017. The two largest pension funds among the CRPTF, the Teachers' Retirement Fund and the State Employees' Retirement Fund, generated net investment results of 7.04 percent and 7.30 percent, respectively for Fiscal Year 2018. Total returns are calculated after reflecting management fees, other pension fund operating expenses and distributions primarily for benefit payments.

The Short-Term Investment Fund, at June 30, 2018, achieved an annual return of 1.39 percent, exceeding its primary benchmark by 12 basis points, thereby earning an additional \$7 million in interest income for the state, state agencies and municipalities and their taxpayers while also adding \$5.2 million to its reserves. At the end of the 2018 Fiscal Year, the Short-Term Investment Fund had \$6.8 billion in assets under management.

The Treasury refunded outstanding debt through the issuance of \$368.5 million of General Obligation Refunding bonds. A total of over \$1.2 billion in debt service savings will be achieved over the life of the bonds from debt refunding and defeasances completed since January 1, 1999.

The Connecticut Higher Education Trust (CHET) Direct Plan held 122,885 accounts with total assets of \$3.1 billion at the end of the 2018 Fiscal Year compared to over 115,145 accounts and \$2.8 billion in assets in the prior fiscal year. The Connecticut Higher Education Trust (CHET) Advisor plan held 29,824 accounts with total assets of \$564 million at the end of the 2018 Fiscal Year compared to 25,607 accounts and \$481 million in assets in the prior fiscal year.

The Office of the Treasurer recovered \$2.5 million in the fiscal year from class action lawsuits and \$52.8 million since 2000 when the Treasury asset recovery and loss prevention program was initiated.

# CONDENSED FINANCIAL INFORMATION

**Combined Investment Funds** Funds represent investments available to the pension funds of the State employees and teachers, municipal employees, as well as academic programs, grants and initiatives throughout the State.

## Net Position and Changes in Net Position

The net position of the Combined Investment Funds at the close of the 2018 Fiscal Year was \$34.4 billion, an increase of \$1.8 billion from the previous year. The change in net position resulted from a \$2.3 billion increase from operations (realized and unrealized gains and investment income) partly offset by \$0.5 billion of net redemptions from the Combined Investment Funds.

The net position of the Combined Investment Funds at the close of the 2017 Fiscal Year was \$32.5 billion, an increase of \$3.3 billion from the previous year. The change in net position resulted from a \$4.1 billion increase from operations (realized and unrealized gains and investment income) partly offset by \$0.8 billion of net withdrawals from the Combined Investment Funds.

Table 1 - Net Position						
Assets	2018	Increase (Decrease)	2017	Increase (Decrease)	2016	
Investments at Fair Value	\$34,368,676,287	\$1,800,301,121	\$32,568,375,166	\$3,362,320,165	\$29,206,055,001	
Cash, Receivables and Other	12,487,065,407	2,186,323,713	10,300,741,694	(4,597,191,581)	14,897,933,275	
Total Assets	46.855.741.694	3,986,624,834	42,869,116,860	(1,234,871,416)	44,103,988,276	
Liabilities	(12,463,683,900)	(2,142,437,054)	(10,321,246,846)	4,536,821,669	(14,858,068,515)	
Net Position	\$34,392,057,794	\$1,844,187,780	\$32,547,870,014	\$3,301,950,253	\$29,245,919,761	
		<u> Table 2 - Changes i</u>				
Additions	2018	Increase (Decrease)	2017	Increase (Decrease)	2016	
Dividends	\$541,639,540	\$31,250,605	\$510,388,935	\$50,435,311	\$459,953,624	
Interest	365,754,068	57,221,220	308,532,848	(28,740,648)	337,273,496	
Securities Lending & Other Incor		1,046,134	48,252,029	19,482,997	28,769,032	
Total Investment Income	956,691,771	89,517,959	867,173,812	41,177,660	825,996,152	
Total Investment Expenses	(127,954,370)	(28,424,542)	(99,529,828)	(8,875,246)	(90,654,582)	
Net Investment Income	828,737,401	61,093,417	767,643,984	32,302,414	735,341,570	
Net Increase (Decrease) in Fair						
Value of Investments and	4 404 050 450	(4.040.000.045)	2 222 742 005	4 050 050 007	(700 440 700)	
Foreign Currency	1,484,659,450	(1,848,083,645)	3,332,743,095	4,052,859,827	(720,116,732)	
Net Increase (Decrease) in Net Position resulting						
from operations	2,313,396,851	(1,786,990,228)	4,100,387,079	4,085,162,241	15,224,838	
Purchase of Units by						
Participants	7,303,018,454	4,616,002,352	2,687,016,102	222,634,561	2,464,381,541	
Total Additions	9,616,415,305	2,829,012,124	6,787,403,181	4,307,796,802	2,479,606,379	
Deductions						
Administrative Expense	(4,322,002)	(321,347)	(4,000,655)	602,017	(4,602,672)	
Distribution of Income to						
Unit Owners	(25,442,996)	(1,136,454)	(24,306,542)	(10,836,504)	(13,470,038)	
Redemption of Units by						
Participants	(7,742,462,527)	(4,285,316,796)	(3,457,145,731)	(374,555,307)	(3,082,590,424)	
Total Deductions	(7,772,227,525)	(4,286,774,597)	(3,485,452,928)	(384,789,794)	(3,100,663,134)	
Change in Net Position	1,844,187,780	(1,457,762,473)	3,301,950,253	3,923,007,008	(621,056,755)	
Net Position – Beginning of year	32,547,870,014	3,301,950,253	29,245,919,761	(621,056,755)	29,866,976,516	
Net Position – End of year	\$34,392,057,794	\$1,844,187,780	\$32,547,870,014	\$3,301,950,253	\$29,245,919,761	

**Short-Term Investment Fund** represents an investment pool of short-term money market instruments serving the State and State agencies, authorities, municipalities and other public subdivisions of the State.

## Net Position and Change in Net Position

The net position in the Short-Term Investment Fund at the close of the 2018 Fiscal Year was \$6.8 billion, versus \$6.5 billion the previous year. General financial market conditions produced an annual total return of 1.39 percent, net of operating expenses and allocations to Fund reserves. The annual total return exceeded that achieved by its benchmark by 12 basis points, resulting in \$7 million in additional interest income for Connecticut governments and their taxpayers while also adding \$5.2 million to its reserves.

The net position in the Short-Term Investment Fund at the close of the 2017 Fiscal Year was \$6.5 billion, versus \$4.9 billion the previous year. General financial market conditions produced an annual total return of 0.61 percent, net of operating expenses and allocations to Fund reserves. The annual total return exceeded that achieved by its benchmark by 12 basis points, resulting in \$6.4 million in additional interest income for Connecticut governments and their taxpayers while also adding \$4.7 million to its reserves.

		Table 3 - Net F	osition		
Assets	2018	Increase (Decrease)	2017	Increase (Decrease)	2016
Investments in Securities, at Amortized Cost	\$6,796,418,299	\$326,489,835	\$6,469,928,464	\$1,572,487,214	\$4,897,441,250
Receivables and Other	10,937,224	6,190,079	4,747,145	(2,580,162)	7,327,307
Total Assets	6,807,355,523	332,679,914	6,474,675,609	1,569,907,052	4,904,768,557
Liabilities	(10,702,148)	(6,114,883)	(4,587,265)	(2,827,591)	(1,759,674)
Net Position	\$6,796,653,375	\$326,565,031	\$6,470,088,344	\$1,567,079,461	\$4,903,008,883
		Table 4 - Changes ir	Not Position		
Additions	2018	Increase (Decrease)	2017	Increase (Decrease)	2016
Interest Income	\$97,021,865	\$54,691,946	\$42,329,919	\$25,200,467	\$17,129,452
Net Realized Gains	1.000	(29,747)	30.747	25.777	4.970
Total Increase from Operations	97,022,865	54,662,199	42,360,666	25,226,244	17,134,422
Purchase of Units by					
Participants	17,231,394,231	1,749,253,599	15,482,140,632	4,090,260,846	11,391,879,786
Total Additions	17,328,417,096	1,803,915,798	15,524,501,298	4,115,487,090	11,409,014,208
Deductions					
Distribution of Income to					
Participants	(89,929,727)	(54,218,152)	(35,711,575)	(21,408,412)	(14,303,163)
Redemption of Units by					
Participants	(16,910,055,574)	(2,990,265,357)	(13,919,790,217)	(2,392,470,353)	(11,527,319,864)
Operating Expenses	(1,866,764)	53,281	(1,920,045)	7,148	(1,927,193)
Total Deductions	(17,001,852,065)	(3,044,430,228)	(13,957,421,837)	(2,413,871,617)	(11,543,550,220)
Change in Net Position	326,565,031	(1,240,514,430)	1,567,079,461	1,701,615,473	(134,536,012)
Net Position – beginning of year	6,470,088,344	1,567,079,461	4,903,008,883	(134,536,012)	5,037,544,895
Net Position – end of year	\$6,796,653,375	\$326,565,031	\$6,470,088,344	\$1,567,079,461	\$4,903,008,883

## **Connecticut Higher Education Trust**

### Fiduciary Net Position and Changes in Fiduciary Net Position (Direct Plan)

Fiduciary Net Position of the Direct Plan at the close of the current fiscal year was \$3.1 billion, an increase of \$260.4 million from the previous year. Change in Fiduciary Net Position in Fiscal Year 2018 resulted from \$102.4 million of contributions to active accounts, net of redemptions, in addition to net investment income of \$68 million and by an increase in the fair value of assets by \$90 million..

Fiduciary Net Position of the Direct Plan at the close of the 2017 fiscal year was \$2.8 billion, an increase of \$343.6 million from the previous year. Change in Fiduciary Net Position in Fiscal Year 2017 resulted from \$91 million of contributions to active accounts, net of redemptions, in addition to net investment income of \$52 million and by an increase in the fair value of assets by \$200 million.

Table 5 - Fiduciary Net Position						
Assets	2018	Increase (Decrease)	2017	Increase (Decrease)	2016	
Investments, at Fair Value	\$3,104,651,513	\$261,064,850	\$2,843,586,663	\$342,203,988	\$2,501,382,675	
Cash, Receivables and Other	6,137,209	1,412,793	4,724,416	997,766	3,726,650	
Total Assets	3,110,788,722	262,477,643	2,848,311,079	343,201,754	2,505,109,325	
Liabilities	(7,042,520)	(2,053,333)	(4,989,187)	401,776	(5,390,963)	
Net Position	\$3,103,746,202	\$260,424,310	\$2,843,321,892	\$343,603,530	\$2,499,718,362	

	<u>Ta</u>	ble 6 - Fiduciary Chang	es in Net Position		
Additions	2018	Increase (Decrease)	2017	Increase (Decrease)	2016
Subscriptions	\$3,152,095,014	\$2,192,066,159	\$960,028,855	\$106,993,443	\$853,035,412
Total investment income	71,533,382	16,135,488	55,397,894	5,819,925	49,577,969
Net increase (decrease) in					
Fair value of investments	89,978,934	(110,120,597)	200,099,531	249,225,841	(49,126,310)
Total additions	3,313,607,330	2,098,081,050	1,215,526,280	362,039,209	853,487,071
Deductions					
Redemptions	(3,049,657,521)	(2,180,816,819)	(868,840,702)	(102,879,133)	(765,961,569)
Plan manager fee	(3,254,307)	(409,341)	(2,844,966)	301,983	(3,146,949)
Administrative fee	(271,192)	(34,110)	(237,082)	(25,190)	(211,892)
Total deductions	(3,053,183,020)	(2,181,260,270)	(871,922,750)	(102,602,340)	(769,320,410)
Change in Net Position	260,424,310	(83,179,220)	343,603,530	259,436,869	84,166,661
Net position – beginning of year	2,843,321,892	343,603,530	2,499,718,362	84,166,661	2,415,551,701
Net position – end of year	\$3,103,746,202	\$260,424,310	\$2,843,321,892	\$343,603,530	\$2,499,718,362

#### Fiduciary Net Position and Changes in Fiduciary Net Position (Advisor Plan)

Fiduciary Net Position of the Advisor Plan at the close of the current fiscal year was \$564.8 million, an increase of \$83.3 million from the previous year. Change in Fiduciary Net Position in Fiscal Year 2018 resulted from \$49 million of contributions to active accounts, net of redemptions, in addition to net investment income of \$39 million and by a decrease in the fair value of assets by \$5 million.

Fiduciary Net Position of the Advisor Plan at the close of the previous fiscal year was \$481.5 million, an increase of \$95.6 million from the previous year. Change in Fiduciary Net Position in Fiscal Year 2017 resulted from \$47 million of contributions to active accounts, net of redemptions, in addition to net investment income of \$17 million and by an increase in the fair value of assets by \$31 million.

Table 7 - Fiduciary Net Position						
Assets	2018	Increase (Decrease)	2017	Increase (Decrease)	2016	
Investments, at Fair Value	\$564,898,086	\$83,120,405	\$481,777,681	\$95,728,317	\$386,049,364	
Cash, Receivables and Other	789,851	323,911	465,940	(125,163)	591,103	
Total Assets	565,687,937	83,444,316	482,243,621	95,603,154	386,640,467	
Liabilities	(865,700)	(139,933)	(725,767)	41,347	(767,114)	
Net Position	\$564,822,237	\$83,304,383	\$481,517,854	\$95,644,501	\$385,873,353	
	Ta	able 8 - Change in Fiduc	iary Net Position			
Additions	2018	Increase (Decrease)	2017	Increase (Decrease)	2016	
Contributions	\$92,357,649	\$8,876,728	\$83,480,921	\$5,912,465	\$77,568,456	
Transfers	372,671,214	286,243,425	86,427,789	20,252,806	66,174,983	
Total investment income	42,611,077	22,595,058	20,016,019	5,898,355	14,117,664	
Net increase (decrease) in						
Fair value of investments	(5,772,526)	(37,015,889)	31,243,363	48,519,810	(17,276,447)	
Total additions	501,867,414	280,699,322	221,168,092	80,583,436	140,584,656	
Deductions						
Withdrawals	(42,861,040)	(6,697,663)	(36,163,377)	(10,152,778)	(26,010,599)	
Transfers	(372,671,214)	(286,243,425)	(86,427,789)	(20,252,806)	(66,174,983)	
Plan manager fees	(927,587)	99,683	(1,027,270)	(189,147)	(838,123)	
Administrative fees	(63,228)	22,374	(85,602)	(15,756)	(69,846)	
Distribution fees	(2,062,991)	(138,704)	(1,924,287)	(340,498)	(1,583,789)	
Total waivers	23,029	(81,705)	104,734	13,048	91,686	
Total deductions	(418,563,031)	(293,039,440)	(125,523,591)	(30,937,937)	(94,585,654)	
Change in Net Position	83,304,383	(12,340,118)	95,644,501	49,645,499	45,999,002	
Net position – beginning of year	481,517,854	95,644,501	385,873,353	45,999,002	339,874,351	
Net position – end of year	\$564,822,237	\$83,304,383	\$481,517,854	\$95,644,501	\$385,873,353	

#### Fiduciary Net Position and Change in Fiduciary Net Position (Consolidated)

Fiduciary Net Position of the CHET Direct and Advisor Plans at the close of the current fiscal year was \$3.7 billion, an increase of \$344 million from the previous year. Change in Fiduciary Net Position in Fiscal Year 2018 resulted from \$152 million of contributions to active accounts, net of redemptions, in addition to net investment income of \$108 million and by an increase in the fair value of assets by \$84 million.

Fiduciary Net Position of the CHET Direct and Advisor Plans at the close of the prior fiscal year was \$3.3 billion, an increase of \$439 million from the previous year. Change in Fiduciary Net Position in Fiscal Year 2017 resulted from \$138 million of contributions to active accounts, net of redemptions, in addition to net investment income of \$69 million and by an increase in the fair value of assets of \$231 million.

Assets         2018         Increase (Decrease)         2017         Increase (Decrease)         2016           Investments, at Fair Value         \$3,669,549,599         \$\$344,185,255         \$3,325,364,344         \$\$437,932,305         \$\$2,887,432,039           Cash, Receivables and Other         6,927,060         1,736,704         5,190,356         872,603         4,317,753           Total Assets         3,676,476,659         345,921,959         3,330,554,700         438,804,908         2,891,749,792           Liabilities         (7,908,220)         (2,193,266)         (5,714,954)         443,123         (6,158,077)           Net Position         \$3,668,568,439         \$343,728,693         \$3,324,839,746         \$\$439,248,031         \$2,885,591,715           Additions         2018         Increase (Decrease)         2017         Increase (Decrease)         2016           Subscriptions         \$3,668,568,439         \$343,728,693         \$3,324,839,746         \$439,248,031         \$2,885,591,715           Total investment income         114,144,459         38,730,546         75,413,913         11,718,280         63,685,633           Net increase (decrease) in         Fair value of investments         3,815,474,744         2,378,780,372         1,436,694,372         442,622,645         994,071,727 <th colspan="7">Table 9 - Fiduciary Net Position</th>	Table 9 - Fiduciary Net Position						
$\begin{array}{c} \mbox{Cash, Receivables and Other} & 6,927,060 & 1,736,704 & 5,190,356 & 872,603 & 4,317,753 \\ \hline Total Assets & 3,676,476,659 & 345,921,959 & 3,330,554,700 & 438,804,908 & 2,891,749,792 \\ \hline Liabilities & (7,908,220) & (2,193,266) & (5,714,954) & 443,123 & (6,158,077) \\ \hline \$,3,668,568,439 & \$343,728,693 & \$3,324,839,746 & \$439,248,031 & \$2,885,591,715 \\ \hline \mbox{Metions } & 2018 & Increase (Decrease) & 2017 & Increase (Decrease) & 2016 \\ \hline \$,3,244,452,663 & \$2,200,942,887 & \$1,043,509,776 & \$112,905,908 & \$930,603,868 \\ \hline \mbox{Transfers } & 372,671,214 & 286,243,425 & 86,427,789 & 20,252,806 & 66,174,983 \\ \hline \mbox{Total investment income } & 114,144,459 & 38,730,546 & 75,413,913 & 11,718,280 & 63,695,633 \\ \hline \mbox{Net increase (decrease) in } & 84,206,408 & (147,136,486) & 231,342,894 & 297,745,651 & (66,402,757) \\ \hline \mbox{Total Additions } & 3,815,474,744 & 2,378,780,372 & 1,436,694,372 & 442,622,645 & 994,071,727 \\ \hline \mbox{Deductions } & (3,092,518,561) & (2,187,514,482) & (905,004,079) & (113,031,911) & (791,972,168) \\ \hline \mbox{Transfers } & (372,671,214) & (286,243,425) & (86,427,789) & (20,252,806) & (66,174,983) \\ \hline \mbox{Plan management fee } & (4,181,894) & (309,658) & (3,872,236) & 112,836 & (3,985,072) \\ \hline \mbox{Administrative fee } & (334,420) & (11,736) & (322,684) & (40,946) & (281,738) \\ \hline \mbox{Distribution fees } & (2,062,991) & (138,704) & (1924,287) & (340,498) & (1,583,789) \\ \hline \mbox{Distribution fees } & (2,02,91) & (138,704) & (1924,287) & (340,498) & (1,583,789) \\ \hline \mbox{Distribution fees } & (2,342,693 & (95,519,338) & 439,248,031 & 309,082,368 & 130,165,663 \\ \hline \mbox{Distribution } & 943,728,693 & (95,519,338) & 439,248,031 & 309,082,368 & 130,165,663 \\ \hline \mbox{Distribution } & beginning of year \\ \ \end{tabular} & 3,224,839,746 & 439,248,031 & 2,885,591,715 & 130,165,663 & 2,755,426,052 \\ \end{tabular} & 3,324,839,746 & 439,248,031 & 2,885,591,715 & 130,165,663 & 2,755,426,052 \\ \end{tabular} & 3,324,839,746 & 439,248,031 & 2,885,591,715 & 130,165,663 & 2,755,426,052 \\ tabular$	Assets	2018	Increase (Decrease)	2017	Increase (Decrease)	2016	
Total Assets         3,676,476,659         345,921,959         3,330,554,700         438,804,908         2,891,749,792           Liabilities         (7,908,220)         (2,193,266)         (5,714,954)         443,123         (6,158,077)           Net Position         \$3,668,568,439         \$343,728,693         \$3,324,839,746         \$439,248,031         \$2,885,591,715           Additions         \$3,668,568,439         \$343,728,693         \$3,324,839,746         \$439,248,031         \$2,885,591,715           Additions         \$2,671,214         2018         Increase (Decrease)         2016         \$930,603,868           Transfers         372,671,214         226,243,425         86,427,789         20,252,806         66,174,983           Total investment income         114,144,459         38,730,546         75,413,913         11,718,280         63,695,633           Net increase (decrease) in         84,206,408         (147,136,486)         231,342,894         297,745,651         (66,402,757)           Total Additions         (3,092,518,561)         (2,187,514,482)         (905,004,079)         (113,031,911)         (791,972,168)           Transfers         (372,671,214)         (286,243,425)         (86,427,789)         (20,252,806)         (66,174,983)           Plan management fee         <	Investments, at Fair Value	\$3,669,549,599	\$344,185,255	\$3,325,364,344	\$437,932,305	\$2,887,432,039	
Liabilities         (7,908,220)         (2,193,266)         (5,714,954)         443,123         (6,158,077)           Net Position         \$3,668,568,439         \$343,728,693         \$3,324,839,746         \$439,248,031         \$2,885,591,715           Additions         \$3,224,452,663         \$2,200,942,887         \$1,043,509,776         \$112,905,908         \$930,603,868           Transfers         372,671,214         286,243,425         86,427,789         20,252,806         66,174,983           Total investment income         114,144,459         38,730,546         75,413,913         11,718,280         63,695,633           Net increase (decrease) in         Fair value of investments         84,206,408         (147,136,486)         231,342,894         297,745,651         (66,402,757)           Deductions         84,206,408         (147,136,486)         231,342,894         297,745,651         (66,402,757)           Deductions         (3,092,518,561)         (2,187,514,482)         (905,004,079)         (113,031,911)         (791,972,168)           Transfers         (372,671,214)         (286,243,425)         (86,427,789)         (20,252,806)         (66,174,983)           Plan management fee         (4,181,894)         (309,658)         (3,872,236)         112,836         (3,985,072)	Cash, Receivables and Other	6,927,060	1,736,704	5,190,356	872,603	4,317,753	
Net Position         \$3,668,566,439         \$343,728,693         \$3,324,839,746         \$439,248,031         \$2,885,591,715           Additions         Table 10 - Change in Fiduciary Net Position         2017         Increase (Decrease)         2016           Subscriptions         \$3,244,452,663         \$2,200,942,887         \$1,043,509,776         \$112,905,908         \$930,603,868           Transfers         372,671,214         286,243,425         86,427,789         20,252,806         66,174,983           Total investment income         114,144,459         38,730,546         75,413,913         11,718,280         63,695,633           Net increase (decrease) in Fair value of investments         84,206,408         (147,136,486)         231,342,894         297,745,651         (66,402,757)           Total Additions         3,815,474,744         2,378,780,372         1,436,694,372         442,622,645         994,071,727           Deductions         Redemptions         (3,092,518,561)         (2,187,514,482)         (905,004,079)         (113,031,911)         (791,972,168)           Transfers         (372,671,214)         (286,243,425)         (86,427,789)         (20,252,806)         (66,174,983)           Plan management fee         (4,181,894)         (309,658)         (3,872,236)         112,836         (3,985,072)	Total Assets	3,676,476,659	345,921,959	3,330,554,700	438,804,908	2,891,749,792	
Additions         Table 10 - Change in Fiduciary Net Position           Subscriptions         2018         Increase (Decrease)         2017         Increase (Decrease)         2016           Subscriptions         \$3,244,452,663         \$2,200,942,887         \$1,043,509,776         \$112,905,908         \$930,603,868           Transfers         372,671,214         286,243,425         86,427,789         20,252,806         66,174,983           Net increase (decrease) in         Fair value of investments         84,206,408         (147,136,486)         231,342,894         297,745,651         (66,402,757)           Total Additions         3,815,474,744         2,378,780,372         1,436,694,372         442,622,645         994,071,727           Deductions         Redemptions         (3,092,518,561)         (2,187,514,482)         (905,004,079)         (113,031,911)         (791,972,168)           Transfers         (372,671,214)         (286,243,425)         (86,427,789)         (20,252,806)         (66,174,983)           Plan management fee         (4,181,894)         (309,658)         (3,372,236)         112,836         (3,985,072)           Administrative fee         (334,420)         (11,736)         (322,684)         (40,946)         (281,738)           Distribution fees         (2,062,991)	Liabilities	(7,908,220)	(2,193,266)	(5,714,954)	443,123	(6,158,077)	
Additions         2018         Increase (Decrease)         2017         Increase (Decrease)         2016           Subscriptions         \$3,244,452,663         \$2,200,942,887         \$1,043,509,776         \$112,905,908         \$930,603,868           Transfers         372,671,214         286,243,425         86,427,789         20,252,806         66,174,983           Total investment income         114,144,459         38,730,546         75,413,913         11,718,280         63,695,633           Net increase (decrease) in         Fair value of investments         84,206,408         (147,136,486)         231,342,894         297,745,651         (66,402,757)           Total Additions         3,815,474,744         2,378,780,372         1,436,694,372         442,622,645         994,071,727           Deductions         Redemptions         (372,671,214)         (286,243,425)         (86,427,789)         (20,252,806)         (66,174,983)           Transfers         (372,671,214)         (286,243,425)         (86,427,789)         (20,252,806)         (66,174,983)           Plan management fee         (4,181,894)         (309,658)         (3,872,236)         112,836         (3,985,072)           Administrative fee         (334.420)         (11,736)         (322,684)         (40,946)         (281,738) <td>Net Position</td> <td>\$3,668,568,439</td> <td>\$343,728,693</td> <td>\$3,324,839,746</td> <td>\$439,248,031</td> <td>\$2,885,591,715</td>	Net Position	\$3,668,568,439	\$343,728,693	\$3,324,839,746	\$439,248,031	\$2,885,591,715	
Subscriptions         \$3,244,452,663         \$2,200,942,887         \$1,043,509,776         \$112,905,908         \$930,603,868           Transfers         372,671,214         286,243,425         86,427,789         20,252,806         66,174,983           Total investment income         114,144,459         38,730,546         75,413,913         11,718,280         63,695,633           Net increase (decrease) in         114,144,459         38,730,546         75,413,913         11,718,280         63,695,633           Total Additions         84,206,408         (147,136,486)         231,342,894         297,745,651         (66,402,757)           Total Additions         3,815,474,744         2,378,780,372         1,436,694,372         442,622,645         994,071,727           Deductions         Redemptions         (3,092,518,561)         (2,187,514,482)         (905,004,079)         (113,031,911)         (791,972,168)           Transfers         (372,671,214)         (286,243,425)         (86,427,789)         (20,252,806)         (66,174,983)           Plan management fee         (4,181,894)         (309,658)         (3,872,236)         112,836         (3,985,072)           Administrative fee         (334,420)         (11,736)         (322,684)         (40,946)         (281,738)           Distri		Tab	le 10 - Change in Fiduc	ary Net Position			
Transfers       372,671,214       286,243,425       86,427,789       20,252,806       66,174,983         Total investment income       114,144,459       38,730,546       75,413,913       11,718,280       63,695,633         Net increase (decrease) in       Fair value of investments       84,206,408       (147,136,486)       231,342,894       297,745,651       (66,402,757)         Total Additions       3,815,474,744       2,378,780,372       1,436,694,372       442,622,645       994,071,727         Deductions       Redemptions       (3,092,518,561)       (2,187,514,482)       (905,004,079)       (113,031,911)       (791,972,168)         Transfers       (372,671,214)       (286,243,425)       (86,427,789)       (20,252,806)       (66,174,983)         Plan management fee       (4,181,894)       (309,658)       (3,872,236)       112,836       (3,985,072)         Administrative fee       (334,420)       (11,736)       (322,684)       (40,946)       (281,738)         Distribution fees       (2,062,991)       (138,704)       (1,924,287)       (340,498)       (1,583,789)         Total waivers       23,029       (81,705)       104,734       13,048       91,686         Total deductions       (3,471,746,051)       (2,474,299,710)       (997,446,341) <td>Additions</td> <td>2018</td> <td>Increase (Decrease)</td> <td>2017</td> <td>Increase (Decrease)</td> <td>2016</td>	Additions	2018	Increase (Decrease)	2017	Increase (Decrease)	2016	
Total investment income         114,144,459         38,730,546         75,413,913         11,718,280         63,695,633           Net increase (decrease) in         Fair value of investments         84,206,408         (147,136,486)         231,342,894         297,745,651         (66,402,757)           Total Additions         3,815,474,744         2,378,780,372         1,436,694,372         442,622,645         994,071,727           Deductions         Redemptions         (3,092,518,561)         (2,187,514,482)         (905,004,079)         (113,031,911)         (791,972,168)           Transfers         (372,671,214)         (286,243,425)         (86,427,789)         (20,252,806)         (66,174,983)           Plan management fee         (4,181,894)         (309,658)         (3,872,236)         112,836         (3,985,072)           Administrative fee         (334,420)         (11,736)         (322,684)         (40,946)         (281,738)           Distribution fees         (2,062,991)         (138,704)         (1,924,287)         (340,498)         (1,583,789)           Total waivers         23,029         (81,705)         104,734         13,048         91,686           Total deductions         (34,71,746,051)         (2,474,299,710)         (997,446,341)         (133,540,277)         (863,906,064)	Subscriptions	\$3,244,452,663	\$2,200,942,887	\$1,043,509,776	\$112,905,908	\$930,603,868	
Net increase (decrease) in Fair value of investments Total Additions         84,206,408         (147,136,486)         231,342,894         297,745,651         (66,402,757)           Total Additions         3,815,474,744         2,378,780,372         1,436,694,372         442,622,645         994,071,727           Deductions         Redemptions         (3,092,518,561)         (2,187,514,482)         (905,004,079)         (113,031,911)         (791,972,168)           Transfers         (372,671,214)         (286,243,425)         (86,427,789)         (20,252,806)         (66,174,983)           Plan management fee         (4,181,894)         (309,658)         (3,872,236)         112,836         (3,985,072)           Administrative fee         (334.420)         (11,736)         (322,684)         (40,946)         (281,738)           Distribution fees         (2,062,991)         (138,704)         (1,924,287)         (340,498)         (1,583,789)           Total waivers         23,029         (81,705)         104,734         13,048         91,686           Total deductions         (3,471,746,051)         (2,474,299,710)         (997,446,341)         (133,540,277)         (863,906,064)           Change in Net Position         343,728,693         (95,519,338)         439,248,031         309,082,368         130,165,663 <td>Transfers</td> <td>372,671,214</td> <td>286,243,425</td> <td>86,427,789</td> <td>20,252,806</td> <td>66,174,983</td>	Transfers	372,671,214	286,243,425	86,427,789	20,252,806	66,174,983	
Fair value of investments Total Additions84,206,408(147,136,486)231,342,894297,745,651(66,402,757)Total Additions3,815,474,7442,378,780,3721,436,694,372442,622,645994,071,727Deductions Redemptions(3,092,518,561)(2,187,514,482)(905,004,079)(113,031,911)(791,972,168)Transfers(372,671,214)(286,243,425)(86,427,789)(20,252,806)(66,174,983)Plan management fee(4,181,894)(309,658)(3,872,236)112,836(3,985,072)Administrative fee(334,420)(11,736)(322,684)(40,946)(281,738)Distribution fees(2,062,991)(138,704)(1,924,287)(340,498)(1,583,789)Total waivers23,029(81,705)104,73413,04891,686Total deductions(3,471,746,051)(2,474,299,710)(997,446,341)(133,540,277)(863,906,064)Change in Net Position Net position - beginning of year343,728,693(95,519,338)439,248,031309,082,368130,165,6632,755,426,052	Total investment income	114,144,459	38,730,546	75,413,913	11,718,280	63,695,633	
Total Additions3,815,474,7442,378,780,3721,436,694,372442,622,645994,071,727DeductionsRedemptions(3,092,518,561)(2,187,514,482)(905,004,079)(113,031,911)(791,972,168)Transfers(372,671,214)(286,243,425)(86,427,789)(20,252,806)(66,174,983)Plan management fee(4,181,894)(309,658)(334.420)(11,736)(322,684)(40,946)(281,738)Distribution fees(2,062,991)(138,704)(1,924,287)(340,498)(1,583,789)Total waivers23,029(81,705)104,73413,04891,686Total deductions(343,728,693(95,519,338)439,248,031309,082,368130,165,6632,755,426,052	Net increase (decrease) in						
Deductions         Redemptions         (3,092,518,561)         (2,187,514,482)         (905,004,079)         (113,031,911)         (791,972,168)           Transfers         (372,671,214)         (286,243,425)         (86,427,789)         (20,252,806)         (66,174,983)           Plan management fee         (4,181,894)         (309,658)         (3,872,236)         112,836         (3,985,072)           Administrative fee         (334.420)         (11,736)         (322,684)         (40,946)         (281,738)           Distribution fees         (2,062,991)         (138,704)         (1,924,287)         (340,498)         (1,583,789)           Total waivers         23,029         (81,705)         104,734         13,048         91,686           Total deductions         (34,71,746,051)         (2,474,299,710)         (997,446,341)         (133,540,277)         (863,906,064)           Change in Net Position         343,728,693         (95,519,338)         439,248,031         309,082,368         130,165,663           Net position – beginning of year         3,324,839,746         439,248,031         2,885,591,715         130,165,663         2,755,426,052	Fair value of investments	84,206,408	(147,136,486)	231,342,894	297,745,651	(66,402,757)	
Redemptions         (3,092,518,561)         (2,187,514,482)         (905,004,079)         (113,031,911)         (791,972,168)           Transfers         (372,671,214)         (286,243,425)         (86,427,789)         (20,252,806)         (66,174,983)           Plan management fee         (4,181,894)         (309,658)         (3,872,236)         112,836         (3,985,072)           Administrative fee         (334.420)         (11,736)         (322,684)         (40,946)         (281,738)           Distribution fees         (2,062,991)         (138,704)         (1,924,287)         (340,498)         (1,583,789)           Total waivers         23,029         (81,705)         104,734         13,048         91,686           Total deductions         (3,471,746,051)         (2,474,299,710)         (997,446,341)         (133,540,277)         (863,906,064)           Change in Net Position         343,728,693         (95,519,338)         439,248,031         309,082,368         130,165,663           Net position – beginning of year         3,324,839,746         439,248,031         2,885,591,715         130,165,663         2,755,426,052	Total Additions	3,815,474,744	2,378,780,372	1,436,694,372	442,622,645	994,071,727	
Transfers(372,671,214)(286,243,425)(86,427,789)(20,252,806)(66,174,983)Plan management fee(4,181,894)(309,658)(3,872,236)112,836(3,985,072)Administrative fee(334.420)(11,736)(322,684)(40,946)(281,738)Distribution fees(2,062,991)(138,704)(1,924,287)(340,498)(1,583,789)Total waivers23,029(81,705)104,73413,04891,686Total deductions(3,471,746,051)(2,474,299,710)(997,446,341)(133,540,277)(863,906,064)Change in Net Position343,728,693(95,519,338)439,248,031309,082,368130,165,663Net position – beginning of year3,324,839,746439,248,0312,885,591,715130,165,6632,755,426,052	Deductions						
Plan management fee         (4,181,894)         (309,658)         (3,872,236)         112,836         (3,985,072)           Administrative fee         (334.420)         (11,736)         (322,684)         (40,946)         (281,738)           Distribution fees         (2,062,991)         (138,704)         (1,924,287)         (340,498)         (1,583,789)           Total waivers         23,029         (81,705)         104,734         13,048         91,686           Total deductions         (3,471,746,051)         (2,474,299,710)         (997,446,341)         (133,540,277)         (863,906,064)           Change in Net Position         343,728,693         (95,519,338)         439,248,031         309,082,368         130,165,663           Net position – beginning of year         3,324,839,746         439,248,031         2,885,591,715         130,165,663         2,755,426,052	Redemptions	(3,092,518,561)	(2,187,514,482)	(905,004,079)	(113,031,911)	(791,972,168)	
Plan management fee         (4,181,894)         (309,658)         (3,872,236)         112,836         (3,985,072)           Administrative fee         (334.420)         (11,736)         (322,684)         (40,946)         (281,738)           Distribution fees         (2,062,991)         (138,704)         (1,924,287)         (340,498)         (1,583,789)           Total waivers         23,029         (81,705)         104,734         13,048         91,686           Total deductions         (3,471,746,051)         (2,474,299,710)         (997,446,341)         (133,540,277)         (863,906,064)           Change in Net Position         343,728,693         (95,519,338)         439,248,031         309,082,368         130,165,663           Net position – beginning of year         3,324,839,746         439,248,031         2,885,591,715         130,165,663         2,755,426,052	Transfers	(372,671,214)	(286,243,425)	(86,427,789)	(20,252,806)	(66,174,983)	
Distribution fees         (2,062,991)         (138,704)         (1,924,287)         (340,498)         (1,583,789)           Total waivers         23,029         (81,705)         104,734         13,048         91,686           Total deductions         (3,471,746,051)         (2,474,299,710)         (997,446,341)         (133,540,277)         (863,906,064)           Change in Net Position         343,728,693         (95,519,338)         439,248,031         309,082,368         130,165,663           Net position – beginning of year         3,324,839,746         439,248,031         2,885,591,715         130,165,663         2,755,426,052	Plan management fee	(4,181,894)		(3,872,236)	112,836	(3,985,072)	
Total waivers         23,029         (81,705)         104,734         13,048         91,686           Total deductions         (3,471,746,051)         (2,474,299,710)         (997,446,341)         (133,540,277)         (863,906,064)           Change in Net Position         343,728,693         (95,519,338)         439,248,031         309,082,368         130,165,663           Net position – beginning of year         3,324,839,746         439,248,031         2,885,591,715         130,165,663         2,755,426,052	Administrative fee	(334.420)	(11,736)	(322,684)	(40,946)	(281,738)	
Total deductions(3,471,746,051)(2,474,299,710)(997,446,341)(133,540,277)(863,906,064)Change in Net Position343,728,693(95,519,338)439,248,031309,082,368130,165,663Net position – beginning of year3,324,839,746439,248,0312,885,591,715130,165,6632,755,426,052	Distribution fees	(2,062,991)	(138,704)	(1,924,287)	(340,498)	(1,583,789)	
Change in Net Position         343,728,693         (95,519,338)         439,248,031         309,082,368         130,165,663           Net position – beginning of year         3,324,839,746         439,248,031         2,885,591,715         130,165,663         2,755,426,052	Total waivers	23,029	(81,705)	104,734	13,048	91,686	
Net position – beginning of year         3,324,839,746         439,248,031         2,885,591,715         130,165,663         2,755,426,052	Total deductions	(3,471,746,051)	(2,474,299,710)	(997,446,341)	(133,540,277)	(863,906,064)	
Net position – beginning of year         3,324,839,746         439,248,031         2,885,591,715         130,165,663         2,755,426,052	Change in Net Position	343 728 693	(95 519 338)	439 248 031	309 082 368	130 165 663	
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#### Second Injury Fund

The Net Position of the Second Injury Fund (SIF) at the close of Fiscal Year 2018 was \$46.0 million, an increase of \$4.1 million from the previous year net position balance of \$41.9 million. The Change in Net Position was an increase of \$4.1 million mainly resulting from operating income.

The Net Position of the SIF at the close of Fiscal Year 2017 was \$41.9 million, an increase of \$3.3 million from the previous year net position balance of \$38.6 million. The Change in Net Position was an increase of \$3.3 million resulting from operating income

### **REQUIRED SUPPLEMENTARY INFORMATION**

Following the Financial Statements section of this annual report is a Supplemental Information section that further explains and supports the financial information and includes additional schedules for the Combined Investment Funds, debt schedules, cash management activities including Civil List Funds, and information on Unclaimed Property and fiscal year division expenses for the Office of the Treasurer.

#### **DEBT ADMINISTRATION**

Long-term debt obligations of the State consist of General Obligation bonds and revenue dedicated bonded debt. General obligation bonds, issued by the State, are backed by the full faith and credit of the State. Dedicated revenue debt payments are made from legally restricted revenues.

At June 30, 2018, the State had \$25.3 billion in bonds and notes outstanding, approximately \$0.6 billion greater than the end of June 30, 2017, issued to fund local school construction projects, state grants and economic development initiatives, Clean Water and Drinking Water Fund loans and grants, improvements to state universities and transportation projects.

The following table presents total outstanding debt for the State distinguished by bond financing type.

Table 11 - Outstanding Debt as of June 30,						
Bond Type	2018	Increase (Decrease)	2017	Increase (Decrease)	2016	
General Obligation –						
Tax Supported	\$14,123,453,503	\$254,939,431	\$13,868,514,072	\$829,260,012	\$13,039,254,060	
Teachers Retirement Fund	2,208,066,524	(19,916,730)	2,227,983,254	(300,000)	2,228,283,254	
Economic Recovery Notes	-	(177,120,000)	177,120,000	(175,465,000)	352,585,000	
GAAP Conversion Bonds	459,690,000	(34,845,000)	494,535,000	(33,440,000)	527,975,000	
Special Tax Obligation	5,540,495,000	498,655,000	5,041,840,000	522,150,000	4,519,690,000	
Bradley International Airport	109,330,000	(6,960,000)	116,290,000	(6,690,000)	122,980,000	
Clean Water Fund	909,420,000	(60,670,000)	970,090,000	169,070,000	801,020,000	
UConn 2000	1,661,785,000	156,790,000	1,504,995,000	201,125,000	1,303,870,000	
CI Increment Financing	22,610,000	(1,905,000)	24,515,000	(3,205,000)	27,720,000	
CHEFA Childcare Facilities Prog	ram 51,140,000	(2,440,000)	53,580,000	(2,380,000)	55,960,000	
CT Juvenile Training school	11,765,000	(635,000)	12,400,000	(605,000)	13,005,000	
Bradley International						
Parking Operations	25,265,000	(2,750,000)	28,015,000	(2,580,000)	30,595,000	
CHFA Special Needs Housing B	onds 52,745,000	(3,840,000)	56,585,000	(3,695,000)	60,280,000	
CHFA Emergency Mortgage						
Assistance Program	35,955,000	(2,130,000)	38,085,000	(2,075,000)	40,160,000	
CRDA Bonds	79,315,000	(3,370,000)	82,685,000	(3,235,000)	85,920,000	
Total	\$25,291,035,027	\$593,802,701	\$24,697,232,326	\$1,487,935,012	\$23,209,297,314	

During Fiscal Year 2018, the State issued \$2.9 billion of bonds for capital projects and other purposes. The issued bonds were offset by bonds retired of \$2.0 billion and bonds refunded of \$0.4 billion, resulting in a net increase of \$0.6 billion in bonds outstanding. Since 1999, debt refunding and defeasances have produced \$1.2 billion in debt savings to taxpayers.

More detailed information about outstanding bonds and other long-term debt can be found in the Supplemental and Statistical Sections of this report.

#### **ECONOMIC CONDITIONS AND OUTLOOK**

Domestic growth, as measured by Gross Domestic Product (GDP), experienced modest growth during the fiscal year. For Fiscal Year 2018, GDP (on a year-over-year basis) ranged between 2.3 percent and 2.8 percent. For the entire fiscal year, GDP averaged a 2.6 percent year-over-year rate, up from fiscal year 2017's 1.9 percent rate. Meanwhile, the unemployment rate ended the fiscal year at 4.0 percent, down from the 4.4 rate at the end of Fiscal Year 2017. During the course of the fiscal year, approximately 2.4 million people were added to payrolls.

Domestic inflation averaged 2.3 percent during the fiscal year, up 50 basis points from 1.8 percent in fiscal year 2017. Excluding the more volatile food and energy components, inflation during the fiscal year averaged 1.9 percent, down 20 basis points from Fiscal Year 2017's 2.1 percent. Similar to domestic inflation, inflation in the Eurozone was stronger as well, with an average inflation rate of 1.5 percent, up 40 basis points from the 2017 fiscal year period.

Connecticut's unemployment rate has continued to decline from a high of 9.5 percent in October 2010 to 4.4 percent in June 2018, compared to the national unemployment rate of 4.0 percent. The State Comptroller reported on November 30, 2018 that the State's General Fund ended the 2018 fiscal year with a pre-audited deficit of \$482.9 million which will be eliminated through a transfer from the Budget Reserve Fund.

### CONTACTING THE OFFICE OF THE TREASURER

This financial report is designed to provide a general overview of the Office of the Treasurer's finances and to show the Office's accountability for the money it receives. Questions about this report or requests for additional information should be addressed to:

Connecticut Office of the Treasurer 55 Elm Street Hartford, CT 06106-1773 Telephone (860) 702-3000 www.ott.ct.gov



#### MANAGEMENT'S REPORT



DENISE L. NAPPIER TREASURER

December 31, 2018

To: The Honorable Dannel P. Malloy Governor of Connecticut The Honorable Denise L. Nappier, Treasurer of Connecticut The Honorable Members of the Connecticut General Assembly Citizens of the State of Connecticut

This Annual Report was prepared by the Office of the Treasurer, which is responsible for the accuracy of the data contained herein, the completeness and fairness of the presentation, and all disclosures. We present the financial statements and data as accurate in all material respects and prepared in conformity with generally accepted accounting principles. Such financial statements are audited annually by the State of Connecticut Auditors of Public Accounts.

To carry out this responsibility, the Office of the Treasurer maintains financial policies, procedures, accounting systems and internal controls that management believes provide reasonable, but not absolute, assurance that accurate financial records are maintained and investments and other assets are safeguarded.

It is our belief that the contents of this Annual Report make evident the Office of the Treasurer's support of the safe custody and conscientious stewardship of the State's property and money, including Trusts and Custodial accounts held by the State Treasurer. In addition, the Office of the Treasurer has sought to maximize earnings on the assets held by the State Treasurer within the boundaries of prudent investment guidelines authorized by Article Four, Section 22 of the Connecticut Constitution and by Title 3 of the Connecticut General Statutes, thereby stabilizing taxpayer costs and securing the safety of benefit commitments established by various general statutes covering the State retirement systems and other retirement systems administered by the State.

The State of Connecticut also issues a Comprehensive Annual Financial Report (the CAFR) available from the State Comptroller's Office. The material presented herein is intended to expand on, but not to conflict with, the State's CAFR.

In management's opinion, the internal control structure of the Office of the Treasurer is adequate to ensure that the financial information in this report fairly presents the financial condition and results of operations of the funds that follow.

Sincerely,

Dave G. With-

Lawrence A. Wilson Interim Deputy Treasurer State of Connecticut

55 ELM STREET, HARTFORD, CONNECTICUT 06106-1773 • (860) 702-3000 An Equal Opportunity Employer

### STATEMENT OF NET POSITION

JUNE 30, 2018

ACCETC		TOTAL
ASSETS Investments in Securities, at Fair Value		
	\$	848 350 202
Cash Equivalents Asset Backed Securities	φ	848,350,292 260,195,751
Government Securities		3,661,833,904
Government Agency Securities		645,395,809
Mortgage Backed Securities		333,199,844
Corporate Debt		
Convertible Securities		4,284,257,522
Common Stock	1	31,231,555 5,183,972,585
	I	
Preferred Stock		47,298,568
Real Estate Investment Trust		327,950,185
Mutual Fund		1,529,260,099
Limited Liability Corporation		1,156,486
Limited Partnerships		7,214,573,687
Total Investments in Securities, at Fair Value	3	4,368,676,287
Cash		106,037,905
Receivables		0 470 400 740
Foreign Exchange Contracts		9,470,188,749
Interest Receivable		91,644,543
Dividends Receivable		30,685,155
Due from Brokers		164,244,578
Foreign Taxes		18,949,920
Securities Lending Receivable		1,319,239
Reserve for Doubtful Receivables		(2,166,899)
Total Receivables		9,774,865,285
Invested Securities Lending Collateral		2,605,088,450
Prepaid Expenses		1,073,767
Total Assets	4	6,855,741,694
LIABILITIES		
Payables		
Foreign Exchange Contracts		9,443,212,919
Due to Brokers		397,327,407
Income Distribution		1,383,916
Total Payables		9,841,924,242
Securities Lending Collateral		2,605,088,450
Accrued Expenses		16,671,208
Total Liabilities	1	2,463,683,900
NET POSITION HELD IN TRUST FOR PARTICIPANTS	\$ 3	4,392,057,794

The accompanying notes are an integral part of these financial statements.

#### STATEMENT OF CHANGES IN NET POSITION FOR THE FISCAL YEAR ENDED JUNE 30, 2018

ADDITIONS	TOTAL
OPERATIONS	
nvestment Income	ф <u>Б</u> (1, 000 Б (0,
Dividends	\$ 541,639,540
Interest	365,754,068
Other Income	5,501,172
Securities Lending	43,796,991
Fotal Income	956,691,771
Expenses	
Investment Advisory Fees	81,766,084
Custody and Transfer Agent Fees	3,305,439
Professional Fees	3,758,554
Security Lending Fees	1,500,325
Security Lending Rebates	28,791,169
Investment Expenses	8,832,799
Fotal Expenses	127,954,370
Net Investment Income	828,737,401
Net Increase (Decrease)	
in the Fair Value of Investments	
and Foreign Currency	1,484,659,450
and i breigh currency	1,404,009,400
Net Increase (Decrease) in Net Position	
Resulting from Operations	2,313,396,851
Jnit Transactions	
Purchase of Units by Participants	7,303,018,454
TOTAL ADDITIONS	9,616,415,305
DEDUCTIONS	
Administrative Expenses:	
Salary and Fringe Benefits	(4,322,002)
Distributions to Unit Owners:	
Income Distributed	(25,442,996)
	(20,442,330)
Jnit Transactions	
Redemption of Units by Participants	(7,742,462,527)
TOTAL DEDUCTIONS	(7,772,227,525)
Change in Net Position Held in Trust for Participants	1,844,187.780
Change in Net Position Held in Trust for Participants Net Position- Beginning of Period	<u> </u>

The accompanying notes are an integral part of these financial statements

#### STATEMENT OF CHANGES IN NET POSITION FOR THE FISCAL YEAR ENDED JUNE 30, 2017

ADDITIONS		TOTAL
OPERATIONS		
Investment Income	¢	F40 000 00F
Dividends	\$	510,388,935
Interest		308,532,848
Other Income		21,127,292
Securities Lending		27,124,737
Total Income		867,173,812
Expenses		
Investment Advisory Fees		77,960,003
Custody and Transfer Agent Fees		3,471,588
Professional Fees		2,852,273
Security Lending Fees		1,576,512
Security Lending Rebates		11,360,474
Investment Expenses		2,308,978
Total Expenses		99,529,828
Net Investment Income		767,643,984
Net Increase (Decrease)		
in the Fair Value of Investments		
and Foreign Currency		3,332,743,095
Net Increase (Decrease) in Net Position		4 400 207 070
Resulting from Operations		4,100,387,079
Unit Transactions Purchase of Units by Participants		2,687,016,102
TOTAL ADDITIONS		6,787,403,181
DEDUCTIONS		
Administrative Expenses:		(1.000.000)
Salary and Fringe Benefits		(4,000,655)
Distributions to Unit Owners:		
Income Distributed		(24,306,542)
Unit Transactions		
Redemption of Units by Participants		(3,457,145,731)
TOTAL DEDUCTIONS		(3,485,452,928)
Change in Net Position Held in Trust for Participants		3,301,950,253
Net Position- Beginning of Period		29,245,919,761
Net Position- End of Period		32,547,870,014
Net Fusition- Ella di Felloa	φ.	52,541,010,014

The accompanying notes are an integral part of these financial statements

#### NOTES TO FINANCIAL STATEMENTS

#### NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Combined Investment Funds (CIFs) are separate legally defined funds, which have been created by the Treasurer of the State of Connecticut (the "Treasurer") under the authority of the Connecticut General Statutes (CGS) Section 3-31b. The CIFs are open-end, unitized portfolios consisting of the Liquidity Fund, Alternative Investment Fund, Mutual Equity Fund, Core Fixed Income Fund, Inflation Linked Bond Fund, Emerging Market Debt Fund, High Yield Debt Fund, Developed Market International Stock Fund, Emerging Market International Stock Fund, Real Estate Fund, and the Private Investment Fund. The CIFs were established to provide a means for investing pension and other trust fund assets entrusted to the Treasurer in a variety of investment classes. The units of the CIFs are owned by these pension and trust funds. For financial reporting purposes of the State of Connecticut, the CIFs are considered to be external investment pools and are not reported in the State's combined financial statements. Instead, each fund type's investment in the CIF is reported as "equity in combined investment funds" in the State's combined balance sheet.

The Treasurer, as sole fiduciary of the CIFs, is authorized to invest in a broad range of fixed income and equity securities, as well as real estate properties, mortgages and private equity. This authority is restricted only by statute. Such limitations include prohibitions against investment in companies doing business in Iran and those doing business in Northern Ireland, but who have failed to implement the MacBride Principles (CGS Section 3–13h). Other legislation restricts the maximum aggregate investment in equity securities to 60% of the fair value of the Trust Funds.

The CIFs are not subject to regulatory oversight and are not registered with the Securities and Exchange Commission as an investment company.

The following is a summary of significant accounting policies consistently followed by the CIFs in the preparation of their financial statements.

#### A. NEW PRONOUNCEMENTS

There were no new pronouncements for the fiscal year ending June 30, 2018.

#### **B. SECURITY VALUATION**

Investments are stated at fair value for each of the CIFs as described below. For the Alternative Investment, Real Estate and Private Investment Funds substantially all of the investments, other than those in the Liquidity Fund, are shown at values that are carried at the general partner's June 30, 2018 fair value, or net asset value ("NAV") equivalent. The CIF's assets are fair valued quarterly by the General Partner and at such other times as determined by the General Partner and are based on Accounting Standards Codification ("ASC") 820 "Fair Value Measurements and Disclosures". The fair value the General Partner assigned to these investments is based upon available information and does not represent necessarily the amount that ultimately might be realized upon sale or maturity. Because of the inherent uncertainty of the fair value that would have been used had a ready market for the security existed, and the difference could be material. The General Partner is responsible for coordination and oversight of all investment valuations.

The Treasurer's staff reviews the valuations for all investments in these alternative asset classes to see that they are reasonable and consistent. Due to the inherent uncertainty of valuation, those estimated values may differ significantly from the values that would have been used had a ready market for the securities existed and the differences could be material.

#### Liquidity Fund

Existing money market vehicles are valued at amortized cost on a daily basis, which approximates fair value. A standard price hierarchy is utilized in the daily valuation of the Liquidity Fund.

Repurchase agreements held in the fund are collateralized at 100 percent of the securities' value. Such transactions are only entered into with primary government securities dealers who report directly to the Federal Reserve Bank of New York. When-issued securities held in the fund are fully collateralized by U.S Government securities and such collateral is in the possession of the CIF's custodial bank. The collateral is evaluated daily to ensure its fair value exceeds the current fair value of the repurchase agreements including accrued interest. The collateral is evaluated daily to ensure its fair value exceeds the current fair value exceeds the repurchase agreements including accrued interest.

#### Alternative Investment Fund

Investments in securities not listed on security exchanges and investments in limited partnerships, which comprise substantially all of the CIF's investments, are carried at the general partner's June 30, 2018 fair value, or net asset value ("NAV") equivalent. The Treasurer's staff reviews the estimated fair values provided by the investment advisors for reasonableness. In those instances where an advisor's value appears to be overstated, this estimated fair value is adjusted accordingly

#### Mutual Equity Fund

Securities traded on securities exchanges are valued at the last reported sales price on the last business day of the fiscal year. Corporate bonds and certain over-the-counter stocks are valued at the mean of bid and asked prices as furnished by broker-dealers.

#### Core Fixed Income Fund

Investments are valued based on quoted market prices when available. For securities that have no quoted market value, fair value is estimated based on yields currently available on comparable securities of issuers with similar credit ratings and maturities.

"When-issued" securities held in the CIF are fully collateralized by U.S Government securities and such collateral is in the possession of the CIF's custodial bank. The collateral is evaluated daily to ensure its market value exceeds the current market value of the instruments including accrued interest.

The Core Fixed Income Fund invests in Mortgage Backed Securities (MBSs) and Asset Backed Securities (ABSs), which are included in the Statement of Net Position. These are bonds issued by a special purpose trust that collects payments on an underlying collateral pool of mortgage or other loans and remits payments to bondholders. The bonds are structured in a series of classes or tranches, each with a different coupon rate and stated maturity date. Interest payments to the bondholders are made in accordance with the trust indentures and amounts received from borrowers in excess of interest payments and expenses are used to amortize the principal on the bonds. Such principal payments are made to retire the tranches of bonds in order of their stated maturity. Because mortgage prepayments are largely dependent on market interest rates, the ultimate maturity date of the bonds is unpredictable and is sensitive to changes in market interest rates, but is generally prior to the stated maturity date. At June 30, 2018, the CIF held MBSs of \$332,454,879 and ABSs of \$256,333,884.

Interest-only stripped mortgage backed securities (IOs), a specialized type of Collateralized Mortgage Obligation (CMO), are included as Mortgage Backed Securities on the Statement of Net Position. The cash flow on these investments is derived from the interest payments on the underlying mortgage loans. Prepayments on the underlying loans curtail these interest payments, reducing the value of the IOs and, as such, these instruments are extremely sensitive to changes in interest rates, which encourage or discourage such prepayments. At June 30, 2018 the CIF's holdings had a fair value of \$340,758 and a cost of \$690,898. The valuations were provided by the custodian.

Investments in non-U.S. fixed income securities are utilized on an opportunistic basis. Certain advisors within the Core Fixed Income Fund are authorized to invest in global fixed income securities.

#### Inflation Linked Bond Fund

Investments are valued based on quoted market prices when available. For securities that have no quoted market value, fair value is estimated based on yields currently available on comparable securities of issuers with similar credit ratings and maturities.

"When-issued" securities held in the CIF are fully collateralized by U.S Government securities and such collateral is in the possession of the CIF's custodial bank. The collateral is evaluated daily to ensure its market value exceeds the current market value of the instruments including accrued interest.

Investments in non-U.S. fixed income securities are utilized on an opportunistic basis. Certain advisors within the Inflation Linked Bond Fund are authorized to invest in global fixed income securities.

The Inflation Linked Bond Fund sometimes invests in Asset Backed Securities (ABSs), which are included in the Statement of Net Position. These are bonds issued by a special purpose trust that collects payments on an underlying

#### NOTES TO FINANCIAL STATEMENTS (Continued)

collateral pool of mortgage or other loans and remits payments to bondholders. The bonds are structured in a series of classes or tranches, each with a different coupon rate and stated maturity date. Interest payments to the bondholders are made in accordance with the trust indentures and amounts received from borrowers in excess of interest payments and expenses are used to amortize the principal on the bonds. Such principal payments are made to retire the tranches of bonds in order of their stated maturity. Because mortgage prepayments are largely dependent on market interest rates, the ultimate maturity date of the bonds is unpredictable and is sensitive to changes in market interest rates, but is generally prior to the stated maturity date. At June 30, 2018, the CIF held ABSs, consisting of swaps and resulting in a fair value of (\$600,841).

#### Emerging Market Debt Fund

Investments are valued based on quoted market prices when available. For securities that have no quoted market value, fair value is estimated based on yields currently available on comparable securities of issuers with similar credit ratings.

The Emerging Market Debt Fund invests in securities in emerging market countries that are either U.S. dollardenominated or issued in the local currency of the country. In addition to bond interest rate sensitivity, the local currency bonds' values will fluctuate with exchange rates.

"When-issued" securities held in the CIF are fully collateralized by U.S Government securities and such collateral is in the possession of the CIF's custodian. The collateral is evaluated daily to ensure its market value exceeds the current market value of the instruments including accrued interest.

The Emerging Market Debt Fund sometimes invests in Asset Backed Securities (ABSs), which are included in the Statement of Net Position. These are bonds issued by a special purpose trust that collects payments on an underlying collateral pool of mortgage or other loans and remits payments to bondholders. The bonds are structured in a series of classes or tranches, each with a different coupon rate and stated maturity date. Interest payments to the bondholders are made in accordance with the trust indentures and amounts received from borrowers in excess of interest payments and expenses are used to amortize the principal on the bonds. Such principal payments are made to retire the tranches of bonds in order of their stated maturity. Because mortgage prepayments are largely dependent on market interest rates, the ultimate maturity date of the bonds is unpredictable and is sensitive to changes in market interest rates, but is generally prior to the stated maturity date. At June 30, 2018, the CIF held ABSs, consisting of swaps and resulting in a fair value of \$3,479,670.

#### High Yield Debt Fund

Investments are valued based on quoted market prices when available. For securities that have no quoted market value, fair value is estimated based on yields currently available on comparable securities of issuers with similar credit ratings and maturities.

"When-issued" securities held in the fund are fully collateralized by U.S Government securities and such collateral is in the possession of the CIF's custodial bank. The collateral is evaluated daily to ensure its market value exceeds the current market value of the instruments including accrued interest.

Investments in non-U.S. fixed income securities are utilized on an opportunistic basis. Certain advisors within the High Yield Debt Fund are authorized to invest in global fixed income securities.

The High Yield Debt Fund invests in Mortgage Backed Securities (MBSs) and Asset Backed Securities (ABSs), which are included in the Statement of Net Position. These are bonds issued by a special purpose trust that collects payments on an underlying collateral pool of mortgage or other loans and remits payments to bondholders. The bonds are structured in a series of classes or tranches, each with a different coupon rate and stated maturity date. Interest payments to the bondholders are made in accordance with the trust indentures and amounts received from borrowers in excess of interest payments and expenses are used to amortize the principal on the bonds. Such principal payments are made to retire the tranches of bonds in order of their stated maturity. Because mortgage prepayments are largely dependent on market interest rates, the ultimate maturity date of the bonds is unpredictable and is sensitive to changes in market interest rates, but is generally prior to the stated maturity date. At June 30, 2018, the CIF held MBSs of \$744,964 and ABSs, consisting of swaps and resulting in a fair value of \$983,038.

#### Developed Market International Stock Fund

The Developed Market International Stock Fund at times may utilize foreign currency contracts to facilitate transactions in foreign securities and to manage the CIF's currency exposure. Contracts to buy are used to acquire exposure to foreign currencies, while contracts to sell are used to hedge the CIF's' investments against currency fluctuations. Also, a contract to buy or sell can offset a previous contract. Losses may arise from changes in the value of the foreign currency or failure of the counterparties to perform under the contracts' terms.

Investing in forward currency contracts may increase the volatility of the CIF's' performance. Price movements of currency contracts are influenced by, among other things, international trade, fiscal, monetary, and exchange control programs and policies; national and international political and economic events; and changes in worldwide interest rates. Governments from time to time intervene in the currency markets with the specific intent of influencing currency prices. Such intervention may cause certain currency prices to move rapidly. Additionally, the currency markets may be particularly sensitive to interest rate fluctuations.

The U. S. dollar value of forward foreign currency contracts is determined using forward currency exchange rates supplied by a quotation service

Investments in securities listed on security exchanges are valued at the last reported sales price on the last business day of the fiscal year; securities traded in the over-the-counter market and listed securities for which no sale was reported on that date are valued at the mean of the last reported bid and asked prices.

Certain cash held in non-U.S. dollar denominated trading accounts is non-interest bearing.

#### Emerging Market International Stock Fund

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Investments in securities listed on security exchanges are valued at the last reported sales price on the last business day of the fiscal year; securities traded in the over-the-counter market and listed securities for which no sale was reported on that date are valued at the mean of the last reported bid and asked prices.

Certain cash held in non-U.S. dollar denominated trading accounts is non-interest bearing.

#### Real Estate Fund

Investments in securities not listed on security exchanges and investments in trusts, limited partnerships, and annuities, which comprise substantially all of the CIF's investments, are carried at the general partner's June 30, 2018 fair value, or net asset value ("NAV") equivalent. The Treasurer's staff reviews estimated fair values provided by the investment advisors for reasonableness. In those instances where an advisor's value appears to be overstated, this estimated fair value is adjusted accordingly.

#### Private Investment Fund

Investments in securities not listed on security exchanges and investments in limited partnerships and limited liability corporations, which comprise substantially all of the CIF's investments, are carried at the general partner's June 30, 2018 fair value, or net asset value ("NAV") equivalent. The Treasurer's staff reviews estimated fair values provided by the investment advisors for reasonableness. In those instances where an advisor's value appears to be overstated, this

estimated fair value is adjusted accordingly.

#### C. INVESTMENT TRANSACTIONS AND RELATED INCOME

Investment transactions are accounted for on a trade date basis. Dividend income is recognized as earned on the ex-dividend date. Interest income is recorded on the accrual basis as earned. Realized gains and losses are computed on the basis of the average cost of investments sold. Such amounts are calculated independent of and are presented as part of the Net Increase (Decrease) in Fair value of Investments on the Statement of Changes in Net Position. Realized gains and losses on investments held more than one fiscal year and sold in the current year were included as a change in the fair value of investments reported in the prior year(s) and the current year. Unrealized gains and losses represent the difference between the fair value and the cost of investments. The increase (decrease) in such difference is also accounted for in the Net Increase (Decrease) in Fair Value of Investments. In the CIF's' cost basis records, premiums are amortized using the straight-line method that approximates the interest method.

Dividends earned by the Private Investment, Real Estate and Alternative Investment Funds relate to investments that are not listed on security exchanges. Such dividends are recognized as income when received, generally net of advisory fees.

#### D. FOREIGN CURRENCY TRANSLATION

The value of investments, assets and liabilities denominated in currencies other than U.S. dollars are translated into U.S. dollars based upon appropriate fiscal year end foreign exchange rates. Purchases and sales of foreign investments and income and expenses are converted into U.S. dollars based on currency exchange rates prevailing on the respective dates of such transactions. The CIFs do not isolate that portion of the results of operations arising from changes in the exchange rates from that portion arising from changes in the market prices of securities.

#### E. SHARE TRANSACTIONS AND PRICING

All unit prices are determined at the end of each month based on the net asset value of each CIF divided by the number of units outstanding. Purchases and redemptions of units are based on the prior month end price and are generally processed on the first business day of the month.

#### F. EXPENSES

Expenses of the CIFs, excluding certain management fees as discussed in more detail in note 1J, are recognized on the accrual basis and are deducted in calculating net investment income and net asset value on a monthly basis. Each of the CIFs bears its direct expenses, such as investment advisory fees, and, in addition, each of the CIFs are allocated a portion of the overhead expenses of the Pension Funds Management Division of the Office of the State Treasurer, which services the CIFs. These expenses include salary and fringe benefit costs and other administrative expenses. Certain of these costs are allocated among the CIFs based on relative net asset values. Other costs are charged directly based on the specific duties of personnel.

#### G. DISTRIBUTIONS

Distributions to unit holders of the CIFs were discontinued after September 30, 2013.

#### H. DERIVATIVE FINANCIAL INSTRUMENTS

GASB Statement Number 53 Accounting and Financial Reporting for Derivative Instruments, requires that the fair value of financial arrangements called derivatives or derivative instruments be reported in the financial statements. GASB defines a derivative instrument as a financial instrument or other contract with all of the following characteristics: a) It has one or more reference rates and (2) one or more notional amounts or payment provisions or both. b) It requires no initial net investment or an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors. c) Its terms require or permit net settlement, it can readily be settled net by a means outside the contract, or it provides for delivery of an asset that puts

#### NOTES TO FINANCIAL STATEMENTS (Continued)

the recipient in a position not substantially different from net settlement.

For the fiscal year ended June 30, 2018, the CIF maintained positions in a variety of such securities that are all reported at fair value on the Statement of Net Position. The following is a listing of such securities:

#### Adjustable Rate Securities:

CIF	Cost	Fair Value
Liquidity	\$1,325,379	\$1,324,919
Core Fixed Income	666,937,216	663,904,569
Inflation Linked Bond	17,840,805	17,752,483
Emerging Market Debt	7,199,855	6,752,859
High Yield Debt	38,130,915	35,029,907
Asset Backed Securities:		
CIF	Cost	Fair Value
Core Fixed Income	\$256,697,037	\$256,333,884
High Yield Debt	936,982	983,038
Mortgage Backed Securities	, Net of CMO's:	
CIF	Cost	Fair Value
Core Fixed Income	\$270,816,526	\$269,165,400
High Yield Debt	762,170	744,965
CMO's:		
CIF	Cost	Fair Value
Core Fixed Income	\$65,605,086	\$63,289,479
TBA's:		
CIF	Cost	Fair Value
Core Fixed Income	\$140,344,608	\$140,844,075
Interest Only:		
CIF	Cost	Fair Value
Core Fixed Income	\$690,898	\$340,758
Options:		
CIF	Cost	Fair Value
Inflation Linked Bond	(\$282,350)	(\$178,733)

The Inflation Linked Bond Fund held futures with a notional cost of \$6,799,842 and an unrealized loss of \$38,418 reported in the Due from Brokers in the Statement of Net Position. The Core Fixed Income Fund held futures with a notional cost of \$109,623,748 and an unrealized loss of \$495,730 reported in the Due from Brokers in the Statement of Net Position. The High Yield Debt Fund held futures with a negative notional cost of (\$3,211,990) and an unrealized loss of \$32,364 reported in the Due from Brokers in the Statement of Net Position. Emerging Market Debt Fund held futures with a negative notional cost of (\$29,220,750) and an unrealized gain of \$15,187 reported in the Due from Brokers in the Statement of Net Position. The Developed Market International Stock also held futures with a notional cost of \$61,021,451 and an unrealized loss of \$3,414,256 reported in the Due from Brokers in the Statement of Net Position.

The Liquidity, Core Fixed Income, Inflation Linked, Emerging Market Debt, High Yield Debt, Developed Market International Stock and Emerging Market International Stock Funds were invested in foreign exchange contracts. The specific nature of these investments is discussed more fully in the foreign exchange contract note for each respective fund, where appropriate. These financial instruments are utilized for trading and other purposes. Those that are used for other than trading purposes are foreign exchange contracts, which can be used to facilitate trade settlements, and may serve as foreign currency hedges. The credit exposure resulting from such contracts is limited to the recorded fair value of the contracts on the Statement of Net Position.

The remaining such securities are utilized for trading purposes and are intended to enhance investment returns. All positions are reported at fair value and changes in fair value are reflected in income as they occur. The CIF's' credit exposure resulting from such investments is limited to the recorded fair value of the derivative financial instruments.

The Core Fixed Income, Developed Market International Stock, Mutual Equity, Emerging Market Debt, and the Emerging Market International Stock Funds may utilize derivatives indirectly through participation in mutual funds. These

mutual funds may hold derivatives from time to time. Such derivatives may be used for hedging, investment and risk management purposes. These transactions subject the investor to credit and market risk.

#### I. COMBINATION/ELIMINATION ENTRY

The financial statements depict a full presentation of each of the CIF. However, one of these funds, the Liquidity Fund, is owned both directly by the pension plans and trust funds which have accounts in the Liquidity Fund, and also indirectly because each of the other CIF has an account with the Liquidity Fund. As a result, elimination entries are presented for the purpose of netting out balances and transactions relating to the ownership of the Liquidity Fund by the other CIF. The combined presentation totals to the overall net assets owned by the pension plans and trust funds. In order to help the Liquidity Fund managers better manage their cash balances, realized gains (losses) are no longer included in the Liquidity Fund income sweep.

#### J. FEES AND REALIZED GAINS

Investment advisory fees incurred for certain investments in the Alternative Investment, Core Fixed Income, Private Investment and Real Estate Funds are generally charged to the entity in which the CIF has been invested. In such cases, these amounts are either capitalized in the cost basis of the investment on a cash basis and become a component of unrealized gain (loss) or are netted against the corresponding income generated. Certain other fees are incurred directly by the CIF and are expensed. These expensed amounts are accrued and the expense is reflected as Investment Advisory Fees on the Statement of Changes in Net Position. The appropriate treatment is determined depending on the terms of the investment agreement. Capitalized fees are not separately presented on the Statement of Changes in Net Position. These fees are borne by the partners in their respective shares. The following is a listing of the Funds total fees for the fiscal year ended June 30, 2018:

CIF	Netted	Capitalized	Expensed	Total
Alternative Investment	\$ 9,766,209	\$ 1,621,418	\$ -	\$ 11,387,627
Private Investment	12,860,261	16,185,732	942,012	29,988,004
Real Estate	10,287,038	6,237,958	6,850,149	23,375,145

Periodically the Private Investment and Real Estate Funds may receive security distributions in lieu of cash. These securities are included as Common Stock and Real Estate Investment Trust, respectively on the Statement of Net Position. When one of these individual securities is sold the realized gain or loss is included in the Net Increase (Decrease) in the Fair Value of Investments presented on the Statement of Changes in Net Position. The Private Investment Fund incurred realized gain of \$11,455,354 for such transactions for the fiscal year ended June 30, 2018.

The Core Fixed Income, Emerging Market Debt, Developed Market International Stock and the Emerging Market International Stock funds include investments in mutual funds. Fees incurred from these investments are deducted from the operations of the CIF and are not separately presented on the Statement of Changes in Net Position. The following is a listing of the corresponding fees incurred for the fiscal year ended June 30, 2018:

CIF		Amount
Core Fixed Income	\$	23,092
Emerging Market Debt		172,634
Developed Market Internation	nal Stock	449,749
Emerging Market Internation	al Stock	1,230,557

Investment advisory fees for the Liquidity, Mutual Equity, Core Fixed Income, Inflation Linked Bond, Emerging Market Debt, High Yield Debt, Developed Market International Stock and the Emerging Market International Stock Funds, except those noted above are estimated monthly based on periodic reviews of asset values. Accordingly, the amounts listed as Investment Advisory Fees on the Statement of Changes in Net Position represent estimates of annual management fee expenses.

#### K. RECLASSIFICATIONS

Certain prior year amounts have been reclassified to conform to the current year presenttion. Net Realized Gain (Loss) and Net Change in Unrealized Gain (Loss) on investments and foreign currency is now presented as Net Increase (Decrease) in the Fair Value of Investments and Foreign Currency.

#### L. RELATED PARTY AND OTHER TRANSACTIONS

There were no related party transactions during the fiscal year. Additionally, there were no "soft dollar" transactions. Soft dollar transactions result from arrangements whereby firms doing business with organizations such as the Treasury arrange for third parties to provide other services in lieu of cash payment. These arrangements tend to obscure the true cost of operations and can result in potential overpayment for services. Such transactions have been prohibited by the Treasurer.

#### M. ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

#### NOTE 2: DEPOSITS, INVESTMENTS AND SECURITIES LENDING PROGRAM

#### Deposits:

The CIFs minimize custodial credit risk by maintaining certain restrictions set forth in the Investment Policy Statement. Custodial credit risk is risk associated with the failure of a depository financial institution. In the event of a depository financial institution's failure the CIFs would not be able to recover its deposits or collateralized securities that are in the possession of the outside parties. The CIFs utilize a Liquidity Account that is a cash management pool investing primarily in highly liquid money market securities such as commercial paper, certificates of deposit, bank notes and other cash equivalents, asset backed securities, and floating rate corporate bonds. Deposits shall consist of cash instruments generally maturing in less than one year and having a quality rating, by at least one widely recognized rating agency, of A-1 or P-1 and earn interest at a rate equal to or better than the International Business Communications ("IBC") First Tier Institutions-Only Rated Money Fund Report Index.

At June 30, 2018, the reported amount of Funds deposits were \$106,037,905 and the bank balance was \$106,037,905. Of the bank amount, \$106,037,905 was uncollateralized and uninsured. Through the Securities Lending Program, \$2,609,094,193 was collateralized with securities held by the counterparty's trust department or agent in the State's name.

#### Investments:

The CIFs measure and record their investments using fair value measurement guidelines established by GAAP. The guidelines recognize a three tired fair value hierarchy, as follows: Level 1: Quoted prices for identical investments in active market; Level 2: Observable inputs other than quoted market price; and, Level 3 Unobservable inputs. At June 30, 2018 the CIF have the following recurring fair value measurements:

	Fair Value Measurements				
vestments by Fair Value Level	Total	Level 1	Level 2	Level 3	
Cash Equivalents	\$ 848,350,291	\$ 47,550	\$ 848,302,741	\$-	
Asset Backed Securities	260,195,751	-	260,195,751	-	
Government Securities	3,661,833,905	1,264,151,788	2,397,682,117	-	
Government Agency Securities	645,395,809	-	645,395,809	-	
Mortgage Backed Securities	333,199,844	-	333,199,844	-	
Corporate Debt	4,284,257,522	-	4,158,574,127	125,683,395	
Convertible Securities	31,231,556	-	31,231,556	-	
Common Stock	15,183,972,584	15,183,228,935	-	743,649	
Preferred Stock	47,298,568	28,737,222	18,561,346	-	
Real Estate Investment Trust	327,950,185	266,669,498	61,280,687	-	
Mutual Fund	1,529,260,099	1,529,260,099	-	-	
Limited Partnerships (publicly traded)	1,948,495	1,948,495	-	-	
Total	\$27,154,894,609	\$18,274,043,587	\$8,754,423,978	\$126,427,044	

#### COMBINED INVESTMENT FUNDS NOTES TO FINANCIAL STATEMENTS (Continued) Investments Measured at the Net Asset Value(NAV) Unfunded Redemption Redemption Commitments Frequency **Notice Period** Limited Liability Corporation Illiquid N/A 1,156,486 Limited Partnerships 2,346,469,160 7,212,625,192 Illiquid N/A \$ 2,346,469,160 Total 7,213,781,678 Total Investments in Securities at Fair Value \$34,368,676,287

Pursuant to the Connecticut General Statutes, the Treasurer is the principal fiduciary of the plans and trusts, authorized to invest in a broad range of equity and fixed income securities, as well as real estate properties, mortgages and private equity. The CIF minimize credit risk, the risk of loss due to the failure of the security issuer or backer, in accordance with a comprehensive Investment Policy Statement (IPS), as developed by The Office of the Treasurer and the State's Investment Advisory Council (IAC), that provides policy guidelines for the plans and trusts and the CIF and includes an asset allocation plan. The asset allocation plan's main objective is to maximize investment returns over the long term at an acceptable level of risk. There have been no violations of these investment restrictions during the 2018 fiscal year.

The CIF's concentration of credit risk is the risk attributed to the magnitude of an investment in a single issuer. There are no restrictions in the amount that can be invested in Government Securities and Government Agency Securities.

The following table provides average credit quality and exposure levels information on the credit ratings associated with Funds investments in debt securities:

	Fair Value	Percentage of Fair Value
Aaa	\$2,476,345,182	24.60%
Aa	683,693,293	6.79
A	822,926,207	8.18
Ваа	844,884,432	8.39
Ва	842,977,539	8.38
В	950,295,970	9.44
Саа	444,618,246	4.42
Са	3,979,710	0.04
С	30,106,217	0.30
Prime 1	698,275,800	6.94
Prime 2	70,027,466	0.70
Prime 3	20,680,782	0.21
U.S. Government fixed income securities (not rated)	159,771,569	1.59
Non US Government fixed income securities (not rated)	323,136,793	3.21
Not Rated	1,692,745,470	16.82
	\$10,064,464,677	100.00%

The investments in the Private Equity, Real Estate and Alternative Investment Funds generally utilize investment vehicles such as annuity contracts, common stocks, limited partnerships and trusts to comply with investment guidelines against direct ownership of such investment assets.

The investments of the Liquidity, Mutual Equity, Core Fixed Income, Inflation Linked Bond, Emerging Market Debt, High Yield Debt, Developed Market International Stock and the Emerging Market International Stock Funds have securities registered under the Bank of New York Mellon's nominee name MAC & Co. and held by a designated agency of the Pension Plans and Trust Funds of the State of Connecticut, or bearer and held by a designated agency of the Pension Plans and Trust Funds of the State of Connecticut.

Investments of cash collateral received and invested under securities lending arrangements are registered and maintained by a third party administrator exclusively for the CIF. In circumstances where securities or letters of credit are received as collateral under securities lending arrangements, the collateral is held by the master custodian in a commingled pool in the third party administrator's name as trustee. Securities Lending collateral of \$2,609,094,193 is invested in various short term repurchase agreements which are classified as cash equivalents.

The following table provides information about the interest rate risks associated with the CIF investments. Interest rate risk is the risk that the value of fixed income securities will decline because of rising interest rates. The prices of fixed income securities with a longer time to maturity tend to be more sensitive to changes in interest rates and therefore, more volatile than those with shorter maturities.

#### NOTES TO FINANCIAL STATEMENTS (Continued)

Investment Managers that manage the CRPTF portfolio are given full discretion to manage their portion of CRPTF assets within their respective guidelines and constraints. The guidelines and constraints require each manager to maintain a diversified portfolio at all times. In addition, each core manager is required to maintain a target duration that is similar to its respective benchmark which is typically the Barclay's Aggregate – an intermediate duration index.

The investments include certain short-term cash equivalents which include certificate of deposits and collateral, various long term items, and restricted assets by maturity in years:

			Investment Matu	rities (in Years)	
Investment Type	Fair Value	Less Than 1	<u>1 - 5</u>	<u>6 - 10</u>	More Than 10
Cash Equivalents	\$848,350,291	\$848,350,291	\$0	\$0	\$0
Asset Backed Securities	260,195,751	(19,989)	90,405,563	80,631,811	89,178,366
Government Securities	3,661,833,905	182,297,513	1,502,443,059	813,202,501	1,163,890,832
Government Agency Securities	645,395,809	34,991,721	43,568,303	29,318,302	537,517,483
Mortgage Backed Securities	333,199,844	3,546,423	56,109,728	30,388,684	243,155,009
Corporate Debt	4,284,257,522	1,366,686,483	1,540,615,356	1,015,629,817	361,325,866
Convertible Debt	31,231,555	558,610	7,393,089	10,342,002	12,937,854
	\$10,064,464,677	\$2,436,411,052	\$3,240,535,098	\$1,979,513,117	\$2,408,005,410

Exposure to foreign currency risk results from investments in foreign currency-denominated equity or fixed income securities. As a means of limiting its exposure, the CIF utilize a strategic hedge ratio of 50% for the Developed Market International Stock Fund ("DMISF"). This strategic hedge ratio represents the neutral stance or desired long-term exposure to currency for the DMISF. To implement this policy, currency specialists actively manage the currency portfolio as an overlay strategy to the equity investment managers. These specialists may manage the portfolio passively or actively depending on opportunities in the market place. While managers within the fixed income portion of the portfolio are allowed to invest in non-U.S. dollar denominated securities, managers are required to limit that investment to a portion of their respective portfolios. The following table provides information on deposits and investments held in various foreign currencies, which are stated in U.S. dollars. Negative amounts are reflective of short positions.

				Fixed Income Securities				Equities		
Foreign Currency	Total	Cash	Cash Equiv Collateral	Government Securities	Corporate Debt	Asset Backed	Mortgage Backed	Common Stock	Preferred Stock	Real Estate Investment Trust
Argentine Peso	\$ 8,484,181			\$7,676,322	\$680,417		\$ -	\$ -	\$ -	\$ -
Australian Dollar	413,204,983	901,512	-	74,622,289	7,448,931	-	-	313,811,408	-	16,420,843
Brazilian Real	144,228,929	5.704	-	92.492.712	-	61.056	-	51,150,029	519.428	-
Canadian Dollar	146,323,095	2,394,985	10,978,889	27,528,031	-	(23,588)	-	104,690,134	-	754,644
Chilean Peso	17,905,293	_,	-	13,084,895	-	(,,	-	4,820,398	-	-
Colombian Peso	63,859,354	908,644	-	61,342,455	1,510,205	-	-	98,050	-	-
Czech Koruna	11,587,537	130	-	11,587,407	-	-	-	-	-	-
Danish Krone	114,297,522	201,087	-	1,063,428	-	-	-	113,033,007	-	-
Dominican Rep Peso		- ,		4,451,925				-,,		
Egyptian Pound	23,882,309	17,404,955	-	4,591,336	-	-	-	1,886,018	-	-
Euro Currency	2,263,543,707	9,332,778	-	230,051,297	19,916,647	(132,690)	-	1,974,339,070	18,874,522	11,162,083
Ghanaian Cedi	1,426,597	-	-	-	1,426,597	-	-	-	-	-
Hong Kong Dollar	671,898,232	(150,639)		-	-	-	-	668,240,479	-	3,808,392
Hungarian Forint	63,075,632	810,543	-	24,459,311	-	-	-	37,805,778	-	-
Iceland Krona	2,255	2,255	-	-	-	-	-	-	-	-
Indian Rupee	5,949,481	-	-	270,123	5,679,358	-	-	-	-	-
Indonesian Rupiah	91,767,909	1,759,753	-	41,373,277	45,930,845	-	-	2,704,034	-	-
Israeli Shekel	42,264,878	16,962	-	-	-	-	-	42,247,916	-	-
Japanese Yen	1,370,814,707	5,610,494	-	50,965,619	-	120,093	-	1,307,198,837	-	6,919,664
Kazakhstan Tenge	6,025,833				6,025,833					
Georgian Lari	1,847,722	-	-	-	1,847,722					
Malaysian Ringgit	87,957,020	607,444	-	87,084,498	-	9,167	-	255,911	-	-
Mexican Peso	183,022,363	1,065,733	-	176,104,481	5,929,393	(150,665)	-	73,421	-	-
New Zealand Dollar	110,392,263	499,070	-	94,017,769	694,377	(94,957)	-	15,276,004	-	-
Nigerian Naira	8,842,336	3,109,127	-	-	5,562,256	-	-	170,953	-	-
Norwegian Krone	49,242,360	85,444	-	-	236,922	-	-	48,919,994	-	-
Peruvian Nouveau So	ol 30,029,278	22,000	-	23,590,298	6,416,980	-	-	-	-	-
Philippine Peso	1,446,583	-	-	1,446,583	-	-	-	-	-	-
Polish Zloty	162,453,211	259,012	-	90,006,543	-	1,382	-	72,186,274	-	-
Pound Sterling	1,223,683,687	2,351,471	106,048	258,745,031	4,874,440	(71,123)	985,228	939,361,941	-	17,330,651
Romanian Leu	14,262,606	-	-	14,262,606	-	-	-	-	-	-
Russian Ruble	71,739,618	122,350	-	71,617,268	-	-	-	-	-	-
Singapore Dollar	131,882,582	79,692	-	25,129,212	-	-	-	103,889,266	-	2,784,412
South African Rand	184,298,453	529,731	-	85,516,065	2,985,382	-	-	95,267,275	-	-
South Korean Won	358,178,755	69,083	-	-	-	-	-	351,268,023	6,841,649	-
Sri Lanka Rupee	3,899,479	-	-	-	3,899,479	-	-	-	-	-

#### NOTES TO FINANCIAL STATEMENTS (Continued)

Swedish Krona	160,132,513	198,008	-	4,212,451	-	-	-	155,722,054	-	-
Swiss Franc	436,610,806	507,137	-	-	-	-	-	436,103,669	-	-
Thailand Baht	84,762,801	309,518	-	36,891,605	-	-	-	47,561,678	-	-
Turkish Lira	51,193,707	76	-	35,943,026	-	-	-	15,250,605	-	-
Ukraine Hryvana	8,827,003				8,827,003					
Uruguayan Peso	3,492,910	-	-	3,492,910	-	-	-	-	-	-
	\$8,833,192,415	\$49,141,501	\$11,084,937	\$1,653,620,773	\$129,892,787	(\$281,325)	\$985,228 \$	6,903,332,226	\$26,235,599 \$	\$59,180,689

#### **Securities Lending:**

Certain of the CIF engage in securities lending transactions to provide incremental returns. The CIF are permitted to enter into securities lending transactions pursuant to Section 3-13d of the Connecticut General Statutes. The CIF's third party securities lending administrator is authorized to lend available securities to authorized broker-dealers and banks subject to a formal loan agreement.

During the period ended June 30, 2018, the Agent lent certain securities and received cash or other collateral as indicated on the Agency Securities Lending Agreement. The Agent did not have the ability to pledge or sell collateral securities delivered therefore absent a borrower default. Borrowers were required to deliver collateral for each loan equal to at least 102% of the fair value of domestic loaned securities or 105% of the fair value of foreign loaned securities.

Pursuant to the Agency Securities Lending Agreement, the Agent has an obligation to indemnify the CIFs in the event any borrower failed to return the loaned securities or pay distributions thereon. There were no such failures by any borrowers to return loaned securities or pay distributions thereon during the fiscal year that resulted in a declaration or notice of default by a borrower. During the fiscal year, the CIF and the borrowers maintained the right to terminate all securities lending transactions upon notice. The cash collateral received on each loan is eligible for investment in cash, securities guaranteed by the U. S. government or any agency of the U. S. government, securities guaranteed by a sovereign government that participates in the General Arrangements to Borrow (Group of 10 or G10) and rated AA or better, or reverse transactions on an overnight or term basis. On June 30, 2018, the CIF had no credit risk exposure to borrowers. The fair value of collateral held for the CIF as of June 30, 2018 was \$2,605,088,450 as cash. The fair value of securities on loan for the CIF as of June 30, 2018 was \$2,556,581,745 as cash.

Under ordinary circumstances, the net weighted average maturity (weighted average maturity of assets less the weighted average maturities of liabilities) will not exceed 60 days. As of June 30, 2018 the cash collateral investment pool had an average duration of 21.06 days and an average weighted final maturity 47.26 days.

The fair value of collateral held and the fair value of securities on loan including \$9,660 million pending loans within DMISF (to be collateralized) are as follows for the CIF as of June 30, 2018:

CIF	Fair Value of Collateral	Fair Value of Securities Lent
Mutual Equity	\$883,208,392	\$862,933,310
Core Fixed Income	166,157,885	162,980,124
Inflation Linked Bond	412,231,077	405,410,437
Emerging Market Debt	38,667,975	37,931,738
High Yield Debt	577,176,107	566,956,356
Developed Market International Stock	107,963,198	100,975,388
Emerging Market International Stock	429,343,816	419,394,392
	\$2 614 748 450	\$2 556 581 745

Investments made using the cash collateral received from security loans were included in the Statement of Net Position. The fair value of these amounts is as follows:

	Cash
CIF	Equivalents
Mutual Equity	\$ 884,566,472
Core Fixed Income	166,413,385
Inflation Linked Bond	412,864,948
Emerging Market Debt	38,727,435
High Yield Debt	578,063,602
Developed Market International Stock	98,454,340
Emerging Market International Stock	430,004,011
Total	\$ 2,609,094,193

These investments are held in a separate accounting consisting of individual securities custodied by the Agent in the name of the CIF. The above total amounts were included on the Statement of Net Position in "Invested Securities Lending Collateral".

#### NOTE 3: PURCHASES AND SALES OF INVESTMENT SECURITIES

For the period ended June 30, 2018, the aggregate cost of purchases and proceeds from sales of investment securities were as follows:

CIF	Purchases	Sales
Alternative Investment	\$1,845,829,579	\$1,482,313,559
Mutual Equity	2,445,066,510	2,574,906,330
Core Fixed Income	11,788,088,678	11,001,997,189
Inflation Linked Bond	1,454,531,855	1,416,476,818
Emerging Market Debt	2,329,847,083	1,906,313,513
High Yield Debt	1,973,657,655	1,815,766,884
Developed Market International Stock	5,665,009,894	5,272,055,787
Emerging Market International Stock	4,805,230,053	5,125,097,700
Real Estate	714,975,644	749,940,100
Private Investment	1,140,300,109	1,363,714,584

The above amounts include the effect of cost adjustments processed during the year.

# NOTE 4: UNREALIZED APPRECIATION AND DEPRECIATION ON INVESTMENTS AND FOREIGN EXCHANGE CONTRACTS

At June 30, 2018, the gross appreciation of investment securities in which there was an excess of fair value over cost, the gross depreciation of investment securities in which there was an excess of cost over fair value and the resulting net appreciation (depreciation) by the CIF were as follows:

CIF	Gross Appreciation	Gross Depreciation	Net Appreciation (Depreciation)
Liquidity Investment Fund	\$76	\$658	\$(582)
Alternative Investment Fund	290,189,982	9,900,381	280,289,601
Mutual Equity	3,034,619,644	171,139,892	2,863,479,752
Core Fixed Income	11,602,685	52,484,276	(40,881,591)
Inflation Linked Bond	25,705,653	33,089,568	(7,383,915)
Emerging Market Debt	7,595,013	165,682,016	(158,087,003)
High Yield Debt	31,495,183	104,397,507	(72,902,324)
Developed Market International Stock	1,382,609,297	341,622,229	1,040,987,068
Emerging Market International Stock	438,893,571	165,550,687	273,342,884
Real Estate	417,674,738	103,283,769	314,390,969
Private Investment Fund	719,166,569	294,050,094	425,116,475

#### **NOTE 5: FOREIGN EXCHANGE CONTRACTS**

From time to time the Liquidity, Core Fixed Income, Inflation Linked Bond Fund, Emerging Market Debt, High Yield Debt Fund, Developed Market International Stock, Emerging Market International Funds utilize foreign currency contracts to facilitate transactions in foreign securities and to manage the CIF's currency exposure. Contracts to buy are used to acquire exposure to foreign currencies, while contracts to sell are used to hedge the CIF's investments against currency fluctuations. Also, a contract to buy or sell can offset a previous contract. Losses may arise from changes in the value of the foreign currency or failure of the counterparties to perform under the contracts' terms.

The U. S. dollar value of forward foreign currency contracts is determined using forward currency exchange rates supplied by a quotation service.

Investing in forward currency contracts may increase the volatility of the CIF's performance. Price movements of currency contracts are influenced by, among other things, international trade, fiscal, monetary, and exchange control programs and policies; national and international political and economic events; and changes in worldwide interest rates. Governments from time to time intervene in the currency markets with the specific intent of influencing currency prices. Such intervention may cause certain currency prices to move rapidly. Additionally, the currency markets may be particularly sensitive to interest rate fluctuations.

At June 30, 2018, the CIF had recorded unrealized gains (losses) from open forward currency contracts as follows:

Core Fixed Income Fund:						
Local Currency Name	Value	Unrealized Gain/(Loss)				
Contracts to Buy:						
Australian Dollar	\$13,898,548	\$(133)				
Canadian Dollar	3,045,121	(46,287)				
Euro Currency Unit	5,539,508	(13,745)				
Japanese Yen	6,904,031	(45,955)				
Mexican Peso	979,258	44,162				
New Zealand Dollar	5,958,501	(97,097)				
Norwegian Krone	8,161,216	(69,567)				
Polish Zloty	14,767,688	(63,003)				
Pound Sterling	14,157,235	(156,327)				
Swedish Krona	7,899,241	(197,472)				
	81,310,347	(645,424)				
Contracts to Sell:						
Australian Dollar	29,907,906	653,104				
Canadian Dollar	26,504,324	323,620				
Euro Currency Unit	6,299,787	(394,838)				
Japanese Yen	2,995,329	22,743				
Mexican Peso	22,610,770	(1,022,035)				
New Zealand Dollar	37,733,664	1,419,640				
Polish Zloty	26,931,437	758,698				
Singapore Dollar	23,648,206	453,326				
	176,631,423	2,214,258				
Grand total	\$257,941,770	\$1,568,834				

#### Financial Statement Amounts:

	Receivable	Payable	Net
FX Value	\$257,941,770	\$257,941,770	\$-
Unrealized Gain(Loss)	(645,424)	2,214,258	1,568,834
Net	\$257,296,346	\$255,727,512	\$1,568,834

#### Inflation Linked Bond Fund:

ination Linkeu Bonu Funu.		
Local Currency Name	Value	Unrealized Gain/(Loss)
Contracts to Buy:		
Australian Dollar	\$1,364,366	\$(10,660)
Canadian Dollar	12,836,202	(139,763)
Colombian Peso	1,122,731	(6,641)
Danish Krone	454,936	(2,664)
Euro Currency Unit	29,080,463	48,246
Japanese Yen	53,815,225	(316,247)
Mexican Peso	9,003,290	177,284
New Zealand Dollar	6,517,104	5,629
Norwegian Krone	18,099,783	(154,283)
Pound Sterling	202,764,580	(1,860,810)
Swedish Krona	45,756,458	(1,097,502)
	380,815,138	(3,357,411)
Contracts to Sell:		
Australian Dollar	49,397,106	1,067,526
Canadian Dollar	2,606,565	33,692
Colombian Peso	7,011,982	186,994
Euro Currency Unit	56,231,409	139,524
Japanese Yen	30,224,448	334,735
Mexican Peso	25,745,554	(908,751)
New Zealand Dollar	65,364,279	2,217,508
Polish Zloty	2,023,476	57,004
Pound Sterling	31,110,039	(79,006)
Swedish Krona	764,705	(1,527)
	270,479,563	3,047,699
Grand total	\$651,294,701	\$(309,712)

### NOTES TO FINANCIAL STATEMENTS (Continued)

Financial Statement Amounts:						
	Receivable	Payable	Net			
FX Value	\$651,294,701	\$651,294,701	\$ -			
Unrealized Gain(Loss) Net	<u>(3,357,411)</u> \$647,937,290	<u>3,047,699</u> \$648,247,002	(309,712) (\$309,712)			
Net	\$047,937,290	\$040,247,002	(\$309,712)			
Emerging Market Debt F	Fund:					
Local Currency Name	Value	Unrealized Gain/(Loss)				
Contracts to Buy: Argentina Peso	¢5 467 701	¢(450 192)				
Australian Dollar	\$5,467,791 4,920,122	\$(450,182) (1,598)				
Brazil Real	41,882,914	(451,787)				
Chilean Peso	21,183,353	(689,405)				
Chinese Yuan Renminbi	3,004,823	(89,866)				
Colombian Peso	18,459,278	(736,374)				
Czech Koruna Dominican Rep Peso	38,797,322 2,080,000	(986,020) 3,352				
Egyptian Pound	3,896,770	172,226				
Ghanaian Cedi	3,062,310	(112,497)				
Hungarian Forint	15,389,813	(615,025)				
Indian Rupee	8,906,369	(192,902)				
Indonesian Rupiah Israeli Shekel	4,961,592	(105,411)				
Kazakhstan Tenge	5,293,772 9,038,149	(101,498) (181,510)				
Malaysian Ringgit	1,222,768	(17,704)				
Mexican Peso	27,421,962	597,264				
Nigerian Naira	4,079,079	190,165				
Peruvian Sol	2,110,468	(35,312)				
Philippines Peso Polish Zloty	3,000,000 37,039,617	(8,858) (2,138,123)				
Romanian Leu	8,389,457	(192,241)				
Russian Ruble (New)	14,974,058	(30,674)				
South African Rand	22,710,463	(1,817,408)				
South Korean Won	2,004,210	(75,390)				
Thailand Baht	29,966,890	(1,201,087)				
Turkish Lira Ukraine Hryvana	21,061,947 527,000	(627,457) 56,955				
Okialite Tiryvalia	360,852,297	(9,838,367)				
		i				
Contracts to Sell:						
Argentina Peso	4,335,769	240,590				
Australian Dollar	9,972,411	104,855				
Brazil Real	58,385,556	1,089,749				
Canadian Dollar Chilean Peso	1,043,355	(13,520)				
Colombian Peso	10,920,472 6,360,447	273,032 287,719				
Czech Koruna	6,145,170	137,254				
Egyptian Pound	788,639	(17,397)				
Euro Currency Unit	5,520,907	30,409				
Hungarian Forint	2,581,000	71,700				
Indian Rupee Indonesian Rupiah	4,262,537 4,847,597	24,181 59,054				
Israeli Shekel	1,256,081	5,811				
Malaysian Ringgit	2,800,000	30,082				
Mexican Peso	27,282,574	1,312,515				
Nigerian Naira	2,998,780	(114,875)				
Peruvian Sol	2,017,000	(2,300)				
Philippines Peso Polish Zloty	2,192,221 16,743,307	(1,853) 418,117				
Romanian Leu	4,178,003	12,965				
Russian Ruble (New)	7,630,530	(65,101)				
South African Rand	31,463,335	1,753,668				
Thailand Baht	4,536,901	88,667				
Turkish Lira Ukraine Hryvana	9,778,000 578,463	(135,404) (5,492)				
Uniallie i llyvalla	228,619,055	5,584,426				
Grand total	\$589,471,352	\$(4,253,941)				

#### **Financial Statement Amounts:**

	Receivable	Payable	Net
FX Value	\$589,471,352	\$589,471,352	\$ -
Unrealized Gain(Loss)	(9,838,367)	5,584,426	(4,253,941)
Net	\$579,632,985	\$583,886,926	\$(4,253,941)
High Yield Debt Fund:			
Local Currency Name	Value	Unrealized Gain/(Loss)	
Contracts to Buy:			
Euro Currency Unit	\$2,336,602	\$15,389	
	2,336,602	15,389	_
Contracts to Sell:			
Euro Currency Unit	21,904,894	25,454	
Pound Sterling	3,091,072	45,852	
	24,995,966	71,306	-
Grand total	\$27,332,568	\$86,695	-

#### Financial Statement Amounts:

	Receivable	Payable	Net
FX Value	\$27,332,568	\$27,332,568	\$ -
Unrealized Gain(Loss)	15,389	71,306	86,695
Net	\$27,347,957	\$27,261,262	\$86,695

#### **Developed Market International Stock Fund:**

Eveloped Market Internat Local Currency Name	Value	Unrealized Gain/(Loss)	
Contracts to Buy:	value		<u> </u>
Australian Dollar	\$556,390,876	\$(15,306,944)	
Canadian Dollar	504,607,920	(9,530,335)	
Danish Krone	374,152	(3,309)	
Euro Currency Unit	285,406,401	(727,740)	
Hong Kong Dollar	7,611,029	(4,707)	
Israeli Shekel	4,479,309	(117,288)	
Japanese Yen	88,254,791	(1,176,910)	
New Zealand Dollar	297,082,585	(8,246,792)	
Norwegian Krone	335,316,606	(1,982,101)	
Pound Sterling	252,921,607	(2,823,078)	
Singapore Dollar	339,197,592	(5,078,556)	
Swedish Krona	243,132,819	(4,004,750)	
Swiss Franc	8.378.887	(74,299)	
	2,923,154,574	(49,076,809)	-
Contracts to Sell:			
Australian Dollar	153,712,391	4,516,695	
Canadian Dollar	183,758,600	320,493	
Danish Krone	52,933,881	529,963	
Euro Currency Unit	1,207,893,584	11,488,041	
Hong Kong Dollar	111,474,171	57,571	
Israeli Shekel	29,857,609	846,538	
Japanese Yen	548,153,599	4,338,876	
New Zealand Dollar	93,237,139	2,464,289	
Norwegian Krone	628,645,900	9,122,623	
Pound Sterling	298,834,289	3,304,098	
Singapore Dollar	706,253,954	14,774,865	
South African Rand	21,709	(194)	
Swedish Krona	799,100,223	23,735,390	
Swiss Franc	261,568,598	2,654,601	
	5,075,445,647	78,153,849	
Grand total	\$7,998,600,221	\$29,077,040	-
Financial Statement Ar	nounts:		
	Receivable	Payable	
FX Value	\$7,998,600,221	\$7,998,600,221	\$
Unrealized Gain(Loss)	(49,076,809)	78,153,849	2
Net	\$7,949,523,412	\$7,920,446,372	\$2

Net

29,077,040

\$29,077,040

#### NOTES TO FINANCIAL STATEMENTS (Continued)

#### Emerging Market International Stock Fund:

menging market internations			
Local Currency Name	Value	Unrealized Gain/(Loss)	
Contracts to Buy:			
Hong Kong Dollar	\$2,527,689	\$206	
Polish Zloty	1,179,156	365	
-	3,706,845	571	
Contracts to Sell:			
Brazil Real	23,625	(53)	
Hong Kong Dollar	1,945,159	(431)	
Polish Zloty	428,183	(133)	
Pound Sterling	380,460	(1,624)	
South African Rand	1,147,559	(9,773)	_
	3,924,986	(12,014)	_
Grand total	\$7,631,831	(\$11,443)	=
Financial Statement Amo	ounts:		
	Receivable	Payable	Net
FX Value	\$7,631,831	\$7,631,831	\$-
Unrealized Gain(Loss)	571	(12,014)	(11,443)
Net	\$7,632,402	\$7,643,845	(\$11,443)

The net unrealized gain has been included in the Statement of Changes in Net Position as a component of Net Change in Unrealized Gain (Loss) on Investments and Foreign Currency.

#### **NOTE 6: COMMITMENTS**

In accordance with the terms of the individual investment agreements, the Private Investment, Real Estate, Alternative Investment Funds and Core Fixed Income Fund have outstanding commitments to make additional investments. These commitments will be fulfilled as suitable investment opportunities become available. Commitments at June 30, 2018, were as follows:

		Cumulative	
	Total	Amounts	Unfunded
Fund	Commitment	Funded	Commitment
Real Estate	\$ 3,433,032,287	\$ 2,986,741,582	\$ 446,290,705
Private Investment	6,163,211,149	4,699,136,604	1,464,074,545
Alternative Investment	2,987,054,932	2,706,509,729	280,545,203

		Cumulative	
Commitments	Total	Amounts	Unfunded
Denominated in Euros	Commitment	Funded	Commitment
Real Estate	€0	€ 0	€ 0
Private Investment	152,500,000	19,361,771	133,138,229
Alternative Investment	0	0	0

Euro denominated Unfunded Commitment when translated to US. Dollars was valued at \$155,558,707 on June 30, 2018.

Certain Private Investment Funds allow the General Partner to recycle distributions without a reduction in unfunded commitments and accordingly have no impact upon the above amounts. Capital recycling is a tool frequently used by investment managers to fully invest the committed capital in portfolio investments. Since fees and expenses are a component of a General Partner's total capital commitments, capital recycling generally allows managers to: (i) mitigate the impact of fees and expenses and (ii) increase the possibility that limited partner capital is invested in portfolio companies. Recycling provisions allow managers to recall capital distributions if certain criteria are met. The use of recycling provisions varies by manager but generally limits capital recycling to a range between 0% and 20% of total commitments. As a result the actual commitment could be as much as 120% of the stated commitment amount.

#### NOTE 7: SUBSEQUENT EVENT

The CRPTF has performed an evaluation of subsequent events through December 31, 2018 the date the basic financial statements were available to be issued. No material events were identified.

### NOTE 8: COST BASIS OF INVESTMENTS

The aggregate cost values of investments in the Funds are as follows at June 30, 2018:

	LIQUIDITY FUND	ALTERNATIVE INVESTMENT FUND	MUTUAL EQUITY FUND	CORE FIXED INCOME FUND	INFLATION LINKED BOND FUND
Investments in Securities, at Cost					
Liquidity Fund	\$ -	\$35,097,771	\$134,290,812	\$173,151,537	\$30,698,897
Cash Equivalents	827,720,976	-	-	11,378,667	1,021,823
Asset Backed Securities	-	-	-	256,697,037	(216,627)
Government Securities	3,726,674	-	-	939,363,791	-
Government Agency Securities	33,557,033	-	-	617,211,103	1,336,381,962
Mortgage Backed Securities	-	-	-	336,421,612	-
Corporate Debt	1,138,817,773	-	-	966,102,739	21,914,595
Convertible Securities	-	-	-	-	-
Common Stock	-	-	4,586,555,323	-	-
Preferred Stock	-	-	-	3,939,731	-
Real Estate Investment Trust	-	-	174,085,322	18,183,283	-
Business Development Corp	-	-	-	-	-
Mutual Fund	-	-	-	10,996,186	-
Limited Liability Corporation	-	-	-	-	-
Trusts	-	-	-	-	-
Limited Partnerships	-	2,107,349,727	1,601,472	-	-
Partnerships	-	, . ,, <u>-</u>	-	-	-
Annuities	-	-	-	-	-
Total Investments in Securities, at cost	\$2,003,822,456	\$2,142,447,498	\$4,896,532,929	\$3,333,445,686	\$1,389,800,650

PRIVATE INVESTMENT FUND	REAL - ESTATE FUND	EMERGING MARKET INTERNATIONAI STOCK FUND	DEVELOPED MARKET INTERNATIONAL STOCK FUND	HIGH YIELD DEBT FUND	EMERGING MARKET DEBT FUND
\$97,075,69	\$72,201,324	\$75,297,334	\$549,732,307	\$54,196,706	\$72,017,606
-	-	-	1,802,404	(43,135)	6,461,890
-	-	-	-	936,982	3,689,766
-	-	-	-	75,526,021	1,460,962,182
-	-	-	-	-	-
-	-	-	-	762,170	-
-	-	-	-	1,883,247,861	376,661,168
-	-	-	-	31,637,096	-
-	-	1,447,536,256	4,795,007,592	75,501,848	395,023
-	-	9,890,177	19,319,661	16,203,546	-
	-	-	53,394,234	44,470,442	-
	-	-	-	-	-
-	-	973,495,873	611,684,669	-	82,206,860
- 1,432,73	-	-	-	-	-
	-	-	-	-	-
2,188,740,25	1,896,547,244	-	-	-	-
	-	-	-	-	-
<u> </u>	-	-	-	-	-
8 \$2,287,248,68	\$1,968,748,568	\$2,506,219,640	\$6,030,940,867	\$2,182,439,537	\$2,002,394,495

#### SUPPLEMENTAL SCHEDULE OF FINANCIAL HIGHLIGHTS

FISCAL YEAR ENDED JUNE 30,	2018	LIQ 2017	UIDITY FU 2016	ND 2015	2014	AL 2018	TERNAT 2017	IVE INVE 2016	STMENT F 2015	UND 2014
PER SHARE DATA Net Position- Beginning of Period	\$0.98	\$0.98	\$0.98	\$1.00	\$1.00	\$1.21	\$1.12	\$1.19	\$1.13	\$1.06
INCOME FROM INVESTMENT OPERATIONS Net Investment Income (Loss) Net Gains or (Losses) on Securities	\$0.02	\$0.02	\$0.01	\$0.01	\$0.01	\$0.01	\$-	\$-	\$-	\$-
(Both Realized and Unrealized) Total from Investment Operations LESS DISTRIBUTIONS	<u>\$0.01</u> \$0.03	\$	\$- \$0.01	\$(0.02) \$(0.01)	<u>\$-</u> \$0.01	\$0.05 \$0.06	\$0.09 \$0.09	\$(0.07) \$(0.07)	\$0.06 \$0.06	\$0.07 \$0.07
Dividends from Net Investment Income Net Position - End of Period TOTAL RETURN	\$(0.02) \$0.99 1.63%	\$(0.02) \$0.98 0.96%	\$(0.01) \$0.98 0.68%	\$(0.01) \$0.98 -1.07%	\$(0.01) \$1.00 0.54%	\$- \$1.27 4.69%	\$- \$1.21 8.51%	\$- \$1.12 -5.32%	\$- \$1.19 3.98%	\$- \$1.13 6.63%
	1.03 //	0.90 %	0.0070	-1.07 /6	0.34 //	4.09%	0.0170	-0.02 /0	5.9070	0.03 //
RATIOS Net Position - End of Period (\$000,000 Omitted) Ratio of Expenses to Average Net Position	\$2,003	\$2,919	\$1,980	\$2,194	\$2,188	\$2,423	\$2,028	\$1,804	\$1,821	\$1,350
(excl. sec. lending fees & rebates) Ratio of Expenses to Average Net Position Ratio of Net Investment Income	0.13% 0.13%	0.12% 0.12%	0.09% 0.09%	0.25% 0.25%	0.24% 0.24%	0.06% 0.06%	0.05% 0.05%	0.06% 0.06%	0.08% 0.08%	0.08% 0.08%
(Loss) to Average Net Position	2.05%	1.81%	1.18%	0.83%	0.57%	0.41%	0.29%	0.24%	0.19%	0.14%
FISCAL YEAR ENDED JUNE 30,	2018	MU1 2017	TUAL EQU 2016	ITY 2015	2014	2018	COR 2017	E FIXED 2016	INCOME 2015	2014
PER SHARE DATA Net Position- Beginning of Period	\$1,849.99	\$1,551.24	\$1,524.55	\$1,420.60	\$1,138.66	\$131.77	\$129.52	\$125.17	\$122.59	\$118.20
Net Investment Income (Loss) Net Gains or (Losses) on Securities	\$31.14	\$30.79	\$28.23	\$24.23	\$21.53	\$3.02	\$2.80	\$2.86	\$2.63	\$2.91
(Both Realized and Unrealized) Total from Investment Operations LESS DISTRIBUTIONS	\$2 <u>41.76</u> \$2 <u>72.90</u>	\$267.96 \$298.75	\$(1.54) \$26.69	\$79.72 \$103.95	\$265.34 \$286.87	\$(4.34) \$(1.32)	\$(0.55) \$2.25	\$1.49 \$4.35	\$(0.05) \$2.58	\$2.02 \$4.93
Dividends from Net Investment Income Net Position - End of Period TOTAL RETURN	\$	\$- \$1,849.99 19.26%	\$- \$1,551.24 1.75%	\$- \$1,524.55 7.32%	\$(4.93) \$1,420.60 25.28%	\$- \$130.45 -0.89%	<u>\$-</u> \$131.77 1.89%	<u>\$-</u> \$129.52 3.46%	\$- \$125.17 1.85%	\$(0.54) \$122.59 4.28%
RATIOS Net Position - End of Period (\$000,000 Omitted) Ratio of Expenses to Average Net Position	\$7,755				\$7,058	\$3,118	. ,			\$2,415
(excl. sec. lending fees & rebates) Ratio of Expenses to Average Net Position Ratio of Net Investment Income	0.24%	0.31%	6.29%	0.23%	0.22%	0.14%	0.17%	0.16%	0.16%	0.17% 0.18%
(Loss) to Average Net Position	1.57%	1.82%	5 1.84%	1.65%	1.73%	2.30%	2.14%	2.25%	2.12%	2.56%
FISCAL YEAR ENDED JUNE 30,	2018	INFLATI 2017	ON LINKEI 2016	D BOND 2015	2014	2018	EMER0 2017	GING MAR 2016	KET DEB 2015	2014
PER SHARE DATA Net Position- Beginning of Period	\$156.02	\$155.00	\$151.53	\$155.97	\$150.54	\$174.23	\$159.68	\$150.63	\$162.98	\$152.34
NCOME FROM INVESTMENT OPERATIONS let Investment Income (Loss)	\$0.13	\$(0.17)	\$(0.11)	\$(0.76)	\$4.65	\$11.21	\$11.96	\$15.30	\$10.11	\$8.68
Vet Gains or (Losses) on Securities (Both Realized and Unrealized) Total from Investment Operations	<u>\$4.88</u> \$5.01	<u>\$1.19</u> \$1.02	<u>\$3.58</u> \$3.47	\$(3.68) \$(4.44)	\$1.50 \$6.15	\$(14.31) \$(3.10)	\$2.59 \$14.55	\$(6.25) \$9.05	\$(22.46) \$(12.35)	\$1.96 \$10.64
ESS DISTRIBUTIONS Dividends from Net Investment Income Jet Position - End of Period "OTAL RETURN	\$- \$161.03 	\$- \$156.02 0.66%	\$- \$155.00 6 2.29%	\$- \$151.53 • -2.85%	\$(0.72) \$155.97 4.17%			\$- \$159.68 6 6.01%		\$- \$162.98 6.99%
RATIOS Net Position - End of Period (\$000,000 Omitted) Ratio of Expenses to Average Net Position	\$1,399	\$1,344	\$1,322	\$1,131	\$1,079	\$1,902	\$1,637	\$1,498	\$1,415	\$1,514
(excl. sec. lending fees & rebates) Ratio of Expenses to Average Net Position Ratio of Net Investment Income	0.26% 0.56%					0.46% 0.49%				0.27% 0.27%
(Loss) to Average Net Position	0.08%	-0.11%	-0.07%	-0.50%	2.97%	6.50%	5 7.16%	6 9.86%	6.45%	5.50%

Source: Amounts were derived from custodial records.

#### SUPPLEMENTAL SCHEDULE OF FINANCIAL HIGHLIGHTS (Continued)

HIGH YIELD DEBT							DEVELOPED MARKET INTERNATIONAL			
FISCAL YEAR ENDED JUNE 30,	2018	2017	2016	2015	2014	2018	2017	2016	2015	2014
PER SHARE DATA										
Net Position- Beginning of Period	\$154.86	\$137.81	\$138.05	\$139.80	\$125.63	\$537.14	\$430.35	\$463.22	\$460.14	\$378.32
INCOME FROM INVESTMENT OPERATIONS										
Net Investment Income (Loss)	\$10.09	\$9.35	\$8.72	\$8.06	\$7.86	\$13.96	\$13.00	\$11.50	\$11.36	\$13.40
Net Gains or (Losses) on Securities										
(Both Realized and Unrealized)	\$(6.07)	\$7.70	\$(8.96)	\$(9.81)	\$7.30	\$21.15	\$93.79	\$(44.37)	\$(8.28)	\$70.75
Total from Investment Operations	\$4.02	\$17.05	\$(0.24)	\$(1.75)	\$15.16	\$35.11	\$106.79	\$(32.87)	\$3.08	\$84.15
LESS DISTRIBUTIONS						-				
Dividends from Net Investment Income	\$-	\$-	\$-	\$-	\$(0.99)	\$-	\$-	\$-	\$-	\$(2.33)
Net Position - End of Period	\$158.88	\$154.86	\$137.81	\$138.05	\$139.80	\$572.25	\$537.14	\$430.35	\$463.22	\$460.14
TOTAL RETURN	2.58%	12.59%	-0.31%	-1.31%	12.24%	6.53%	24.81%	-7.09%	0.67%	22.31%
RATIOS										
Net Position - End of Period (\$000,000 Omitted)	\$2,132	\$2,044	\$1,823	\$1,774	\$1,588	\$7,153	\$6,381	\$5,224	\$5,909	\$6,135
Ratio of Expenses to Average Net Position										
(excl. sec. lending fees & rebates)	0.38%	0.29%	0.35%	0.33%	0.35%	0.38%	0.40%	0.43%	0.40%	0.40%
Ratio of Expenses to Average Net Position	0.65%	0.41%	0.39%	0.34%	0.36%	0.42%	0.41%	0.43%	0.41%	0.40%
Ratio of Net Investment Income										
(Loss) to Average Net Position	6.43%	6.39%	6.32%	5.80%	5.91%	2.52%	2.69%	2.57%	2.46%	3.17%

	EMERGIN	G MARKE	T INTERN	ATIONAL S	тоск			RE	EAL ESTA	TE	
FISCAL YEAR ENDED JUNE 30,	2018	2017	2016	2015	2014	20	018	2017	2016	2015	2014
PER SHARE DATA											
Net Position- Beginning of Period	\$422.00	\$343.19	\$369.61	\$397.12	\$358.76	\$	53.40	\$50.62	\$46.27	\$39.48	\$36.46
INCOME FROM INVESTMENT OPERATIONS											
Net Investment Income (Loss)	\$8.60	\$6.16	\$6.59	\$8.22	\$6.81		\$2.10	\$1.79	\$1.66	\$1.59	\$(0.97
Net Gains or (Losses) on Securities											
(Both Realized and Unrealized)	\$11.08	\$72.65	\$(33.01)	\$(35.73)	\$34.08		\$2.52	\$0.99	\$2.69	\$5.20	\$4.84
Total from Investment Operations	\$19.68	\$78.81	\$(26.42)	\$(27.51)	\$40.89		\$4.62	\$2.78	\$4.35	\$6.79	\$3.87
LESS DISTRIBUTIONS											
Dividends from Net Investment Income	\$-	\$-	\$-	\$-	\$(2.53)		\$-	\$-	\$-	\$-	\$(0.85
Net Position - End of Period	\$441.68	\$422.00	\$343.19	\$369.61	\$397.12	\$	58.02	\$53.40	\$50.62	\$46.27	\$39.48
TOTAL RETURN	4.66%	23.00%	-7.15%	-6.93%	11.50%	88	8.69%	7.38%	11.51%	12.93%	10.66%
RATIOS											
Net Position - End of Period (\$000,000 Omitted)	\$2,791	\$3,015	\$2,483	\$2,473	\$2,655	\$	2,285	\$2,248	\$2,207	\$1,918	\$1,510
Ratio of Expenses to Average Net Position											
(excl. sec. lending fees & rebates)	0.50%	0.59%	0.64%	0.70%	0.69%	C	).38%	0.47%	0.42%	0.39%	0.55%
Ratio of Expenses to Average Net Position	0.60%	0.63%	0.66%	0.71%	0.70%	C	).38%	0.47%	0.42%	0.39%	0.55%
Ratio of Net Investment Income											
(Loss) to Average Net Position	2.00%	1.61%	1.85%	2.15%	1.81%	3	3.76%	3.44%	3.42%	3.69%	-2.50%

FISCAL YEAR ENDED JUNE 30, PER SHARE DATA	2018	PRIVATE 2017	E INVESTN 2016	/ENT 2015	2014
Net Position- Beginning of Period	\$78.60	\$69.80	\$65.13	\$54.72	\$48.06
Net Investment Income (Loss) Net Gains or (Losses) on Securities	\$1.36	\$1.18	\$0.46	\$1.31	\$4.72
(Both Realized and Unrealized)	\$7.11	\$7.62	\$4.21	\$9.10	\$2.79
Total from Investment Operations	\$8.47	\$8.80	\$4.67	\$10.41	\$7.51
LESS DISTRIBUTIONS Dividends from Net Investment Income	\$-	\$-	\$-	\$-	\$(0.85)
Net Position - End of Period	\$87.07	\$78.60	\$69.80	\$65.13	\$54.72
TOTAL RETURN	15.50%	10.97%	8.87%	14.04%	16.06%
RATIOS					
Net Position - End of Period (\$000,000 Omitted) Ratio of Expenses to Average Net Position	\$2,726	\$2,990	\$2,770	\$2,895	\$2,919
(excl. sec. lending fees & rebates)	0.30%	0.17%	0.19%	0.17%	0.22%
Ratio of Expenses to Average Net Position Ratio of Net Investment Income	0.30%	0.17%	0.19%	0.17%	0.22%
(Loss) to Average Net Position	1.61%	1.60%	0.68%	2.20%	9.21%

Source: Amounts were derived from custodial records.

#### STATEMENT OF NET POSITION JUNE 30, 2018

	June 30, 2018
ASSETS	
Investment in Securities, at Amortized Cost (Note 7)	\$ 6,796,418,299
Accrued Interest and Other Receivables	10,722,803
Prepaid Assets	214,421
Total Net Positions	\$ 6,807,355,523
LIABILITIES	
Distribution Payable	10,702,148
Total Liabilities	\$ 10,702,148
NET POSITION HELD IN TRUST FOR PARTICIPANTS (includes reserve)	\$ 6,796,653,375

See accompanying Notes to the Financial Statements.

#### STATEMENT OF CHANGES IN NET POSITION FOR THE FISCAL YEARS ENDED JUNE 30, 2018 AND JUNE 30, 2017

	2018	2017
ADDITIONS		
Operations		
Interest Income	<u>\$ 97,021,865</u>	<u>\$ 42,329,919</u>
Net Investment Income	97,021,865	42,329,919
Net Realized Gains	1,000	30,747
Net Increase in Net Position Resulting from Operations	97,022,865	42,360,666
Share Transactions at Net Asset Value of \$1.00 per Shar	e	
Purchase of Units	17,231,394,231	15,482,140,632
TOTAL ADDITIONS	17,328,417,096	15,524,501,298
DEDUCTIONS		
Distribution to Participants (Notes 2 & 6)		
Distributions to Participants*	(89,929,727)	(35,711,575)
Total Distributions Paid and Payable	(89,929,727)	(35,711,575)
Share Transactions at Fair Value of \$1.00 per Share		( · · · · )
Redemption of Units	(16,910,055,574)	(13,919,790,217)
Operations		
Operating Expenses	(1,866,764)	(1,920,045)
TOTAL DEDUCTIONS	(17,001,852,065)	(13,957,421,837)
* Net of designated reserve transfer contributions and expenses.	( ))	
······································		
CHANGE IN NET POSITION	326,565,031	1,567,079,461
	, ,	· · ·
Net Position Held in Trust for Participants		
Beginning of Year	\$ 6,470,088,344	\$ 4,903,008,883
End of Year	\$ 6,796,653,375	\$ 6,470,088,344
	<u> </u>	

See accompanying Notes to the Financial Statements.

#### NOTES TO FINANCIAL STATEMENTS

#### NOTE 1: INTRODUCTION AND BASIS OF PRESENTATION

The Short-Term Investment Fund (STIF or the Fund) is a money market investment pool managed by the Treasurer of the State of Connecticut. Section 3-27 of the Connecticut General Statutes (CGS) created STIF. Pursuant to CGS 3-27a - 3-27f, the State, municipal entities, and political subdivisions of the State are eligible to invest in the Fund. Securities in which the State Treasurer is authorized to invest monies of STIF include United States government and agency obligations, certificates of deposit, commercial paper, corporate bonds, saving accounts, bankers' acceptances, repurchase agreements, and asset-backed securities. STIF is authorized to issue an unlimited number of units.

For State of Connecticut financial reporting purposes, STIF is considered to be a mixed investment pool – a pool having external and internal portions. The internal portion (i.e., the portion that belongs to investors that are part of the State's financial reporting entity) is not displayed in the State's basic financial statements. Instead, each fund type's investment in STIF is reported as "cash equivalents" in the State's financial reporting entity) is recorded in an investment trust fund in the basic financial statements.

The fund is considered a "2a7-like" pool and reports the investments at amortized cost (which approximates fair value). A 2a7-like pool is not necessarily registered with the Securities and Exchange Commission (SEC) as an investment company, but nevertheless has a policy that is similar to the SEC's requirements of rule 2a7 of the Investment Company Act of 1940. The Fund reports net assets at amortized cost for financial reporting purposes and the determination of net asset value, consistent with Government Accounting Standards Board (GASB) financial reporting standards, while SEC rule 2a7 requires a floating rate, market price-based valuation for institutional prime money market funds.

#### Related Party Transactions.

STIF had no related party transactions during the fiscal year with the State of Connecticut and its component units including leasing arrangements, the performance of administrative services and the execution of securities transactions.

#### NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### Financial Reporting Entity.

The Fund is a Fiduciary Investment Trust Fund. A fiduciary fund is used to account for governmental activities that are similar to those found in the private sector where the determination of net income is necessary or useful to sound financial administration. The generally accepted accounting principles (GAAP) used for fiduciary funds are generally those applicable to similar businesses in the private sector. The Fund uses the accrual basis of accounting.

#### Security Valuation of Financial Instruments.

The assets of the Fund are carried at amortized cost (which approximates fair value). All premiums and discounts on securities are amortized or accreted on a straight line basis. The Fund's custodian calculates the fair value of investments daily and the Fund calculates a fair value shadow price once a month (at a minimum) in compliance with GASB 79.

As of June 30, 2018, the shadow price of the Fund was \$1.0089 and the ratio of fair value to amortized cost was 99.9846%.

#### Security Transactions.

Purchases and sales of investments are recorded on a trade date basis. Gains and losses on investments are realized at the time of the sales and are calculated on the basis of an identified block or blocks of securities having an identified amortized cost. Bond cost is determined by identified lot.

#### Interest Income.

Interest income, which includes amortization of premiums and accretion of discounts, is accrued as earned.

#### Expenses.

Operating and interest expenses are accounted for on an accrual basis.

#### Fiscal Year.

The fiscal year of STIF ends on June 30.

### SHORT-TERM INVESTMENT FUND NOTES TO FINANCIAL STATEMENTS (Continued)

#### Distributions to Investors.

Distributions to investors are earned on units outstanding from date of purchase to date of redemption. Income is calculated daily based upon the actual earnings of the Fund net of administrative expenses and, if applicable, an allocation to the designated surplus reserve. Distributions are paid monthly within two business days of the end of the month, and are based upon actual number of days in a year. Shares are sold and redeemed at a constant \$1.00 net asset value per share, which is consistent with the per share net asset value of the Fund, excluding the designated surplus reserve.

#### Designated Surplus Reserve.

While STIF is managed prudently to protect against losses from credit and market changes, the Fund is not insured or guaranteed by any government. Therefore, the maintenance of capital cannot be fully assured. In order to provide some protection to the shareholders of STIF from potential credit and market risks, the Treasurer has designated that a portion of each day's net earnings be transferred to the designated surplus reserve (reserve). Such amounts are restricted in nature and are not available for current distribution to shareholders. The amount transferred daily to the designated surplus reserve is equal to 0.1 percent of end-of-day investment balance divided by the actual number of days in the year until the reserve account is equal to or greater than 1.0 percent of the daily investment balance. If net losses significant to the aggregate portfolio are realized, the Treasurer is authorized to transfer funds from the reserve to Participants with Units Outstanding.

As of June 30, 2018, the balance in the designated surplus reserve was \$61,343,690 which reflects \$5.2 million in contributions during the year.

#### Estimates.

The preparation of the financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities in the financial statements as well as the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

#### NOTE 3: DEPOSIT AND INVESTMENT DISCLOSURES

A formal investment policy (as adopted August 21, 1996, revised June 16, 2008 and April 17, 2009) specifies policies and guidelines that provide for the systematic management of STIF and prudent and productive investment of funds. All securities of STIF are registered under the Bank of New York Mellon nominee name, MAC & Co.

#### Custodial Credit Risk – Deposits

The custodial credit risk for deposits is the risk that in the event of a bank failure, the STIF's deposits may not be recovered. The STIF follows policy parameters that limit deposits in any one entity to a maximum of ten percent of total assets with a ten-business-day cure period. Further, the certificates of deposits must be issued from commercial banks whose short-term debt is rated at least A -1 by Standard and Poor's and F-1 by Fitch and whose long-term debt is rated at least A- by S&P and Fitch, or backed by a letter of credit issued by a Federal Home Loan bank.

Deposits in FDIC insured banks are insured up to \$250,000 (as of June 30, 2018), any amount above this limit is considered uninsured. Additionally, state banking regulation requires all Connecticut public depositories to segregate collateral against public deposits in an amount equal to at least ten percent of the outstanding deposit. As of fiscal year-end, deposit instruments in the Short-Term Investment Fund totaled \$3,131,627,404. Of that amount, \$2,488,402,404 was exposed to custodial credit risk representing the portion that was uninsured, uncollateralized or not backed by a letter of credit.

#### Uninsured Bank Amounts

Bank	Amount	Uninsured/Uncollateralized
ANZ BANK	\$300,000,000	\$300,000,000
BB&T	225,000,000	224,750,000
CITIZENS BANK	250,000,000	0
DEXIA CREDIT LOCAL*	160,000,000	160,000,000
DZ BANK	200,000,000	200,000,000
FIRST REPUBLIC BANK	275,000,000	0
NORDEA BANK	231,377,000	231,377,000
ROYAL BANK CANADA	190,248,904	190,248,904
SCOTIA BANK	300,000,000	300,000,000

#### SHORT-TERM INVESTMENT FUND NOTES TO FINANCIAL STATEMENTS (Continued)

SUMITOMO BANK	300,000,000	300,000,000
SVENSKA HANDELSBANKEN	275,001,500	275,001,500
TD BANK	175,000,000	157,275,000
TD BANK SECURITIES, DTC CD	125,000,000	125,000,000
UNITED BANK	100,000,000	0
US BANK, NA, DTC CD	25,000,000	24,750,000
TOTAL	\$3,131,627,404	\$2,488,402,404

\* Dexia Credit Local deposit guaranteed by the governments of France, Belgium and Luxembourg.

#### Interest Rate Risk – Investments

Interest rate risk is the risk that changes in the general level of interest rates will adversely affect the fair value of an investment. The STIF's policy for managing interest rate risk is to limit investments to a very short weighted average maturity, not to exceed 90-days, and to comply with Standard and Poor's requirement that the weighted average maturity not exceed 60 days. The weighted-average maturity is calculated daily and reported to Standard and Poor's weekly to ensure compliance. As of June 30, 2018 the weighted average maturity of the STIF was 35 days. The breakdown of the STIF's maturity profile is outlined below.

	Investment Maturity in Years	
Amortized		
Cost	Less than One	
\$2,374,661,981	\$2,374,661,981	
756,965,422	756,965,422	
523,075,727	523,075,727	
872,751,437	872,751,437	
1,568,963,732	1,568,963,732	
50,000,000	50,000,000	
650,000,000	650,000,000	
\$6,796,418,299	\$6,796,418,299	
	Cost           \$2,374,661,981           756,965,422           523,075,727           872,751,437           1,568,963,732           50,000,000           650,000,000	Amortized Cost         J           \$2,374,661,981         \$2,374,661,981           756,965,422         756,965,422           523,075,727         523,075,727           872,751,437         872,751,437           1,568,963,732         1,568,963,732           50,000,000         50,000,000           650,000,000         650,000,000

Additionally, STIF is allowed by policy to invest in floating-rate debt securities. Further, investment in floating-rate securities with maturities greater than two years is limited to no more than 20 percent of the overall portfolio. For purposes of the weighted average maturity calculation and classification in the chart above, variable-rate securities are calculated using their interest rate reset dates. Because these securities reset frequently to prevailing market rates, interest rate risk is substantially reduced. As of fiscal year-end, the STIF portfolio held \$1,680 million in variable rate securities.

#### Credit Risk of Debt Securities

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. Concentration of credit risk is the risk of loss attributed to the magnitude of the investment in a single issuer.

Investment credit risk and concentration of credit risk of debt securities will be managed as follows:

- The STIF will purchase short-term, high-quality fixed income securities as allowed by CGS 3-27c 3-27e and further defined within Connecticut State Treasurer's Short-Term Investment Fund Investment Policy, Standard & Poor's AAAm Principal Stability Fund Guidelines and the Governmental Accounting Standards Board Statement Number 79. To be considered high-quality, a security must be rated in the highest shortterm rating category by one or more Nationally Recognized Statistical Rating Organizations ("NRSRO").
- The STIF will perform a fundamental credit analysis to develop and approve a database of issuers that meet the Fund's standard for minimal credit risk. The STIF will monitor the credit risks of all portfolio securities on an ongoing basis by reviewing the financial data, issuer news and developments, and ratings of designated NRSROs.
- The STIF generally will comply with the following diversification limitations that are additional to those set forth in SEC Rule 2a-7, GASB Statement Number 79 and Standard & Poor's AAAm Principal Stability Fund Guidelines. First, at least 75 percent of fund assets will be invested in securities rated "A-1+" or equivalent. Second, exposure to any single non-governmental issuer's securities will not exceed 5 percent (at the time a security is purchased), exposure to any single money market mutual fund (rated AAAm) will not exceed 5 percent of fund assets and exposure to money market mutual funds in total will not exceed 10 percent.

#### NOTES TO FINANCIAL STATEMENTS (Continued)

#### The STIF's credit quality ratings were as follows at June 30, 2018:

Credit Quality Rating	Amortized Cost	Percentage of Amortized Cost
AA / A-1+	\$ 3,051,946,897	44.9%
A / A-1	1,073,644,239	15.8%
A-2*	525,000,000	7.7%
Federal Agency and U.S. Govt / Govt Guaranteed Securities**	2,045,827,163	30.1%
N/R*	100,000,000	1.5%
Total	\$ 6,796,418,299	100%

\*A-2 & N/R securities are backed by irrevocable standby letters of credit provided by federal home loan banks.

\*\*Federal Agency and U.S.Govt / Govt Guaranteed Securities include Repurchase agreements backed by such securities.

As of June 30, 2018, the table below lists issuers with concentrations of greater than 5 percent.

Issuer	Fair Value	Percent of Total Portfolio
FEDERAL FARM CREDIT	\$648,526,163	9.5%
FEDERAL HOME LOAN BANK	631,999,484	9.3%
ROYAL BANK CANADA*	640,300,130	9.4%

\*Royal Bank Canada includes an investment with RBC and Repurchase agreements with RBC.

#### Investments, Fair Value Hierarchy

STIF investments are carried at amortized cost, but fair value is reported in certain note disclosures as required by GAAP. STIF investments are measured and reported at fair value and classified according to the following hierarchy:

Level 1 - Investments reflect unadjusted quoted prices in active markets for identical assets.

Level 2 – Investments reflect prices that are based on inputs that are either directly or indirectly observable for an asset (including quoted prices for similar assets), which may include inputs in markets that are not considered to be active.

Level 3 - Investments reflect prices based upon unobservable inputs for an asset.

The categorization of investments within the hierarchy is based upon the pricing transparency of the instrument and should not be perceived as the particular investment's risk.

Debt securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Debt securities classified in Level 2 of the fair value hierarchy are valued using a pricing methodology that uses evaluation models, such as matrix pricing, to value securities based on a security's relationship to benchmark quoted prices. Debt securities classified in Level 3 of the fair value hierarchy are subject to being priced by an alternative pricing source utilizing discounted cash flow models and broker bids, or may have an estimated fair value equal to cost, due to the absence of an independent pricing source.

Certain investments, such as bank deposit instruments, money market funds and repurchase agreements, are not included in the following tables because they are not negotiable instruments and are valued at cost.

STIF has the following fair value measurements as of June 30, 2018:

	June 30, 2018	Quoted Prices in Active Market for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3
Investments by fair value level:				
Federal Agency Securities	\$1,394,841,815	-	\$1,394,841,815	-
Non-bank Commercial paper	1,618,801,750	-	1,618,801,750	-
Total debt securities measured at fair value	\$3,013,643,565	-	\$3,013,643,565	-

### SHORT-TERM INVESTMENT FUND NOTES TO FINANCIAL STATEMENTS (Continued)

#### NOTE 4: CUSTODIAN

BNY Mellon was appointed as custodian for STIF effective December 9, 2013. STIF pays an approximately \$275,000 annual custodial fee for the Short-Term Investment Unit.

#### NOTE 5: ADMINISTRATION

STIF is managed and administered by employees of the State of Connecticut Treasury. Salaries and fringe benefit costs as well as operating expenses are charged directly to the Fund.

#### NOTE 6: DISTRIBUTIONS TO INVESTORS

The components of the distributions to investors are as follows for the income earned during the twelve months ended:

Distributions:	<u>2018</u>	<u>2017</u>
July	\$5,374,620	\$1,888,124
August	5,998,212	1,822,366
September	5,605,317	1,948,752
October	5,668,566	2,016,150
November	5,474,579	2,176,315
December	5,834,846	2,522,404
January	7,124,016	3,120,576
February	7,840,017	3,125,857
March	9,233,470	3,852,470
April	10,052,118	4,137,077
May	11,021,818	4,514,219
June (Payable at June 30)	10,702,148	4,587,265
Total Distribution Paid & Payable	\$89,929,727	\$35,711,575

#### NOTE 7: INVESTMENTS IN SECURITIES

The following is a summary of investments in securities, at amortized cost and fair value as of June 30, 2018:

mortized Cost	Fair Value
2,506,627,403	\$2,506,730,830
625,000,000	625,000,000
1,618,963,732	1,618,801,750
1,395,827,164	1,394,841,815
650,000,000	650,000,000
6,796,418,299	\$6,795,374,395
	2,506,627,403 625,000,000 1,618,963,732 1,395,827,164 650,000,000

Repurchase agreements are agreements to purchase securities from an entity for a specified amount of cash and to resell the securities to the entity at an agreed upon price and time. They are used to enhance returns with minimal risk on overnight cash deposits of the Fund. Such transactions are only entered into with primary government securities dealers who report directly to the Federal Reserve Bank of New York and commercial banks that meet certain quality standards. All repurchase agreements are collateralized at between 100 percent and 102 percent of the securities' value. As of fiscal year end, STIF held \$650 million in repurchase agreements.

In response to changes to SEC rule 2a-7 and in an effort to enhance comparability of financial statements among governments the Government Accounting Standards Board (GASB) issued GASB Statement No. 79, Certain External Investment Pools and Pool Participants, effective December 15, 2015. Statement 79 addresses accounting and financial reporting for certain external investment pools and pool participants. Specifically, it establishes criteria for an external investment pool to qualify for making the election to measure all of its investments at amortized cost for financial reporting purposes. The specific criteria address (1) how the external investment pool transacts with participants; (2) requirements for portfolio maturity, quality, diversification, and liquidity; and (3) calculation and requirements of a shadow price. Significant noncompliance would prevent the external investment pool from measuring all of its investments at amortized cost for financial reporting in this Statement and measures all of its investments at amortized cost, the pool's participants also should measure their investments in that external investment pool at amortized cost for financial reporting purposes. STIF is in compliance with GASB Statement No. 79 and has elected to measure its investments on an amortized cost basis.

In an effort to improve disclosures associated with derivative contracts, the Government Accounting Standards Board (GASB) issued GASB Statement No. 53, Accounting and Financial Reporting for Derivative Instruments,

## SHORT-TERM INVESTMENT FUND NOTES TO FINANCIAL STATEMENTS (Continued)

effective for the fiscal years beginning after June 15, 2009. Statement No. 53 requires that all derivatives be reported on the Statement of Net Assets and defines a derivative instrument as a financial instrument or other contract that has all of the following characteristics: a) Settlement factors. It has (1) one or more reference rates and (2) one or more notional amounts or payment provisions or both, b) Leverage. It requires no initial net investment or an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors, and c) Net settlement. Its terms require or permit net settlement, it can readily be settled net by a means outside the contract, or it provides for delivery of an asset that puts the recipient in a position not substantially different from net settlement.

For the fiscal year ended June 30, 2018, the Short-Term Investment Fund held adjustable-rate U.S. government agency securities whose interest rates vary directly with short-term money market indices and are reset either daily, weekly, monthly or quarterly. Such securities allow the Fund to earn higher interest rates as market rates increase, thereby increasing fund yields and protecting against the erosion of market values from rising interest rates. These adjustable rate securities have similar risks as fixed-rate securities from the same issuers.

#### NOTE 8: CREDIT RATING OF THE FUND

Throughout the year ended June 30, 2018, STIF was rated AAAm, its highest rating, by Standard and Poor's Corporation (S&P). In December 2017, following a review of the portfolio and STIF's investment policies, management and procedures, S&P reaffirmed STIF's AAAm rating and has continued to maintain this high rating throughout the current fiscal year. In order to maintain an AAAm rating, STIF adheres to the following guidelines:

- · Weekly portfolio and market value calculations;
- Maintenance of credit quality standards for portfolio securities with at least 50% of such securities rated A-1+ or invested in overnight repurchase agreements with dealers or banks rated A-1;
- Ensuring adequate portfolio diversification standards with no more than 5% of the portfolio invested in an individual security and no more than 10% invested in an individual issuer, with a ten-business-day cure period, excluding one and two day repurchase agreements and U.S. government agency securities; and
- A limit on the overall portfolio weighted average maturity (currently no more than 60 days).

It is the Treasurer's intention to take any and all such actions as are needed from time to time to maintain the AAAm rating.

#### NOTE 9: SUBSEQUENT EVENTS

The Fund management has evaluated the events and transactions that have occurred through December 31, 2018, the date the basic financial statements were available to be issued. There were no subsequent events identified related to the Short-Term Investment Fund that could have a material impact on the Short-Term Investment Fund's financial statements.

## SHORT-TERM INVESTMENT FUND LIST OF INVESTMENTS AT JUNE 30, 2018

100.000.000         BB&T CO. (2)         2.30%         7/2/2018         100.000.000         1           125.000.000         BB&T CO. (2)         2.30%         7/2/2018         125.000.000         1           25.000.000         DEXIA CREDIT LOCAL SA NY         2.28%         7/9/2018         25.000.000           25.000.000         DEXIA CREDIT LOCAL SA NY         2.28%         7/9/2018         25.000.000           25.000.000         DEXIA CREDIT LOCAL SA NY         2.34%         11/9/2018         25.000.000           25.000.000         DEXIA CREDIT LOCAL SA NY         2.31%         10/1/1/2018         10,000.000           25.000.000         DEXIA CREDIT LOCAL SA NY         2.34%         11/9/2018         25.000.000           25.000.000         DEXIA CREDIT LOCAL SA NY         2.33%         11/9/2018         25.000.000           100.000.000         DZ BANK NY         2.23%         11/9/2018         25.000.000           100.000.000         DZ BANK NY         2.23%         7/2/2018         50.000.000           25.000.000         NORDEA BANK         1.87%         7/18/2018         25.000.000           25.000.000         NORDEA BANK         1.88%         7/2/2018         25.000.000           25.000.000         NORDEA BANK	00,000,000 00,000,000 25,000,000 25,000,000 25,000,000 24,995,750 10,000,500 24,999,250 25,000,000 50,006,000 50,007,000 25,000,0000 25,000,000 25,000,000 25,000,000 25,00	A-1+ A-1 A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A
100,000,000         BB&T CO. (2)         2.30%         7/2/2018         100,000,000         1           125,000,000         BB&T CO. (2)         2.30%         7/2/2018         125,000,000         1           25,000,000         DEXIA CREDIT LOCAL SA NY         2.28%         7/9/2018         25,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.28%         7/9/2018         25,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.36%         7/9/2018         25,000,000           10,000,000         DEXIA CREDIT LOCAL SA NY         2.31%         10/1/1/2018         10,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.33%         11/9/2018         25,000,000           10,000,000         DEXIA CREDIT LOCAL SA NY         2.33%         11/9/2018         25,000,000           10,000,000         DE BANK NY         1.89%         7/12/2018         50,000,000         1           50,000,000         NORDEA BANK         1.87%         7/18/2018         25,000,000         1           25,000,000         NORDEA BANK         1.88%         7/18/2018         25,000,000         25,000,000         1         25,000,000         1         25,000,000         1         25,000,000         25,000,000	00,000,000 25,000,000 25,000,000 25,000,000 24,995,750 10,000,500 24,999,250 25,000,000 50,006,000 50,007,000 25,000,000 50,000,000 25,000,0000 25,000,000 25,000,000 25,00	A-1 A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A
125,000,000         BBAT CO. (2)         2.30%         7/2/2018         125,000,000         1           25,000,000         DEXIA CREDIT LOCAL SA NY         2.26%         7/9/2018         25,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.26%         7/9/2018         25,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.16%         7/9/2018         25,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.31%         10/1/2018         10,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.33%         1/9/2018         25,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.33%         1/9/2018         25,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.33%         1/9/2018         25,000,000           100,000,000         DZ BANK NY         2.23%         7/1/8/2018         25,000,000         1           50,000,000         NORDEA BANK         1.89%         7/2/2018         50,000,000         25,000,000         25,000,000         NORDEA BANK         1.84%         7/2/2/2018         55,000,000           25,000,000         NORDEA BANK         2.37%         12/17/2018         25,000,000         25,000,000         25,000,000         25	25,000,000 25,000,000 25,000,000 24,995,750 10,000,500 24,999,250 25,000,000 50,006,000 50,007,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000	A-1 A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A
25,000,000         DEXIA CREDIT LOCAL SA NY         2.26%         7/9/2018         25,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.26%         7/9/2018         25,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.05%         7/9/2018         25,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.31%         10/1/2018         10,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.31%         11/9/2018         25,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.33%         11/9/2018         25,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.33%         7/12/2018         50,000,000           100,000,000         DZ BANK NY         1.89%         7/12/2018         50,000,000           25,000,000         NORDEA BANK         1.87%         7/18/2018         25,000,000           25,000,000         NORDEA BANK         1.84%         7/12/2018         55,000,000           25,000,000         NORDEA BANK         2.25%         9/18/2018         25,000,000           25,000,000         NORDEA BANK         2.25%         9/18/2018         25,000,000           25,000,000         NORDEA BANK         2.25%         9/17/20	25,000,000 25,000,000 24,995,750 10,000,500 24,999,250 25,000,000 50,006,000 50,007,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000	A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A-1+
25,000,000         DEXIA CREDIT LOCAL SA NY         2.28%         7/9/2018         25,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.05%         7/9/2018         25,000,000           01,000,000         DEXIA CREDIT LOCAL SA NY         2.31%         10/1/2018         10,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.31%         10/1/2018         25,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.34%         11/9/2018         25,000,000           100,000,000         DEXIA CREDIT LOCAL SA NY         2.33%         1/9/2018         25,000,000           100,000,000         DEXIA KNY         1.89%         7/2/2018         100,000,000         1           50,000,000         DZ BANK NY         2.23%         7/18/2018         50,000,000         25,000,000         1         56,377,000         NORDEA BANK         1.87%         7/18/2018         25,000,000         25,000,000         100,000,000         1         50,000,000         100,000,000         100,000,000         100,000,000         100,000,000         100,000,000         100,000,000         125,000,000         125,000,000         125,000,000         125,000,000         125,000,000         125,000,000         112/17/2018         25,000,000         125,000,000         <	25,000,000 25,000,000 24,995,750 10,000,500 24,999,250 25,000,000 50,000,000 50,007,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000	A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A-1+
25,000,000         DEXIA CREDIT LOCAL SA NY         2.05%         7/9/2018         25,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         1.86%         8/6/2018         25,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.31%         11/1/2018         10,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.34%         11/9/2018         25,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.33%         1/9/2018         25,000,000         1           100,000,000         DZ BANK NY         2.23%         7/18/2018         50,000,000         1           50,000,000         DZ BANK NY         2.23%         7/18/2018         25,000,000         25,000,000         1           50,000,000         NORDEA BANK         1.87%         7/18/2018         25,000,000         25,000,000         1           50,000,000         NORDEA BANK         1.84%         7/20/2018         25,000,000         25,000,000         25,000,000         12/17/2018         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000	25,000,000 24,995,750 10,000,500 24,999,250 25,000,000 50,000,000 50,007,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000	A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A-1+
25,000,000         DEXIA CREDIT LOCAL SA NY         2.05%         7/9/2018         25,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         1.86%         8/6/2018         25,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.31%         11/1/2018         10,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.33%         11/9/2018         25,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.23%         1/9/2018         25,000,000         1           100,000,000         DZ BANK NY         2.23%         7/18/2018         50,000,000         1           50,000,000         DZ BANK NY         2.23%         7/18/2018         25,000,000         1           25,000,000         NORDEA BANK         1.87%         7/18/2018         25,000,000         1           50,000,000         NORDEA BANK         1.84%         7/20/2018         25,000,000         1           25,000,000         NORDEA BANK         2.25%         9/18/2018         25,000,000         25,000,000         1         25,000,000         1         25,000,000         1         25,000,000         1         25,000,000         25,000,000         25,000,000         1         25,000,000         25,000,000 <td< td=""><td>25,000,000 24,995,750 10,000,500 24,999,250 25,000,000 50,000,000 50,007,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000</td><td>A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A-1+</td></td<>	25,000,000 24,995,750 10,000,500 24,999,250 25,000,000 50,000,000 50,007,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000	A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A-1+
25,000,000         DEXIA CREDIT LOCAL SA NY         1.86%         8/6/2018         25,000,000           10,000,000         DEXIA CREDIT LOCAL SA NY         2.31%         11/9/2018         25,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.33%         11/9/2018         25,000,000           100,000,000         DEXIA CREDIT LOCAL SA NY         2.23%         1/9/2018         25,000,000           100,000,000         DZ BANK NY         1.89%         7/12/2018         50,000,000           50,000,000         DZ BANK NY         2.23%         7/18/2018         50,000,000           25,000,000         NORDEA BANK         1.87%         7/18/2018         25,000,000           56,377,000         NORDEA BANK         1.84%         7/20/2018         25,000,000           25,000,000         NORDEA BANK         1.84%         7/20/2018         25,000,000           25,000,000         NORDEA BANK         2.00%         8/15/2018         25,000,000           25,000,000         NORDEA BANK         2.37%         12/17/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.40%         7/16/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.49%         7/17/2018	24,995,750 10,000,500 24,999,250 25,000,000 50,006,000 50,007,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000	A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A-1+
10,000,000         DEXIA CREDIT LOCAL SA NY         2.31%         10/1/2018         10,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.34%         11/9/2018         25,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.23%         1/9/2018         25,000,000           100,000,000         DZ BANK NY         1.89%         7/2/2018         100,000,000         1           50,000,000         DZ BANK NY         2.23%         7/18/2018         50,000,000         1           50,000,000         DZ BANK NY         2.23%         7/12/2018         50,000,000         1           25,000,000         NORDEA BANK         1.87%         7/18/2018         55,000,000         1           50,000,000         NORDEA BANK         1.88%         7/2/2018         55,000,000         1           50,000,000         NORDEA BANK         2.00%         8/1/2018         25,000,000         1           25,000,000         NORDEA BANK         2.00%         8/1/2018         25,000,000         1           25,000,000         NORDEA BANK         2.25%         9/18/2018         25,000,000         25,000,000         25,000,000         12/17/2018         25,000,000         25,000,000         12/17/2018         25,000,000 <td>10,000,500 24,999,250 25,000,000 50,006,000 50,007,000 25,000,000 56,377,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000</td> <td>A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A-1+</td>	10,000,500 24,999,250 25,000,000 50,006,000 50,007,000 25,000,000 56,377,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000	A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A-1+
25,000,000         DEXIA CREDIT LOCAL SA NY         2.34%         11/9/2018         25,000,000           25,000,000         DEXIA CREDIT LOCAL SA NY         2.23%         1/9/2018         25,000,000           100,000,000         DZ BANK NY         1.89%         7/2/2018         100,000,000         10           50,000,000         DZ BANK NY         2.23%         7/18/2018         50,000,000         10           25,000,000         DZ BANK NY         2.23%         7/18/2018         50,000,000         10           25,000,000         NORDEA BANK         1.87%         7/18/2018         25,000,000         10           25,000,000         NORDEA BANK         1.84%         7/2/2018         25,000,000         10           25,000,000         NORDEA BANK         2.00%         8/1/2018         25,000,000         10           25,000,000         NORDEA BANK         2.25%         9/18/2018         25,000,000         12           25,000,000         NORDEA BANK         2.25%         9/18/2018         25,000,000         12           25,000,000         ROYAL BANK OF CANADA NY         2.17%         7/13/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.49%         7/117/2018         25,000,000	24,999,250 25,000,000 50,006,000 50,007,000 25,000,000 56,377,000 25,000,000 50,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000	A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A-1+
25,000,000         DEXIA CREDIT LOCAL SA NY         2.23%         1/9/2018         25,000,000           100,000,000         DZ BANK NY         1.89%         7/12/2018         100,000,000         1           50,000,000         DZ BANK NY         2.23%         7/18/2018         50,000,000         1           50,000,000         DZ BANK NY         2.23%         7/18/2018         50,000,000         1           25,000,000         NORDEA BANK         1.87%         7/18/2018         25,000,000         1           25,000,000         NORDEA BANK         1.84%         7/20/2018         25,000,000         1           25,000,000         NORDEA BANK         1.84%         7/20/2018         25,000,000         1           25,000,000         NORDEA BANK         2.37%         12/17/2018         25,000,000         25,000,000           25,000,000         NORDEA BANK         2.37%         12/17/2018         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         <	25,000,000 00,000,000 50,006,000 50,007,000 25,000,000 56,377,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,000	A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A-1+
100,000,000         DZ BANK NY         1.89%         7/2/2018         100,000,000         1           50,000,000         DZ BANK NY         2.23%         7/18/2018         50,000,000           50,000,000         DZ BANK NY         2.23%         7/18/2018         50,000,000           25,000,000         NORDEA BANK         1.87%         7/18/2018         25,000,000           56,377,000         NORDEA BANK         1.88%         7/2/2018         25,000,000           25,000,000         NORDEA BANK         1.84%         7/2/2018         25,000,000           50,000,000         NORDEA BANK         2.90%         8/1/2018         25,000,000           25,000,000         NORDEA BANK         2.90%         8/15/2018         25,000,000           25,000,000         NORDEA BANK         2.37%         12/17/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.17%         7/13/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.49%         7/17/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.49%         7/17/2018         30,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.29%         7/12/2018         5,050	00,000,000 50,006,000 50,007,000 25,000,000 56,377,000 25,000,000 50,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,000,850	A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A-1+
50,000,000         DZ BANK NY         2.23%         7/18/2018         50,000,000           50,000,000         DZ BANK NY         2.23%         7/25/2018         50,000,000           25,000,000         NORDEA BANK         1.87%         7/18/2018         25,000,000           56,377,000         NORDEA BANK         1.88%         7/20/218         56,377,000           25,000,000         NORDEA BANK         1.84%         7/20/2018         25,000,000           50,000,000         NORDEA BANK         1.90%         8/1/2018         25,000,000           25,000,000         NORDEA BANK         2.00%         8/15/2018         25,000,000           25,000,000         NORDEA BANK         2.25%         9/18/2018         25,000,000           25,000,000         NORDEA BANK         2.37%         12/17/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.42%         7/11/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.49%         7/17/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.49%         7/17/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.49%         7/17/2018         25,000,000 <td>50,006,000 50,007,000 25,000,000 56,377,000 25,000,000 50,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,001,850</td> <td>A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A-1+</td>	50,006,000 50,007,000 25,000,000 56,377,000 25,000,000 50,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,001,850	A-1+ A-1+ A-1+ A-1+ A-1+ A-1+ A-1+
50,000,000         DZ BANK NY         2.23%         7/25/2018         50,000,000           25,000,000         NORDEA BANK         1.87%         7/18/2018         25,000,000           56,377,000         NORDEA BANK         1.88%         7/22/2018         56,377,000           25,000,000         NORDEA BANK         1.84%         7/20/2018         25,000,000           50,000,000         NORDEA BANK         1.90%         8/11/2018         50,000,000           25,000,000         NORDEA BANK         2.00%         8/15/2018         25,000,000           25,000,000         NORDEA BANK         2.37%         12/17/2018         25,000,000           25,000,000         NORDEA BANK         2.37%         12/17/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.17%         7/3/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.49%         7/17/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.49%         7/17/2018         30,00,000           25,000,000         ROYAL BANK OF CANADA NY         2.9%         7/24/2018         5,050,000           25,000,000         ROYAL BANK OF CANADA NY         2.9%         7/24/2018         5,050,000 <td>50,007,000 25,000,000 56,377,000 25,000,000 50,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,001,850</td> <td>A-1+ A-1+ A-1+ A-1+ A-1+ A-1+</td>	50,007,000 25,000,000 56,377,000 25,000,000 50,000,000 25,000,000 25,000,000 25,000,000 25,000,000 25,001,850	A-1+ A-1+ A-1+ A-1+ A-1+ A-1+
25,000,000         NORDEA BANK         1.87%         7/18/2018         25,000,000           56,377,000         NORDEA BANK         1.88%         7/2/2018         56,377,000           25,000,000         NORDEA BANK         1.84%         7/2/2018         25,000,000           50,000,000         NORDEA BANK         1.90%         8/1/2018         25,000,000           25,000,000         NORDEA BANK         2.00%         8/15/2018         25,000,000           25,000,000         NORDEA BANK         2.25%         9/18/2018         25,000,000           25,000,000         NORDEA BANK         2.37%         12/17/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.17%         7/3/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.40%         7/16/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.40%         7/17/2018         30,000,000           30,000,000         ROYAL BANK OF CANADA NY         2.40%         7/17/2018         30,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.39%         8/2/2018         25,000,000           21,900,000         ROYAL BANK OF CANADA NY         2.41%         1/4/2018         8	25,000,000 56,377,000 25,000,000 50,000,000 25,000,000 25,000,000 25,000,000 25,001,850	A-1+ A-1+ A-1+ A-1+ A-1+
25,000,000         NORDEA BANK         1.87%         7/18/2018         25,000,000           56,377,000         NORDEA BANK         1.88%         7/2018         56,377,000           25,000,000         NORDEA BANK         1.84%         7/20/2018         25,000,000           50,000,000         NORDEA BANK         1.90%         8/1/2018         25,000,000           25,000,000         NORDEA BANK         2.00%         8/15/2018         25,000,000           25,000,000         NORDEA BANK         2.25%         9/18/2018         25,000,000           25,000,000         NORDEA BANK         2.37%         12/17/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.40%         7/6/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.40%         7/17/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.40%         7/17/2018         30,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.40%         7/17/2018         30,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.39%         8/2/2018         25,000,000           21,900,000         ROYAL BANK OF CANADA NY         2.41%         10/4/2018         8	56,377,000 25,000,000 50,000,000 25,000,000 25,000,000 25,000,000 25,001,850	A-1+ A-1+ A-1+ A-1+ A-1+
56,377,000         NORDEA BANK         1.88%         7/2/2018         56,377,000           25,000,000         NORDEA BANK         1.84%         7/20/2018         25,000,000           50,000,000         NORDEA BANK         1.90%         8/1/2018         50,000,000           25,000,000         NORDEA BANK         2.00%         8/15/2018         25,000,000           25,000,000         NORDEA BANK         2.25%         9/18/2018         25,000,000           25,000,000         NORDEA BANK         2.37%         12/17/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.17%         7/3/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.40%         7/17/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.49%         7/17/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.49%         7/17/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.9%         7/2/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.9%         7/2/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.47%         9/6/2018	56,377,000 25,000,000 50,000,000 25,000,000 25,000,000 25,000,000 25,001,850	A-1+ A-1+ A-1+ A-1+
25,000,000         NORDEA BANK         1.84%         7/20/2018         25,000,000           50,000,000         NORDEA BANK         1.90%         8/1/2018         50,000,000           25,000,000         NORDEA BANK         2.00%         8/15/2018         25,000,000           25,000,000         NORDEA BANK         2.37%         12/17/2018         25,000,000           25,000,000         NORDEA BANK         2.37%         12/17/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.17%         7/3/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.40%         7/17/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.49%         7/17/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.49%         7/17/2018         25,000,000           30,000,000         ROYAL BANK OF CANADA NY         2.49%         7/17/2018         5,050,000           25,000,000         ROYAL BANK OF CANADA NY         2.39%         8/2/2018         5,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.47%         9/6/2018         21,913,923           8,300,000         ROYAL BANK OF CANADA NY         2.41%         10/4	25,000,000 50,000,000 25,000,000 25,000,000 25,000,000 25,001,850	A-1+ A-1+ A-1+
50,000,000         NORDEA BANK         1.90%         8/1/2018         50,000,000           25,000,000         NORDEA BANK         2.00%         8/15/2018         25,000,000           25,000,000         NORDEA BANK         2.25%         9/18/2018         25,000,000           25,000,000         NORDEA BANK         2.37%         12/17/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.22%         7/11/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.17%         7/3/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.40%         7/6/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.49%         7/17/2018         30,000,000           30,000,000         ROYAL BANK OF CANADA NY         2.53%         7/17/2018         25,000,000           5,050,000         ROYAL BANK OF CANADA NY         2.9%         8/2/2018         25,000,000           21,900,000         ROYAL BANK OF CANADA NY         2.9%         8/2/2018         25,000,000           21,900,000         ROYAL BANK OF CANADA NY         2.47%         9/6/2018         21,913,923           8,300,000         ROYAL BANK (C         2.04%         7/2/20	50,000,000 25,000,000 25,000,000 25,000,000 25,001,850	A-1+ A-1+
25,000,000         NORDEA BANK         2.00%         8/15/2018         25,000,000           25,000,000         NORDEA BANK         2.25%         9/18/2018         25,000,000           25,000,000         NORDEA BANK         2.37%         12/17/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.22%         7/11/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.17%         7/3/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.40%         7/6/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.49%         7/17/2018         30,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.53%         7/17/2018         30,000,000           30,000,000         ROYAL BANK OF CANADA NY         2.29%         7/24/2018         5,050,000           25,000,000         ROYAL BANK OF CANADA NY         2.39%         8/2/2018         25,000,000           21,900,000         ROYAL BANK OF CANADA NY         2.49%         7/24/2018         5,000,000           21,900,000         ROYAL BANK OF CANADA NY         2.41%         10/4/2018         8,284,981           50,000,000         SCOTIA BANK (2)         2.04%	25,000,000 25,000,000 25,000,000 25,001,850	A-1+
25,000,000         NORDEA BANK         2.25%         9/18/2018         25,000,000           25,000,000         NORDEA BANK         2.37%         12/17/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.22%         7/11/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.17%         7/3/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.40%         7/6/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.49%         7/17/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.49%         7/17/2018         30,000,000           30,000,000         ROYAL BANK OF CANADA NY         2.39%         7/2/2018         5,050,000           25,000,000         ROYAL BANK OF CANADA NY         2.39%         8/2/2018         25,000,000           21,900,000         ROYAL BANK OF CANADA NY         2.47%         9/6/2018         21,913,923           8,300,000         ROYAL BANK OF CANADA NY         2.41%         10/4/2018         8,284,981           50,000,000         SCOTIA BANK (2)         2.04%         7/2/2018         50,000,000           25,000,000         SUMITOMO MITSUI BANK (2)         2	25,000,000 25,000,000 25,001,850	
25,000,000         NORDEA BANK         2.37%         12/17/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.22%         7/11/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.17%         7/3/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.40%         7/17/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.49%         7/17/2018         25,000,000           30,000,000         ROYAL BANK OF CANADA NY         2.49%         7/17/2018         30,000,000           5,050,000         ROYAL BANK OF CANADA NY         2.53%         7/17/2018         30,000,000           5,050,000         ROYAL BANK OF CANADA NY         2.29%         7/24/2018         5,050,000           25,000,000         ROYAL BANK OF CANADA NY         2.49%         7/17/2018         25,000,000           21,900,000         ROYAL BANK OF CANADA NY         2.41%         10/4/2018         8,284,981           50,000,000         SCOTIA BANK (2)         2.04%         7/2/2018         50,000,000           25,000,000         SCOTIA BANK (2)         2.00%         7/2/2018         25,000,000           25,000,000         SUMITOMO MITSUI BANK (2)	25,000,000 25,001,850	
25,000,000         ROYAL BANK OF CANADA NY         2.22%         7/11/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.17%         7/3/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.40%         7/6/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.49%         7/17/2018         25,000,000           30,000,000         ROYAL BANK OF CANADA NY         2.49%         7/17/2018         30,000,000           5,050,000         ROYAL BANK OF CANADA NY         2.53%         7/17/2018         30,000,000           5,050,000         ROYAL BANK OF CANADA NY         2.29%         7/24/2018         5,050,000           25,000,000         ROYAL BANK OF CANADA NY         2.39%         8/2/2018         25,000,000           21,900,000         ROYAL BANK OF CANADA NY         2.47%         9/6/2018         21,913,923           8,300,000         ROYAL BANK OF CANADA NY         2.41%         10/4/2018         8,284,981           50,000,000         SCOTIA BANK (2)         2.04%         7/2/2018         50,000,000           25,000,000         SCOTIA BANK (2)         2.00%         7/2/2018         25,000,000           25,000,000         SUMITOMO MITSUI BANK (2)	25,001,850	A-1+
25,000,000         ROYAL BANK OF CANADA NY         2.17%         7/3/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.40%         7/6/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.49%         7/17/2018         25,000,000           30,000,000         ROYAL BANK OF CANADA NY         2.49%         7/17/2018         30,000,000           30,000,000         ROYAL BANK OF CANADA NY         2.53%         7/17/2018         30,000,000           5,050,000         ROYAL BANK OF CANADA NY         2.29%         7/24/2018         5,050,000           25,000,000         ROYAL BANK OF CANADA NY         2.39%         8/2/2018         25,000,000           21,900,000         ROYAL BANK OF CANADA NY         2.47%         9/6/2018         21,913,923           8,300,000         ROYAL BANK OF CANADA NY         2.41%         10/4/2018         8,284,981           50,000,000         SCOTIA BANK (2)         2.04%         7/2/2018         50,000,000           25,000,000         SCOTIA BANK (2)         2.00%         7/2/2018         25,000,000           25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         25,000,000           25,000,000         SUMITOMO MITSUI BANK (2)		A-1+
25,000,000         ROYAL BANK OF CANADA NY         2.40%         7/6/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.49%         7/17/2018         25,000,000           30,000,000         ROYAL BANK OF CANADA NY         2.53%         7/17/2018         30,000,000           5,050,000         ROYAL BANK OF CANADA NY         2.53%         7/17/2018         30,000,000           5,050,000         ROYAL BANK OF CANADA NY         2.29%         7/24/2018         5,050,000           25,000,000         ROYAL BANK OF CANADA NY         2.39%         8/2/2018         25,000,000           21,900,000         ROYAL BANK OF CANADA NY         2.47%         9/6/2018         21,913,923           8,300,000         ROYAL BANK OF CANADA NY         2.41%         10/4/2018         8,284,981           50,000,000         SCOTIA BANK (2)         2.04%         7/2/2018         50,000,000           250,000,000         SCOTIA BANK (2)         2.00%         7/2/2018         25,000,000         2           25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         25,000,000         2           25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         50,000,000         1 <td< td=""><td></td><td>A-1+</td></td<>		A-1+
25,000,000         ROYAL BANK OF CANADA NY         2.40%         7/6/2018         25,000,000           25,000,000         ROYAL BANK OF CANADA NY         2.49%         7/17/2018         25,000,000           30,000,000         ROYAL BANK OF CANADA NY         2.53%         7/17/2018         30,000,000           5,050,000         ROYAL BANK OF CANADA NY         2.53%         7/17/2018         30,000,000           5,050,000         ROYAL BANK OF CANADA NY         2.29%         7/24/2018         5,050,000           25,000,000         ROYAL BANK OF CANADA NY         2.39%         8/2/2018         25,000,000           21,900,000         ROYAL BANK OF CANADA NY         2.47%         9/6/2018         21,913,923           8,300,000         ROYAL BANK OF CANADA NY         2.41%         10/4/2018         8,284,981           50,000,000         SCOTIA BANK (2)         2.04%         7/2/2018         50,000,000           25,000,000         SCOTIA BANK (2)         2.00%         7/2/2018         25,000,000           25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         50,000,000           25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000         1           100,000,000         SUMITOMO	25,000,550	A-1+
25,000,000         ROYAL BANK OF CANADA NY         2.49%         7/17/2018         25,000,000           30,000,000         ROYAL BANK OF CANADA NY         2.53%         7/17/2018         30,000,000           5,050,000         ROYAL BANK OF CANADA NY         2.29%         7/24/2018         5,050,000           25,000,000         ROYAL BANK OF CANADA NY         2.39%         8/2/2018         25,000,000           21,900,000         ROYAL BANK OF CANADA NY         2.47%         9/6/2018         21,913,923           8,300,000         ROYAL BANK OF CANADA NY         2.41%         10/4/2018         8,284,981           50,000,000         SCOTIA BANK (2)         2.04%         7/2/2018         50,000,000           250,000,000         SCOTIA BANK (2)         2.04%         7/2/2018         25,000,000           250,000,000         SCOTIA BANK (2)         2.00%         7/2/2018         25,000,000           25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         25,000,000           25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         50,000,000           100,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000           100,000,000         SUMITOMO MITSUI BANK (2)	25,000,000	A-1+
30,000,000         ROYAL BANK OF CANADA NY         2.53%         7/17/2018         30,000,000           5,050,000         ROYAL BANK OF CANADA NY         2.29%         7/24/2018         5,050,000           25,000,000         ROYAL BANK OF CANADA NY         2.39%         8/2/2018         25,000,000           21,900,000         ROYAL BANK OF CANADA NY         2.39%         8/2/2018         25,000,000           21,900,000         ROYAL BANK OF CANADA NY         2.47%         9/6/2018         21,913,923           8,300,000         ROYAL BANK OF CANADA NY         2.41%         10/4/2018         8,284,981           50,000,000         SCOTIA BANK (2)         2.04%         7/2/2018         50,000,000           25,000,000         SCOTIA BANK (2)         2.04%         7/2/2018         25,000,000           25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         25,000,000           25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         50,000,000           100,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000           100,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000           100,000,000         SUMITOMO MITSUI BANK (2	25,017,825	A-1+
5,050,000ROYAL BANK OF CANADA NY2.29%7/24/20185,050,00025,000,000ROYAL BANK OF CANADA NY2.39%8/2/201825,000,00021,900,000ROYAL BANK OF CANADA NY2.47%9/6/201821,913,9238,300,000ROYAL BANK OF CANADA NY2.41%10/4/20188,284,98150,000,000SCOTIA BANK (2)2.04%7/2/201850,000,000250,000,000SCOTIA BANK (2)2.04%7/2/2018250,000,00025,000,000SUMITOMO MITSUI BANK (2)2.00%7/2/201825,000,00025,000,000SUMITOMO MITSUI BANK (2)2.00%7/2/201825,000,00000,000,000SUMITOMO MITSUI BANK (2)2.00%7/2/201850,000,000100,000,000SUMITOMO MITSUI BANK (2)2.00%7/2/2018100,000,000100,000,000SUMITOMO MITSUI BANK (2)2.00%7/2/201825,000,00025,000,000SVENSKA HANDELSBANKEN NY1.89%7/25/201825,000,00025,000,000SVENSKA HANDELSBANKEN NY2.35%10/24/201825,000,000	30,024,030.	A-1+
25,000,000         ROYAL BANK OF CANADA NY         2.39%         8/2/2018         25,000,000           21,900,000         ROYAL BANK OF CANADA NY         2.47%         9/6/2018         21,913,923           8,300,000         ROYAL BANK OF CANADA NY         2.47%         9/6/2018         21,913,923           8,300,000         ROYAL BANK OF CANADA NY         2.41%         10/4/2018         8,284,981           50,000,000         SCOTIA BANK (2)         2.04%         7/2/2018         50,000,000           250,000,000         SCOTIA BANK (2)         2.04%         7/2/2018         250,000,000           25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         25,000,000           25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         25,000,000           50,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         50,000,000           100,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000         1           100,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000         1           100,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000         1	, ,	
21,900,000         ROYAL BANK OF CANADA NY         2.47%         9/6/2018         21,913,923           8,300,000         ROYAL BANK OF CANADA NY         2.41%         10/4/2018         8,284,981           50,000,000         SCOTIA BANK (2)         2.04%         7/2/2018         50,000,000           250,000,000         SCOTIA BANK (2)         2.04%         7/2/2018         250,000,000         2           25,000,000         SCOTIA BANK (2)         2.04%         7/2/2018         250,000,000         2           25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         25,000,000         2           25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         25,000,000         2           50,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         50,000,000         1           100,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000         1           100,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000         1           100,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000         1           100,000,000         SUMITOMO MITSUI BANK (2)	5,050,924	A-1+
8,300,000         ROYAL BANK OF CANADA NY         2.41%         10/4/2018         8,284,981           50,000,000         SCOTIA BANK (2)         2.04%         7/2/2018         50,000,000           250,000,000         SCOTIA BANK (2)         2.04%         7/2/2018         250,000,000         2           25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         25,000,000         2           25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         25,000,000         2           25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         25,000,000         50,000,000         100,000,000         100,000,000         100,000,000         100,000,000         1         100,000,000         100,000,000         1         100,000,000         100,000,000         1         100,000,000         1         100,000,000         1         100,000,000         1         100,000,000         1         1         100,000,000         1         100,000,000         1         100,000,000         1         100,000,000         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1<	25,000,000	A-1+
50,000,000         SCOTIA BANK (2)         2.04%         7/2/2018         50,000,000           250,000,000         SCOTIA BANK (2)         2.04%         7/2/2018         250,000,000         2           25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         25,000,000         2           25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         25,000,000         2           25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         25,000,000         2           50,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         50,000,000         1           100,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000         1           100,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000         1           100,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000         1           25,000,000         SVENSKA HANDELSBANKEN NY         1.89%         7/25/2018         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000	21,918,812	A-1+
250,000,000         SCOTIA BANK (2)         2.04%         7/2/2018         250,000,000         2           25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         25,000,000         2           25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         25,000,000         2           25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         25,000,000         2           50,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         50,000,000         1           100,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000         1           100,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000         1           100,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000         1           25,000,000         SVENSKA HANDELSBANKEN NY         1.89%         7/25/2018         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,000,000         25,0	8,286,139	A-1+
25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         25,000,000           25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         25,000,000           50,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         50,000,000           50,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         50,000,000           100,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000         1           100,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000         1           25,000,000         SVENSKA HANDELSBANKEN NY         1.89%         7/25/2018         25,000,000         25,000,000         SVENSKA HANDELSBANKEN NY         2.38%         9/24/2018         25,000,000           25,000,000         SVENSKA HANDELSBANKEN NY         2.35%         10/24/2018         25,000,000	50,000,000	A-1
25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         25,000,000           25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         25,000,000           50,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         50,000,000           50,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         50,000,000           100,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000         1           100,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000         1           25,000,000         SVENSKA HANDELSBANKEN NY         1.89%         7/25/2018         25,000,000         25,000,000         SVENSKA HANDELSBANKEN NY         2.38%         9/24/2018         25,000,000           25,000,000         SVENSKA HANDELSBANKEN NY         2.35%         10/24/2018         25,000,000	50,000,000	A-1
25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         25,000,000           50,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         50,000,000           100,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000         1           100,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000         1           25,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000         1           25,000,000         SVENSKA HANDELSBANKEN NY         1.89%         7/25/2018         25,000,000         25,000,000         25,000,000         SVENSKA HANDELSBANKEN NY         2.38%         9/24/2018         25,000,000           25,000,000         SVENSKA HANDELSBANKEN NY         2.35%         10/24/2018         25,000,000	25,000,000	A-1
50,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         50,000,000           100,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000         1           100,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000         1           100,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000         1           25,000,000         SVENSKA HANDELSBANKEN NY         1.89%         7/25/2018         25,000,000	25,000,000	A-1
100,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000         1           100,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000         1           25,000,000         SVENSKA HANDELSBANKEN NY         1.89%         7/25/2018         25,000,000	50,000,000	A-1
100,000,000         SUMITOMO MITSUI BANK (2)         2.00%         7/2/2018         100,000,000         1           25,000,000         SVENSKA HANDELSBANKEN NY         1.89%         7/25/2018         25,000,000         25,000,000         25,000,000         25,000,000         SVENSKA HANDELSBANKEN NY         2.38%         9/24/2018         25,000,000         25,000,000         SVENSKA HANDELSBANKEN NY         2.35%         10/24/2018         25,000,000	, ,	
25,000,000SVENSKA HANDELSBANKEN NY1.89%7/25/201825,000,00025,000,000SVENSKA HANDELSBANKEN NY2.38%9/24/201825,000,00025,000,000SVENSKA HANDELSBANKEN NY2.35%10/24/201825,000,000	00,000,000	A-1
25,000,000         SVENSKA HANDELSBANKEN NY         2.38%         9/24/2018         25,000,000           25,000,000         SVENSKA HANDELSBANKEN NY         2.35%         10/24/2018         25,000,000	00,000,000	A-1
25,000,000 SVENSKA HANDELSBANKEN NY 2.35% 10/24/2018 25,000,000	24,999,000	A-1+
	25,008,750	A-1+
	25,002,250	A-1+
25,000,000 SVENSKA HANDELSBANKEN NY 2.40% 11/5/2018 25,000,000	25,005,250	A-1+
	24,997,750	A-1+
		A-1+
	25,003,700	
	50,000,000	A-1+
	25,006,000	A-1+
	50,000,000	A-1+
	25,000,000	A-1+
50,000,000 TORONTO DOMINION BANK NY (2) 2.01% 7/2/2018 50,000,000	50,000,000	A-1+
	00,000,000	A-1+
	50,008,000	A-1+
	25,004,500	A-1+
	25,002,250	A-1+
	25,007,750	A-1+
	25,000,000	A-1+
\$ 2,506,627,000	06,730,830	
BANK DEPOSIT INSTRUMENTS WITH GOVERNMENT BACKING (9.2% OF TOTAL INVESTMENTS)		
	25 000 000	A 0
	25,000,000	A-2
	50,000,000	A-2
	75,000,000	A-2
100,000,000 CITIZEN'S BANK (2,3) 2.00% 7/2/2018 100,000,000 1	00,000,000	A-2
	75,000,000	A-2
	00,000,000	A-2
	50,000,000	N/A
	50,000,000	N/A
\$ 625,000,000	25,000,000	

## SHORT-TERM INVESTMENT FUND

## LIST OF INVESTMENTS AT JUNE 30, 2018 (Continued)

	Par	Issuer	YTM	Reset / Maturity	Amortized Cost	Fair Market Value	Ratin
10	N-FINANCIAL C	OMMERCIAL PAPER AND CORPORA	TE NOTES (	23 8% OF TOTAL		5)	
	25,000,000	APPLE INC	1.94%	8/13/2018 \$	24,943,264	\$ 24,937,500	A-2
	25,000,000	APPLE INC	2.14%	9/10/2018	24,896,951	24,895,250	A-'
	25,000,000	APPLE INC	2.14 %	9/12/2018	24,893,542	24,892,250	A- A-
	25,000,000	APPLE INC	2.13%	9/17/2018	24,883,000		A- A-
			2.21%			24,884,250	
	25,000,000	APPLE INC		9/17/2018	24,882,458	24,884,250	A-
	25,000,000	APPLE INC	2.21%	9/18/2018	24,881,500	24,882,750	A-
	25,000,000	APPLE INC	2.22%	9/18/2018	24,880,951	24,882,750	A-
	25,000,000	APPLE INC	2.34%	12/3/2018	24,754,583	24,742,750	A-
	25,000,000	APPLE INC	2.34%	12/3/2018	24,754,583	24,742,750	A-
	25,000,000	APPLE INC	2.34%	12/4/2018	24,753,000	24,741,000	A-
	25,000,000	COCA-COLA CO	1.85%	7/12/2018	24,986,174	24,982,500	A-
	25,000,000	COCA-COLA CO	2.14%	8/23/2018	24,923,076	24,922,000	A-
	25,000,000	COCA-COLA CO	2.14%	8/23/2018	24,923,076	24,922,000	A-
	25,000,000	COCA-COLA CO	2.15%	8/24/2018	24,921,250	24,920,500.	A-
	10,000,000	COCA-COLA CO	2.32%	9/10/2018	9,955,231	9,957,700	A-
	25,000,000	COCA-COLA CO	2.32%	9/12/2018	24,884,924	24,891,250	A-
	25,000,000	COCA-COLA CO	2.34%	9/24/2018	24,865,417	24,871,750	A-
	25,000,000		2.34%		24,863,833		A- A-
	, ,	COCA-COLA CO		9/25/2018	, ,	24,870,250	
	25,000,000	COCA-COLA CO	2.43%	12/6/2018	24,739,958	24,734,500	A-
	25,000,000	COCA-COLA CO	2.43%	12/7/2018	24,738,313	24,732,500	A-
	15,000,000	COCA-COLA CO	2.43%	12/7/2018	14,842,988	14,839,500	A-
	50,000,000	EXXON MOBIL CORP	2.06%	8/16/2018	49,870,944	49,866,500	A-
	50,000,000	EXXON MOBIL CORP	2.06%	8/17/2018	49,868,139	49,864,000	A-
	50,000,000	EXXON MOBIL CORP	2.06%	8/21/2018	49,856,917	49,852,000	A-
	25,000,000	EXXON MOBIL CORP	2.07%	9/14/2018	24,894,271	24,891,000	A-
	25,000,000	EXXON MOBIL CORP	2.09%	9/14/2018	24,893,229	24,891,000	A-
	25,000,000	EXXON MOBIL CORP	2.08%	9/17/2018	24,889,500	24,886,750	A-
	25,000,000	EXXON MOBIL CORP	2.08%	9/21/2018	24,883,833	24,880,750	A-
	25,000,000	NATL SEC CLEARING CORP	1.92%	7/2/2018	24,998,688	24,996,000	A-
	25,000,000	NATL SEC CLEARING CORP	2.09%	7/9/2018	24,988,611	24,986,750	A-
	25,000,000	NATL SEC CLEARING CORP	2.09%	8/7/2018	24,947,326	24,945,250	A-
	25,000,000	NATL SEC CLEARING CORP	2.29%	9/17/2018	24,878,125	24,879,500	A-
	25,000,000	NATL SEC CLEARING CORP	2.20%	10/1/2018	24,862,639	24,854,750	A-
	25,000,000	NATE SEC CLEARING CORP	2.24%	10/1/2018			A-
					24,859,444	24,854,750	
	25,000,000	NATL SEC CLEARING CORP	2.25%	10/2/2018	24,857,917	24,852,750	A-
	25,000,000	NATL SEC CLEARING CORP	2.31%	11/28/2018	24,765,625	24,745,500	A-
	25,000,000	NATL SEC CLEARING CORP	2.41%	12/4/2018	24,745,417	24,735,000	A-
	25,000,000	NATL SEC CLEARING CORP	2.42%	12/13/2018	24,729,583	24,719,250	A-
	100,000,000	PROCTER & GAMBLE CO	1.95%	7/5/2018	99,978,667	99,968,000	A-
	25,000,000	PROCTER & GAMBLE CO	1.98%	7/23/2018	24,970,208	24,967,500	A-
	25,000,000	TOYOTA MOTOR CREDIT CORP	2.11%	7/3/2018	25,000,000	25,000,000	A-
	25,000,000	TOYOTA MOTOR CREDIT CORP	2.31%	7/3/2018	25,000,000	25,000,000	A-
	10,000,000	TOYOTA MOTOR CREDIT CORP	1.84%	7/11/2018	9,995,000	9,993,600	A-
	25,000,000	TOYOTA MOTOR CREDIT CORP	1.86%	7/19/2018	24,977,250	24,973,000	A-
	25,000,000	TOYOTA MOTOR CREDIT CORP	1.88%	7/24/2018	24,970,611	24,966,000	A-
	25,000,000	TOYOTA MOTOR CREDIT CORP	2.40%	8/16/2018	24,924,931	24,931,750	A-
	15,000,000	TOYOTA MOTOR CREDIT CORP	2.36%	9/14/2018	14,927,813	14,930,700	A-
	, ,						
	50,000,000	TOYOTA MOTOR CREDIT CORP	2.35%	9/21/2018	49,738,056	49,744,500	A-
	25,000,000	TOYOTA MOTOR CREDIT CORP	2.33%	9/26/2018	24,862,250	24,863,750	A-
	25,000,000	TOYOTA MOTOR CREDIT CORP	2.37%	10/5/2018	24,845,333	24,847,500	A-
	50,000,000	WALMART INC	1.96%	7/2/2018	49,997,319	49,992,000	A-
	50,000,000	WALMART INC	2.01%	7/16/2018	49,958,750	49,952,500	A-
	50,000,000	WALMART INC	2.01%	7/17/2018	49,956,000	49,949,500	A-
	50,000,000	WALMART INC	2.02%	7/18/2018	49,953,014	49,946,500	A-
	50,000,000	WALMART INC	2.02%	7/19/2018	49,950,250	49,943,500	A-
	625,000,000		. =		1,618,963,732	\$ 1,618,801,750	

## SHORT-TERM INVESTMENT FUND

## LIST OF INVESTMENTS AT JUNE 30, 2018 (Continued)

Par	Issuer	YTM	Reset / Maturity	Amortized Cost	Fair Market Value	Rating
GOVERNMENT	AGENCY SECURITIES (20.5% OF TOTAL	INVESTME	NTS)			
\$ 12,000,000	FANNIE MAE	1.26%	7/13/2018	\$ 11,998,392	\$ 11,996,364	AA+
3,000,000	FANNIE MAE	1.25%	7/13/2018	2,999,612	2,999,091	AA+
12,000,000	FANNIE MAE	1.27%	7/27/2018	12,000,000	11,991,396	AA+
1,972,000	FANNIE MAE	1.76%	10/19/2018	1,968,272	1,966,435	AA+
15,000,000	FANNIE MAE	1.89%	10/19/2018	14,965,697	14,957,670	AA+
10,000,000	FANNIE MAE	1.92%	10/19/2018	9,976,341	9,971,780	AA+
14,516,000	FANNIE MAE	1.90%	11/27/2018	14,499,801	14,487,403	AA+
7,536,000	FANNIE MAE	2.02%	2/26/2019	7,486,401	7,473,451	AA+
11,714,000	FANNIE MAE	2.12%	2/26/2019	11,629,399	11,616,774	AA+
15,000,000	FANNIE MAE	2.24%	2/26/2019	14,880,128	14,875,500	AA+
30,000,000	FEDERAL FARM CREDIT BANK	1.94%	12/18/2019	29,923,255	29,920,394	AA+
25,000,000	FEDERAL FARM CREDIT BANK	2.11%	6/18/2020	24,997,544	24,997,685	AA+
25,000,000	FEDERAL FARM CREDIT BANK	1.95%	1/9/2020	24,998,092	24,936,489	AA+
25,000,000	FEDERAL FARM CREDIT BANK	1.94%	12/26/2019	24,998,140	24,933,700	AA+
50,000,000	FEDERAL FARM CREDIT BANK	2.01%	2/28/2020	50,000,000	49,898,784	AA+
10,000,000	FEDERAL FARM CREDIT BANK	2.01%	2/28/2020	9,985,103	9,979,757	AA+
25,000,000	FEDERAL FARM CREDIT BANK	2.03%	3/6/2019	24,999,405	25,010,777	AA+
25,000,000	FEDERAL FARM CREDIT BANK	2.03%	3/6/2019	25,000,000	25,010,777	AA+
25,000,000	FEDERAL FARM CREDIT BANK	2.03%	3/13/2020	24,995,762	24,966,235	AA+
15,000,000	FEDERAL FARM CREDIT BANK	2.04%	3/13/2020	14,989,860	14,979,741	AA+
25,000,000	FEDERAL FARM CREDIT BANK	1.94%	6/5/2019	25,000,000	24,970,833	AA+
25,000,000	FEDERAL FARM CREDIT BANK	1.94% 1.92%	6/5/2019	25,000,580	24,970,833 29,968,451	AA+ AA+
30,000,000	FEDERAL FARM CREDIT BANK		7/17/2019	29,996,868		
25,000,000	FEDERAL FARM CREDIT BANK	1.92%	8/16/2019	25,000,000	24,968,080	AA+
5,000,000	FEDERAL FARM CREDIT BANK	2.17%	9/17/2018	5,000,953	5,002,477	AA+
25,000,000	FEDERAL FARM CREDIT BANK	1.93%	9/5/2019	24,998,524	24,965,536	AA+
25,000,000	FEDERAL FARM CREDIT BANK	1.93%	9/5/2019	24,998,524	24,965,536	AA+
25,000,000	FEDERAL FARM CREDIT BANK	1.92%	9/13/2019	24,997,703	24,936,817	AA+
25,000,000	FEDERAL FARM CREDIT BANK	1.93%	11/4/2019	24,995,790	24,943,046	AA+
15,790,000	FEDERAL FARM CREDIT BANK	2.09%	2/10/2020	15,817,001	15,821,185	AA+
7,275,000	FEDERAL FARM CREDIT BANK	2.09%	2/10/2020	7,286,805	7,289,368	AA+
25,000,000	FEDERAL FARM CREDIT BANK	2.03%	11/19/2019	24,982,414	25,004,188	AA+
3,000,000	FEDERAL FARM CREDIT BANK	2.15%	10/22/2018	3,000,005	3,001,841	AA+
1,500,000	FEDERAL FARM CREDIT BANK	2.26%	2/25/2019	1,502,662	1,502,661	AA+
25,000,000	FEDERAL FARM CREDIT BANK	2.05%	2/27/2020	24,999,810	24,999,435	AA+
15,000,000	FEDERAL FARM CREDIT BANK	1.88%	3/1/2019	15,000,000	14,998,491	AA+
25,000,000	FEDERAL FARM CREDIT BANK	2.05%	1/3/2019	25,000,312	25,018,786	AA+
1,000,000	FEDERAL FARM CREDIT BANK	1.76%	9/17/2018	1,000,398	1,000,037	AA+
7,000,000	FEDERAL FARM CREDIT BANK	1.67%	9/20/2018	6,987,738	6,982,787	AA+
9,000,000	FEDERAL FARM CREDIT BANK	1.95%	10/11/2018	9,001,353	9,000,342	AA+
4,150,000	FEDERAL FARM CREDIT BANK	1.70%	10/15/2018	4,142,829	4,138,787	AA+
3,000,000	FEDERAL FARM CREDIT BANK	1.76%	10/24/2018	3,002,198	3,000,225	AA+
5,000,000	FEDERAL FARM CREDIT BANK	1.60%	11/1/2018	4,989,564	4,981,455	AA+
8,795,000	FEDERAL FARM CREDIT BANK	1.62%	11/1/2018	8,776,053	8,762,379	AA+
3,000,000	FEDERAL FARM CREDIT BANK	2.06%	11/9/2018	2,989,453	2,987,130	AA+
2,000,000	FEDERAL FARM CREDIT BANK	2.10%	12/19/2018	1,990,965	1,990,334	AA+
15,000,000	FEDERAL FARM CREDIT BANK	2.19%	1/8/2019	14,923,789	14,905,725	AA+
2,340,000	FEDERAL FARM CREDIT BANK	2.21%	1/25/2019	2,327,081	2,325,829	AA+
6,539,000	FEDERAL FARM CREDIT BANK	2.08%	2/11/2019	6,504,131	6,489,231	AA+
15,000,000	FED HOME LN DISCOUNT NT	2.13%	2/26/2019	14,794,000	14,786,895	AA+
25,000,000	FEDERAL HOME LOAN BANK	1.96%	8/7/2019	25,000,675	25,008,827	AA+
25,000,000	FEDERAL HOME LOAN BANK	1.97%	11/13/2019	24,998,994	24,995,113	AA+
25,000,000	FEDERAL HOME LOAN BANK	1.97%	1/14/2019	25,000,664	25,002,460	AA+
39,000,000	FEDERAL HOME LOAN BANK	2.15%	1/18/2019	39,005,324	39,020,499	AA+
15,000,000	FEDERAL HOME LOAN BANK	2.01%	7/19/2019	15,000,084	15,008,364	AA+
25,000,000	FEDERAL HOME LOAN BANK	2.02%	1/22/2020	25,000,000	24,996,223	AA+
25,000,000	FEDERAL HOME LOAN BANK	2.02%	2/25/2019	25,000,152	25,005,616	AA+
25,000,000	FEDERAL HOME LOAN BANK	1.91%	8/1/2019	25,000,000	25,006,115	AA+
6,200,000	FEDERAL HOME LOAN BANK	2.17%	5/10/2019	6,197,800	6,204,661	AA+
25,000,000	FEDERAL HOME LOAN BANK	2.17%	5/24/2019	25,000,000	25,024,105	AA+
22,000,000	FEDERAL HOME LOAN BANK	2.17%	5/24/2019	21,995,063	22,021,213	AA+
25,000,000	FEDERAL HOME LOAN BANK	2.08%	3/6/2019	24,989,841	25,009,391	AA+
4,000,000	FEDERAL HOME LOAN BANK	2.08%	3/6/2019	3,998,308	4,001,503	AA+
4,100,000	FEDERAL HOME LOAN BANK	2.17%	6/12/2019	4,099,419	4,105,620	AA+
+,100,000		<b>_</b> ,/0	5/ 1 <i>L</i> /2010	1,000,410	1,100,020	1 1 1

## SHORT-TERM INVESTMENT FUND LIST OF INVESTMENTS AT JUNE 30, 2018 (Continued)

Par	lssuer	YTM	Reset / Maturity	Amortized Cost	Fair Market Value	Rating
2,500,000	FEDERAL HOME LOAN BANK	1.33%	9/14/2018	2,503,382	2,499,490	AA+
2,000,000	FEDERAL HOME LOAN BANK	1.76%	9/14/2018	2,000,969	1,999,592	AA+
14,660,000	FEDERAL HOME LOAN BANK	1.76%	9/14/2018	14,667,103	4,657,009	AA+
2,000,000	FEDERAL HOME LOAN BANK	1.76%	9/14/2018	2,000,969	1,999,592	AA+
4,000,000	FEDERAL HOME LOAN BANK	1.81%	9/14/2018	4,001,500	3,999,184	AA+
, ,		1.31%		, ,		AA+ AA+
2,000,000	FEDERAL HOME LOAN BANK		9/21/2018	1,999,052	1,995,814	
5,000,000	FEDERAL HOME LOAN BANK	1.50%	10/1/2018	4,992,205	4,985,710	AA+
6,915,000	FEDERAL HOME LOAN BANK	1.53%	10/1/2018	6,903,784	6,895,237	AA+
2,540,000	FEDERAL HOME LOAN BANK	1.65%	10/1/2018	2,535,107	2,532,741	AA+
25,000,000	FEDERAL HOME LOAN BANK	1.74%	10/1/2018	24,946,125	24,928,550	AA+
8,495,000	FEDERAL HOME LOAN BANK	1.77%	10/1/2018	8,476,141	8,470,721	AA+
4,000,000	FEDERAL HOME LOAN BANK	1.75%	10/16/2018	3,995,629	3,992,272	AA+
5,555,000	FEDERAL HOME LOAN BANK	1.78%	10/16/2018	5,548,428	5,544,268	AA+
2,000,000	FEDERAL HOME LOAN BANK	1.49%	10/30/2018	1,999,240	1,995,450	AA+
5,000,000	FEDERAL HOME LOAN BANK	1.51%	11/6/2018	4,999,825	4,989,960	AA+
10,000,000	FEDERAL HOME LOAN BANK	1.80%	11/30/2018	9,995,881	9,982,430	AA+
10,000,000	FEDERAL HOME LOAN BANK	1.77%	12/4/2018	9,993,997	9,978,510	AA+
10,000,000	FEDERAL HOME LOAN BANK	1.65%	12/14/2018	10,004,332	9,979,620	AA+
10,000,000	FEDERAL HOME LOAN BANK	1.81%	12/14/2018	9,997,113	9,979,620	AA+
8,400,000	FEDERAL HOME LOAN BANK	1.82%	12/18/2018	8,397,115	8,383,376	AA+
11,900,000	FEDERAL HOME LOAN BANK	1.82%	12/26/2018	11,896,174	11,874,974	AA+
25,000,000	FEDERAL HOME LOAN BANK	1.93%	12/28/2018	25,000,000	24,883,575	AA+
		1.87%				AA+ AA+
11,475,000	FEDERAL HOME LOAN BANK		1/16/2019	11,436,631	11,415,261	
15,000,000	FEDERAL HOME LOAN BANK	2.02%	1/16/2019	14,938,126	14,921,910	AA+
13,000,000	FEDERAL HOME LOAN BANK	1.92%	1/18/2019	12,979,492	12,955,813	AA+
4,575,000	FEDERAL HOME LOAN BANK	1.95%	1/18/2019	4,567,052	4,559,450	AA+
15,000,000	FEDERAL HOME LOAN BANK	1.88%	1/18/2019	14,989,232	14,962,455	AA+
15,000,000	FEDERAL HOME LOAN BANK	2.00%	2/12/2019	14,988,762	14,966,220	AA+
10,250,000	FEDERAL HOME LOAN BANK	2.14%	3/5/2019	10,240,524	10,231,407	AA+
15,000,000	FEDERAL HOME LOAN BANK	2.28%	3/8/2019	14,920,966	14,924,220	AA+
20,000,000	FEDERAL HOME LOAN BANK	2.24%	3/18/2019	19,878,842	19,872,000	AA+
1,200,000	FEDERAL HOME LOAN BANK	2.27%	3/18/2019	1,192,473	1,192,320	AA+
15,000,000	FEDERAL HOME LOAN BANK	2.33%	5/15/2019	15,391,603	15,386,850	AA+
15,000,000	FEDERAL HOME LOAN BANK	2.36%	5/28/2019	14,869,035	14,867,280	AA+
2,500,000	FREDDIE MAC	1.61%	7/27/2018	2,500,000	2,498,410	AA+
2,000,000	FREDDIE MAC	1.29%	7/27/2018	2,000,000	1,998,718	AA+
3,000,000	FREDDIE MAC	1.29%	7/27/2018	3,000,000	2,998,254	AA+
4,540,000	FREDDIE MAC	1.98%	1/2/2019	4,495,321	4,484,922	AA+
1,396,932,000				\$1,395,827,164	\$ 1,394,841,815	
	EEMENTS (9.6% OF TOTAL INVES					
200,000,000	MERRILL LYNCH	2.09%	7/2/2018	\$ 200,000,000	\$ 200,000,000	A-1
450,000,000	RBC SECURITIES	2.07%	7/2/2018	450,000,000	450,000,000	A-1+
650,000,000				\$ 650,000,000	\$ 650,000,000	
				\$6,796,418,299	\$ 6,795,374,395	
6,803,559,000	ATISTICS AND NOTES	06 418 200		\$6,796,418,299	<u>\$ 6,795,374,395</u>	
		96,418,299				
air market value		95,374,395				
Shares Outstanding		35,309,684				
und Net Asset Value		\$1.01				
ffective 7-Day Net Yie		1.96%				
Effective 7-Day Gross	Yield	2.10%				
VAM(R) (6)		35 Days				
VAM(F) (7)		92 Days				
( ) ( )	at to Fair Market Value	0.9998				
<ol> <li>Citizens Bank PA, F credit provided by the</li> </ol>	to the nearest dollar. put option, and thus is calculated as 1 First Republic Bank and United Bank de ne Federal Home Loan Bank of Pittsbu d surplus reserve. NAV is calculated as	eposits are bao rgh, Boston ar	cked by irrevoc nd San Franciso	able standby letter c co guaranteeing prin		

(6) Weighted average maturity to the next reset date.(7) Weighted average maturity to final maturity date.

## SHORT-TERM INVESTMENT FUND SCHEDULE OF ANNUAL RATES OF RETURN

					Year	Ended Ju	ine 30,			
	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
STIF Total Rate of Return (%)	1.39	0.61	0.29	0.15	0.14	0.16	0.16	0.23	0.34	1.49
First Tier Institutional-only Rated Money Fund Report Averages™ (MFR) Index (%) (1)	1.27	0.49	0.15	0.03	0.02	0.05	0.05	0.08	0.09	1.30
Net Positions in STIF, End of Period (\$ - Millions)	6,797	6,470	4,903	5,037	4,211	4,427	4,894	4,495	4,582	4,548
Percent of State Assets in Fund	81%	82%	82%	84%	83%	83%	83%	84%	84%	81%
Number of Participant Accounts in Composite, End of Year (2) State Treasury	55	54	52	53	58	67	52	52	51	47
Municpal and Local Entities State Agencies and Authorities Total	523 <u>342</u> 920	546 329 929	541 330 923	551 335 939	475 341 874	685 <u>428</u> 1180	671 <u>429</u> 1155	660 417 1129	656 <u>416</u> 1123	608 <u>367</u> 1022

(1) Represents iMoneyNet Money Fund Average<sup>™</sup>- Rated First Tier Institutional Average (MFR) Index.

(2) As of January 2014 and going forward, inactive accounts were closed and only active accounts containing balances were included in the total number of participant accounts.

See Notes to Schedules of Rates of Return.

## SHORT-TERM INVESTMENT FUND SCHEDULE OF QUARTERLY RATES OF RETURN

FISCAL YEAR	Rate of Return(%)	(MFR) Index (%) <sup>(1)</sup>	FISCAL YEAR	Rate of Return(%)	(MFR) Index (%) <sup>(1)</sup>
2018			2013		
Sep-17	0.27	0.25	Sep-12	0.05	0.02
Dec-17	0.31	0.26	Dec-12	0.05	0.02
Mar-18	0.36	0.33	Mar-13	0.03	0.01
Jun-18	0.45	0.43	Jun-13	0.03	0.01
YEAR	1.39	1.27	YEAR	0.16	0.05
2017			2012		
Sep-16	0.11	0.06		0.04	0.04
Dec-16	0.12	0.08	Sep-11	0.04	0.01
Mar-17	0.16	0.15	Dec-11	0.06	0.01
Jun-17	0.22	0.20	Mar-12	0.03	0.02
YEAR	0.61	0.49	Jun-12	0.03	0.02
ILAK	0.61	0.49	YEAR	0.16	0.05
2016			0014		
Sep-15	0.04	0.01	<b>2011</b>	0.06	0.03
Dec-15	0.05	0.02	Sep-10 Dec-10	0.06	0.03
Mar-16	0.10	0.06	Mar-11	0.06	0.02
Jun-16	0.09	0.06	Jun-11	0.05	0.02
YEAR	0.29	0.15	YEAR	0.00	0.08
			2010	0.25	0.00
2015			Sep-09	0.11	0.04
Sep-14	0.04	0.005	Dec-09	0.09	0.02
Dec-14	0.04	0.005	Mar-10	0.09	0.02
Mar-15	0.04	0.01	Jun-10	0.06	0.02
Jun-15	0.03	0.01			
YEAR	0.15	0.03	YEAR	0.34	0.09
2044			2009		
2014	0.00	0.005	Sep-08	0.58	0.58
Sep-13	0.03	0.005	Dec-08	0.47	0.45
Dec-13	0.03	0.005	Mar-09	0.26	0.17
Mar-14 Jun-14	0.04 0.04	0.005 0.005	Jun-09	0.16	0.09
YEAR	0.04	0.02	YEAR	1.49	1.30

 Represents iMoneyNet Money Fund Average<sup>™</sup>- Rated First Tier Institutional Average (MFR) Index. These Index rates have been taken from published sources.

#### CALCULATION OF RATES OF RETURN

STIF uses a time-weighted linked rate of return formula to calculate rates of return. Other methods may produce different results and the results for individual participants and different periods may vary. The current rates of return may not be indicative of future rates of return.

The time-weighted linked rate of return formula used by STIF is as follows: Monthly returns are calculated by taking the sum of daily income earned on an accrual basis, after deduction for all operating expenses and a transfer to the Designated Surplus Reserve, divided by the average daily participant balance for the month.

The rates of return presented herein are those earned by the Fund during the periods presented as described above.

Firemen's Fund Fund Fund 34,619,821 3,522,859 3,522,859 (3,040,429) (355,996) 16,433) 16,433 2,144,515 2,144,515 (16,433)	<u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>	State's         Sailors & Arts           Judges'         Attorneys'         Marines         Endowmen           Retirement         Retirement         Fund         Fund           \$-         \$-         \$-         \$-         \$-           \$-         \$-         \$-         \$-         \$-         \$-           \$-         \$-         \$-         \$-         \$-         \$-         \$-           \$-         \$-         \$-         \$-         \$-         \$-         \$-         \$-           \$-	State's Attorneys' Retirement Retirement \$-21 1,932,098 \$1,932,119 \$1,112,119\$\$1,112,119\$\$1,112,112,112,112,112,112,112,112,112,	Judges' Judges' \$- \$222.747.722 \$222.750,525 \$222.747,722 \$22.671,684 102,436 102,436) (9,359) 86 (102,436) 86 (102,436)				Cash       Teachers' Retirement         Cash       1,007,629         Income Receivable       1,007,629         Interest in Investment Funds       1,7,936,759,675         Total Cash and Investments       517,937,767,304         Cash and Investments       517,937,767,304         Shares Purchased (Excluding Liquidity Fund)       2,181,551,125         Shares Purchased (Excluding Liquidity Fund)       2,199,285,830         Net Investment Income       (378,813,307)         Net Investment Income       1,206,505,214         Net Investment Income       1,206,505,214         Net Investment Income       1,206,505,214         Increase (Decrease) in Receivables - Net (1)       (17,418,092)         Distributions       (17,418,092)
\$34,620,706		\$222,750,525 \$1,932,119 \$76,120,683 \$20,060,835	\$1,932,119	\$222,750,525	\$99,882,678	\$2,627,412,705	\$12,507,318,196	\$17,937,767,304 \$12,507,318,196
/10 <sup>1</sup>	_	100,0201	(nnc)	(1064,400)	(00,430)	(1,120,002)	(0,000,404)	(11,410,032)
116,15	(B 631)	130 5201	č.	1102 1361	(ED ADE)	(1 1 20 862)	18 030 151	117 118 002)
36)	(823)	(1,974)		(6,359)	(3,736)	(117,605)	(557,709)	(955,497)
2,144,51	870,838	1,844,410		13,073,038	5,746,190	148,595,338	867,579,148	1,206,505,214
16,43	8,631	30,529	366	102,436	50,496	1,120,862	8,030,454	
(355,96	(381,480)		(6,202)	(4,173,947)	(1,674,378)	(55,986,202)	(244,658,124)	(378,813,307)
(3,040,42	(14,785,438)	(14,177,693)	(112,231)	(18,845,302)	(9,398,937)	(212,610,505)	(1,312,806,380)	(2,199,285,830)
3,522,85	14,403,125	13,538,661	143,898	22,671,684	10,160,290	306,086,923	1,241,494,959	2,181,551,125
\$32,350,74	\$19,954,613 \$	\$75,904,989	\$1,798,528	\$210,034,411	\$95,053,249		\$11,956,266,302	
		I II	1,932,119		99,882,678 \$			,937,767,304
34,619,82	20,060,490	76,118,843	1,932,098	222,747,722			12,506,984,183	17,936,759,675
	345	1,840	21	2,803	1,760	23,752	334,013	1,007,629
	\$	\$	ጵ	\$	- <del>\$</del>	\$	Ş	\$
	Endowment Fund	Marines Fund	Attorneys' Retirement	Judges' Retirement	Court Retirement	Employees' Retirement	Employees' Retirement	Teachers' Retirement
Fireme	Arts	Sailors &	State's		Probate	Municipal	State	

# SCHEDULE OF CASH AND INVESTMENTS, BALANCES AND ACTIVITY (at Fair Value) FOR THE FISCAL YEAR ENDED JUNE 30, 2018

**CIVIL LIST PENSION AND TRUST FUNDS** 

See Notes to Civil and Non-Civil List Trust Fund Financial Statements.

(1) Reflects timing differences in the recognition of income by the Plans.

#### NON-CIVIL LIST TRUST FUNDS

#### FINANCIAL STATEMENTS JUNE 30, 2018

	SCHOOL FUND	AGRICUL- TURAL COLLEGE FUND	IDA EATON COTTON FUND	ANDREW C. CLARK FUND	HOPEMEAD STATE PARK TRUST FUNI	OPEB
STATEMENT OF NET POSITION, at Fair Value						
ASSETS						
Cash & Cash Equivalents	\$ -	\$-	\$-	\$-	\$-	\$-
Interest & Dividends Receivable	310	1	71	35	81	10,367
Investments in Combined Investment Funds, at Fair Va	lue 11,667,990	639,981	2,588,598	1,217,385	3,891,632	845,559,505
Total Assets	\$11,668,300	\$639,982	\$2,588,669	\$1,217,420	\$3,891,713	\$845,569,872
LIABILITIES & NET POSITION						
Due to Other Funds	\$87,583	\$14,527	\$54,501	\$25,645	\$ - \$	÷ -
Fund Balance	11,580,717	625,455	2,534,168	1,191,775	3,891,713	845,569,872
Total Liabilities & Fund Balance	\$11,668,300	\$639,982	, ,	\$1,217,420	, ,	845,569,872

See Notes to Civil and Non-Civil List Trust Fund Financial Statements.

#### STATEMENT OF REVENUE AND EXPENDITURES

REVENUE						
Net Investment Income	\$6,104	\$5	\$1,023	\$438	\$1,832	\$294,172
Net Increase (Decrease) in the Fair Value						
of Investments and Foreign Currency	280,504	(6,388)	62,175	29,187	91,855	36,707,682
Increase (Decrease) in Liquidity Fund	(070)	4	(70)	(05)	(4.4.4.)	(000)
Income Receivables - (1)	(370)	1	(79)	(35)	(141)	(966)
Total Revenue	286,238	(6,382)	63,119	29,590	93,546	37,000,888
EXPENDITURES						
Excess of Revenue over Expenditures	\$286,238	\$(6,382)	\$63,119	\$29,590	\$93,546	\$37,000,888

(1) Reflects timing differences in the recognition of income by the Plans and Trusts.

See Notes to Civil and Non-Civil List Trust Fund Financial Statements.

#### STATEMENT OF CHANGES IN NET POSITION

Net Position at July 1, 2017	\$11,543,466	\$646,365	\$2,525,549	\$1,187,828	\$3,798,167	\$569,451,638
Excess of Revenue over Expenditures	286,238	(6,382)	63,119	29,590	93,546	37,000,888
Net Cash Transactions	-	-	-	-	-	-
Transfer from Other Funds	24,388	-	-	-	-	239,117,346
Transfer to Other Funds	(272,723)	(13,844)	(51,851)	(24,388)	-	-
Increase in Due to Other Funds	(652)	(684)	(2,649)	(1,255)	-	-
Net Position at June 30, 2018	\$11,580,717	\$625,455	\$2,534,168	\$1,191,775	\$3,891,713	\$845,569,872

See Notes to Civil and Non-Civil List Trust Fund Financial Statements.

#### NON-CIVIL LIST TRUST FUNDS

#### STATEMENT OF CASH FLOWS FOR THE FISCAL YEAR ENDED JUNE 30, 2018

	SCHOOL	AGRICUL- TURAL COLLEGE	IDA EATON COTTON	C. I CLARK	HOPEMEA STATE PARK	OPEB
	FUND	FUND	FUND	FUND	TRUST FU	ND FUND
Cash Flows from Operating Activities:						
Excess of Revenues over Expenditures	\$286,238	\$(6,382)	\$63,119	\$29,590	\$93,546	\$37,000,888
Net Increase (Decrease) in the Fair Value of Investments						
and Foreign Currency	(280,504)	6,388	(62,175)	(29,187)	(91,855)	( , , , ,
(Increase) Decrease in Liquidity Fund Income Receivables	370	(1)	79	35	141	966
Net Cash Provided by Operations	6,104	5	1,023	438	1,832	294,172
Cash Flows from Non Capital Financing Activities:						
Operating Transfers - Out to Other Funds	(272,723)	(13,844)	(51,851)	(24,388)	-	-
Operating Transfers - In from Other Funds	24,388	-	-	-	-	239,117,346
Net Cash Used for Non-Capital Financing Actvities	(248,335)	(13,844)	(51,851)	(24,388)	-	239,117,346
Cash Flows from Investing Activities:						
Net Purchase and Redemptions of Liquidity Fund	154,935	19	32,866	14,311	62,809	(11,005,411)
Purchase of Investments	(2,082,184)	(160,158)	(494,831)	(226,641)	,	(298,105,340)
Proceeds from Sale of Investment	2,169,480	173,978	512,793	236,281	682,484	69,699,233
Net Cash Provided by (Used for) Investing Activities	242,231	13,839	50,828	23,951	/	(239,411,518)
Net Increase (Decrease) In Cash	-	-	-	-	-	-
Cash June 30, 2017	-	-	-	-	-	-
Cash June 30, 2018	\$-	\$-	\$-	\$-	\$-	\$-

See Notes to Civil and Non-Civil List Trust Fund Financial Statements.

## CIVIL AND NON-CIVIL LIST TRUST FUNDS NOTES TO FINANCIAL STATEMENTS

#### NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Civil List and Non-Civil list trust funds (the "trust funds") are entrusted to the Treasurer for investment purposes. Civil List trust funds are mandated by the State Legislature and are administered by the Office of the State Comptroller. Accordingly, the presentation of the Civil List funds in the Treasurer's Annual Report (see Civil List trust funds cash and investments schedules in the Supplemental Information section of these document) is intended to present only the cash and investments under the Treasurer's care and does not depict a full financial statement presentation. The Non-Civil List Trust funds are not administered by the Office of the Comptroller. Accordingly, the financial statements presented for the Non-Civil List funds are designed to provide a full set of financial statements for the trusts' investment assets and provide the necessary detail for the respective Boards that administer these trust funds.

Significant account policies of the trust funds are as follows:

<u>Basis of Presentation</u>: The foregoing Non-Civil List trust fund financial statements represent the financial position, results of operations and cash flows of the investment trust assets of the funds in accordance with generally accepted accounting principles. These financial statements present all of the financial statements of the Non-Civil List funds except for the Second Injury Fund which, due to the unique nature of its operation, is presented separately in this Annual Report. The financial statements do not include a Statement of Revenue and Expenditures for the Miscellaneous Agency and Trust Funds because agency funds do not report operations. These statements were prepared on the fair value basis. A Statement of Condition on a cost basis is also presented for informational purposes.

<u>Valuation of Combined Investment Fund Shares:</u> All unit prices are determined at the end of each month based on the fair value of the applicable investment fund.

<u>Expenses</u>: The Non-Civil List trust funds are not charged with any expenses for administration of the trust funds. Investment expenses of the Combined Investment Funds are deducted in calculating net investment income.

<u>Purchases and Redemptions of Units</u>: Purchases and redemptions of units are generally processed on the first day of the month based on the prior month end price. Purchases represent cash that has been allocated to a particular investment fund in accordance with directions from the Treasurer's office. Redemptions represent the return of principal back to the plan. In the case of certain funds, a portion of the redemption can also include a distribution of income.

#### NOTE 2. STATEMENT OF CASH FLOWS

A statement of cash flows is presented for the non-expendable Non-Civil List trust funds. This presentation is in accordance with Governmental Accounting Standards Board (GASB) Statement No. 9. No such statement of cash flows is presented for the Miscellaneous Agency and Trust Funds as none is required.

#### NOTE 3. MISCELLANEOUS AGENCY AND TRUST FUND TRANSFERS

These transactions comprise principal and income transfers to trustees as well as transfers and expenditure payments made on their behalf. Certain of these transfers are made to the General Fund and other Civil List funds as well as various state agencies.

## SECOND INJURY FUND STATEMENT OF NET POSITION JUNE 30, 2018 and 2017

ASSETS CURRENT ASSETS:	<u>June 30, 2018</u>	<u>June 30, 2017</u>
Cash and Cash Equivalents Receivables, Net of Allowance for Uncollectible	\$49,907,736	\$43,486,340
Accounts - \$9,590,452 and \$10,806,947 respectively	6,016,440	7,799,880
Other Assets	37,403	25,041
TOTAL CURRENT ASSETS	55,961,579	51,311,261
LIABILITIES		
Claims Benefits Payable	6,116,738	5,986,285
Settlement Payable	1,099,517	851,402
Accounts Payable and Other Accrued Liabilities	925,841	874,884
Compensated Absences	554,428	575,630
Long-Term Liabilities:		
Accounts Payable and Accrued Expenses	1,000,200	863,100
Compensated Absences	306,600	288,867
TOTAL LIABILITIES	10,003,324	9,440,168
NET POSITION		
Unrestricted	45,958,255	41,871,093
TOTAL NET POSITION	\$45,958,255	\$41,871,093

See accompanying Notes to the Financial Statements.

#### STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION FOR THE FISCAL YEARS ENDED JUNE 30, 2018 AND JUNE 30, 2017

OPERATING REVENUES	<u>2018</u>	2017
Assessment Revenues	\$35,617,027	\$36,298,587
Fund Recoveries	618,366	510,727
Other Income	527,547	237,592_
TOTAL OPERATING REVENUES	36,762,940	37,046,906
OPERATING EXPENSES		
Injured Worker Benefits:		
Settlements	4,149,334	3,374,524
Indemnity Claims Benefits	17,366,090	16,038,116
Medical Claims Benefits	4,648,253	6,803,651
Total Injured Worker Benefits	26,163,677	26,216,291
Administrative Expenses	7,141,172	7,802,366
TOTAL OPERATING EXPENSES	33,304,849	34,018,657
TO THE OF EIGHING EXPENSES	55,504,049	54,010,037
OPERATING INCOME	_3,458,091_	3,028,249
NON-OPERATING INCOME		
Interest Income	629,071	247,349
interest meene		
Change in Net Position	4,087,162	3,275,598
onange in Net i osition	4,007,102	
NET POSITION - Beginning of Year	41,871,093	38,595,495
RETTORING Deginning of Teal	-1,071,000	<u>30,333,435</u>
NET POSITION - End of Year	\$45,958,255	\$ <u>41,871,093</u>
	φ <u>+0,000,200</u>	$\psi$ + 1,07 1,095

See accompanying Notes to the Financial Statements.

#### STATEMENT OF CASH FLOWS FOR THE FISCAL YEARS ENDED JUNE 30, 2018 AND JUNE 30, 2017

CASH FLOWS FROM OPERATING ACTIVITIES SOURCE:	<u>2018</u>	<u>2017</u>
Assessment Revenues	\$37,420,492	\$35,959,841
Fund Recoveries	618,366	510,727
Other Income	527,547	237,592
Other Assets	(3,471)	(8,221)
	38,562,934	36,699,939
USE:		
Injured Worker Benefits	(25,648,009)	(25,846,652)
Administrative Expenses	(7,113,709) (32,761,718)	$\frac{(7,774,776)}{(33,621,428)}$
	(32,701,710)	(33,021,420)
NET CASH PROVIDED BY OPERATING ACTIVITIES	5,801,216	3,078,511
CASH FLOWS FROM INVESTING ACTIVITIES SOURCE:		
Interest Income	620,180	241,611
NET CASH PROVIDED BY INVESTING ACTIVITIES	620,180	241,611
NET INCREASE (DECREASE) IN CASH & CASH EQUIVALENTS	6,421,396	3,320,122
Cash and Cash Equivalents, Beginning of Year	43,486,340	40,166,218
CASH AND CASH EQUIVALENTS, End of Year	\$49,907,736	\$43,486,340
RECONCILIATION OF OPERATING INCOME (LOSS) TO NET CASH PROVIDED BY OPERATING ACTIVITIES		
OPERATING INCOME (LOSS)	\$ 3,458,091	\$ 3,028,249
Adjustments to reconcile operating income to net cash: Decrease (Increase) in Assets:		
Decrease (Increase) in Receivables, Net	1,783,440	(448,112)
Decrease (Increase) in Other Assets	(3,471)	(8,221)
Increase (Decrease) in Liabilities		
Increase (Decrease) in Accounts Payable & Accrued Expenses	566,625	480,202
Increase (Decrease) in Compensated Absences	(3,469)	26,393
NET CASH PROVIDED BY OPERATING ACTIVITIES	\$ 5,801,216	\$ 3,078,511

See accompanying Notes to the Financial Statements.

#### NOTES TO FINANCIAL STATEMENTS

#### NOTE 1: INTRODUCTION AND BASIS OF PRESENTATION

The Second Injury Fund ("SIF" or the "Fund") is an extension of the Workers' Compensation Act managed by the Treasurer of the State of Connecticut and operates under Chapter 568, of the Connecticut General Statutes (C.G.S.). Prior to July 1, 1995, the Fund provided relief to employers where a worker, who already had a preexisting injury or medical condition, was hurt on the job and that second injury was made "materially and substantially" worse by the preexisting injury or medical condition.

In 1995 the Connecticut General Assembly closed the Fund to new "second injury" claims sustained on or after July 1, 1995. However, the Fund continues to be liable for payment of claims which involve an uninsured or bankrupt employer and, on a pro rata basis, be liable for reimbursement claims to employers of any worker who had more than one employer at the time of the injury.

In addition, the Fund will continue to be liable for and make payments with respect to:

- · Widow and dependent death benefits
- · Reimbursement for cost of living adjustments on certain claims
- Second injury claims transferred to the Fund prior to July 1999 with a date of injury prior to July 1, 1995.

For State of Connecticut financial reporting purposes, SIF is reported as an Enterprise Fund. (See Note 2)

#### NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### Financial Reporting Entity

The accompanying financial statements of SIF have been prepared in conformity with generally accepted accounting principles as prescribed in pronouncements of the Governmental Accounting Standards Board (GASB).

The Fund utilizes the enterprise fund form of reporting. The reporting focuses on the determination of operating income, changes in net position (or cost recovery), financial position, and cash flows. The full accrual form of accounting is employed, and revenues are recognized when earned, and expenses are recorded when liabilities are incurred without regard to receipt or disbursement of cash. GASB No. 34 has defined an enterprise fund as a governmental unit in which the pricing policies of the activity establish fees and charges designed to recover its costs.

Enterprise funds distinguish operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with an enterprise fund's principal ongoing operations. Revenues and expenses not meeting this definition are reported as non-operating revenues and expenses. The principal operating revenues of the Fund are the monies assessed to Connecticut employers for their share of the Fund's expenses for managing workers' compensation claims assigned to the Fund by statute.

#### Cash and Cash Equivalents

Cash consists of funds in bank checking accounts and deposits held by the State General Fund in the Treasury Business Office account. Cash equivalents include investments in the State of Connecticut Short-Term Investment Fund (STIF). Custodial Credit Risk for Cash and Cash Equivalents is the risk that in the event of a bank failure, the SIF deposits may not be returned to them. Deposits in FDIC insured banks are insured up to \$250,000 (as of June 30, 2018), any amount above this limit is considered uninsured. Cash balances, excluding STIF accounts, as of June 30, 2018 totaled \$1,179,674 of which \$683,827 was exposed to custodial credit risk representing the portion that was uninsured and uncollateralized. STIF Investment Policy ensures strong asset diversification by security type and issuer, comprised of high quality, very liquid securities with a relatively short average maturity. SIF has 98.1% of its cash invested in STIF which is rated AAAm by S&P Global Ratings ("S&P"). Deposits are presented in the basic financial statements at cost plus accrued interest which is also the market or fair value.

#### Receivables, Net of Allowance for Uncollectible Accounts

The receivables balance is composed of assessment receivables and other receivables.

Assessment receivables are recorded inclusive of interest due and result from amounts billed in accordance with C.G.S. 31-354 Assessments: SIF's primary source of revenue is from the levying of assessments against

## SECOND INJURY FUND NOTES TO FINANCIAL STATEMENTS (Continued)

self-insured and insured Connecticut employers. Insurance carriers who insure Connecticut employers are responsible to collect the assessments from employers and submit the revenue to SIF. (see Note 3)

Other receivables are recorded inclusive of interest due and result from amounts billed in accordance with either statute C.G.S. 31-301 or C.G.S.355.

C.G.S. 31-301, Appeal Cases, provides for the payment of indemnity (lost wages) and medical benefits to an injured worker while their claims are under appeal. Upon a decision in the appeal, the injured worker (in cases of denial of compensation), or insurer (in cases of award of compensation), must reimburse the SIF for monies expended during the appeal process. This statute was repealed with passage of P.A. 95-277 for appeals filed on injuries occurring after July 1, 1995. During fiscal years 2018 and 2017, there were no benefits paid for appeals cases.

C.G.S. 31-355, Non Compliance, mandates that SIF pay indemnity and medical benefits for injured workers whose employers fail to or are unable to pay the compensation. The most common examples of these cases involve employers who did not carry worker's compensation insurance or are bankrupt.

Appeal Cases and Non Compliance transactions are recorded as injured worker benefits when paid by the Fund. Concurrently, the Fund seeks recovery of the amounts paid from the party statutorily responsible and a receivable is established. The receivable is offset by a credit to Allowance for Uncollectible Accounts. Recoveries are recorded as revenue when cash is received.

The Fund records other receivables for penalties and citations and certain other payments made under other statutes where the Fund has a right to seek reimbursement. The receivable is offset by a credit to Allowance for Uncollectible Accounts. Recoveries are recorded as revenue when cash is received. Revenue is recorded for these receivables when cash is received.

The allowance for uncollectible account represents those amounts estimated to be uncollectible as of the balance sheet date. The Fund fully reserves for the other receivable balances. (see Note 4)

#### **Capital Assets**

The category of capital assets consists of computers and office equipment. The Fund is recording these capital assets at cost with a useful life of 5 years on a straight-line method. In the year of acquisition of the capital asset, the Fund has elected to take a half a year depreciation expense.

#### **Claims Benefits Payable**

This category of liability includes various unpaid reimbursement, indemnity and medical benefit claims incurred as of the balance sheet date and will be paid during the subsequent fiscal year. The long-term portion of claims benefits payable represents an estimate of the amount of liability of as June 30, 2018 and June 30, 2017 of the concurrent employment until a year or more for reimbursement. (see Note 5)

#### Settlements Payable

Settlements are negotiated agreements for resolving the Fund's future exposure on injured worker claims. An accrual is made for all settlements committed as of the balance sheet date. (see Note 5)

#### Accounts Payable and Other Accrued Liabilities

Accounts payable and other accrued liabilities represent administrative expenses of the Fund outstanding as of June 30, 2018 and June 30, 2017 as well as assessments owed to Connecticut Workers' Compensation and other Connecticut employers. (see Note 5)

#### **Compensated Absences**

Vacation and sick policy is as follows: Employees hired on or before June 30, 1977 can accumulate up to a maximum of 120 vacation days. Employees hired after that date can accumulate up to a maximum of 60 days. Upon termination or death, the employee is entitled to be paid for the full amount of vacation days owed. No limit is placed on the number of sick days that an employee can accumulate. However, the employee is entitled to payment for accumulated sick time only upon retirement, or after ten years of service upon death, for an amount equal to one-fourth of his/her accrued sick leave up to a maximum payment equivalent of sixty days. (See Note 5)

#### NOTES TO FINANCIAL STATEMENTS (Continued)

#### **NOTE 3: ASSESSMENTS**

The assessment method for carriers paying on behalf of insured employers is on an actual premium basis. The premium surcharge, which is paid by insured employers through their worker's compensation insurance carrier within 45 days of the close of a quarter, is the premium surcharge rate multiplied by the employer's "SIF's surcharge base" premium on all policies with an effective date for that quarter. "SIF's surcharge base" means direct written premium on policies prior to application of any deductible policy premium credits. The premium surcharge is set yearly based on the Fund's budgetary needs prior to the start of the fiscal year. The annual insured employers' assessment rate for the fiscal years ending June 30, 2018 and June 30, 2017 was 2.75%.

The method of assessment for self-insured employers is a quarterly billing based on the previous calendar year's paid losses. The annual assessment rate for self-insured employers for the fiscal year ending June 30, 2018 and June 30, 2017 was 3.25%.

#### NOTE 4: RECEIVABLES

The following is an analysis of the changes in the Fund receivable balances:

<u>As of June 30, 2018:</u>							
	Beginning	A alaliki a na	Cash		Ending	Amount Due Within	Allowance for
	Balance	Additions	Receipts	Write-Offs	Balance	One Year	Uncollectible
Assessments	\$ 7,817,788	\$54,249,348	\$56,033,189	\$-	\$ 6,033,947	\$ 6,016,440	\$ 17,506
Non-Compliance 355	10,537,540	3,868,139	410,152	4,845,569	9,149,958	-	9,149,958
Other Receivables	251,499	466,530	241,909	53,133	422,987	-	422,988
Total Receivables	\$18,606,827	\$58,584,017	\$56,685,250	\$4,898,702	\$15,606,892	\$ 6,016,440	\$9,590,452
		<u>As</u>	s of June 30, 201	<u>7:</u>		Amount	Allowance
	Beginning		Cash		Ending	Due Within	for
	Balance	Additions	Receipts	Write-Offs	Balance	One Year	Uncollectible
Assessments	\$ 7,370,211	\$63,386,528	\$62,938,951	\$-	\$ 7,817,788	\$7,799,880	\$ 17,908
Non-Compliance 355	9,625,694	3,868,149	334,791	2,621,512	10,537,540	-	10,537,540
Other Receivables	225,426	233,073	207,000	-	251,499	-	251,499

#### NOTE 5: LIABILITES AND COMPENSATED ABSENCES

The following is an analysis of the changes in the Fund liabilities and compensated absence balances:

<u>As of June 30, 2018:</u>					
	Beginning Balance	Additions	Cash Disbursements	Ending Balance	Amount Due Within One Year
Claims and Benefits Payable	\$6,849,385	\$22,151,444	\$21,883,891	\$7,116,938	\$6,116,738
Settlements Payable	851,402	4,149,334	3,901,219	1,099,517	1,099,517
Accounts Payable & Accrued Expenses	874,884	7,141,172	7,090,215	925,841	925,841
Compensated Absences	864,497	-	3,469	861,028	554,428
Total Liabilities & Compensated Absences	\$9,440,168	\$33,441,950	\$32,878,794	\$10,003,324	\$8,696,524
<u>As of June 30, 2017:</u>					

	Beginning Balance	Additions	Cash Disbursements	Ending Balance	Due Within One Year
Claims Benefits Payable	\$ 6,372,245	\$22,803,267	\$22,326,127	\$6,849,385	\$5,986,285
Settlements Payable	958,903	3,374,524	3,482,025	851,402	851,402
Accounts Payable & Accrued Expenses	764,321	7,802,366	7,691,803	874,884	874,884
Compensated Absences	838,104	26,393	-	864,497	575,630
Total Liabilities & Compensated Absences	\$ 8,933,573	\$34,006,550	\$33,499,955	\$9,440,168	\$8,288,201

Amount

#### NOTES TO FINANCIAL STATEMENTS (Continued)

#### NOTE 6: SETTLEMENTS

Negotiations were at various stages of completion for settlements valued and accrued. As of June 30, 2018 they were \$1.1 million and at June 30, 2017 were \$900,000

#### NOTE 7: SUBSEQUENT EVENTS

The Fund management has evaluated the events and transactions that have occurred through December 31, 2018, the date the financial statements were available for issuance, and identified no events or transactions that have occurred requiring recognition or disclosure in the financial statements.

#### **Report of Independent Auditors**

To the Trustee of the Connecticut Higher Education Trust - Direct Plan:

We have audited the accompanying financial statements of the Connecticut Higher Education Trust -Direct Plan (the "Direct Plan"), which comprise the statement of fiduciary net position as of June 30, 2018 and the related statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements.

#### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditors' Responsibility

pwc

Our responsibility is to express opinions on the financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the Direct Plan's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Direct Plan's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

#### **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Connecticut Higher Education Trust - Direct Plan, as of June 30, 2018, and the changes in its position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

PricewaterhouseCoopers LLP, 100 East Pratt Street, Suite 1900, Baltimore, MD 21202-1096 T: (410) 783 7600, F: (410) 783 7680, www.pwc.com/us



#### **Other Matter**

The accompanying management's discussion and analysis on pages 4 through 7 are required by accounting principles generally accepted in the United States of America to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### **Other Matter**

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Direct Plan's basic financial statements. The accompanying supplemental information of the statements of fiduciary net position on pages 16 through 23, statements of changes in fiduciary net position on pages 25 through 35 and financial highlights on pages 37 through 47 are presented for purposes of additional analysis and are not a required part of the basic financial statements. The information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves and other additional procedures, in accordance with auditing standards generally accepted in the United States of America. In our opinion, the accompanying supplemental information is fairly stated, in all material respects, in relation to the basic financial statements taken as a whole.

#### Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated August 21, 2018 on our consideration of the Direct Plan's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Direct Plan's internal control over financial reporting and compliance.

Precent ferhouse Coopen LLP

August 21, 2018

### MANAGEMENT'S DISCUSSION AND ANALYSIS (unaudited)

As Plan manager of the Connecticut Higher Education Trust – Direct Plan (the "Direct Plan"), TIAA-CREF Tuition Financing, Inc.("TFI") offers readers of the Direct Plan's financial statements this discussion and analysis of the financial performance for the fiscal year ended June 30, 2018. Readers should consider the information presented in this section in conjunction with the Direct Plan's financial statements and notes to financial statements. The Direct Plan is comprised of 14 investment options (the "Options") in which account owners ("Account Owners") may invest.

### **FINANCIAL HIGHLIGHTS**

During the year ended July 1, 2017 and ending August 8, 2017, the Options within the Direct Plan posted returns as follows:

Conservative Managed Allocation	on Option#†	Aggressive Managed Allocation Option #1	
Ages 0-3	1.81%	Ages 0-3	2.57%
Ages 4-7	1.51	Ages 4-7	2.26
Ages 8-11	1.24	Ages 8-11	2.01
Ages 12-14	1.02	Ages 12-14	1.83
Ages 15-17	0.67	Ages 15-17	1.61
Ages 18 & Over	0.36	Ages 18 & Over	1.13
Moderate Managed Allocation (	<u> Option #†</u>		
Ages 0-3	2.27%		
Ages 4-7	1.97		
Ages 8-11	1.60		
Ages 12-14	1.36	# Based on net position prior to liquidation.	
Ages 15-17	1.16	† The percentages shown for this period are not ann	ualized.
Ages 18 & Over	0.85		

During the period of August 8, 2017 to June 30, 2018, the Options within the Direct Plan posted returns as follows:

Conservative Managed Alloca	ation Option*†	Aggressive Managed Allocation Option*	t
Ages 0-4	3.30%	Ages 0-4	6.00%
Ages 5-8	3.00	Ages 5-8	5.70
Ages 9-10	2.60	Ages 9-10	5.40
Ages 11-12	1.90	Ages 11-12	4.80
Ages 13-14	1.70	Ages 13-14	4.20
Ages 15	1.50	Ages 15	3.70
Ages 16	1.50	Ages 16	3.10
Ages 17	1.30	Ages 17	2.70
Ages 18 & Over	1.40	Ages 18 & Over	2.50
Moderate Managed Allocatior	<u>n Option *†</u>	Multi-Fund Investment Options	
Ages 0-4	5.20%	Global Equity Index Option	10.10%
Ages 5-8	4.40	Global Tactical Asset Allocation Option	3.16
Ages 9-10	3.50	International Equity Index Option	6.31
Ages 11-12	3.00	Active Global Equity Option	12.54
Ages 13-14	2.40	U.S. Equity Index Option	14.65
Ages 15	2.10	HIgh Equity Balanced Option	8.43
Ages 16	1.90	Active Fixed-Income Option	0.43
Ages 17	1.90	Social Choice Option	13.52
Ages 18 & Over	1.80	Index Fixed Income Option	(0.76)
*The options converted band structures		Money Market Option	1.08
on August 8, 2017.		Principal Plus Interest Option	1.78
†The percentages shown for this period a	re not annualized.		

#### MANAGEMENT'S DISCUSSION AND ANALYSIS (unaudited) (Continued)

As of August 8, 2017, the Conservative, Moderate, and Agressive Managed Allocation Options were converted from six age band structures to nine age band structures ("Band Restructuring") as follows:

<u>Closed Age Bands:</u>	<u>Open Age Bands:</u>
Ages 0-3	Ages 0-4
Ages 4-7	Ages 5-8
Ages 8-11	Ages 9-10
Ages 12-14	Ages 11-12
Ages 15-17	Ages 13-14
Ages 18 & Over	Ages 15
-	Ages 16
	Ages 17
	Ages 18 & Over

The Direct Plan received \$3.2 billion in subscriptions, including \$1.8 billion from Band Restructuring. Redemptions were \$3.0 billion including redemptions to the Direct Plan accounts from Band Restructuring of \$1.8 billion. The result is net subscriptions of \$0.2 billion during the year ended June 30, 2018.

In April and June of 2018, TFI, the CHET Direct Plan manager, advised the Trustee that 33 CHET account holders had online access to their accounts established by unauthorized individuals that resulted in withdrawals of approximately \$1.4 million. Of this amount, more than \$442,000 was recovered or stopped. TFI fully restored the accounts of all impacted CHET accounts, and provided account holders and beneficiaries with two years of identity fraud protection services, identity restoration services and \$1,000,000 in identity theft insurance coverage. Federal, state and local law enforcement agencies are conducting a coordinated investigation.

Following these incidents, TFI implemented system enhancements, additional internal controls, and extra manual reviews aimed at preventing fraudulent activity. The Trustee is closely monitoring these security initiatives. In addition, at the Trustee's request, TFI has committed to retain an independent auditor to review this incident and make any further recommendations.

The Direct Plan earned \$71.5 million from investment income, incurred \$3.5 million for operating expenses and had a net increase in fair value of investments of \$90.0 million during the year ended June 30, 2018.

#### **OVERVIEW OF THE FINANCIAL STATEMENTS**

The Direct Plan's financial statements are prepared in accordance with accounting principles generally accepted in the United States of America as prescribed by the Governmental Accounting Standards Board.

This report consists of two parts: Management's Discussion and Analysis (this section) and the basic financial statements. The basic financial statements are comprised of a Statement of Fiduciary Net Position, a Statement of Changes in Fiduciary Net Position and Notes to Financial Statements that explain the information in the financial statements and provide more detailed information. The measurement focus of economic resources is where a set of financial statements report all inflows, outflows and balances effecting an entity's net position.

The Statement of Fiduciary Net Position presents information on the Direct Plan's assets and liabilities, with the difference between the two reported as net position as of June 30, 2018. This statement, along with all of the Direct Plan's financial statements, is prepared using the accrual basis of accounting. Subscriptions are recognized when enrollment in the Direct Plan is finalized; subsequent subscriptions and redemptions are recognized on trade date; expenses and liabilities are recognized when services are provided, regardless of when cash is disbursed.

The Statement of Changes in Fiduciary Net Position presents information showing how the Direct Plan's assets changed during the year. Changes in net position are reported as soon as the underlying event giving rise to the current change occurs, regardless of the timing of related cash flows. Thus, revenues and expenses are reported in this statement for some items that will result in cash flows in future fiscal years.

#### MANAGEMENT'S DISCUSSION AND ANALYSIS (unaudited) (Continued)

The Notes to Financial Statements provides additional information that is essential to a full understanding of the data provided in the basic financial statements.

This report presents the operating results and financial status of the Direct Plan, which the State of Connecticut reports as a fiduciary fund. Fiduciary fund reporting is used to account for resources held for the benefit of parties outside the governmental entity.

#### **FINANCIAL ANALYSIS**

Net position - The following are condensed Statements of Fiduciary Net Position as of June 30, 2018 and 2017:

	<u>2018</u>	<u>2017</u>
Investments	\$3,104,651,513	\$2,843,586,663
Cash	80,192	7,596
Receivables	6,057,017	4,716,820
Total Assets	3,110,788,722	2,848,311,079
Payables	7,042,520	4,989,187
Total Liabilities	<u>7,042,520</u>	4,989,187
<b>Total Net Position</b>	<u>\$3,103,746,202</u>	<u>\$2,843,321,892</u>

Net position represents total subscriptions from Account Owners, plus the net increases (decreases) from operations, less redemptions and expenses.

Investments are approximately 100% of total net position, and consist of the Options, each of which invests in varying percentages in multiple TIAA-CREF Funds and/or other third-party mutual funds, or a funding agreement ("Funding Agreement") issued by TIAA-CREF Life Insurance Company to the Connecticut Higher Education Trust. Receivables consist of securities sold, subscriptions, and accrued income. Liabilities consist mainly of payables for securities purchased, redemptions, and accrued expenses.

**Changes in net position** - The following are Statements of Changes in Fiduciary Net Position for the years ended June 30, 2018 and 2017:

Additions:	<u>2018</u>	<u>2017</u>
Subscriptions	\$3,152,095,014	\$960,028,855
Investment income	71,533,382	55,397,894
Net increase in fair value of investments Total Additions	89,978,934 <b>3,313,607,330</b>	<u>200,099,531</u> <b>1,215,526,280</b>
Deductions:		
Redemptions	(3,049,657,521)	(868,840,702)
Direct Plan manager fee	(3,254,307)	(2,844,966)
Administrative fee	(271,192)	(237,082)
Total Deductions	<u>(3,053,183,020)</u>	<u>(871,922,750)</u>
Changes in Net Position	260,424,310	343,603,530
Net position - beginning of year	<u>2,843,321,892</u>	<u>2,499,718,362</u>
Net position - end of year	<u>\$3,103,746,202</u>	<u>\$2,843,321,892</u>

## CONNECTICUT HIGHER EDUCATION TRUST - DIRECT PLAN STATEMENT OF FIDUCIARY NET POSITION

ASSETS Cash Investments, at value (Cost: \$2,886,317,887 and \$2,379,956,6 Dividends and interest receivable Receivable for securities transactions Receivable for Direct Plan units sold	2,716,927 993,382 2,346,708	June 30, 2017 \$7,596 2,843,586,663 2,142,811 752,855 1,821,154
TOTAL ASSETS	3,110,788,722	2,848,311,079
LIABILITIES		
Overdraft payable	77,725	25,995
Accrued Direct Plan manager fee	841,674	254,173
Accrued administrative fee	70,140	21,181
Payable for securities transactions	3,856,338	3,310,829
Payable for Direct Plan units redeemed	2,196,643	1,377,009
TOTAL LIABILITIES	7,042,520	4,989,187
NET POSITION		
Held in trust for Account Owners in the Direct Plan	\$3,103,746,202	\$2,843,321,892

See notes to financial statements.

### CONNECTICUT HIGHER EDUCATION TRUST - DIRECT PLAN STATEMENT OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEARS ENDED JUNE 30,

	2018	2017
ADDITIONS		
Subscriptions	\$3,152,095,014	\$960,028,855
Investment Income:		
Interest	8,134,885	4,181,332
Dividends	63,398,497	51,216,562
Total investment income	71,533,382	55,397,894
Net increase in fair value of investments	89,978,934	200,099,531
Total additions	3,313,607,330	1,215,526,280
DEDUCTIONS		
Redemptions	(3,049,657,521)	(868,840,702)
Direct Plan manager fee	(3,254,307)	(2,844,966)
Administrative fee	(271,192)	(237,082)
Total deductions	(3,053,183,020)	(871,922,750)
Changes in net position	260,424,310	343,603,530
Net position – beginning of year	_2,843,321,892	2,499,718,362
Net position – end of year	\$3,103,746,202	\$2,843,321,892

See notes to financial statements.

#### NOTES TO FINANCIAL STATEMENTS

#### NOTE 1—ORGANIZATION AND SIGNIFICANT ACCOUNTING POLICIES

The Connecticut Higher Education Trust - Direct Plan (the "Direct Plan") is designed to help people save for the costs of higher education. The Direct Plan is administered by the Treasurer of the State of Connecticut, as the trustee (the "Trustee") of the Connecticut Higher Education Trust (the "Trust"). The Trustee has the authority to establish, develop, implement and maintain the Direct Plan and to make and enter into contracts to service the Direct Plan. TIAA-CREF Tuition Financing, Inc. ("TFI"), a wholly owned, direct subsidiary of Teachers Insurance and Annuity Association of America ("TIAA"), and the Trustee have entered into a management agreement ("Management Agreement") under which TFI serves as Direct Plan manager. The Direct Plan is intended to meet the requirements of a qualified tuition program under Section 529 of the Internal Revenue Code ("Code"). Investment options (the "Options" or individually "Option"), allocations and fees, as approved by the Trustee, are described in the current Disclosure Booklet for the Direct Plan.

The assets in the Principal Plus Interest Option are allocated to a funding agreement ("Funding Agreement") issued by TIAA-CREF Life Insurance Company ("TIAA Life"), an affiliate of TFI, to the Trust, as policyholder. The Funding Agreement provides for a return of principal plus a guaranteed rate of interest and allows for the possibility that additional interest may be credited as declared periodically by TIAA Life.

Teachers Advisors, LLC ("Advisors"), an affiliate of TFI, is registered with the Securities and Exchange Commission as an investment adviser and provides investment advisory services to the TIAA-CREF Funds (the "Funds"). TIAA-CREF Individual & Institutional Services, LLC ("Services"), a wholly owned, direct subsidiary of TIAA, serves as the primary distributor and underwriter for the Direct Plan and provides certain underwriting and distribution services in furtherance of TFI's marketing plan for the Direct Plan. Services are registered as a broker-dealer under the Securities Exchange Act of 1934 and is a member of the Financial Industry Regulatory Authority.

As of August 8, 2017, the Conservative, Moderate and Aggressive Managed Allocation Options were converted from six age band structures to nine age band structures ("Band Restructuring") as follows:

<u>Closed Age Bands:</u>	Opened Age Bands:
Ages 0-3	Ages 0-4
Ages 4-7	Ages 5-8
Ages 8-11	Ages 9-10
Ages 12-14	Ages 11-12
Ages 15-17	Ages 13-14
Ages 18 & Over	Age 15
	Age 16
	Age 17
	Age 18 & Over

All account owner balances as of August 8, 2017 were transferred to the appropriate band based on the age of the beneficiary, which resulted in \$1,765,248,327 in transfers between bands.

The accompanying financial statements were prepared in accordance with accounting principles generally accepted in the United States of America as prescribed by the Governmental Accounting Standards Board ("GASB") which may require the use of estimates made by management and the evaluation of subsequent events. Actual results may differ from those estimates. The following is a summary of the significant accounting policies consistently followed by the Direct Plan.

**Investment income:** Securities transactions are accounted for as of the trade date for financial reporting purposes. Interest income is recorded as earned. Dividend income and capital gain distributions from the underlying mutual funds are recorded on the ex-dividend date. Income distributions from underlying mutual funds are included in total investment income and gain distributions are included in net increase in fair value of investments. Realized gains and losses are based upon the specific identification method.

**Income tax:** No provision for federal income tax has been made. The Direct Plan is designed to constitute a qualified tuition program under Section 529 of the Code and does not expect to have any unrelated business income subject to tax.

## CONNECTICUT HIGHER EDUCATION TRUST - DIRECT PLAN NOTES TO FINANCIAL STATEMENTS (Continued)

**Units:** The beneficial interests for each account owner ("Account Owner") in the Options are represented by Direct Plan units. Subscriptions and redemptions are recorded upon receipt of Account Owner's instructions in good order, based on the next determined net position value per unit ("Unit Value"). Unit Values for each Option are determined at the close of business of the New York Stock Exchange. The Unit Value for financial reporting purposes may differ from the Unit Value for processing transactions. The Unit Value for financial reporting purposes includes security and shareholder transactions through the date of the report. There are no distributions of net investment gains or net investment income to the Option's Account Owners or beneficiaries.

**Subscriptions and Redemptions:** Subscriptions on the Statement of Changes in Fiduciary Net Position include any contributions to the Direct Plan made by Account Owners and any exchanges within the Direct Plan that result in a reinvestment of assets. Redemptions on the Statement of Changes in Fiduciary Net Position include any redemptions from the Direct Plan made by Account Owners and any exchanges within the Direct Plan that result in a withdrawal and subsequent reinvestment of assets and redemptions as a result of Band Restructuring. For the year ended June 30, 2018, the Direct Plan had subscriptions and redemptions of \$1,765,248,327 as a result of Band Restructuring

#### NOTE 2-VALUATION OF INVESTMENTS

Fair value measurements are grouped categorically into three levels, as defined by the GASB. The levels are defined as follows:

Level 1 – quoted prices in active markets for identical securities

• Level 2 – other significant observable inputs (including quoted prices for similar securities, interest rates, credit spreads, etc.)

• Level 3 – significant unobservable inputs (including the Direct Plan's own assumptions in determining the fair value of investments)

The availability of observable inputs can vary from security to security and is affected by a wide variety of factors including, for example, the type of security, whether the security is new and not yet established in the marketplace, the liquidity of markets, and other characteristics particular to the security. To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised in determining fair value is greatest for instruments categorized in Level 3. The inputs or methodology used for valuing securities are not necessarily an indication of the risk associated with investing in those securities.

A description of the valuation techniques applied to the Direct Plan's major categories of investments follows:

**Investments in registered investment companies:** These investments are valued at their published net asset value on the valuation date. These investments are categorized in Level 1 of the fair value hierarchy.

**Funding Agreement:** The Funding Agreement, to which the Principal Plus Interest Option allocates assets, is considered a nonparticipating interest-earning investment contract and is accounted for at cost. Because the Funding Agreement is valued at cost, it is not included in the fair value hierarchy.

#### NOTE 3—DIRECT PLAN FEES

Each Option (with the exception of the Principal Plus Interest Option) pays TFI a Direct Plan manager fee of 0.12% of the average daily net assets of the Option. The Direct Plan manager fee is subject to reductions if total assets in the Direct Plan reach certain levels. In addition, Advisors is paid investment management fees on the underlying investments in the Funds.

The Principal Plus Interest Option does not pay a Direct Plan manager fee or an administrative fee to the Trustee. TIAA Life, the issuer of the funding agreement in which this Option invests and an affiliate of TFI, makes payments to TFI. As a result, the participant does not incur any expense related to this option.

## CONNECTICUT HIGHER EDUCATION TRUST - DIRECT PLAN NOTES TO FINANCIAL STATEMENTS (Continued)

For its services administering the Direct Plan, each Option (with the exception of the Principal Plus Interest Option) pays to the Trustee an administrative fee at an annual rate of 0.01% of the average daily net assets of the Option. TIAA Life also pays the Trustee a fee equal to 0.01% of the average daily net assets held by the Principal Plus Interest Option. The fee is deposited in an administrative fund held by the Trustee and then used to pay certain administrative expenses.

These amounts are reflected in the expenses on the Statement of Changes in Fiduciary Net Position.

Effective August 1, 2011, TFI and the Trustee have agreed to voluntarily waive the Money Market Option's Direct Plan manager fee and administrative fee, respectively, in an attempt to maintain at least a 0.00% return for the Option. TFI and the Trustee may discontinue the waiver at any time without notice. For the year ended June 30, 2018, no fees were waived for the Money Market Option.

#### NOTE 4—INVESTMENTS

**Cash deposits:** All cash deposits at June 30, 2018 were covered by federal depository insurance coverage.

**Investments:** As of June 30, 2018, net unrealized appreciation (depreciation) of portfolio investments was \$218,333,626 consisting of gross unrealized appreciation of \$246,330,178 and gross unrealized depreciation of \$27,996,552.

At June 30, 2018, the Direct Plan's Investments consist of the following:

TIAA-CREF Funds (Institutional Class):	UNITS	COST	VALUE
Bond Index Fund	27,320,301	\$295,833,715	\$286,863,158
	, ,		
Emerging Markets Equity Index Fund	2,789,259	27,501,585	31,239,703
Equity Index Fund	30,257,485	502,248,181	613,621,797
Growth & Income Fund	888,282	10,442,603	13,173,218
High-Yield Fund	10,695,619	105,141,490	102,036,204
Inflation-Linked Bond Fund	20,961,877	239,049,564	236,449,970
International Equity Index Fund	25,406,821	460,629,292	499,752,171
Money Market Fund	43,916,719	43,916,719	43,916,719
S&P 500 Index Fund	3,481,696	42,431,531	105,773,929
Social Choice Equity Fund	2,659,973	38,709,371	52,295,060
BlackRock Strategic Income Opportunities Fund (Inst'l Class)	22,335,808	222,269,796	217,997,488
DFA Emerging Markets Core Equity Portfolio (Institutional Class	) 5,190,954	108,431,456	109,892,494
GMO Benchmark-Free Allocation Series Fund - R6 Class	456,743	4,650,389	4,759,262
GMO International Equity Allocation Series Fund - R6 Class	1,047,132	10,120,330	10,240,956
Harding Loevner International Equity Portfolio (Institutional Clas	s) 757,284	17,731,279	17,182,765
MetWest Total Return Bond Fund (Institutional Class)	2,259,033	22,665,457	22,070,755
State Street Institutional Small Cap Equity Fund (Institutional Cla	ass) 960,059	18,947,496	20,228,445
T. Rowe Price Inst. Large-Cap Growth Fund (Institutional Class)		5,093,957	7,905,914
T. Rowe Price Inst. Large-Cap Value Fund (Institutional Class)	263,431	5,506,047	6,101,063
Templeton Global Bond Fund (Advisor Class)	3,638,916	44,277,783	41,738,368
Vanguard Mid Cap Index Fund (Institutional Class)	690,239	27,256,037	29,756,209
Vanguard Real Estate Index Fund (Institutional Class)	6,376,838	115,634,500	113,826,556
TIAA-CREF Life Insurance Company:	, ,,,,,,,	,,	, ,,,,,,,,
Funding Agreement	251,402,846	517.829.309	517.829.309
0.0	, ,	\$2,886,317,887	\$3,104,651,513

#### NOTE 5 – INVESTMENT RISKS

Certain investments are subject to a variety of investment risks based on the amount of risk in the underlying funds. GASB requires that entities disclose certain essential risk information about deposits and investments. All of the Direct Plan's Options are uninsured and unregistered and are held by a custodian in the Direct Plan's name.

**Custodial credit risk**: Custodial credit risk represents the potential inability of a custodian to return Direct Plan deposits and investments in the event of a failure. An Account Owner has an investment in an Option and not a direct investment in any underlying mutual fund or other investment vehicle to which funds in that Option may be allocated. Because of this ownership structure, the custodial credit risk is mitigated.

## CONNECTICUT HIGHER EDUCATION TRUST - DIRECT PLAN NOTES TO FINANCIAL STATEMENTS (Continued)

Investment policy: The Direct Plan does not have specific investment policies which address credit, interest rate, foreign currency or custodial credit risk. The Direct Plan's Options are managed based on specific investment objectives and strategies which are disclosed in the current Direct Plan Disclosure Booklet.

**Credit risk:** The mutual funds investing primarily in fixed income securities are subject to credit risk. Credit risk refers to the ability of the issuer to make timely payments of interest and principal. The mutual funds do not carry a formal credit quality rating. The Funding Agreement is a guaranteed insurance product issued by TIAA Life. TIAA Life had a Standard & Poor's credit rating of AA+ at June 30, 2018.

**Interest rate risk:** Interest rate risk represents exposure to changes in the fair value of investments due to volatility in interest rates. At June 30, 2018, the average maturities for the fixed income mutual funds are as follows:

Investment	Value	Weighted Average Maturity
TIAA-CREF Funds (Institutional Class):		
Bond Index Fund	\$286,863,158	8.30 years
High-Yield Fund	102,036,204	6.60 years
Inflation-Linked Bond Fund	236,449,970	5.47 years
BlackRock Strategic Income Opportunities Fund (Institutiona	Il Class) 217,997,488	5.98 years
GMO Benchmark-Free Allocation Series Fund - R6 Class	4,759,262	N/A
MetWest Total Return Bond Fund (Institutional Class)	22,070,755	7.57 years
Templeton Global Bond Fund (Advisor Class)	41,738,368	2.98 years

**Foreign currency risk:** Foreign currency risk represents exposure to changes in the fair value of investments due to volatility in exchange rates. The Direct Plan does not have any direct investment in foreign securities. Certain Direct Plan Options allocate assets to mutual funds that are exposed to foreign currency risk. At June 30, 2018, the value of investments in mutual funds that significantly invest in foreign denominated contracts are as follows:

Investment	Value
TIAA-CREF Funds (Institutional Class):	
Emerging Markets Equity Index Fund	\$31,239,703
International Equity Index Fund	499,752,171
DFA Emerging Markets Core Equity Portfolio (Institutional Class)	109,892,494
GMO Benchmark-Free Allocation Series Fund - R6 Class	4,759,262
GMO International Equity Allocation Series Fund - R6 Class	10,240,956
Harding Loevner International Equity Portfolio (Institutional Class)	17,182,765
Templeton Global Bond Fund (Advisor Class)	41,738,368

#### **NOTE 6 – GUARANTEES AND INDEMNIFICATION**

Under the Direct Plan's organizational documents, each officer, employee or other agent of the Direct Plan (including TFI) is indemnified against certain liabilities that may arise out of performance of their duties to the Direct Plan. Additionally, in the normal course of business, the Direct Plan enters into contracts that contain a variety of indemnification clauses. The Direct Plan's maximum exposure under these arrangements is unknown as this would involve future claims that may be made against the Direct Plan that have not yet occurred. However, the Direct Plan has not had prior claims or losses pursuant to these contracts, and management expects the risk of loss to be remote.

#### FINANCIAL HIGHLIGHTS

#### For the Year Ended June 30, 2018

#### Conservative Managed Allocation Option

Age Bands Within the Conservative Managed Allocation Option

			Ag	jes		
FOR A UNIT OUTSTANDING THROUGHOUT THE PERIOD	0-3*	4-7*	8-11*	12-14*	15-17*	18 &Over*
Net position value, beginning of period	\$15.44	\$14.54	\$13.73	\$12.80	\$12.00	\$11.13
Gain (loss) from investment operations:						
Net investment income(a)	0.01	0.02	0.02	0.02	0.02	0.02
Net realized and unrealized gain on investments	0.27	0.20	0.15	0.11	0.06	0.02
Total gain from investment operations	0.28	0.22	0.17	0.13	0.08	0.04
Net position value, end of period	\$15.72	\$14.76	\$13.90	\$12.93	\$12.08	\$11.17
TOTAL RETURN	1.81%	1.51%	1.24%	1.02%	0.67%	0.36%
RATIOS AND SUPPLEMENTAL DATA						
Net position at end of year (in thousands)	\$-	\$-	\$-	\$-	\$-	\$-
Ratio of expenses to average net position(c) (d)	0.13%	0.13%	0.13%	0.13%	0.13%	0.13%
Ratio of net investment income to average net position(d)	0.75%	1.15%	1.52%	1.58%	1.65%	1.73%

#### Moderate Managed Allocation Option Age Bands Within the Moderate Managed Allocation Option

			Ag	es		
FOR A UNIT OUTSTANDING THROUGHOUT THE PERIOD	0-3*	4-7*	8-11*	12-14*	15-17*	18 &Over*
Net position value, beginning of period	\$23.81	\$20.31	\$20.58	\$20.52	\$18.97	\$17.66
Gain (loss) from investment operations:	-					
Net investment income(a)	0.01	0.01	0.02	0.03	0.03	0.03
Net realized and unrealized gain on investments	0.53	0.39	0.31	0.25	0.19	0.12
Total gain (loss) from investment operations	0.54	0.40	0.33	0.28	0.22	0.15
Net position value, end of period	\$24.35	\$20.71	\$20.91	\$20.80	\$19.19	\$ <u>17.81</u>
TOTAL RETURN	2.27%	1.97%	1.60%	1.36%	1.16%	0.85%
RATIOS AND SUPPLEMENTAL DATA						
Net position at end of year (in thousands)	\$-	\$-	\$-	\$-	\$-	\$-
Ratio of expenses to average net position(c)(b)	0.13%	0.13%	0.13%	0.13%	0.13%	0.13%
Ratio of net investment income to average net position(d)	0.30%	0.63%	1.00%	1.25%	1.32%	1.31%

#### Aggressive Managed Allocation Option Age Bands Within the Aggressive Managed Allocation Option

			Age	es		
FOR A UNIT OUTSTANDING THROUGHOUT THE PERIOD	0-3*	4-7*	8-11*	12-14*	15-17*	18 &Over*
Net position value, beginning of period	\$16.34	\$15.90	\$15.94	\$15.89	\$15.53	\$14.17
Gain (loss) from investment operations:						
Net investment income(a)	0.00(e)	0.00(e)	0.01	0.01	0.02	0.02
Net realized and unrealized gain on investments	0.42	0.36	0.31	0.28	0.23	0.14
Total gain (loss) from investment operations	0.42	0.36	0.32	0.29	0.25	0.16
Net position value, end of period	<u>\$16.76</u>	\$16.26	\$16.26	\$16.18	\$15.78	\$14.33
TOTAL RETURN	2.57%	<u>   2.26%</u>	2.01%	1.83%	1.61%	1.13%
RATIOS AND SUPPLEMENTAL DATA						
Net position at end of year (in thousands)	\$-	\$-	\$-	\$-	\$-	\$-
Ratio of expenses to average net position(c)(b)	0.13%	0.13%	0.13%	0.13%	0.13%	0.13%
Ratio of net investment income to average net position(d)	(0.13)%	0.18%	0.54%	0.78%	1.02%	1.28%

\*For the period July 1, 2017 to August 8, 2017 (date of liquidation)

(a) Based on average units outstanding.

(b) The percentages shown for this period are not annualized.

(c) Does not include expenses on Direct Plan investments in the TIAA-CREF Funds and other third party mutual funds.

(d) Periods less than one year are annualized and are not necessarily indicative of a full year of operations.

(e) Amount represents less than \$0.01 per share

#### FINANCIAL HIGHLIGHTS

#### For the Year Ended June 30, 2018

Conservative Managed Allocation Option

Age Bands Within the Conservative Managed Allocation Option

Ages
9-10* 11-12* 13-14* 15*
\$10.00 \$10.00 \$10.00 \$10.00
0.27 0.27 0.27 0.24
<u>(0.01)</u> (0.08) <u>(0.10)</u> (0.09)
0.26 0.19 0.17 0.15
<u>\$10.26</u> <u>\$10.19</u> <u>\$10.17</u> <u>\$10.15</u>
<u>% _2.60% _1.90% _1.70% _1.50%</u>
2 \$7,235 \$9,018 \$11,485 \$7,748
% 0.13% 0.13% 0.13% 0.13%
6 2.94% 2.92% 2.95% 2.7%

Moderate Managed Allocation Option Age Bands Within the Moderate Managed Allocation Option

			A	ges		
FOR A UNIT OUTSTANDING THROUGHOUT THE YEAR	0-4*	5-8*	9-10*	11-12*	13-14*	15*
Net position value, beginning of year	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00
Gain (loss) from investment operations:						
Net investment income(a)	0.26	0.26	0.27	0.26	0.26	0.26
Net realized and unrealized gain on investments	0.26	0.18	0.08	0.04	_(0.02)_	_(0.05)_
Total gain (loss) from investment operations	0.52	0.44	0.35	0.30	0.24	0.21
Net position value, end of year	<u>\$10.52</u>	<u>\$10.44</u>	<u>\$10.35</u>	<u>\$10.30</u>	<u>\$10.24</u>	<u>\$10.21</u>
TOTAL RETURN	5.20%	4.40%	3.50%	3.00%	2.40%	2.10%
RATIOS AND SUPPLEMENTAL DATA						
Net position at end of year (in thousands)	\$50,661	\$120,646	\$99,381	\$140,232	\$170,811	\$102,964
Ratio of expenses to average net position(c)(b)	0.13%	0.13%	0.13%	0.13%	0.13%	0.13%
Ratio of net investment income to average net position(d)	2.82%	2.82%	2.91%	2.86%	2.86%	2.84%

#### Aggressive Managed Allocation Option Age Bands Within the Aggressive Managed Allocation Option

			Ag	les		
FOR A UNIT OUTSTANDING THROUGHOUT THE YEAR	0-4*	5-8*	9-10*	11-12*	13-14*	15*
Net position value, beginning of year	<u>\$10.00</u>	\$10.00	\$10.00	\$10.00	\$10.00	\$10.00
Gain (loss) from investment operations:						
Net investment income(a)	0.25	0.25	0.25	0.25	0.25	0.26
Net realized and unrealized gain on investments	0.35	0.32	0.29	0.23	0.17	0.11
Total gain (loss) from investment operations	0.60	0.57	0.54	0.48	0.42	0.37
Net position value, end of year	\$10.60	<u>\$10.57</u>	\$10.54	<u>\$10.48</u>	<u>\$10.42</u>	\$10.37
TOTAL RETURN	6.00%	5.70%	5.40%	4.80%	4.20%	3.70%
RATIOS AND SUPPLEMENTAL DATA						
Net position at end of year (in thousands)	\$70,164	\$122,128	\$84,285	\$77,906	\$72,331	\$33.747
Ratio of expenses to average net position(c)(b)	0.13%		0.13%	0.13%	0.13%	0.13%
Ratio of net investment income to average net position(d)	2.61%	2.66%	2.64%	2.65%	2.72%	2.78%

\*The options commenced operations on August 8, 2017.

(a) Based on average units outstanding.

(b) The percentages shown for this period are not annualized.

(c) Does not include expenses on Direct Plan investments in the TIAA-CREF Funds and other third party mutual funds.

(d) Periods less than one year are annualized and are not necessarily indicative of a full year of operations.

## FINANCIAL HIGHLIGHTS

## For the Year Ended June 30, 2018

#### Conservative Managed Allocation Option Age Bands Within the Conservative Managed Allocation Option

the conservative Managed Anocation Optio			
	Age	s	
16*	17*	18 &Over*	
\$10.00	\$10.00	\$10.00	
0.22	0.21	0.18	
(0.07)	(0.08)	(0.04)	
0.15	0.13	0.14	
\$10.15	\$10.13	\$10.14	
<u>    1.50%</u>	1.30%	1.40%	
\$7,813	\$9,837	\$25,904	
0.13%	0.13%	0.13%	
2.46%	2.32%	2.03%	
	<u>16*</u> <u>\$10.00</u> 0.22 <u>(0.07)</u> 0.15 <u>\$10.15</u> <u>\$10.15</u> <u>1.50%</u> \$7,813 0.13%	$\begin{array}{c cccc} & & & & & \\ \hline & & & & & & 17^{*} \\ \hline \$10.00 & \$10.00 \\ \hline & & & \$10.00 \\ \hline & & & & \$10.02 \\ \hline & & & & & & 0.13 \\ \hline & & & & & & 0.13 \\ \hline & & & & & & 1.013 \\ \hline & & & & & & 1.30\% \\ \hline & & & & & & & 1.30\% \\ \hline & \$7,813 & \$9,837 \\ \hline & & & & & 0.13\% \\ \end{array}$	Ages $16^*$ $17^*$ $18 \& Over^*$ \$10.00         \$10.00         \$10.00           0.22         0.21         0.18 $(0.07)$ $(0.08)$ $(0.04)$ 0.15         0.13         0.14           \$10.15         \$10.13         \$10.14           \$10.15         \$10.13         \$10.14           \$10.15         \$10.13         \$10.14           \$10.15         \$10.13         \$10.14           \$10.15         \$10.30%         1.40%           \$7,813         \$9,837         \$25,904           0.13%         0.13%         0.13%

#### Moderate Managed Allocation Option Age Bands Within the Moderate Managed Allocation Option

		Age	es	
FOR A UNIT OUTSTANDING THROUGHOUT THE YEAR	16*	17*	18 &Over*	
Net position value, beginning of year	\$10.00	\$10.00	\$10.00	
Gain (loss) from investment operations:				
Net investment income(a)	0.26	0.24	0.22	
Net realized and unrealized loss on investments	(0.07)	(0.05)	(0.04)	
Total gain (loss) from investment operations	0.19	0.19	0.18	
Net position value, end of year	\$10.19	\$10.19	\$10.18	
TOTAL RETURN	1.90%	1.90%	1.80%	
RATIOS AND SUPPLEMENTAL DATA				
Net position at end of year (in thousands)	\$104,018	\$113,972	\$322,635	
Ratio of expenses to average net position(c) (d)	0.13%	0.13%	0.13%	
Ratio of net investment income to average net position(d)	2.82%	2.69%	2.47%	
<b>ö</b> 1 ()				

•	Agressive Managed Allocation Option e Bands Within the Agressive Managed Allocation Option						
	Ages						
FOR A UNIT OUTSTANDING THROUGHOUT THE YEAR	16*	17*	18 &Over*				
Net position value, beginning of year	\$10.00	\$10.00	\$10.00				
Gain (loss) from investment operations:							
Net investment income(a)	0.26	0.24	0.23				
Net realized and unrealized loss on investments	0.05	0.03	0.02				
Total gain (loss) from investment operations	0.31	0.27	0.25				
Net position value, end of year	<u>\$10.31</u>	<u>\$10.27</u>	<u>\$10.25</u>				
TOTAL RETURN	3.10%	2.70%	2.50%				
RATIOS AND SUPPLEMENTAL DATA							
Net position at end of year (in thousands)	\$33,552	\$27,927	\$56,757				
Ratio of expenses to average net position(c) (d)	0.13%	0.13%	0.13%				
Ratio of net investment income to average net position(d)	2.83%	2.63%	2.51%				

\*The options commenced operations on August 8, 2017.

(a) Based on average units outstanding.

(b) The percentages shown for this period are not annualized.

(c) Does not include expenses on Direct Plan investments in the TIAA-CREF Funds and other third party mutual funds.

(d) Periods less than one year are annualized and are not necessarily indicative of a full year of operations.

#### **FINANCIAL HIGHLIGHTS** For the Year Ended June 30, 2018

#### Multi-Fund Investment Optioins

FOR A UNIT OUTSTANDING THROUGHOUT THE YEAR Net position value, beginning of period Gain (loss) from investment operations:	Global Equity Index Fund \$18.02	Global Tactical Asset Allocation Option \$10.43	Int'l Equity Index Option \$10.93	Active Global Equity Option \$17.46	U.S. Equity Index Option \$12.08	High Equity Balanced Option \$21.70
Net investment income (a) Net realized and unrealized gain on investments Total gain from investment operations Net position value, end of period	0.40 <u>1.42</u> <u>1.82</u> \$19.84	0.22 0.11 0.33 \$10.76	0.26 0.43 0.69 <u>\$11.62</u>	0.22 <u>1.97</u> 2.19 <u>\$19.65</u>	0.19 <u>1.58</u> <u>1.77</u> <u>\$13.85</u>	0.47 <u>1.36</u> <u>1.83</u> <u>\$25.53</u>
TOTAL RETURN	10.10%	3.16%	6.31%	12.54%	14.65%	<u>8.43%</u>
RATIOS AND SUPPLEMENTAL DATA Net position at end of year (in thousands) Ratio of expenses to average net position (b) Ratio of net investment income to average net position	\$241,657 0.13% 2.02%	\$4,758 0.13% 1.99%	\$13,126 0.13% 2.22%	\$58,999 0.13% 1.14%	\$98,881 0.13% 1.45%	\$330,409 0.13% 2.01%

#### **Multi-Fund Investment Optioins**

FOR A UNIT OUTSTANDING THROUGHOUT THE YEAR Net position value, beginning of period	Active Fixed Income Option \$16.23	Social Choice Option \$20.49	Index Fixed Income Option \$11.91	Money Market Option \$10.17	Principal Plus Interest Option \$15.77	
Gain (loss) from investment operations: Net investment income (a) Net realized and unrealized gain on investments Total gain from investment operations Net position value, end of period	0.50 (0.43) 0.07 \$16.30	0.32 2.45 2.77 \$23.26	0.28 (0.37) (0.09) \$11.82	0.11 - - \$10.28	0.28 	
TOTAL RETURN	0.43%	<u>13.52%</u>	(0.76)%	1.08%		
RATIOS AND SUPPLEMENTAL DATA Net position at end of year (in thousands) Ratio of expenses to average net position (b) Ratio of net investment income to average net position	\$45,778 0.13% 3.03%	\$52,278 0.13% 1.42%	\$20,024 0.13% 2.39%	\$49,903 0.13% 1.07%	\$284,127 _% 1.78%	

(a) Based on average units outstanding.(b) Does not include expenses on Direct Plan Investments in the TIAA-CREF Funds and other third party mutual funds.

#### **INDEPENDENT AUDITORS' REPORT**

#### **Connecticut Higher Education Trust Program Advisor Plan**

#### Independent Auditors' Report

To the State Treasurer as Trustee of the Connecticut Higher Education Trust Hartford, Connecticut

#### **Report on Financial Statements**

We have audited the accompanying statement of fiduciary net position of the Connecticut Higher Education Trust Program Advisor Plan (the "Plan"), a Plan of the State of Connecticut, as of and for the year ended June 30, 2018, and the related statement of changes in fiduciary net position for the year then ended, and the notes to the financial statements, which collectively comprise the Plan's basic financial statements as listed in the table of contents.

#### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Plan, as of June 30, 2018, and the related changes in fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

#### **Other Matters**

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that management's discussion and analysis on pages 3 and 4 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the

#### INDEPENDENT AUDITORS' REPORT

## Connecticut Higher Education Trust Program Advisor Plan

#### Independent Auditors' Report

required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### **Other Information**

Our audit was conducted for the purpose of forming an opinion on the financial statements as a whole. The combining statements of fiduciary net position, the combining statements of changes in fiduciary net position, and financial highlights, as listed in the table of contents, on pages 12 through 26 are supplemental schedules presented for purposes of additional analysis and are not a required part of the basic financial statements.

These supplemental schedules are the responsibility of the Plan's management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such supplemental schedules have been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplemental schedules are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

#### Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated September 13, 2018 on our consideration of the Plan's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contacts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering Plan's internal control over financial reporting and compliance.

Debitte & Touche LLP

Philadelphia, Pennsylvania September 13, 2018

Note: The full independent auditors report that is covered by this opinion is available on the Office of the State Treasurer's web page.

#### MANAGEMENT'S DISCUSSION AND ANALYSIS

The Connecticut Higher Education Trust ("CHET" or the "Trust") Program (the "Program") was formed on July 1, 1997, by Connecticut law, to help people save for the costs of education after high school. The Program is administered by the Treasurer of the State of Connecticut, as trustee (the "Trustee") of the Trust. The Trustee has the authority to enter into contracts for program management services, adopt regulations for the administration of the Program, and establish investment policies for the Program. The Program consists of two components – CHET Direct Plan, which is offered directly by the state, and an advisor plan which began on September 30, 2010 ("CHET Advisor Plan" or "Plan"). Hartford Life Insurance Company ("Hartford Life") and the Trust entered into a management agreement under which Hartford Life serves as a plan manager until May 31, 2018. Effective May 31, 2018, Hartford Funds Management Company, LLC ("HFMC"), an affiliate of Hartford Life, assumed the management agreement and commenced serving as plan manager. The Hartford Financial Services Group, Inc. ("The Hartford"), HFMC's ultimate parent company, has provided insurance other financial management services for its clients since 1810. As plan manager, HFMC provides readers of the financial statements of the plan this discussion and analysis of the financial performance as of and for the fiscal year ended June 30, 2018. The following should be considered in conjunction with the plan's financial statements and notes to financial statements, which follow this section.

These financial statements are intended for use in connection with an account opened in the CHET Advisor Plan only, and are not intended to include information relevant to the CHET Direct Plan, which is described in a separate report, and offers investment options different from those offered under the CHET Advisor Plan. For more information on the CHET Direct Plan, you may call 1-888-799-2438 or go to www.aboutchet.com.

## **FINANCIAL HIGHLIGHTS**

- The following financial highlights occurred during the year ended June 30, 2018:
- The Plan had contributions of \$92.4 million and withdrawals of \$42.9 million during the year;
- At June 30, 2018, the Plan's Fiduciary Net Position totaled \$564.8 million, an increase of \$83.3 million, or 17% since June 30, 2017;
- The Plan earned \$10.2 million from investment income, \$16.5 million from capital gain distributions, \$(5.8) million from net change in depreciation in fair value of investments, and recognized gain on the sale of investments of \$15.9 million during the year. The Plan incurred \$3.0 million for operating expenses net of waivers during the year.

## **OVERVIEW OF THE FINANCIAL STATEMENTS**

The Plan's financial statements are prepared in accordance with Governmental Accounting Standards Board ("GASB") No. 34, Basic Financial Statements and Management's Discussion and Analysis for State and Local Governments.

This annual report consists of two sections: Management's discussion and analysis (this section) and the basic financial statements. The basic financial statements include the Statement of Fiduciary Net Position, the Statement of Changes in Fiduciary Net Position and the Notes to Financial Statements. The statements are prepared using the accrual basis of accounting. Contributions and withdrawals are recognized on trade date; expenses and liabilities are recognized when services are provided, regardless of when cash is disbursed.

The Statement of Fiduciary Net Position presents information on all of the Plan's assets and liabilities, with the difference reported as net position.

The Statement of Changes in Fiduciary Net Position reports the additions and deductions to the Plan for the fiscal year.

The Notes to Financial Statements provide additional information that is essential to a full understanding of the data provided in the basic financial statements.

This report presents the operating results and financial status of the Plan and represents assets held for benefit of parties outside the governmental entity.

#### MANAGEMENT'S DISCUSSION AND ANALYSIS (Continued)

# FINANCIAL ANALYSIS

*Fiduciary Net Position:* The following is a condensed Statement of Fiduciary Net Position for the Plan as of June 30, 2018 and June 30, 2017.

	<u>2018</u>	<u>2017</u>
Assets: Investments Receivables and other assets Total assets	\$564,898,086 789,851 565,687,937	\$481,777,681 <u>465,940</u> 482,243,621
Liabilities: Payables and other liabilities Accrued expenses Total liabilities	758,209 107,491 865,700	455,765 270,002 725,767
Fiduciary Net Position	\$564,822,237	\$481,517,854

Total Fiduciary Net Position represent cumulative contributions from participants since the Plan's inception, plus net increases and decreases from investment operations less withdrawals and expenses.

Investments make up 100% of total Fiduciary Net Position, and consist of 26 investment options, each of which is invested in underlying mutual funds, except the CHET Advisor Stable Value 529 Portfolio. Receivables include receivables for investments sold, receivables for sale of units and receivables for accrued income. Liabilities consist of payables for investments purchased, payables for units redeemed, and payables for accrued expenses for management, distribution and administrative services.

Changes in Net Position: The following is a condensed Statement of Changes in Fiduciary Net Position (excluding transfers) for the Plan for the years ended June 30, 2018 and June 30, 2017

	<u>2018</u>	<u>2017</u>
Additions:		
Contributions	\$92,357,649	\$83,480,921
Increase from investment operations	<u>36,838,551</u>	51,259,382
Total additions	129,196,200	134,740,303
Deductions:		
Withdrawals	42,861,040	36,163,377
Expenses after fees waived	3,030,777	2,932,425
Total deductions	45,891,817	39,095,802
Change in not position	83,304,383	95.644.501
Change in net position		
Fiduciary net position, beginning of year	481,517,854	385,873,353
Fiduciary Net Position, end of year	\$564,822,237	\$4 <u>81,517,854</u>

# CONNECTICUT HIGHER EDUCATION TRUST - ADVISOR PLAN STATEMENT OF FIDUCIARY NET POSITION

Assets:	June 30, 2018	June 30, 2017
Investments at fair value (cost \$469,671,673 and \$468,521,071) Fully benefit-responsive investment contracts at contract value	\$476,179,721	\$481,777,681
(Cost \$87,742,329) (See Note 7) Receivables:	88,718,365	-
Investments sold	81,210	141,814
Sale of Units	528,466	226,213
Dividends	180,175	97,913
Total Assets	565,687,937	482,243,621
Liabilities: Payables:		
Investments purchased	571,612	236,980
Units redeemed	186,597	218,785
Accrued distribution fees	28,010	170,439
Accrued plan manager fees	74,804	91,901
Accrued administration fees	4,677	7,662
Total Liabilities	865,700	725,767
Fiduciary Net Position	\$564,822,237	\$481,517,854

#### See notes to financial statements.

#### STATEMENT OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEARS ENDED JUNE 30,

	2018	2017
Additions:	<b>#00.057.040</b>	<b>#00 400 004</b>
Contributions from account holders	\$92,357,649	\$83,480,921
Transfers in	372,671,214	86,427,789
Increase from investment operations:	40 404 750	E 070 077
Dividends and other income	10,191,758	5,973,077
Capital gain distributions received from underlying funds	16,489,838	4,182,566
Net realized gain on sale of underlying shares	15,929,481	9,860,376
Net change in unrealized (depreciation) on underlying funds	(5,772,526)	31,243,363
Net increase from investment operations	36,838,551	51,259,382
Total additions	501,867,414	221,168,092
Deductions:		
Withdrawals by account holders	42,861,040	36,163,377
Transfers out	372,671,214	86,427,789
Expenses:		
Plan manager fees	927,587	1,027,270
Administrative fees	63,228	85,602
Distribution fees	2,062,991	1,924,287
Total expenses before waivers	3,053,806	3,037,159
Total waivers	(23,029)	(104,734)
Total expenses after fees waived	3,030,777	2,932,425
Total deductions	418,563,031	125,523,591
Fiduciary Net Position		
Net increase in fiduciary net position	83,304,383	95,644,501
Beginning of year	481,517,854	385,873,353
End of year	\$564,822,237	\$481,517,854

See notes to financial statements.

#### NOTES TO FINANCIAL STATEMENTS

#### NOTE 1: ORGANIZATION

The CHET Advisor Plan is a qualified tuition program offered by the Trust. Prior to May 31, 2018, Hartford Life served as plan manager and managed the Plan under the direction of the Trustee. Effective May 31, 2018, an affiliate of Hartford Life, HFMC serves as plan manager. The Plan is intended to meet the requirements of the qualified tuition program under Section 529 of the Internal Revenue Code and was established pursuant to the Connecticut General Statutes Section 3-22f to 3-22o. Investment options and allocations, as adopted by the Trustee, are described in the current Disclosure Booklet for the Program.

The Plan offers Age-Based Investment Options tailored to the length of time until the designated beneficiary reaches college age, Static Investment Options that allow investing in fixed allocations of underlying investments or Individual Investment Options (collectively, "Investment Options"). The CHET Advisor Plan consists of 26 portfolios that make up the Investment Options in which plan participants can direct their contributions. Effective September 15, 2017, there was a change in the age-based portfolios from five age-bands to nine age-bands. These Investment Options are as follows:

#### Age-Based Investment Options

CHET Advisor Age-Based Portfolio 0-3(<sup>1</sup>) CHET Advisor Age-Based Portfolio 4-6(<sup>2</sup>) CHET Advisor Age-Based Portfolio 7-9(<sup>1</sup>) CHET Advisor Age-Based Portfolio 10-11(<sup>3</sup>) CHET Advisor Age-Based Portfolio 12-13(<sup>1</sup>) CHET Advisor Age-Based Portfolio 14-15 CHET Advisor Age-Based Portfolio 16(<sup>4</sup>) CHET Advisor Age-Based Portfolio 17(<sup>1</sup>) CHET Advisor Age-Based Portfolio 18+ <u>Static Investment Options</u> CHET Advisor Agressive Growth Portfolio CHET Advisor Balanced Portfolio CHET Advisor Checks & Balances Portfolio CHET Advisor Conservative Portfolio

CHET Advisor Growth Portfolio

#### Individual Investment Options

Hartford Balanced Income 529(<sup>1</sup>) Hartford Core Equity 529 Portfolio(<sup>1</sup>) Hartford Dividend and Growth 529 Portfolio Hartford Equity Income 529 Portfolio Hartford Growth Oportunities 529 Portfolio Hartford Inflation Plus 529 Portfolio Hartford International Opportunities 529 Portfolio Hartford MidCap 529 Portfolio Hartford Small Cap Growth 529 Portfolio Hartford Total Return Bond 529 Portfolio Hartford World Bond 529 Portfolio Hartford Advisor Stable Value 529 Portfolio(<sup>1</sup>)

<sup>(1)</sup>The portfolio was added as a new investment option on September 15, 2017.

<sup>(2)</sup>Effective September 15, 2017, the name of CHET Advisor Age-Based Portfolio 0-8 changed to CHET Advisor Age-Based Portfolio 4-6.

(<sup>3</sup>)Effective September 15, 2017, the name of CHET Advisor Age-Based Portfolio 9-13 changed to CHET Advisor Age-Based Portfolio 10-11.

(<sup>4</sup>)Effective September 15, 2017, the name of CHET Advisor Age-Based Portfolio 16-17 changed to CHET Advisor Age-Based Portfolio 16

The Investment Options are not mutual funds and have not been registered with the U.S. Securities and Exchange Commission. As of September 15, 2017, CHET Advisor Money Market 529 Portfolio, Hartford Capital Appreciation 529 Portfolio, and Hartford Global Real Asset 529 Portfolio ceased operations. The Investment Options invest their assets in Class F shares of underlying mutual funds of Hartford Mutual Funds (the "underlying mutual funds") as well as Class I shares of the iShares Russell MidCap Index Fund and iShares Russell 1000 Large Cap Index Fund, mutual funds unaffiliated with Hartford Funds. In addition, certain Investment Options invest in a stable value fund, which is not a mutual fund, managed by Invesco Advisors, Inc. ("Invesco") (the "CHET Advisor Stable Value Portfolio", and together with the underlying mutual funds, the "Underlying Funds").

Financial statements of the underlying mutual funds contain additional information about the expenses and investments of the underlying mutual funds and are available from the EDGAR database on the Securities and Exchange Commission website at http://www.sec.gov.

The Investment Options offer Class A Units, Class C Units and Class E Units. Each Class of Units has a different fee structure determined by the sales charge.

#### NOTES TO FINANCIAL STATEMENTS

The following Class A commission rates are for all investment options except the CHET Advisor Stable Value 529 Portfolio for which there is no front-end charge:

	-		% Retained by
Breakpoint	Cumulative Contributions	Up-Front Sales Charge*	Financial Advisory Firm
1	Less than \$99,999.99	2.50%	2.50%
2	\$100,000 - \$249,999.99	2.25%	2.25%
3	\$250,000 - \$499,999.99	1.75%	1.75%
4	\$500,000 - \$999,999.99	1.25%	1.25%
5	\$1,000,000 and greater	0.00%**	1.00%

\* The new Up-Front Sales Charge Schedule reflects a reduction for most CHET Advisor Plan Portfolios.

\*\* There is a contingent deferred sales charge of 1.00% for shares sold within 18 months.

Class C units are sold with a contingent deferred sales charge of up to 1% on shares redeemed within 12 months. Class C units convert to Class A units after four years. Class E units are sold without sales charges to certain eligible investors. All classes of units have identical withdrawal, dividend, liquidation, and other rights and the same terms and conditions, with the exception that each class may have different expenses, which may affect performance.

#### NOTE 2: SIGNIFICANT ACCOUNTING POLICIES

The following is a summary of significant accounting policies of the CHET Advisor Plan in the preparation of its financial statements, which are in accordance with the accounting principles generally accepted in the United States of America ("U.S. GAAP"), as defined by the Governmental Accounting Standards Board ("GASB"). The preparation of financial statements in accordance with U.S. GAAP may require management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the reported amounts of increases and decreases in fiduciary net position from operations during the reporting period. Actual results could differ from those estimates.

**Determination of Net Position Value ("NPV")** – The NPV of each class of the Investment Option's units is based on the value of all underlying investment holdings, determined as of the close of regular trading (normally 4:00 p.m. Eastern Time) (the "NYSE Close") on each day that the New York Stock Exchange is open ("Valuation Date"). Information that becomes known to the Investment Option after the NPV has been calculated on a particular day will not generally be used to retroactively adjust the NPV determined earlier that day.

**Investment Valuation** – Investments in open-end mutual funds are valued at the Net Asset Value per share as determined as of the NYSE closing daily. The underlying assets in the CHET Advisor Stable Value Portfolio are marked to market daily and reported to the Plan. In addition, wrap contracts with respect to the underlying assets in the CHET Advisor Stable Value Portfolio seek to provide for minimal fluctuation in principal values. The wrap contracts are valued by Invesco and reported to the Plan Manager monthly at contract value (also known as book value).

**Fair Value Measurements** – The Investment Options' investments valuation process is based on several considerations and may use multiple inputs to determine the fair value of the investments held by the Investment Option. In conformity with accounting principles generally accepted in the United States of America, the inputs used to determine a valuation are classified into three broad levels.

- Level 1 valuation inputs consist of unadjusted quoted prices in an active market for identical assets and liabilities.
- Level 2 valuation inputs consist of direct or indirect observable market data (including quoted prices for comparable investments, evaluations of subsequent market events, interest rates, prepayment speeds, credit risk, etc.).
- Level 3 valuation inputs consist of unobservable data (including the plan manager's own assumptions).

#### NOTES TO FINANCIAL STATEMENTS (Continued)

The level classification is based on the lowest level input that is significant to the fair valuation measurement. The valuation inputs are not necessarily an indication of the risks associated with investing in these Underlying Funds or other financial instruments. There were no significant transfers between levels during the year.

As of year-end, the Investment Options' investments were classified as Level 1.

**Security Transactions and Investment Income** – Underlying Fund transactions are recorded as of the trade date (the date the order to buy or sell is executed) for financial reporting purposes. Realized gains and losses are determined on the basis of specific identified cost. Income, realized and unrealized gains and losses of each class are allocated daily based on the relative fiduciary net position of each class of units of the Investment Option.

Income and capital gain distributions from Underlying Funds are recorded on the ex-dividend date.

**Units** – Contributions by a participant are evidenced through the issuance of units in the particular Investment Option according to the investment elections made by the participant. Contributions and withdrawals are subject to terms and limitations defined in the participation agreement between the participant and the CHET Advisor Plan. Contributions are invested in units of the assigned Investment Option on the same day as the credit of the contribution to the participant's account. Withdrawals are based on the unit value calculated for such Investment Option on the day that the withdrawal request is accepted. The earnings portion of non-qualified withdrawals, in addition to applicable federal and state income taxes, may be subject to a 10% non-qualified withdrawal penalty to be withheld from the amount withdrawn.

**Receivables** – Receivables for Underlying Funds sold and receivables from the sale of units to participants of the CHET Advisor Plan represent the sales of the Underlying Funds held by the Investment Options and the contributions of the participants that have not settled as of the reporting date, respectively.

**Payables** – Payables for Underlying Funds purchased and payables from units redeemed from participants of the CHET Advisor Plan represent the purchases of the Underlying Funds held by the Investment Options of the participants that have not settled as of the reporting date, respectively.

**Expenses** – Expenses are recorded on the accrual basis of accounting. Under this method of accounting, expenses are recorded when a liability is incurred, regardless of the timing of the related cash flow.

#### NOTE 3: INVESTMENT RISKS

The CHET Advisor Plan's investments represent shares of the Underlying Funds, rather than individual securities and therefore, are not subject to classification by custodial credit risk or disclosure of concentration of credit risk under GASB Statement No. 40, Deposit and Investment Risk Disclosures. The Underlying Funds are not rated by any nationally recognized statistical rating organization.

An Investment Option is exposed to the risks of the Underlying Funds in direct proportion to the amount of assets the Investment Option allocates to each Underlying Fund.

Interest Rate Risks – Certain Underlying Funds invest in debt securities, including bonds, and are subject to interest rate risk. Declining interest rates generally increase the value of existing debt instruments, and rising interest rates generally decrease the value of existing debt instruments. The exposure to interest rate risk is greater with Underlying Funds with longer average effective maturity and average effective duration.

Certain Underlying Funds listed below have investments with exposure to interest rate risk. As of June 30, 2018, the average effective maturity and the average effective duration measured in years are as follows:

	Average	Average	
	Effective	Effective	
	<u>Maturity</u>	<b>Duration</b>	
The Hartford Balanced Income Fund	5.46	3.47	
The Hartford Inflation Plus Fund	6.69	4.76	
The Hartford Strategic Income Fund	11.33	4.12	
The Hartford Total Return Bond Fund	10.10	5.23	
The Hartford World Bond Fund	4.96	3.56	
CHET Advisor Stable Value Portfolio	6.91	3.24	

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#### NOTES TO FINANCIAL STATEMENTS (Continued)

**Foreign Currency Risks** – Certain Underlying Funds invest in foreign securities. Certain additional risks are involved when investing in foreign securities that are not inherent with investments in domestic securities. These risks may involve foreign exchange rate fluctuations, adverse political and economic developments and the possible prevention of currency exchange or other foreign governmental laws or restrictions. In addition, the liquidity of foreign securities may be more limited than that of domestic securities.

**Market Risks** – In the normal course of business, the Underlying Funds invest in securities and enter into transactions where risks exist due to fluctuations in the market (market risk). The market values of Underlying Funds may decline due to general market conditions, which are not specifically related to a particular company, such as real or perceived adverse economic conditions, changes in the general outlook for corporate earnings, changes in interest or currency rates, or adverse investor sentiment generally. The market value of equity securities may also decline due to factors, which affect a particular industry or industries, such as labor shortages or increased production costs and competitive conditions within an industry.

**Credit Risks** – Certain Underlying Funds invest in fixed-income securities and are subject to credit risks. Generally credit risk is the risk that an issuer (issuer credit risk) or other counterparty (counterparty credit risk) to an investment will not fulfill its obligation to the holder of the investment.

Financial assets, which potentially expose the Underlying Funds to market, issuer and counterparty credit risks, consist principally of financial instruments and receivables due from counterparties. The extent of the Underlying Funds' exposure to market, issuer and counterparty credit risks with respect to these financial assets is generally approximated by their value as recorded in the Underlying Funds' Statements of Assets and Liabilities. Refer to the prospectuses and financial statements of the Underlying Funds for information on the respective Underlying Fund's investment strategy.

#### **NOTE 4: FEDERAL AND STATE INCOME TAX**

The Program has been designated to comply with the requirements for treatment as a qualified state tuition program under Section 529 of the Internal Revenue Code, which is exempt from federal and state income tax. Therefore, no provision for income tax is required.

#### NOTE 5: PLAN MANAGEMENT AND OTHER FEES

Allocable expenses incurred by the CHET Advisor Plan are allocated to each Investment Option and allocated to classes within the Investment Option in proportion to the average daily fiduciary net position of the Investment Option and each class, except where otherwise noted.

**Plan Manger Fee** – The Program Manager has entered into a Plan Management Agreement with the Trust, which provides for the payment of a Plan Manager Fee for services performed on behalf of the Trust. Currently, the Plan Manager Fee is 0.16% and is accrued daily and paid monthly to HFMC. The Plan Manager fee was 0.24% until September 15, 2017 at which time it was reduced to 0.16%. In addition, HFMC receives investment management fees from the underlying Hartford mutual funds.

The Plan offered the CHET Advisor Money Market 529 Portfolio until September 15, 2017. As of September 15, 2017 the amount of the waiver was \$7,162.

**Portfolio Fee** – The CHET Advisor Stable Value Portfolio charged a fee of 0.34% which includes investment management related fees and other fees, but not the wrap fee, until May 31, 2018. Effective May 31, 2018 the fee was reduced to 0.23%.

**Administrative Fee** – The Administrative Fee of 0.01%, is charged to pay the Trust's expenses related to the overall operation of the Connecticut Higher Education Trust. This fee is accrued and deducted daily as a percentage of average daily fiduciary net position of the Investment Options and paid monthly. The Administrative was 0.02% until September 15, 2017 at which time it was reduced to 0.01%.

#### NOTES TO FINANCIAL STATEMENTS (Continued)

The Plan offered the CHET Advisor Money Market 529 Portfolio until September 15, 2017. As of June 30, 2018, the amount of the administrative fees waiver was \$597.

**Annual Distribution Fee** – The CHET Advisor Plan is authorized to charge an annual distribution fee to compensate Hartford Funds Distributors, LLC ("HFD"), an affiliate of HFMC, for activities intended to result in the sale and distribution of Classes A and C units and for providing services for shareholders. The fee is accrued and deducted daily as a percentage of average fiduciary net position in the Investment Options and paid monthly. From its receipt of the annual distribution fee, HFD may compensate other entities for distributing units of the CHET Advisor Plan. As of June 30, 2018, the amount of distribution fees paid was \$2,062,991. The schedule below reflects the fees effective as of June 30, 2018:

Class of Units	Annual
Class A	0.25%
Class C	1.00%

The Plan offered the CHET Advisor Money Market 529 Portfolio until September 15, 2017. As of September 15, 2017, the amount of distribution fees waiver was \$15,270.

#### **NOTE 6: AFFILIATE HOLDINGS**

As of June 30, 2018, affiliates of The Program Manager had ownership in certain Investment Options in order to create startup capital. As of June 30, 2018, affiliates of the Hartford owned 6.33% of the units outstanding of Hartford Balanced Income 529 Portfolio.

#### **NOTE 7: INVESTMENTS**

HFMC manages the Plan's investments in 26 different portfolios. Each portfolio invests in underlying mutual funds, other than the CHET Advisor Stable Value Portfolio which is not a mutual fund. The CHET Advisor Stable Value Portfolio investment objectives are to preserve principal and interest income, to maintain liquidity for interfund transfers and withdrawals, and to provide for a portfolio book value crediting rate that moves generally in the direction of prevailing market rates. The CHET Advisor Stable Value Portfolio seeks to maximize current income while preserving principal and delivering stable investment returns. Except for the CHET Advisor Stable Value Portfolio, investments are reported at fair value, which is the same as the value of the pool shares, and are accounted for by the Plan accordingly, with changes in the fair value included in investment earnings. The CHET Advisor Stable Value Portfolio is a synthetic guaranteed investment contract, which is a form of derivative instrument as defined by GASB, and accordingly is reported at contract value in accordance with GASB standards. Changes in contract alue are included in investment earnings. The fair value and the contract value of the CHET Advisor Stable Value Portfolio as of June 30, 2018 are as follows:

	Fair Value	Contract Value
Underlying Investments	\$86,888,300	\$88,718,365
Wrap Contract		
Total CHET Advisor Stable Value Portfolio	\$86,888,300	<u>\$88,718,365</u>

The following table represents a calculation of the net change in investments during the year ended June 30, 2018:

Investments at fair value, end of year*	\$564,898,086
Less cost of investments purchased during year	(416,914,697)
Plus proceeds from investments sold during year	328,021,766
Less investments at beginning of year	(481,777,681)
Net depreciation of investments during year	\$ (5,772,526)

\*Includes Contract Value of CHET Advisor Stable Value Portfolio

#### NOTES TO FINANCIAL STATEMENTS (Continued)

Investments on the Combining Statements of Fiduciary Net Position consists of the following as of June 30, 2018:

CHET Advisor Plan:	<u>Shares</u>	Cost	Market Value
CHET Advisor Stable Value Portfolio*	0 750 705	\$87,742,329	\$88,718,365
iShares Russell 1000 Large-Cap Index Fund, Class I	8,758,785	12,212,184	
<b>°</b>	717,712		13,033,657
iShares Russell MidCap Index Fund, Class I	952,700	10,523,577	9,946,185
Hartford Core Equity Fund, Class F	1,988,544	55,427,137	59,596,651
Hartford Schroders Emerging Markets Equity Fund, Class F	906,503	14,496,020	14,150,512
The Hartford Balanced Income Fund, Class F	19,070	275,581	266,411
The Hartford Capital Appreciation Fund, Class F	70,674	2,716,337	2,797,974
The Hartford Dividend and Growth Fund, Class F	2,704,386	69,235,047	68,366,874
The Hartford Equity Income Fund, Class F	2,644,234	51,763,462	51,403,913
The Hartford Growth Opportunities Fund, Class F	309,444	13,135,433	15,843,519
The Hartford Inflation Plus Fund, Class F	3,523,165	38,864,528	37,592,169
The Hartford International Opportunities Fund, Class F	2,891,621	46,472,786	47,046,676
The Hartford International Value Fund, Class F	1,730,401	29,023,885	28,326,655
The Hartford MidCap Fund, Class F	383,606	10,721,115	12,274,265
The Hartford Small Cap Growth Fund, Class F	313,567	16,971,521	19,692,014
The Hartford Strategic Income Fund, Class F	3,695,261	33,025,190	31,594,480
The Hartford Total Return Bond Fund, Class F	4,471,795	46,489,766	44,986,259
The Hartford World Bond Fund, Class F	1,758,091	18,318,104	18,811,571
*Contract Value		\$557,414,002	<u>\$564.898.086</u>

#### **NOTE 7: SUBSEQUENT EVENTS**

Subsequent events have been evaluated through September 13, 2018, which is the date the financial statements were available to be issued. There were no subsequent events identified related to the CHET Advisor Plan that could have a material impact on the CHET Advisor Plan's financial statements.

#### FINANCIAL HIGHLIGHTS FOR THE YEAR ENDED JUNE 30, 2018

	Selected Per-Share Data (1)						Ratios ar	nd Suppleme	ental Data	
Class	Net Position Value at I Beginning of Period	Net nvestment Income (Loss)	Net Realized and Unrealized Gain (Loss)	Total from Investment Operations		Total Return Based on Net Position Value Per Unit	Net Position at End of Period (000's)		Ratio of Net Investment Income (Loss) to Average Net Position	Portfolic Turnove Rate <sup>(2)</sup>
CHET Advisor Age-Bas	ed Portfolio 0	-3 <sup>(3)</sup>	. ,							
Class A	\$ 10.00	\$ 0.16	\$ 0.39	\$ 0.55	\$ 10.55	5.50(4)%	\$ 14,266	0.42(5)%	1.89 <sup>(5)</sup> %	35%
Class C	10.00	0.10	0.39	0.49	10.49	4.90(4)	3,170	1.17(5)	1.20 <sup>(5)</sup>	35
Class E	10.00	0.17	0.41	0.58	10.58	5.80(4)	1,529	0.17(5)	2.02(5)	35
CHET Advisor Age-Base	ed Portfolio 4	<b>-6</b> <sup>(6)</sup>								
Class A	\$ 17.66	\$ 0.25	\$ 1.25	\$ 1.50	\$ 19.16	8.49(7)%	\$ 28,978	0.45%	1.31%	45%
Class C	16.79	0.07	1.22	1.29	18.08	7.68(7)	6,653	1.21	0.39	45
Class E	17.95	0.29	1.29	1.58	19.53	8.807)	3,527	0.20	1.51	45
CHET Advisor Age-Base	ed Portfolio 7	<b>-9</b> <sup>(3)</sup>								
Class A	\$ 10.00	\$ 0.20	\$ 0.19	\$ 0.39	\$ 10.39	3.90(4)%	\$ 40,891	0.42(5)%	2.50(5)%	3%
Class C	10.00	0.15	0.18	0.33	10.33	3.30(4)	5,931	1.17 <sup>(5)</sup>	1.82(5)	3
Class E	10.00	0.23	0.18	0.41	10.41	4.10(4)	5.602	0.17(5)	2.81 <sup>(5)</sup>	3
CHET Advisor Age-Base	ed Portfolio 1	0-11 <sup>(8)</sup>								
Class A	\$ 15.95	\$ 0.25	\$ 0.81	\$ 1.06	\$ 17.01	6.65(9)%	\$ 30,332	0.45%	1.47%	43%
Class C	15.16	0.03	0.87	0.90	16.06	5.94 <sup>(9)</sup>	4,501	1.22	0.22	43
Class E	16.21	0.27	0.86	1.13	17.34	6.97(9)	3,625	0.20	1.58	43
CHET Advisor Age-Base	ed Portfolio 1	2-13 <sup>(3)</sup>								
Class A	\$ 10.00	\$ 0.22	\$ 0.03	\$ 0.25	\$ 10.25	2.50(4)%	\$ 34,770	0.42(5)%	2.71(5)%	7%
Class C	10.00	0.16	0.03	0.19	10.19	1.90(4)	6,579	1.17(5)	1.99(5)	7
Class E	10.00	0.24	0.03	0.27	10.27	2.70(4)	3,957	0.17(5)	2.95(5)	7
CHET Advisor Age-Base	ed Portfolio 1									
Class A	\$ 14.90	\$ 0.35	\$ 0.38	\$ 0.73	\$ 15.63		\$ 35,791	0.44%	2.24%	44%
Class C	14.17	0.18	0.40	0.58	14.75	4.09	8,382	1.19	1.23	44
Class E	15.16	0.39	0.40	0.79	15.95	5.21	4,244	0.19	2.46	44
CHET Advisor Age-Base	ed Portfolio 1									
Class A	\$ 13.01	\$ 0.16	\$ 0.29	\$ 0.45	\$ 13.46		6 \$ 16,346	0.45%	1.22%	77%
Class C	12.36	0.04	0.29	0.33	12.69	2.67 <sup>(11)</sup>	4,544	1.21	0.34	77
Class E	13.23	0.19	0.31	0.50	13.73	3.78(11)	1,879	0.20	1.44	77
CHET Advisor Age-Base										
Class A	\$ 10.00	\$ 0.10	\$ 0.02	\$ 0.12	\$ 10.12		\$ 17,850	0.42(5)%	1.27(5)%	13%
Class C	10.00	0.05	0.01	0.06	10.06	0.60 <sup>(4)</sup>	4,469	1.17 <sup>(5)</sup>	0.57(5)	13
Class E	10.00	0.13	0.01	0.14	10.14	1.40(4)	1,814	0.17 <sup>(5)</sup>	1.60 <sup>(5)</sup>	13
CHET Advisor Age-Base										
Class A	\$ 11.48	\$ 0.12	\$ 0.12	\$ 0.24	\$ 11.72		\$ 26,993	0.43%	1.00%	103%
Class C	10.91	0.02	0.12	0.14	11.05	1.28	10,550	1.19	0.15	103
Class E	11.67	0.15	0.12	0.27	11.94	2.31	4,484	0.19	1.23	103
CHET Advisor Aggressi			<b>.</b>	<b>.</b>	<b>*</b> • • • • <b>-</b>	0 770/	<b>*</b> 4 4 <b>0</b> 4 0	0 4 4 9 (	4 400/	= 4 0 (
Class A	\$ 19.54	\$ 0.31	\$ 1.60	\$ 1.91	\$ 21.45		\$ 14,249	0.44%	1.46%	51%
Class C Class E	18.56 19.86	0.09 0.35	1.57 1.65	1.66 2.00	20.24 21.86	8.93 10.07	3,692 6,371	1.19 0.19	0.43 1.60	51 51
		0.00	1.00	2.00	21.00	10.07	0,071	0.13	1.00	51
CHET Advisor Balanced		¢ 0 22	¢ 0 74	¢ 1 00	¢ 16 20	6 740/	\$ 17,483	0 4 4 9/	1 0 4 0/	53%
Class A Class C	\$ 15.36 14.60	\$ 0.32	\$ 0.71 0.73	\$ 1.03 0.87	\$ 16.39 15.47		\$ 17,483 6,247	0.44%	1.94% 0.90	53% 53
Class E	14.60 15.61	0.14 0.36	0.73	1.10	15.47 16.71	5.96 7.05	2,313	1.20 0.19	0.90 2.20	53 53
			0.74	1.10	10.71	1.00	2,010	0.10	2.20	00
CHET Advisor Checks & Class A	<b>&amp; Balances Po</b> \$ 17.92	\$ 0.34	\$ 0.97	\$ 1.31	\$ 19.23	7.31%	\$ 5,915	0.44%	1.83%	12%
Class A Class C	\$ 17.92 17.03	\$ 0.34 0.16	\$ 0.97 0.95	\$ 1.31 1.11	\$ 19.23 18.14	7.31% 6.52	\$ 5,915 1,852	0.44% 1.19	1.83% 0.92	12%
Class C Class E	17.03	0.16	0.95	1.11	18.14	6.52 7.57	650	0.19	0.92 2.02	12
			0.00	1.00	10.00		000	0.10	2.52	14
CHET Advisor Conserva Class A	ative Portfolic \$ 13.04	<b>)</b> \$ 0.18	\$ 0.28	\$ 0.46	\$ 13.50	3.53%	\$ 4,815	0.44%	1.35%	93%
Class C	\$ 13.04 12.41	φ0.18 0.06	ֆ 0.28 0.27	\$ 0.46 0.33	φ 13.50 12.74	3.53% 2.66	\$ 4,615 2,299	0.44 <i>%</i> 1.19	0.48	93% 93
	12.41	0.00	0.21	0.00	14.14	2.00	2,233	1.13	0.40	33
Class E	13.26	0.22	0.28	0.50	13.76	3.77	534	0.19	1.59	93

#### FINANCIAL HIGHLIGHTS

# FOR THE YEAR ENDED JUNE 30, 2018 (Continued)

	Selected Per-Share Data (1)						Ratios ar	nd Suppleme	ental Data	
Class	Net Position Value at Beginning of Period	Net Investment Income (Loss)	Net Realized and Unrealized Gain (Loss)	Total from Investment Operations		Total Return Based on Net Position Value Per Unit	Net Position at End of Period (000's)	Ratio of Expenses to Average Net Position	Ratio of Net Investment Income (Loss) to Average Net Position	Portfolic Turnove Rate <sup>(2)</sup>
CHET Advisor Growth P	ortfolio			-						
Class A	\$ 17.64	\$ 0.33	\$ 1.17	\$ 1.50	\$ 19.14	8.50%	\$ 25,569	0.44%	1.73%	49%
Class C	16.77	0.14	1.16	1.30	18.07	7.75	5,913	1.19	0.81	49
Class E	17.94	0.37	1.21	1.58	19.52	8.81	3,281	0.19	1.90	49
CHET Advisor Stable Va	lue 529 Port	folio								
Class A	\$ 10.00	\$ (0.03)	\$ 0.13	\$ 0.10	\$ 10.10	1.00(4)%	\$ 11,020	0.42(5)%	(0.41)%	21%
Class C	10.00	(0.09)	0.13	0.04	10.04	0.40(4)	4,659	1.17(5)	(1.15)	21
Class E	10.00	(0.01)	0.13	0.12	10.12	1.20(4)	3,028	0.17(5)	(0.16)	21
Hartford Balanced Incor	ne 529 Portf	olio								
Class A	\$ 10.00	\$ 0.33	\$ (0.28)	\$ 0.05	\$ 10.05	0.50(4)%	\$ 220	0.42(5)%	4.10(5)%	12%
Class C	10.00	0.19	(0.20)	(0.01)	9.99	(0.10(4))	27	1.17(5)	2.46(5)	12
Class E	10.00	0.27	(0.20)	0.07	10.07	0.70(4)	18	0.17(5)	3.37(5)	12
Hartford Core Equity 52	9 Portfolio									
Class A	\$ 10.00	\$ 0.09	\$ 1.12	\$ 1.21	\$ 11.21	12.10(4)%	\$ 8,045	0.42(5)%	1.04(5)%	9%
Class C	10.00	0.03	1.12	1.15	11.15	11.50 <sup>(4)</sup>	2,323	1.17 <sup>(5)</sup>	0.36 <sup>(5)</sup>	9
Class E	10.00	0.12	1.11	1.23	11.23	12.30(4)	2,730	0.17(5)	1.36(5)	9
Hartford Dividend and G	Frowth 529 P	ortfolio								
Class A	\$ 21.92	\$ 0.34	\$ 1.74	\$ 2.08	\$ 24.00	9.49%	\$ 14,513	0.43%	1.43(5)%	11%
Class C	20.83	0.12	1.69	1.81	22.64	8.69	9,265	1.19	0.56(5)	11
Class E	22.27	0.39	1.79	2.18	24.45	9.79	3,198	0.19	1.64(5)	11
Hartford Equity Income	529 Portfolio	<b>)</b>								
Class A	\$ 21.86	\$ 0.40	\$ 1.06	\$ 1.46	\$ 23.32	6.68%	\$ 6,075	0.44%	1.73%	10%
Class C	20.79	0.19	1.03	1.22	22.01	5.87	1,976	1.19	0.88	10
Class E	22.23	0.45	1.09	1.54	23.77	6.93	1,334	0.19	1.90	10
Hartford Growth Opport	unities 529 I	Portfolio								
Class A	\$ 25.34	\$ (0.13)	\$ 6.95	\$ 6.82	\$ 32.16	26.91%	\$ 10,696	0.44%	(0.44)%	9%
Class C	24.10	(0.32)	6.58	6.26	30.36	25.98	2,904	1.19	(1.19)	9
Class E	25.78	(0.05)	7.07	7.02	32.80	27.23	2,242	0.19	(0.19)	9
Hartford Inflation Plus 5	29 Portfolio									
Class A	\$ 11.08	\$ 0.48	\$ (0.39)	\$ 0.09	\$ 11.17	0.81%	\$ 2,921	0.43%	4.32%	21%
Class C	10.53	0.26	(0.25)	0.01	10.54	0.09	1,464	1.19	2.47	21
Class E	11.26	0.50	(0.38)	0.12	11.38	1.07	478	0.19	4.40	21
Hartford International O	pportunities	529 Portf	olio							
Class A	\$ 14.63	\$ 0.20	\$ 0.50	\$ 0.70	\$ 15.33	4.78%	\$ 6,328	0.43%	1.27%	7%
Class C	13.90	0.05	0.51	0.56	14.46	4.03	1,844	1.19	0.31	7
Class E	14.87	0.24	0.52	0.76	15.63	5.11	1,757	0.19	1.49	7
Hartford MidCap 529 Po										
Class A	\$ 23.71	\$ (0.11)	\$ 4.59	\$ 4.48	\$ 28.19	18.89%	\$ 8,034	0.43%	(0.43)%	8%
Class C	22.55	(0.29)	φ <del>4</del> .35	φ <del>4</del> .06	26.61	18.00	φ 0,004 2,141	1.19	(1.19)	8
Class E	24.11	(0.05)	4.67	4.62	28.73	19.16	2,547	0.19	(0.19)	8
Hartford SmallCap Grow									· /	
Class A	\$ 23.19	\$ (0.11)	\$ 4.41	\$ 4.30	\$ 27.49	18.54%	\$ 5,990	0.44%	(0.44)%	7%
Class C	22.04	(0.28)	4.17	φ <del>4</del> .50 3.89	25.93	17.65	1,088	1.19	(1.19)	7
Class E	23.58	(0.05)	4.49	4.44	28.02	18.83	1,672	0.19	(0.19)	7
Hartford Total Return Bo									· /	
Class A	\$ 12.26	\$ 0.42	\$(0.45)	\$ (0.03)	\$ 12.23	(0.24)%	\$ 4,912	0.44%	3.38%	18%
Class C	\$ 12.20 11.65	φ 0.42 0.28	\$(0.43) (0.40)	\$ (0.03) (0.12)	φ 12.23 11.53	(0.24)%	\$ 4,912 1,598	1.20	2.41	18
Class E	12.47	0.20	(0.46)	(0.12)	12.46	(0.08)	1,001	0.19	3.57	18
			()	()		()	.,			
Hartford World Bond 52		¢(0,04)	¢ 0 20	¢ 0 25	¢ 10 04	2 260/	¢ 1 040	0 / 20/	(0.40)%	16%
Class A Class C	\$ 10.59 10.28	\$(0.04) (0.12)	\$ 0.29 0.29	\$ 0.25 0.17	\$ 10.84 10.45	2.36% 1.65	\$ 1,040 2,346	0.43% 1.19	(0.40)% (1.16)	16%
Class E	10.28	. ,	0.29	0.17		2.62	2,340	0.19		16
Class E	10.69	(0.02)	0.30	0.28	10.97	2.62	548	0.19	(0.15)	16

#### FINANCIAL HIGHLIGHTS FOR THE YEAR ENDED JUNE 30, 2018

- <sup>(1)</sup> Information presented relates to a unit outstanding throughout the indicated period.
- <sup>(2)</sup> Portfolio turnover rate is calculated on the basis of the portfolio as a whole without distinguishing between the class of shares issued.
- <sup>(3)</sup> From September 15, 2017 (commencement of operations) through June 30, 2018.
- <sup>(4)</sup> Periods less than one year are not annualized for total returns.
- <sup>(5)</sup> Periods less than one year are annualized for ration of expenses to average net assets and ratios of net investment income to average net assets.
- <sup>(6)</sup> Effective September 15, 2017, the name of CHET Advisor Age-Based Portfolio 0-8 changed to CHET Advisor Age-Based Portfolio 4-6.
- <sup>(7)</sup> CHETAdvisorAge-Based Portfolio 4-6 continued the performance of CHETAdvisorAge-Based Portfolio 0-8.
- <sup>(8)</sup> Effective September 15, 2017, the name CHET Advisor Age-Based Portfolio 9-13 changed to CHET Advisor Age-Based Portfolio 10-11.
- <sup>(9)</sup> CHET Advisor Age-Based Portfolio 10-11 continued the performance of CHET Advisor Age-Based Portfolio 9-13.
- <sup>(10)</sup> Effective September 15, 2017, the name CHET Advisor Age-Based Portfolio 16-17 changed to CHET Advisor Age-Based Portfolio 16.
- <sup>(11)</sup> CHET Advisor Age-Based Portfolio 16 continued the performance of CHET Advisor Age-Based Portfolio 16-17.

Supplemental Information



#### COMBINED INVESTMENT FUNDS TOTAL NET POSITION VALUE BY PENSION PLANS AND TRUST FUNDS JUNE 30, 2018

Retirement Funds	Net Position Value
Teachers' Retirement Fund	\$17,936,759,675
State Employees' Retirement Fund	12,506,984,183
Municipal Employees' Retirement Fund	2,627,388,953
State Judges' Retirement Fund	222,747,722
The Probate Court Retirement Fund	99,880,918
State's Attorneys' Retirement Fund	1,932,098
Non-retirement Trust Funds	
Soldiers' Sailors' & Marines' Fund	\$76,118,843
Police & Fireman's Survivors' Benefit Fund	34,619,821
Connecticut Arts Endowment Fund	20,060,490
School Fund	11,667,990
Ida Eaton Cotton Fund	2,588,598
Hopemead State Park Fund	3,891,632
Andrew C. Clark Fund	1,217,385
Agricultural College Fund	639,981
OPEB Fund	845,559,505
TOTAL	\$34,392,057,794

# SCHEDULE OF NET POSITION BY INVESTMENT FUND JUNE 30, 2018

	LIQUIDITY FUND	ALTERNATIVE INVESTMENT FUND	MUTUAL EQUITY FUND	CORE FIXED INCOME FUND	INFLATION E LINKED BOND FUND	EMERGING MARKET DEBT FUND
ASSETS	-	-	-			
Investments in Securities, at Fair Value	)					
Liquidity Fund	\$ -	\$35,135,304	\$134,326,137	\$173,148,830	\$30,658,190	\$72,030,870
Cash Equivalents	827,720,976	-	-	11,273,539	1,134,618	6,461,890
Asset Backed Securities	-	-	-	256,333,884	(600,841)	3,479,670
Government Securities	3,726,674	-	-	930,148,285	1,329,441,771	1,326,725,762
Government Agency Securities	33,556,572	-	-	611,839,237	-	-
Mortgage Backed Securities	-	-	-	332,454,879	-	-
Corporate Debt	1,138,817,652	-	-	944,651,219	21,782,997	353,637,757
Convertible Securities	-	-	-	-	,,	-
Common Stock	-	-	7,416,249,240	-	-	-
Preferred Stock	-	-		4,031,714	_	-
Real Estate Investment Trust	-	-	207,488,810	17,685,480	-	-
Business Development Corportati	on -	-	-	-	_	
Mutual Fund	-	_	_	10,996,186	_	82,206,860
Limited Liability Corporation	_	_	_	10,000,100	_	02,200,000
Trusts	-	-	-	-	-	-
Limited Partnerships	-	- 2,387,601,795	1.948.495	-	-	-
Total Investments in Securities,	-	2,307,001,793	1,940,495		-	
at Fair Value	2,003,821,874	2,422,737,099	7,760,012,682	3,292,563,253	1,382,416,735	1,844,542,809
Cash	1,283	39,683	4,624	17,704,313	11,036,897	30,116,330
Receivables						
Foreign Exchange Contracts				257,296,346	647,937,290	579,632,985
Interest Receivable	2 006 422	-	-		5,652,807	
	2,806,423	69,142	218,459	16,361,522	5,052,007	36,330,356
Dividends Receivable	-	-	6,257,183	-	10.075.005	0 206 757
Due from Brokers	-	-	14,174,999	102,013,412	13,875,685	8,386,757
Foreign Taxes	-	-	-	95,734	65,119	351,043
Securities Lending Receivable	-	-	396,625	49,698	60,714	27,396
Reserve for Doubtful Receivables		-	(51,077)	-	(41,211)	(172,691)
Total Receivables	2,806,423	69,142	20,996,189	375,816,712	667,550,404	624,555,846
Invested Securities Lending Collateral	-	-	883,208,392	166,157,885	412,231,077	38,667,975
Other Funds on Deposit	-	-		-	-	
Prepaid Expenses	-	-	-	-	-	-
Total Assets	2,006,629,580	2,422,845,924	8,664,221,887	3,852,242,163	2,473,235,113	2,537,882,960
	_,,,			-,,,,		
LIABILITIES Payables						
Foreign Exchange Contracts	-	-	-	255,727,512	648,247,002	583,886,926
Due to Brokers	99,995	-	21,726,013	311,400,136	12,816,051	11,881,424
Income Distribution	3,135,238	-	-	-	-	-
Other Payable _	-	-	-	-	-	-
Total Payables	3,235,233	-	21,726,013	567,127,648	661,063,053	595,768,350
Securities Lending Collateral	-	-	883,208,392	166,157,885	412,231,077	38,667,975
Accrued Expenses	213,495	195,880	4,390,385	1,341,350	464,791	1,935,300
Total Liabilities	3,448,728	195,880	909,324,790	734,626,883	1,073,758,921	636,371,625
NET POSITION HELD IN TRUST						
FOR PARTICIPANTS	\$2,003,180,852	\$2,422,650,044	\$7,754,897,097	\$3,117,615,280	\$1,399,476,192	\$1,901,511,335
Units Outstanding	2,066,711,393	1,897,245,550	3,652,993	23,898,786	8,691,004	11,111,573
Net Position Value and Redemption Price per Unit	\$0.97	\$1.28	\$2,122.89	\$130.45	\$161.03	\$171.13
: :	-			•		

# SCHEDULE OF NET POSITION BY INVESTMENT FUND (Continued) JUNE 30, 2018

HIGH YIELD- DEBT FUND	DEVELOPED MARKET INTERNATIONAL STOCK FUND	EMERGING MARKET INTERNATIONAI STOCK FUND	REAL L ESTATE FUND	PRIVATE INVESTMENT FUND	ELIMINATION ENTRY	TOTAL
\$54,241,116	\$549,786,248	\$75,326,025	¢70 001 674	¢07.002.126 /	\$(1,293,977,530)	۰. ۴
	\$549,786,248 1,802,404	\$10,020,020	\$12,231,014	\$97,093,130 4	\$(1,293,911,330)	
(43,135) 983,038	1,002,404	-	-	-	-	848,350,292 260,195,751
	-	-	-	-	-	
71,791,412	-	-	-	-	-	3,661,833,904
-	-	-	-	-	-	645,395,809
744,965	-	-	-	-	-	333,199,844
1,825,367,897	-	-	-	-	-	4,284,257,522
31,231,555	-	-	-	-	-	31,231,555
66,621,828	5,884,677,156	1,816,424,361	-	-	-	15,183,972,585
15,030,330	19,393,950	8,842,574	-	-	-	47,298,568
43,595,207	59,180,688	-	-	-	-	327,950,185
-	-	-	-	-	-	-
-	557,087,489	878,969,564	-	-	-	1,529,260,099
-	-	-	-	1,156,486	-	1,156,486
_	_	_	_	1,100,400	_	1,100,700
-			- 2,210,907,863	2,614,115,534	-	- 7,214,573,687
2,109,564,213	7,071,927,935	2,779,562,524	2,283,139,537	2,712,365,156	(1,293,977,530	) 34,368,676,287
1,510,293	30,469,974	153,421	2,216,589	12,785,781	(1,283)	106,037,905
27,347,957	7,949,523,412	7,632,402	_	_	818,357	9,470,188,749
32,151,966	523,633	122,965	97,118	116,575	(2,806,423)	91,644,543
			57,110	110,070	(2,000,420)	
1,196,746	10,593,098	12,638,128	-	-	-	30,685,155
12,957,757	7,738,647	5,097,321	-	-	-	164,244,578
715	18,176,146	261,163	-	-	-	18,949,920
339,888	319,621	125,297	-	-	-	1,319,239
-	(1,862,308)	(39,612)		-		(2,166,899)
73,995,029	7,985,012,249	25,837,664	97,118	116,575	(1,988,066)	9,774,865,285
577,176,107	98,303,198	429,343,816	-	-	-	2,605,088,450
-	-	-	-	-	-	-
-	-	-	-	1,073,767	-	1,073,767
2,762,245,642	15,185,713,356	3,234,897,425	2,285,453,244	2,726,341,279	(1,295,966,879)	46,855,741,694
27,261,262	7,920,446,372	7,643,845	-	-	-	9,443,212,919
24,018,251	8,405,749	7,079,783	-	-	(99,995)	397,327,407
-	-	-	-	-	(1,751,322)	1,383,916
					-	
51,279,513	7,928,852,121	14,723,628	-	-	(1,851,317)	9,841,924,242
577,176,107	98,303,198	429,343,816	-	-	· · · · · · · · · · · · · · · · · · ·	2,605,088,450
1,959,353	5,815,061	(164,745)	422,725	235,478	(137,865)	16,671,208
630,414,973	8,032,970,380	443,902,699	422,725			12,463,683,900
000,414,070	0,002,010,000	440,002,000	TLL,1 LU	200,770	(1,300,102)	12,403,003,300
52,131,830,669	\$7,152,742,976	\$2,790,994,726	\$2,285,030,519	\$2,726,105,801	\$(1,293,977,69	07) 34,392,057,794
13,418,104	12,499,233	6,319,081	38,990,437	30,035,584		
\$158.88	\$572.25	\$441.68	\$58.60	\$90.76	-	-

#### SCHEDULE OF CHANGES IN NET POSITION BY INVESTMENT FUND FOR THE FISCAL YEAR ENDED JUNE 30, 2018

	LIQUIDITY FUND	ALTERNATIVE INVESTMENT FUND	MUTUAL EQUITY FUND	CORE FIXED INCOME FUND	INFLATION LINKED BOND FUND	EMERGING MARKET DEBT FUND
ADDITIONS			1 0112	1 0.15	1 0.12	1 0.12
OPERATIONS						
Investment Income						
Dividends	\$ -	\$7,805,080	\$126,447,951	\$ -	\$2,872	\$ -
Interest	53,715,722	2,633,636	1,537,886	65,968,279	4,125,637	121,969,219
Other Income		-	1,197,691	1,183,335	-	751,367
Securities Lending	-	-	15,749,816	4,646,032	4,713,966	853,274
Total Income	53,715,722	10,438,716	144,933,344	71,797,646	8,842,475	123,573,860
Expenses						
Investment Advisory Fees	2,296,629	-	15,772,324	3.349.330	2,418,901	7,076,439
Custody and Transfer Agent Fees	419,432	164,310	656,291	197,146	124,607	163,322
Professional Fees	-	,	287,984	66,944	78,754	
	97,749	680,974			,	53,661
Security Lending Fees	-	-	501,658	100,801	67,593	37,986
Security Lending Rebates	-	-	10,733,238	3,635,445	4,038,033	473,412
Investment Expenses	3,747	45,512	4,524	44,450	799,007	614,703
Total Expenses	2,817,557	890,796	27,956,019	7,394,116	7,526,895	8,419,523
Net Investment Income	50,898,165	9,547,920	116,977,325	64,403,530	1,315,580	115,154,337
Net Increase (Decrease) in the Fair Val of Investments and Foreign Current		99,010,481	872,193,040	(81,735,749)	41,231,309	(162,693,302)
Net Increase (Decrease) in Net Position Resulting from Operations	50,574,911	108,558,401	989,170,365	(17,332,219)	42,546,889	(47,538,965)
Unit Transactions Purchase of Units by Participants	14,804,261,716	1,023,676,633	122,950,325	2,045,154,431	29,212,312	353,270,812
TOTAL ADDITIONS	14,854,836,627	1,132,235,034	1,112,120,690	2,027,822,212	71,759,201	305,731,847
DEDUCTIONS Administrative Expenses: Salary and Fringe Benefits	(344,959)	(486,558)	(1,004,964)	(239,056)	(158,756)	(214,341)
Distributions to Unit Owners: Income Distributed	(50,572,924)	-	-	-	-	-
Unit Transactions Redemption of Units by Participants	(15,720,180,463)	(737,054,932)	(378,349,332)	(1,362,351,366)	(16,150,000)	(41,187,186)
TOTAL DEDUCTIONS	(15,771,098,346)	(737,541,490)	(379,354,296)	(1,362,590,422)	(16,308,756)	(41,401,527)
Change in Net Position Held in Trust for Participants Net Position- Beginning of Period Net Position- End of Period	(916,261,719) 2,919,442,571 \$2,003,180,852	2,027,956,500	732,766,394 7,022,130,703 \$7,754,897,097	665,231,790 2,452,383,490 \$3,117,615,280	55,450,445 <u>1,344,025,747</u> \$1,399,476,192	264,330,320 <u>1,637,181,015</u> \$1,901,511,335
Other Information: Units						
Purchased	15,284,824,485	829,564,849	58,999	15,650,528	176,840	1,949,265
	(16,229,855,741)	(602,283,161)	(201,778)	(10,363,496)	(100,124)	(234,454)
Reneemen						
Redeemed Net Increase (Decrease)	(945,031,256)	227,281,688	(142,779)	5,287,032	76,716	1,714,811

# SCHEDULE OF CHANGES IN NET POSITION BY INVESTMENT FUND (Continued) FOR THE FISCAL YEAR ENDED JUNE 30, 2018

HIGH YIELD- DEBT FUND	DEVELOPED MARKET INTERNATIONAL STOCK FUND	EMERGING MARKET INTERNATIONA STOCK FUND		PRIVATE INVESTMENT FUND	ELIMINATION ENTRY	TOTAL	
\$6,757,662	\$190,477,094	\$70,155,533	\$91,018,808	\$48,974,540	\$ -	\$541,639,540	
129,714,760	3,053,158	1,236,661	2,815,546	5,675,165	φ - (26,691,601)	365,754,068	
2,151,701	116,397	97,065	_,~ ,	3,616		5,501,172	
9,159,455	4,906,339	3,768,109	-	-	-	43,796,991	
147,783,578	198,552,988	75,257,368	93,834,354	54,653,321	(26,691,601)	956,691,771	
7,408,647	24,221,682	12,571,177	6,850,149	942,012	(1,141,206)	81,766,084	
179,772	661,288	344,059	280,249	323,381	(208,418)	3,305,439	
71,538	249,855	115,089	422,695	1,681,883	(48,572)	3,758,554	
405,524	279,357	107,406	-	-	-	1,500,325	
5,104,220	2,112,767	2,694,054	-		-	28,791,169	
94,233	113,821	1,185,654	884,395	5,044,615	(1,862)	8,832,799	
13,263,934	27,638,770	17,017,439	8,437,488	7,991,891	(1,400,058)	127,954,370	
134,519,644	170,914,218	58,239,929	85,396,866	46,661,430	(25,291,543)	828,737,401	
(81,543,783)	238,467,080	96,282,068	126,356,745	336,154,690	1,260,125	1,484,659,450	
52,975,861	409,381,298	154,521,997	211,753,611	382,816,120	(24,031,418)	2,313,396,851	
64,936,312	373,709,523	8,972,708	61,076,136	12,430,605	(11,596,633,059)	7,303,018,454	
117,912,173	783,090,821	163,494,705	272,829,747	395,246,725	(11,620,664,477)	9,616,415,305	
(227,544)	(701,812)	(314,641)	(280,048)	(520,735)	171,412	(4,322,002)	
-	-	-	-	-	25,129,928	(25,442,996)	
(30,187,989)	(10,686,223)	(387,507,397)	(236,000,000)	(659,062,570)	11,836,254,931	(7,742,462,527)	
(30,415,533)	(11,388,035)	(387,822,038)	(236,280,048)	(659,583,305)	11,861,556,271	(7,772,227,525)	
87,496,640	771,702,786	(224,327,333)	36,549,699	(264,336,580	) 240,891,794	1,844,187,780	
2,044,334,029	6,381,040,190	3,015,322,059	2,248,480,820	· · · · ·	,	32,547,870,014	
52,131,830,669	\$7,152,742,976				1 \$(1,293,977,697)		
407,463	639,201	18,345	1,086,882	162,359	-		
(190,217)	(19,573)	(844,567)	(4,205,022)	(8,171,113)	-		
217,246	619,628	(826,222)	(3,118,140)	(8,008,754)	-		

#### SCHEDULE OF CHANGES IN NET POSITION BY INVESTMENT FUND FOR THE FISCAL YEAR ENDED JUNE 30, 2017

	Liquidity Fund	ALTERNATIVE INVESTMENT FUND	MUTUAL EQUITY FUND	CORE FIXED INCOME FUND	INFLATION LINKED BOND FUND	EMERGING MARKET DEBT FUND
ADDITIONS OPERATIONS						
Investment Income						
Dividends	\$-	\$3,675,456	\$130,853,122	\$7,415	\$459	\$ -
Interest	47,272,487	2,775,092	1,557,805	53,982,946	846,960	100,777,661
Other Income	13,908	23,518	1,272,856	608,095	17,231	17,312,548
Securities Lending	-	-	11,869,343	1,699,211	2,876,399	332,417
Total Income	47,286,395	6,474,066	145,553,126	56,297,667	3,741,049	118,422,626
Expenses						
Investment Advisory Fees	2,240,224	-	13,261,733	2,602,485	2,613,172	5,645,057
Custody and Transfer Agent Fees	160,666	188,495	703,492	244,697	136,366	156,178
Professional Fees	51,404	573,708	228,862	51,521	27,929	41,474
Security Lending Fees	-	-	652,152	77,010	93,113	24,477
Security Lending Rebates	-	-	5,348,677	929,110	1,945,268	87,652
Investment Expenses	12,774	10,433	42,193	38,683	172,699	24,068
Total Expenses	2,465,068	772,636	20,237,109	3,943,506	4,988,547	5,978,906
Net Investment Income	44,821,327	5,701,430	125,316,017	52,354,161	(1,247,498)	112,443,720
Net Increase (Decrease) in the Fair Valu of Investments and Foreign Currer		147,986,010	1,093,439,042	(9,942,660)	10,408,838	24,349,950
Net Increase (Decrease) in Net Position Resulting from Operations	27,890,199	153,687,440	1,218,755,059	42,411,501	9,161,340	136,793,670
Unit Transactions Purchase of Units by Participants	10,670,233,604	73,221,868	25,848,399	50,171,440	13,067,857	9,119,611
TOTAL ADDITIONS	10,698,123,803	226,909,308	1,244,603,458	92,582,941	22,229,197	145,913,281
DEDUCTIONS Administrative Expenses: Salary and Fringe Benefits	(427,025)	(223,352)	(977,274)	(307,273)	(177,396)	(181,723)
Distributions to Unit Owners: Income Distributed	(44,443,763)	-	-	-	-	-
Unit Transactions Redemption of Units by Participants	(9,713,904,136)	(3,070,100)	(863,600,297)	(46,756,545)	-	(6,331,026)
TOTAL DEDUCTIONS	(9,758,774,924)	(3,293,452)	(864,577,571)	(47,063,818)	(177,396)	(6,512,749)
Change in Net Position Held in Trust						
for Participants	939,348,879	223,615,856	380,025,887	45,519,123	22,051,801	139,400,532
Net Position- Beginning of Period		1,804,340,644	6,642,104,816	2,406,864,366	1,321,973,944	1,497,780,484
Net Position- End of Period	\$2,919,442,572	\$2,027,956,500	\$7,022,130,703	\$2,452,383,489	\$1,344,025,745	\$1,637,181,016
Other Information:						
Units Purchased	10,973,461,035	64,193,409	15,479	386,610	85,657	55 107
			(501,504)		00,007	55,127 (38,165)
Redeemed						
Redeemed Net Increase (Decrease)	(9,988,401,748) 985,059,287	(2,675,765) 61,517,644	(486,025)	,	85,657	16,962

#### SCHEDULE OF CHANGES IN NET POSITION BY INVESTMENT FUND (Continued) FOR THE FISCAL YEAR ENDED JUNE 30, 2017

HIGH YIELD- DEBT FUND	DEVELOPED MARKET INTERNATIONAL STOCK FUND	EMERGING MARKET INTERNATIONA STOCK FUND	REAL L ESTATE FUND	PRIVATE INVESTMENT FUND	ELIMINATION ENTRY	TOTAL	
\$11,598,458 113,359,654 1,323,824	\$174,761,976 2,398,866 114,531	\$57,931,072 1,084,545 22,788	\$84,913,699 2,100,048 28,768	\$46,647,278 3,795,686 395,527	\$- (21,418,902) (6,302)	\$510,388,935 308,532,848 21,127,292	
5,104,339 131,386,275	2,781,738	2,461,290	87,042,515	- 50,838,491	(21,425,204)	27,124,737 867,173,812	
131,300,275	160,057,111	01,499,095	07,042,515	50,030,491	(21,425,204)	007,173,012	
4,896,835	21,770,263	13,891,017	9,398,241	2,656,009	(1,015,033)	77,960,003	
195,000	602,595	471,686	310,010	375,200	(72,797)	3,471,588	
47,359	129,903	63,664	449,555	1,210,185	(23,291)	2,852,273	
325,031	247,612	157,117	-	-	-	1,576,512	
1,854,032	305,614	890,121	-	-	-	11,360,474	
289,911	157,154	1,393,591	12,410	160,850	(5,788)	2,308,978	
7,608,168	23,213,141	16,867,196	10,170,216	4,402,244	(1,116,909)	99,529,828	
123,778,107	156,843,970	44,632,499	76,872,299	46,436,247	(20,308,295)	767,643,984	
101,465,790	1,125,951,807	522,156,606	38,116,638	288,361,287	7,380,915	3,332,743,095	
225,243,897	1,282,795,777	566,789,105	114,988,937	334,797,534	(12,927,380)	4,100,387,079	
13,149,010	17,140,296	7,204,576	66,607,366	35,661,283	(8,294,409,208)	2,687,016,102	
238,392,907	1,299,936,073	573,993,681	181,596,303	370,458,817	(8,307,336,588)	6,787,403,181	
(255,405)	(670,799)	(325,165)	(235,414)	(413,312)	193,483	(4,000,655)	
-	-	-	-		20,137,221	(24,306,542)	
(16,952,242)	(142,029,995)	(41,816,972)	(139,968,974)	(149,413,229)	7,666,697,785	(3,457,145,731)	
(17,207,647)	(142,700,794)	(42,142,137)	(140,204,388)	(149,826,541)	7,687,028,489	(3,485,452,928)	
221,185,260 ,823,148,770	1,157,235,279 5,223,804,912	531,851,544 2,483,470,514	41,391,915 2,207,088,905	220,632,276 2,769,810,105	(620,308,099) (914,561,392)	3,301,950,253 29,245,919,761	
2,044,334,030	\$6,381,040,191	\$3,015,322,058	\$2,248,480,820 \$	\$2,990,442,381	\$(1,534,869,491)	\$32,547,870,014	
07.000	07.004	40 500	4 004 000	400.000			
87,988	37,301	19,508	1,291,886	489,630			
(116,161) (28,173)	(296,111) (258,810)	(110,695) (91,187)	(2,788,325) (1,496,439)	(2,128,299) (1,638,669)			

#### COMBINED INVESTMENT FUNDS SCHEDULE OF INVESTMENT ACTIVITY BY PENSION PLAN FOR THE FISCAL YEAR ENDED JUNE 30, 2018

Trachers' Retirement Fund         5851/272.831         5005.086.000         5477 248.691         5008.287,199         5408.447.781         5856 500.280           Market Value at June 30, 2017         \$876.866.312         \$144.084.407         \$381.272.386         \$588.932.014         \$581.722.386           Shares Purchased         (2.637.890.312)         (376.596.632         \$127.51.596         \$588.932.014         \$581.722.386           Market Value of Copial         (1.905.265)         44.073.863         \$193.968.979         \$94.006.066         1.810.897         7.326.959           Nat Investment Income Earning         (1.7418.092)         -	_	LIQUIDITY FUND	ALTERNATIVE INVESTMENT FUND	MUTUAL EQUITY FUND	CORE FIXED INCON FUND	INFLATION IE LINKED BONI FUND	EMERGING D MARKET DEBT FUND
Market Value at June 30, 2017         S878 986.312         S10.48, 084.410         S3.812,766,933         S1.414,896,406         S588,932,014         S917,223,895           Shares Purchased         2,25,977,005         573,386,219         50,000,000         (16,65,07,672         -175,169,625           Gain (Lloss) on Shares Redeemed         (1,905,265)         44,073,885         93,968,979         94,006,086         1,810,897         7,326,599           Net Investment Income Distributed         (17,418,092)         -         -         -         -         -         -         -         32,312, (16,409)         33,940,877         (101,976,828)         11,037,408,409           Book Value Cost at June 30, 2018         \$500.564,059         \$1,145,943,424         \$441,217,400         \$1,340,456,524         \$490,256,678         \$804,096,673           Shares Outstanding         \$16,754,613         1,018,688,205         1,967,353         11,069,861         3,712,638         6,062,146           Market Value Pi Share         \$0.97         \$1,28         \$2,122,89         \$130,455         \$440,956,528         \$440,956,528         \$449,256,515         \$442,986,315           Shares Purchased         \$51,031,516         \$40,237,555         \$2,646,440,559         \$868,457,305         \$4542,986,315         \$442,986,315         \$442,98							
Shares Purchased         2.259.077.005         573.368.219         50.000.000         1.166.507.62         175.169.625           Shares Redeemed         (2.637.368.214)         50.000.000         (856.324.433)         (10.000.000)           Returns of Capital         (1.905.265)         44.073.863         193.968.379         94.006.085         1.810.897         7.326.959           Net Investment Income Earned         (1.7418.092)         339.734.087         (101.976.822)         17.087.898         (2.2312.164)           Market Value of Fund Shares         2.621.848         \$11.330.793.652         \$44.178.469.999         \$1.444.071.902         \$507.830.009         \$1.037.408.409           Book Value(Cost at June 30. 2018         \$500.554.055         \$1.125.33         \$1.008.81         3.712.638         6.062.146           Shares Purchased         \$10.754.613         1.018.688.205         1.967.353         \$1.086.85.058         \$516.508         \$510.550.68         \$511.21           Shares Purchased         \$0.073         \$12.8         \$2.122.89         \$130.45         \$161.03         \$171.13           Book Value Cost at June 30.2017         \$412.730.992         \$620.620.000         \$283.672.072         \$737.207.75         \$550.655         \$42.896.315           Shares Redeemed         (8.030.454 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>							
Shares Redeemed         (2,637,890,312)         (376,566,658)         (22,0,000,000)         (856,324,433)         (10,000,000)         (30,000,000)           Gain/(Loss) on Shares Redeemed         (1,005,265)         44,073,863         193,968,979         94,006,086         1,810,897         7,326,899           Net Investment Income Earmed         (17,418,092)         39,734,087         (101,976,828)         17,087,698         \$2,212,164           Market Value at June 30, 2018         \$500,654,059         \$1,145,943,424         \$481,217,480         \$1,340,455,524         \$490,258,676         \$804,096,873           Shares Cutstanding         516,754,613         1,018,688,205         1,967,363         11,069,861         3,712,638         6,062,146           Market Value por Share         \$0,07         \$1,28         \$2,122,89         \$130,45         \$161,03         \$117,13           State Employees' Retirement Fund         \$412,730,992         \$620,620,000         \$283,572,072         \$737,209,170         \$539,055,066         \$318,201,035           Shares Redeemed         \$40,730,592         \$712,522,265         \$2,240,93,038         -         144,916,165           Shares Redeemed         \$40,804,675         \$8,385,170         \$259,03,038         -         144,916,165           Shares Redeemed						\$588,932,014	
Returns of Capital Gain(Loss) on Shares Redeemed Net Investment Income Earned Net Investment Income Earned Shares Outstanding         5500,554,059         \$1,440,073,652         \$4,176,469,999         \$1,444,071,902         \$507,830,609         \$1,037,408,409           Book Value/Cost at June 30, 2018         \$500,554,059         \$1,145,943,424         \$481,217,480         \$1,340,456,524         \$490,258,678         \$804,096,873           Shares Outstanding         516,754,613         1,018,688,205         1,967,353         11,069,861         3,712,638         6,062,146           Market Value per Share         \$0.97         \$1.28         \$2,122,89         \$130,45         \$161.03         \$171,13           State Employees' Retirement Fund Book Value at June 30, 2017         \$412,730,992         \$620,620,000         \$283,572,072         \$737,209,170         \$539,055,068         \$3482,986,315           Shares Purchased         \$410,316,12         340,237,665         \$2,648,440,599         \$886,479,306         \$600,455,568         \$442,986,653,15           Shares Purchased         \$400,306,52         \$712,573,256         \$2,648,673,372         \$2,636,707,177,77         \$600,00,000         (10,000,000)         (10,000,000)		, , ,	, ,	, ,		-	
Gain/(Loss) on Shares Redeemed         (1,902,265)         44.073,863         193,968,979         94,006,086         1,810,897         7,326,959           Net Investment Income Earmed         (17,418,092)         -<		(2,037,090,312)	(370,300,036)	(220,000,000)	(050,324,433)	(10,000,000)	(30,000,000)
Net Investment Income Distributed Changes in Market Value of Fund Shares         (17,141,602)         339,734,087         (101,976,828)         17,087,698         (32,312,164)           Market Value at June 30, 2018         \$500,660,588 \$1,300,793,652         \$4,176,460,999 \$1,444,407,1902         \$597,830,609         \$1,037,408,409           Book Value/Cost at June 30, 2018         \$500,554,6159         \$1,145,943,424         \$481,217,480         \$1,340,456,524         \$490,256,678         \$804,096,673           Shares Cutstanding         516,754,613         1,018,688,205         1,967,353         11,069,861         3,712,638         6,062,146           Market Value per Share         \$0.97         \$12.8         \$2,122,89         \$1304,5         \$161.03         \$171.13           State Engloyses' Retirement Fund Book Value at June 30, 2017         \$412,730,992         \$20,862,000         \$283,572,072         \$737,209,170         \$539,055,068         \$442,986,355           Shares Purchased         (82,698,400) (262,165,210)         (151,000,000)         (365,727,117)         (6,000,000)         (10,000,000)           Returns of Capital Shares Purchased         (4,964,875)         \$28,361,44         1350,30,051         \$55,80,357         \$856,749         2,616,717           Net Investment Income Earmed Net Investment Income Earmed         \$4,902,462,159         \$826,679,372	Gain/(Loss) on Shares Redeemed	( , , , ,	44,073,863	193,968,979	94,006,086	1,810,897	7,326,959
Changes in Market Value of Fund Shares         2,621,848         11,833,818         339,734,087         (101,976,828)         17,087,668         (32,312,164)           Market Value at June 30, 2018         \$500,669,568         \$1,300,793,652         \$4,176,469,999         \$1,444,071,902         \$597,830,669         \$1,037,408,409           Book Value/Cost at June 30, 2018         \$500,554,059         \$1,145,943,424         \$481,217,480         \$1,340,456,524         \$490,256,678         \$804,096,873           Shares Outstanding         516,754,613         1.018,688,205         1,967,353         11,069,861         3,712,638         6,062,146           Market Value per Share         \$0.97         \$12.8         \$2,122.89         \$130.45         \$161.03         \$171.13           State Employees' Retirement Fund Book Value at June 30, 2017         \$410,730,562         \$712,523,256         \$2,646,440,599         \$886,497,360         \$608,455,058         \$482,963,15           Shares Redeemed         (4,604,675)         28,351,720,72         \$737,209,170         \$539,055,068         \$442,916,165           Shares Redeemed         (4,604,675)         28,046,440,599         \$886,497,360         \$608,455,058         \$442,916,165           Shares Redeemed         (4,604,675)         28,351,41         155,030,051         \$5,803,377         \$26,16,7			-	-	-	-	-
Book Value\Cost at June 30, 2018         \$500,554,059         \$1,145,943,424         \$481,217,480         \$1,340,456,524         \$440,258,678         \$804,096,873           Shares Outstanding         516,754,613         1,018,688,205         1,967,353         11,069,861         3,712,638         6,062,148           Market Value per Share         \$0.97         \$1.28         \$2,122,89         \$130.45         \$161.03         \$171.13           State Employees' Retirement Fund Book Value at June 30, 2017         \$412,730,992         \$620,620,000         \$283,572,072         \$737,209,170         \$539,055,068         \$318,201,035           Shares Purchased         581,031,156         340,237,565         -         629,090,388         -         144,916,165           Shares Purchased         (825,659,640)         (282,165,210)         (151,000,000)         (385,727,117)         (6,000,000)         (10,000,000)           Returms of Capital         -	Changes in Market Value of Fund Shares	2,621,848	11,833,818	339,734,087	(101,976,828)	17,087,698	(32,312,164)
Shares Outstanding         516,754,613         1,018,688,205         1,967,353         11,069,861         3,712,638         6,062,146           Market Value per Share         \$0.97         \$1.28         \$2,122.89         \$130.45         \$161.03         \$171.13           State Employees' Retirement Fund Book Value at June 30, 2017         \$412,730,992         \$620,620,000         \$283,572,072         \$737,209,170         \$539,055,068         \$318,201,035           Shares Purchased         561,01516         340,237,655         - 629,000,888         - 64440,599         \$608,445,058         \$442,986,315           Gain/(Loss) on Shares Redeemed         (4,604,675)         28,385,184         135,030,051         55,880,357         856,749         2,616,717           Net Investment Income Eamed         (8,030,454         -	Market Value at June 30, 2018 =	\$500,869,588	\$1,300,793,652	\$4,176,469,999	\$1,444,071,902	\$597,830,609	\$1,037,408,409
Market Value per Share         \$0.97         \$1.28         \$2,122.89         \$130.45         \$161.03         \$171.13           State Employees' Retirement Fund Book Value at June 30, 2017         \$412,730.992         \$620,620.000         \$283,572.072         \$737,209.170         \$539,055.068         \$318,201.035           Shares Funchased         \$511,015         340,237,565         -         629,000.388         -         144,4916,165           Shares Funchased         \$681,031,1516         340,237,565         -         629,003.88         -         144,4916,165           Returns of Capital Changes in Market Value of Fund Shares         (4.604,675)         28,385,184         135,030,051         55,880,357         856,749         2,616,717           Market Value at June 30, 2018         \$162,844,591         \$828,679,372         \$23,835,184         135,030,051         55,880,357         856,749         2,616,717           Market Value at June 30, 2018         \$162,844,591         \$828,679,372         \$23,834,597         (60,807,236)         18,662,247         (18,664,386)           Market Value per Share         \$0.97         \$1.28         \$27,707,539         \$267,602,123         \$1,024,333,511,817         \$445,5733,917           Shares Dutstanding         168,009,197         648,962,160         1,349,956         8,623,	Book Value\Cost at June 30, 2018 =	\$500,554,059	\$1,145,943,424	\$481,217,480	\$1,340,456,524	\$490,258,678	\$804,096,873
State Employees' Retirement Fund Book Value at June 30, 2017         \$412,730,992         \$620,620,000         \$283,572,072         \$737,209,170         \$539,055,068         \$318,201,035           Market Value at June 30, 2017         \$407,390,592         \$712,523,256         \$2,646,440,580         \$608,455,058         \$482,986,315           Shares Redeemed         (8,25,689,640)         (262,165,210)         (151,000,000)         (385,727,117)         (6,000,000)         (10,000,000)           Returns of Capital         (3,030,454         -	Shares Outstanding =	516,754,613	1,018,688,205	1,967,353	11,069,861	3,712,638	6,062,146
Book Value at June 30, 2017         \$412,730,992         \$620,620,000         \$283,572,072         \$737,209,170         \$539,055,068         \$318,201,035           Market Value at June 30, 2017         \$4107,390,592         \$712,232,326         \$2,2646,400,599         \$866,497,360         \$608,455,058         \$482,986,315           Shares Purchased         (225,689,640)         (262,165,210)         (151,000,000)         (385,727,117)         (6.000,000)         (10,000,000)           Returns of Capital         - </td <td>Market Value per Share =</td> <td>\$0.97</td> <td>\$1.28</td> <td>\$2,122.89</td> <td>\$130.45</td> <td>\$161.03</td> <td>\$171.13</td>	Market Value per Share =	\$0.97	\$1.28	\$2,122.89	\$130.45	\$161.03	\$171.13
Market Value at June 30, 2017         \$407, 390, 592         \$712, 522, 256         \$2,646,440,599         \$868,497,360         \$608,455,058         \$442,986,315           Shares Purchased         581,031,516         340,237,565         -         629,090,388         -         144,916,165           Shares Redeemed         (825,689,640)         (252,165,210)         (385,727,117)         (6,000,000)         (10,000,000)           Returns of Capital         -         -         -         -         -         -           Gain/Loss) on Shares Redeemed         (4,604,675)         828,385,184         135,030,051         55,880,357         856,749         2,616,717           Net Investment Income Distributed         (8,030,454         - <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Shares Purchased         581 031 516         340 237,565         629,090,388         144,916,165           Shares Redeemed         (825,689,640)         (262,165,210)         (151,000,000)         (385,727,117)         (6,000,000)         (10,000,000)           Returns of Capital         (4,604,675)         28,385,184         135,030,051         55,880,357         856,749         2,616,717           Net Investment Income Earned         (8,030,454)         -         -         -         -           Market Value at June 30, 2018         \$162,844,591         \$828,679,372         \$23,85,384,597         (60,807,236)         18,662,247         (18,664,386)           Market Value at June 30, 2018         \$163,468,193         \$727,077,539         \$267,602,123         \$1,036,452,798         \$533,911,817         \$455,733,917           Shares Outstanding         168,009,197         648,962,160         1,349,956         8,623,435         3,862,573         3,516,968           Market Value pr Share         \$0,97         \$11,28         \$2,122.89         \$130.45         \$161.03         \$171.13           Municipal Employees' Retirement Fund Book Value at June 30, 2017         \$66,770.887         \$193,570,136         \$390,607,349         \$192,704,913         \$119,522,506         \$119,385,662           Shares Redeemed						, , ,	
Shares Redeemed         (825,689,640)         (262,165,210)         (151,000,000)         (385,727,117)         (6,000,000)         (10,000,000)           Returns of Capital         (4,604,675)         28,385,184         135,030,051         55,880,357         856,749         2,616,717           Net Investment Income Earned         (8,030,454         -         -         -         -         -           Net Investment Income Distributed         (8,030,454)         -         -         -         -         -         -           Market Value of Fund Shares         4,716,798         9,698,577         235,334,597         (60,807,236)         18,662,247         (18,664,386)           Book Value Algues 30, 2018         \$163,468,193         \$727,077,539         \$267,602,123         \$1,036,452,798         \$533,911,817         \$455,733,917           Shares Outstanding         168,009,197         648,962,160         1,349,956         8,623,435         3,862,573         3,516,968           Market Value pr Share         \$0.97         \$11.28         \$2,122.89         \$110,43,367         \$119,22,506         \$193,856,062           Shares Purchased         115,642,153         \$59,840,186         \$40,000,000         101,411,126         \$119,352,506         \$193,856,062           Shares Purchased				\$2,646,440,599		\$608,455,058	
Returns of Capital Gain/(Loss) on Shares Redeemed       (4,604,675)       28,385,184       135,030,051       55,880,357       856,749       2,616,717         Net Investment Income Distributed       (8,030,454)       -       -       -       -         Market Value at June 30, 2018       \$162,844,591       \$828,679,372       \$2,865,805,247       \$1,124,933,752       \$621,974,054       \$601,854,811         Book Value/Cost at June 30, 2018       \$163,468,193       \$727,077,539       \$267,602,123       \$1,036,452,798       \$533,911,817       \$455,733,917         Shares Outstanding       168,009,197       648,962,160       1,349,956       8,623,435       3,862,573       3,516,968         Market Value per Share       \$0.97       \$1.28       \$2,122.89       \$130.45       \$161.03       \$171.13         Municipal Employees' Retirement Fund Book Value 4. June 30, 2017       \$66,770,887       \$193,570,136       \$390,677,349       \$192,704,913       \$119,522,506       \$193,866,662         Shares Purchased       (17,1628,355)       (70,029,479)       (61,19,707)       (46,994,155)       -				-		-	
Gain/(Loss) on Shares Redeemed Net Investment Income Earned Net Investment Income Distributed (B,030,454)28,385,184 8,030,454135,030,051 55,880,35755,880,357 55,880,357856,749 8,687,7472,616,717 4Market Value of Fund Shares(4,604,675) 8,030,454)28,385,184 8,030,454)135,030,051 2,35,334,59755,880,357 (60,807,236)18,662,247 18,662,247(18,664,386) 4,664,386)Market Value at June 30, 2018\$162,844,591 \$163,468,193\$727,077,539 \$2267,602,123\$2,665,805,247 \$1,124,933,752\$621,974,054 \$621,974,054\$601,854,811Book Value/Cost at June 30, 2018\$163,468,193 \$168,009,197\$727,077,539 648,962,160\$2,67,602,123 \$1,036,452,798\$,623,435 \$1,036,452,798\$,623,435 \$1,036,452,798\$,661,85,648 \$1,036,452,798\$,661,85,648 \$1,036,452,798\$,661,85,648 \$1,036,452,798\$,661,85,648 \$1,02,883,453\$,156,250,304Market Value per Share\$0,97 \$1,28\$,212,289 \$1,304\$,162,443,453\$,156,250,304Moricipal Employees' Retirement Fund Book Value at June 30, 2017 Shares Redeemed (147,628,355)\$,166,185,264 \$67,167,529 \$198,3570,136\$,165,404,367 \$102,883,453\$,156,250,304Market Value at June 30, 2017 Shares Redeemed Net Investment Income Earned (14,120,862)\$,108,62,479 \$1,24,590\$,108,64,787 \$1,243,235\$,108,61,787 \$1,243,235\$,212,985 \$1,644,787\$,22,512,985 \$1,124,913\$,118,063,051 \$1,128,874,144\$,210,183,645Market Value at June 30, 2018 Net Investment Income Earned (14,120,862)\$,108,67,499 <b< td=""><td></td><td>(825,689,640)</td><td>(262,165,210)</td><td>(151,000,000)</td><td>(385,727,117)</td><td>(6,000,000)</td><td>(10,000,000)</td></b<>		(825,689,640)	(262,165,210)	(151,000,000)	(385,727,117)	(6,000,000)	(10,000,000)
Net Investment Income Earned Net Investment Income Distributed Changes in Market Value of Fund Shares         1 <td></td> <td>- (4 604 675)</td> <td>- 28 385 19/</td> <td>- 135 030 051</td> <td>-</td> <td>- 856 740</td> <td>- 2 616 717</td>		- (4 604 675)	- 28 385 19/	- 135 030 051	-	- 856 740	- 2 616 717
Net Investment Income Distributed Changes in Market Value of Fund Shares         (8,030,454) 4,716,798         -		( )	20,303,104	133,030,031		030,749	2,010,717
Changes in Market Value of Fund Shares4,716,7989,698,577235,334,597(60,807,236)18,662,247(118,664,386)Market Value at June 30, 2018\$162,844,591\$828,679,372\$2,865,805,247\$1,124,933,752\$621,974,054\$601,854,811Book Value\Cost at June 30, 2018\$163,468,193\$727,077,539\$267,602,123\$1,036,452,798\$533,911,817\$455,733,917Shares Outstanding168,009,197648,962,1601,349,9568,623,4353,862,5733,516,968Market Value per Share\$0.97\$1.28\$2,122.89\$130.45\$161.03\$171.13Municipal Employees' Retirement Fund Book Value at June 30, 2017\$67,243,689\$166,185,264\$67,167,529\$165,404,367\$102,883,453\$156,250,304Market Value at June 30, 2017\$66,770,887\$193,570,136\$390,677,349\$192,704,913\$119,522,506\$193,856,062Shares Redeemed(171,628,55)(70,029,479)(6,119,707)(46,994,155)-(906,500)Returns of CapitalOtal Income Distributed(1,120,862)Net Investment Income Earned(1,20,862)Net Investment Income Earned(1,20,862)Net Investment Income Earned(1,20,862)1,294,590\$1,543,235(7,665,413)3,184,063(5,480,501)Market Value at June 30, 2018\$10,865,093\$193,108			-	-	-	-	-
Book Value\Cost at June 30, 2018         \$163,468,193         \$727,077,539         \$267,602,123         \$1,036,452,798         \$533,911,817         \$455,733,917           Shares Outstanding         168,009,197         648,962,160         1,349,956         8,623,435         3,862,573         3,516,968           Market Value per Share         \$0.97         \$1.28         \$2,122.89         \$130.45         \$161.03         \$171.13           Municipal Employees' Retirement Fund Book Value at June 30, 2017         \$66,770,887         \$193,570,136         \$330,677,349         \$192,704.913         \$119,522,506         \$193,856,062           Shares Purchased         (171,628,355)         (70,029,479)         (6,119,707)         (46,994,155)         -         (906,500)           Returns of Capital         -         -         -         -         -         -           Gain/(Loss) on Shares Redeemed         (389,988)         8,432,942         5,089,353         5,644,787         -         201,599           Net Investment Income Earned         1,120,862         -         -         -         -         -           Market Value at June 30, 2018         \$10,865,093         \$193,108,375         \$465,190,230         \$245,101,258         \$143,874,144         \$210,183,645           Market Value at June 30,				235,334,597	(60,807,236)	18,662,247	(18,664,386)
Shares Outstanding         168,009,197         648,962,160         1,349,956         8,623,435         3,862,573         3,516,968           Market Value per Share         \$0.97         \$1.28         \$2,122.89         \$130.45         \$161.03         \$171.13           Municipal Employees' Retirement Fund Book Value at June 30, 2017         \$67,243,689         \$166,185,264         \$67,167,529         \$165,404,367         \$102,883,453         \$156,250,304           Market Value at June 30, 2017         \$66,770,887         \$193,570,136         \$390,677,349         \$192,704,913         \$119,522,506         \$193,856,062           Shares Purchased         115,642,153         59,840,186         24,000,000         101,411,126         \$21,167,575         22,512,985           Shares Redeemed         (389,988)         8,432,942         5,089,353         5,644,787         201,599           Returns of Capital         -         -         -         -         -         -           Net Investment Income Earned         1,120,862         -<	Market Value at June 30, 2018	\$162,844,591	\$828,679,372	\$2,865,805,247	\$1,124,933,752	\$621,974,054	\$601,854,811
Market Value per Share         \$0.97         \$1.28         \$2,122.89         \$130.45         \$161.03         \$171.13           Municipal Employees' Retirement Fund Book Value at June 30, 2017         \$667,243,689         \$166,185,264         \$67,167,529         \$165,404,367         \$102,883,453         \$156,250,304           Market Value at June 30, 2017         \$666,770,887         \$193,570,136         \$390,677,349         \$192,704,913         \$119,522,506         \$193,856,062           Shares Purchased         (171,628,355)         (70,029,479)         (6,119,707)         (46,994,155)         -         (906,500)           Returns of Capital         -	Book Value\Cost at June 30, 2018 =	\$163,468,193	\$727,077,539	\$267,602,123	\$1,036,452,798	\$533,911,817	\$455,733,917
Municipal Employees' Retirement Fund Book Value at June 30, 2017         \$67,243,689         \$166,185,264         \$67,167,529         \$165,404,367         \$102,883,453         \$156,250,304           Market Value at June 30, 2017         \$66,770,887         \$193,570,136         \$390,677,349         \$192,704,913         \$119,522,506         \$193,856,062           Shares Purchased         115,642,153         59,840,186         24,000,000         101,411,126         21,167,575         22,512,985           Shares Redeemed         (171,628,355)         (70,029,479)         (6,119,707)         (46,994,155)         -         (906,500)           Returns of Capital         -	Shares Outstanding	168,009,197	648,962,160	1,349,956	8,623,435	3,862,573	3,516,968
Book Value at June 30, 2017         \$67,243,689         \$166,185,264         \$67,167,529         \$165,404,367         \$102,883,453         \$156,250,304           Market Value at June 30, 2017         \$66,770,887         \$193,570,136         \$390,677,349         \$192,704,913         \$119,522,506         \$193,856,062           Shares Purchased         115,642,153         59,840,186         24,000,000         101,411,126         21,167,575         22,512,985           Shares Redeemed         (171,628,355)         (70,029,479)         (6,119,707)         (46,994,155)         -         (906,500)           Returns of Capital         -	Market Value per Share	\$0.97	\$1.28	\$2,122.89	\$130.45	\$161.03	\$171.13
Market Value at June 30, 2017       \$66,770,887       \$193,570,136       \$390,677,349       \$1192,704,913       \$119,522,506       \$193,856,062         Shares Purchased       115,642,153       59,840,186       24,000,000       101,411,126       21,167,575       22,512,985         Shares Redeemed       (171,628,355)       (70,029,479)       (6,119,707)       (46,994,155)       -       (906,500)         Returns of Capital       -	Municipal Employees' Retirement Fund						
Shares Purchased       115,642,153       59,840,186       24,000,000       101,411,126       21,167,575       22,512,985         Shares Redeemed       (171,628,355)       (70,029,479)       (6,119,707)       (46,994,155)       -       (906,500)         Returns of Capital       - <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Shares Redeemed       (171,628,355)       (70,029,479)       (6,119,707)       (46,994,155)       -       (906,500)         Returns of Capital       -							
Returns of Capital       -       201,599       Net Investment Income Earned       1,120,862       -<						21,167,575	
Gain/(Loss) on Shares Redeemed       (389,988)       8,432,942       5,089,353       5,644,787       -       201,599         Net Investment Income Earned       1,120,862       -		(171,628,355)	(70,029,479)	(6,119,707)	(46,994,155)	-	(906,500)
Net Investment Income Earned Net Investment Income Distributed Changes in Market Value of Fund Shares         1,120,862 (1,120,862) 470,396         -		- (389,988)	- 8,432,942	- 5,089,353	- 5,644,787	-	- 201,599
Changes in Market Value of Fund Shares       470,396       1,294,590       51,543,235       (7,665,413)       3,184,063       (5,480,501)         Market Value at June 30, 2018       \$10,865,093       \$193,108,375       \$465,190,230       \$245,101,258       \$143,874,144       \$210,183,645         Book Value\Cost at June 30, 2018       \$10,867,499       \$164,428,913       \$90,137,175       \$225,466,125       \$124,051,028       \$178,058,388         Shares Outstanding       11,209,688       151,228,607       219,131       1,878,879       893,485       1,228,218			-	-	-	-	-
Market Value at June 30, 2018       \$10,865,093       \$193,108,375       \$465,190,230       \$245,101,258       \$143,874,144       \$210,183,645         Book Value\Cost at June 30, 2018       \$10,867,499       \$164,428,913       \$90,137,175       \$225,466,125       \$124,051,028       \$178,058,388         Shares Outstanding       11,209,688       151,228,607       219,131       1,878,879       893,485       1,228,218				-	-	-	-
Book Value\Cost at June 30, 2018         \$10,867,499         \$164,428,913         \$90,137,175         \$225,466,125         \$124,051,028         \$178,058,388           Shares Outstanding         11,209,688         151,228,607         219,131         1,878,879         893,485         1,228,218	Changes in Market Value of Fund Shares	470,396	1,294,590	51,543,235	(7,665,413)	3,184,063	(5,480,501)
Shares Outstanding         11,209,688         151,228,607         219,131         1,878,879         893,485         1,228,218	Market Value at June 30, 2018 =	\$10,865,093	\$193,108,375	\$465,190,230	\$245,101,258	\$143,874,144	\$210,183,645
	Book Value\Cost at June 30, 2018 =	\$10,867,499	\$164,428,913	\$90,137,175	\$225,466,125	\$124,051,028	\$178,058,388
Market Value per Share \$0.97 \$1.28 \$2,122.89 \$130.45 \$161.03 \$171.13	Shares Outstanding =	11,209,688	151,228,607	219,131	1,878,879	893,485	1,228,218
	Market Value per Share =	\$0.97	\$1.28	\$2,122.89	\$130.45	\$161.03	\$171.13

HIGH YIELD DEBT FUND	DEVELOPED MARKET INTERNATIONAL STOCK FUND	EMERGING MARKET INTERNATIONAL STOCK FUND	REAL ESTATE FUND	PRIVATE INVESTMENT FUND	TOTAL	
3735,399,049	\$1,536,011,692	\$893,189,424	\$999,345,960	\$1,223,444,661	\$9,717,295,187	
<u>5974,464,378</u>	\$3,471,808,606	\$1,656,937,784	\$1,186,810,692	\$1,448,947,950	\$17,126,802,473	
-	170,000,000	-	40,505,609	6,000,000	4,440,628,130	
(15,000,000)	-	(230,000,000)	(125,561,697)	(335,833,042)	(4,837,176,142)	
-	-	-	-	-	-	
3,953,417	-	116,038,453	24,925,463	59,746,056	543,944,908	
-	-	-	-	-	17,418,092	
-	-	-	-	-	(17,418,092)	
21,283,901	223,595,194	(30,045,141)	86,637,556	124,100,337	662,560,306	
984,701,696	\$3,865,403,800	\$1,512,931,096	\$1,213,317,623	\$1,302,961,301	\$17,936,759,675	
5724,352,466	\$1,706,011,692	\$779,227,877	\$939,215,335	\$953,357,675	\$9,864,692,083	
6,197,880	6,754,693	3,425,422	20,703,349	14,355,717	1,609,691,876	
\$158.88	\$572.25	\$441.68	\$58.60	\$90.76		
	¢4 000 <del>7</del> 00 000	¢040.057.400	¢005 040 000	¢4 040 050 000	¢0 700 500 440	
6494,458,589	\$1,008,726,606	\$616,857,122	\$695,212,682	\$1,042,956,083	\$6,769,599,419	
640,418,008	\$2,422,514,428	\$1,132,400,053	\$819,121,986	\$1,196,626,925	\$11,955,374,580	
-	120,000,000	-	7,250,841		1,822,526,475	
(15,000,000)	-	(145,000,000)	(85,759,247)	(252,154,807)	(2,138,496,021)	
3,698,470	-	72,374,141	16,501,267	37,771,583	348,509,844	
-,,	-	-	-	-	8,030,454	
-	-	-	-	-	(8,030,454)	
12,881,682	156,001,760	(14,113,404)	59,899,806	115,458,864	519,069,305	
C 41 000 160	¢0 600 516 100	¢1 045 660 700	¢017 014 652	¢1 007 702 FCF	¢10 506 004 100	
641,998,160	\$2,698,516,188	\$1,045,660,790	\$817,014,653	\$1,097,702,565	\$12,506,984,183	
\$483,157,059	\$1,128,726,606	\$544,231,263	\$633,205,543	\$828,572,859	\$6,802,139,717	
4,040,846	4,715,587	2,367,477	13,941,065	12,094,225	871,483,488	
-,0+0,0+0		2,001,411		12,004,220	011,400,400	
\$158.88	\$572.25	\$441.68	\$58.60	\$90.76		
\$273,954,836	\$149,975,585	\$110,568,596	\$135,019,769	\$206,763,317	\$1,601,416,709	
5338,249,628	\$345,741,069	\$174,115,775	\$169,540,537	\$256,554,537	\$2,441,303,399	
31,440,050	42,000,000	-	3,715,001		421,729,076	
-	(9,061,211)	(10,750,395)	(16,718,107)	(52,030,951)	(384,238,860)	
-	-	-	-	-	-	
-	5,193,902	4,376,911	3,986,926	11,006,701	43,543,133	
-	-	-	-	-	1,120,862	
-	-	-	-	-	(1,120,862)	
8,520,095	15,253,946	3,987,527	12,013,536	21,930,731	105,052,205	
\$378,209,773	\$399,127,706	\$171,729,818	\$172,537,893	\$237,461,018	\$2,627,388,953	
1010,200,110	<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>	φ171,720,010	ψ172,007,000	<i>\\\\</i>	φ2,027,000,000	
\$305,394,886	\$188,108,276	\$104,195,112	\$126,003,589	\$165,739,067	\$1,682,450,058	
2,380,517	697,465	388,813	2,944,087	2,616,289	175,685,179	
\$158.88	\$572.25	¢444.60	¢50.60	¢00.76		
<b>\$158 88</b>	\$5/225	\$441.68	\$58.60	\$90.76		

_	Liquidity Fund	ALTERNATIVE INVESTMENT FUND	MUTUAL EQUITY FUND	CORE FIXED INCOME FUND	INFLATION LINKED BOND FUND	EMERGING MARKET DEBT FUND
Probate Court Retirement Fund						
Book Value at June 30, 2017	\$2,396,202	\$3,998,202	\$1,952,010	\$6,944,726	\$3,980,642	\$5,954,492
Market Value at June 30, 2017	\$2,389,960	\$4,719,999	\$15,242,418	\$8,458,103	\$4,663,128	\$7,563,333
Shares Purchased	5,743,807	1,421,463	1,000,000	4,708,763	12,862	618,562
Shares Redeemed	(7,418,185)	(1,700,364)	(343,656)	(3,555,158)	-	(87,785)
Returns of Capital	-	-	-	-	-	-
Gain/(Loss) on Shares Redeemed	(9,386)	221,176	300,557	464,204	-	21,109
Net Investment Income Earned	50,496	-	-	-	-	-
Net Investment Income Distributed	(50,496)	-	-	-	-	-
Changes in Market Value of Fund Shares	6,251	14,428	1,899,008	(550,794)	149,625	(201,115)
Market Value at Jun. 30, 2018 =	\$712,447	\$4,676,702	\$18,098,327	\$9,525,118	\$4,825,615	\$7,914,104
Book Value\Cost at Jun 30, 2018 =	\$712,438	\$3,940,477	\$2,908,911	\$8,562,535	\$3,993,504	\$6,506,378
Shares Outstanding	735,043	3,662,457	8,525	73,017	29,968	46,246
Market Value per Share	\$0.97	\$1.28	\$2,122.89	\$130.45	\$161.03	\$171.13
Judges' Retirement Fund						
Book Value at June 30, 2017	\$5,841,238	\$14,278,123	\$6,225,787	\$14,137,155	\$8,802,585	\$13,284,538
Market Value at June 30, 2017	\$5,792,818	\$16,648,493	\$33,601,417	\$16,574,121	\$10,279,865	\$16,673,183
Shares Purchased	2,938,383	5,230,910	1,500,000	9,741,376	645,995	1,208,606
Shares Redeemed Returns of Capital	(7,112,330)	(6,039,222)	(380,637)	(5,051,138)	-	(5,105)
Gain/(Loss) on Shares Redeemed Net Investment Income Earned	(44,130) 102,436	729,851	311,571	583,565	-	1,181
Net Investment Income Distributed	(102,436)	-	-	-	-	-
Changes in Market Value of Fund Shares	39,928	110,343	4,595,061	(760,165)	314,311	(396,042)
Market Value at Jun. 30, 2018	\$1,614,669	\$16,680,375	\$39,627,412	\$21,087,759	\$11,240,171	\$17,481,823
Book Value\Cost at Jun 30, 2018	\$1,623,161	\$14,199,662	\$7,656,721	\$19,410,958	\$9,448,580	\$14,489,220
Shares Outstanding	1,665,880	13,062,874	18,667	161,653	69,804	102,156
Market Value per Share	\$0.97	\$1.28	\$2,122.89	\$130.45	\$161.03	\$171.13
State's Attorneys' Retirement Fund						
Book Value at June 30, 2017	\$23,885	\$-	\$153,077	\$354,458	\$27,304	\$75,906
Market Value at June 30, 2017	\$23,800	\$-	\$520,527	\$407,315	\$35,149	\$106,879
Shares Purchased	25,427	-	-	137,721	827	2,166
Shares Redeemed	(31,629)	-	(1,076)	(100,038)	-	-
Returns of Capital	-	-	-	-	-	-
Gain/(Loss) on Shares Redeemed	(53)	-	766	10,943	-	-
Net Investment Income Earned Net Investment Income Distributed	366	-	-	-	-	-
Changes in Market Value of Fund Shares	(366) 75	-	- 75,886	- (15,213)	- 1,134	(2,019)
 Market Value at Jun. 30, 2018	\$17,620	\$-	\$596,103	\$440,728	\$37,110	\$107,026
= Book Value\Cost at Jun 30, 2018	\$17,630	\$-	\$152,767	\$403,084	\$28,131	\$78,072
= Shares Outstanding	18,175		281	3,378	230	625
= Market Value per Share	\$0.97		\$2,122.89	\$130.45	\$161.03	\$171.13
=	φ0.31	-	ΨΖ, ΙΖΖ.Οΰ	ψ100.40	φτοτ.05	ψιτι.ισ

IIGH YIELD DEBT FUND	DEVELOPED MARKET INTERNATIONAL STOCK FUND	EMERGING MARKET INTERNATIONAL STOCK FUND	REAL ESTATE FUND	PRIVATE INVESTMENT FUND	TOTAL	
TONE	STOCKTOND	STOCKTOND	TOND	TONE	TOTAL	
	¢5 400 500	¢4.004.777	¢5 400 045	¢7 740 000	¢50.005.404	
\$11,354,411 \$14,139,420	\$5,480,586 \$14,453,460	\$4,091,777 \$6,793,474	\$5,426,045 \$6,614,698	<u>\$7,716,398</u> \$10,009,760	<u>\$59,295,491</u> \$95,047,753	
	. , ,			\$10,009,760	. , ,	
1,100,000	1,000,000	200,000	98,640	-	15,904,097	
(37,989)	(477,861)	(465,621)	(647,880)	(2,082,623)	(16,817,122)	
-	-	-	-	-	-	
7,779	299,578	203,796	140,749	510,739	2,160,301	
-	-	-	-	-	50,496	
-	-	-	-	-	(50,496)	
355,014	572,266	95,295	480,184	765,727	3,585,889	
\$15,564,224	\$15,847,443	\$6,826,944	\$6,686,391	\$9,203,603	\$99,880,918	
\$12,424,201	\$6,302,303	\$4,029,952	\$5,017,554	\$6,144,514	\$60,542,767	
97,964	27,693	15,457	114,093	101,403	4,911,866	
	· · · ·		,	· · ·	<del>4</del> ,311,000	
\$158.88	\$572.25	\$441.68	\$58.60	\$90.76		
\$23,497,547	\$13,013,933	\$9,265,696	\$12,136,399	\$18,468,635	\$138,951,636	
529,092,151	\$29,736,915	\$14,975,523	\$14,581,873	\$22,065,890	\$210,022,249	
3,451,410	500,000	-	383,808	9,579	25,610,067	
-	(652,231)	(861,037)	(1,443,981)	(4,411,951)	(25,957,632)	
-	-	-	-	-	-	
-	371,385	363,670	294,502	800,595	3,412,190	
-	-	-	-	-	102,436	
-	-	-	-	-	(102,436)	
759,295	1,513,293	354,292	1,086,293	2,044,239	9,660,848	
\$33,302,856	\$31,469,362	\$14,832,448	\$14,902,495	\$20,508,352	\$222,747,722	
26,948,957	\$13,233,087	\$8,768,329	\$11,370,728	\$14,866,858	\$142,016,261	
20,940,937	\$13,233,067	\$0,700,329	\$11,370,720	\$14,000,030	\$142,010,201	
209,614	54,992	33,582	254,288	225,956	15,859,464	
\$158.88	\$572.25	\$441.68	\$58.60	\$90.76		
\$139,220	\$298,893	\$107,578	\$-	\$-	\$1,180,321	
\$177,619	\$399,249	\$127,955	\$-	\$-	\$1,798,493	
3,184	-	-	-	-	169,325	
-	(4,960)	(6,157)	-	-	(143,860)	
-	-	-	-	-	-	
-	1,307	1,324	-	-	14,287	
-	-	-	-	-	366	
-	-	-	-	-	(366)	
4,654	24,553	4,783	-	-	93,853	
\$185,457	\$420,149	\$127,905	\$-	\$-	\$1,932,098	
\$142,404	\$295,240	\$102,745	\$-	\$-	\$1,220,073	
1,167	734	290			24,881	
					,	
\$158.88	\$572.25	\$441.67	-	-		

# PENSION FUNDS MANAGEMENT DIVISION COMBINED INVESTMENT FUNDS SCHEDULE OF INVESTMENT ACTIVITY BY TRUST FOR THE FISCAL YEAR ENDED JUNE 30, 2018

	Liquidity Fund	ALTERNATIVE INVESTMENT FUND	MUTUAL EQUITY FUND	CORE FIXED INCOME FUND	INFLATION LINKED BOND FUND	EMERGING MARKET DEB1 FUND
Soldiers' Sailors' & Marines' Fund						
Book Value at June 30, 2017	\$1,773,950	\$-	\$3,471,266	\$41,153,945	\$-	\$-
Market Value at June 30, 2017	\$1,762,761	\$-	\$11,548,652	\$50,884,757	\$-	\$-
Shares Purchased	1,502,040	-	-	13,506,260	-	32,401
Shares Redeemed	(2,489,750)	-	(309,682)	(13,286,370)	-	(32,401)
Returns of Capital	-	-	-	-	-	-
Gain/(Loss) on Shares Redeemed	(13,418)	-	218,526	2,136,830	-	-
Net Investment Income Earned	30,529	-	-	-	-	-
Net Investment Income Distributed	(30,529)	-	-	-	-	-
Changes in Market Value of Fund Shares	9,985	-	1,446,750	(2,650,362)	-	-
Market Value at Jun. 30, 2018	\$771,618	\$-	\$12,904,246	\$50,591,115	\$-	\$-
Book Value\Cost at Jun 30, 2018	\$772,822	\$-	\$3,380,110	\$43,510,665	\$-	\$-
Shares Outstanding	796,090	-	6,079	387,818	-	-
 Market Value per Share	\$0.97	-	\$2,122.89	\$130.45	\$-	\$-
 Endowment for the Arts						
Book Value at June 30, 2017	\$593,163	\$-	\$1,663,832	\$11,232,040	\$-	\$-
Market Value at June 30, 2017	\$591,158	\$-	\$3,016,000	\$13,289,762	\$-	\$-
Shares Purchased	1,243,173	-	2,711,125	3,074,532	1,245,248	1,842,591
Shares Redeemed Returns of Capital	(1,624,653)	-	_,,	(14,335,438)	(150,000)	(150,000)
Gain/(Loss) on Shares Redeemed	(1,770)	-	-	1,942,167	6,344	5,354
Net Investment Income Earned	8,631	-	-	1,942,107	0,344	5,554
Net Investment Income Distributed		-	-	-	-	-
	(8,631)	-	-	-	-	-
Changes in Market Value of Fund Shares	2,162	-	685,133	(1,922,351)	10,839	(90,159)
Market Value at Jun. 30, 2018	\$210,070	\$-	\$6,412,258	\$2,048,672	\$1,112,431	\$1,607,786
Book Value∖Cost at Jun 30, 2018 =	\$209,913	\$-	\$4,374,957	\$1,913,301	\$1,101,592	\$1,697,945
Shares Outstanding	216,732	-	3,021	15,705	6,908	9,395
Market Value per Share	\$0.97	\$-	\$2,122.89	\$130.45	\$161.03	\$171.13
Agricultural College Fund						
Book Value at June 30, 2017	\$150	\$-	\$-	\$577,311	\$-	\$-
Market Value at June 30, 2017	\$151	\$-	\$-	\$660,057	\$-	\$-
Shares Purchased	48,613	-	-	160,145	-	13
Shares Redeemed	(48,632)	-	-	(173,965)	-	(13)
Returns of Capital	-	-	-	-	-	-
Gain/(Loss) on Shares Redeemed	-	-	-	18,810	-	-
Net Investment Income Earned	5	-	-	-	-	-
Net Investment Income Distributed	(5)	-	-	-	-	-
Changes in Market Value of Fund Shares	-	-	-	(25,198)	-	-
Market Value at Jun. 30, 2018 =	\$132	\$-	\$-	\$639,849	\$-	\$-
Book Value\Cost at Jun 30, 2018	\$131	\$-	\$-	\$582,301	\$-	\$-
Shares Outstanding	138		-	4,905		
 Market Value per Share	\$0.96	\$-	\$-	\$130.45	\$-	\$-

IGH YIELD DEBT FUND	DEVELOPED MARKET INTERNATIONAL STOCK FUND	EMERGING MARKET INTERNATIONAL STOCK FUND	REAL ESTATE FUND	PRIVATE INVESTMENT FUND	TOTAL	
\$-	\$5,630,137	\$2,697,411	¢_	¢_	\$54,726,709	
	\$8,567,288	\$3,137,717	<u>\$-</u> \$-	<u>\$-</u> \$-	\$75,901,175	
÷	-	-	÷	÷	15,040,701	
-	(320,655)	(228,585)	-	-	(16,667,443)	
-	-	-	-	-	-	
-	113,323	45,126	-	-	2,500,387	
-	-	-	-	-	30,529	
-	-	-	-	-	(30,529)	
-	431,244	106,406	-	-	(655,977)	
\$-	\$8,791,200	\$3,060,664	\$-	\$-	\$76,118,843	
\$-	\$5,422,805	\$2,513,952	\$-	\$-	\$55,600,354	
-	15,362	6,930	-	-	1,212,279	
\$-	\$572.25	\$441.68	\$-	\$-		
φ-	\$572.25	φ441.00	-Φ-	φ-		
¢	¢1 470 EEE	¢705 700	¢	¢	¢15 670 070	
\$- \$-	\$1,478,555 \$2,237,150	\$705,783 \$819,375	<u>\$-</u> \$-	\$- \$-	\$15,673,373 \$19,953,445	
-م 1,828,958	3,223,964	476,707	φ- -	φ- -	15,646,298	
(150,000)	5,225,304	470,707	-		(16,410,091)	
(100,000)	-	-	-	-	-	
2,405	-	-	-	-	1,954,500	
-	-	-	-	-	8,631	
-	-	-	-	-	(8,631)	
12,075	201,823	16,816	-	-	(1,083,662)	
\$1,693,438	\$5,662,937	\$1,312,898	\$-	\$-	\$20,060,490	
\$1,681,363	\$4,702,519	\$1,182,490	\$-	\$-	\$16,864,080	
10,659	9,896	2,973	-	-	275,288	
\$158.88	\$572.25	\$441.68	\$-	\$-		
<u>\$-</u> \$-	\$\$\$\$\$\$\$	\$-	\$-	\$-	\$577,461	
\$-	\$-	\$-	\$-	\$-	\$660,208	
-	-	-	-	-	208,771 (222,610)	
-	-	-	-	-	(222,010)	
-	-	-	-	-	18,810	
-	-	-	-	-	5	
-	-	-	-	-	(5)	
-	-	-	-	-	(25,198)	
\$-	\$-	\$-	\$-	¢	\$639,981	
				\$-		
\$-	\$-	\$-	\$-	\$-	\$582,432	
-	-		-	-	5,043	
\$-	\$-	\$-	\$-	\$-		

	LIQUIDITY FUND	ALTERNATIVE INVESTMENT FUND	MUTUAL EQUITY FUND	CORE FIXED INCOME FUND	INFLATION LINKED BOND FUND	EMERGING MARKET DEBT FUND
Ida Eaton Cotton Fund						
Book Value at June 30, 2017	\$76,645	\$-	\$49,291	\$1,463,228	\$-	\$-
Market Value at June 30, 2017	\$76,358	\$-	\$389,561	\$1,716,543	\$-	\$-
Shares Purchased	72,159	-	-	493,465	-	1,366
Shares Redeemed	(105,025)	-	(17,906)	(467,586)	-	(1,366)
Returns of Capital	-	-	-	-	-	-
Gain/(Loss) on Shares Redeemed	(250)	-	15,744	57,849	-	-
Net Investment Income Earned	1,023	-	-	-	-	-
Net Investment Income Distributed	(1,023)	-	-	-	-	-
Changes in Market Value of Fund Shares	284	-	40,025	(75,123)	-	-
Market Value at Jun. 30, 2018 =	\$43,526	\$-	\$427,424	\$1,725,148	\$-	\$-
Book Value\Cost at Jun 30, 2018 =	\$43,529	\$-	\$47,129	\$1,546,956	\$-	\$-
Shares Outstanding	44,904	-	201	13,224	-	-
Market Value per Share =	\$0.97	\$-	\$2,122.88	\$130.45	\$-	\$-
Andrew Clark Fund						
Book Value at June 30, 2017	\$36,044	\$-	\$23,263	\$702,581	\$-	\$-
Market Value at June 30, 2017	\$35,913	\$-	\$183,221	\$807,334	\$-	\$-
Shares Purchased	28,981	-	-	225,973	-	668
Shares Redeemed	(43,292)	-	(8,718)	(219,401)	-	(668)
Returns of Capital	-	-	-	-	-	-
Gain/(Loss) on Shares Redeemed	(111)	-	7,663	23,896	-	-
Net Investment Income Earned	438	-	-	-	-	-
Net Investment Income Distributed	(438)	-	-	-	-	-
Changes in Market Value of Fund Shares	129	-	18,547	(32,015)	-	-
Market Value at Jun. 30, 2018 =	\$21,620	\$-	\$200,713	\$805,787	\$-	\$-
Book Value\Cost at Jun 30, 2018 =	\$21,622	\$-	\$22,208	\$733,049	\$-	\$-
Shares Outstanding =	22,302	-	95	6,177	-	-
Market Value per Share	\$0.97	\$-	\$2,122.89	\$130.45	\$-	\$-
School Fund						
Book Value at June 30, 2017	\$345,174	\$-	\$254,925	\$6,580,887	\$-	\$-
Market Value at June 30, 2017	\$344,286	\$-	\$1,758,131	\$7,744,805	\$-	\$-
Shares Purchased	210,566	-	-	2,080,816	-	1,368
Shares Redeemed	(365,501)	-	(110,919)	(1,984,229)	-	(1,368)
Returns of Capital	-	-	-	-	-	-
Gain/(Loss) on Shares Redeemed	(1,464)	-	96,277	250,895	-	-
Net Investment Income Earned	6,104	-	-	-	-	-
Net Investment Income Distributed	(6,104)	-	-	-	-	-
Changes in Market Value of Fund Shares	817	-	158,115	(330,452)	-	-
Market Value at Jun. 30, 2018 =	\$188,704	\$-	\$1,901,604	\$7,761,835	\$-	\$-
Book Value\Cost at Jun 30, 2018 =	\$188,775	\$-	\$240,283	\$6,928,369	\$-	\$-
Shares Outstanding =	194,693	-	896	59,500	-	-
Market Value per Share	\$0.97	\$-	\$2,122.89	\$130.45	\$-	\$-

PARD         STOCK PARD         STOCK PARD         PARD         PARD         TOTAL           \$         \$189,971         \$91,133         \$-         \$-         \$187,0283           \$-         \$288,996         \$105,831         \$-         \$-         \$566,980           -         (18,914)         (7,021)         -         -         \$66,980           -         7,034         1,377         -         -         \$1,023           -         -         1,023         -         1,023           -         1,1,517         3,718         -         -         (19,579)           \$-         \$288,595         \$103,905         \$-         \$-         \$25,582,598           \$-         \$102,127         -         -         \$1023         -           -         1,517         3,718         -         -         \$109,000           \$-         \$288,595         \$103,905         \$-         \$-         \$109,000           \$-         \$108,001         \$285,628         \$-         \$1,901,194           -         -         -         -         50,070           \$-         \$178,001         \$48,97,777         \$-         \$12,127,149 <th>IGH YIELD DEBT FUND</th> <th>DEVELOPED MARKET INTERNATIONAL</th> <th>EMERGING MARKET INTERNATIONAL</th> <th>REAL ESTATE</th> <th>PRIVATE INVESTMENT</th> <th>TOTAL</th> <th></th>	IGH YIELD DEBT FUND	DEVELOPED MARKET INTERNATIONAL	EMERGING MARKET INTERNATIONAL	REAL ESTATE	PRIVATE INVESTMENT	TOTAL	
\$-       \$288,958       \$105,831       \$-       \$-       \$25,77,251         -       (18,914)       (7,021)       -       -       (617,818)         -       7,034       1,377       -       81,754         -       -       1,023       -       1,023         -       -       -       1,023       -         -       -       -       (1,023)       -       1,023         -       1,1517       3,718       -       -       (1,023)         -       1,1517       3,718       -       -       (1,023)         -       504       235       -       -       59,070         \$-       \$504       235       -       -       59,070         \$-       \$504       235       -       -       59,070         \$-       \$51212,149       -       -       255,622       -         -       -       -       -       25,622       -       -         -       -       -       -       -       25,622       -       -         -       -       -       -       -       33,575       -       -       25,72,26 <th>FUND</th> <th>STOCK FUND</th> <th>STOCK FUND</th> <th>FUND</th> <th>FUND</th> <th>TOTAL</th> <th></th>	FUND	STOCK FUND	STOCK FUND	FUND	FUND	TOTAL	
\$-       \$288.958       \$106.831       \$-       \$-       \$25.77.261         -       (18.914)       (7,021)       -       (617.818)         -       7,034       1,377       -       81.754         -       -       1,023       1,023       1,023         -       -       -       1,023       1,023         -       -       -       1,023       1,023         -       -       -       (1,023)       1,023         -       1,1517       3,718       -       -       (1,023)         -       1,1517       3,718       -       -       (1,023)         -       5288,595       \$103.905       \$-       \$-       \$2,586,598         \$-       \$2486,595       \$103.905       \$-       \$-       \$2,586,598         \$-       \$5172,26       \$441,68       \$-       \$-       \$2,586,22         -       -       51,212,149       \$25,622       \$-       \$2,586,22         -       -       -       25,622       \$-       \$2,586,23         -       -       -       -       25,622       \$-         -       -       -       \$2,							
.       .       .       .       .       .       566.990         .       .       .       .       .       .       .       .         .       .       .       .       .       .       .       .         .       .       .       .       .       .       .       .       .         .       .       .       .       .       .       .       .       .       .         .					<u>\$-</u>		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	\$-	\$288,958	\$105,831	\$-	<b>P</b> -		
-       7,034       1,377       -       81,754         -       -       1,023       1,023         -       11,517       3,718       -       (10,23)         -       11,517       3,718       -       (10,23)         -       11,517       3,718       -       (10,579)         \$-       \$22,588,595       \$103,905       \$-       \$-       \$22,588,598         \$-       \$178,091       \$85,489       \$-       \$-       \$1,901,194         -       504       235       -       -       \$9,070         \$-       \$572,26       \$441,68       \$-       \$-       \$25,622         -       -       \$175,904       \$49,777       \$-       \$25,622         -       -       (4,192)       (3,302)       -       -       \$25,622         -       -       -       33,575       -       438       -       -       438         -       -       -       -       438       -       -       -       438         -       -       -       -       438       -       -       -       438         -       -       -	-	- (18 914)	(7.021)	-	-		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	-	(10,011)	(1,021)	-	-	-	
-       -       -       -       -       (1,023)         -       11,517       3,718       -       -       (19,579)         \$       \$2288,595       \$103,905       \$-       \$-       \$-       \$22,588,598         \$-       \$178,091       \$85,489       \$-       \$-       \$1,901,194         -       504       235       -       -       59,070         \$-       \$572,26       \$441,68       \$-       \$-       -         \$-       \$572,26       \$441,68       \$-       \$-       -         \$-       \$572,26       \$441,68       \$-       \$-       -         \$-       \$133,904       \$49,777       \$-       \$-       \$1,212,149         -       -       -       -       256,622       -       \$-         \$-       (4,192)       (3,302)       -       -       (279,573)       -         -       -       -       438       -       -       438         -       -       -       -       438       -         -       -       -       -       438       -         -       7,201       1,750       - </td <td>-</td> <td>7,034</td> <td>1,377</td> <td>-</td> <td>-</td> <td>81,754</td> <td></td>	-	7,034	1,377	-	-	81,754	
-       11,517 $3,718$ -       -       (19,579)         \$-       \$288,595       \$103,905       \$-       \$-       \$2,588,598         \$-       \$178,091       \$85,489       \$-       \$-       \$1,901,194         -       504       235       -       -       \$9,070         \$-       \$572,26       \$441,68       \$-       \$-       \$9,070         \$-       \$89,346       \$42,882       \$-       \$-       \$894,116         \$-       \$135,904       \$49,777       \$-       \$25,622       -         -       -       25,622       -       \$25,622       -         -       -       (4,192)       (3,302)       -       -       25,622         -       -       -       25,622       -       -       438         -       -       -       -       24,622       -       -       438         -       -       -       -       438       -       -       -       438         -       -       -       -       -       438       -       -       -       438         -       -       7,201       1,750 <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td></td>	-	-	-	-	-		
\$-         \$288,595         \$103,905         \$-         \$-         \$2,588,598           \$-         \$178,091         \$85,489         \$-         \$-         \$1,901,194           -         504         235         -         -         59,070           \$-         \$572,26         \$441,68         \$-         \$-           \$-         \$572,26         \$441,68         \$-         \$-           \$-         \$135,904         \$49,777         \$-         \$-         \$1212,149           \$-         \$135,904         \$49,777         \$-         \$-         \$1212,149           \$- $   25,622$ $ (4,192)$ $(3,302)$ $  25,622$ $ (4,192)$ $(3,302)$ $  33,575$ $    3438$ $  (4,388)$ $     (4,388)$ \$-         \$140,394         \$48,871         \$-         \$-         \$1217,385           \$-         \$140,394         \$448,871	-	-	-	-	-		
\$-         \$178,091         \$85,489         \$-         \$-         \$1,901,194           -         504         235         -         -         59,070           \$-         \$572,26         \$441,68         \$-         \$-           \$-         \$89,346         \$42,882         \$-         \$-         \$89,4116           \$-         \$135,904         \$49,777         \$-         \$-         \$25,622           -         -         -         -         255,622           -         -         -         -         25,622           -         -         -         -         25,622           -         (4,192) $(3,302)$ -         -         25,622           -         -         -         -         3,575         -         -           -         1,481         646         -         -         3,575           -         -         -         -         -         438           -         -         -         -         438           -         -         -         -         438           -         -         -         -         28,930      <	-	11,517	3,718	-	-	(19,579)	
-         504         235         -         -         59,070           \$-         \$572.26         \$441.68         \$-         \$-           \$-         \$89,346         \$42,882         \$-         \$-         \$894,116           \$-         \$135,904         \$49,777         \$-         \$-         \$12,12,149           \$-         \$135,904         \$49,777         \$-         \$-         \$12,12,149           \$-         \$135,904         \$49,777         \$-         \$-         \$12,12,149           \$-         \$135,904         \$49,777         \$-         \$-         \$12,12,149           \$-         \$135,904         \$49,777         \$-         \$-         \$25,622           \$-         \$(4,192)         \$(3,302)         \$-         \$25,622           \$-         \$1,481         \$646         \$-         \$3,575           \$-         \$1,481         \$646         \$-         \$3,575           \$-         \$1,401         \$146         \$-         \$438           \$-         \$7,201         \$1,750         \$-         \$12,17,385           \$-         \$140,394         \$48,871         \$-         \$-         \$12,17,385	\$-	\$288,595	\$103,905	\$-	\$-	\$2,588,598	
\$-         \$572.26         \$441.68         \$-         \$-           \$-         \$89.346         \$42.882         \$-         \$-         \$894.116           \$-         \$135.904         \$49,777         \$-         \$-         \$1212,149           -         -         -         -         255,622           -         (4,192)         (3.302)         -         -         (279,573)           -         1.481         646         -         -         33,575           -         -         -         -         438           -         -         -         -         4(380)           -         7,201         1,750         -         -         (4,388)           \$-         7,201         1,750         -         -         (4,388)           \$-         7,201         1,750         -         -         (4,388)           \$-         \$140,394         \$48,871         \$-         \$-         \$127,1385           \$-         \$86,635         \$40,226         \$-         \$-         \$903,740           -         245         111         -         -         28,930           \$-         \$572.26	\$-	\$178,091	\$85,489	\$-	\$-	\$1,901,194	
\$-         \$89,346         \$42,882         \$-         \$-         \$894,116           \$-         \$135,904         \$49,777         \$-         \$-         \$-         \$25,622           -         (4,192)         (3,302)         -         -         (279,573)           -         -         -         -         233,575           -         1,481         646         -         -         33,575           -         -         -         -         438           -         -         -         438           -         -         -         -         4(38)           *         \$140,394         \$48,871         \$-         \$-         (4,388)           \$-         \$140,394         \$448,871         \$-         \$-         \$1,217,385           \$-         \$140,394         \$448,871         \$-         \$-         \$1,217,385           \$-         \$86,635         \$40,226         \$-         \$-         \$903,740           -         245         111         -         -         28,930           \$-         \$572,26         \$441,70         \$-         \$-         \$2,92,750           -	-	504	235	-	-	59,070	
\$-         \$89,346         \$42,882         \$-         \$-         \$894,116           \$-         \$135,904         \$49,777         \$-         \$-         \$-         \$25,622           -         (4,192)         (3,302)         -         -         (279,573)           -         -         -         -         (279,573)           -         1,481         646         -         -         33,575           -         1,481         646         -         -         33,575           -         -         -         438         -         -         438           -         -         -         -         4(38)         -         -         (4,388)           \$-         \$140,394         \$48,871         \$-         \$-         \$1,217,385           \$-         \$140,394         \$48,871         \$-         \$-         \$1,217,385           \$-         \$86,635         \$40,226         \$-         \$-         \$903,740           -         245         111         -         -         28,930           \$-         \$572,26         \$441,70         \$-         \$2,92,750           -         -         - <td>\$-</td> <td>\$572.26</td> <td>\$441.68</td> <td>\$-</td> <td>\$-</td> <td></td> <td></td>	\$-	\$572.26	\$441.68	\$-	\$-		
\$-       \$135,904       \$49,777       \$-       \$-       \$-       \$1,212,149         -       -       -       -       255,622       -       265,622         -       (4,192)       (3,302)       -       -       (279,573)         -       1,481       646       -       -       33,575         -       -       -       438         -       -       -       438         -       -       -       -       438         -       7,201       1,750       -       -       (4,388)         \$-       \$140,394       \$48,871       \$-       \$-       \$1,217,385         \$-       \$140,394       \$48,871       \$-       \$-       \$43,80         \$-       \$245       111       -       -       28,930         \$-       \$572,26       \$441.70       \$-       \$-       \$8,8459,307         \$-       \$572,26       \$441.70       \$-       \$2,292,750       \$-         -       -       -       -       -       2,292,750       -         -       -       -       -       -       2,292,750       -       -       2,292,7							
\$-       \$135,904       \$49,777       \$-       \$-       \$-       \$1,212,149         -       -       -       -       255,622       -       255,622         -       (4,192)       (3,302)       -       -       (279,573)         -       1,481       646       -       -       33,575         -       -       -       -       438         -       -       -       -       438         -       7,201       1,750       -       -       (4,388)         \$-       \$140,394       \$48,871       \$-       \$-       \$903,740         -       245       111       -       -       28,930         \$-       \$572,26       \$441,70       \$-       \$-       \$11,629,717         -       -       -       -       2,292,750       -       -       2,292,750         -       -       -       -       -       2,292,750       -       -       2,292,750         -       -       -       -       -       -       2,292,750         -       -       -       -       -       -       2,292,750         -	¢_	\$80 346	\$42 882	\$_	¢_	\$894 116	
-       -       -       -       255,622         -       (4,192)       (3,302)       -       -       (279,573)         -       1,481       646       -       -       33,575         -       -       -       438         -       -       -       438         -       -       -       438         -       -       -       438         -       7,201       1,750       -       -         \$       \$140,394       \$48,871       \$-       \$-       \$438         \$       \$140,394       \$48,871       \$-       \$       \$903,740         -       245       111       -       -       28,930         \$-       \$572.26       \$441.70       \$-       \$       \$903,740         \$-       \$2686,411       \$409,910       \$-       \$       \$         \$-       \$272,06       \$441,70       \$-       \$       \$         \$-       \$268,641       \$409,910       \$-       \$       \$         \$-       \$272,06       \$441,70       \$-       \$       \$         \$-       \$1,304,688       \$477,807       <	<u> </u>						
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Ψ -	φ100,004 -	φ+0,111 -	Ψ -	Ψ		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	-	(4,192)	(3,302)	-	-		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	-	-	-	-	-	-	
(438)- $7,201$ $1,750$ (4,38)\$-\$140,394\$48,871\$-\$-\$1,217,385\$-\$86,635\$40,226\$-\$-\$993,740-24511128,930\$-\$572,26\$441,70\$-\$-\$-\$572,26\$441,70\$-\$-\$-\$1,304,688\$477,807\$-\$-\$-\$1,304,688\$477,807\$-\$-\$-\$1,304,688\$477,807\$-\$-\$-\$1,304,688\$477,807\$-\$-\$-\$1,304,688\$477,807\$-\$-\$-\$1,304,688\$477,807\$-\$-\$-\$1,304,688\$477,807\$-\$-\$-\$1,304,688\$477,807\$-\$-\$-\$1,604,688\$-\$-\$6,29,717\$-<	-	1,481	646	-	-		
- $7,201$ $1,750$ (4,388)\$-\$140,394\$48,871\$-\$-\$1,217,385\$-\$86,635\$40,226\$-\$-\$903,740- $245$ 111 $28,930$ \$-\$572.26\$441.70\$-\$- $28,930$ \$-\$572.26\$441.70\$-\$- $28,930$ \$-\$572.26\$441.70\$-\$- $28,930$ \$-\$1,304,688\$477,807\$-\$-\$11,629,7172,292,750-(41,023)(31,941)(2,534,981)14,1576,3586,104(6,104)(6,104)(6,104)(6,104)(6,511(6,104)(85,719)\$-\$1,346,972\$468,875\$-\$-\$11,667,990	-	-	-	-	-		
\$-       \$140,394       \$48,871       \$-       \$-       \$1,217,385         \$-       \$86,635       \$40,226       \$-       \$-       \$903,740         -       245       111       -       -       28,930         \$-       \$572.26       \$441.70       \$-       \$-       28,930         \$-       \$572.26       \$441.70       \$-       \$-       28,930         \$-       \$572.26       \$441.70       \$-       \$-       28,930         \$-       \$572.26       \$441.70       \$-       \$-       28,930         \$-       \$572.26       \$441.70       \$-       \$-       28,930         \$-       \$572.26       \$441.70       \$-       \$-       28,930         \$-       \$572.26       \$441.70       \$-       \$-       28,930         \$-       \$1304,688       \$4477,807       \$-       \$-       \$-         \$-       \$1,304,688       \$4477,807       \$-       \$-       \$11,629,717         \$-       \$1,304,688       \$4477,807       \$-       \$-       \$11,629,717         \$-       \$13,04,688       \$4477,807       \$-       \$-       \$11,629,717       \$-       \$11,629,717	-	- 7,201	- 1,750	-	-		
\$-       \$86,635       \$40,226       \$-       \$-       \$903,740         -       245       111       -       -       28,930         \$-       \$572.26       \$441.70       \$-       \$-       \$8,459,307         \$-       \$572.26       \$441.70       \$-       \$-       \$8,459,307         \$-       \$1,304,688       \$477,807       \$-       \$-       \$11,629,717         -       -       -       -       2,292,750         -       (41,023)       (31,941)       -       (2,534,981)         -       -       -       -       26,223         -       -       -       -       6,104         -       -       -       -       6,104         -       -       -       -       6,104         -       -       -       -       6,104         -       -       -       -       (6,104)         -       69,150       16,651       -       -       (85,719)         \$-       \$1,346,972       \$468,875       \$-       \$-       \$11,667,990	\$-			\$-	\$-		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $							
\$-         \$572.26         \$441.70         \$-         \$-           \$-         \$868,411         \$409,910         \$-         \$-         \$8,459,307           \$-         \$1,304,688         \$477,807         \$-         \$-         \$11,629,717           -         -         -         -         2,292,750         -         \$11,629,717           -         -         -         -         -         2,292,750         -         \$14,1023         \$(31,941)         -         -         \$2,292,750           -         \$(41,023)         \$(31,941)         -         -         \$2,292,750         -         \$2,292,750           -         \$(41,023)         \$(31,941)         -         -         \$2,292,750         -         -         \$2,292,750         -         -         \$2,292,750         -         -         \$2,292,750         -         -         \$2,292,750         -         -         \$2,292,750         -         -         \$2,292,750         -         -         \$2,292,750         -         -         \$6,104         -         -         \$6,104         -         -         \$6,104         -         -         \$6,104         -         -         \$6,104         -	\$-	\$86,635	\$40,226	\$-	\$-	\$903,740	
\$-\$868,411\$409,910\$-\$-\$8,459,307\$-\$1,304,688\$477,807\$-\$-\$11,629,7172,292,750- $(41,023)$ $(31,941)$ $(2,534,981)$ 14,1576,358366,2236,104(6,104)-69,15016,651\$-\$1,346,972\$468,875\$-\$-	-	245	111	-	-	28,930	
-       -       -       2,292,750         -       (41,023)       (31,941)       -       -       (2,534,981)         -       -       -       -       -       -       -         -       14,157       6,358       -       -       366,223         -       -       -       -       6,104         -       -       -       -       6,104         -       -       -       -       6,104         -       -       -       -       (6,104)         -       69,150       16,651       -       -       (85,719)         \$-       \$1,346,972       \$468,875       \$-       \$-       \$11,667,990	\$-	\$572.26	\$441.70	\$-	\$-		
-       -       -       2,292,750         -       (41,023)       (31,941)       -       -       (2,534,981)         -       -       -       -       -       -       -         -       14,157       6,358       -       -       366,223         -       -       -       -       6,104         -       -       -       -       6,104         -       -       -       -       6,104         -       -       -       -       (6,104)         -       69,150       16,651       -       -       (85,719)         \$-       \$1,346,972       \$468,875       \$-       \$-       \$11,667,990							
-       -       -       2,292,750         -       (41,023)       (31,941)       -       -       (2,534,981)         -       -       -       -       -       -       -         -       14,157       6,358       -       -       366,223         -       -       -       -       6,104         -       -       -       -       6,104         -       -       -       -       6,104         -       -       -       -       (6,104)         -       69,150       16,651       -       -       (85,719)         \$-       \$1,346,972       \$468,875       \$-       \$-       \$11,667,990	\$-	\$868,411	\$409,910	\$-	\$-		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	\$-	\$1,304,688	\$477,807	\$-	\$-	\$11,629,717	
-       14,157       6,358       -       -       366,223         -       -       -       -       6,104         -       -       -       -       6,104         -       -       -       -       6,104         -       -       -       -       (6,104)         -       69,150       16,651       -       -       (85,719)         \$-       \$1,346,972       \$468,875       \$-       \$-       \$11,667,990	-	-	-	-	-		
-     -     -     -     6,104       -     -     -     -     (6,104)       -     69,150     16,651     -     -     (85,719)       \$-     \$1,346,972     \$468,875     \$-     \$-     \$11,667,990	-	(41,023)	(31,941)	-	-	(2,534,981)	
-     -     -     -     6,104       -     -     -     -     (6,104)       -     69,150     16,651     -     -     (85,719)       \$-     \$1,346,972     \$468,875     \$-     \$-     \$11,667,990	-	- 14 157	- 6 358	-	-	-	
-     -     -     -     (6,104)       -     69,150     16,651     -     -     (85,719)       \$-     \$1,346,972     \$468,875     \$-     \$-     \$11,667,990	-	-	-	-	-		
-     69,150     16,651     -     -     (85,719)       \$-     \$1,346,972     \$468,875     \$-     \$-     \$11,667,990	-	-	-	-	-		
	-	69,150	16,651	-	-		
\$- \$841,545 \$384,327 \$- \$- \$8,583,299	\$-	\$1,346,972	\$468,875	\$-	\$-	\$11,667,990	
	\$-	\$841,545	\$384,327	\$-	\$-	\$8,583,299	
- 2,354 1,062 258,505	-	2,354	1,062	-	-	258,505	
\$- \$572.25 \$441.68 \$- \$-	¢			¢	¢		

_	LIQUIDITY FUND	ALTERNATIVE INVESTMENT FUND	MUTUAL EQUITY FUND	CORE FIXED INCOME FUND	INFLATION LINKED BOND FUND	EMERGING MARKET DEB1 FUND
Hopemead Fund						
Book Value at June 30, 2017	\$115,910	\$-	\$115,914	\$2,215,012	\$-	\$-
Market Value at June 30, 2017	\$112,522	\$-	\$574,077	\$2,529,572	\$-	\$-
Shares Purchased	33,483	-	-	745,147	-	1,978
Shares Redeemed	(96,292)	-	(11,650)	(645,374)	-	(1,978)
Returns of Capital	-	-	-	-	-	-
Gain/(Loss) on Shares Redeemed	(2,947)	-	9,347	67,742	-	-
Net Investment Income Earned	1,832	-	-	-	-	-
Net Investment Income Distributed	(1,832)	-	-	-	-	-
Changes in Market Value of Fund Shares	2,817	-	73,896	(93,711)	-	-
Market Value at Jun. 30, 2018 =	\$49,583	\$-	\$645,670	\$2,603,376	\$-	\$-
Book Value\Cost at Jun 30, 2018	\$50,154	\$-	\$113,611	\$2,382,527	\$-	\$-
Shares Outstanding	51,154	-	304	19,957		-
Market Value per Share	\$0.97	\$-	\$2,122.89	\$130.45	\$-	\$-
Police & Fireman's Survivors' Benefit Fund	I					
Book Value at June 30, 2017	\$966,893	\$2,567,029	\$2,347,309	\$1,958,769	\$1,106,666	\$1,654,046
Market Value at June 30, 2017	\$948,047	\$2,875,936	\$5,481,686	\$2,226,805	\$1,262,760	\$2,240,046
Shares Purchased	813,107	913,634	200,000	1,264,334	121,818	124,814
Shares Redeemed Returns of Capital	(1,169,103)	(1,045,166) -	(45,381)	(745,152)	-	-
Gain/(Loss) on Shares Redeemed	(14,142)	97,006	26,351	68,676	-	-
Net Investment Income Earned	16,433				-	-
Net Investment Income Distributed	(16,433)	-	-	-	-	-
Changes in Market Value of Fund Shares	13,995	48,556	784,239	(90,851)	37,371	(49,126)
Market Value at Jun. 30, 2018	\$591,904	\$2,889,966	\$6,446,895	\$2,723,812	\$1,421,949	\$2,315,734
Book Value∖Cost at Jun 30, 2018	\$596,755	\$2,532,503	\$2,528,279	\$2,546,627	\$1,228,484	\$1,778,860
Shares Outstanding	610,675	2,263,215	3,037	20,880	8,831	13,532
Market Value per Share	\$0.97	\$1.28	\$2,122.89	\$130.45	\$161.03	\$171.13
OPEB Fund						
Book Value at June 30, 2017	\$19,374,020	\$46,074,553	\$75,318,308	\$119,516,548	\$10,634,250	\$14,763,316
Market Value at June 30, 2017	\$19,367,516	\$49,534,269	\$99,930,132	\$126,022,638	\$10,875,265	\$16,531,209
Shares Purchased	239,218,244	42,664,656	43,539,201	112,006,717	6,017,988	6,837,503
Shares Redeemed	(228,212,833)	(19,508,833)	-	(32,741,812)	-	-
Returns of Capital	-	-	-	-	-	-
Gain/(Loss) on Shares Redeemed	22,332	1,127,815	-	1,344,915	-	-
Net Investment Income Earned	294,172	-	-	-	-	
Net Investment Income Distributed	(294,172)	-	-	-	-	-
Changes in Market Value of Fund Shares	6,731	2,003,695	16,701,636	(3,077,289)	266,856	(730,715)
Market Value at Jun. 30, 2018 =	\$30,401,990	\$75,821,602	\$160,170,969	\$203,555,169	\$17,160,109	\$22,637,997
Book Value\Cost at Jun 30, 2018 =	\$30,401,763	\$70,358,191	\$118,857,509	\$200,126,368	\$16,652,238	\$21,600,819
Shares Outstanding	31,366,189	59,378,032	75,450	1,560,398	106,567	132,286
	\$0.97	\$1.28	\$2,122.89	\$130.45	\$161.03	\$171.13

IIGH YIELD DEBT FUND	DEVELOPED MARKET INTERNATIONAL STOCK FUND	EMERGING MARKET INTERNATIONAL STOCK FUND	REAL ESTATE FUND	PRIVATE INVESTMENT FUND	TOTAL	
\$-	\$283,120	\$133,931	\$-	\$-	\$2,863,887	
<u> </u>	\$425,817	\$155,957	\$-	<u> </u>	\$3,797,945	
-	-	-	-	-	780,608	
-	(13,136)	(10,346)	-	-	(778,776)	
-	- 4,543	- 2,051	-	-	- 80,736	
-	-	-,	-	-	1,832	
-	-		-	-	(1,832)	
-	22,659	5,458	-	-	11,119	
\$-	\$439,883	\$153,120	\$-	\$-	\$3,891,632	
\$-	\$274,527	\$125,636	\$-	\$-	\$2,946,455	
-	769	347	-	-	72,531	
\$-	\$572.25	\$441.68	\$-	\$-		
\$3,042,710	\$3,654,159	\$2,199,916	\$1,791,922	\$2,362,748	\$23,652,167	
\$3,828,828	\$4,891,506	\$2,627,632	\$2,238,922	\$3,726,704	\$32,348,872	
369,804	350,000 (92,041)	100,000 (142,992)	65,882 (222,369)	12,573 (747,328)	4,335,966 (4,209,532)	
-	(02,041)	-	(222,000)	-	(7,200,002)	
-	24,389	31,226	51,873	283,098	568,477	
-	-	-	-	-	16,433	
- 99,759	- 281,732	- 90,923	- 160,637	- 198,803	(16,433) 1,576,038	
	· · ·					
\$4,298,391	\$5,455,586	\$2,706,789	\$2,294,945	\$3,473,850	\$34,619,821	
\$3,412,514	\$3,936,507	\$2,188,150	\$1,687,308	\$1,911,091	\$24,347,078	
27,055	9,533	6,128	39,160	38,274	3,040,320	
\$158.88	\$572.25	\$441.68	\$58.60	\$90.76		
٥٥.00 ل	<b>Φ</b> ΟΤΖ.ΖΟ		φυο.υυ	\$90.10		
÷=== 440,000	*** ***	*10.050.440	***	****	A 400 005 074	
\$38,412,829 \$43,963,998	\$63,028,237 \$78,535,153	\$18,858,442 \$22,597,398	\$40,666,677 \$49,572,113	\$39,748,194 \$52,510,614	\$486,395,374 \$569,440,305	
26,742,905	36,635,560	8,196,001	9,056,357	6,408,452	537,323,584	
-	-	-	(5,646,719)	(11,801,869)	(297,912,066)	
-	-	-	-	-	-	
-	-	-	1,080,908	2,772,483	6,348,453 294,172	
-	-	-	-	-	(294,172)	
1,169,771	4,662,048	237,204	4,213,860	4,905,432	30,359,229	
\$71,876,674	\$119,832,761	\$31,030,603	\$58,276,519	\$54,795,112	\$845,559,505	
\$65,155,734	\$99,663,797	\$27,054,443	\$45,157,223	\$37,127,260	\$732,806,674	
452,404	209,405	70,256	994,397	603,720	94,949,104	
\$158.88	\$572.25	\$441.68	\$58.60	\$90.76		

#### COMBINED INVESTMENT FUNDS

#### SUMMARY OF OPERATIONS (Dollars in Thousands)

#### FISCAL YEARS ENDED JUNE 30

	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Investment Income (1)	926,400	854,237	819,246	\$785,305	\$759,442	\$954,708	\$888,007	\$1,010,079	\$762,800	\$803,203
Expenses (2)	101,985	90,593	88,347	89,745	87,227	82,759	83,105	86,671	79,950	62,802
Net Investment Income	824,415	763,644	730,899	695,560	672,215	871,949	804,902	923,408	682,850	740,401
Net Increase (Decrease) in t	he									
Fair Value of Investment	s									
and Foreign Currency	1,484,659	3,332,743	(720,277)	339,140	3,329,796	1,905,837	(1,023,840)	3,525,575	1,952,086	(5,275,961)
Total	\$2,309,074	\$4,096,387	\$10,622	\$1,034,700	\$4,002,011	\$2,777,786	\$(218,938)	\$4,448,983	\$2,634,936	\$(4,535,560)

(1) Securities lending income and expenses are shown net in the Investment Income line above for all periods presented.

(2) Expenses shown above include salary and fringe benefits.

#### COMBINED INVESTMENT FUNDS PENSION AND TRUST FUNDS BALANCES <sup>(1)</sup> IN COMBINED INVESTMENT FUNDS (Dollars in Thousands) AT JUNE 30, 2018

			Sta	te	Munic	ipal	Pro	bate			S	tate's		
Fund	Teac	hers'	Emplo	yees'	Employ	/ees'	Co	urt	Judg	ges	Atte	orneys'	Tr	rust
Name	Retireme	ent Fund	Retireme	nt Fund	Retiremer	nt Fund	Retirem	ent Fund	Retireme	nt Fund	Retirer	ment Fund	Fu	inds
LF	\$500,870	2.79 %	\$162,844	1.30%	\$10,865	0.41%	\$712	0.71%	\$1,615	0.73%	\$18	0.93%	\$32,279	3.24%
AIF	1,300,794	7.25	828,679	6.63	193,108	7.35	4,677	4.68	16,680	7.49	-	-	78,711	7.90
MEF	4,176,470	23.28	2,865,805	22.91	465,190	17.71	18,098	18.12	39,628	17.79	596	30.85	189,109	18.98
CFIF	1,444,072	8.05	1,124,934	8.99	245,101	9.33	9,525	9.54	21,088	9.47	440	22.77	272,455	27.34
ILBF	597,831	3.33	621,974	4.97	143,874	5.48	4,826	4.83	11,240	5.05	37	1.92	19,694	1.98
EMDF	1,037,408	5.78	601,855	4.81	210,184	8.00	7,914	7.92	17,482	7.85	107	5.54	26,562	2.67
HYBD	984,702	5.49	641,998	5.13	378,210	14.39	15,564	15.58	33,303	14.95	186	9.63	77,868	7.82
DMISF	3,865,404	21.55	2,698,516	21.58	399,128	15.19	15,848	15.87	31,469	14.13	420	21.74	141,958	14.25
EMISF	1,512,931	8.43	1,045,661	8.36	171,730	6.54	6,827	6.84	14,832	6.66	128	6.63	38,887	3.90
REF	1,213,317	6.76	817,015	6.53	172,538	6.57	6,686	6.69	14,903	6.69	-	-	60,571	6.08
PIF	1,302,961	7.26	1,097,703	8.78	237,461	9.04	9,204	9.21	20,508	9.21	-	-	58,269	5.85
Total	\$ <u>17,936,760</u>	100.00 %	\$12,506,984	100.00 %	6 \$2,627,389	100.00 %	\$99,881	100.00 %	\$222,748	100.00 %	\$1,932	100.00%	\$996,363	100.00%

(1) Based on Net Asset Value

Source: Amounts were dervied from custodial records.

# COMBINED INVESTMENT FUNDS INVESTMENT SUMMARY AT JUNE 30, 2018 <sup>(1)</sup>

	Liquidity Fund <sup>(2)</sup>							
	Book Value	Fair Value	% of Total Fund FV	Rate of Return				
2018	\$710,062,471	\$709,844,344	2.07%	1.63%				
2017	1,405,083,566	1,387,328,362	4.26%	0.96%				
2016	1,036,810,247	1,018,293,290	3.49%	0.68%				
2015	1,358,875,058	1,282,270,968	4.31%	-1.07%				
2014	1,157,564,578	1,158,961,835	3.93%	0.54%				
2013	1,062,418,543	1,041,232,312	4.01%	0.66%				
2012	772,408,827	770,217,574	3.20%	-0.14%				
2011	756,915,969	775,433,903	3.07%	1.20%				
2010	1,626,177,183	1,621,182,259	7.44%	0.98%				
2009	952,212,787	950,605,428	4.65%	1.54%				

Mutual Equity Fund							
Book	Fair	% of Total	Rate of				
Value	Value	Fund FV	Return				
\$4,896,532,930	\$7,760,012,682	22.58%	14.74%				
4,708,963,250	7,026,486,865	21.57%	19.26%				
4,681,029,693	6,647,482,185	22.76%	1.75%				
4,584,447,046	6,784,028,571	22.80%	7.32%				
4,612,970,046	7,055,012,881	23.93%	25.28%				
4,664,358,346	6,236,082,798	24.07%	21.15%				
5,144,712,429	6,417,508,518	26.65%	3.38%				
5,327,666,479	6,634,922,151	26.28%	31.92%				
5,175,570,747	5,288,853,566	24.28%	14.01%				
6,019,782,554	5,588,272,211	27.35%	-28.36%				

# Core Fixed Income Fund

	Book Value	Fair Value	% of Total Fund FV	Rate of Return
2018	\$3,339,936,592	\$3,292,563,253	9.58%	-0.89%
2017	2,563,940,862	2,601,453,937	7.99%	1.89%
2016	2,442,024,334	2,490,655,941	8.53%	3.46%
2015	2,603,408,489	2,627,250,626	8.83%	1.85%
2014	2,528,639,885	2,573,846,130	8.73%	4.28%
2013	2,042,090,874	2,056,321,868	7.94%	-0.24%
2012	2,726,575,207	2,859,134,784	11.88%	7.63%
2011	2,911,577,713	3,001,125,667	11.89%	4.49%
2010	2,682,943,303	2,789,605,943	12.81%	11.81%
2009	3,400,625,343	3,215,718,047	15.74%	2.84%

# Emerging Market Debt Fund

	Book	Fair	% of Total	Rate of
	Value	Value	Fund FV	Return
2018	\$2,023,139,455	\$1,844,542,809	5.37%	-1.78%
2017	1,606,817,274	\$1,598,180,952	4.91%	9.11%
2016	1,577,124,552	1,483,772,612	5.08%	6.01%
2015	1,523,207,614	1,399,864,819	4.70%	-7.57%
2014	1,470,166,119	1,500,069,627	5.09%	6.99%
2013	1,415,363,738	1,388,070,525	5.36%	1.69%
2012	1,098,205,685	1,176,095,315	4.88%	4.78%
2011	1,012,164,604	1,141,817,330	4.52%	16.06%
2010	1,082,027,071	1,155,351,613	5.30%	23.02%
2009	1,153,012,696	1,125,226,197	5.51%	-3.62%

#### Inflation Linked Bond Fund

Book Value	Fair Value	% of Total Fund FV	Rate of Return
\$1,389,800,650	\$1,382,416,735	4.02%	3.21%
1,347,627,821	1,332,942,016	4.09%	0.66%
1,338,629,405	1,321,779,931	4.52%	2.29%
1,189,323,643	1,120,365,183	3.77%	-2.85%
1,057,661,503	1,075,489,795	3.65%	4.17%
886,052,044	879,482,495	3.39%	-4.33%
864,059,933	932,982,728	3.88%	11.91%
1,075,894,193	1,115,148,171	4.42%	7.23%
1,033,720,440	1,070,660,872	4.91%	9.48%
813,926,651	829,543,021	4.06%	-0.20%

#### High Yield Debt Fund

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	Book	Fair	% of Total	Rate of
	Value	Value	Fund FV	Return
\$2,	182,466,537	\$2,109,564,213	6.14%	2.58%
2,	027,683,334	2,034,712,429	6.25%	12.59%
1,	905,160,587	1,808,188,496	6.19%	-0.31%
1,	824,316,127	1,772,254,243	5.96%	-1.31%
1,	520,226,270	1,592,980,848	5.40%	12.24%
1,	261,124,831	1,267,238,204	4.89%	8.46%
	693,951,103	706,123,033	2.93%	6.23%
	685,595,880	710,362,023	2.81%	15.96%
	659,015,939	656,175,724	3.01%	24.54%
	801,755,724	718,563,903	3.52%	-4.59%

# PENSION FUNDS MANAGEMENT DIVISION **COMBINED INVESTMENT FUNDS** INVESTMENT SUMMARY AT JUNE 30, 2018 (1) (Continued)

	Book Value	Fair Value	% of Total Fund FV	Rate of Return
2018	\$6,030,940,868	\$7.071.927.935	20.58%	6.53%
2017	5,180,435,660	6,344,307,953	19.48%	24.81%
2016	4,943,295,363	5,187,629,818	17.76%	-7.09%
2015	5,052,512,834	5,879,680,883	19.76%	0.67%
2014	4,806,622,148	6,101,761,491	20.70%	22.31%
2013	4,861,705,636	5,393,071,695	20.81%	22.56%
2012	4,586,337,006	4,550,036,799	18.90%	-12.48%
2011	4,684,676,553	5,391,257,095	21.35%	26.30%
2010	4,552,279,820	4,328,450,937	19.87%	11.03%
2009	4,847,669,826	4,464,491,006	21.85%	-27.98%

#### Real Estate Fund (3)

	Book	Fair	% of Total	Rate of
	Value	Value	Fund FV	Return
2018	\$1,968,748,568		6.64%	8.69%
2017	\$2,003,957,301	2,207,396,472	6.89%	7.38%
2016	1,941,003,659		7.56%	11.51%
2015	1,763,256,288	1,848,291,148	6.21%	12.93%
2014	1,478,885,377	1,509,757,272	5.12%	10.66%
2013	1,611,385,620	1,471,299,222	5.68%	10.26%
2012	1,524,367,937	1,328,560,229	5.52%	7.19%
2011	1,350,551,373	1,097,203,255	4.35%	16.12%
2010	1,174,718,491	792,483,221	3.64%	-20.18%
2009	1,021,805,530	770,955,194	3.77%	-28.66%

#### Private Investment Fund <sup>(3)</sup>

	Book Value	Fair Value	% of Total Fund FV	Rate of Return
2018	\$2,287,248,681	\$2,712,365,156	7.89%	15.50%
2017	\$2,499,963,535	\$2,970,729,926	9.12%	10.97%
2016	2,306,644,120	2,769,435,919	9.48%	8.87%
2015	2,286,868,807	2,773,374,435	9.32%	14.04%
2014	2,449,109,360	2,918,978,182	9.90%	16.06%
2013	2,246,698,441	2,564,877,605	9.90%	9.50%
2012	2,221,945,727	2,569,809,038	10.67%	5.92%
2011	1,909,670,699	2,229,679,980	8.83%	19.89%
2010	1,859,585,108	2,013,101,198	9.24%	17.32%
2009	1,819,125,566	1,621,268,022	7.94%	-16.36%

## Developed Market International Stock Fund Emerging Market International Stock Fund

Book	Fair	% of Total	Rate of
Value	Value	Fund FV	Return
\$2,506,219,641	\$2,779,562,524	8.09%	4.66%
2,359,195,270	3,002,786,523	9.22%	23.00%
2,305,345,878	2,467,083,187	8.45%	-7.15%
2.313.960.007	2.463.358.430	8.28%	-6.93%
2,278,127,868	2,645,431,257	8.97%	11.50%
2,241,227,436	2.367.182.053	9.14%	3.29%
2,086,716,284	2,216,901,370	9.21%	-14.16%
2,114,345,516	2,629,250,556	10.41%	28.55%
1,860,837,675	2,065,255,957	9.48%	25.23%
1,110,911,776	1,141,401,975	5.59%	-30.90%

# Commercial Mortgage Fund (3) (6)

Book Value	Fair Value	% of Total Fund FV	Rate of Return
\$0	\$0	0.00%	0.00%
\$0	\$0	0.00%	0.00%
83	83	0.00%	0.00%
29,834	29,799	0.00%	0.25%
67,723	67,609	0.00%	10.17%
70,239	70,099	0.00%	0.88%
717,122	765,779	0.00%	-6.48%
2,338,063	2,386,359	0.01%	4.61%
3,769,581	3,818,115	0.02%	6.75%
5,084,919	5,135,144	0.02%	-3.14%

# Alternative Investment Fund <sup>(5)</sup>

	Book Value	Fair Value	% of Total Fund FV	Rate of Return
\$2,	142,447,498	\$2,422,737,099	7.05%	4.69%
\$1,	780,457,507	\$2,026,788,085	6.22%	8.51%
1,	705,961,044	1,804,337,067	6.18%	-5.32%
1,	611,126,633	1,804,487,746	6.06%	3.98%
1,	210,080,164	1,349,977,450	4.58%	6.63%
1,	190,675,281	1,247,574,910	4.81%	6.39%
	550,080,365	549,205,302	2.28%	-1.62%
	511,873,555	519,007,742	2.06%	0.00%
	0	0	0.00%	0.00%
	0	0	0.00%	0.00%

#### COMBINED INVESTMENT FUNDS INVESTMENT SUMMARY AT JUNE 30, 2018 <sup>(1)</sup> (Continued)

#### Total Fund (4)

Book Value	Fair Value	% of Total Fund FV	Rate of Return
\$29 477 543 891	\$34 368 676 287	100 00%	7.03%
· · · · · · · · · · · · · · ·		100.00%	14.18%
26,183,028,965	29,206,055,001	100.00%	0.35%
26,111,332,380	29,755,256,851	100.00%	2.79%
24,570,121,041	29,482,334,377	100.00%	15.43%
23,483,171,029	25,912,503,786	100.00%	11.64%
22,270,077,625	24,077,340,469	100.00%	-0.90%
22,343,270,597	25,247,594,232	100.00%	20.75%
21,710,645,358	21,784,939,405	100.00%	12.88%
21,945,913,372	20,431,180,148	100.00%	-17.37%
	Value \$29,477,543,891 \$27,484,125,381 26,183,028,965 26,111,332,380 24,570,121,041 23,483,171,029 22,270,077,625 22,343,270,597 21,710,645,358	ValueValue\$29,477,543,891\$34,368,676,287\$27,484,125,381\$32,568,375,16626,183,028,96529,206,055,00126,111,332,38029,755,256,85124,570,121,04129,482,334,37723,483,171,02925,912,503,78622,270,077,62524,077,340,46922,343,270,59725,247,594,23221,710,645,35821,784,939,405	Value         Value         Fund FV           \$29,477,543,891         \$34,368,676,287         100.00%           \$27,484,125,381         \$32,568,375,166         100.00%           26,183,028,965         29,206,055,001         100.00%           26,111,332,380         29,755,256,851         100.00%           24,570,121,041         29,482,334,377         100.00%           23,483,171,029         25,912,503,786         100.00%           22,270,077,625         24,077,340,469         100.00%           22,343,270,597         25,247,594,232         100.00%           21,710,645,358         21,784,939,405         100.00%

(1) All rates of return are net of management fees and division operating expenses.

(2) The fair value of the Liquidity Fund for the periods presented represents the fair value of the pension and trust balances in the Liquidity Fund only (excluding receivables and payables); the Liquidity Fund balances of the other combined investment funds are shown in the fair value of each fund.

(3) Investment returns published for prior years were net of management fees, but were restated in 2008 net of all expenses.

(4) Represents a composite return of the total pension and trust funds. Individual returns for the three primary pension funds (Teachers, State Employees and Municipal Employees) are separately presented elsewhere due to different asset allocations of each fund.

(5) Inception of the Alternative Investment Fund during Fiscal 2011.

(6) Investments in Commercial Mortgage Fund were redeemed by plan participants. Ending Net Asset Value at June 30, 2016 was less than \$100. No percentages were calculated due to the immaterial amounts.

#### COMBINED INVESTMENT FUNDS TOP TEN HOLDINGS\* BY FUND AT JUNE 30, 2018

# LIQUIDITY FUND

Security Name	Maturity Date	Market Value	%
HSBC BANK TRI REPO	7/2/2018	218,025,433	10.88%
CITIGROUP GLOBAL TRI REPO	7/2/2018	200,023,444	9.98%
BANK OF NY REPO TRI REPO	7/2/2018	95,011,136	4.74%
MERRILL LYNCH TRI REPO	7/2/2018	59,006,883	2.94%
ING BANK NV C/D	10/9/2018	35,000,807	1.75%
DZ BANK AG DISC	7/2/2018	29,998,425	1.50%
WESTPAC BANKING IB NT	1/18/2019	25,127,706	1.25%
NATIXIS NY INSTL C/D	9/4/2018	25,102,514	1.25%
BNP PARIBAS NY BRH C/D	9/17/2018	25,072,188	1.25%
NATIONAL BK CANADA IB NT	8/6/2018	25,037,899	1.25%
Top Ten		\$737,406,435	36.80%

FAIR VALUE LF

\$2,003,821,874

# ALTERNATIVE INVESTMENT FUND

Partnership Name	Partnership Type	Market Value	%
PRUDENCE CRANDALL III D - LIQUID SRATEGY	Hedge Fund-of-Funds	389,578,681	16.08%
PRUDENCE CRANDALL II PRISMA	Hedge Fund-of-Funds	333,672,871	13.77%
PRUDENCE CRANDALL III ROCK CREEK	Hedge Fund-of-Funds	325,958,511	13.45%
PRUDENCE CRANDALL IV K2	Hedge Fund-of-Funds	321,674,793	13.28%
PRUDENCE CRANDALL IV LLC-C	Hedge Fund-of-Funds	301,518,897	12.45%
PRUDENCE CRANDALL III LLC-C	Hedge Fund-of-Funds	293,058,881	12.10%
THOMAS WELLES FUND I	Hedge Fund-of-Funds	89,394,492	3.69%
THOMAS WELLES FUND II	Hedge Fund-of-Funds	88,572,379	3.66%
ARCLIGHT VI	Real Assets	77,051,205	3.18%
ARCLIGHT ENERGY PARTNERS FUND V	Real Assets	49,473,619	2.04%
Top Ten		\$2,269,954,328	93.69%

FAIR VALUE AIF

\$2,422,737,099

# MUTUAL EQUITY FUND

Security Name	Industry Sector	Market Value	%
APPLE INC	INFORMATION TECHNOLOGY	226,909,689	2.92%
MICROSOFT CORP	INFORMATION TECHNOLOGY	201,686,244	2.60%
AMAZON.COM INC	CONSUMER DISCR	195,601,085	2.52%
FACEBOOK INC	INFORMATION TECHNOLOGY	134,587,198	1.73%
EXXON MOBIL CORP	ENERGY	100,344,541	1.29%
JP MORGAN CHASE & CO	FINANCIALS	98,141,604	1.26%
ALPHABET INC-CL C	INFORMATION TECHNOLOGY	96,402,201	1.24%
ALPHABET INC-CL A	INFORMATION TECHNOLOGY	95,523,828	1.23%
JOHNSON & JOHNSON	HEALTH CARE	81,038,739	1.04%
WELLS FARGO & CO	FINANCIALS	74,401,921	0.96%
Top Ten		\$1,304,637,050	16.81%
FAIR VALUE MEF		\$7,760,012,682	

#### **COMBINED INVESTMENT FUNDS** TOP TEN HOLDINGS\* BY FUND AT JUNE 30, 2018 (Continued)

## **CORE FIXED INCOME FUND**

Security Name	Coupon	Maturity	Security Type	Market Value	%
FNMA TBA	4.000	7/1/2048	U.S. Govt/Agency	37,760,528	1.15%
FHLMC TBA	3.500	7/1/2048	U.S. Govt/Agency	35,450,590	1.08%
U S TREASURY NOTE	3.500	9/30/2019	U.S. Govt/Agency	24,954,294	0.76%
GNMA TBA	1.375	7/20/2048	U.S. Govt/Agency	22,960,941	0.70%
U S TREASURY NOTE	1.875	8/31/2019	U.S. Govt/Agency	22,342,946	0.68%
U S TREASURY NOTE	1.250	12/31/2019	U.S. Govt/Agency	22,235,806	0.68%
U S TREASURY NOTE	2.875	5/31/2025	U.S. Govt/Agency	21,366,313	0.65%
U S TREASURY NOTE	1.625	3/31/2022	U.S. Govt/Agency	19,624,495	0.60%
U S TREASURY NOTE	1.875	6/30/2021	U.S. Govt/Agency	18,136,513	0.55%
SINGAPORE GOVERNMENT BOND	1.125	10/1/2019	Singapore Govt/Agency	18,018,266	0.55%

Top Ten

FAIR VALUE CFIF

\$242,850,693 7.38%

\$3,292,563,253

# INFLATION LINKED BOND FUND

Security Name	Coupon	Maturity	Security Type	Market Value	%
US TREAS-CPI INFLAT	3.875	4/15/2029	U.S. Govt/Agency	68,820,250	4.98%
US TREAS-CPI INFLAT	0.125	7/15/2022	U.S. Govt/Agency	54,862,660	3.97%
US TREAS-CPI INFLAT	2.375	1/15/2027	U.S. Govt/Agency	54,808,441	3.96%
ITALY BUONI POLIENNALI DE REGS	2.600	9/15/2023	Italy Govt/Agency	56,875,656	4.11%
US TREAS-CPI INFLAT	0.750	2/15/2042	U.S. Govt/Agency	52,512,551	3.80%
US TREAS-CPI INFLAT	1.125	1/15/2021	U.S. Govt/Agency	43,015,573	3.11%
UNITED KINGDOM GILT INFLA REGS	0.125	3/22/2044	U.K. Govt/Agency	41,288,878	2.99%
NEW ZEALAND GOVT IN REGS	3.000	9/20/2030	New Zealand Govt/Agency	35,950,387	2.60%
US TREAS-CPI INFLAT	0.125	4/15/2022	U.S. Govt/Agency	33,778,377	2.44%
MEXICAN UDIBONOS	4.000	11/15/2040	Mexico Govt/Agency	23,167,704	1.68%
Top Ten				\$465,080,479	33.64%

FAIR VALUE ILBF

\$1,382,416,735

## **EMERGING MARKET DEBT FUND**

Security Name	Coupon	Maturity	Market Value	%
BRAZIL NOTAS DO TESOURO NACIO	ON 10.000	1/1/2021	39,709,525	2.15%
MEXICAN BONOS	10.000	12/5/2024	27,417,050	1.49%
REPUBLIC OF SOUTH AFRICA GOVE	R 7.000	2/28/2031	26,264,324	1.42%
COLOMBIAN TES	7.000	5/4/2022	23,817,748	1.29%
COLOMBIAN TES	10.000	7/24/2024	18,477,017	1.00%
RUSSIAN FEDERAL BOND - OFZ	8.150	2/3/2027	18,359,629	1.00%
ARGENTINE REPUBLIC GOVERNME	NT 7.500	4/22/2026	17,603,931	0.95%
BRAZIL NOTAS DO TESOURO NACIO	ON 10.000	1/1/2023	17,091,923	0.93%
JPMORGAN CHASE BANK NA 144A	8.375	9/17/2026	16,130,070	0.87%
RUSSIAN FEDERAL BOND - OFZ	7.600	4/14/2021	15,233,210	0.83%
Top Ten			\$220,104,429	11.93%
FAIR VALUE EMDF			\$1,844,542,809	

## COMBINED INVESTMENT FUNDS TOP TEN HOLDINGS\* BY FUND AT JUNE 30, 2018 (Continued)

ecurity Name	Coupon	Maturity	Market Value	%
J S TREASURY BILL	0.000	9/6/2018	19,931,200	0.94%
J S TREASURY BILL	0.000	11/15/2018	14,886,600	0.71%
J S TREASURY NOTE	1.250	5/31/2019	11,285,347	0.53%
NDONESIA GOVERNMENT INTE 144A	5.875	1/15/2024	9,441,770	0.45%
POLARIS INTERMEDIATE CORP 144A	8.500	12/1/2022	9,487,964	0.45%
ALTICE FRANCE SA/FRANCE 144A	6.000	5/15/2022	8,746,445	0.41%
TENET HEALTHCARE CORP	6.875	11/15/2031	8,190,047	0.39%
NEW STAR METALS INC	9.000	6/22/2022	8,179,421	0.39%
MEG ENERGY CORP 144A	7.000	3/31/2024	8,130,056	0.39%
NEW ALBERTSONS LP	7.450	8/1/2029	8,099,231	0.38%
Гор Ten			\$106,378,081	5.04%
FAIR VALUE HYDF		:	\$2,109,564,213	
DEVELOPED MARKET INTER		L STOCK FUND		
Security Name		Country	Market Value	%
ISHARES CORE MSCI EAFE ETF		Multiple Domicile	556,352,226	7.87%
NESTLE SA		Switzerland	86,435,658	1.22%
ROCHE HOLDING AG		Switzerland	72,589,764	1.03%
NOVARTIS AG		Switzerland	47,599,689	0.67%
SAP SE		Germany	45,419,353	0.64%
BAYER AG		Germany	45,084,855	0.64%
NOVO NORDISK A/S		Denmark	43,143,999	0.61%
AIA GROUP LTD		Hong Kong	42,166,399	0.60%
DBS GROUP HOLDINGS LTD		Singapore	38,769,433	0.55%
LVMH MOET HENNESSY LOUIS VUITT		France	37,647,375	0.53%
Top Ten			\$1,015,208,749	14.36%
FAIR VALUE DMISF			\$7,071,927,935	
EMERGING MARKET INTERN	IATIONAL		Market Value	%
Security Name		Country		70
	 F	MULTIPLE DOMICILE	878.969.563	
SHARES CORE MSCI EMERGING ET	F	MULTIPLE DOMICILE	878,969,563 146.824.514	31.62%
ISHARES CORE MSCI EMERGING ET TENCENT HOLDINGS LTD	F	MULTIPLE DOMICILE CHINA	146,824,514	31.62% 5.28%
ISHARES CORE MSCI EMERGING ET TENCENT HOLDINGS LTD SAMSUNG ELECTRONICS CO LTD	F	MULTIPLE DOMICILE CHINA SOUTH KOREA	146,824,514 130,190,950	31.62% 5.28% 4.68%
ISHARES CORE MSCI EMERGING ET TENCENT HOLDINGS LTD SAMSUNG ELECTRONICS CO LTD ALIBABA GROUP HOLDING LTD		MULTIPLE DOMICILE CHINA SOUTH KOREA CHINA	146,824,514 130,190,950 111,528,948	31.62% 5.28% 4.68% 4.01%
ISHARES CORE MSCI EMERGING ET TENCENT HOLDINGS LTD SAMSUNG ELECTRONICS CO LTD ALIBABA GROUP HOLDING LTD TAIWAN SEMICONDUCTOR MANUFA	СТИ	MULTIPLE DOMICILE CHINA SOUTH KOREA CHINA TAIWAN	146,824,514 130,190,950 111,528,948 96,755,872	31.62% 5.28% 4.68% 4.01% 3.48%
ISHARES CORE MSCI EMERGING ET TENCENT HOLDINGS LTD SAMSUNG ELECTRONICS CO LTD ALIBABA GROUP HOLDING LTD TAIWAN SEMICONDUCTOR MANUFA CHINA CONSTRUCTION BANK CORP	СТИ	MULTIPLE DOMICILE CHINA SOUTH KOREA CHINA TAIWAN CHINA	146,824,514 130,190,950 111,528,948 96,755,872 77,226,461	31.62% 5.28% 4.68% 4.01% 3.48% 2.78%
ISHARES CORE MSCI EMERGING ET TENCENT HOLDINGS LTD SAMSUNG ELECTRONICS CO LTD ALIBABA GROUP HOLDING LTD TAIWAN SEMICONDUCTOR MANUFA CHINA CONSTRUCTION BANK CORP LUKOIL PJSC	СТИ	MULTIPLE DOMICILE CHINA SOUTH KOREA CHINA TAIWAN CHINA RUSSIA	146,824,514 130,190,950 111,528,948 96,755,872 77,226,461 51,515,378	31.62% 5.28% 4.68% 4.01% 3.48% 2.78% 1.85%
ISHARES CORE MSCI EMERGING ET TENCENT HOLDINGS LTD SAMSUNG ELECTRONICS CO LTD ALIBABA GROUP HOLDING LTD TAIWAN SEMICONDUCTOR MANUFA CHINA CONSTRUCTION BANK CORP LUKOIL PJSC AIA GROUP LTD	СТИ	MULTIPLE DOMICILE CHINA SOUTH KOREA CHINA TAIWAN CHINA RUSSIA HONG KONG	146,824,514 130,190,950 111,528,948 96,755,872 77,226,461 51,515,378 49,557,050	31.62% 5.28% 4.68% 4.01% 3.48% 2.78% 1.85% 1.78%
ISHARES CORE MSCI EMERGING ET TENCENT HOLDINGS LTD SAMSUNG ELECTRONICS CO LTD ALIBABA GROUP HOLDING LTD TAIWAN SEMICONDUCTOR MANUFA CHINA CONSTRUCTION BANK CORP LUKOIL PJSC AIA GROUP LTD HDFC BANK LTD	СТИ	MULTIPLE DOMICILE CHINA SOUTH KOREA CHINA TAIWAN CHINA RUSSIA HONG KONG INDIA	146,824,514 130,190,950 111,528,948 96,755,872 77,226,461 51,515,378 49,557,050 46,689,178	31.62% 5.28% 4.68% 4.01% 3.48% 2.78% 1.85% 1.78% 1.68%
ISHARES CORE MSCI EMERGING ET TENCENT HOLDINGS LTD SAMSUNG ELECTRONICS CO LTD ALIBABA GROUP HOLDING LTD TAIWAN SEMICONDUCTOR MANUFA CHINA CONSTRUCTION BANK CORP LUKOIL PJSC AIA GROUP LTD HDFC BANK LTD INFOSYS LTD	СТИ	MULTIPLE DOMICILE CHINA SOUTH KOREA CHINA TAIWAN CHINA RUSSIA HONG KONG	146,824,514 130,190,950 111,528,948 96,755,872 77,226,461 51,515,378 49,557,050 46,689,178 43,841,852	31.62% 5.28% 4.68% 4.01% 3.48% 2.78% 1.85% 1.78% 1.68% 1.58%
Security Name ISHARES CORE MSCI EMERGING ET TENCENT HOLDINGS LTD SAMSUNG ELECTRONICS CO LTD ALIBABA GROUP HOLDING LTD TAIWAN SEMICONDUCTOR MANUFA CHINA CONSTRUCTION BANK CORP LUKOIL PJSC AIA GROUP LTD HDFC BANK LTD INFOSYS LTD Top Ten	СТИ	MULTIPLE DOMICILE CHINA SOUTH KOREA CHINA TAIWAN CHINA RUSSIA HONG KONG INDIA	146,824,514 130,190,950 111,528,948 96,755,872 77,226,461 51,515,378 49,557,050 46,689,178	31.62% 5.28% 4.68% 4.01% 3.48% 2.78% 1.85% 1.78% 1.68% 1.58%
ISHARES CORE MSCI EMERGING ET TENCENT HOLDINGS LTD SAMSUNG ELECTRONICS CO LTD ALIBABA GROUP HOLDING LTD TAIWAN SEMICONDUCTOR MANUFA CHINA CONSTRUCTION BANK CORP LUKOIL PJSC AIA GROUP LTD HDFC BANK LTD INFOSYS LTD	СТИ	MULTIPLE DOMICILE CHINA SOUTH KOREA CHINA TAIWAN CHINA RUSSIA HONG KONG INDIA	146,824,514 130,190,950 111,528,948 96,755,872 77,226,461 51,515,378 49,557,050 46,689,178 43,841,852	31.62% 5.28% 4.68% 4.01% 3.48% 2.78% 1.85% 1.78% 1.68%

### COMBINED INVESTMENT FUNDS TOP TEN HOLDINGS\* BY FUND AT JUNE 30, 2018 (Continued)

# **REAL ESTATE FUND**

Partnership Name	Partnership Type	Market Value	%
PRIME PROPERTY FUND	Core	274,974,063	12.04%
CORNERSTONE PATRIOT FUND	Core	253,473,430	11.10%
HART REALTY ADVISORS	Core	218,377,677	9.56%
PRISA	Core	207,845,289	9.10%
AMERICAN REALTY ADVISORS	Core	165,301,184	7.24%
USAA EAGLE RE FUND	Core	140,600,644	6.16%
CLARION LION INDUSTRIAL TRUST	Value Added	130,172,102	5.70%
JPM CHASE STRATEGIC PROP FD	Core	104,322,514	4.57%
UBS TRUMBULL PROPERTY FUND	Core	89,494,498	3.92%
UBS TRUMBULL PROP G%I (TPG)	Value Added	70,749,203	3.10%
Top Ten		\$1,655,310,603	72.50%

FAIR VALUE REF

\$2,283,139,537

Partnership Name	Partnership Type	Market Value	%
FAIRVIEW CONSTITUTION III	Fund of Funds	311,760,899	11.49%
FAIRVIEW CONSTITUTION IV	Fund of Funds	167,477,196	6.17%
APOLLO INVESTMENT FUND VIII	Special Situations	111,757,366	4.12%
YUCAIPA AMERICAN ALLIANCE FUND	Buyout	98,652,129	3.64%
FS EQUITY PARTNERS VI	Buyout	90,812,149	3.35%
NUTMEG OPPORTUNITIES FUND	Fund of Funds	83,933,116	3.09%
VISTA VI	Buyout	81,666,443	3.01%
STEPSTONE PIONEER CAPITAL II	Fund of Funds	80,469,570	2.97%
M 2 CT EMERGING	Fund of Funds	74,873,926	2.76%
LEVINE LEICHTMAN CAPITAL PARTNERS	Special Situations	71,613,885	2.64%
Top Ten	·	1,173,016,679	43.25%
		¢0 710 365 156	

#### FAIR VALUE PIF

\$2,712,365,156

\* A complete list of portfolio holdings is available upon request from the Office of the Treasurer, in accordance with the Connecticut Freedom of Information Act..

## SCHEDULE OF EXPENSES IN EXCESS OF \$5,000 <sup>(1)</sup> FISCAL YEAR ENDED JUNE 30, 2018

Name of Firm	Description of Services	Contract	Aggregate Comp. Paid	Status at June 30,
NAME OF FIRM	Description of Services	Date	in FY 2018	2018
Domestic Equity Investment Advisory Services				
Bivium Capital Partners, LLC	Equity Advisor	Jul-05	\$2,995,488	Active
Capital Prospects LLC	Equity Advisor	Jul-05	2,085,324	Active
FIS Group Inc.	Equity Advisor	Jul-05	1,725,404	Active
Frontier Capital Management Co.LLC	Equity Advisor	Oct-10	3,227,994	Active
State Street Global Advisors	Equity Advisor	Mar-96	243,744	Active
T. Rowe Price Associates. Inc.	Equity Advisor	Nov-08	5,446,248	Active
Total Domestic Equity Advisor Compensation			\$15,724,201	
Core Fixed Income Investment Advisory Serve				
Blackrock Financial Management	Core Income Advisor	Mar-96	\$957,925	Active
Colchester Global investors Limited	Core Income Advisor	May-09	620,633	Active
Goodwin Capital Advisors(Phoenix)	Core Income Advisor	Nov-97	556,037	Active
Pacific Investment Management Co. LLC	Core Income Advisor	Mar-09	584,123	Active
Payden & Rygel	Core Income Advisor	Mar-09	546,329	Active
Progress Investment Management	Core Income Advisor	Jul-05	416,017	Active
State Street Global Advisors	Core Income Advisor	Mar-96	100,000	Active
Wellington Asset Management	Core Income Advisor	Nov-97	874,202	Active
Total Core Fixed Income Advisor Compensation			\$4,655,267	
-				
<i>Inflation Linked Bond Investment Advisory Se</i> BlackRock Financial Management, Inc	Inflation Income Advisor	Sep-14	\$793,449	Active
Colchester Global Investors Limited	Inflation Income Advisor	Nov-14	1,222,212	Active
New Century Advisors, LLC	Inflation Income Advisor	Sep-14	403,256	Active
Total Inflation Linked Bond Advisor Compens			\$2,418,917	710170
•			. , ,	
Emerging Market Debt Investment Advisory S		0 10	<b>\$0.570.004</b>	A
Ashmore Investment Management Limited	Emerging Market Income Advisor		\$2,579,091	Active
Lazard Asset Management LLC	Emerging Market Income Advisor		131,814	Active
Payden & Rygel	Emerging Market Income Advisor	Jul-16	2,468,210	Active
FIAM, LLC Total Emerging Market Debt Advisor Compens	Emerging Market Income Advisor	Oct-07	2.027.032 \$7,201,147	Active
	Sation		\$7,201,147	
High Yield Debt Advisory Services				
Alliance Bernstein L.P.	High Yield Income Advisor	Nov-16	\$1,025,342	Active
Columbia	High Yield Income Advisor	Feb-17	1,340,472	Active
DDJ Capital Management	High Yield Income Advisor	Nov-16	1,070,659	Active
Loomis Sayles & Co., Inc.	High Yield Income Advisor	Mar-96	786,435	Active
Nomura	High Yield Income Advisor	Feb-17	1,780,726	Active
Shenkman Capital Management Total High Yield Debt Advisor Compensation	High Yield Income Advisor	Dec-07	915,627 <b>\$6,919,261</b>	Active
			ψ0,313,201	
Liquidity Fund Advisory Services	Line data - Tree di A. L. 1	May 00	057 000	A
State Street Global Advisors Total Liquidity Fund Advisor Compensation	Liquidity Fund Advisor	Mar-96	357,320 <b>\$357,320</b>	Active
			φ301,32U	
Developed Market International Equity Investr		_		
Acadian Asset Management	International Equity Advisor	Sep-06	\$2,660,821	Active
AQR Capital Management, LLC	International Equity Advisor	Sep-06	3,453,143	Active
Dimensional Fund Advisors LP	International Equity Advisor	Mar-09	2,327,583	Active
First Quadrant LP	International Equity Advisor	Jul-14	4,556,402	Active
Grantham, Mayo, Van Otterloo & Co	International Equity Advisor	Mar-96	885,994	Terminated
MFS Institutional Advisors	International Equity Advisor	Aug-03	2,939,866	Active
Progress Investment Management	International Equity Advisor	Jul-05	996,421	Active
Schroder Investment Management	International Equity Advisor	Sep-03	2,270,676	Active
State Street Global Advisors	International Equity Advisor	Mar-96	1,134,189	Active
William Blair & Company, LLC	International Equity Advisor	Mar-09	2,886,855	Active
Total Developed Market International Equity A			\$24,111,949	

# SCHEDULE OF EXPENSES IN EXCESS OF \$5,000 <sup>(1)</sup> (Continued) FISCAL YEAR ENDED JUNE 30, 2018

Name of Firm	Description of Services	Contract Date	Aggregate Comp. Paid in FY 2018	Status at June 30, 2018
Emerging Market International Equity Advisory	•			
Aberdeen Asset Management INC	International Equity Advisor	Jul-09	\$3,717,109	Terminated
Grantham, Mayo, Van Otterloo & Co	International Equity Advisor	Feb-00	1,227,025	Terminated
Schroder Investment Management	International Equity Advisor	Jan-10	7,833,438	Active
Total Emerging Market International Equity Adv			\$12,777,573	7.00170
Alternative Investment Advisory Services (2)				
ArcLight Energy Partners Fund VI	Alternative Investment Advisor	Jul-15	\$1,237,382	Active
EIG Energy Fund XV, LP	Alternative Investment Advisor	Apr-11	384,036	Active
Total Alternative Investment Advisor Compensation			\$1,621,418	7101110
Real Estate Investment Advisory Services (2)				
American Realty Advisors	Real Estate Advisor	Mar-12	\$566,242	Active
Blackstone Real Estate Advisors Europe	Real Estate Advisor	Nov-08	212,725	Active
Blackstone Real Estate Partners Europe V	Real Estate Advisor	Jun-17	1,000,000	Active
Blackstone Real Estate Partners VI	Real Estate Advisor	Aug-07	108,207	Active
Blackstone Real Estate Partners VIII	Real Estate Advisor	Mar-15	1,500,000	Active
Clarion Lion Industrial Trust LP	Real Estate Advisor	Sep-14	1,327,904	Active
Cornerstone Patriot Fund, LP	Real Estate Advisor	Dec-07	1,611,788	Active
Crow Holdings Capital Partners LLC	Real Estate Advisor	Nov-14	819,360	Active
Cypress Retail Fund LP	Real Estate Advisor	May-13	467,487	Active
Gerding Elden Fund Management, LP	Real Estate Advisor	May-14	903,387	Active
Hart Realty Advisors, Inc. (CORE)	Real Estate Advisor	Nov-11	1,490,213	Active
JP Morgan Investment Mgmt.	Real Estate Advisor	May-14	699,930	Active
Rockwood Capital Partners Fund VII	Real Estate Advisor	Jun-06	7,105	Active
UBS Trumbull Property Growth & Income Fund LP	Real Estate Advisor	Nov-13	696,157	Active
UBS Trumbull Property Income Fund, LP	Real Estate Advisor	Nov-13	1,169,529	Active
Total Real Estate Advisor Compensation			\$12,580,033	
Private Investment Advisory Services (2)				
AIG Altaris Healthcare Partners III, LP	Private Investment Advisor	Oct-07	\$346,977	Active
AIG Altaris Healthcare Partners IV, LP	Private Investment Advisor	Jan-17	616,413	Active
Apollo Advisors VIII, LP	Private Investment Advisor	Nov-13	838,028	Active
Audax Mezzanine Fund III, LP	Private Investment Advisor	May-10	401,447	Active
BC European Capital X	Private Investment Advisor	May-17	906,491	
				Active
Clearlake Capital Partners III, LP	Private Investment Advisor	Nov-12		Active Active
Clearlake Capital Partners III, LP Clearlake Capital Partners IV, LP	Private Investment Advisor Private Investment Advisor	Nov-12 Aug-15	16,923	Active
Clearlake Capital Partners IV, LP	Private Investment Advisor	Aug-15	16,923 639,135	Active Active
Clearlake Capital Partners IV, LP Clearlake Capital Partners V, LP			16,923 639,135 668,021	Active
Clearlake Capital Partners IV, LP Clearlake Capital Partners V, LP Connecticut Growth Capital, LLC	Private Investment Advisor Private Investment Advisor	Aug-15 Jan-18	16,923 639,135	Active Active Active
Clearlake Capital Partners IV, LP Clearlake Capital Partners V, LP Connecticut Growth Capital, LLC Constitution Fund V, LLC	Private Investment Advisor Private Investment Advisor Private Investment Advisor	Aug-15 Jan-18 Dec-15	16,923 639,135 668,021 191,866	Active Active Active Active
Clearlake Capital Partners IV, LP Clearlake Capital Partners V, LP Connecticut Growth Capital, LLC Constitution Fund V, LLC Court Square Capital Partners II	Private Investment Advisor Private Investment Advisor Private Investment Advisor Private Investment Advisor	Aug-15 Jan-18 Dec-15 Dec-16	16,923 639,135 668,021 191,866 975,000	Active Active Active Active Active
Clearlake Capital Partners IV, LP Clearlake Capital Partners V, LP Connecticut Growth Capital, LLC Constitution Fund V, LLC Court Square Capital Partners II Court Square Capital Partners III	Private Investment Advisor Private Investment Advisor Private Investment Advisor Private Investment Advisor Private Investment Advisor	Aug-15 Jan-18 Dec-15 Dec-16 Apr-12	16,923 639,135 668,021 191,866 975,000 66,171 750,000	Active Active Active Active Active Active
Clearlake Capital Partners IV, LP Clearlake Capital Partners V, LP Connecticut Growth Capital, LLC Constitution Fund V, LLC Court Square Capital Partners II Court Square Capital Partners III CT Horizon Legacy Fund LP Total	Private Investment Advisor Private Investment Advisor Private Investment Advisor Private Investment Advisor Private Investment Advisor Private Investment Advisor	Aug-15 Jan-18 Dec-15 Dec-16 Apr-12 May-13	16,923 639,135 668,021 191,866 975,000 66,171	Active Active Active Active Active Active Active
Clearlake Capital Partners IV, LP Clearlake Capital Partners V, LP Connecticut Growth Capital, LLC Constitution Fund V, LLC Court Square Capital Partners II Court Square Capital Partners III CT Horizon Legacy Fund LP Total Fairview Constitution Management, LLC	Private Investment Advisor Private Investment Advisor Private Investment Advisor Private Investment Advisor Private Investment Advisor Private Investment Advisor Private Investment Advisor	Aug-15 Jan-18 Dec-15 Dec-16 Apr-12 May-13 Jun-08	16,923 639,135 668,021 191,866 975,000 66,171 750,000 37,500	Active Active Active Active Active Active Active Active
Clearlake Capital Partners IV, LP Clearlake Capital Partners V, LP Connecticut Growth Capital, LLC Constitution Fund V, LLC Court Square Capital Partners II Court Square Capital Partners III CT Horizon Legacy Fund LP Total Fairview Constitution Management, LLC Fairview Constitution II, LP	Private Investment Advisor Private Investment Advisor	Aug-15 Jan-18 Dec-15 Dec-16 Apr-12 May-13 Jun-08 May-05	16,923 639,135 668,021 191,866 975,000 66,171 750,000 37,500 56,010	Active Active Active Active Active Active Active Active Active
Clearlake Capital Partners IV, LP Clearlake Capital Partners V, LP Connecticut Growth Capital, LLC Constitution Fund V, LLC Court Square Capital Partners II Court Square Capital Partners III CT Horizon Legacy Fund LP Total Fairview Constitution Management, LLC Fairview Constitution II, LP Fairview Constitution III, LP	Private Investment Advisor Private Investment Advisor	Aug-15 Jan-18 Dec-15 Dec-16 Apr-12 May-13 Jun-08 May-05 May-05	16,923 639,135 668,021 191,866 975,000 66,171 750,000 37,500 56,010 143,191	Active Active Active Active Active Active Active Active Active Active
Clearlake Capital Partners IV, LP Clearlake Capital Partners V, LP Connecticut Growth Capital, LLC Constitution Fund V, LLC Court Square Capital Partners II Court Square Capital Partners III CT Horizon Legacy Fund LP Total Fairview Constitution Management, LLC Fairview Constitution II, LP Fairview Constitution III, LP Fairview Constitution IV, LP	Private Investment Advisor Private Investment Advisor	Aug-15 Jan-18 Dec-15 Dec-16 Apr-12 May-13 Jun-08 May-05 May-05 Jun-07	16,923 639,135 668,021 191,866 975,000 66,171 750,000 37,500 56,010 143,191 525,000	Active Active Active Active Active Active Active Active Active Active Active
Clearlake Capital Partners IV, LP Clearlake Capital Partners V, LP Connecticut Growth Capital, LLC Constitution Fund V, LLC Court Square Capital Partners II Court Square Capital Partners III CT Horizon Legacy Fund LP Total Fairview Constitution Management, LLC Fairview Constitution II, LP Fairview Constitution III, LP Fairview Constitution IV, LP FS Equity Partners V, LP	Private Investment Advisor Private Investment Advisor	Aug-15 Jan-18 Dec-15 Dec-16 Apr-12 May-13 Jun-08 May-05 May-05 Jun-07 Dec-11	16,923 639,135 668,021 191,866 975,000 66,171 750,000 37,500 56,010 143,191 525,000 975,000	Active Active Active Active Active Active Active Active Active Active Active Active
Clearlake Capital Partners IV, LP Clearlake Capital Partners V, LP Connecticut Growth Capital, LLC Constitution Fund V, LLC Court Square Capital Partners II Court Square Capital Partners III Court Square Capital Partners III CT Horizon Legacy Fund LP Total Fairview Constitution Management, LLC Fairview Constitution II, LP Fairview Constitution III, LP Fairview Constitution IV, LP FS Equity Partners V, LP FS Equity Partners VI, LP	Private Investment Advisor Private Investment Advisor	Aug-15 Jan-18 Dec-15 Dec-16 Apr-12 May-13 Jun-08 May-05 Jun-07 Dec-11 Mar-04	16,923 639,135 668,021 191,866 975,000 66,171 750,000 37,500 56,010 143,191 525,000 975,000 13,459	Active Active Active Active Active Active Active Active Active Active Active Active Active
Clearlake Capital Partners IV, LP Clearlake Capital Partners V, LP Connecticut Growth Capital, LLC Constitution Fund V, LLC Court Square Capital Partners II Court Square Capital Partners III Court Square Capital Partners III CT Horizon Legacy Fund LP Total Fairview Constitution Management, LLC Fairview Constitution II, LP Fairview Constitution III, LP Fairview Constitution IV, LP FS Equity Partners V, LP FS Equity Partners VI, LP Garmark Partners, II LP GCM Grosvenor - CT Cleantech	Private Investment Advisor Private Investment Advisor	Aug-15 Jan-18 Dec-15 Dec-16 Apr-12 May-13 Jun-08 May-05 May-05 Jun-07 Dec-11 Mar-04 Mar-04 Jun-95	16,923 639,135 668,021 191,866 975,000 66,171 750,000 37,500 56,010 143,191 525,000 975,000 13,459 175,163 37,034	Active Active Active Active Active Active Active Active Active Active Active Active Active Active
Clearlake Capital Partners IV, LP Clearlake Capital Partners V, LP Connecticut Growth Capital, LLC Constitution Fund V, LLC Court Square Capital Partners II Court Square Capital Partners III Court Square Capital Partners III CT Horizon Legacy Fund LP Total Fairview Constitution Management, LLC Fairview Constitution II, LP Fairview Constitution III, LP Fairview Constitution IV, LP FS Equity Partners V, LP FS Equity Partners VI, LP Garmark Partners, II LP	Private Investment Advisor Private Investment Advisor	Aug-15 Jan-18 Dec-15 Dec-16 Apr-12 May-13 Jun-08 May-05 Jun-07 Dec-11 Mar-04 Mar-04	16,923 639,135 668,021 191,866 975,000 66,171 750,000 37,500 56,010 143,191 525,000 975,000 13,459 175,163	Active Active Active Active Active Active Active Active Active Active Active Active Active Active
Clearlake Capital Partners IV, LP Clearlake Capital Partners V, LP Connecticut Growth Capital, LLC Constitution Fund V, LLC Court Square Capital Partners II Court Square Capital Partners III Court Square Capital Partners III CT Horizon Legacy Fund LP Total Fairview Constitution Management, LLC Fairview Constitution II, LP Fairview Constitution II, LP Fairview Constitution IV, LP FS Equity Partners V, LP FS Equity Partners VI, LP Garmark Partners, II LP GCM Grosvenor - CT Cleantech (formerly CS/CT Cleantech)	Private Investment Advisor Private Investment Advisor	Aug-15 Jan-18 Dec-15 Dec-16 Apr-12 May-13 Jun-08 May-05 May-05 Jun-07 Dec-11 Mar-04 Mar-04 Jun-95 Jul-07 Mar-14	16,923 639,135 668,021 191,866 975,000 66,171 750,000 37,500 56,010 143,191 525,000 975,000 13,459 175,163 37,034	Active Active Active Active Active Active Active Active Active Active Active Active Active Active
Clearlake Capital Partners IV, LP Clearlake Capital Partners V, LP Connecticut Growth Capital, LLC Constitution Fund V, LLC Court Square Capital Partners II Court Square Capital Partners III Court Square Capital Partners III CT Horizon Legacy Fund LP Total Fairview Constitution Management, LLC Fairview Constitution II, LP Fairview Constitution II, LP Fairview Constitution IV, LP FS Equity Partners V, LP FS Equity Partners VI, LP Garmark Partners, II LP GCM Grosvenor - CT Cleantech (formerly CS/CT Cleantech) GenNx360 Capital Partners II, LP	Private Investment Advisor Private Investment Advisor	Aug-15 Jan-18 Dec-15 Dec-16 Apr-12 May-13 Jun-08 May-05 May-05 Jun-07 Dec-11 Mar-04 Mar-04 Jun-95 Jul-07	16,923 639,135 668,021 191,866 975,000 66,171 750,000 37,500 56,010 143,191 525,000 975,000 13,459 175,163 37,034	Active Active Active Active Active Active Active Active Active Active Active Active Active Active Active Active
Clearlake Capital Partners IV, LP Clearlake Capital Partners V, LP Connecticut Growth Capital, LLC Constitution Fund V, LLC Court Square Capital Partners II Court Square Capital Partners III Court Square Capital Partners III CT Horizon Legacy Fund LP Total Fairview Constitution Management, LLC Fairview Constitution II, LP Fairview Constitution II, LP Fairview Constitution IV, LP FS Equity Partners V, LP FS Equity Partners VI, LP Garmark Partners, II LP GCM Grosvenor - CT Cleantech	Private Investment Advisor Private Investment Advisor	Aug-15 Jan-18 Dec-15 Dec-16 Apr-12 May-13 Jun-08 May-05 May-05 Jun-07 Dec-11 Mar-04 Mar-04 Jun-95 Jul-07 Mar-14	16,923 639,135 668,021 191,866 975,000 66,171 750,000 37,500 56,010 143,191 525,000 975,000 13,459 175,163 37,034 69,946 265,892	Active Active Active Active Active Active Active Active Active Active Active Active Active Active Active Active Active
Clearlake Capital Partners IV, LP Clearlake Capital Partners V, LP Connecticut Growth Capital, LLC Constitution Fund V, LLC Court Square Capital Partners II Court Square Capital Partners III Court Square Capital Partners III CT Horizon Legacy Fund LP Total Fairview Constitution Management, LLC Fairview Constitution II, LP Fairview Constitution II, LP Fairview Constitution IV, LP FS Equity Partners V, LP FS Equity Partners VI, LP Garmark Partners, II LP GCM Grosvenor - CT Cleantech (formerly CS/CT Cleantech) GenNx360 Capital Partners II, LP JFL Equity Investors IV, L.P.	Private Investment Advisor Private Investment Advisor	Aug-15 Jan-18 Dec-15 Dec-16 Apr-12 May-13 Jun-08 May-05 May-05 Jun-07 Dec-11 Mar-04 Mar-04 Jun-95 Jul-07 Mar-14 Sep-16	16,923 639,135 668,021 191,866 975,000 66,171 750,000 37,500 56,010 143,191 525,000 975,000 13,459 175,163 37,034 69,946 265,892 693,854	Active Active Active Active Active Active Active Active Active Active Active Active Active Active Active Active Active
Clearlake Capital Partners IV, LP Clearlake Capital Partners V, LP Connecticut Growth Capital, LLC Constitution Fund V, LLC Court Square Capital Partners II Court Square Capital Partners III Court Square Capital Partners III CT Horizon Legacy Fund LP Total Fairview Constitution Management, LLC Fairview Constitution II, LP Fairview Constitution II, LP Fairview Constitution IV, LP FS Equity Partners V, LP FS Equity Partners VI, LP Garmark Partners, II LP GCM Grosvenor - CT Cleantech (formerly CS/CT Cleantech) GenNx360 Capital Partners II, LP JFL Equity Investors IV, L.P. JFL Investors III, LP Leeds Equity Partners VI, LP	Private Investment Advisor Private Investment Advisor	Aug-15 Jan-18 Dec-15 Dec-16 Apr-12 May-13 Jun-08 May-05 May-05 Jun-07 Dec-11 Mar-04 Mar-04 Jun-95 Jul-07 Mar-14 Sep-16 Aug-11	16,923 639,135 668,021 191,866 975,000 66,171 750,000 37,500 56,010 143,191 525,000 975,000 13,459 175,163 37,034 69,946 265,892 693,854 587,004	Active Active Active Active Active Active Active Active Active Active Active Active Active Active Active Active Active
Clearlake Capital Partners IV, LP Clearlake Capital Partners V, LP Connecticut Growth Capital, LLC Constitution Fund V, LLC Court Square Capital Partners II Court Square Capital Partners III Court Square Capital Partners III CT Horizon Legacy Fund LP Total Fairview Constitution Management, LLC Fairview Constitution II, LP Fairview Constitution II, LP Fairview Constitution IV, LP FS Equity Partners V, LP FS Equity Partners VI, LP Garmark Partners, II LP GCM Grosvenor - CT Cleantech (formerly CS/CT Cleantech) GenNx360 Capital Partners II, LP JFL Equity Investors IV, L.P. JFL Investors III, LP Leeds Equity Partners VI, LP	Private Investment Advisor Private Investment Advisor	Aug-15 Jan-18 Dec-15 Dec-16 Apr-12 May-13 Jun-08 May-05 May-05 Jun-07 Dec-11 Mar-04 Mar-04 Jun-95 Jul-07 Mar-14 Sep-16 Aug-11 Nov-16	16,923 639,135 668,021 191,866 975,000 66,171 750,000 37,500 56,010 143,191 525,000 975,000 13,459 175,163 37,034 69,946 265,892 693,854 587,004 455,264	Active Active Active Active Active Active Active Active Active Active Active Active Active Active Active Active Active Active Active
Clearlake Capital Partners IV, LP Clearlake Capital Partners V, LP Connecticut Growth Capital, LLC Constitution Fund V, LLC Court Square Capital Partners II Court Square Capital Partners III Court Square Capital Partners III CT Horizon Legacy Fund LP Total Fairview Constitution Management, LLC Fairview Constitution II, LP Fairview Constitution II, LP Fairview Constitution IV, LP FS Equity Partners V, LP FS Equity Partners VI, LP Garmark Partners, II LP GCM Grosvenor - CT Cleantech (formerly CS/CT Cleantech) GenNx360 Capital Partners II, LP JFL Equity Investors IV, L.P.	Private Investment Advisor Private Investment Advisor	Aug-15 Jan-18 Dec-15 Dec-16 Apr-12 May-13 Jun-08 May-05 May-05 Jun-07 Dec-11 Mar-04 Mar-04 Jun-95 Jul-07 Mar-14 Sep-16 Aug-11 Nov-16 Jul-08	16,923 639,135 668,021 191,866 975,000 66,171 750,000 37,500 56,010 143,191 525,000 975,000 13,459 175,163 37,034 69,946 265,892 693,854 587,004 455,264 325,470	Active Active Active Active Active Active Active Active Active Active Active Active Active Active Active Active Active Active Active
Clearlake Capital Partners IV, LP Clearlake Capital Partners V, LP Connecticut Growth Capital, LLC Constitution Fund V, LLC Court Square Capital Partners II Court Square Capital Partners III Court Square Capital Partners III CT Horizon Legacy Fund LP Total Fairview Constitution Management, LLC Fairview Constitution II, LP Fairview Constitution II, LP Fairview Constitution IV, LP FS Equity Partners V, LP FS Equity Partners VI, LP Garmark Partners, II LP GCM Grosvenor - CT Cleantech (formerly CS/CT Cleantech) GenNx360 Capital Partners II, LP JFL Equity Investors IV, L.P. JFL Investors III, LP Leeds Equity Partners VI, LP Levine Leichtman Capital Partners IV, LP	Private Investment Advisor Private Investment Advisor	Aug-15 Jan-18 Dec-15 Dec-16 Apr-12 May-13 Jun-08 May-05 May-05 Jun-07 Dec-11 Mar-04 Mar-04 Jun-95 Jul-07 Mar-14 Sep-16 Aug-11 Nov-16 Jul-08 Aug-12	16,923 639,135 668,021 191,866 975,000 66,171 750,000 37,500 56,010 143,191 525,000 975,000 13,459 175,163 37,034 69,946 265,892 693,854 587,004 455,264 325,470 899,815	Active Active Active Active Active Active Active Active Active Active Active Active Active Active Active Active Active Active Active Active

## SCHEDULE OF EXPENSES IN EXCESS OF \$5,000 <sup>(1)</sup> (Continued) FISCAL YEAR ENDED JUNE 30, 2018

Name of Firm	Description of Services	Contract Date	Aggregate Comp. Paid in FY 2018	Status at June 30, 2018
Nutmeg Opportunities Fund II LLC	Private Investment Advisor	Apr-11	675,000	Active
Pegasus Investors IV, LP	Private Investment Advisor	Aug-07	401,453	Active
Pegasus Investors V, LP	Private Investment Advisor	May-12	483,024	Active
RFE Associates VIII, LP	Private Investment Advisor	Apr-12	356,429	Active
StepStone Pioneer Capital Buyout Fund II, LP	Private Investment Advisor	Jun-06	276,063	Active
/ista Equity Partners III, LP	Private Investment Advisor	Feb-12	88,860	Active
/ista Equity Partners IV, LP	Private Investment Advisor	May-12	837,473	Active
íista Equity Partners VI, LP	Private Investment Advisor	Nov-16	1,243,321	Active
VCAS Fund XII, LP	Private Investment Advisor	May-16	945,280	Active
Vellspring Capital Partners VI, LP	Private Investment Advisor	Mar-17	76,855	Active
′uciapa American Alliance Fund III, LP	Private Investment Advisor	Jul-15	462,624	Active
Total Private Equity Advisor Compensation			\$18,443,561	
TOTAL COMPENSATION TO INVESTMENT ADV	ISORS		\$106,810,648	
Custody Services				
Bank of New York Mellon	Master Custodian	Oct-13	\$3,262,223	Active
TOTAL CUSTODY SERVICES COMPENSATION			\$3,262,223	
CONSULTING SERVICES				
Cliffwater LLC	Consultant - Alternative Investment	Jun-13	\$535,000	Active
Hewitt EnnisKnupp, Inc.	Consulting - Pension Funds	Aug-11	68,700	Active
Maketa Investment Group	Consultant - Pension Funds	Jul-17	450,000	Active
Stepstone Group LP	Consultant -Private Investment	Oct-15	500,000	Active
The Townsend Group, Inc.	Consultant -Pension Funds	Mar-08	165,972	Terminated
TOTAL CONSULTING SERVICES COMPENSATI	ON		\$1,719,672	
MISCELLANEOUS SERVICES				
A & A Office Systems	Photocopier Lease	N/A	\$6,461	Active
Advanced Office Systems	Computer Equipment	N/A	12,427	Active
Bloomberg Finance LP	On-Line Information service	N/A	61,236	Active
CERES, Inc.	Dues	N/A	5,750	Active
Corporate Governance Consulting	Corporate Governance Services	N/A	7,590	Active
Council of Institutional Investors	Dues	N/A	19,594	Active
Day Pitney LLP	Legal Services	Mar-12	7,001	Active
Department of Public Safety	Services	N/A	8,265	Active
DLA Piper LLP	Legal Services	Nov-17	375,388	Active
Finn, Dixon & Herling	Legal Services	Mar-17	47,515	Active
nstitutional Shareholder Services	Proxy Voting	Nov-99	83,140	Active
Lexis-Nexis Corp.	Services	N/A	5,320	Active
McCarter & English	Legal Services	Dec-11	159,239	Active
Murphy Security Services LLC	Premises Security Services	May-10	11,723	Active
National Association of State Treasurers	Subscription	N/A	5,425	Active
Nossaman	Legal Services	Dec-16	49,773	Active
Office of the State Comptroller	Services	N/A	22,740	Active
Orrick, Herrington, & Sutcliffe	Legal Services	Jun-12	55,343	Active
PRIAssociation	Subscription	N/A	11,877	Active
Pullman & Comley, LLC	Legal Services	Dec-11	15,385	Active
Reinhart Boerner Vandeuren	Legal Services	Dec-11	98,172	Active
Robinson Bradshaw	Legal Services	Jun-17	82,077	Active
Shipman & Goodwin LLP	Legal Services	Mar-12	23,113	Active
Squire Patton Boggs	Legal Services	Sep-10	144,898	Active
Teigland-Hunt LLP	Legal Services	May-17	83,497	Active
TOTAL MISCELLANEOUS SERVICES COMPEN	SATION		\$1,402,947	

(1) Expenses are presented on a cash basis.

(2) Alternative Investment Management fees for the Private Investment Fund and the Real Estate Fund include capitalized fees and expensed fees Capitalized fees are part of the cost of the investment and become a component of unrealized gain (loss). Capitalized fees are disclosed in Note 1 of the Combined Investment Funds Financial Statements. Expensed fees which are not part of the cost of the investment are recorded in the Statement of Operations.

COMBINED INVESTMENT FUNDS

### LIST OF INVESTMENT ADVISORS AND NET ASSETS UNDER MANAGEMENT

JUNE 30, 2018

	Investment		Net Assets	Percent
Name of Fund	Investment		Under Management	of Fund Total
	Strategy		Management	TUIAI
LIQUIDITY (LF)				
State Street Global Advisors	Active	\$	2,003,180,852	100.00%
Other <sup>(1)</sup>			0	0.00%
SUBTOTAL LF		\$	2,003,180,852	100.00%
		¢	6 445 520 442	70.000/
Large Cap T. Rowe Price Associates	Enhanced Index	\$	6,115,530,413	78.86%
	Enhanced - Index		2,620,992,391	33.80%
State Street Global Advisors	Passive - Indexed		3,494,538,022	45.06%
All Cap	A		735,853,288	9.49%
Capital Prospects	Active		383,066,200	4.94%
FIS Group, Inc.	Active		352,787,089	4.55%
Small/Mid Cap			828,677,442	10.69%
Frontier Capital Mgmt Co	Active		456,625,174	5.89%
Bivium	Active		372,052,268	4.80%
Other (1)			74,835,954	0.97%
SUBTOTAL MEF		\$	7,754,897,097	100.00%
CORE FIXED INCOME FUND (CFIF) State Street Global Advisors	Passive	\$	1/18 05/ 951	4.78%
		Φ	148,954,851 434,307,915	4.78% 13.93%
BlackRock Financial Management, Inc.	Active		, ,	
Wellington	Active		750,871,746	24.08%
Conning-Goodwin Capital	Active		363,455,130	11.66%
Colchester	Active		297,322,850	9.54%
Payden and Rygel	Active		546,134,896	17.52%
PIMCO	Active		431,258,300	13.83%
Progress	Active		118,655,940	3.81%
Other (1)			26,653,653	0.85%
SUBTOTAL CFIF		\$	3,117,615,280	100.00%
INFLATION LINKED BOND FUND (ILBF)				
BlackRock	Active	\$	535,129,762	38.24%
Colchester	Active	Ψ	627,844,915	44.86%
New Century	Active		216,232,717	15.45%
	Active			
Other <sup>(1)</sup> SUBTOTAL ILBF		\$	20,268,798 1,399,476,192	<u> </u>
		Ψ	1,333,470,132	100.00 /8
EMERGING MARKET DEBT FUND (EMDF)				
Ashmore Investment Mgt. Ltd.	Active	\$	562,035,658	29.56%
Payden & Rygel	Active		759,912,413	39.96%
Fidelity Institutional Asset Mgt. Trust Co.	Active		472,297,829	24.84%
Lazard	Active		98,898,275	5.20%
Other (1)			8,367,161	0.44%
SUBTOTAL EMDF		\$	1,901,511,336	100.00%
	A ative	<b>~</b>	204 004 057	40.070/
Loomis Sayles & Co., Inc.	Active	\$	391,634,857	18.37%
Stone Harbor Investment Partners	Active		2,687	0.00%
Shenkman Capital Management, Inc.	Active		238,199,178	11.17%
Daktree Capital Management, L.L.C.	Active		414,963	0.02%
AllianceBernstein, LP	Active		321,676,184	15.09%
DDJ Capital Management, LLC	Active		263,149,399	12.34%
Columbia Management Investment Advisers, LLC	Active		372,909,831	17.49%
Nomura Corporation Research &				
Asset Management, Inc.	Active		469,510,728	22.02%
TCG BDC, Inc.	Active		55,926,710	2.62%
			18,406,131	0.86%
Other <sup>(1)</sup>			10,700,101	0.00/0

### COMBINED INVESTMENT FUNDS

## LIST OF INVESTMENT ADVISORS AND NET ASSETS UNDER MANAGEMENT (Continued)

JUNE 30, 2018

	Investment	Net Assets Under	Percent of Fund
Name of Fund	Strategy	Management	Total
DEVELOPED MARKET INTERNATIONAL STO	CK FUND (DMISF)		
Index	- ( - )	1,947,913,436	27.23%
State Street Global Advisors	Index-Passive	1,947,913,436	27.23%
Core		1,849,815,018	25.86%
AQR Capital Management	Active	818,980,240	11.45%
Acadian Asset Management	Active	875,506,681	12.24%
Progress	Active	155,328,097	2.17%
Active-Growth		984,321,964	13.76%
MFS Institutional Advisors, Inc.	Active	984,321,964	13.76%
Active-Value		567,380,455	7.93%
MSCI EAFE ETF Formerly GMO	Index-Passive	567,380,455	7.93%
Small Cap		1,352,262,314	18.91%
Schroder Investment Mgmt.	Active	457,058,321	6.39%
DFA	Active	433,138,250	6.06%
William Blair & Company	Active	462,065,743	6.46%
Other <sup>(1)</sup>	Active	451,049,788	6.31%
SUBTOTAL DMISF		\$ 7,152,742,976	100.00%
		ψ 1,132,142,310	100.00 /0
EMERGING MARKET INTERNATIONAL STOC	K FUND (EMISF)		
Aberdeen Asset Management	Active	135,204	0.00%
Schroders Investment Mgt	Active	1,882,153,750	67.44%
MSCI Emerging ETF Formerly GMO	Index-Passive	879,343,899	31.51%
Other <sup>(1)</sup>		29,361,873	1.05%
SUBTOTAL EMISF		\$ 2,790,994,726	100.00%
	A shire	¢ 405 004 404	7 000/
American Realty Advisors	Active	\$ 165,301,184	7.23%
Blackstone Real Estate Partner Europe III LP	Active	15,344,939	0.67%
Blackstone Real Estate Spec Sit II LP	Active	2,193,832	0.10%
Blackstone Real Estate VI LP	Active	12,517,217	0.55%
Blackstone Real Estate Partners VIII LP	Active	60,816,226	2.66%
Blackstone Real Estate Partners EURO V	Active	23,054,319	1.01%
Clarion Lion Industrial Trust	Active	130,172,102	5.70%
Cornerstone Patriot Fund LP	Active	253,473,430	11.09%
Covenant Apartment Fund VIII	Active	23,908,070	1.05%
Crow Hldgs Realty Partners VII LP	Active	62,374,096	2.73%
Cypress Acquisition Prtnrs Retail FD LP	Active	55,727,475	2.44%
Gerding Edlen Green Cities II	Active	29,219,191	1.28%
Gerding REF III	Active	44,555,714	1.95%
Hart Realty Advisors	Active	218,377,677	9.56%
IL & FS India Realty Fund II LLC	Active	12,034,582	0.53%
JP Morgan Strategic Property	Active	104,322,514	4.57%
Landmark RE Partners VII LP	Active	26,223,304	1.15%
Landmark VIII REF	Active	6,989,311	0.31%
Lone Star Real Estate Part II LP	Active	4,586,286	0.20%
Prime Property Fund LLC	Active	274,974,063	12.03%
PRISA	Active	207,845,289	9.10%
Rockwood Capital VI Limited Partnership	Active	192,727	0.01%
Rockwood Capital VII Limited Partnership	Active	11,037,052	0.48%
Starwood Opportunity Fund VII	Active	3,449,609	0.15%
Starwood Opportunity Fund VIII	Active	9,614,245	0.42%
Starwood Opportunity Fund VIII Starwood Opportunity Fund IX	Active	9,614,245 26,281,169	1.15%
Starwood Opportunity Fund X		26,261,169 53,228,501	2.33%
	Active Active		2.65%
UBS-Trumbull Property Income		60,465,980 70,740,202	
UBS-Trumbull Property G&I (TPG)	Active	70,749,203	3.10%
UBS-Trumbull Property Fund LP	Active	89,494,498	3.92%
Urban Strategy America Fund LP	Active	4,351,251	0.19%
USAA Eagle RE Fund	Active	140,600,644	6.15%
WLR IV PPIP Co Invest LP	Active	6,774,355	0.30%
Other <sup>(1)(2)</sup>	Active	74,780,465	3.27%
SUBTOTAL REF		\$ 2,285,030,519	100.00%

### COMBINED INVESTMENT FUNDS

## LIST OF INVESTMENT ADVISORS AND NET ASSETS UNDER MANAGEMENT (Continued)

JUNE 30, 2018

Name of Fund	Investment Strategy	Net Assets Under Management	Percent of Fund Total
PRIVATE INVESTMENT FUND (PIF)		· ·	
Buyout		\$ 1,036,283,222	38.01%
Altaris Health Partners II	Active	15,371,147	0.56%
Altaris Health Partners III	Active	50,196,527	1.84%
Altaris Constellation Partners IV	Active	3,067,317	0.11%
Altaris Health Partners IV	Active	8,270,111	0.30%
Boston Ventures VII	Active	29,093,861	1.07%
Charterhouse Equity Partners IV	Active	1,201,977	0.04%
Court Square Capital Partners II	Active	22,952,144	0.84%
Court Square Capital Partners II	Active	30,058,378	1.10%
Ethos Private Equity Fund V	Active	5,075,595	0.19%
S Equity Partners V	Active	5,277,696	0.19%
S Equity Partners VI	Active	90,812,149	3.33%
GENNX360 Capital Partners II	Active	23,320,772	0.86%
CV Partners II	Active	7,455,410	0.27%
IFL Equity Investors III	Active	42,526,837	1.56%
IFL IV	Active	36,449,948	1.34%
KR 2006 Fund	Active	44,578,444	1.64%
KR Millennium Fund	Active	3,193,566	0.12%
eeds Equity Partners V	Active	37,743,576	1.38%
eeds Equity Partners VI	Active	19,904,861	0.73%
RFE Investment Partners VII	Active	6,417,634	0.24%
RFE Investments Partners VIII	Active	31,083,939	1.14%
TA XI	Active	51,771,336	1.90%
Thomas H. Lee Equity Fund VI	Active	36,505,871	1.34%
/ista Equity Partners Fund III	Active	13,963,411	0.51%
/ista Equity Partners Fund IV	Active	61,571,257	2.26%
/ista Equity Partners Fund VI	Active	81,666,443	3.00%
Vellspring Capital Partners V	Active	33,145,750	1.22%
Vellspring Capital Partners VI	Active	2,526,476	0.09%
Velsh Carson Anderson & Stowe X	Active	203,794	0.01%
Velsh Carson Anderson & Stowe XI	Active	56,272,120	2.06%
Velsh Carson Anderson & Stowe XII	Active	68,124,111	2.50%
/ucaipa American Alliance Fund II	Active	98,652,129	3.62%
/ucaipa American Alliance Fund III	Active	17,828,635	0.65%
/enture Capital	Active	6,301,707	0.03%
Crescendo III	Active	1,156,486	0.04%
	Active		0.19%
Syndicated Communications V	Active	5,145,221	1.83%
	A stille	49,802,476	
Audax Mezzanine III	Active	22,900,921	0.84%
CT Growth Capital	Active	20,339,318	0.75%
GarMark Partners II	Active	4,766,813	0.17%
ronwood IV	Active	1,795,424	0.07%
nternational	A . 4	74,017,593	2.72%
3C European Capital X	Active	20,880,786	0.77%
GGEP/CPM Holdings, Gilbert Global Equity Par	tners Active	53,136,807	1.95%
und of Funds		980,944,127	35.98%
Connecticut Horizon Legacy	Active	3,032,286	0.11%
CS/CT Cleantech Opp Fund	Active	5,552,346	0.20%
CT Emerging M-2 Private Equity	Active	74,873,926	2.75%
Fairview Constitution II	Active	67,921,100	2.49%
Fairview Constitution III	Active	311,760,899	11.44%
airview Constitution IV	Active	167,477,196	6.14%
Nutmeg Opportunities Fund II	Active	13,432,258	0.49%
Nutmeg Opportunities Fund I	Active	83,933,116	3.08%
Pinebridge Global Emerging Markets Fund	Active	1,685,093	0.06%
andmark Equity Partners XIV	Active	25,658,937	0.94%
andmark Equity Partners XV	Active	47,725,225	1.75%
andmark Equity Partners XVI	Active	1,239,368	0.05%
Stepstone Pioneer Capital I	Active	12,202	0.00%
	/ 100/00	80,469,570	2.95%

#### **COMBINED INVESTMENT FUNDS**

## LIST OF INVESTMENT ADVISORS AND NET ASSETS UNDER MANAGEMENT (Continued)

JUNE 30, 2018

Name of Fund	Investment Strategy	Net Assets Under Management	Percent of Fund Total
Constitution Fund V	Active	63,520,577	2.33%
The Constitution Liquidating Fund	Active	32,650,028	1.20%
Special Situations	Active	467,693,295	17.16%
Apollo Investment Fund VIII	Active	111,757,366	4.10%
Castlelake II	Active	29,659,138	1.09%
Clearlake Capital Partners III	Active	67,780,725	2.49%
Clearlake Capital Partners IV	Active	44,661,112	1.64%
Clearlake Capital Partners V	Active	14,666,655	0.54%
Levine Leichtman Capital Partners IV	Active	29,059,852	1.07%
Levine Leichtman Capital Partners V	Active	71,613,885	2.63%
Pegasus Partners IV	Active	27,825,959	1.02%
Pegasus Partners V	Active	61,557,225	2.26%
WLR Recovery Fund IV	Active	9,111,378	0.33%
Other <sup>(1)(2)</sup>		111,063,380	4.07%
SUBTOTAL PIF		\$ 2,726,105,801	100.00%
ALTERNATIVE INVESTMENT FUND (AIF) Anchorage Arclight Energy Partners Fund V Arclight VI Crescent II EIG Energy Fund XV Limited Partnership ISQ II	Active Active Active Active Active Active	\$ 7,539,420 49,473,619 77,051,205 17,931,494 33,011,940 4,249,661	0.31% 2.04% 3.18% 0.74% 1.36% 0.18%
Marathon European Credit Opportunity	Active	9,628,710	0.40%
Owl Rock	Active	26,131,651	1.08%
Prudence Crandall I Permal Limited Partnership	Active	19,154,591	0.79%
Prudence Crandall II Prisma Limited Partnership	Active	333,672,871	13.77%
Prudence Crandall III LLC-C Prudence Crandall III Rock Creek	Active	293,058,881	12.10%
Limited Partnership	Active	325,958,511	13.45%
Prudence Crandall III D	Active	389,578,681	16.08%
Prudence Crandall IV K2 Limited Partnership	Active	321,674,793	13.28%
Prudence Crandall IV LLC-C	Active	301,518,897	12.45%
Thomas Welles Fund I	Active	89,394,492	3.69%
Thomas Welles Fund II	Active	88,572,379	3.66%
Other <sup>(2)(1)</sup>		 35,048,249	1.45%
SUBTOTAL AIF		\$ 2,422,650,044	100.00%
TOTAL		\$ 35,686,035,491	
Adjustments <sup>(3)</sup>		 (1,293,977,697)	
GRAND TOTAL		\$ 34,392,057,794	

(1) Other represents cash equivalents, other net assets and terminated advisor balances, as well as, currency overlay balances for the DMISF.

(2) Other includes partnerships with nonmaterial balances, as well as moneys earmarked for distribution to participants, reinvestment, expenses and other net assets.

(3) Represents Elimination Entry to account for investment of Combined Investment Funds in the Liquidity Fund.

# PENSION FUNDS MANAGEMENT DIVISION COMBINED INVESTMENT FUNDS SCHEDULE OF BROKERAGE COMMISSIONS FOR THE FISCAL YEAR ENDED JUNE 30, 2018

	\$	Shares/	Avg		\$	Shares/	Avg
Broker Name	Commission	Par Value	Comm	Broker Name	Commiss	ion Par Value	Comm
ABG SEC AS (NORGE), FILIAL, STOCKHOLM	462.15	47,824.00	0.01	CREDICORP CAPITAL COLOMBIA S.A, BOGOTA	30.08	2,555.00	0.01
ABG SECS, OSLO	1,045.00	188,504.00	0.01	CREDIT LYONNAIS SEC, SEOUL	67,371.63	1,704,581.00	0.04
ABN AMRO CLEARING BANK N.V., AMSTERDAM	1,530.33	103,569.00	0.01	CREDIT LYONNAIS SECS (ASIA), HONG KONG	44,489.01	146,678,235.00	0.00
ACADEMY SECURITIES, INC, NEW YORK	625.20	19,663.00	0.03	CREDIT LYONNAIS SECS, SINGAPORE	10,102.08	2,297,029.00	0.00
ALMUZAINI EXCHANGE CO KSC, KUWAIT	8,458.29 310.36	2,413.00 7,759.00	3.51 0.04	CREDIT SUISSE (EUROPE), LONDON	118,785.29	58,394,888.00	0.00
APEX CLEARING CORPORATION, DALLAS ARQAAM CAP S AFRICA LTD, JOHANNESBURG	224.33	22,576.00	0.04	CREDIT SUISSE (EUROPE), SEOUL CREDIT SUISSE (HK) LIMITED, HONG KONG	29,287.73 21,414.26	288,033.00 8,418,100.00	0.10 0.00
B RILEY AND CO LLC, NEW YORK	2,601.14	91,882.00	0.01	CREDIT SUISSE (IIK) EIMITED, TONG KONG CREDIT SUISSE AUSTRALIA EQ, MELBOURNE	339.66	70,711.00	0.00
BAIRD, ROBERT W & CO INC, MILWAUKEE	21,323.70	612,949.00	0.03	CREDIT SUISSE SECS (EUROPE) LTD, NEW YOR	375.62	1,081.00	0.35
BANCO BTG PACTUAL SA, RIO DE JANEIRO	6,150.94	454,400.00	0.01	CREDIT SUISSE, NEW YORK (CSUS)	152,859.60	29,241,580.00	0.01
BANCO DE INVESTIMENTUS GARATIA	1,438.71	192,800.00	0.01	CREDIT SUISSE, SAO PAULO	2,479.00	270,395.00	0.01
BANCO ITAU S.A., NEW YORK	2,220.30	81,100.00	0.03	D CARNEGIE AB, STOCKHOLM	13,722.90	995,394.00	0.01
BANCO ITAU, SAO PAULO	2,098.96	159,300.00	0.01	DAIWA SEC, SEOUL DAIWA SECS (HK) LTD, HONG KONG	332.57	3,231.00	0.10
BANCO SANTANDER-CHILE, SANTIAGO BANCO SANTANDER, NEW YORK	598.45 7,277.39	20,123.00 980,967.00	0.03 0.01	DAIWA SECS (HK) LTD, HONG KONG DAIWA SECS AMER INC, NEW YORK	8,368.24 11,464.52	2,493,088.00 1,436,800.00	0.00 0.01
BANK J VONTOBEL & CO LTD, ZURICH	2,765.84	3,352.00	0.83	DAVIDSON(D A) & CO INC, NEW YORK	1,683.23	44,109.00	0.01
BANK OF AMERICA MERRILL LYNCH, NEW YORK	135.91	5,010.00	0.03	DAVY STOCKBROKERS, DUBLIN	643.48	76,646.00	0.01
BANQUE PARIBAS, PARIS	18,203.38	3,083,216.00	0.01	DEN DANSKE BANK, COPENHAGEN	6,713.03	440,237.00	0.02
BARCLAYS BANK, NEW YORK	62,622.85	534.00	117.27	DEUTSCHE BK INTL EQ, LONDN (DEUTGB22EEQ)	25,360.10	8,343,626.00	0.00
BARCLAYS CAPITAL INC./LE, NEW JERSEY	5,641.06	349,697.00	0.02	DEUTSCHE BK SECS INC, NY (NWSCUS33)	109,686.98	38,193,960.00	0.00
BARCLAYS CAPITAL INC, NEW YORK	2,150.68	25,640,000.00	0.00	DEUTSCHE MORGAN GRENFELL SEC, SYDNEY	14.64	2,196.00	0.01
BARCLAYS CAPITAL LE, NEW YORK BARCLAYS CAPITAL, LONDON (BARCGB33)	14,026.20 22,046.54	607,463.00 6,897,245.00	0.02 0.00	DEUTSCHE SEC ASIA LTD, HONG KONG DEUTSCHE SEC ASIA LTD, SEOUL	7,862.11 1,249.11	1,062,950.00 14,622.00	0.01 0.09
BARCLAYS CAPITAL, LONDON (BARCGB33) BARCLAYS CAPITAL, NEW YORK	22,046.54 34.23	26,432.00	0.00	DOWLING AND PARTNERS, NEW YORK	10,662.68	416,997.00	0.09
BERENBERG GOSSLER & CIE, HAMBURG	25,209.72	1,881,226.00	0.00	ERSTE BK SPARKASSEN, PRAGUE	43.45	24.00	1.81
BERNSTEIN SANFORD C & CO, NEW YORK	43,311.83	11,381,405.00	0.00	EUROCLEAR BANK SA NV, BRUSSELS	3,125.69	373,164.00	0.01
BLOOMBERG TRADEBOOK LLC, NEW YORK	2,079.85	64,567.00	0.03	EXANE, PARIS (EXANFRPP)	11,920.39	471,025.00	0.03
BLOOMBERG TRADEBOOK LLC, NY	10,325.73	12,558,000.00	0.00	FIDELITY CAPITAL MARKETS, NEW YORK	0.03	2.00	0.02
BLOOMBERG TRADEBOOK, NEW YORK	27,292.75	705,673.00	0.04	FIDELITY CLEARING CANADA ULC, TOR (FIDC)	29.06	2,500.00	0.01
BMO CAPITAL MARKETS CORP, NEW YORK	6,577.26	448,688.00	0.01	FIRST CLEARING LLC, RICHMOND	3,288.09	94,631.00	0.03
BNP PARIBAS PEREGRINE SEC LTD, HONG KONG BNP PARIBAS PRIME BROKERAGE, INC, NEW YORK	12,812.95 292.50	1,249,036.00 11,700.00	0.01 0.03	FORSYTH BARR, DUNEDIN FOX RIVER EXECUTION TECH,LLC,JERSEY CITY	239.20 588.00	102,314.00 117,600.00	0.00 0.01
BNP PARIBAS SEC SRVS SA, SINGAPORE	25,858.23	5,062,471.00	0.00	FRANK RUSSELL SEC BROADCOR CAP, NEW YORK	164.53	6,581.00	0.01
BNP PARIBAS SEC SVCS, LONDON (PARBGB2L)	2,977.16	189,594.00	0.02	FRIEDMAN, BILLINGS AND RAMSEY, NEW YORK	771.03	17,640.00	0.04
BNP PARIBAS SECS SERVS, SYDNEY	3,724.29	1,195,149.00	0.00	FX- STANDARD CHARTERED, NEW YORK	10,214.90	12,930,000,000.00	0.00
BNP PARIBAS SECURITIES SVCS, HONG KONG	6,401.04	3,042,400.00	0.00	GK GOH SECURITIES	487.16	152,000.00	0.00
BNP PARIBAS U.S.A - NEW YORK BRANCH,NJ	658.01	74,487.00	0.01	GOLDMAN SACHS (ASIA), SEOUL	150.39	5,550.00	0.03
BNY CONVERGEX EXECUTION SOL, NEW YORK	102,874.24	18,146,566.00	0.01	GOLDMAN SACHS & CO, NY	198,438.39	48,946,389.00	0.00
BNY CONVERGEX, NEW YORK	7,544.07	384,604.00	0.02 0.01	GOLDMAN SACHS ASIA SEC LTD, HONG KONG	711.84	9,769,481.00	0.00 0.00
BRADESCO S.A. CTVM, SAO PAULO BRASIL PLURAL CCTVM SA, SAO PAULO	9,909.13 108.37	1,205,499.00 21,581.00	0.01	GOLDMAN SACHS AUSTRALIA PTY LTD, MELBOURN GOLDMAN SACHS DO BRASIL, SAO PAULO	4.65 4,984.90	1,718.00 943,328.00	0.00
BROADCORT CAPITAL CORP, NEW YORK	1,731.13	105,745.00	0.01	GOLDMAN SACHS EXECUTION & CLEARING, NY	411.49	43,633.00	0.01
BROCKHOUSE AND COOPER, MONTREAL	350.68	15,900.00	0.02	GOLDMAN SACHS INTL, LONDON (GSILGB2X)	107,635.97	54,367,168.00	0.00
BTG CAPITAL CORP, JERSEY CITY	237.70	11,885.00	0.02	GOLDMAN SACHS INTL, NY	1,676.24	129,642.00	0.01
BTIG LLC, NEW YORK	4,927.58	279,963.00	0.02	GOODBODY STOCKBROKERS, DUBLIN	993.74	171,826.00	0.01
BUCKINGHAM RESEARCH, NEW YORK	105.81	3,023.00	0.04	GUGGENHEIM CAPITAL MARKETS LLC, NEW YORK	838.15	41,600.00	0.02
CABRERA CAPITAL MARKETS, CHICAGO	530.60	50,610.00	0.01	GUGGENHEIM CAPITAL MARKETS LLC, NEW YORK	3,546.99	113,198.00	0.03
CANACCORD GENUITY LTD, LONDON CANADIAN DEPOSITORY, TORONTO	422.29 833.33	360,000.00 300,000.00	0.00 0.00	GUZMAN AND COMPANY, NEW YORK HANWHA SECS CO LTD, SEOUL	1,437.44 1,731.74	50,936.00 95,067.00	0.03 0.02
CANTOR FITZGERALD & CO INC, NEW YORK	7,066.11	301,689.00	0.00	HAUCK UND AUFHAEUSER PRIVATE, FRANKFURT	492.62	18,079.00	0.02
CAP INSTL SVCS INC - EQUITIES, NEW YORK	6,001.52	218,601.00	0.02	HILLTOP SECURITIES INC, DALLAS	4,214.00	120,400.00	0.04
CARNEGIE ASA, OSLO	3,665.89	371,281.00	0.01	HONG KONG & SHANGHAI BKG CORP, HONG KONG	7,999.95	4,569,200.00	0.00
CARNEGIE SECS LTD, HELSINKI (CASFFIH1)	1,142.79	19,331.00	0.06	HSBC BANK PLC (MIDLAND BK)(JAC), LONDON	59,986.29	7,974,862.00	0.01
CHINA INTL CAP CORP HK SECS, HONG KONG	70.46	40,000.00	0.00	HSBC JAMES CAPEL, SEOUL	287.04	2,783.00	0.10
CIBC WORLD MKTS INC, TORONTO	665.73	44,231.00	0.02	HSBC SECS INC, NEW YORK	5,852.00	5,004,779.00	0.00
CIMB GK SECURITIES PTE LTD, SINGAPORE CIMB INVESTMENT BK BERHAD, KUALA LUMPUR	2,897.15 757.11	800,000.00 100,500.00	0.00 0.01	HSBC SECURITIES (USA) INC, NEW YORK	713.61	61,214.00	0.01
CITCO FUND SERVICES IRELAND, DUBLIN	154.22	3,342.00	0.01	ICAP DO BRASIL DTVM LTDA, RIO DE JANEIRO ICBC FINCL SVCS, NEW YORK	163.77 9,193.22	11,100.00 470,049.00	0.01 0.02
CITIBANK (COR), NEW YORK	111.11	107,647.00	0.00	IM TRUST SA.CORREDORES DE BOLSA, SANTIAGO	5,386.58	926,140.00	0.02
CITIBANK EUROPE PLC AUSTRIA BR, VIENNA	3,311.41	153,781.00	0.02	INSTINET AUSTRALIA CLEARING SERV, SYDNEY	6,733.09	3,858,327.00	0.00
CITIBANK NA, HONG KONG	1,113.23	1,083,500.00	0.00	INSTINET CANADA, TORONTO	12.28	2,100.00	0.01
CITIBANK NA, LONDON	2,645.03	179,484.00	0.01	INSTINET CLEARING SER INC, NEW YORK	17,809.98	1,368,574.00	0.01
	541.43	328,404.00	0.00	INSTINET CORP, NEW YORK	23,180.01	4,061,323.00	0.01
CITIBANK, FRANKFURT	28,348.47	1,081,896.00	0.03	INSTINET EUROPE LIMITED, LONDON	105,576.88	34,387,559.00	0.00
CITIBANK, NY CITIGROUP GBL MKTS AUSTRALIA PTY, SYDNEY	176,955.82 396.69	42,582,027.00 190,858.00	0.00 0.00	INSTINET PACIFIC LTD, HONG KONG INSTINET, SINGAPORE	52,750.95 3,158.37	39,207,026.00 2,598,270.00	0.00 0.00
CITIGROUP GBL MKTS INC, NEW YORK	65,124.54	4,770,501.00	0.00	INSTINET, SINGAPORE INTERMONTE SIM S.P.A., MILANO	289.67	2,598,270.00	0.00
CITIGROUP GBL MKTS/SALOMON, NEW YORK	26,348.88	12,312,894.00	0.00	INVESTEC HENDERSON CROSTHWAITE,LONDON	2,319.74	290,513.00	0.01
CITIGROUP GLOBAL MARKETS LTD, LONDON	191,540.54	35,855,200.00	0.01	INVESTEC SECURITIES (331), LONDON	4,908.97	703,942.00	0.01
CLSA AUSTRALIA PTY LTD, SYDNEY	4,272.67	881,591.00	0.00	INVESTEC SECURITIES LTD, JOHANNESBURG	4,116.67	1,619,527.00	0.00
CLSA SINGAPORE PTE LTD (CHV), SINGAPORE	179.56	36,627.00	0.00	INVESTMENT TECH GROUP INC, NEW YORK	8,700.79	480,553.00	0.02
CONVENCAO S/A CORRETORA DE, SAO PAULO	1,189.79	149,829.00	0.01	INVESTMENT TECHNOLOGY GROUP LTD, DUBLIN	58,718.16	10,786,547.00	0.01
CONVERGEX EXECUTION SOLUTION, NEW YORK	199.38	9,969.00	0.02	ISI GROUP INC, NEW YORK	15,899.37	1,091,233.00	0.01
CORNERSTONE MACRO LLC, NEW YORK COWEN AND CO LLC, NEW YORK	2,936.73 15,109.23	137,168.00 1,167,014.00	0.02 0.01	ITG AUSTRALIA LTD, MELBOURNE ITG CANADA CORP, TORONTO	43,710.51 9,176.23	40,249,964.00 1,528,549.00	0.00 0.01
COWEN AND COLLC, NEW YORK COWEN AND COMPANY, LLC, JERSEY CITY	5,769.25	173,050.00	0.01	ITG CANADA CORP, TORONTO ITG HONG KONG LIMITED, HONG KONG	9,176.23 9,648.28	1,528,549.00	0.01
CRAIG HALLUM, NEW YORK	3,160.19	106,613.00	0.03	ITG INC, NEW YORK	16,023.56	1,766,441.00	0.03
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# PENSION FUNDS MANAGEMENT DIVISION COMBINED INVESTMENT FUNDS SCHEDULE OF BROKERAGE COMMISSIONS (Continued) FOR THE FISCAL YEAR ENDED JUNE 30, 2018

Bricker Name         Commission         Par Value         Commission <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>								
TOT N. YU         5.87.41         1.955.59.10         0.00         NOMERA SECS INT.L CONCOM         9.22         1.902.00         0.00           IP MORAN BEC. TOPTORY. EDWORD, LONDON         242.33         387.700         0.00         MORTH ANSI SECURITIE SILV, ELVOY         80.7100         1.902.00         1.	Broker Name				Broker Name			Avg Comm
J & D.W.Y.         Bit Structure         Bit Structure         Bit Structure         Control         Non-Charles Actual Control         Control         Structure         Structure </td <td></td> <td>001111133</td> <td></td> <td>Comm</td> <td></td> <td>0011111331011</td> <td></td> <td>Comm</td>		001111133		Comm		0011111331011		Comm
P MORAN SEC LITISTOCK LENDING, DURON         282:23         397.7000         0.01         NORTHAN SEC LITISTOCK, LENDING, DURON         01.14         4.1000         0.00           P MORAN SEC LITISTOCK, LENDING, DURON         2.822.24         682.200         0.00         NORTHAN SECURITIES INC, NEW YORK         0.11         0.00	ITG INC, NY							0.01
JP MOKAN SEC SYNNEY         232208         5067/200         000         NORTHAND SECURITES INC. NEW YORK         693.14         217260         000           JP MOKAN SEC SYNNEY         1084.27         41.070         000         NUMB SECURITES INC. NEW YORK         593.14         10728         000         000         1000000         1000000         1000000         1000000         1000000         1000000         1000000         1000000         1000000         1000000         1000000         10000000         1000000         1000000         10000000         1000000         1000000         10000000         10000000         10000000         1000000000000000         1000000000000000000000000000000000000								0.00
JP MORKAN SEGA TTI. LONDON         [15,08]         15,083,200         0.01         NUMB SECURTIES NO., NEW YORK         377,26         0.02           JP MORKAN SECURTIES NO., NEW YORK         10,883,90         253,758,00         00         00,800         10,0000         10,000         10,000 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
J# MORGAN SECURITIES INC. NEW YORK         1064/27         441.170         0.02         NUMBER CLURITIES LTD. LONDON         327.22         77.22.00         0.05           J# MORGAN CLEAR DATE CORE NEW YORK         123.610         0.05         NULL AND YORK         101.00         NULL AND YORK         101.00         NULL AND YORK         101.00         NULL AND YORK         101.								
J.P. MCRAN CLEARING CORP. NEW YORK         125.014.5         7.82.088.00         0.02         ONEL, WILLAM CON BOD CLEARING         51.61.70         0.03           J.P. MCRAN CLEARING CORP. NEW YORK         13.63.01         0.03         11.62.00         0.00         0.00         11.62.00 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>								
JP MORKAM SEQUENTIES, HOW KOMG         398516         25.37.88         0.00         DODO ET CE, PARIS         54.25.1         11.02.20         DOS           MARY MONTONGOUND KONT         33.241.37         21.146.00         0.00         DALAMARTERMITIONAL LANA, HOW KONG         33.31         10.00.00         0.00         DALAMARTERMITIONAL LANA, HOW KONG         30.31         10.00.00         0.00         PARLEL, HOW KONG         10.00.15         23.01.00         0.00         DALAMARTERMITIONAL LANA, HOW KONG         10.00.15         23.01.00         0.00         PARLEL, PARIS         4.00.20         20.01.01         0.00         PARLEL, PARIS         4.00.00         0.00         1.00.00         0.00         1.00.00         0.00         1.00.00         0.00         1.00.00         0.00         1.00.00         0.00         1.00.00         0.00         1.00.00         0.00         1.00.00         0.00         1.00.00         0.00         1.00.00         0.00         1.00.00         0.00         1.00.00         0.00         1.00.00         0.00         1.	J.P. MORGAN CLEARING CORP, NEW YORK				-			0.03
JEFERERE AC O. INC. NEW YORK         120.488.65         11.446.198.00         0.01         OPPENHEMER & CO. INC. HEW YORK         6.277.11         221.422.00         0.00           EFFERERE AC OLIC, NEW YORK         2.308.42         4.58.70.00         0.00         PANLE, NARS         4.60.70         2.83.91.00         0.00           EFFEREE AC DINC, NEW YORK         4.200.70         2.808.42         4.58.70.00         0.00         PARL, NARS         4.200.70         2.83.91.00         0.00           EFFEREE AC DINC, NEW YORK         4.200.70         2.84.97.00         1.00.70         1.85.91.00         0.00           PROPONA SCC, SINCAPORE         8.90.92.00         4.43.91.00         0.00         PERSHING ACC, LERREY CUTY         2.94.47.7         1.85.1.7.00         0.00         2.74.92.00         0.00         PERSHING ACC, LERREY CUTY         2.94.47.1         1.85.1.00         0.00         2.74.92.00         0.00         2.74.92.00         0.00         2.74.92.00         0.00         2.74.92.00         0.00         2.74.93.00         0.00         2.74.93.00         0.00         2.74.93.00         0.00         2.74.93.00         0.00         2.74.93.00         0.00         2.74.93.00         0.00         2.74.93.00         0.00         2.74.93.00         0.00         2.74.93.00         0.00	J.P. MORGAN SECURITIES, HONG KONG	39,856.16	25,357,268.00	0.00				0.05
JEFFERES AC OLTIL, LONDON         35.241-37         21,144,000.0         0.00         PARLINES CORED TO LTIL, LONDON         1,885.3         933,470.00         0.00           LIMEST RAUGALL, LINE VICAK         1,151.0         60,750.0         0.00         PARLE, PARLS         2,56.49         1,228,48.0         0.00           LIMEST RAUGALL, LINE VICAK         1,151.0         60,750.0         0.00         PARLE, PARLS         2,56.49         1,228,44.74         1,551.00         0.00           LIMEST RAUGALL, LINE VICAK         3,80.23         1,50.10         60,750.00         0.00         PERCENTRE, RESCHELT, PERCENTRE, CAMINEL AL STATULA TO TT, STORE VICAK         1,53.14.000         0.00           MORGAN SCELTTER INVECTOR VICAK         7,43.05.40         0.00         PERCENTRE, RESCHELT, STORE VICAK         1,53.14.00         0.00           VICAGUAL, STORE VICAK         7,43.05.40         0.00         PERCENTRE, RESCHELT, STORE VICAK         1,53.04.00         0.00           VICAGUAL, ALARSTEN, KLEWYORK         3,94.30         1,90.22.44         7,41.15.10         1,53.04.00         1,13.7.30.00         0.00           VICAGUAL, ALARSTEN, KLEWYORK         3,94.30         1,90.22.40         0.00         PERCENTRE, RESCHELT, RESCHET, RESCHELT, RESCHET, RESCHET,	JANNEY MONTGOMERY SCOTT, PHILADELPHIA	1,988.70		0.04	OKASAN INTERNATIONAL (ASIA), HONG KONG	363.38	16,600.00	0.02
JEFFEREIGNON KONG LIMITED, HONS KONG         2,808.43         4.618,700.00         000         PAREL, PARES         4.820.75         223.53.00         0.02           DAMBERTANDIG BERTANDIG STOCK LIC, MERY YORK         7,803.94         4.53.05.00         0.00         PELENKA SCUTTES, NEW YORK         7,803.94         0.00         PELENKA SCUTTES, NEW YORK         7,803.94         0.00         0.00         PELENKA SCUTTES, NEW YORK         7,803.94         0.00         0.00         PELENKA SCUTTES, NEW YORK         7,803.94         0.00         0.00         PERENKA SCUTTES, NEW YORK         7,803.94         1,801.00         0.00         0.00         PERENKA SCUTTES, NEW YORK         7,803.84         1,801.00         0.00         PERENKA SCUTTES, NEW YORK         7,803.85         1,801.00         0.00         PERENKA SCUTES, NEW YORK         3,803.83         1,800.00         0.00         PERENKA SCUTES, NEW YORK         1,803.00         0.00         PERENKA SCUTES, NEW YORK         2,803.85         1,800.00         0.00         PERENKA SCUTES, NEW YORK         2,803.80         0.00         PERENKA SCUTES, NEW YORK         2,803.80         0.00         PERENKA SCUTES, NEW YORK         2,803.80	JEFFERIES & CO INC, NEW YORK							0.04
JONESTRAUNG INST SVES LLC, NEW YORK 1, 19, 10, 10 PERL HUNT LIP, LONDON 2, 19, 120, 20, 10 120, 20, 20, 20, 20, 20, 20, 20, 20, 20,								
PM KORGAN BEGS FARE AST) TD. SEQUL         1,735.94         45,389.00         0.04         PERSERVA CUT         7.422.7         62.10.00         0.00           PURCERA UCASE BANAGECLE BANK EW YORK         1,232.54         44.451.00         0.00         PERSENTES INC.         20.4417.4         10.631,740.00         0.00           VERDERA UCASE BANKECLE LINE BANK EW YORK         1,232.54         44.451.00         0.00         PERSENTES INC.         20.4417.4         10.631,740.00         0.00           VERDERA UCASE BANKECLE LINE BANK ESC ANTERNETS INC. UNDOS NOR WERS ASTRONOUS BANK HARMARES INC. NEW YORK         350.350         10.631,740.00         0.00         PERSENTES INC. TORKIN JORANA INC. SEC ANTERNETS INC. UNDOS NO. EWY ORK         350.350         0.00         PERSENTES INC. TORKIN JORANA INC. SEC ANTERNETS INC. STARL MARKES INC. NEW YORK         350.350         0.00         PERSENTES INC. TORKIN JORANA INC. STARL MARKES INC. NEW YORK         357.430.00         0.00         PERSENTES INC. TORKIN JORANA INC. NEW YORK         375.410.00         0.00         PERSENTES INC. TORKIN JORANA INC. NEW YORK         375.410.00         0.00         PERSENTES INC. TORKIN JORANA INC. NEW YORK         375.400.00         0.00         PERSENTES INC. TORKIN JORANA INC. YORK         375.410.00         0.00         PERSENTES INC. TORKIN JORANA INC. YORK         375.410.00         0.00         PERSENTES INC. TORKIN JORANA INC. YORK         375.400.00         0.00		1						
PM KORGAN SECS, SINGAPORE         28,002.30         75,403,044.00         0.00         PERSENSE SINCE PHILEPINES INC, MARKINAL         313.74         1105,700.00         0.02           PMORINGAN CARGE BARKECH, BAIN, KEW YORK         12,847.87         1105,700.00         0.02         PERSENSE SILE, RESELVENT         34.84         116,601.00         0.00         0.02         PERSENSE SILE, RESELVENT         34.84         116,601.00         0.00         0.02         PERSENSE SILE, RESELVENT         34.84         116,601.00         0.00         0.02         PERSENSE SILE, RESELVENT         34.83         116,601.00         0.00         0.02         PERSENSE SILE, RESELVENT         34.83         116,601.00         0.00         0.00         PERSENSE SILE, RESELVENT         100,810.00         0.00         PERSENSE, MARKET BINK, NEW YORK         3,615.40         10.83         116,601.00         0.00         PERSENSE SILE, RESELVENT         10.84         21.822.00         0.00         PERSENSE SILE, RESELVENT         10.84.00         10.83         11.11.47.41.00         0.03         11.11.47.41.00         10.83.00         0.00         PERSENSE SILE, RESELVENT KANKET BINK KEW YORK         3,61.51.00         11.11.47.41.00         10.83.00         0.00         PERSENSES SILE, RESELVENT KANKET BINK KEW YORK         3,72.93         31.55.31.00         0.00         PERSENSESING TORONOTIN, MARKET BINK KEW								
JPADREAM CHASE BANK/ECL BANK, NEW YORK         10.222.44         44.4150.00         0.02         PERSHING LLC, ERSEY CITY         20.44.17.4         10.821,74.000         0.02           NDBRGAR SCEURTERS N., REVYORK         75.44         17.002,84.00         0.00         PERSHING SECAUTTES LIT, LONDON         14.27.00         2.510,160.00         0.00           NDB DAK N. ABSTERGAM         25.74         2.543,00         0.00         PERSHING SECAUTTES LIT, LONDON         14.27.00         2.510,160.00         0.00           NDB DAK N. ABSTERGAM         17.651,00         0.01         PIPERSHING SECAUTTES LIT, LONDON         14.27.00         2.17.000.00         0.00           REFERE PRUYTET F. VOODS IN, CHW YORK         4.01.66         116,22.00         0.01         PIPERSHING SECAUTTES LIT, LONDON MARS LASS ASSOCHARTA         10.08.01         10.08.01         10.00         0.00           REFERE PRUYTET F. VOODS IN, CHW YORK         4.410.66         116,22.00         0.01         REC CANTAL MARKETS IL, NEW YORK         4.410.66         116,22.00         0.01         REC CANTAL MARKETS IL, NEW YORK         3.21.40         1.17.200.00         0.00         REC CANTAL MARKETS IL, NEW YORK         3.21.40         1.17.200.00         0.00         REC CANTAL MARKETS IL, NEW YORK         3.23.40         7.17.20         0.00         REC CANTAL MARKETS IL, NEW YORK         1.28.2	JP MORGAN SECS, SINGAPORE				-			0.00
Acea Bankin, X. AUSTERDAM         327.52         25.41.00         0.01         PERSHING SECURITIES LTD, LONDOM         14.72.10         2.510,160.00         0.01           REEFE RULYTTE - WOODS NC, NEW YORK         3.69.30         104,150.00         0.00         PIPER JAFFRAY 3 CO, JUNEARY CO, NEW YORK         1.522.70         65.84.60.00         0.00           REEFE RULYTE - WOODS NC, NEW YORK         3.69.30         104,150.00         0.00         PIPER JAFFRAY 3 CO, JUNEARY CO, MINELAGUL, JUNATING SU,	JPMORGAN CHASE BANK/ECLR BANK, NEW YORK							0.02
REB SALOMON SMITH BARNEY SECS. SECUL         BESRIG         BESRIG         PIPER, AFFRAY & CO., LREEY CTY         8.306         7.27.463.00         000           GEFER ENUTTER FARIS         NEW OODS INC., NEW YORK         4.176.10         110.519.00         00         PIPE RAFEAY & CO., MINAEAPCUIS         13227.00         0.00           GEFELER CAUTES, FARIS         NEW YORK         4.176.10         110.519.00         00         PIPE RAFEAY AC CAUTES, MARKETS INC. NEW YORK         4.314.90         0.00           NERG CLA ASSOCIATES, ALBANY         7.97.75         97.372.00         0.00         REPUER CAUTES, MARKETS INC. NEW YORK         1.344         0.00         0.00         REPUER CAUTES, MARKETS INC. NEW YORK         1.345.00         0.00         RENASSANCE CAUTES, CAUTES, MARKETS INC. NEW YORK         1.345.00         0.00         RENASSANCE CAUTES, CAUTES, MARKETS INC. NEW YORK         1.352.0         0.00         RENASSANCE ASSOC CAUTES, MARKETS INC. NEW YORK         1.352.0         0.00         RENASSANCE ASSOC CAUTES, MARKETS INC. NEW YORK         1.354.00         0.00         RENASSANCE ASSOC CAUTES, MARKETS INC. NEW YORK         1.352.0         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00	JPMORGAN SECURITIES INC, NEW YORK	79,544.76	17,060,884.00	0.00	PERSHING SECS AUSTRALIA PTY LTD, SYDNEY	39.83	15,601.00	0.00
EKEPEF ENUTYETT F         WOODS         TAT	KAS BANK NV, AMSTERDAM							0.01
KEELER GUITTES, PARIS         4.77.518         110.518.00         0.00         PT COSK NUSADANA SECS NUCCESI, ALXARTA         100.80         271.500.00         0.00           KEYBANC CAPITAL MARKETS INC, NEW YORK         4.410.50         102.831.00         0.03         REC CAPITAL MARKETS ILC, NEW YORK         4.410.50         0.03           KEYBANC CAPITAL MARKETS ILC, NEW YORK         4.2410.50         102.831.00         0.03         REC CAPITAL MARKETS ILC, NEW YORK         4.316.46         2.418.200         0.03           KIGU LA ASSCOLTES, ALBARY         2.245.55         757.733.00         0.00         REMAISANCE CAPITAL LITAL MARKETS INC, NEW YORK         7.19.67         4.57.60         0.00           KIGU LA ASSCOLTES, ALBARY         2.234.40         7.702.73.30         0.00         RENAISSANCE CAPITAL LITAL LONDON         1.85.67         6.57.600         0.00           LARRAN NUL, SANTIAGO         2.234.40         7.702.73.30         0.00         RENAISSANCE CAPITAL LITAL LONDON         8.86.5         5.65.85.00         0.02         0.00         RENAISSANCE CAPITAL LITAL LONDON         8.86.5         5.65.85.00         0.02         0.00         RENAISSANCE CAPITAL LITAL LONDON         8.86.5         5.21.85.00         0.02         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00								0.03
KEYEBANC CAPITAL MARKETS INC. NEW YORK         6.885.89         198.022.00         0.04         RAYMOND ALMES & ASSOCIACTS PETERSBURG         2.710.06         1.147.401.00         0.02           KING (CJ, AASSOCIATTS, ALBANY         77.375.55         77.373.00         0.07         REG COMINON SECS INC, TORVITO (DOMA)         6.314.30         361.41.00         0.00           KING (CJ, AASSOCIATTS, ALBANY         77.375.55         77.373.00         0.07         REG DOMINON SECS INC, TORVITO (DOMA)         2.315.11         702.346.00         0.00           KING (CJ, AASSOCIATTS, ALBANY         3.38         197.03         0.00         REDININ RATURES LIP, LIPNONON         2.115.11         702.346.00         0.00           KING (CJ, AASSOCIATTS, ALBANY         3.34         197.03         0.00         RENAISSANCE CAPTAL LTD, LIDNON         2.115.41         4.57.600         0.00           LEERINK KANNEL NOL COMPANY, NEW YORK         1.332.27         5.22.400         0.03         ROTH CAPTAL, PARTINERS LL, CNEW YORK         2.827.60         0.00         6.50.35.00         0.00         2.277.60.00         0.00         2.277.60.00         0.00         2.277.70.00         0.00         2.277.70.00         0.00         2.277.70.00         0.00         2.277.70.00         0.00         2.277.70.00         0.00         2.277.70.00         0.00								
KEYEBANC CAPITAL MARKETS ILC, NEW YORK         4.116.56         2.412.82.00         0.03         REC CAPTAL MARKETS LLC, REV YORK         3.61.54.10         0.03           NIGH C - LATTAL EUROPE LID, LONDON         2.888.81         789.73.00         0.03         REC CAPTAL MARKETS LLP, EUROPE LID, MODON         2.115.11         770.248.00         0.00           NIGH T EQUITY MARETS LLP, EUROPE LID, LONDON         2.810.21         1.810.02         789.73.00         0.03         REC CAPTAL MARKETS LLP, EUROPE LID, MODON         2.15.11         770.248.00         0.00           NORMEA MARETS LLP, EUROPE LID, MODON         1.800.05         3.32.83.00         0.03         RENABSANCE SECS (LYTWIS) ID MODON         1.26.02         8.44.200         0.00           LIBERIM, KONANA DIC, TORONTO         4.721.72         2.61.700         0.03         ROVAL EMARK OF CAMADA ELISTON LONDON         986.59         9.58.55.00         0.00           LIDUINET CAMADANI, C, TORONTO         4.42.12         7.31.20         0.07         S G WARBURG, SECUL         1.001.00         84.40         1.474.40         1.474.40         1.474.40         1.474.40         1.474.40         1.474.40         1.474.40         1.474.40         1.474.40         1.474.40         1.474.40         1.474.40         1.474.40         1.474.40         1.474.40         1.474.40         1.474.40								
NING (CL) A ASSOCIATES, ALBANY         27,375 5         673,730         0.03         REC DOMINON SEES INC, TORONO (DOMA)         6,374.30         93/4.30         93/4.30         93/4.30         0.01           NING (HT CAPTLA LURDPELTD, LONDON)         2,888 1         796.770         0.00         REDUND NATURES LUP, LONDON         2,886 5         679.177.00         0.00           NING (HT CAPTLA LURD, LONDON)         2,286 4         77.02,730.00         0.00         RENAISSANCE SCES (CYPRUS) ILTD, NICOM         12,65 2         9.442.00         0.01           LARRAN IVAL, SANTIAGO CIDS SCOLL         1,060.08         32,321         32,321         0.321.01         0.01         0.01         7,027.730.00         0.00         RENAISSANCE SCES (CYPRUS) ILTD, NICOM         52,66 2         21,860.00         0.01 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.03</td>								0.03
NINGHT CALTYM EUROPE LUN CD         2,888,81         756,739.00         0.00         REDBURN PARTNERS LP, REVNON         2,115,11         702,348.00         0.00           COREA INVESTMENT AND SEC COLTD,SECUL         1,080,08         33,281.00         0.03         RENAISSANCE SECS (CHTD, LONDON         12,502         9,442.00         0.01           ARPAN VUL, ASMATTAGO         2,284.00         7,702,730.0         0.03         RENAISSANCE SECS (CHTD,SECUL, 1,080.00         12,502         9,442.00         0.01           ALPRAN VUL, ASMATTAGO         2,884.00         7,372.00         0.03         RECLAP SECURITES INC. NEW YORK         52,885         21,880.00         0.03           LICUIDNET TEUROPE LIMITED LONDON         4,982.17         73,210.00         0.07         S G WARBURG, SECUL, NEW YORK         32,27.60         30,006.00         0.01           LICUIDNET TIK, NEW YORK         2,803.51         11,810.00         0.07         S G WARBURG, SECUL, NADRON         32,27.20         30,006.00         0.00           LICUIDNET TIK, NEW YORK         2,161.1         1,861.00         0.07         S ANTADEC CONEL, LANDRON         7,445.00         2,862.00         0.00           LICUIDNET TIK, NEW YORK         2,863.00         0.02         SANTADEC CONEL, LANDRON         7,446.40         2,862.00         0.00         0.00 <td>KING (CL) &amp; ASSOCIATES, ALBANY</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.02</td>	KING (CL) & ASSOCIATES, ALBANY							0.02
KOREA, INVESTMENT AND SEC COLTD.SECUL         1,080,08         35,283,00         0.03         RENARSANCE SECS (CYRUS) [T, NICOSIA         125,02         9,442,00         0.00           LEERINK SWAMN AND COMPANY, NEW YORK         1,833,27         53,214,00         0.03         ROTH CAPTAL PARTINES INC, NEW YORK         528,65         21,880,00         0.02           LEERINK SWAMN AND COMPANY, NEW YORK         4,833,27         228,172,00         0.02         ROYAL LANC PORCONNON         842,00         7,320,00         0.02           LOUIDINET ELIGORE (LINTED, LONDON         44,20         7,212,00         0.02         ROYAL LANC PARTER LIN REV (LINDON)         884,05         126,376,00         0.01           LOUIDINET ELIGORE (LINTES LLC, NEW YORK         28,891         1,365,386,00         0.02         SANDLER ONELLA AND PARTER LIN, NEW YORK         3,592,72         227,750,00         0.02           LOURDART ELIGORE (LINTES LLC, NEW YORK         258,91         1,017,00         0.02         SANDLER ONELLA AND PARTER A COMCL LONDON         4,463,00         0.00         NGCALARE BANK LTD, HONG KONG         24,40,70         0.02         SANDLER CAPTAL MARKETS, LERSEY CITY         251,426         0.01,77         0.02         SANDLER CAPTAL MARKETS, LERSEY CITY         256,40         0.00         NGCALARE BANK LTD, HONG KONG         24,40,70         0.000         SCOTA CAPTAL MARKETS	KNIGHT CAPITAL EUROPE LTD, LONDON							0.00
LARRAN VAL. SANTIAGO         2.236.40         7.702.733.00         0.00         RENCAP SECURITIES INC, NEW YORK         719.57         45,762.00         0.00           LEBRINK SWAMN AND COMMARY, NEW YORK         7.406.14         447,864.00         0.02         ROYLL BANK OF CANADE LUC, NEW YORK         56,635.00         0.02           LIBERUM CAPTRAL INC, NEW YORK         7.406.14         447,864.00         0.02         ROYLL BANK OF CANADE LUC, NEW YORK         3.297.96         30,005.00         0.01           LIQUIDNET CANADE NIC, TOROND         544.20         7,312.00         0.07         S G WARBURG, SEOUL         3.297.96         30,005.00         0.02           LIQUIDNET TIC, NEW YORK         2.101         1,861.00         0.07         S ANATABCE CONE, LAND PATTREA LIP, NEW YORK         3.297.96         30,005.00         0.00           LIQUIDNET TIC, NEW YORK         2.101         1,861.00         0.00         SANTABCE CONE, LAND PATTREA LIP, NEW YORK         2.482.00         0.00           LIQUIDNET TIC, NEW YORK         2.401.7         2.517.70         117.00         0.00         SONTA CAPTRAL LAND PATTREA LIP, NEW YORK         2.482.00         0.00           LIQUIDNET TIC, NEW YORK         2.491.70         2.517.21         2.517.01         2.460.00         0.00         SONTA CAPTRAL LAND PATTREA LIP, NEW YORK         2.482.0	KNIGHT EQUITY MARKETS LP, NEW YORK		167.00		RENAISSANCE CAPITAL LTD, LONDON	12,660.56	679,177.00	0.02
LEERINK SWAIN AND COMPANY, NEW YORK         183.22         5.3.214.00         0.03         ROTH CAPITAL PARTNERS LLS, NEW YORK         528.65         21.890.00         0.02           LIDUINDET CANADA INC, TORONTO         4.282.17         286.126.00         0.02         ROYAL BANK, SCOLL         3.237.56         3.000.00         0.01           LIDUINDET CANADA INC, TORONTO         4.282.17         286.126.00         0.02         ROYAL BANK, SCOLL         3.527.56         3.000.00         0.01           LIDUINDET TIC, NEW YORK         22.010         1.56.378.00         0.02         SANKORDE CENTREI L, OLDONON         5.442.0         7.734.60         0.00           LOUINET TIC, NEW YORK         25.17.7         101.177.00         0.02         SANKORDE CENTRAL INSESTIVENT Y A64.50         1.479.482.00         0.00           LOURGAW SECURITIES LLD, NEW YORK         25.17.7         101.177.00         0.02         SANTANDER CENTRAL TIS & COINC, CINDON T, MADRID         176.76         12.88.200.00         0.02           AGCUARRE BANK LDT, FONDRY         4.386.40         2.697.33.41.01         0.03         SCOTIA CAPITAL USA INC. NEW YORK         245.65         367.500.00         0.02           AGCUARRE BANK LDT, SYDNEY         4.386.40         2.697.33.00         0.03         SCOTIA CAPITAL USA INC. NEW YORK         254.77         24.41.00 <td>KOREA INVESTMENT AND SEC CO.LTD, SEOUL</td> <td></td> <td></td> <td></td> <td>, , ,</td> <td></td> <td></td> <td>0.01</td>	KOREA INVESTMENT AND SEC CO.LTD, SEOUL				, , ,			0.01
LIBERUM CAPITAL INC, NEW YORK         7.406.14         447.804.00         0.02         ROVAL BANK OF CAMADA BURGPE LID, LONDON         966.99         56.635.00         0.02           LOUIDING T CAMADA NG, TORONTO         4.22.17         2.821.60         0.07         S GWARBURG, SECUL         3.277.96         3.00.055.00         0.01           LOUIDING T LIN, NEW YORK         2.809.85         1.365.385.00         0.07         S GWARBURG, SECUL         NOVEL TO KONK         2.877.26         0.07           LOUIDING T ING, NEW YORK         2.809.85         1.365.435.00         0.01         SANADLER AGO INC, LONDON         7.464.50         1.479.486.00         0.01           LOUIDING T ING, NEW YORK         2.809.85         1.354.01         0.00         SANTAIDER INVESTMENT, MARRET D, ENTRAL HISPANO INVI, MARRID         2.462.62         2.51.450.00         0.02           LOUIDING T ING, NEW YORK         2.463.73         138.738.412.01         0.00         SCOTIA CAPITAL LING, INC, NEW YORK         2.262.25         2.51.450.00         0.00           MACQUARE EARTHAL LIDS, INC, NEW YORK         2.463.00         0.00         SCOTIA CAPITAL LING, INC, NEW YORK         2.262.25         2.51.450.00         0.00           MACQUARE ECARTIAL LIDS, INC. NEW YORK         1.387.3412.00         0.00         SCOTIA CAPITAL LING, INC, NEW YORK         5.217.75								
LIQUIDNET CANADA NIC, TORONTO         4.28:17         288,128.00         0.02         ROVAL TR CORP OF CADORIC LUSTOP L. LONDON         684.05         126,375.00         0.02           LIQUIDNET ELINOPE INITED. LONDON         544.20         7.312.00         0.07         S G WARDING, SECUL         3.592.72         237,750.00         0.02           LIQUIDNET TIC, NEW YORK         21.01         1.681.00         0.04         SANFORD C EENTSEI IN & C OINC, LONDON         7.445.50         1.479.488.00         0.00           LONGBOW SECURITIES LLC, NEW YORK         258.17.81         101.177.00         0.05         SANTANDER CENTRAL INSESTIVETY         168.270.00         0.00           MACCUARIE BANK LUT, HONK KONG         92.440.76         138.784.120         0.00         SCOTIA CAPITAL INS, INKEYST MERS YOTK         25.425         28.416.00         0.00           MACCUARIE BANK LUT, HONK KONG         92.440.76         138.784.120         0.00         SCOTIA CAPITAL INS, INK, INKY YORK         25.427         24.410.00         0.00           MACCUARIE CAPITAL LTD, LONDON         2.480.00         0.00         SG AMERICAS SECURITIES LLC, NEW YORK         5.417.75         25.411.410         0.00           MACCUARIE CAPITAL LTD, LONDON         2.480.00         0.05         SG AMERICAS SECURITIES LLC, NEW YORK         5.417.75         25.411.410.00 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>								
LIQUIDNET EUROPE LIMITED, LONDON         544.20         7.31.20         0.07         S G WARBURG, SEQUL         3.29.76         3.00.00         0.07           LIQUIDNET INC, NEW YORK         23.09.09         5.35.386.00         0.02         SANUERD OVELL AND PARTHER LD, NEW YORK         5.927,750.00         0.02           LIQUIDNET INC, NEW YORK         5.89.91         1.364.00         0.04         SANTANDER CENTRAL HISPANO INT, MARINE IN TECS, JERSEY CITY         576.40         2.88.20.00         0.00           LOUD CAPTAL MARKETS, JERSEY CITY         2.512.78         101.177.00         0.02         SANTANDER CINTRAL HISPANOKIK         2.845.80         0.00           MACOUARIE BANK LTD, HONG KONG         92.440.76         138.738.412.01         0.00         SCOTA CAPTAL (INS, NEW YORK         2.852.5         261.456.00         0.00           MACOUARIE GAPTAL (IDS, JINDEY         418.33         33.738.412.01         0.00         SCOTA CAPTAL (INS, NEW YORK         2.58.75         246.100.00         SEADORT GROUP SECURTIES LLC, NEW YORK         1.55.17         2.457.00         0.00           MACOUARIE SEGN SINGAPORE, SINGAPORE         562.77         244.200         0.00         SEADORT GROUP SECURTIES LLC, NEW YORK         1.53.18         7.03.410.00         0.00         MACOUARIE SECURTIES LLD, NEW YORK         1.53.81         7.03.90.00         0.00								
LICUIDNET INC, NEW YORK         28,090 85         1.365,380         0.02         SANDLER OVEL(LAN PARTINEL IP, NEW YORK         352,72         227,700 0         0.02           LOUIDNET INC, NEW YORK         589 1         1.364,00         0.04         SANTANDER CERTINAL INFPANO INVT, MADRID         1746,450         0.00           LONGBOW SECURTITES LLC, NEW YORK         589 1         1.364,00         0.04         SANTANDER CERTINAL INFPANO INVT, MADRID         176,75         188,270,00         0.00           LONGBOW SECURTITES LD, SYDNEY         4,354         2.867,373,814,201         0.00         SCATA CAPITAL, INS, NEW YORK         2.582,527         226,156,00         0.00           MACQUARIE BANK LTD, FONG KONG         94,407 61         337,384,12201         0.00         SCOTA CAPITAL, INCS, NEW YORK         1.56,17         226,451,00         0.00           MACQUARIE SACS (SINGAPORE, SINGAPORE         562,75         254,400.00         0.00         SCAPCRT GROUP SECURTITES, I.C., NEW YORK         1.51,88         91,287.00         0.00           MACQUARIE SECS USA INC, NEW YORK         1.695,95         44,213.00         0.00         SGAECICAPITAL, INCS, NEW YORK         1.530,88         91,287.00         0.00         0.00           MACQUARIE SECURTITES ITD, AUCKLAND         2.433,21         44,230.00         0.00         SGAECICAPITAL, INCS,								
LONGBOW SECURTITES LL, NEW YORK         58.91         13.94.00         0.04         SANTANDER CENTRAL HISPANO INVT, MADRID         178.75         188.270.00         DOD           LONGDY CAPITAL MARKETS, JERSEY CITY         2.512.78         101,177.00         Cost         SANTANDER CENTRAL HISPANO INVT, MADRID         178.75         188.270.00         DOD           MACQUARE BANK LTD, HONG KONG         2.240.76         189.738.172.01         ODS         SCR SECURTIES CO, LPU BANCKOK         2.262.25         281.466.00         DOD           MACQUARE BANK LTD, HONG KONG         2.949.70         0.00         SCOTA CAPITAL (USA) INC. NEW YORK         1.55.17         92.457.00         DOD           MACQUARE SECS (SINCAPORE, SINAPORE         562.75         244.200.00         DO         SCAMERICAS SECURTIES, LLC, NEW YORK         1.53.08         91.287.00         DO           MACQUARE SECS (SINCAPORE, SINAPORE         562.7         244.200.00         DO         SGAREICAS SECURTIES, LLC, NEW YORK         1.53.08         91.287.00         DO         DO           MACQUARE SECURTIES LTD, SUCAL MARD         23.13.7         1.382.00         DO         SG SEC (LONDON         48.49.28.47         8.70.434.00         DO         DO         MACQUARE SECURTIES, LLC, NEW YORK         1.86.36         53.970.00         DO         MACQUARE SECURTIES LTD, MANKA GERNANCHALA, AR	LIQUIDNET INC, NEW YORK							0.02
LOOP CAPITAL MARKETS, JERSEY CITY         2,512.78         101,177.00         0.02         SANTANDER INVERSITY         576.40         2,882.00         0.00         Color           MACQUARE BANK LIMITED, SYDNEY         4,345.40         2,887.310.00         0.00         SCOTA CAPITAL, LINA, NEW YORK         2,528.25         2,81,456.00         0.00           MACQUARE BANK LTD, SYDNEY         481.89         433.208.00         0.00         SCOTA CAPITAL, LINA, NEW YORK         157.72         2,446.00         0.00           MACQUARE BACK LTD, SYDNEY         481.89         433.208.00         0.00         SCOTA CAPITAL, INS, NEW YORK         157.72         2,464.00         0.00           MACQUARE SECS ISINA INC, NEW YORK         1,589.27         2,442.00.0         0.00         SGAMERICAS ECUANTICS LLC, NEW YORK         1,530.88         91.287.00         0.00           MACQUARE SECS ISINA INC, NEW YORK         1,589.54         4,213.00         0.00         SG SECURTIES LLC, NEW YORK         1,530.84         87.043.410         0.00           MACQUARE SECURITIES LTD, AUCKLAND         321.38         74.238.00         0.00         SG SECURTIES LLC, NEW YORK         1,277.63         2,417.00         0.00           MACQUARE SECURITIES LTD, AUCKLAND         321.38         74.238.00         0.00         SG SECURTIES LLC, NEW YORK         1,	LIQUIDNET INC, NEW YORK	21.01	1,681.00	0.01		7,464.50	1,479,486.00	0.01
MACQUARIE BANK LIMTED, SYDNEY         4.346.40         2.847.313.00         0.00         SCG SECURTIES COLTD, BANGKOK         2.464.5         367.500.00         0.00           MACQUARIE BANK LTD, SYDNEY         481.89         433.339.00         0.00         SCOTIA CAPITAL, IUK, NEW YORK         1.551.7         92.447.00         0.00           MACQUARIE CAPITAL, IUS, NEW YORK         3.873.41.00         0.02         SCOTIA CAPITAL, IUK, NEW YORK         5.51.7         92.447.00         0.00           MACQUARIE CAETTAL, USA, INC, NEW YORK         3.89.99         659.737.00         0.00         SG ADERICAS SECURTIES LLC, NEW YORK         5.388.99         4.227.00         0.02           MACQUARIE SECS (SINGAPORE), SINGAPORE         582.7         24.200.00         0.00         SG SECURTIES LLD, NEW YORK         1.308.89         4.217.00         0.02           MACQUARIE SECURTIES LTD, AUCLIAND         22.138         71.238.00         0.00         SG SECURTIES LID, AUCRIANS         72.17.12         21.371.1810.00         0.00           MACQUARIE SECURTIES LTD, AUCLIAND         22.138         73.000.00         0.00         SIG SECURTIES LID, AUCRIANS         74.981.00         0.01           MACQUARIE SECURTIES LTD, AUCLIAND         72.138         71.080.00         0.02         SKANDINAVISKA ENSKILDA BANKENC, COPENHAGE         74.1287.00         0.01<	LONGBOW SECURITIES LLC, NEW YORK				SANTANDER CENTRAL HISPANO INVT, MADRID	176.75	188,270.00	0.00
MACQUARIE BANK LTD, HONG KONG         92,440.76         188,788,412.01         0.00         SCOTIA CAPITAL (USA) INC, NEW YORK         2,528.25         281,456.00         0.01           MACQUARIE GAPTIAL (USA) INC, NEW YORK         399.17         25,639.00         0.02         SCOTIA CAPITAL (USA) INC, NEW YORK         3,742.27         266,890.00         0.00           MACQUARIE GAPTIAL (USA) INC, NEW YORK         2,460.09         659,737         0.00         SEAPORT GROUP SECURITIES LLC, NEW YORK         1,530.88         91,287.00         0.00           MACQUARIE SECS (SINABAPORE), SINGAPORE         662,75         244,203.00         0.00         SG AMERICAS SECURITIES LLC, NEW YORK         1,530.88         91,287.00         0.00           MACQUARIE SECURITIES LIC, AUCKLAND         244,53.79         406,889.00         0.00         SG SEC (LINDON) ITO, LONDON         42,437.09         0.00           MACQUARIE SECURITIES LIC, AUCKLAND         24,54.37         10,080.00         0.06         SHORE CAPTIAL (INC, NEW YORK         1,86.36         53,970.00         0.00           MACQUARIE SECURITIES LIC, AMERIA MAININ         53.47         10,080.00         0.03         SIODTIA ND COMPANY LANGKONG         74,42         77,000.00         0.00           MARDIANG KONG SAN, MANNIN ANSA CARGANARY CAPS MANNINA/SKA SINGKONG SANGKONG         37,385.00         0.01         SK								0.02
MACQUARIE GANK, LTD, SYDNEY         481.89         43.209.00         OLD         SCOTIA CAPITAL, ILCA, NEW YORK         155.17         92.487.00         0.00           MACQUARIE CAPITAL, USA, INC. NEW YORK         3.889.09         658.737.00         0.00         SEAPORT GROUP SECURITIES, LLC, NEW YORK         5.217.75         256.014.00         0.00           MACQUARIE SECS USAINC, NEW YORK         1.889.59         48.213.00         0.00         SG AMERICAS SECURITIES, LLC, NEW YORK         48.928.47         8,704.341.00         0.00           MACQUARIE SECS USAINC, NEW YORK         1.889.59         48.213.00         0.00         SG SECURITIES, HONG KONG         32.472.12         21.371.819.00         0.00           MACQUARIE SECURITIES ITO, SEOUL         24.543.79         406.889         0.00         SSECURITIES, HONG KONG         74.42         770.900.00         0.00           MACQUARIE SECURITIES ITO, SEOUL         24.543.79         10.082.00         0.00         SINDER CAPTLAL, LINCK (CNG         74.42         770.900.00         0.00           MACQUARIE SECURITIES ITO, KEONG         74.42         770.900.00         0.00         SINDER CAPTLAL, LINCK (CNG         74.42         770.900.00         0.00           MACQUARIE SECURITIES, HONG KONG         74.43         10.352.00         0.00         SINDER CAPTLAL, LINCK (CNG         74								
MACQUARIE CAPITAL (USA) INC. NEW YORK         399.17         25.839.00         0.02         SCOTIA CAPITAL INT, STORNOTO         3.74.27         206.800.00         0.02           MACQUARIE SCEPTAL ITD, LONDON         2.469.00         650.770         0.00         SEAPORT GROUP SECURITIES, LIC.NEW YORK         1.530.88         91.287.00         0.00           MACQUARIE SECURITIES, LIC, NEW YORK         1.680.870.00         650.770.00         000         SG AMERICAS SECURITIES, LIC, NEW YORK         1.530.88         91.287.00         0.00           MACQUARIE SECURITIES, LID, AUCKLAND         321.38         74.288.00         0.00         SG SECULCINDON         48.928.47         8,704.341.00         0.00           MACQUARIE SECURITIES, LID, AUCKLAND         321.38         74.288.00         0.00         SHENYIN WARGUO SECS LID, HONG KONG         794.42         770.90.00         0.00           MACQUARIE SECURITIES, LID, ADRIANCINA GERVARIES, LID, LONDON         366.54         71.769.00         0.00         SHENYIN WARGUO SECS LID, HONG KONG         794.42         770.90.00         0.00           MAXIM GROUP, JERSEY CITY         33.37         10.382.00         0.00         SKANDINAVISKA ENSKILDA BANKEN, LONDON         1.865.36         53.970.00         0.00           MERRILL LYNCH BROADCURTE CAP, NEW YORK         1.863.31         76.950.00         0.00								
MACQUARIE CAPITAL ITD, LONDON         2469 00         658,737.00         0.00         SEAPORT GROUP SECURTIES, LLC, NEW YORK         5,217.75         254,014.00         0.00           MACQUARIE SECS (SINGAPORE), SINGAPORE         562         724,200.00         0.00         SG SEC (LINDON) LTD, LONDON         48,928.47         8,704,341.00         0.00           MACQUARIE SECS USA, INC, NEW YORK         1,889.59         42,213.00         0.04         SG SEC (LINDON) LTD, LONDON         24,222.12         21,371,819.00         0.00           MACQUARIE SECURTIES, LTD, AUCKLAND         321.88         74,238.00         0.00         SG SECURTIES, HONG KONG         794.42         770,900.00         0.00           MACNDARE SECURTIES, COR, LINSK VICT AM MAIN         634.77         10.308.00         0.00         SINGER CAPITAL MARKETS, LONDON         366.54         17,669.00         0.00           MAXIM GROUP, JERSEY CITY         323.75         10.392.00         0.00         SINGER CAPITAL MARKETS, LD, LONDON         1,865.36         53,970.00         0.00           MAYBANK INV BANK BERHAD, KUALA LUMPUR         1,188.33         136,000.00         0.00         SKANDINAVISKA ENSKILDA BANKEN, LOPENA         1,663.11         75,003.00         0.00           MERRILL LYNCH (SINGAPORE) PTE LTD         459.62         6,743.4982.00         0.00         SKANDINAV								
MACQUARIE SECS (SINGAPORE), SINGAPORE         562.75         244.200.00         0.00         SG AMERICAS SECURTIES LLC, NEW YORK         1.530.88         91.287.00         0.00           MACQUARIE SECS USAING, NEW YORK         1.689.59         48.213.00         0.04         SG SEC (LONDON) TDL LONDON         48.928.47         21.217.010.00         0.00           MACQUARIE SECURTIES LTD, AUCKLAND         321.38         74.238.00         0.00         SG SEC (LONDON) TDL LONDON         38.65.4         17.068.00         0.00           MACQUARIE SECURTIES LTD, SEOUL         24.543.79         10.030.00         0.00         SINGER CAPTIAL STOCKBROKERS, LONDON         38.65.4         17.068.00         0.00           MACMARKER LAD, KUALAL LUMPUR         1.188.33         318.000         0.00         SINGER CAPTIAL MARKETS ITD, LONDON         39.98         30.000.00         0.00           MERRILL LYNCH & CO ING ATLAS GLOBAL, NY         1.49.25         75.55.50         0.01         SKANDINAVISKA ENSKILDA BANKEN, LONDON         1.663.14         760.398.00         0.02           MERRILL LYNCH & GO ING ATLAS GLOBAL, NY         1.49.63.5         6.743.982.00         0.01         SKANDINAVISKA ENSKILDA BANKEN, LONDON         1.663.14         760.398.00         0.02           MERRILL LYNCH BCOLONG ATLAS GLOBAL, NY         1.49.63.25         6.743.982.00         0.01 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.02</td>								0.02
MACQUARE SECURTIES LTD. AUCKLAND         321.38         74.238.00         0.00         SG ECURTIES LTD. AUCKLAND         32.472.12         21.371.319.00         0.00           MACQUARE SECURTIES LTD. SEOUL         24.454.79         406.889.00         0.00         SHENYIN WANGU SEGS LTD_HONG KONG         794.42         770.900.00         0.00           MAXIM GROUP, JERSEY CITY         323.76         10.392.00         0.03         SHORE CAPITAL STOCKBROKERS, LONDON         306.54         17.668.00         0.02           MAXIM GROUP, JERSEY CITY         323.76         10.392.00         0.03         SHORE CAPITAL STOCKBROKERS, LONDON         306.54         17.668.00         0.02           MAYBAK INY KING KANK BERHAD, KUALA LUMPUR         1,862.81         78.598.00         0.02         SKANDINAVISKA ENSKILDA BANKEN, LONDON         16.03.14         760.338.00         0.02           MERRILL LYNCH GINCA CAP, NEW YORK         14.34         1912.00         0.01         SMBC NIKAYS ENSKILDA BANKEN, LONDON         16.683.14         760.338.00         0.02           MERRILL LYNCH BROADCOURT CAP, NEW YORK         14.48.3         71.010.0         0.00         SMBC SECURTIES LIND, LONDON         16.683.14         760.338.00         0.02           MERRILL YNCH BROADCOURT CAP, NEW YORK         14.033.98         62.237.010         0.01         STATES ENER SMITH	MACQUARIE SECS (SINGAPORE), SINGAPORE							0.02
MACQUARIE SECURTIES LTD. SEOUL         24,543.79         406,889.00         0.00         SHORE CAPITAL MANGUO SECS LTD. HONG KONG         74,42         770,900.00         0.00           MAINIFIRST BANK AG,FRANKFURT AM MAIN         634,79         10,080.00         0.00         SHORE CAPITAL STOCKBROKERS, LONDON         306,54         17,669.00         0.02           MAXIM GROUP, JERSEY CITY         323.76         10,092.00         0.03         SIIDOTI AND COMPANY LLC, NEW YORK         1,865.36         53,370.00         0.02           MAYBANK INV BANK BERHAD, KUALA LUMPUR         1,188.33         318,000.00         0.00         SKANDINAVISKA ENSKLIDA BANKEN, LONDON         469.45         11,195.00         0.00           MERRILL LYNCH (SINGAPORE) PTE LTD         459.02         660,000.00         0.01         SKANDINAVISKA ENSKLIDA BANKEN, LONDON         16.03.17         52,350.00         0.02           MERRILL LYNCH BROADCOURT CAP, NEW YORK         14.34         1,912.00         0.01         SMBC NIKKO SECURITIES, INC, NEW YORK         4,393.98         253,000.00         0.02           MERRILL LYNCH BROADCOURT CAP, NEW YORK         14.34         1,912.00         0.01         SMBC NIKKO SECURITIES, INC, NEW YORK         4,393.98         253,000.00         0.02           MERRILL LYNCH BROADCAUNT DATE         19,663.95         6,743,992.00         0.03	MACQUARIE SECS USA INC, NEW YORK	1,689.59	48,213.00	0.04		48,928.47	8,704,341.00	0.01
MAINERST BANK AG, FRANKFURT AM MAIN         634 79         10.008.00         0.06         SHORE CAPITAL STOCKBROKERS, LONDON         306,54         17,660.00         0.02           MAXIM GROUP, JERSEY CITY         323,76         10.392.00         0.03         SIDGTI AND COMPANY LLC, NEW YORK         1,865,36         53,970.00         0.03           MAYBANK INY BANK BERHAD,KUALA LUMPUR         1,188,33         318,000.00         0.00         SINGER CAPITAL MARKETS LTD, LONDON         1,063,17         52,850.00         0.00           MERRILL LYNCH (SINCAPORE) PTE LTD         459.02         660,000.00         0.00         SKANDINAVISKA ENSKILDA BANKEN, COPENHAGE         469.45         11,195.00         0.00           MERRILL LYNCH (SINCAPORE) PTE LTD         459.02         660,000.00         0.00         SKANDINAVISKA ENSKILDA BANKEN, STOCKHON         16,563.14         760,398.00         0.00           MERRILL LYNCH BROADCOURT CAP, NEW YORK         14,34         1,912.00         0.00         SMGC SECURITIES, INC, NEW YORK         4,383.88         253,000.00         0.00           MERRILL LYNCH INTL (2L), LONDON         488.3         70,101.00         0.00         SOUTHWEST ECURITIES, INC, NEW YORK         3,783.50         108,100.00         0.00           MERRILL LYNCH INTL (2L), LONDON EQUITIES         183,180.80         71,391.40.80         0.00	MACQUARIE SECURITIES LTD, AUCKLAND					32,472.12	21,371,819.00	0.00
MAXIM GROUP, JERSEY CITY         223.76         10.920.00         0.03         SIDOTI AND COMPANY LLC, NEW YORK         1.86.36         53.970.00         0.00           MAYBANK INV BANK BERHAD, KUALA LUMPUR         1.188.33         318.000.00         0.00         SINGER CAPITAL MARKETS LTD, LONDON         379.98         30.000.00         0.00           MEDIDBANCA SPA, MILANO         1.352.81         78.598.00         0.02         SKANDINAVISKA ENSKILDA BANKEN, LONDON         1.663.17         52.850.00         0.00           MERRILL LYNCH (SINGAPORE) PTE LTD         459.02         660.000.0         0.01         SKANDINAVISKA ENSKILDA BANKEN, LONDON         1.663.14         760.398.00         0.02           MERRILL LYNCH SCINGAPORE) PTE LTD         459.02         660.000.0         0.01         SKANDINAVISKA ENSKILDA BANKEN, STOCKHOLM         1.663.14         763.398.00         0.02           MERRILL LYNCH BICL SCENDADCOURT CAP, NEW YORK         14.34         1.912.00         0.01         SMBC NIKKO SECURITIES ITD, WAN CHAI         1.63.24         72.20.370.0         0.02           MERRILL LYNCH INTL (2), LONDON         48.83         71.910.0         0.00         SMBC SECURITIES INC, NEW YORK         3.73.35.0         10.61.00.0         0.04           MERRILL LYNCH INTL (2), LONDON         48.83         72.23.23.1.90.00         0.01         STAT					,			0.00
MAYBANK INV BANK BERHAD, KUALA LUMPUR         1,188.33         318,000.0         0.00         SINGER CAPITAL MARKETS LTD, LONDON         379.98         30,000.0         0.01           MEDIOBANCA SPA, MILANO         1,362.81         78,598.00         0.02         SKANDINAVISKA ENSKILDA BANKEN, COPENHAGE         469.45         11,195.00         0.00           MERRILL LYNCH (SINGAPORE) PTE LTD         459.02         660.000.0         0.01         SKANDINAVISKA ENSKILDA BANKEN, STOCKHOLM         16,663.14         760,398.00         0.02           MERRILL LYNCH BROADCOURT CAP, NEW YORK         14.34         1912.00         0.01         SMBC NIKKO SECURITIES ITD, WAN CHAIL         4433.98         253,000.00         0.02           MERRILL LYNCH BROADCOURT CAP, NEW YORK         14.34         70,110.0         0.00         SOUTHWEST SECURITIES ITD, WAN CHAIL         4393.98         253,000.00         0.02           MERRILL LYNCH INTL CONDON EQUITES         183,180.80         74.488.484.00         0.00         SOUTHWEST SECURITIES INC, NEW YORK         3,783.50         108,100.00         0.04           MERRILL LYNCH PIERCE FENNER, WILMINGTON         32,817.39         6,225,930.00         0.01         STATPERAS SECURITIES INC, NEW YORK         3,783.50         108,100.00         0.01           MERRILL LYNCH PROFESSIONAL CLGR, PURCHAS         341.97         9,438.00								
MEDIOBANCA SPA, MILANO         1,362,81         76,598.00         0,02         SKANDINAVISKA ENSKILDA BANKEN, COPENHAGE         460,45         11,195.00         0,00           MERRILL LYNCH & CO INC ATLAS GLOBAL, NY         1,601.57         52,850.00         0,00         SKANDINAVISKA ENSKILDA BANKEN, STOCKHOLM         16,503.17         52,850.00         0,00           MERRILL LYNCH & CO INC ATLAS GLOBAL, NY         1,601.56         255,455.00         0,01         SKANDINAVISKA ENSKILDA BANKEN, STOCKHOLM         16,503.14         760.398.00         0,02           MERRILL LYNCH BCADCOURT CAP, NEW YORK         14,34         1,912.00         0,00         SMBC NIKKO SECURITIES, INC NEW YORK         4,383.98         253,000.00         0,02           MERRILL LYNCH GITS ITD, LONDON         48.83         70,101.00         0,00         SOLTEY GENERALE LONDON BRANCH, LONDON         35,93.26         7,520.379.00         0,00           MERRILL LYNCH PIERCE FENNER SMITH INC NY         204,983.55         22,21.499.00         0,01         STATE STREET GLOBAL MARKETS LLC, BOSTON         876.93         77,333.00         0,00           MERRILL LYNCH PIERCE FENNER, MITH INC NY         2,214.19.00         0,00         STATE STREET GLOBAL MARKETS LLC, BOSTON         876.93         77,333.00         0,00           MERRILL LYNCH PIERCE FENNER, MITH INC NY         2,214.12         279,000.00<								
MERRILL LYNCH (SINGAPORE) PTE LTD         459.02         660,000.00         0.00         SKANDINAVISKA ENSKLDA BANKEN, LONDON         1,603.17         52,850.00         0.02           MERRILL LYNCH & CO INC ATLAS GLOBAL, NY         1,601.56         255,455.00         0.01         SKANDINAVISKA ENSKLDA BANKEN, LONDON         16,563.14         760,398.00         0.02           MERRILL LYNCH BROADCOURT CAP, NEW YORK         14,34         1,912.00         0.01         SMBC NIKKO SECURITIES, INC, NEW YORK         4,333.98         253,000.00         0.02           MERRILL LYNCH BROADCOURT CAP, NEW YORK         14,88.3         70,101.00         0.00         SOUTHWEST SECURITIES, INC, NEW YORK         4,393.98         253,000.00         0.02           MERRILL LYNCH INTL (L) LONDON EQUITIES         183,180.86         74,884,848.00         0.00         SOUTHWEST SECURITIES, INC, NEW YORK         3,783.50         108,100.00         0.04           MERRILL LYNCH INTL (L) NDON EQUITIES         183,180.86         74,884,848.00         0.00         SOUTHWEST SECURITIES, INC, NEW YORK         3,783.50         108,100.00         0.04           MERRILL LYNCH INTL (L) NDON EQUITIES         183,1497         9,838.00         0.03         STEPHENS INC, LITTLE ROCK         17,325.44         543,938.00         0.03           MERRILL LYNCH, SOLVTM, SA OPAULO         2,214.12         27								
MERRILL LYNCH & CO INC ATLAS GLOBAL, NY         1,601.56         255,455.00         0.01         SKANDINAVISKA ENSKILDA BANKEN, STOCKHOLM         16,563.14         760,398.00         0.02           MERRILL LYNCH BROADCOURT CAP, NEW YORK         14.34         1,912.00         0.01         SMBC NIKKO SECURITIES, ITD, WAN CHAI         463.24         24,200.00         0.02           MERRILL LYNCH BITL, LONDON         19,663.95         6,743.982.00         0.00         SOCIETE GENERALE LONDON BRANCH, LONDON         35,398.26         7,520,379.00         0.00           MERRILL LYNCH INTL LONDON EQUITIES         183,180.86         74,884,848.00         0.00         SOUTHWEST SECURITIES INC, NEW YORK         3,783.50         108,100.00         0.00           MERRILL LYNCH PIERCE FENNER SMITH INC NY         22,321,499.00         0.01         STANDARD BANK, LONDON         14,758.64         2,211,376.00         0.01           MERRILL LYNCH PIERCE FENNER, WILMINGTON         32,817.39         6,225,930.00         0.01         STATE STREET GLOBAL MARKETS LLC, BOSTON         876,83         77,393.00         0.00           MERRILL LYNCH AS CYTM, SAO PAULO         2,214.12         279,000.00         STIFLE NICOLAUS         28,857.13         1,164,367.00         0.02           MIRAE ASSET SECURITIES, SECUL         2,007.62         562,070.0         0.44         STURDIVANT & CO								0.03
MERRILL LYNCH GLTS LTD, LONDON         19,663.95         6,743,982.00         0.00         SMBC SECURITIES, INC NEW YORK         4,393.98         253,000.00         0.02           MERRILL LYNCH INTL (2L), LONDON         48.83         70,101.00         0.00         SOCIETE GENERALE LONDON BRANCH, LONDON         35,938.26         7,520,379.00         0.00           MERRILL LYNCH INTL (2L), LONDON EQUITIES         183,180.86         74.884,484.00         0.00         SOUTHWEST SIC, NEW YORK         37,835.01         108,100.00         0.04           MERRILL LYNCH PIERCE FENNER, WILMINGTON         32,817.39         6,225,930.00         0.01         STATE STREET GLOBAL MARKETS LLC, BOSTON         876.93         77,393.00         0.01           MERRILL LYNCH PROFESSIONAL CLRC, PURCHAS         341.97         9,838.00         0.03         STEPHENS INC, LITTLE ROCK         17,325.44         543,338.00         0.02           MERRILL LYNCH SAOVET, SYDNEY         0.24         338.00         0.03         STIRATEGAS SECURITIES LLC, NEW YORK         82.00         3,280.00         0.02           MIRAE ASSET SECURITIES, SEOUL         2,007.62         56,27.00         0.04         STURDIVANT & CO INC, BROOKLYN         2,132.91         76,144.00         0.02           MITSUBISHI UF J SECURITIES, NEW YORK         13,059.19         1,529,300.00         0.01         <	MERRILL LYNCH & CO INC ATLAS GLOBAL, NY			0.01				0.02
MERRILL LYNCH INTL (2L), LONDON         48.83         70,101.00         0.00         SOCIETE GENERALE LONDON BRANCH, LONDON         35,938.26         7,520,379.00         0.00           MERRILL LYNCH INTL LONDON EQUITIES         183,180.86         74,884,848.00         0.00         SOUTHWEST SECURITIES INC, NEW YORK         3,783.50         108,100.00         0.00           MERRILL LYNCH PIERCE FENNER SMITH INC NY         204,983.52         22,321,499.00         0.01         STANDARD BANK, LONDON         14,758.64         22,211,376.00         0.00           MERRILL LYNCH PIERCE FENNER SMITH INC NY         32,817.39         6,225,930.00         0.01         STATE STREET GLOBAL MARKETS LLC, BOSTON         876.93         77,393.00         0.00           MERRILL LYNCH PROFESSIONAL CLCR, PURCHAS         341.97         9,838.00         0.03         STEPHENS INC, LITTLE ROCK         17,325.44         543,938.00         0.00           MERRILL LYNCH, SYDNEY         0.24         338.00         0.00         STRATEGAS SECURITIES LLC, NEW YORK         82.00         3,828.09         218,724.00         0.03           MISCHLER FINANCIAL GROUP INC, NEW YORK         3,383.39         126,692.00         0.03         SUNTRUST CAPITAL MARKETS INC, NEW YORK         6,883.09         218,724.00         0.03           MITSUBISHI UFJ SECURITIES, SEOUL         2,142.5         3	MERRILL LYNCH BROADCOURT CAP, NEW YORK	14.34	1,912.00	0.01	SMBC NIKKO SECURITIES LTD, WAN CHAI	463.24	24,200.00	0.02
MERRILL LYNCH INTL LONDON EQUITIES         183,180.86         74,884,848.00         0.00         SOUTHWEST SECURITIES INC, NEW YORK         3,783.50         108,100.00         0.04           MERRILL LYNCH PIERCE FENNER, MITH INC NY         204,983.55         22,321,499.00         0.01         STANDARD BANK, LONDON         14,758.64         2,211,376.00         0.01           MERRILL LYNCH PIERCE FENNER, MITH INC NY         204,983.55         22,321,499.00         0.01         STATE STREET GLOBAL MARKETS LLC, BOSTON         876.93         77,393.00         0.01           MERRILL LYNCH PROFESSIONAL CLRG, PURCHAS         341.97         9,838.00         0.03         STEPHENS INC, LITTLE ROCK         17,325.44         543,938.00         0.03           MERRILL LYNCH, SYDNEY         0.24         338.00         0.03         STITFEL NICOLAUS         28,857.13         1,164,367.00         0.02           MIRCHLER FINANCIAL GROUP INC, NEW YORK         3,380.39         126,692.00         0.03         SUNTRUST CAPITAL MARKETS INC, NEW YORK         82.00         3,280.00         0.03           MITSUBISHI UFJ SECURITIES, NEW YORK         13,059.19         1,529,300.00         0.01         TD SECURITIES (USA) LLC, NEW YORK         16,831.00         0.02           MITSUBISHI UFJ SECURITIES SAL, HONG KONG         56.58         1,300.00         0.01         TD SECURITIES	MERRILL LYNCH GILTS LTD, LONDON							0.02
MERRILL LYNCH PIERCE FENNER SMITH INC NY         204,983.55         22,321,499.00         0.01         STANDARD BANK, LONDON         14,758.64         2,211,376.00         0.01           MERRILL LYNCH PIERCE FENNER, WILMINGTON         32,817.39         6,225,930.00         0.01         STATE STREET GLOBAL MARKETS LLC, BOSTON         876.93         77,393.00         0.01           MERRILL LYNCH PROFESSIONAL CLRG, PURCHAS         341.97         9,838.00         0.03         STEPHENS INC, LITTLE ROCK         17,325.44         543,938.00         0.03           MERRILL LYNCH, SAC VTM, SAO PAULO         2,214.12         279,000.00         0.01         STIRTEGAS SECURITIES LLC, NEW YORK         8,867.11         1,164,367.00         0.02           MERRILL LYNCH, SYDNEY         0.24         338.03         126,692.00         0.03         STURDIVANT & CO INC, BROOKLYN         2,132.91         76,144.00         0.03           MISCHLER FINANCIAL GROUP INC, NEW YORK         3,380.39         126,692.00         0.03         SUNTRUST CAPITAL MARKETS INC, NEW YORK         18,381.00         0.04           MISCHLER FINANCIAL GROUP INC, NEW YORK         13,059.19         1,529,300.00         0.04         TELSEY ADVISORY GROUP LLC, DALLAS         2,747.79         104,027.00         0.02           MITSUBISHI UFJ SECURITIES USA INC. NEW YORK         1,059.19         1,529,300.00								0.00
MERRILL LYNCH PIERCE FENNER, WILMINGTON         32,817.39         6,225,930.00         0.01         STATE STREET GLOBAL MARKETS LLC, BOSTON         876.93         77,393.00         0.01           MERRILL LYNCH PROFESSIONAL CLRG, PURCHAS         341.97         9,838.00         0.03         STEPHENS INC, LITTLE ROCK         17,325.44         543,938.00         0.03           MERRILL LYNCH SA CVTM, SAO PAULO         2,214.12         279,000.00         0.01         STIFEL NICOLAUS         28,857.13         1,164,367.00         0.02           MERRILL LYNCH, SYDNEY         0.24         338.00         0.00         STRATE GAS SECURITIES LLC, NEW YORK         82,00         0.03           MISCHLER FINANCIAL GROUP INC, NEW YORK         3,303.93         126,692.00         0.03         SUNTRUST CAPITAL MARKETS INC, NEW YORK         6,833.09         218,724.00         0.02           MITSUBISHI UFJ SECS INTL PLC, LONDON         389.67         16,800.00         0.02         SVENSKA HANDELSBANKEN, STOCKHOLM         1,715.85         94,727.00         0.02           MITSUBISHI UFJ SECS INTL PLC, LONDON         389.67         16,800.00         0.01         TD SECURTITES (USA) LLC, NEW YORK         133,24         3,81.00         0.04           MITSUBISHI UFJ SECURITIES USA INC. NEW YORK         13,529,300.00         0.01         TDNG YANG SECURITIES INC, SEOUL         1,5								0.04
MERRILL LYNCH PROFESSIONAL CLRG, PURCHAS         341.97         9,838.00         0.03         STEPHENS INC, LITTLE ROCK         17,325.44         543,938.00         0.03           MERRILL LYNCH SA CVTM, SA O PAULO         2.214.12         279,000.00         0.01         STIFEL NICOLAUS         28,857.13         1,164,367.00         0.02           MERRILL LYNCH, SYDNEY         0.24         338.00         0.00         STIREL INCOLAUS         28,857.13         1,164,367.00         0.02           MIRAE ASSET SECURITIES, SEOUL         2,007.62         56,207.00         0.04         STURDIVANT & CO INC, BROOKLYN         2,132.91         76,144.00         0.03           MIRSUBISHI UFJ SECS INTL PLC, LONDON         389.67         16,609.00         0.02         SVENSKA HANDELSBANKEN, STOCKHOLM         1,715.85         94,727.00         0.02           MITSUBISHI UFJ SECINTLES, NEW YORK         13,059.19         1,529,300.00         0.01         TD SECURITIES USA INC. NEW YORK         153.24         3,831.00         0.04           MIZUHO SECURITIES USA INC. NEW YORK         7,075.06         874,924.00         0.01         TONG YANG SECURITIES INC, SEOUL         1,521.26         21,475.00         0.02           MIZUHO SECURITIES USA INC. NEW YORK         121.62         3,644.00         0.03         TORONTO DOMINION SEC, TORONTO         3,629.49<								
MERRILL LYNCH SA CVTM, SAO PAULO         2,214.12         279,000.00         0.01         STIFEL NICOLAUS         28,857.13         1,164,367.00         0.02           MERRILL LYNCH, SYDNEY         0.24         338.00         0.00         STRATEGAS SECURITIES LLC, NEW YORK         82.00         3,280.00         0.03           MIRAE ASSET SECURITIES, SEOUL         2,007.62         56,207.00         0.04         STURDIVANT & CO INC, BROOKLYN         2,132.91         76,144.00         0.03           MISCHLER FINANCIAL GROUP INC, NEW YORK         3,380.39         126,692.00         0.03         SUNTRUST CAPITAL MARKETS INC, NEW YORK         6,883.09         218,724.00         0.03           MITSUBISHI UFJ SECURITIES, NEW YORK         13,059.19         1,529,300.00         0.01         TD SECURITIES (USA) LLC, NEW YORK         153.24         3,831.00         0.04           MIZUHO SECURITIES USA INC, NEW YORK         7,075.06         874,924.00         0.03         TORONTO DOMINION SEC, TORONTO         3,629.49         29,782.00         0.07           MIZUHO SECURITIES USA INC, NEW YORK         7,075.06         874,924.00         0.03         UBS EQUITIES INC, SEOUL         1,521.26         21,475.00         0.07           MIZUHO SECURITIES USA INC, NEW YORK         121.62         3,644.00         0.03         UBS SECURITIES INC, SEOUL								
MERRILL LYNCH, SYDNEY         0.24         338.00         0.00         STRATEGAS SECURITIES LLC, NEW YORK         82.00         3,280.00         0.03           MIRAE ASSET SECURITIES, SEOUL         2,007.62         56,207.00         0.04         STURDIVANT & CO INC, BROOKLYN         2,132.91         76,144.00         0.03           MISCHLER FINANCIAL GROUP INC, NEW YORK         3,380.39         126,692.00         0.03         SUNTRUST CAPITAL MARKETS INC, NEW YORK         6,83.09         218,724.00         0.03           MITSUBISHI UFJ SECS INTL PLC, LONDON         389.67         16,800.00         0.02         SVENSKA HANDELSBANKEN, STOCKHOLM         1,715.85         94,727.00         0.02           MITSUBISHI UFJ SECURITIES, NEW YORK         13,059.19         1,529,300.00         0.01         TD SECURITIES (USA) LLC, NEW YORK         153.24         3,831.00         0.04           MIZUHO SECURITIES USA INC, NEW YORK         7,075.06         874,924.00         0.01         TONG YANG SECURITIES INC, SEOUL         1,521.26         21,475.00         0.07           MIZUHO SECURITIES USA INC, NEW YORK         121.62         3,644.00         0.03         TORONTO DOMINION SEC, TORONTO         3,629.49         239,782.00         0.02           MCRGAN STANLEY & CO INC, NY         267,288.96         41,768,683.00         0.01         UBS SECURITIES CANA	MERRILL LYNCH SA CVTM, SAO PAULO							0.03
MIRAE ASSET SECURITIES, SEOUL         2,007.62         56,207.00         0.04         STURDIVANT & CO INC, BROOKLYN         2,132.91         76,144.00         0.03           MISCHLER FINANCIAL GROUP INC, NEW YORK         3,380.39         126,692.00         0.03         SUNTRUST CAPITAL MARKETS INC, NEW YORK         6,883.09         218,724.00         0.03           MITSUBISHI UFJ SECS INTL PLC, LONDON         389.67         16,600.00         0.02         SVENSKA HANDELSBANKEN, STOCKHOLM         1,715.85         94,727.00         0.02           MITSUBISHI UFJ SECS INTL PLC, LONDON         389.67         16,800.00         0.02         SVENSKA HANDELSBANKEN, STOCKHOLM         1,715.85         94,727.00         0.02           MITSUBISHI UFJ SECURITIES ASA, HONG KONG         56.58         1,300.00         0.04         TELSEY ADVISORY GROUP LLC, DALLAS         2,747.79         104,027.00         0.03           MIZUHO SECURITIES USA INC. NEW YORK         7,075.06         874,924.00         0.01         TONG YANG SECURITIES INC, SEOUL         1,521.26         21,475.00         0.07           MIZUHO SECURITIES USA INC, NEW YORK         121.62         3,644.00         0.03         TORONTO DOMINION SEC, TORONTO         3,629.49         239,782.00         0.02           MORGAN STANLEY & CO INC, NY         267,288.96         41,768,683.00         0.01	MERRILL LYNCH, SYDNEY							0.03
MITSUBISHI UFJ SECS INTL PLC, LONDON         389.67         16,800.00         0.02         SVENSKA HANDELSBANKEN, STOCKHOLM         1,715.85         94,727.00         0.02           MITSUBISHI UFJ SECURITIES, NEW YORK         13,059.19         1,529,300.00         0.01         TD SECURITIES (USA) LLC, NEW YORK         153.24         3,831.00         0.04           MIZUHO SECURITIES ASIA, HONG KONG         56.58         1,300.00         0.04         TELSEY ADVISORY GROUP LLC, DALLAS         2,747.79         104.027.00         0.03           MIZUHO SECURITIES USA INC, NEW YORK         7075.06         874,924.00         0.01         TONG YANG SECURITIES INC, SEOUL         1,521.26         21,475.00         0.07           MIZUHO SECURITIES USA INC, NEW YORK         121.62         3,644.00         0.03         TORONTO DOMINION SEC, TORONTO         3,629.49         239,782.00         0.07           MIZUHO SECURITIES USA INC, NEW YORK         121.62         3,644.00         0.03         UBS EQUITIES, LONDON         5,622.72         5,219,853.00         0.00           MORGAN STANLEY & CO INCL NY         267,288.96         41,768,683.00         0.01         UBS SECURITIES CANADA, TORONTO (BWIT)         2,718.02         164,012.00         0.02           MORGAN STANLEY & CO, LONDON (MSLNGBZX)         67,118.15         66,388,874.02         0.00	MIRAE ASSET SECURITIES, SEOUL					2,132.91	76,144.00	0.03
MITSUBISHI UFJ SECURITIES, NEW YORK         13,059.19         1,529,300.00         0.01         TD SECURITIES (USA) LLC, NEW YORK         153.24         3,831.00         0.04           MIZUHO SECURITIES ASIA, HONG KONG         56.58         1,300.00         0.04         TELSEY ADVISORY GROUP LLC, DALLAS         2,747.79         104,027.00         0.03           MIZUHO SECURITIES USA INC. NEW YORK         7,075.06         874,924.00         0.01         TONG YANG SECURITIES INC, SEOUL         1,521.26         21,475.00         0.07           MIZUHO SECURITIES USA INC, NEW YORK         121.62         3,644.00         0.03         TORONTO DOMINION SEC, TORONTO         3,629.49         239,782.00         0.00           MIZHO SECURITIES USA INC, NEW YORK         121.62         2,570.00         0.03         UBS EQUITIES, LONDON         5,622.72         5,219,853.00         0.00           MORGAN STANLEY & CO INC, NY         267,288.96         41,768,683.00         0.01         UBS SECS SINGAPORE PTE LTD         1,416.97         386,600.00         0.00           MORGAN STANLEY & CO INTL LTD, SEOUL         10,983.18         96,075.00         0.11         UBS SECURITIES HONG KONG LTD, HONG KONG         17.78         150,400.00         0.00           MORGAN STANLEY & CO, LONDON (MSLNGB2X)         67,118.15         66,388,874.02         0.00         UBS	MISCHLER FINANCIAL GROUP INC, NEW YORK							0.03
MIZUHO SECURITIES ASIA, HONG KONG         56.58         1,300.00         0.04         TELSEY ADVISORY GROUP LLC, DALLAS         2,747.79         104,027.00         0.03           MIZUHO SECURITIES USA INC. NEW YORK         7,075.06         874,924.00         0.01         TONG YANG SECURITIES INC, SEOUL         1,521.26         21,475.00         0.07           MIZUHO SECURITIES USA INC, NEW YORK         121.62         3,644.00         0.03         TORONTO DOMINION SEC, TORONTO         3,629.49         239,782.00         0.02           MKM PARTNERS LLC, GREENWICH         64.25         2,570.00         0.03         UBS EQUITIES, LONDON         5,622.72         5,219,853.00         0.00           MORGAN STANLEY & CO INC, NY         267,288.96         41,768,683.00         0.01         UBS SECS SINGAPORE PTE LTD         1,416.97         386,600.00         0.00           MORGAN STANLEY & CO INTL LTD, SEOUL         10,983.18         96,075.00         0.11         UBS SECURITIES CANADA, TORONTO (BWIT)         2,718.02         164,012.00         0.00           MORGAN STANLEY & CO, LONDON (MSLNGB2X)         67,118.15         66,388,874.02         0.00         UBS SECURITIES HONG KONG LTD, HONG KONG         17.78         150,400.00         0.00           MORGAN STANLEY & CO, LONDON (MSLNGB2X)         67,118.15         66,388,874.02         0.00							- ,	0.02
MIZUHO SECURITIES USA INC. NEW YORK         7,075.06         874,924.00         0.01         TONG YANG SECURITIES INC, SEOUL         1,521.26         21,475.00         0.07           MIZUHO SECURITIES USA INC, NEW YORK         121.62         3,644.00         0.03         TORONTO DOMINION SEC, TORONTO         3,629.49         239,782.00         0.02           MKM PARTNERS LLC, GREENWICH         64.25         2,570.00         0.03         UBS EQUITIES, LONDON         5,622.72         5,219,853.00         0.00           MORGAN STANLEY & CO INC, NY         267,288.96         41,768,683.00         0.01         UBS SECURITIES CANADA, TORONTO (BWIT)         2,718.02         164,012.00         0.02           MORGAN STANLEY & CO INTL LTD, SEOUL         10,983.18         96,075.00         0.11         UBS SECURITIES CANADA, TORONTO (BWIT)         2,718.02         164,012.00         0.02           MORGAN STANLEY & CO, LONDON (MSLNGB2X)         67,118.15         66,388,874.02         0.00         UBS SECURITIES HONG KONG LTD, HONG KONG         17.78         150,400.00         0.00           MORGAN STANLEY DEAN WITTER, SYDNEY         247.04         589,647.00         0.00         UBS WARBURG ASIA LTD, HONG KONG         17.78         150,400.00         0.00           NATIONAL FINANCIAL SERVICES LLC, BOSTON         130.48         159,841.00         0.00								
MIZUHO SECURITIES USA INC, NEW YORK         121.62         3,644.00         0.03         TORONTO DOMINION SEC, TORONTO         3,629.49         239,782.00         0.02           MKM PARTNERS LLC, GREENWICH         64.25         2,570.00         0.03         UBS EQUITIES, LONDON         5,622.72         5,219,853.00         0.00           MORGAN STANLEY & CO INC, NY         267,288.96         41,768,683.00         0.01         UBS SECURITIES, LONDON         1,416.97         386,600.00         0.02           MORGAN STANLEY & CO INTL ITD, SEOUL         10,983.18         96,075.00         0.11         UBS SECURITIES CANADA, TORONTO (BWIT)         2,718.02         164,012.00         0.02           MORGAN STANLEY & CO, LONDON (MSLNGB2X)         67,118.15         66,388,874.02         0.00         UBS SECURITIES HONG KONG [17,78         150,400.00         0.00           MORGAN STANLEY DEAN WITTER, SYDNEY         247.04         589,647.00         0.00         UBS SECURITIES LLC, STAMFORD         61,763.22         4,919,623.00         0.01           NATIONAL FINANCIAL SERVICES LLC, BOSTON         130.48         159,841.00         0.00         UBS WARBURG ASIA LTD, HONG KONG         57,783.00         0.00           NATIONAL FINANCIAL SERVICES VICK         151,031.99         18,885,323.00         0.01         UBS WARBURG ASIA LIA EQUITIES, SYDNEY         187,783								
MKM PARTNERS LLC, GREENWICH         64.25         2,570.00         0.03         UBS EQUITIES, LONDON         5,622.72         5,219,853.00         0.00           MORGAN STANLEY & CO INC, NY         267,288.96         41,768,683.00         0.01         UBS SECS SINGAPORE PTE LTD         1,416.97         386,600.00         0.00           MORGAN STANLEY & CO INTL LTD, SEOUL         10,983.18         96,075.00         0.11         UBS SECURITIES CANADA, TORONTO (BWIT)         2,718.02         164,012.00         0.02           MORGAN STANLEY & CO, LONDON (MSLNGB2X)         67,118.15         66,388,874.02         0.00         UBS SECURITIES HONG KONG LTD, HONG KONG         17.78         150,400.00         0.00           MORGAN STANLEY DEAN WITTER, SYDNEY         247.04         589,647.00         0.00         UBS SECURITIES LLC, STAMFORD         61,763.22         4,919,623.00         0.01           NATIONAL FINANCIAL SERVICES LLC, BOSTON         130.48         159,841.00         0.00         UBS WARBURG ASIA LTD, HONG KONG         55,963.08         22,807,598.00         0.00           NATIONAL FIN. SVCS CORP, NEW YORK         151,031.99         18,885,323.00         0.01         UBS WARBURG AUSTRALIA EQUITIES, SYDNEY         187,7838.00         0.00           NEEDHAM AND CO LLC, NEW YORK         5,165.78         164,063.00         0.03         UBS WARBURG, L								
MORGAN STANLEY & CO INC, NY         267,288.96         41,768,683.00         0.01         UBS SECS SINGAPORE PTE LTD         1,416.97         386,600.00         0.00           MORGAN STANLEY & CO INTL LTD, SEOUL         10,983.18         96,075.00         0.11         UBS SECS SINGAPORE PTE LTD         1,416.97         386,600.00         0.00           MORGAN STANLEY & CO INTL LTD, SEOUL         10,983.18         96,075.00         0.11         UBS SECURITIES CANADA, TORONTO (BWIT)         2,718.02         164,012.00         0.00           MORGAN STANLEY & CO, LONDON (MSLNGB2X)         67,118.15         66,388,874.02         0.00         UBS SECURITIES HONG KONG LTD, HONG KONG         17.78         150,400.00         0.00           MORGAN STANLEY DEAN WITTER, SYDNEY         247.04         589,647.00         0.00         UBS SECURITIES LLC, STAMFORD         61,763.22         4,919,623.00         0.01           NATIONAL FINANCIAL SERVICES LLC, BOSTON         130.48         159,841.00         0.00         UBS WARBURG AUSTRALIA EQUITIES, SYDNEY         187.87         77,838.00         0.00           NATIONAL FINL SVCS CORP, NEW YORK         151,031.99         18,885,323.00         0.01         UBS WARBURG, LONDON         88,216.84         12,720,241.00         0.01           NEEDHAM AND CO LLC, NEW YORK         5,165.78         164,063.00         0.02	MKM PARTNERS LLC, GREENWICH							0.02
MORGAN STANLEY & CO INTL LTD, SEOUL         10,983.18         96,075.00         0.11         UBS SECURITIES CANADA, TORONTO (BWIT)         2,718.02         164,012.00         0.02           MORGAN STANLEY & CO, LONDON (MSLNGB2X)         67,118.15         66,388,874.02         0.00         UBS SECURITIES HONG KONG LTD, HONG KONG         17.78         150,400.00         0.00           MORGAN STANLEY & CO, LONDON (MSLNGB2X)         67,118.15         66,388,874.02         0.00         UBS SECURITIES HONG KONG LTD, HONG KONG         17.78         150,400.00         0.00           MORGAN STANLEY DEAN WITTER, SYDNEY         247.04         589,647.00         0.00         UBS SECURITIES LLC, STAMFORD         61,763.22         4,919,623.00         0.01           NATIONAL FINANCIAL SERVICES LLC, BOSTON         130.48         159,841.00         0.00         UBS WARBURG AUSTRALIA EQUITIES, SYDNEY         187.87         77,838.00         0.00           NATIONAL FINL SVCS CORP, NEW YORK         151,031.99         18,885,323.00         0.01         UBS WARBURG AUSTRALIA EQUITIES, SYDNEY         187.87         77,838.00         0.00           NEEDHAM AND CO LLC, NEW YORK         5,165.78         164,063.00         0.02         UNION BANK SWITZERLAND SECS, LONDON         88,216.84         12,720,241.00         0.01           NESBITT BURNS, TORONTO (NTDT)         2,066.84 <t< td=""><td>MORGAN STANLEY &amp; CO INC, NY</td><td></td><td></td><td></td><td></td><td></td><td></td><td>0.00</td></t<>	MORGAN STANLEY & CO INC, NY							0.00
MORGAN STANLEY DEAN WITTER, SYDNEY         247.04         589,647.00         0.00         UBS SECURITIES LLC, STAMFORD         61,763.22         4,919,623.00         0.01           NATIONAL FINANCIAL SERVICES LLC, BOSTON         130.48         159,841.00         0.00         UBS WARBURG ASIA LTD, HONG KONG         55,963.08         22,807,598.00         0.00           NATIONAL FINANCIAL SERVICES LLC, BOSTON         130.48         159,841.00         0.01         UBS WARBURG ASIA LTD, HONG KONG         55,963.08         22,807,598.00         0.00           NATIONAL FINL SVCS CORP, NEW YORK         151,031.99         18,885,323.00         0.01         UBS WARBURG AUSTRALIA EQUITIES, SYDNEY         187.87         77,838.00         0.00           NEEDHAM AND CO LLC, NEW YORK         5,165.78         164,063.00         0.03         UBS WARBURG, LONDON         88,216.84         12,720,241.00         0.01           NESBITT BURNS, TORONTO (NTDT)         2,066.84         134,487.00         0.02         UNION BANK SWITZERLAND SECS, LONDON         711.98         4,223,000.00         0.00	MORGAN STANLEY & CO INTL LTD, SEOUL		96,075.00	0.11				0.02
NATIONAL FINANCIAL SERVICES LLC, BOSTON         130.48         159,841.00         0.00         UBS WARBURG ASIA LTD, HONG KONG         55,963.08         22,807,598.00         0.00           NATIONAL FINL SVCS CORP, NEW YORK         151,031.99         18,885,323.00         0.01         UBS WARBURG AUSTRALIA EQUITIES, SYDNEY         187.87         77,838.00         0.00           NEEDHAM AND CO LLC, NEW YORK         5,165.78         164,063.00         0.03         UBS WARBURG, LONDON         88,216.84         12,720,241.00         0.01           NESBITT BURNS, TORONTO (NTDT)         2,066.84         134,487.00         0.02         UNION BANK SWITZERLAND SECS, LONDON         711.98         4,223,000.00         0.00	MORGAN STANLEY & CO, LONDON (MSLNGB2X)					17.78	150,400.00	0.00
NATIONAL FINL SVCS CORP, NEW YORK         151,031.99         18,885,323.00         0.01         UBS WARBURG AUSTRALIA EQUITIES, SYDNEY         187.87         77,838.00         0.00           NEEDHAM AND CO LLC, NEW YORK         5,165.78         164,063.00         0.03         UBS WARBURG, LONDON         88,216.84         12,720,241.00         0.01           NESBITT BURNS, TORONTO (NTDT)         2,066.84         134,487.00         0.02         UNION BANK SWITZERLAND SECS, LONDON         711.98         4,223,000.00         0.00	MORGAN STANLEY DEAN WITTER, SYDNEY							0.01
NEEDHAM AND CO LLC, NEW YORK         5,165.78         164,063.00         0.03         UBS WARBURG, LONDON         88,216.84         12,720,241.00         0.01           NESBITT BURNS, TORONTO (NTDT)         2,066.84         134,487.00         0.02         UNION BANK SWITZERLAND SECS, LONDON         711.98         4,223,000.00         0.00								0.00
NESBITT BURNS, TORONTO (NTDT) 2,066.84 134,487.00 0.02 UNION BANK SWITZERLAND SECS, LONDON 711.98 4,223,000.00 0.00								0.00
	NOMURA FINANCIAL & INVESTMENT, SEOUL	2,000.84 3,199.80	300,782.00	0.02	VIRTU AMERICAS LLC, JERSEY CITY	320.27	4,223,000.00	0.00

## COMBINED INVESTMENT FUNDS SCHEDULE OF BROKERAGE COMMISSIONS (Continued) FOR THE FISCAL YEAR ENDED JUNE 30, 2018

Broker Name	\$ Commission	Shares/ Par Value	Avg Comm
VIRTU FINANCIAL IRELAND LIMITED, DUBLIN	234.72	99,985.00	0.00
VIRTU FINANCIAL IRELAND LIMITED, DUBLIN VTB BANK EUROPE PLC, LONDON	3.53 255.98	6,853.00 5.039.00	0.00 0.05
WEDBUSH MORGAN SECS INC. LOS ANGELES	5.484.22	195.408.00	0.03
WEEDEN & CO. GREENWICH	826.91	50.389.00	0.02
WEEDEN & CO, NEW YORK	39,433.42	2,093,879.00	0.02
WELLS FARGO SECURITIES LLC, CHARLOTTE	7,708.19	244,445.00	0.03
WELLS FARGO SECURITIES, LLC, NEW YORK	8,022.76	296,236.00	0.03
WILLIAM BLAIR & CO, CHICAGO	19,584.72	575,115.00	0.03
WILLIAMS CAPITAL GROUP LP, JERSEY CITY	292.98	15,716.00	0.02
WOLFE TRAHAN SECURITIES, NEW YORK	10,427.00	336,477.00	0.03
WOOD & COMPANY, PRAGUE	10,311.14	597,756.00	0.02
WOORI INVESTMENT & SECURITIES, SEOUL	615.22	1,077.00	0.57
YAMNER & COMPANY INC, JERSEY CITY	2,022.90	202,290.00	0.01
TOTAL	\$5,313,335.94		

#### **GLOSSARY OF INVESTMENT TERMS**

- Active extension Active extension is defined as an investment strategy that allows for both long and short positions in an investment portfolio with a gross exposure above 100% of total portfolio value on an absolute basis, while maintaining a beta of one.
- Agency Securities Securities, usually bonds, issued by U.S. Government agencies. These securities have high credit ratings but are not backed by the full faith and credit of the U.S. Government.
- All-cap An investment approach that disregards market capitalization (i.e. small, medium, or large cap) in its security selection process.
- Alpha A coefficient which measures risk-adjusted performance, factoring in the risk due to the specific security, rather than the overall market. A high value for alpha implies that the stock or mutual fund has performed better than would have been expected given its beta (volatility).
- **Asset** Anything owned that has economic value; any interest in property, tangible or intangible, that can be used for payment of debts.
- Asset Backed Security Bonds or notes collateralized by one or more types of assets including real property, mortgages, and receivables.
- At Value A term used to denote the current value of an asset at a point in time. Generally used in presentations containing a mix of assets some of which are traded on an exchange and some that are valued on an appraisal or similar basis.
- Banker's Acceptance (BA) A high-quality, short-term negotiable discount note, drawn on and accepted by banks which are obligated to pay the face amount at maturity.
- **Basis Point (bp)** The smallest measure used in quoting yields or returns. One basis point is 0.01% of yield, 100 basis points equals 1%. For example, a yield that changed from 8.75% to 9.50% has increased by 75 basis points.
- **Benchmark** A standard unit used as the basis of comparison; a universal unit that is identified with sufficient detail so that other similar classifications can be compared as being above, below, or comparable to the benchmark.
- **Benchmark composite** A term used when reporting on a portfolio containing multiple asset classes. The composite is generally calculated as a weighted average of the benchmarks of the underlying portfolios.
- Beta A quantitative measure of the volatility of a given stock, mutual fund or portfolio relative to the overall market.
- **Book Value (BV)** The value of individual assets, calculated as actual cost minus accumulated depreciation. Book value may be more or less than current market value.
- Buyout See "Leveraged Buyout"
- Capital Gain (Loss) Also known as capital appreciation (depreciation), capital gain (loss) measures the increase (decrease) in valuation of an asset over time.
- Capitalized Fees Fees (and expenses) that increase the cost basis of an investment.
- Certificates of Deposit (CDs) A debt instrument issued by banks, usually paying interest, with maturities ranging from 3 months to six years.
- **Citigroup Broad Investment-Grade Bond Index (CBIG)** A market value-weighted index composed of over 4,000 individually priced securities with a quality rating of at least BBB. Each issue has a minimum maturity of one year with an outstanding par amount of at least \$25 million.
- Citigroup World Government Bond Index Non-U.S. (CWGBI) An unhedged index measuring government issues of 12 major industrialized countries.
- Close-End fund Funds that have set limits on the life of the fund and/or the total amount to be invested.
- **Coefficient of Determination (R2)** A measurement of how closely the returns of an investment portfolio and its benchmark match. An R2 of 1.0 indicates that portfolio returns perfectly match the returns of the benchmark, while a value less than 1.0 indicates that the returns of the portfolio do not match the benchmark return. The closer the value is to 1 the closer the return of the portfolio is to the benchmark.
- Collateral Assets pledged by a borrower to secure a loan or other credit, and subject to seizure in the event of default.
- **Collateralized Mortgage Obligation (CMO)** A mortgage-backed, investment-grade bond that separates mortgage pools into different maturity classes. CMO payment obligations are backed by mortgage-backed securities with a fixed maturity.
- **Commercial Paper** Short-term obligations with maturities ranging from 2 to 270 days. An unsecured obligation issued by a corporation or bank to finance its short-term credit needs.
- **Commingled fund** A fund consisting of assets from multiple investors that are blended together. A mutual fund is a common example of a commingled fund.

# PENSION FUNDS MANAGEMENT DIVISION GLOSSARY OF INVESTMENT TERMS (Continued)

- **Committed capital** Money that is committed by limited partners to a private investment fund. Company risk The risk of investing in any single company's stock or bonds.
- **Compounded Annual Total Return** Compounded annual total return measures the implicit annual percentage change in value of an investment, assuming reinvestment of dividends, interest, and realized capital gains, including those attributable to currency fluctuations. In effect, compounded annual total return "smoothes" fluctuations in long-term investment returns to derive an implied year-to-year annual return.
- **Consumer Price Index (CPI)** A measure of change in the cost of a fixed basket of products and services as determined by a monthly survey of the U.S. Bureau of Labor Statistics. Components of the CPI include housing costs, food, transportation, and electricity.
- **Core real estate strategy** Lower risk, low leverage, vehicles that invest in stabilized income-producing properties that provide steady net operating income or cash flow. Properties are usually located in major regional markets, have investment grade tenants, at-market rents, and high occupancy levels.
- Cost basis The original price paid for an investment.
- **Counter-party risk** The risk to each party of a contract that the counterparty will not live up to its contractual obligations. Credit default risk The risk that a debtor will not make payments in accordance with the terms of the debt.
- Credit risk The risk that a borrower will fail to make payments in a timely manner.
- **Cumulative Rate of Return** A measure of the total return earned for a particular time period. This calculation measures the absolute percentage change in value of an investment over a specified period, assuming reinvestment of dividends, interest income, and realized capital gains. For example, if a \$100 investment grew to \$120 in a two-year period, the cumulative rate of return would be 20%.
- Currency exchange risk The risk that a foreign country's currency may appreciate or depreciate relative to the U.S. dollar, thus impacting the value of foreign investments.
- **Currency hedging** Transactions intended to manage the foreign exchange rate risk associated with investing in foreign securities.
- **Currency spot** A contract for the purchase or sale of a commodity, security or currency for settlement (payment and delivery) on the spot date, which is normally two business days after the trade date.
- **Current Yield** The relationship between the stated annual interest or dividend rate and the market price of a security. In calculating current yield, only income payments are considered; no consideration is given to capital gain/loss.
- **Default risk** The chance that an issuer will not make the required coupon payments or principal repayments to its debt holders.
- **Derivative** Derivatives are generally defined as contracts whose value depend on, or are derived from, the value of an underlying asset, reference rate, or index. For example, an option is a derivative instrument because its value derives from an underlying stock, stock index, commodity.
- **Discount Rate** The interest rate that the Federal Reserve charges banks for loans, using government securities or eligible paper as collateral.
- **Diversification** A portfolio strategy designed to reduce exposure to risk by putting assets in several different securities or categories of investments.
- Drawdown (a) A request for cash charged against capital committed to a limited partnership, limited liability corporation, or other like entity; (b) a decline in the current value of an investment or other asset. Duration - Duration is a measure of the price sensitivity of a fixed-income investment to a change in interest rates. (See Modified and Macaulay Duration).
- Economic risk The risk that economic activities will negatively impact an investment.
- **Enhanced indexing** Refers to the application of strategies to an index fund designed to generate higher rates of returns. Equity The ownership interest possessed by shareholders in a corporation in the form of common stock or preferred stock.
- ERISA (Employee Retirement Income Security Act) The 1974 federal law which established legal guidelines for private pension plan administration and investment practices.
- **Expense Ratio** Operating costs (including management fees) expressed as a percentage of the fund's average net assets for a given time period.
- **Fair Value** The amount at which a financial instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale.
- Federal Funds Rate The interest rate that banks charge each other for the use of Federal Funds. This rate changes daily and is a sensitive indicator of general interest rate trends.

## PENSION FUNDS MANAGEMENT DIVISION GLOSSARY OF INVESTMENT TERMS (Continued)

- Federal Reserve Board The seven member Board of Governors that oversees Federal Reserve Banks, establishes monetary policy and monitors the economic health of the economy.
- Fiduciary A person, company, or association holding assets in trust for a beneficiary. The fiduciary is charged with the responsibility to invest the assets prudently and solely for the beneficiary's benefit.

Fitch Investor Services - A financial services rating agency.

- Floating Rate Note A fixed principal instrument which has a long or even indefinite life and whose yield is periodically reset relative to a reference index rate to reflect changes in short- or intermediate-term interest rates.
- Forward contract A contract between two parties that requires the parties to sell or purchase an asset at a price set when the contract is entered into for settlement at a specified future date.
- Funded Capital Amount of cash invested. Geopolitical risk See "Political risk".
- **Gross Domestic Product** Total market value of goods and services produced in a country over a particular period of time, usually one year. The GDP growth rate is the primary indicator of the health of the economy.
- Hedge An investment in assets which serves to reduce the risk of adverse price movements in a security, by taking an offsetting position in a related security, such as an option or short sale.
- **Index** A benchmark of securities used as an independent representation of market performance. Example: S&P 500 index. Index Fund - A passively managed fund constructed to mirror the performance of a specific index, such as the S&P 500. Individual company risk - The risk associated with investment in the securities of any single company.
- **Inflation** The overall general upward price movement of goods and services in an economy, usually as measured by the Consumer Price Index and the Producer Price Index.
- Inflation risk The risk that the value of an investment will erode as a result of inflationary pressures.
- Interest rate risk The risk that changes in the general level of interest rates will adversely affect the fair value of an investment.
- Investment Income The equity dividends, bond interest, and/or cash interest paid on an investment.
- J-Curve An economic theory stating that a policy designed to have one effect will initially have the opposite effect. With regard to closed end commingled fund investments, this generally refers to a trend whereby a fund's return tends to be negative in the early years of a fund's existence until income and valuations increase in the later periods as investments mature and as the relative size of fees and other costs diminish relative to the value of invested capital.
- JP Morgan Emerging Markets Bond Index Plus (EMBI+) An index which tracks total returns for traded external debt instruments in the emerging markets. The instruments include external-currency-denominated Brady bonds, loans and Eurobonds, as well as U.S. dollar denominated local market instruments. The EMBI+ expands upon JP Morgan's original Emerging Markets Bond Index, which was introduced in 1992 and covers only Brady bonds.
- Letter of Credit An instrument or document issued by a bank, guaranteeing the payment of a customer's drafts up to a stated amount for a specified period. It substitutes the bank's credit for the buyer's and reduces the seller's risk.
- Leverage The use of borrowed funds to increase purchasing power and, ideally, to increase profitability of an investment transaction or business.
- Leveraged buyout A leveraged buyout (LBO) is an acquisition (usually of a company) financed through a combination of equity and debt and in which the cash flows or assets of the target are used to secure and repay the debt used to finance the acquisition.
- Liability The claim on the assets of a company or individual excluding ownership equity. An obligation that legally binds an individual or company to settle a debt.
- Limited Partnership A partnership formed by two or more entities with at least one limited partner and one general partner. Limited partner responsibility for debts and losses is limited to the amount of their investment in the partnership. In addition, the limited partner does not participate in the activities of the partnership. The general partner has control over the management of the partnership and has unlimited liability for partnership debt and losses.
- Liquidity risk The risk that an investment cannot be immediately liquidated unless discounted in value.
- **Macaulay Duration** The weighted-average term to maturity of a bond's cash flows. The weighting is based on the present value of each cash flow divided by price.
- Management risk The risks associated with ineffective, destructive or underperforming management.
- **Marked-to-market pricing** An accounting practice in which the price of an investment recorded within the accounting records is the market value at the end of the month.
- Market Risk The risk that fluctuations in the overall market for securities will impact an investment portfolio.

## PENSION FUNDS MANAGEMENT DIVISION GLOSSARY OF INVESTMENT TERMS (Continued)

- Market Value A security's last reported sale price or its current bid and ask prices. The price as determined dynamically by buyers and sellers in an open market.
- **Master Custodian** An entity, usually a bank, used for safekeeping of securities and other assets. May be responsible for other functions including accounting, performance measurement and securities lending.
- Maturity Date The date on which the principal amount of a bond or other debt instrument becomes payable or due. Mezzanine Debt Debt that incorporates equity-based options, such as warrants, and is subordinated debt.
- MFR Index (iMoneyNet's First Tier Institutional-only Rated Money Fund Report AveragesTM Index) An index which represents an average of the returns of institutional money market mutual funds that invest primarily in first-tier (securities rated A-1, P-1) taxable securities.
- **Modified Duration** A measure of the price sensitivity of a bond to interest rate movements. It is the primary basis for comparing the effect of interest rate changes on prices of fixed income securities.
- Money Market Fund An open-ended mutual fund that invests in commercial paper, bankers' acceptances, repurchase agreements, government securities, certificates of deposit, and other highly liquid and safe securities and pays money market rates of interest. The fund's net asset value remains a constant \$1 per share only the interest rate goes up or down.

Moody's (Moody's Investors Service) - A financial services rating agency.

- **MSCI EAFE** Morgan Stanley Europe Australasia Far East foreign equity index. An arithmetic value weighted average of the performance of over 900 securities on the stock exchanges of 23 countries on three continents. NCREIF (National Council of Real Estate Investment Fiduciaries) National Council of Real Estate Investment Fiduciaries) National Council of Real Estate Investment Fiduciaries, a non-profit organization established to serve the institutional real estate investment community as a non-partisan collector, processor, validator and disseminator of real estate performance information.
- Net Asset Value (NAV) The total assets (including any valuation gains or losses on investments or currencies) minus total liabilities divided by shares outstanding.
- Netted Fees Refers to instances in which investment management fees/expenses are offset against income normally distributed to investors. May also refer to practices whereby investment management fees/expenses are added to the cost basis of an investment.
- NPI NCREIF Property Index. The NCREIF Property Index is a quarterly time series composite total rate of return measure of investment performance of a very large pool of individual commercial real estate properties acquired in the private market for investment purposes only.. Properties comprising this benchmark, which include wholly owned and joint venture investments, are held on an all-cash, non-leveraged basis, and is restricted to investment-grade, nonagricultural, and income-producing properties.
- **Open-End fund** A fund operated by an investment company in accordance with a stated set of objectives. Open-end funds raise money by periodically selling shares of the fund to the public.
- **Operations risk** The risk associated with negative operating events (net operating losses, inventory write-downs, breakdown in internal procedures, etc).
- Par Value The stated or face value of a stock or bond. While it has little significance for common stocks, for bonds, it specifies the payment amount at maturity.
- **Pension Fund** A fund set up by a corporation, labor union, governmental entity, or other organization to provide retirement income.
- Percentile A description of the percentage rank of a portfolio's performance, relative to a larger universe of portfolios. Political Risk The risk resulting from political changes or instability in a country's system of government, laws or regulation. Prepayment risk The risk associated with the prepayment of fixed income investments in a declining rate environment.
- Present Value The current value of a future cash flow or series of cash flows discounted at an appropriate interest rate or rates. For example, at a 12% interest rate, the value of one dollar a year from now has a present value of \$0.89286.
- Price/Book (P/B) A ratio showing the price of a stock divided by its book value per share. The P/B measures the multiple at which the market is capitalizing the net asset value per share of a company at any given time.
- **Price/Earnings (P/E)** A ratio showing the price of a stock divided by its earnings per share. The P/E measures the multiple at which the market is capitalizing the earnings per share of a company at any given time.
- **Principal** Face value of an obligation, such as a bond or a loan, that must be repaid at maturity. Product risk The risk associated with the introduction of a new product or process.
- Prudent Person Rule The standard adopted by some states to guide those fiduciaries with responsibility for investing the money of others. Such fiduciaries must act as a prudent person would be expected to act, with discretion and intelligence, to seek reasonable income, preserve capital, and, in general, avoid speculative investments.

### **GLOSSARY OF INVESTMENT TERMS (Continued)**

Purchasing power risk- See "Inflation risk"

**Pure indexing** - Refers to the application of strategies to an index fund designed to exactly match the returns of the portfolio benchmark.

R2 - See "Coefficient of Determination"

Real interest rate - An interest rate that has been adjusted to remove the effects of inflation.

Real rate of return - The return realized on an investment adjusted for changes due to inflation or other external effects.

- Realized Gain (Loss) A gain (loss) that has occurred financially. The difference between the principal amount received and the cost basis of an asset realized at sale.
- **Reinvestment risk** The risk that cash flows received from a security will be reinvested at lower rates due to declining interest rates.

**Relative Volatility** - The standard deviation of the Fund divided by the standard deviation of its selected benchmark. A relative volatility greater than 1.0 suggests comparatively more volatility in Fund returns than those of the benchmark.

- **Repurchase Agreements ("Repos")** A contract in which the seller of securities, such as Treasury Bills, agrees to buy them back at a specified time and price. Repos are widely used as a money market instrument.
- Return on Equity (ROE) Net income of a company (after payment of preferred stock dividends but before payment of common stock dividends) divided by common shareholder equity. Reverse Repurchase Agreements ("Reverse Repos") A purchase of securities with an agreement to resell them at a higher price at a specific future date.

Risk Adjusted Return - A measure of investment return which accounts for the amount of risk taken over a specified period.

**Russell 3000** - An equity index comprised of the securities of the 3,000 largest public U.S. companies as determined by total market capitalization. This index represents approximately 98% of the U.S. equity market's capitalization.

Securities Lending - A collateralized process of loaning portfolio positions to custodians, dealers, and short sellers who must make physical delivery of positions. Securities lending may reduce custody costs or enhance annual returns by a full percentage point or more in certain market environments.

Senior debt securities - Debt that must be paid off before other liabilities in the event of a business failure or bankruptcy.

- Separate accounts An investment portfolio managed by a third party investment manager in which the investor directly owns the securities within the portfolio.
- **Soft Dollars** The value of research or other services that brokerage houses and other service entities provide to a client "free of charge" in exchange for the client's brokerage.
- **S&P 500 (Standard & Poor's)** A basket of 500 stocks chosen for market size, liquidity and industry grouping, among other factors, designed to represented a US equity universe of large capitalization stocks.
- S&P Credit Ratings Service A financial services rating agency.
- **Special situations** Private equity investments in a variety of securities (Debt, Preferred Equity and/or Common Equity) in portfolio companies at a variety of stages of development (Seed, Early Stage, Later Stage).
- **Standard Deviation** A measure of the dispersion of a set of data from its mean. Often used as a measure of investment volatility or risk, it measures how much an investment return may vary from its average return.

Tail risk - The risk that a loss (or gain) would be three standard deviations from the mean or current price.

- **Treasury Bill (T-Bill)** Short-term, highly liquid government securities issued at a discount from the face value and returning the face amount at maturity.
- **Treasury Bond or Note** Debt obligations of the Federal government that make semiannual coupon payments and are sold at or near par value in denominations of \$1,000 or more.
- **Trust** A fiduciary relationship in which a person, called a trustee, holds title to property for the benefit of another person, called a beneficiary.
- **TUCS** Trust Universe Comparison Service. TUCS is a universe based upon a pooling of quarterly trust accounting data from participating banks and other organizations that provide custody for trust assets.
- **Turnover** Security purchases and sales divided by the fiscal year's average market value {(P+S)/[(BMV+EMV)/2]} for a given portfolio.

**Unhedged** - Not protected from market actions.

Un-levered - Investments made without the use of debt or debt like securities.

Unrealized Gain (Loss) - A profit (loss) that has not been realized through the sale of a security. The gain (loss) is realized when a security or futures contract is actually sold or settled.

### GLOSSARY OF INVESTMENT TERMS (Continued)

Variable Rate Note - Floating rate notes with a coupon rate adjusted at set intervals, such as daily, weekly, or monthly, based on different interest rate indices, such as LIBOR, Fed Funds, and Treasury Bills.

- Vintage year The year in which a capital commitment is made to an investment, most often applied to real estate and private equity investments.
- **Volatility** A statistical measure of the tendency of a market price or yield to vary over time. Volatility is said to be high if the price, yield, or return typically changes dramatically in a short period of time.
- **Warrant** A security that entitles the holder to buy a specific security at a specified price within a specified time frame. Yield The income return on an investment.
- Yield Curve A graph showing the term structure of interest rates by plotting the yields of all bonds of the same quality with maturities ranging from the shortest to the longest. The Y-axis represents the interest rate and the X-axis represents time, generally with a normal curve that is convex in shape.

Zero Coupon Bond - A bond paying no interest that sells at a discount and returns principal only at maturity.

#### UNDERSTANDING INVESTMENT PERFORMANCE

#### Introduction

This section discusses the Treasury's approach to measuring performance, including risk and return of the Connecticut Retirement Plans and Trust Funds (CRPTF).

## **Understanding Performance**

To measure success in achieving the primary objective of the Asset Allocation Plan, the Fund's performance is evaluated in two principal areas: risk and return. The results of these reviews, coupled with information on portfolio characteristics, are used to monitor and improve the performance of the Fund's external investment managers.

To monitor and evaluate Fund performance and measurements of risk and return, CRPTF performance is compared to those of similarly structured peer groups and indices. In addition, the performance of the Combined Investment Funds (CIF) invested in by the various plans and trusts is compared to the performance of their respective benchmarks. Each CIF's benchmark is selected on the basis of portfolio composition, investment style, and objectives. The benchmark comparisons enable plan participants, the Treasurer and the Investment Advisory Council, to determine whether and by how much CIF returns exceeded or fell short of their respective benchmarks. The comparisons provide an understanding of the reason for the CIF's performance relative to their benchmarks.

Comparative performance is reviewed over both the near-term and the long-term for two reasons. First, pension management is, by its very nature, a long-term process. While both young and old employees comprise the pool of plan beneficiaries, the increasing life span of plan participants makes it important that plan assets be managed for the long term. Second, as experience has shown, results attained in the short term are not necessarily an indicator of results to be achieved over the long term. Performance must be viewed in a broad context.

Overall performance is measured by calculating monthly returns and linking them to provide one-, three-, fiveand ten-year histories of overall investment performance. Short-term performance is measured by total return over one-month, quarter-end, and trailing one-year time periods. Risk is also measured over both short- and long-term periods

## Risk

The measurement of risk is a critical component in investment management. It is the basis for both strategic decision- making and investment evaluation. Investors assume risk to enhance portfolio returns. The primary objective is to generate returns in excess of those available in "risk-free" investments, such as Treasury Bills. The amount of excess returns varies in magnitude according to the degree of risk assumed. Many investors focus on the negative aspects of risk and in doing so forego substantial upside potential, which can significantly enhance long-term returns. Thus, while risk can never be completely eliminated from a portfolio, the prudent management of risk can maximize investment returns at acceptable levels of risk.

Risk can take several forms and include: <u>market risk</u>, the risk of fluctuations in the overall market for securities; <u>company risk</u>, the risk of investing in any single company's stock or bonds; <u>currency-exchange risk</u>, the risk that a foreign country's currency may appreciate or depreciate relative to the U.S. dollar, thus impacting the value of foreign investments; and political risk, risk incurred through investing in foreign countries with volatile economies and political systems.

With respect to fixed income investments, investors also assume: <u>reinvestment risk</u>, the risk that cash flows received from a security will be reinvested at lower rates due to declining interest rates; <u>credit or default risk</u>, the risk that the issuer of a fixed income security may fail to make principal and interest payments on the security; <u>interest rate risk</u>, the risk that the market value of fixed coupon bonds will decline in the event of rising market interest rates; and <u>inflation or purchasing power risk</u>, the risk that the real value of a security and its cash flows may be reduced by inflation. The level of risk incurred in fixed income investing increases as the investment time horizon is lengthened. This is demonstrated by the comparatively higher yields available on "long bonds," or bonds maturing in 20 to 30 years, versus those available on short-term fixed income securities.

### UNDERSTANDING INVESTMENT PERFORMANCE (Continued)

In the alternative investment category, risks are significantly greater than those of publicly traded investments. Assessment of progress is more tenuous and valuation judgments are more complex. The investor assumes not only <u>management, product, market, and operations risk</u>, similar to equity investing, but also assumes <u>liquidity risk</u>, the risk that one's investment cannot be immediately liquidated at other than a substantially discounted value. An additional risk to this category is transparency risk, the risk associated with not knowing the underlying investments within a portfolio.

#### Volatility

To measure the effects of risk on the portfolio, the volatility of returns is calculated over time. Volatility, viewed as the deviation of returns from an average of these returns over some period of time, is measured statistically by <u>standard deviation</u>. Funds with high standard deviations are considered riskier than those with low standard deviations.

To evaluate the significance of the CIF's standard deviation, each CIF's <u>relative volatility</u>, or the ratio of the CIF's standard deviation to that of the benchmark is calculated. A relative volatility greater than 1.0 indicates that the CIF is more volatile than the benchmark while a measure less than 1.0 indicates less volatility. A relative volatility of 1.0 indicates that the volatility of the CIF is the same as the benchmark.

As an extension of standard deviation, each CIF's <u>beta</u>, (a measure of the relative price fluctuation of the CIF to its benchmark) is also calculated. The measurement of beta allows one to evaluate the sensitivity of Fund returns to given movements in the market and/or its benchmark. A beta greater than 1.0 compared to the selected market benchmark signifies greater price sensitivity while a beta less than 1.0 indicates less sensitivity.

To measure the degree of correlation between CIF returns and the benchmark, the Division calculates the <u>coefficient of determination</u>, or R2. This calculation, which is used in conjunction with beta, allows one to evaluate how much of the volatility in CIF returns is explained by returns in the selected market benchmark. An R2 of 1.0 indicates that CIF returns are perfectly explained by returns of the benchmark, while a value less than 1.0 indicates that the returns of the benchmark explain only a portion of the fund return.

Finally, to evaluate how well each of the above measures actually predicted returns of the CIF, a calculation is performed on the CIF's <u>alpha</u>. This calculation measures the absolute difference between the CIF's monthly return and that predicted by its beta. Used together, these measures provide a comprehensive view of a CIF's relative risk profile.

#### Return

The Pension and Trust Funds are managed to maximize return and minimize risk. Return, viewed in this context, includes realized and unrealized gains in the market value of a security, including those attributable to currency fluctuations, as well as income distributed by a security such as dividends and interest. Return is measured through two calculations: compounded annual total return and cumulative total return.

Compounded Annual Total Return - This return measure evaluates performance over the short and long-term. Compounded annual total return measures the implicit annual percentage change in value of an investment, assuming reinvestment of dividends, interest, and realized and unrealized capital gains, including gains attributable to currency fluctuations. In effect, compounded annual total return "smooths" fluctuations in long-term investment returns to derive an implied year-to-year annual return.

Cumulative Total Return - This calculation measures the absolute percentage change in value of an investment over a specified period, assuming reinvestment of dividends, interest income, and realized capital gains. While this calculation does not "smooth" year-to-year fluctuations in long-term returns to derive implied annual performance, cumulative total return allows one to see on an absolute basis the percentage increase in the total Fund's value over a specified time. Viewed graphically, cumulative total return shows one what a \$10 million investment in the CRPTF a set number of years ago would be worth today.

#### **DEBT MANAGEMENT DIVISION**

#### CHANGES IN DEBT OUTSTANDING - STATUTORY BASIS FOR THE FISCAL YEAR ENDED JUNE 30, 2018

			FY 2018			
Bond Finance Type	Outstanding June 30, 2017	Issued	Retired	Refunded or Defeased	Outstanding June 30, 2018	FY 2018 <sup>1)</sup> Interest Paid
General Obligation - Tax Supported General Obligation -	\$13,868,514,072	\$1,868,545,000	\$1,219,105,569	\$ 394,500,000	\$ 14,123,453,503	\$ 566,108,752
Teachers' Retirement Fund Bonds <sup>(2)</sup> General Obligation -	2,227,983,254		19,916,730		2,208,066,524	120,302,291
Economic Recovery Notes General Obligation -	177,120,000		177,120,000		-	1,373,022
GAAP Conversion Bonds <sup>(3)</sup>	494,535,000		34,845,000		459,690,000	23,526,700
Special Tax Obligation	5,041,840,000	800,000,000	301,345,000	-	5,540,495,000	241,891,364
Bradley International Airport	116,290,000		6,960,000		109,330,000	4,395,808
Clean Water Fund	970,090,000	-	60,670,000	-	909,420,000	43,429,518
UConn 2000 <sup>(4)</sup>	1,504,995,000	276,075,000	119,285,000	-	1,661,785,000	70,141,253
CI Increment Financing <sup>(5)</sup>	24,515,000		1,905,000		22,610,000	1,117,370
CHEFA Childcare Facilities Program <sup>(6)</sup>	53,580,000		2,440,000		51,140,000	2,344,506
Juvenile Training School <sup>(7)</sup>	12,400,000		635,000		11,765,000	593,475
Bradley International Parking Operations	28,015,000		2,750,000		25,265,000	1,753,930
CHFA Special Needs Housing Bonds <sup>(8)</sup>	56,585,000		3,840,000		52,745,000	2,542,656
CHFA Emergency Mortgage Assistance Progra	am <sup>(9)</sup> 38,085,000		2,130,000		35,955,000	1,837,336
CRDA Bonds (10)	82,685,000		3,370,000		79,315,000	2,220,847
TOTAL	\$24,697,232,326	\$2,944,620,000	\$1,956,317,299	\$ 394,500,000	\$ 25,291,035,027	\$1,083,578,828

(1) Includes interest rate swap payments and variable rate bond fees.

- (2) General Obligation Teachers' Retirement Fund bonds were issued as taxable bonds pursuant to Public Act 07-186 to fund \$2 billion of the unfunded liability of the Connecticut Teachers' Retirement Fund, capitalized interest and cost of issuance.
- (3) General Obligation GAAP Conversion bonds were issued in fiscal year 2014 to fund half of the General Fund GAAP deficit at that time and commit the State to funding the balance over time through budget appropriation as part of a bond covenant.
- (4) UConn 2000 bonds were authorized in three stages in a total amount of \$4.3 billion over a 32 year period to be paid by the University of Connecticut from a State debt service commitment. As each series is issued, the debt service is appropriated from the State's General Fund.
- (5) Connecticut Innovations (CI) has issued tax increment bonds for certain economic development projects. The debt service is deemed appropriated from the State's General Fund.
- (6) On July 1, 1999, the State Treasurer assumed the responsibility for the Connecticut Health and Educational Facilities Authority (CHEFA) Childcare debt service appropriation per Public Act 97-259.
- (7) A lease purchase financing of the heating and cooling plant at the Juvenile Training School in Middletown, CT.
- (8) Connecticut Housing Finance Authority (CHFA) Special Needs Housing bonds were issued pursuant to Public Act 05-280 and Public Act 05-3 for the purpose of financing costs of the Next Steps Initiative. The State is required to make debt service payments on the bonds under a contract for state assistance agreement between CHFA, the State Treasurer and the Secretary of the Office of Policy and Management.
- (9) Connecticut Housing Finance Authority (CHFA) Emergency Mortgage Assistance Program bonds were issued pursuant to Public Act 08-176 to fund the Emergency Mortgage Assistance Program. The State is required to make debt service payments on the bonds under a contract for state assistance agreement between CHFA, the State Treasurer and the Secretary of the Office of Policy and Management.
- (10) Capital Region Development Authority (CRDA) bonds were issued to provide funding for the Adriaen's Landing development project in Hartford. The bonds, issued in a combination of fixed and variable rate securities, have a final maturity of 2034. The State is required to make debt service payments on the bonds up to a maximum annual amount of \$9 million pursuant to a contract for financial assistance agreement between CRDA, the State Treasurer and the Secretary of the Office of Policy and Management. CRDA is required to reimburse the State for the debt service payments from net parking and central utility plant revenues.
- Note 1: In accordance with Section 3-115 of the General Statutes, the State Comptroller shall provide accounting statements relating to the financial condition of the State as a whole in the same form and in the same categories as appears in the Budget Act enacted by the General Assembly. The accounting standards that were applied in this legislation and the Budget Act enacted for the 2018 fiscal year is a basis of accounting other than Generally Accepted Accounting Principles. In order to be consistent with the Comptroller's statements and the Budgetary Act, the State Treasurer has employed the same statutory basis of accounting for the presentation of this schedule.
- Note 2: GAAP accounting requires that Long-Term debt obligations be segregated into the portion payable within the next fiscal year (the current portion) and the remaining portion that is not due until after the next fiscal year. This manner of presentation is not used for the statutory basis presentation.

For a detailed listing of debt outstanding for the fiscal year ended June 30, 2018, please see Statutory Appendix.

#### **DEBT MANAGEMENT DIVISION**

## RETIREMENT SCHEDULE OF IN-SUBSTANCE DEFEASED DEBT OUTSTANDING<sup>(1)</sup> STATUTORY BASIS

JUNE 30, 2018

Date Escrow Established		Amount of Principal Outstanding	Last Payment Date on Refunded Deb		Market Value of Escrow	Investment Profile of Escrow Account
BOND TYPE:	GENER	AL OBLIGATION				
06/20/2018	\$	-	06/25/2018	\$	10	Cash
SUBTOTAL	\$	-		\$	10	
BOND TYPE: S 09/28/2016 SUBTOTAL	SPECIAL \$	- TAX OBLIGATI 75,565,000 75,565,000	ON 11/01/2018	\$	77,143,949 77,143,949	US Treasury Notes State and Local Government Series/Cash
09/28/2016	\$	75,565,000 <b>75,565,000</b>		\$		US Treasury Notes State and Local Government Series/Cash
09/28/2016 SUBTOTAL	\$	75,565,000 <b>75,565,000</b>		\$ \$		US Treasury Notes State and Local Government Series/Cash
09/28/2016 SUBTOTAL BOND TYPE: C	\$ CLEAN V	75,565,000 75,565,000 VATER FUND	11/01/2018		77,143,949	

(1) Represents bonds which have been refunded with proceeds of other bond issues and bonds which have been defeased using budget surplus. Although the State is still legally responsible for principal and interest payments on the refunded bonds, the refunded bonds are not carried as a liability of the State since they have been "in-substance" defeased. Investments adequate to meet all payments have been irrevocably deposited in escrow accounts with an independent agent for the sole purpose of satisfying principal and interest. The adequacy of each escrow account to meet debt service payments has been verified by an independent accounting firm.

- Note 1: In accordance with Section 3-115 of the General Statutes, the State Comptroller shall provide accounting statements relating to the financial condition of the State as a whole in the same form and in the same categories as appears in the Budget Act enacted by the General Assembly. The accounting standards that were applied in this legislation and the Budget Act enacted for the 2018 fiscal year is a basis of accounting other than Generally Accepted Accounting Principles. In order to be consistent with the Comptroller's statements and the Budgetary Act, the State Treasurer has employed the same statutory basis of accounting for the presentation of this schedule.
- Note 2: GAAP accounting requires that Long-Term debt obligations be segregated into the portion payable within the next fiscal year (the current portion) and the remaining portion that is not due until after the next fiscal year. This manner of presentation is not used for the statutory basis presentation.

### **DEBT MANAGEMENT DIVISION**

#### SCHEDULE OF EXPENSES IN EXCESS OF \$5,000<sup>(1)</sup> FISCAL YEAR ENDED JUNE 30, 2018

Name of Firm	Description of Services	Aggregate Compensation Paid in FY 2018	Status as of 06/30/18
Acacia Financial Group, Inc.	Financial Advisor	\$ 98,729	Active
AMTEC	Arbitrage Calculation/Verification Agent Fees	, ,	Active
Bank of America Merrill Lynch	Management Fees	55.000	Active
Day Pitney, LLP	Bond/Disclosure Counsel	346,309	Active
Dornenburg Kallenbach Advertising	Web Site Improvements	20.250	Active
Fitch Ratings	Rating Agency	168,000	N/A
Goldman, Sachs & Company	Management Fees	115.000	Active
Hardwick Law Firm LLC	Bond Counsel	59,538	Active
Hawkins, Delafield & Wood, LLP	Arbitrage Calculation Fees/Bond Counsel	143.372	Active
Hilltop Securities	Financial Advisor	87,859	Active
ImageMaster	Financial Printer	13,008	Active
Kroll Bond Rating Agency, Inc.	Rating Agency	120,000	N/A
Lamont Financial Services	Financial Advisor	71.088	Active
Law Offices of Joseph C Reid, PA	Bond Counsel	26.755	Active
Lewis & Munday	Bond Counsel	87.251	Active
Loop Capital Markets LLC	Management Fees	55,000	Active
Mahoney Sabol & Co., LLP	Auditor	74,500	Active
Moody's Investors Service	Rating Agency	434,200	N/A
Orrick, Herrington & Sutcliffe, LLP (BondLogistix)	Arbitrage Calculation Fees	16,000	Active
Public Financial Management	Financial Advisor	144.472	Active
Public Resources Advisory Group	Financial Advisor	76,728	Active
Pullman & Comley, LLC	Bond Counsel	261.541	Active
Robinson & Cole	Bond/Tax Counsel	250.572	Active
Schiff Hardin LLP	Bond Counsel	188.658	Active
Seward and Monde	Auditor	51.640	Active
Shipman & Goodwin, LLP	Bond Counsel	55,531	Active
Soeder & Associates	Tax Counsel	263,491	Active
Source Media	Advertisement and Subscription	6.099	Active
Squire, Patton, Boggs (US) LLP	Bond Counsel	71,388	Active
S & P Global Ratings	Rating Agency	270,970	N/A
Sustainalytics	Green Bond Program Review	15.000	Inactive
U. S. Bank, NA	Administrative/Escrow/Trustee Fees	238,310	Active
Updike, Kelly & Spellacy	Bond Counsel	166,332	Active
Total		\$ 4,058,291	

1) Expenses are presented on a cash basis. Debt Management expenses are comprised of payments to vendors made through the Treasury Business Office, fees netted at bond closings, and fees and expenses paid from Cost of Issuance accounts. The amounts shown do not include bond issuance expenses paid on behalf of the State and counsel fees for firms representing the underwriter's, banks or trustees. Also excluded are bond sales charges which are paid to the Senior Manager and distributed by agreement of the underwriters, whether netted from bond proceeds or funded from the Treasury Business Office, as well as bond remarketing and liquidity fees which are accounted for as part of interest cost paid during the fiscal year. Also not included are amounts paid to the IRS for arbitrage rebate payments in accordance with IRS regulations.

#### **CASH MANAGEMENT DIVISION**

#### ACTIVITY STATEMENT FISCAL YEAR ENDED JUNE 30, 2018

Description	Total
INFLOWS	
Receipts:	
Deposits	\$32,550,193,504.35 (1)
Bad Checks	(7,388,708.51) <sup>(2)</sup>
Treasury Initiated Transfers	2,966,935,473.80 <sup>(3)</sup>
Total Receipts	\$35,509,740,269.64
Transfers:	24,276,793,571.45 (4)
Other Inflows:	
Internal Bank Transfers	41,065,906,612.82 <sup>(5)</sup>
Interbank Transfers	23,887,462,962.00 (6)
Total Other Inflows	\$64,953,369,574.82
TOTAL INFLOWS	<u>\$124,739,903,415.91</u>
DUTFLOWS	
Disbursements:	
Vendor	\$30,621,514,211.70 <sup>(7)</sup>
Payroll Total Disbursements	4,402,007,781.33 (8)
Total Disbursements	\$35,023,521,993.03
Transfers:	24,833,169,111.03 (4)
Other Outflows:	
Internal Bank Transfers	41,065,906,612.82 <sup>(5)</sup>
Interbank Transfers	23,887,462,962.00 (6)
Total Other Outflows	\$64,953,369,574.82
TOTAL OUTFLOWS	<u>\$124,810,060,678.88</u>

- (1) Deposits revenue received from taxes, licenses, lottery fees, federal grants and other sources.
- (2) Bad Checks checks issued with insufficient funds in the originator's bank account.
- (3) Treasury Initiated Transfers To record debt service payments to the proper bank account and transfer investment income to the proper fund.
- (4) Transfers income earned from short and long-term investments, transfers of cash from one fund to the other, investment activity, and Certificates of Deposit purchased and sold with Connecticut banks under the Treasurer's Community Bank and Credit Union Initiative.
- (5) Internal Bank Transfers transfers of money from concentration accounts to zero balance accounts with the same depository institution to provide funds to cover authorized disbursements and invest excess cash.
- (6) Interbank Transfers transfers of state moneys between banks to invest excess cash or to cover authorized disbursements.
- (7) Vendor expenditures for goods and services provided to the State by vendors, along with other payments, such as refunds of payments made to State agencies, restitution payments directed by the courts, and State grant payments.
- (8) Payroll expenditures for the State's personnel and retirement payrolls.

				CASH MANAGE		N		
		SU	MMARY SCHED	SCAL YEAR EN			ENIS	
			PRESENTED U	NDER STATUT	ORY BASIS OF	ACCOUNTING	G <sup>(3) (4)</sup>	
Fund	d Name	Cash Balance July 1, 2017	FY 2018 Receipts	FY 2018 Disbursements	Transfers	Cash Balance June 30, 2018	Other Net Adjustments <sup>(2)</sup>	Adjusted Cash Balance June 30, 2018
тот	AL FUNDS	\$(242,963,282.48)	\$35,509,740,269.64	\$35,023,521,993.03	\$(556,375,539.58)	\$(313,120,545.45)	\$113,149,061.21	\$(199,971,484.24)
	AL FUNDS	\$(242,963,262.46)	\$35,509,740,269.64 	\$35,023,521,993.03	ə(556,375,539.56)	\$(313,120,545.45)	\$113,149,061.21	\$(199,971,404.24)
(1)	Detailed ir Annual Re		ty within each individ	ual fund (formerly pro	ovided in the Statuto	ory Appendix) can b	e obtained from th	ne Comptroller's
(2)		Adjustments have l resentation.	been included to bring	g the Treasurer's cas	h balance presenta	tion into conformar	nce with the Comp	troller's cash
	These adj	ustments include th	e following:					
	- Cash hel	d in agency checki	ng accounts.					
	- Petty cas	sh balance.						
(3)	condition of The Budge Principals.	of the State as a wh et Act enacted for th . In order to be cons	-115 of the General S nole in the same form ne 2017 fiscal year is sistent with the Comp unting for the present	and in the same cate presented on a com ptroller's statements a	egories as appears prehensive basis of and the Budgetary A	in the Budget Act e accounting other the act, the State Treas	nacted by the Gen nan General Accep urer has employed	neral Assembly. oted Accounting I the same
(4)		counting requires the tutory basis presen	at investment balance tation.	es be presented to in	clude the accrued i	nterest earned. Thi	s manner of prese	ntation is not used
1								

### **CASH MANAGEMENT DIVISION**

#### CIVIL LIST FUNDS SUMMARY SCHEDULE OF CASH AND INVESTMENTS <sup>(1)</sup> FISCAL YEAR ENDED JUNE 30, 2018 PRESENTED UNDER STATUTORY BASIS OF ACCOUNTING <sup>(2) (3)</sup>

escription	Total All Funds
eneral Investments	
ash	\$ (199,971,484.24)
TIF	4,011,025,250.04
vestments with Treasurer as Trustee	
nort-Term	1,619,644,178.33
ng-Term	33,663,202,222.55
vestments with Others as Trustee	
ort-Term	653,925,647.62
g-Term	308,959,731.07
al	\$ 40,056,785,545.37
concilation Between Treasurer & Comptroller (4)	
ice of the Comptroller	
sh and STIF June 30, 2018 (Annual Statutory Report)	\$ 3,996,370,408.42
sh and Investments with Trustee Fund #14005	650,805,058.59
sh and Investments with Trustee Fund #21008	15,861,525.37
h and Investments with Trustee Fund #21009	220,804,597.38
h and Investments with Trustee Fund #21015	419,997,738.77
h and Investments with Trustee Fund #21016	(0.60)
and Investments with Trustee Fund #21018	127,183,252.62
and Investments with Treasurer Fund #31001	(623,594.36)
and Investments with Treasurer Fund #31002	(9.10)
h and Investments with Treasurer Fund #31004	(8,488.78)
h and Investments with Treasurer Fund #31006	315,515.47
and Investments with Treasurer Fund #31008	(2,402.43)
and Investments with Treasurer Fund #31009	(4,841.12)
and Investments with Treasurer Fund #31010	5.34
and Investments with Treasurer Fund #31011	226.83
and Investments with Treasurer Fund #35010	161.66
and Investments with Treasurer Fund #35011	(1,209.93)
	\$ 5,430,697,944.13
ce of the Treasurer	ф (400.074.404.04)
h <del>-</del>	\$ (199,971,484.24)
	4,011,025,250.04
IF/Investment with Treasurer as Trustee	1,619,644,178.33
al	<u>\$ 5,430,697,944.13</u>

(1) For a detailed listing of the Civil List Investments for the Fiscal Year Ending June 30, 2018, please see Statutory Appendix.

- (2) In accordance with Section 3-115 of the General Statutes, the State Comptroller shall provide accounting statements relating to the financial condition of the State as a whole in the same form and in the same categories as appears in the budget act enacted by the General Assembly. The Budget Act enacted for the 2018 fiscal year is presented on a comprehensive basis of accounting other than general accepted accounting principals. In order to be consistent with the Comptroller's statements and the budgetary act, the State Treasurer has employed the same comprehensive basis of accounting for the presentation of the summary of cash and investments.
- (3) GAAP accounting requires that investment balances be presented to include the accrued investment earnings. This manner of presentation is not used for the statutory basis presentation.
- (4) Reconciliation of Cash Equivalents Per Comptroller's Books to Cash and General Investments and Short-Term Investments Per Treasury Books.

## CASH MANAGEMENT DIVISION CIVIL LIST FUNDS INTEREST CREDIT PROGRAM <sup>(1)</sup> FISCAL YEAR ENDED JUNE 30, 2018

Fund	Participant	Department	SID	Interest Earned During the Year
12004	Insurance Fund			
<b>-</b>	INSURANCE FUND	DOI37500	10010	2,144,631.11
Fotal				2,144,631.11
2007	Workers Compensation			
Fatal	ADMINISTRATION FUND	WCC42000	10010	415,881.10
Fotal				415,881.10
12014	Criminal Injuries Compensation Fund		40047	F7 400 40
Total	VICTIM SERVICES	JUD95000	12047	<u> </u>
				,
12015	Vending Facilities Operators Fringe Benefits VENDING FACILITY PROGRAM - FEDERAL INCOME	SDR63500	40012	123.17
Total		00100000	40012	123.17
12017	University of Connectiout Operating Fund			
12017	University of Connecticut Operating Fund OPERATING FUND	UOC67000	40001	3,791,133.36
Total				3,791,133.36
12018	University Health Center Operating Fund			
2010	OPERATING FUND	UHC72000	40001	165,204.25
	STUDENT SCHOLARSHIPS AND LOANS	UHC72000	40014	92,247.99
Fotal				257,452.24
2019	State University Operating Fund			
	STATE UNIVERSITIES CENTRAL CONNECTICUT STATE UNIVERSITY	BOR77700 BOR84000	40001	3,607,223.67 <sup>(2)</sup> 33,948.61
	EASTERN CONNECTICUT STATE UNIVERSITY			49,703.58
Total		BOR85500		3,690,875.86
	Regional Community/Technical Colleges Operating Fund (Tuition	n Account)	40001	3,690,875.86
12020			40001	
1 <b>2020</b> Fotal	Regional Community/Technical Colleges Operating Fund (Tuition BOARD FOR REGIONAL COMM-TECH COLLEGE	n Account)	40001	3,690,875.86
1 <b>2020</b> Fotal	Regional Community/Technical Colleges Operating Fund (Tuition BOARD FOR REGIONAL COMM-TECH COLLEGE University of Connecticut Research Foundation	a Account) BOR77700		3,690,875.86 1,520,027.69 1,520,027.69
Total 12020 Total 12022 Total	Regional Community/Technical Colleges Operating Fund (Tuition BOARD FOR REGIONAL COMM-TECH COLLEGE	n Account)	40001	3,690,875.86
12020 Fotal 12022 Fotal	Regional Community/Technical Colleges Operating Fund (Tuition BOARD FOR REGIONAL COMM-TECH COLLEGE University of Connecticut Research Foundation RESEARCH	a Account) BOR77700		3,690,875.86 <u>1,520,027.69</u> 1,520,027.69 593,258.86
2020 Total 2022 Total	Regional Community/Technical Colleges Operating Fund (Tuition BOARD FOR REGIONAL COMM-TECH COLLEGE University of Connecticut Research Foundation	a Account) BOR77700		3,690,875.86 <u>1,520,027.69</u> 1,520,027.69 593,258.86
12020 Fotal 12022 Fotal 12031	Regional Community/Technical Colleges Operating Fund (Tuition BOARD FOR REGIONAL COMM-TECH COLLEGE University of Connecticut Research Foundation RESEARCH Employment Security - Administration	UOC67000	40001	3,690,875.86 <u>1,520,027.69</u> 1,520,027.69 <u>593,258.86</u> 593,258.86 59,999.42 0.00
12020 Total 12022	Regional Community/Technical Colleges Operating Fund (Tuition BOARD FOR REGIONAL COMM-TECH COLLEGE         University of Connecticut Research Foundation RESEARCH         Employment Security - Administration PENALTY & INTEREST	DOL40000	40001	3,690,875.86 <u>1,520,027.69</u> 1,520,027.69 <u>593,258.86</u> 593,258.86 593,258.86
<b>12020</b> Fotal <b>12022</b> Fotal <b>12031</b> Fotal	Regional Community/Technical Colleges Operating Fund (Tuition BOARD FOR REGIONAL COMM-TECH COLLEGE         University of Connecticut Research Foundation         RESEARCH         Employment Security - Administration         PENALTY & INTEREST         TITLE XII EXCESS FUNDS         Tobacco Settlement Fund	DOL40000	40001	3,690,875.86 1,520,027.69 1,520,027.69 593,258.86 593,258.86 59,999.42 0.00 59,999.42
<b>I2020</b> Fotal <b>I2022</b> Fotal <b>I2031</b> Fotal <b>I2037</b>	Regional Community/Technical Colleges Operating Fund (Tuition BOARD FOR REGIONAL COMM-TECH COLLEGE         University of Connecticut Research Foundation         RESEARCH         Employment Security - Administration         PENALTY & INTEREST         TITLE XII EXCESS FUNDS	DOL40000	40001	3,690,875.86 1,520,027.69 1,520,027.69 593,258.86 593,258.86 59,999.42 0.00 59,999.42 12,461.74
12020 Fotal 12022 Fotal 12031	Regional Community/Technical Colleges Operating Fund (Tuition BOARD FOR REGIONAL COMM-TECH COLLEGE         University of Connecticut Research Foundation         RESEARCH         Employment Security - Administration         PENALTY & INTEREST         TITLE XII EXCESS FUNDS         Tobacco Settlement Fund	DOL40000	40001	3,690,875.86 1,520,027.69 1,520,027.69 593,258.86 593,258.86 59,999.42 0.00 59,999.42
2020 Fotal 2022 Fotal 2031 Fotal 2037 Fotal	Regional Community/Technical Colleges Operating Fund (Tuition BOARD FOR REGIONAL COMM-TECH COLLEGE         University of Connecticut Research Foundation         RESEARCH         Employment Security - Administration         PENALTY & INTEREST         TITLE XII EXCESS FUNDS         Tobacco Settlement Fund         TOBACCO SETTLEMENT FUND         GENERAL FUND	DOL40000 OPM20000	40001 40213 40214	3,690,875.86 1,520,027.69 1,520,027.69 593,258.86 593,258.86 593,258.86 59,999.42 0.00 59,999.42 12,461.74 12,461.74
2020 Total 2022 Total 2031 Total 2037 Total	Regional Community/Technical Colleges Operating Fund (Tuition BOARD FOR REGIONAL COMM-TECH COLLEGE         University of Connecticut Research Foundation RESEARCH         Employment Security - Administration PENALTY & INTEREST TITLE XII EXCESS FUNDS         Tobacco Settlement Fund TOBACCO SETTLEMENT FUND         GENERAL FUND RESEARCH IN PLANT SCIENCE	Account) BOR77700 UOC67000 DOL40000 DOL40000 OPM20000 AES48000	40001 40213 40214 30099	3,690,875.86 1,520,027.69 1,520,027.69 593,258.86 593,258.86 593,258.86 59,999.42 0.00 59,999.42 12,461.74 12,461.74 11,509.81
2020 Total 2022 Total 2031 Total 2037 Total	Regional Community/Technical Colleges Operating Fund (Tuition BOARD FOR REGIONAL COMM-TECH COLLEGE         University of Connecticut Research Foundation RESEARCH         Employment Security - Administration PENALTY & INTEREST TITLE XII EXCESS FUNDS         Tobacco Settlement Fund TOBACCO SETTLEMENT FUND         GENERAL FUND RESEARCH IN PLANT SCIENCE ADMINISTRATION OF GRANTS	Account) BOR77700 UOC67000 DOL40000 DOL40000 OPM20000 AES48000 AES48000	40001 40213 40214 30099 30116	3,690,875.86 <u>1,520,027.69</u> 1,520,027.69 <u>593,258.86</u> <u>593,258.86</u> <u>593,258.86</u> <u>59,999.42</u> <u>0.00</u> <u>59,999.42</u> <u>12,461.74</u> <u>12,461.74</u> <u>11,509.81</u> <u>1,980.54</u>
2020 Fotal 2022 Fotal 2031 Fotal 2037 Fotal	Regional Community/Technical Colleges Operating Fund (Tuition BOARD FOR REGIONAL COMM-TECH COLLEGE         University of Connecticut Research Foundation RESEARCH         Employment Security - Administration PENALTY & INTEREST TITLE XII EXCESS FUNDS         Tobacco Settlement Fund TOBACCO SETTLEMENT FUND         GENERAL FUND RESEARCH IN PLANT SCIENCE ADMINISTRATION OF GRANTS BOARD FOR STATE ACADEMIC AWARD	Account) BOR77700 UOC67000 DOL40000 DOL40000 OPM20000 AES48000 AES48000 BOR77700	40001 40213 40214 30099 30116 35186	3,690,875.86 <u>1,520,027.69</u> 1,520,027.69 <u>593,258.86</u> <u>593,258.86</u> <u>593,258.86</u> <u>59,999.42</u> <u>0.00</u> <u>59,999.42</u> <u>12,461.74</u> <u>12,461.74</u> <u>11,509.81</u> <u>1,980.54}</u> <u>39,044.99</u>
2020 Fotal 2022 Fotal 2031 Fotal 2037 Fotal	Regional Community/Technical Colleges Operating Fund (Tuition BOARD FOR REGIONAL COMM-TECH COLLEGE         University of Connecticut Research Foundation RESEARCH         Employment Security - Administration PENALTY & INTEREST TITLE XII EXCESS FUNDS         Tobacco Settlement Fund TOBACCO SETTLEMENT FUND         GENERAL FUND RESEARCH IN PLANT SCIENCE ADMINISTRATION OF GRANTS BOARD FOR STATE ACADEMIC AWARD CT DISTANCE LEARNING CONSORTIUM	Account) BOR77700 UOC67000 DOL40000 DOL40000 OPM20000 AES48000 AES48000 BOR77700 BOR77700	40001 40213 40214 30099 30116 35186 35289	3,690,875.86 1,520,027.69 1,520,027.69 593,258.86 593,258.86 593,258.86 59,999.42 0.00 59,999.42 12,461.74 12,461.74 11,509.81 1,980.54 39,044.99 4,228.01
2020 Fotal 2022 Fotal 2031 Fotal 2037 Fotal	Regional Community/Technical Colleges Operating Fund (Tuition BOARD FOR REGIONAL COMM-TECH COLLEGE         University of Connecticut Research Foundation RESEARCH         Employment Security - Administration PENALTY & INTEREST TITLE XII EXCESS FUNDS         Tobacco Settlement Fund TOBACCO SETTLEMENT FUND         GENERAL FUND RESEARCH IN PLANT SCIENCE ADMINISTRATION OF GRANTS BOARD FOR STATE ACADEMIC AWARD CT DISTANCE LEARNING CONSORTIUM GEARUP FEDERAL SCHOLARSHIPS	Account) BOR77700 UOC67000 DOL40000 DOL40000 OPM20000 AES48000 AES48000 BOR77700 BOR77700 BOR77700	40001 40213 40214 30099 30116 35186 35289 26247	3,690,875.86 1,520,027.69 1,520,027.69 593,258.86 593,258.86 593,258.86 59,999.42 0.00 59,999.42 12,461.74 12,461.74 11,509.81 1,980.54 39,044.99 4,228.01 193,664.07
12020 Fotal 12022 Fotal 12031 Fotal 12037 Fotal	Regional Community/Technical Colleges Operating Fund (Tuition BOARD FOR REGIONAL COMM-TECH COLLEGE         University of Connecticut Research Foundation RESEARCH         Employment Security - Administration PENALTY & INTEREST TITLE XII EXCESS FUNDS         Tobacco Settlement Fund TOBACCO SETTLEMENT FUND         GENERAL FUND RESEARCH IN PLANT SCIENCE ADMINISTRATION OF GRANTS BOARD FOR STATE ACADEMIC AWARD CT DISTANCE LEARNING CONSORTIUM GEARUP FEDERAL SCHOLARSHIPS CONN STATE LIBRARY ACCOUNT	Account) BOR77700 UOC67000 DOL40000 DOL40000 OPM20000 AES48000 AES48000 BOR77700 BOR77700 BOR77700 CSL66000	40001 40213 40214 30099 30116 35186 35289 26247 30082	3,690,875.86 1,520,027.69 1,520,027.69 593,258.86 593,258.86 593,258.86 59,999.42 0.00 59,999.42 12,461.74 12,461.74 11,509.81 1,980.54 39,044.99 4,228.01 193,664.07 310.29
12020 Fotal 12022 Fotal 12031 Fotal 12037 Fotal	Regional Community/Technical Colleges Operating Fund (Tuition BOARD FOR REGIONAL COMM-TECH COLLEGE         University of Connecticut Research Foundation RESEARCH         Employment Security - Administration PENALTY & INTEREST TITLE XII EXCESS FUNDS         Tobacco Settlement Fund TOBACCO SETTLEMENT FUND         GENERAL FUND RESEARCH IN PLANT SCIENCE ADMINISTRATION OF GRANTS BOARD FOR STATE ACADEMIC AWARD CT DISTANCE LEARNING CONSORTIUM GEARUP FEDERAL SCHOLARSHIPS CONN STATE LIBRARY ACCOUNT CT LIBRARY & MUSEUM FUND	Account) BOR77700 UOC67000 DOL40000 DOL40000 OPM20000 OPM20000 AES48000 BOR77700 BOR77700 BOR77700 CSL66000 CSL66000	40001 40213 40214 30099 30116 35186 35289 26247 30082 30093	3,690,875.86 1,520,027.69 1,520,027.69 593,258.86 593,258.86 593,258.86 59,999.42 0.00 59,999.42 12,461.74 12,461.74 11,509.81 1,980.54 39,044.99 4,228.01 193,664.07 310.29 19,780.39
12020 Fotal 12022 Fotal 12031 Fotal 12037 Fotal	Regional Community/Technical Colleges Operating Fund (Tuition BOARD FOR REGIONAL COMM-TECH COLLEGE         University of Connecticut Research Foundation RESEARCH         Employment Security - Administration PENALTY & INTEREST TITLE XII EXCESS FUNDS         Tobacco Settlement Fund TOBACCO SETTLEMENT FUND         GENERAL FUND RESEARCH IN PLANT SCIENCE ADMINISTRATION OF GRANTS BOARD FOR STATE ACADEMIC AWARD CT DISTANCE LEARNING CONSORTIUM GEARUP FEDERAL SCHOLARSHIPS CONN STATE LIBRARY ACCOUNT CT LIBRARY & MUSEUM FUND HISTORIC DOCUMENTS PRESERVATION ACCOUNT	Account) BOR77700 UOC67000 DOL40000 DOL40000 OPM20000 OPM20000 AES48000 BOR77700 BOR77700 BOR77700 CSL66000 CSL66000 CSL66000	40001 40213 40214 30099 30116 35186 35289 26247 30082 30093 35150	3,690,875.86 1,520,027.69 1,520,027.69 593,258.86 593,258.86 593,258.86 59,999.42 0.00 59,999.42 12,461.74 12,461.74 11,509.81 1,980.54 39,044.99 4,228.01 193,664.07 310.29 19,780.39 12,382.73
2020 Fotal 2022 Fotal 2031 Fotal 2037 Fotal	Regional Community/Technical Colleges Operating Fund (Tuition BOARD FOR REGIONAL COMM-TECH COLLEGE         University of Connecticut Research Foundation RESEARCH         Employment Security - Administration PENALTY & INTEREST TITLE XII EXCESS FUNDS         Tobacco Settlement Fund TOBACCO SETTLEMENT FUND         GENERAL SCHOLARSHIPS         CONN STATE LIBRARY ACCOUNT	Account) BOR77700 UOC67000 DOL40000 DOL40000 OPM20000 OPM20000 AES48000 BOR77700 BOR77700 BOR77700 BOR77700 CSL66000 CSL66000 CSL66000 DCF91000	40001 40213 40214 30099 30116 35186 35289 26247 30082 30093 35150 30084	3,690,875.86 1,520,027.69 1,520,027.69 593,258.86 593,258.86 593,258.86 59,999.42 0.00 59,999.42 12,461.74 12,461.74 11,509.81 1,980.54 39,044.99 4,228.01 193,664.07 310.29 19,780.39 12,382.73 70.11
12020 Fotal 12022 Fotal 12031 Fotal 12037 Fotal	Regional Community/Technical Colleges Operating Fund (Tuition BOARD FOR REGIONAL COMM-TECH COLLEGE         University of Connecticut Research Foundation         RESEARCH         Employment Security - Administration         PENALTY & INTEREST         TITLE XII EXCESS FUNDS         Tobacco Settlement Fund         TOBACCO SETTLEMENT FUND         GENERAL FUND         RESEARCH IN PLANT SCIENCE         ADMINISTRATION OF GRANTS         BOARD FOR STATE ACADEMIC AWARD         CT DISTANCE LEARNING CONSORTIUM         GEARUP FEDERAL SCHOLARSHIPS         CONN STATE LIBRARY ACCOUNT         CT LIBRARY & MUSEUM FUND         HISTORIC DOCUMENTS PRESERVATION ACCOUNT         RICHARD A. FORESTER MEMORIAL FUND         STRIPPER WELL OVERCHARGE	Account) BOR77700 UOC67000 DOL40000 DOL40000 OPM20000 OPM20000 OPM20000 AES48000 BOR77700 BOR77700 BOR77700 BOR77700 CSL66000 CSL66000 CSL66000 DCF91000 DEP43000	40001 40213 40214 30099 30116 35186 35289 26247 30082 30082 30082 30082 30082 30084 20492	3,690,875.86 1,520,027.69 1,520,027.69 593,258.86 593,258.86 593,258.86 59,999.42 0.00 59,999.42 12,461.74 12,461.74 11,509.81 1,980.54 39,044.99 4,228.01 193,664.07 310.29 19,780.39 12,382.73 70.11 4.79
12020 Fotal 12022 Fotal 12031 Fotal 12037 Fotal	Regional Community/Technical Colleges Operating Fund (Tuition BOARD FOR REGIONAL COMM-TECH COLLEGE         University of Connecticut Research Foundation RESEARCH         Employment Security - Administration PENALTY & INTEREST TITLE XII EXCESS FUNDS         Tobacco Settlement Fund TOBACCO SETTLEMENT FUND         GENERAL FUND RESEARCH IN PLANT SCIENCE ADMINISTRATION OF GRANTS BOARD FOR STATE ACADEMIC AWARD CT DISTANCE LEARNING CONSORTIUM GEARUP FEDERAL SCHOLARSHIPS CONN STATE LIBRARY ACCOUNT CT LIBRARY & MUSEUM FUND HISTORIC DOCUMENTS PRESERVATION ACCOUNT RICHARD A. FORESTER MEMORIAL FUND STRIPPER WELL OVERCHARGE NUCLEAR SAFETY EMERGENCY PREPAREDNESS	Account) BOR77700 UOC67000 DOL40000 DOL40000 OPM20000 OPM20000 OPM20000 AES48000 BOR77700 BOR77700 BOR77700 BOR77700 CSL66000 CSL66000 CSL66000 DCF91000 DEP43000 DEP43000	40001 40213 40214 30099 30116 35186 35289 26247 30082 30082 30082 30082 30082 30084 20492 35411	3,690,875.86 1,520,027.69 1,520,027.69 1,520,027.69 593,258.86 593,258.86 593,258.86 59,999.42 0.00 59,999.42 12,461.74 12,461.74 11,509.81 1,980.54 39,044.99 4,228.01 193,664.07 310.29 19,780.39 12,382.73 70.11 4.79 11,267.37
<b>I2020</b> Fotal <b>I2022</b> Fotal <b>I2031</b> Fotal <b>I2037</b>	Regional Community/Technical Colleges Operating Fund (Tuition BOARD FOR REGIONAL COMM-TECH COLLEGE         University of Connecticut Research Foundation RESEARCH         Employment Security - Administration PENALTY & INTEREST TITLE XII EXCESS FUNDS         Tobacco Settlement Fund TOBACCO SETTLEMENT FUND         GENERAL SCHOLARSHIPS         CONN STATE LIBRARY ACOUNT	Account) BOR77700 UOC67000 DOL40000 DOL40000 OPM20000 OPM20000 OPM20000 AES48000 BOR77700 BOR77700 BOR77700 BOR77700 BOR77700 BOR77700 BOR77700 BOR77700 BOR77700 BOR77700 BOR77700 BOR7700 BOR7700 BOR7700 BOR7700 BOR7700 BOR7700 BOR7700 BOR7700 BOR7700 BOR7700 BOR7700 BOR7700 BOR7700 BOR77700 BOR7700 BOR7700 BOR77700 BOR7700 BOR7700 BOR77700 BOR7700 BOR700 BOR7700 BOR7700 BOR7000 BOR7700 BOR7000 BOR77700 BOR7000 BOR7000 BOR7000 BOR7000 BOR7000 BOR7000 BOR7000 BOR7000 BOR70000 BOR70000 BOR70000 BOR7000 BOR7700 BOR7000 BOR7000 BOR7000 BOR7000 BOR7000 BOR7000 BOR7000 BOR7000 BOR7000 BOR7700 BOR7000 BOR7000 BOR70000	40001 40213 40214 30099 30116 35186 35289 26247 30082 30093 35150 30084 20492 35411 22133	3,690,875.86 1,520,027.69 1,520,027.69 1,520,027.69 593,258.86 593,258.86 593,258.86 59,999.42 0.00 59,999.42 12,461.74 12,461.74 11,509.81 1,980.54 39,044.99 4,228.01 193,664.07 310.29 19,780.39 12,382.73 70.11 4.79 11,267.37 26,660.59
12020 Fotal 12022 Fotal 12031 Fotal 12037 Fotal	Regional Community/Technical Colleges Operating Fund (Tuition BOARD FOR REGIONAL COMM-TECH COLLEGE         University of Connecticut Research Foundation RESEARCH         Employment Security - Administration PENALTY & INTEREST TITLE XII EXCESS FUNDS         Tobacco Settlement Fund TOBACCO SETTLEMENT FUND         GENERAL FUND RESEARCH IN PLANT SCIENCE ADMINISTRATION OF GRANTS BOARD FOR STATE ACADEMIC AWARD CT DISTANCE LEARNING CONSORTIUM GEARUP FEDERAL SCHOLARSHIPS CONN STATE LIBRARY ACCOUNT CT LIBRARY & MUSEUM FUND HISTORIC DOCUMENTS PRESERVATION ACCOUNT RICHARD A. FORESTER MEMORIAL FUND STRIPPER WELL OVERCHARGE NUCLEAR SAFETY EMERGENCY PREPAREDNESS	Account) BOR77700 UOC67000 DOL40000 DOL40000 OPM20000 OPM20000 OPM20000 AES48000 BOR77700 BOR77700 BOR77700 BOR77700 CSL66000 CSL66000 CSL66000 DCF91000 DEP43000 DEP43000	40001 40213 40214 30099 30116 35186 35289 26247 30082 30082 30082 30082 30082 30084 20492 35411	3,690,875.86 1,520,027.69 1,520,027.69 1,520,027.69 593,258.86 593,258.86 593,258.86 59,999.42 0.00 59,999.42 12,461.74 12,461.74 11,509.81 1,980.54 39,044.99 4,228.01 193,664.07 310.29 19,780.39 12,382.73 70.11 4.79 11,267.37

## CASH MANAGEMENT DIVISION

## CIVIL LIST FUNDS INTEREST CREDIT PROGRAM <sup>(1)</sup> (Continued) FISCAL YEAR ENDED JUNE 30, 2018

Fund	Participant	Agency		Interest Earned During the Year
	PRIVATE OCCUPATIONAL STUDENT PROTECTION FUND	DHE66500	35135	9,159.58
	CONNECTICUT FUTURES ACCOUNT	DHE66500	35151	46.58
	BOARD OF PAROLE'S ASSET FORFEITURE ACCOUNT	DOC88000	20127	287.02
	CORRECTIONAL MEMORIAL FUND	DOC88000	30015	304.87
	CORRECTION GENERAL WELFARE FUND	DOC88000	35137	3,569.11
	FEDERAL ASSET FORFEITURE	DPS32000	20493	8,175.68
	ENHANCED 911 TELECOMMUNICATIONS FUND	DPS32000	35190	654,101.56
	BRAIN INJURY PREVENTION AND SERVICE ACCOUNT	DSS60000	35308	273.30
	OFFICE OF TOURISM	ECD46000	30207	560.68
	CITIZEN'S ELECTION FUND GRANT	ELE13500	35339	309,216.30
	CITIZEN'S ELECTION FUND RESERVE ACCT.	ELE13500	30422	634.09
	CRIMINAL VIOLENCE VICTIMS ESCROW ACCT.	JUD95000	35203	0.35
	CLIENT SECURITY FUND	JUD95000	35205	208,704.64
	DMHAS-COMMISSIONER'S OFFICE PRE-TRIAL ACCOUNT	MHA53000	35166	2,702.79
	DRUG ASSET FORFEITURE PROGRAM	MIL36000	35112	597.44
	CHILDREN'S TRUST FUND	OEC64800	30219	139.86
	JUVENILE ACCOUNTABLIITY INCENTIVE BLOCK	OPM20000	21672	
				561.16
		OPM20000	21921	58,601.88
		OTT14000	35101	289,277.62
		OTT14000	35105	28,734.80
	SECOND INJURY STIPULATION & REIMBURSEMENT	OTT14000	35111	37,870.37
	MUNICIPAL PARTICIPATION FUND	OTT14000	35269	381.07
	CARE OF CEMETERY LOTS	OTT14000	35577	3,713.93
	DIV. OF FINANCE AND INTERNAL OPERATIONS	SDE64000	35351	0.23
	FINANCIAL LITERACY UBS	SDE64000	35358	67.47
	FINANCIAL LITERACY	SDE64000	35380	1,442.48
	FAUCHTSWANGER FUND	SDR63500	30030	119.98
	FRAUENHOFER FUND	SDR63500	30042	289.31
	MISCELLANEOUS GRANTS	SDR63500	30070	189.60
	SARA BROWN FUND	SDR63500	30092	3,421.00
	CHARLES PRECOURT MEMORIAL FUND	SDR63500	30104	57.28
	ANN COROTEAU MEMORIAL FUND	SDR63500	30113	63.87
	VENDING FACILITIES PROGRAM -STATE AND LOCAL INCOME	SDR63500	35149	13,827.48
Total				1,966,640.17
21005	Auto Emissions Inspection Fund			
	AUTO EMISSION INSPECTION FUND	DMV35000		81,700.51
Total				81,700.51
21009	Bradley International Airport Operations			
	BRADLEY ENTERPRISE FUND	APT59500	40001	61,591.44
Total				61,591.44
21019	Stadium Facility Enterprise Fund STADIUM ENTERPRISE FUND	OPM20000		0.077.04
Total		0FIM20000		<u>2,377.04</u> 2,377.04
21021	General Aviation Airport Enterprise			
	GENERAL AVIATION AIRPORT ENTERPRISE	APT59500		9,863.44
Total				9,863.44
22001	Correction Industries			
Total	CORRECTION INDUSTRIES	DOC88000	42304	<u>40,073.06</u> 40,073.06
				10,010100
31001	State Employees' Retirement System STATE EMPLOYEES' RETIREMENT SYSTEM	OSC15000	40001	1,381,510.50
Total				1,381,510.50
31003	General Assembly Retirement			
	OFFICE OF THE COMPTROLLER	OSC15000		182.66
Total				

## **CASH MANAGEMENT DIVISION**

### CIVIL LIST FUNDS INTEREST CREDIT PROGRAM <sup>(1)</sup> (Continued) FISCAL YEAR ENDED JUNE 30, 2018

Fund	Participant	Agency	SID	Interest Earned During the Year
i unu	OFFICE OF THE COMPTROLLER	OSC15000	010	4,842.88
Total		00010000		4,842.88
31006	Teacher's Retirement System			
	TEACHER'S RETIREMENT BOARD OPERATING FUND	TRB77500		-167,471.38
Total				-167,471.38
31008	Municipal Employees Retirement - Fund B			
Total	MUNICIPAL EMPLOYEES RETIREMENT FUND	OSC15000	40001	<u>124,848.58</u> 124,848.58
				124,040.30
31011	OPEB Fund OPEB OPERATING APPROPRIATIONS	OSC15000	40001	94,325.02
	OPEB RETIREE MED. EMPL. SHARE	OSC15000	43426	(501,482.45)
	OPEB RETIREE PHARMACY	OSC15000	43427	501,253.78
	OPEB HEALTH INS. EMPLOYEE CONT.	OSC15000	43440	92,182.10
Total				186,278.45
31012	Teacher's Retirement System			
Total	TEACHER'S RETIREMENT OPEB	TRB77500	42358	<u>-81,799.00</u> -81,799.00
				-01,799.00
34003	Funds Awaiting Distribution EARLY RETIREE RECOVERIES	OSC15000	43483	0.00
Total		00010000	-0-00	0.00
35001	Connecticut Health Club Guaranty Fund			
55001	HEALTH CLUB GUARANTY FUND	DCP39500	40001	2,417.23
Total				2,417.23
35002	Real Estate Guaranty			
	REAL ESTATE GUARANTYFUND	DCP39500	40001	2,157.52
Total				2,157.52
35003	Home Improvement Guaranty Fund			
<b>T</b> ( )	HOME IMPROVEMENT GUARANTY FUND	DCP39500	40001	9,209.24
Total				9,209.24
35006	New Home Construction Guaranty Fund	5 6 5 6 6 5 6 6		
Total	NEW HOME CONSTRUCTION GUARANTY	DCP39500	40001	<u>9,888.99</u> 9,888.99
				9,000.99
35007	Tobacco and Health Trust Fund TOBACCO HEALTH TRUST FUND	OPM20000	40001	46,349.91
Total	TOBACCO TIEAETT TROST FORD	OF10120000	40001	46.349.91
35008	Biomedical Research Trust Fund			,
33000	BIOMEDICAL RESEARCH FUND	DPH48500		11,970.50
Total		2		11,970.50
35009	Endowed Chair Investment Fund			
	ENDOWED CHAIR INVESTMENT FUND	DHE66500	40001	52,351.22
Total				52,351.22
35012	Various Treasurer's Trust Funds			
	IRWIN LEPOW TRUST FUND	CME49500	42354	389.37
	R. GRAEME SMITH	DPS32000	42353	97.25
		DVA21000	42356	477.71
Total	JOHN H. KING	JUD95000	42355	<u>1,786.90</u> 2,751.23
				_,. ••
Grand <sup>-</sup>	Total			\$16,291,018.14

(1) Interest is earned at the monthly simple interest rate of the Treasurer's Short-Term Investment Fund. Interest is calculated on the average monthly balance of the fund or account, and credited to the fund or account on a quarterly basis.

(2) Interest is earned by the participant and allocated to the constituent units.

## CASH MANAGEMENT DIVISION SCHEDULE OF EXPENSES IN EXCESS OF \$5,000 <sup>(1)</sup> FISCAL YEAR ENDED JUNE 30, 2018

Name of Firm	Description of Services	Contract Date	Aggregate Compensation Paid in FY 2018	Status As of 6/30/18
				•
Bank of America	Banking Services	Various	\$ 1,343,481 <sup>(2)</sup>	Active
People's United Bank	Banking Services	Apr-16	369,991 <sup>(2)</sup>	Active
Bank Of NewYork Mellon	Master Custody	Oct-16	281,044	Active
Webster Bank	Banking Services	Jun-98	163,627 <sup>(2)</sup>	Active
Wells Fargo Bank	Banking Services	N/A	99,285 <sup>(2)</sup>	Closed
Standard & Poor Fin. Svcs. LLC	Subscription & Rating	N/A	85,000	Active
US Bank National Assn	Bond Trustee & Paying Agent	Jul-06	73,500	Active
JP Morgan Chase Bank	Banking Services	Mar-10	57,887 <sup>(2)</sup>	Assigned
Bloomberg Financial LP	Subscription & Research	N/A	44,335	Active
Key Bank	Banking Services	Jan-18	35,931	Active
Moodys Investors Services	Credit Research	N/A	26,883	Active
Spectra Food Svcs & Hospitality	Catering Service	N/A	11,833	Active
TOTAL			\$ 2,592,797	

(1) Expenses are presented on a cash basis.

(2) Includes compensation realized through bank balances and fees.

## UNCLAIMED PROPERTY DIVISION

## SCHEDULE OF EXPENSES IN EXCESS OF \$5,000 <sup>(1)</sup> FISCAL YEAR ENDED JUNE 30, 2018

Name of Firm	Description of Services	Contract Date	Con	ggregate npensation in FY 2018	Status As of 6/30/18
A & A Office Systems, Inc.	Photocopier Lease	N/A	\$	\$8,700	Active
Advanced Corporate Networking	Computer Equipment	N/A		8,206	Active
Advance Office System	Computer Equipment	N/A		12,427	Active
Audit Services US LLC	Identification & Collection of Property	May-14		13,911	Active
Conduent State & Local Solutions	Claims Processing & Database Management	t July-06		1,056,881	Active
Conduent State & Local Solutions	Identification & Collection of Property	Aug-94		132,677	Active
Hallmark TotalTech Inc.	Temporary Services	N/A		18,056	Active
Kelmar Associates LLC	Identification & Collection of Property	Jul-14		30,331	Active
Murphy Security Services LLC	Security Services	N/A		11,723	Active
National Association of State Treasurers	Membership Dues	N/A		5,775	Active
Russell Implementation Services, Inc.	Security Commission Expense	May-09		20,054	Active
Shipman & Goodwin	Legal Services	Dec-16		14,016	Active
Verus Financial LLC	Identification & Collection of Property	Jul-14		533,657	Active

TOTAL

\$ 1,866,414

(1) Expenses are presented on a cash basis.

## UNCLAIMED PROPERTY DIVISION

### FIVE YEAR SELECTED FINANCIAL INFORMATION

	Fiscal Year Ended June 30,				
	2018	2017	2016	2015	2014
Gross Receipts (1)	\$138,725,122	\$129,187,512	\$ 111,446,654	\$147,656,895	\$103,178,699
Claims Paid <sup>(1)</sup>	58,182,884	41,105,448	57,568,310	61,090,933	63,772,440
Transfer to Citizens Election Fund <sup>(2)</sup> Administrative Expenses:	11,634,363	11,428,647	11,349,203	11,281,219	11,081,918
Salaries & Fringe Benefits	3,584,769	3,692,758	3,786,288	3,539,983	3,542,003
Data Processing & Hardware	1,770,305	2,329,983	1,837,988	2,696,640	1,522,819
All Other	136,104	112,478	68,760	76,916	338,740
Total Disbursements	75,308,425	58,669,314	74,610,549	78,685,691	80,257,920
Excess (Deficiency) of Receipts					
over Disbursements <sup>(3)</sup>	\$ 63,416,697	\$ 70,518,198	\$ 36,836,105	\$ 68,971,204	\$ 22,920,779
Approximate Market Value of Securities at Fiscal Year End:					
Total Securities Inventory <sup>(1)</sup>	\$ 3,906,687	\$ 4,208,673	\$ 3,773,812	\$ 534,458	\$ 665,152
Securities Liquidated	\$ 44,034,620	\$ 28,946,243	\$ 17,632,827	\$ 41,815,320	\$ 21,227,122
Number of Claims Paid	18,472	16,670	15,758	17,888	20,897

(1) The amounts disclosed above as "gross receipts" and "claims paid" represent actual cash flows and do not include the value of marketable securities received by the Unclaimed Property Division, nor the value of the securities returned to owners. However, the amounts disclosed above as fiscal year end market values of securities help provide a general indication of the relative net activity in such assets over time. Receipts include the proceeds from securities liquidated in a given year.

(3) Deficiency of receipts over disbursements are covered by transfers from the General Fund, whereas excess of receipts over disbursements are remitted to the General Fund. Regardless, all amounts collected remain liabilities of the State until returned to rightful owners.

## Summary of Gross Receipts Fiscal Year Ended June 30, 2018

Total Gross Receipts	\$138,725,122
Reciprocal Exchange Program with Other States	1,092,781
Sale of Property Lists, Copying and Other Charges	3,172
Securities Sold	44,034,620
Securities Tendered	18,392
Dividends on Securities Held	175,227
Govern Agency/ Public Authorities	4,053,394
Insurance Companies	14,340,442
Other Corporations	50,862,536
Financial Institutions	\$24,144,558

<sup>(2)</sup> P.A. 05-5, October 25, 2005 special session required Unclaimed Property Division to deposit certain funds into the Citizens' Election Fund and the balance is deposited into the General Fund.

## SECOND INJURY FUND SCHEDULE OF EXPENSES IN EXCESS OF \$5,000 <sup>(1)</sup> FISCAL YEAR ENDED JUNE 30, 2018

Name of Firm	Description of Services	Contract Date	Aggregate Compensation Paid in FY 2018	Status As of 6/30/18
A & A Office Systems, Inc.	Photocopier Lease	N/A	\$ 12,621	Active
Advanced Office Systems	Computer Equipment	N/A	20,021	Active
Advanced Corporate Networking	Computer Equipment	N/A	27,044	Active
Automatic Data Processing Inc.	Check Processing	Apr-06	11,932	Active
Coventry Healthcare Workers Comp.Inc.	Provider Bill Audit Services	Feb-06	71,930	Active
Hallmark TotalTech, Inc.	Temporary Services	N/A	15,383	Active
MCMC, LLC	IME/Case Mgmt./Job Placement	Jan-06	24,225	Active
Murphy Security Service, LLC	Security Services	N/A	18,887	Active
PCC Technology Group	Maintenance & Support	N/A	58,880	Active
PCC Technology Group	Hosting Service & Managed Srv	s N/A	107,800	Active
Security Services of Connecticut Inc.	Surveillance Services	Dec-13	12,194	Active
West Group	Subscription	Jul-16	10,524	Active
TOTAL			\$ 391,442	

(1) Expenses are presented on a cash basis. This schedule only includes services that were retained directly by the Fund and does not include medical services ordered by Workers Compensation Commissioners, claimants or their treating physicians.

## EXECUTIVE OFFICE

# DUTIES OF THE STATE TREASURER BOARDS, COMMITTEES AND COMMISSIONS

Connecticut state statutes provide that the State Treasurer serves as a member, ex-officio member or can designate a representative on a number of State boards, commissions and legislatively-mandated committees. The Treasurer served on the following boards, commissions and committees during Fiscal Year 2018, listed in alphabetical order.

### BANKING COMMISSION (§ 36a-70(h)(1) CGS)

The Banking Commission approves all applications for the creation of state banks or trust companies. As part of this process, the Commission holds public hearings on applications prior to granting approval. The Commission members are the Treasurer, Comptroller and Banking Commissioner.

## STATE BOND COMMISSION (§ 3-20(c) CGS)

As authorized by the General Assembly, all projects and grants funded from State bonds, as well as the issuance of the bonds, must be authorized by the State Bond Commission. The members of the Commission include the Governor, Treasurer, Comptroller, Attorney General, Secretary of the Office of Policy and Management (OPM), Commissioner of Public Works, and the Co-chairpersons and the ranking minority members of the joint standing committee of the General Assembly having cognizance of matters relating to finance, revenue and bonding.

### CONNECTICUT AIRPORT AUTHORITY (§ 15-120bb CGS)

The CAA was established to develop, improve and operate Bradley International Airport and the five state-owned general aviation airports (Danielson, Groton/New London, Hartford Brainard, Waterbury-Oxford, and Windham Airports) and for the subsequent purchase of other general aviation airports. An eleven member board governs the authority including the Treasurer, the Commissioner of Transportation, the Commissioner of Economic and Community Development, four members appointed by the Governor, and four members appointed by legislative leaders.

### CONNECTICUT DATA ANALYSIS TECHNOLOGY ADVISORY BOARD (CGS 18-175, PARTICULARLY § 3)

The Connecticut Data Analysis Technology Advisory Board advises various governmental agencies, departments and offices on data policy. The Board has 16 members, eight who have expertise in data analysis, management, policy or related fields, and the Treasurer, the Commissioner of Administrative Services, the Executive Director of the Freedom of Information Commission, the Attorney General, the Chief Court Administrator, the State Librarian, the Comptroller, and the Chief Data Officer, serving as board chairperson.

#### CONNECTICUT GREEN BANK (§ 16-245N CGS)

The Connecticut Green Bank leverages public and private funds to accelerate the growth of green energy in Connecticut. The members of its Board consist of 11 members as follows: The Treasurer, the Commissioner of Energy and Environmental Protection, the Commissioner of Economic and Community Development, four members appointed by the Legislature, and four members appointed by the Governor.

## CONNECTICUT HEALTH AND EDUCATIONAL FACILITIES AUTHORITY (CHEFA)

#### BOARD OF DIRECTORS (§ 10a-179 CGS)

CHEFA is a conduit bond issuer for hospitals, nursing homes, private universities, private secondary schools and day care facilities. The board members include the Treasurer, Secretary of OPM, and eight members appointed by the Governor.

CONNECTICUT HIGHER EDUCATION SUPPLEMENTAL LOAN AUTHORITY (CHESLA)

## BOARD OF DIRECTORS (§ 10a-179(a) CGS)

CHESLA finances supplemental student loans and issues bonds every two years. The Board consists of eight members including the Treasurer, Commissioner of Higher Education, Secretary of OPM, and five members appointed by the Governor.

#### CONNECTICUT HIGHER EDUCATION TRUST (CHET) ADVISORY COMMITTEE (§ 3-22e(a) CGS)

This committee advises the Treasurer on policies concerning CHET. The Connecticut Higher Education Trust allows families to make tax deferred investments for higher education costs. The Commissioner of Higher Education, the Secretary of OPM, the Co-chairpersons and ranking members of the Legislature's education and finance, revenue and bonding committees, and four representatives of private and public higher education serve with the Treasurer on this board.

# EXECUTIVE OFFICE DUTIES OF THE STATE TREASURER (Continued) BOARDS, COMMITTEES AND COMMISSIONS

## CONNECTICUT HOUSING FINANCE AUTHORITY (CHFA) (§ 8-244(a) CGS)

CHFA was created to increase the supply of, and encourage and assist in the purchase, development and construction of, housing for low and moderate-income families and persons throughout the State. It provides mortgages for single family homeowners at below market rates, mortgages for multi-family developers, and construction financing. The members of the board include the Treasurer, Commissioner of Economic and Community Development, Secretary of OPM, Banking Commissioner, seven members appointed by the Governor, and four members appointed by legislative leaders.

## CONNECTICUT INNOVATIONS, Incorporated (CI) (§32-35 CGS)

CI is a quasi-public organization dedicated to driving an entrepreneurial, technology-based economy in Connecticut. CI stimulates high-tech growth by investing in early-stage Connecticut technology companies, university/industry research collaborations and technology transfer and collaborating with government, business, nonprofit and academic organizations to advance technology growth and promote public policies consistent with CI's mission. The members of the board include the Treasurer, Commissioner of Economic and Community Development, Secretary of OPM, the president of the Board of Regents for Higher Education, nine members appointed by the Governor and four members appointed by legislative leaders.

## CONNECTICUT LOTTERY CORPORATION BOARD OF DIRECTORS (§ 12-802(b) CGS)

The Connecticut Lottery Corporation manages the State lottery and is responsible for maximizing the efficiency of operations in order to provide a greater return to the general fund. The thirteen member Board of Directors includes the Treasurer, the Secretary of OPM, as well as appointees by the Governor and legislative leaders.

## CONNECTICUT PORT AUTHORITY (§ 32-435 CGS)

The purposes of the Connecticut Port Authority shall be to coordinate the development of Connecticut's ports and harbors, work with the Department of Economic and Community Development and establish maritime policy for the State. The powers of the authority shall be exercised by board members including the Treasurer, the Commissioner of Energy and Environmental Protection, the Commissioner of Transportation, the Commissioner of Economic and Community Development, the Secretary of OPM, four appointed by the Governor and six appointed by legislative leaders.

## CONNECTICUT RETIREMENT SECURITY AUTHORITY (§ 31-410 CGS)

The Authority is charged with designing and implementing a program to provide private-sector employees with retirement savings accounts if their employer does not offer one. The Authority is governed by a fifteen-member Board of Directors consisting of the Treasurer, the Comptroller, the Secretary of OPM, the Banking Commissioner, the Labor Commissioner, four appointments by the Governor and six appointments by legislative leaders.

## CONNECTICUT STUDENT LOAN FOUNDATION (§ 10A-203(A)(B)(1)CGS)

The Student Loan Foundation is a non-profit corporation created to improve educational opportunity and promote repayment of loans. The corporation is governed by a board of directors consisting of fourteen members including the chairperson of the Board of Governors of Higher Education and the Commissioner of Higher Education; six public members appointed by the Governor; four members with knowledge of business or finance appointed by the legislature leadership; and the Treasurer.

## FINANCE ADVISORY COMMITTEE (§ 4-93 CGS)

The Finance Advisory Committee approves budget transfers recommended by the Governor and has other such powers over the State budget when the General Assembly is not in session. The Committee members are the Governor, Lieutenant Governor, Treasurer, Comptroller, two Senate members who are members of the legislature's Appropriations Committee and three House members who are members of the legislature's Appropriations Committee.

## INVESTMENT ADVISORY COUNCIL (§ 3-13b(a) CGS)

The Investment Advisory Council advises on investment policy and guidelines, and also reviews the assets and performance of the pension funds. Additionally, the Council advises the Treasurer with respect to the hiring of outside investment advisors and on the appointment of the Chief Investment Officer. The Investment Advisory Council consists of the Treasurer, the Secretary of OPM and ten appointees of the Governor and legislative leaders.

### **EXECUTIVE OFFICE**

### DUTIES OF THE STATE TREASURER (Continued) BOARDS, COMMITTEES AND COMMISSIONS

#### MUNICIPAL ACCOUNTABILITY REVIEW BOARD (MARB) (Section 367 of Public Act 17-2)

The MARB provides technical, financial and other assistance and related accountability for municipalities experiencing various levels of fiscal distress. Its members include the Treasurer and Secretary of the OPM as co-chairs, five members appointed by the governor, and four members appointed by legislative leaders.

#### NITROGEN CREDIT ADVISORY BOARD (§ 22A-523 CGS)

The Nitrogen Credit Advisory Board assists and advises the Commissioner of Energy and Environmental Protection in administering the nitrogen credit exchange program. The board consists of the Commissioner, the Treasurer, the Secretary of OPM, eight public members to be appointed by legislative leaders, and one to be appointed by the Governor.

### PENSION SUSTAINABILITY COMMISSION (SECTION 180 OF PUBLIC ACT 17-2)

The commission was established to study the feasibility of placing state capital assets in a trust and maximizing those assets for the benefit of the state pension system. The commission has 13 members, consisting of Treasurer, the Attorney General, the Comptroller, the Secretary of OPM, the Commissioner of Administrative Services, one appointed by the Governor and seven appointed by legislative leaders.

#### THE STANDARDIZATION COMMITTEE (§ 4a-58(a) CGS)

The standardization committee approves or grants waivers to existing purchasing regulations when it is in the best interests of the State to do so. The members of this committee include the Treasurer, Comptroller, Commissioner of Administrative Services, and such administrative heads of State departments as are designated for that duty by the Governor.

#### STATE EMPLOYEES' RETIREMENT COMMISSION (§5-155a)

The Connecticut State Employees Retirement Commission administers the provisions of the State Employees Retirement System, the Municipal Employees Retirement System, and all other state retirement and pension plans except the Teachers' Retirement System. The Commission consists of the Treasurer, the Comptroller, six members representing employees who are appointed by the bargaining agents, six management members who are members of the State Employees Retirement System two actuarial members who are enrolled actuaries and Fellows of the Society of Actuaries and one neutral trustee who is chairman of the Commission and is enrolled in the National Academy of Arbitrators.

### TEACHERS' RETIREMENT BOARD (§10-183L)

The Teachers' Retirement Board administers the Connecticut Teachers' Retirement System. The Board consists of 14 members: four active teacher members, two retired teacher members, the State Treasurer, the Secretary of OPM, the Commissioner of the State Board of Education, and five public members appointed by the Governor.

#### TEACHERS' RETIREMENT SYSTEM VIABILITY COMISSION (SECTION 59 OF PUBLIC ACT 17-2)

The commission, comprised of the members of the Teachers' Retirement Board, was established to develop a plan to maintain the financial viability of the Connecticut Teachers' Retirement System.

### TRANSPORTATION POLICY ADVISORY COUNCIL (PUBLIC ACT NO.17-192)

The Transportation Policy Advisory Council has various responsibilities related to transportation policy, including reviewing the five-year transportation capital plan developed annually by the Department of Transportation (DOT). The council has 18 members, consisting of the Treasurer, the Secretary of OPM, the Commissioner of Economic and Community Development, the Commissioner of Energy and Environmental Protection, the Housing Commissioner, the Commissioner of Transportation, the chairpersons and ranking members of the legislature's Transportation Committee, two appointments of the Governor, and six appointments of legislative leaders.

# EXECUTIVE OFFICE TOTAL ADMINISTRATION EXPENDITURES FISCAL YEARS ENDED JUNE 30,

Fiscal Years Ended June 30,

	2018	%	2017	%	2016	%	2015	%	2014	%
GENERAL FUND										
Personal Services	\$2,699,575	2.58%	\$2,864,352	2.88%	\$3,060,211	2.96%	\$3,122,049	2.92%	\$3,133,301	2.96%
Other Expenses	115,094	0.11%	127,454	0.13%	134,705	0.13%	153,995	0.14%	164,129	0.15%
Capital Equipment	5,058	0.00%	0	0.00%	0	0.00%	1	0.00%	1	0.00%
TOTAL	\$2,819,727	2.69%	\$2,991,807	3.01%	3,194,917	3.09%	3,276,045	3.07%	3,297,432	3.11%
PENSION FUNDS										
Personal Services	\$4,365,671	4.17%	\$4,650,774	4.68%	\$4,843,363	4.69%	\$4,939,368	4.63%	\$4,877,348	4.60%
Other Expenses	82,289,263	78.56%	75,598,020	76.12%	79,162,396	76.64%	82,497,181	77.27%	83,204,722	78.51%
Capital Equipment	14,015	0.01%	18	0.00%	9,717	0.01%	0	0.00%	3,279	0.00%
TOTAL	\$86,668,949	82.74%	\$80,248,812	80.80%	84,015,476	81.34%	87,436,549	81.90%	88,085,349	83.11%
SECOND INJURY FUN	ND									
Personal Services	\$7,122,823	6.80%	\$7,165,040	7.21%	\$7,391,756	7.16%	\$6,701,004	6.28%	\$6,631,038	6.26%
Other Expenses	517,675	0.49%	612,527	0.62%	728,779	0.71%	808,594	0.76%	603,991	0.57%
Capital Equipment	22,580	0.02%	549	0.00%	13,118	0.01%	0	0.00%	4,590	0.00%
TOTAL	\$7,663,078	7.32%	\$7,778,116	7.83%	8,133,653	7.87%	7,509,598	7.03%	7,239,619	6.83%
UNCLAIMED PROPER	RTY FUND									
Personal Services	\$3,594,942	3.43%	\$3,717,511	3.74%	\$3,739,155	3.62%	\$3,539,983	3.32%	\$3,133,301	2.96%
Other Expenses	1,882,221	1.80%	2,417,708	2.43%	1,898,003	1.84%	2,773,556	2.60%	1,858,608	1.75%
Capital Equipment	14,015	0.01%	353	0.00%	8,745	0.01%	0	0.00%	2,951	0.00%
TOTAL	\$5,491,178	5.24%	\$6,135,572	6.18%	5,645,903	5.47%	6,313,539	5.91%	4,994,861	4.71%
SHORT-TERM INVEST	MENT FUND									
Personal Services	\$1,340,513	1.28%	\$1,557,441	1.57%	\$1,560,895	1.51%	\$1,484,134	1.39%	\$1,448,544	1.37%
Other Expenses	365,988	0.35%	407,558	0.41%	471,853	0.46%	414,469	0.39%	531,720	0.50%
Capital Equipment	4,924	0.00%	0	0.00%	2,915	0.00%	0	0.00%	984	0.00%
TOTAL	\$1,711,425	1.63%	\$1,964,999	1.98%	2,035,663	1.97%	1,898,603	1.78%	1,981,248	1.87%
Other Financing										
Sources (1)	375,188	0.36%	196,877	0.20%	269,827	0.26%	\$333,055	0.31%	\$384,997	0.36%
TOTAL AGENCY	\$104,743,560 <sup>-</sup>	100.00%	<b>\$99,316,183</b> 1	100.00% \$	5103,295,439	100.00%	\$106,767,389	100.00%	\$105,983,505	100.00%

(1) Other Financing Sources include: Clean Water Fund and the Capital Equipment Fund.

### EXECUTIVE OFFICE

### SCHEDULE OF EXPENSES IN EXCESS OF \$5,000 (1) FISCAL YEAR ENDED JUNE 30, 2018

			Aggregate Compensatio	n
Name of Firm	Description of Services	Contract Date	Paid	Status As of 6/30/18
A&A Office	Office Equipment	N/A	\$ 11,783	Active
Advanced Corporate Networking	Office Equipment	N/A	27,873	Active
Advanced Office System	Comupter Equipment	N/A	21,402	Active
Aon Hewitt Investing Consulting	Consultant Services	Sep-17	85,200	Active
Corporate Goverance Research and Consulting	Consulting Services.	Mar-07	7,590	Active
Council of Institutional Investors	Dues	N/A	19,594	Active
Financial Recovery Technology LLC	Subscription	N/A	22,917	Active
Hallmark TotalTech, Inc	Temporary Executive Secretary	N/A	6,591	Active
Hewitt Ennisknupp	Consultant Services	Sep-17	54,000	Active
Lexus-Nexis	Subscription	N/A	7,726	Active
Lowes & Associates	Consultant Services	N/A	29,600	Active
JP Morgan Chase Bank	P-Card Purchase	N/A	13,065	Active
Murphy Security Service LLC	Premises Security Services	May-10	20,190	Active
MSCI	Subscription	N/A	30,000	Active
National Association of State Auditors	Dues	N/A	5,200	Active
National Association Of State Treasurers	Dues	N/A	13,325	Active
PRI Association	Subscription	N/A	11,877	Active
Practising Law Institute	Subscription	N/A	6,500	Active
TIAA-CREF Tuition Financing INC	CHET Baby Scholorship	N/A	38,890	Active
TOTAL			\$ 433,323	

(1) Expenses are presented on a cash basis.

Statutory Appendix



		(3) <b>t</b>	5	- 0	5	31	36	15 88	0	5	98	0	8	4	0,00	0	0	0	0	ρı	50 02		5 2	30	5	)6 %				0	14	91	39	38	75	00	5	0
		Interest Paid During FY 2018 <sup>(3)</sup>	10 071	<del>.</del>	17,275	243,561	27,566	23,715 154 138	509.479	11,696,475	819,398	300,000	6,316,478	1,414,924 15 225 356	13,006,278	376,800	2,059,600	873,600	24,355,000	8,8/0,9/8	1,18/,625 1 744 450	5 649 450	1,901,075	10,770,030	1,177,975	14,984,706 1 222 465	7 200 402	547 192	130.500	20,185,550	12,340,744	1,034,346	2,011,289	21,637,188	12,057,875	1,063,260	2,838,515 6 507 950	6,587,850
		Interest Accreted Through FY 2018 <sup>2</sup> )	v	• •	ı	•				•		•	•			ı	ı	•		•				•	•	'	•			•			•	'	•			
		Last Maturity Date	05/01/2018	03/01/2020	03/01/2020	09/01/2022	09/01/2022	10/01/2022	03/01/2023	06/01/2020	06/01/2020	12/01/2017	04/15/2018	04/15/2018 11/01/2028	02/15/2029	03/01/2018	03/01/2023	03/01/2019	12/01/2029	0707/10/40	04/01/2018 12/01/2018	12/01/2021	10/01/2022	10/01/2029	10/01/2030	10/01/2030	01/12/2010	05/15/2019	11/01/2019	11/01/2031	04/15/2032	04/15/2022	04/15/2020	06/01/2025	09/15/2032	09/15/2019	10/15/2022	10/15/2032
	BASIS	Next Maturity Date		03/01/2019	03/01/2019	09/01/2018	09/01/2018	10/01/2018 10/01/2018	03/01/2023	06/01/2019	06/01/2020			11/01/2018	02/15/2019		03/01/2019	03/01/2019	12/01/2020	B1.07/1.0/40	12/01/2018	12/01/2018	10/01/2018	10/01/2029	10/01/2030	10/01/2025	05/15/2010	05/15/2019	11/01/2019	11/01/2018	04/15/2021	04/15/2019	04/15/2019	06/01/2019	09/15/2020	09/15/2018	10/15/2018	10/15/2022
	UTORY	High Rate (%)		5 081	5.081	4.633	4.633	4.650 4.652	1.700	5.250	5.200			5 750	5.000		5.000	5.460	5.632	107.0	5 000	5,000	5.000	5.295	5.305	5.090	2000	2.000 2.400	5.000	5.000	5.000	2.934	2.400	5.000	5.000	2.730	2.551	000.6
NOISINIC	(1) <b>- STAT</b>	Low Rate (%)		5 081	5.081	4.633	4.633	4.650 4.652	1.700	5.250	5.200			1 600	3.125		3.500	5.460	4.950	4.407	3 000	3 000	3.000	5.295	5.305	5.090		2.300 2.400	5.000	2.000	2.000	2.205	2.250	2.000	2.000	2.580	1.696	3.000
DEBT MANAGEMENT DIVISION	OF DEBT OUTSTANDING <sup>(1)</sup> - STATUTORY BASIS JUNE 30, 2018	Outstanding June 30, 2018		2 094 308	235,000	4,804,560	505,000	390,000	10.000.000	151,630,000	20,000,000			-	261.000.000		35,000,000	8,000,000	450,000,000	184,250,000	- 27 750 000	21,7 JO,000 119,495,000	40,250,000	203,400,000	22,205 ,000	294,395,000	-	25 000 000	2.610.000	412,500,000	299,600,000	33,200,000	70,800,000	396,045,000	280,135,000	50,000,000	124,785,000	150,215,000
DEBT	ILE OF DEBT	Refunded or Defeased	بع ب د		,	•	•				ı		196,360,000	198, 140,000		·									•		•							•	•			
	SCHEDU	FY 2017 Retired	PPORTED	~	105,000	905,040	180,000	165,000 567 771		71,160,000	ı	15,000,000	23,640,000	15,810,000 26.365.000	15.000.000	8,415,000	11,635,000	8,000,000	I	- 000 010 00	26,250,000 29,000,000	5 720 000	2,125,000	•	•	-	04,140,000		'	27,500,000	1	8,300,000	23,600,000	43,535,000	'	25,000,000	25,000,000	ı
		lssued	ATION - TAX SUI		ı						ı	•				ı	ı		·	•				•	•		•		'	•	'	•		'	'		•	
		Outstanding June 30, 2017	BOND TYPE: GENERAL OBLIGATION - TAX SUPPORTED 03/28/1006 \$ 200 303 \$	¢.	340,000	5,709,600	685,000	555,000 3 597 406	10.000.000	222,790,000	20,000,000	15,000,000	220,000,000	213,950,000	276.000.000	8,415,000	46,635,000	16,000,000	450,000,000	184,230,000	26,250,000 56 750 000	30,730,000 125,215,000	42,375,000	203,400,000	22,205,000	294,395,000 64 740 000	162 070 000	25 000 000	2.610.000	440,000,000	259,600,000	41,500,000	94,400,000	439,580,000	280,135,000	75,000,000	149,785,000 150,245,000	150,215,000
		lssue Date	BOND TYPE	09/01/1990	09/30/1997	05/01/1999	05/06/1999	06/12/2001 06/12/2001	03/16/2005	04/27/2005	04/27/2005	12/19/2007	06/26/2008	00/20/2008 11/06/2008	02/26/2009	03/26/2009	03/26/2009	03/26/2009	12/23/2009	04/28/2010	04/28/2010 06/23/2010	00/23/2010	10/19/2010	10/19/2010	10/19/2010	10/19/2010 05/10/2011	00/13/2011	05/31/2011	11/14/2011	11/14/2011	04/26/2012	04/26/2012	04/26/2012	06/29/2012	10/04/2012	10/04/2012	11/16/2012	11/28/2012

		SC	SCHEDULE OF	DEBT MA	DEBT MANAGEMENT DIVISION OF DEBT OUTSTANDING <sup>(1)</sup> - STATUTORY BASIS (Continued) JILINE 30 2018	/ISION ATUTORY	BASI	S (Continu	led)		
Issue	Outstanding		FY 2018	Refunded or	Outstanding	Low Rate	High Rate	Next Maturity	Last Maturity Date	Interest Accreted Through FV 2018(2)	Interest Paid During FV 2018 <sup>(3)</sup>
Date	June 30, 2017	Issued	Kellfed	Deleased		(0/)	/0/		המופ	0071	
03/28/2013	155,430,000	•		•	155,430,000	2.000	5.000	03/01/2019	03/01/2033	•	6,257,719
03/20/2013	170,000,000	•	20,000,000	•	144,57,0,000 160,000,000	010.2	Z.334	03/01/2019	03/01/2020 07/16/2023		2,910,202 0.007 500
C1 07/10/00	70,000,000	•	15,000,000	•		4.000	0.000	0107/01/10		•	0,001,300
00/29/2013		•	19,000,000		33,000,000	Z.400 2000 2000	2.020	01/12/12/100	0707/C1/20		1,130,310
00/28/2010 00/00/00	200,000,000	•	3,000,000	•		2.000	0.000	01/02/01/00	00/15/2033	•	7 773 460
00/29/2013	778 000 000	•	10,000,000	•		2.17Z	2.017	03/01/2010	02/01/2023		2,213,400 12 462 500
03/20/2014	26,000,000				2/0,000,000 6 000 000	000 0		03/01/2020	03/01/2034		12,402,300 800 000
03/26/2014	20,000,000				22 000,000	2 450	9.870	03/01/2019	03/01/2013		420,000
03/26/2014	14 000,000				14 000,000	010 S	3 010	03/01/2010	03/01/2023		221.027 221.027
05/20/2014	330,850,000		93 325 000		237 525 000	2.500	5,000	12/15/2018	12/15/2025		14 832 725
06/26/2014	170 000 000	,	10 000 000		160 000 000	2 000	5 000	06/15/2019	06/15/2034	,	7 904 650
08/28/2014	270 000 000	'	15 000 000		255 000 000	4 000	5 000	09/01/2018	09/01/2034	ı	11 925 000
08/28/2014	160.000.000		20,000,000		140.000.000	1.600	3.100	09/01/2018	09/01/2024	ı	3,550.000
12/10/2014	236.590.000		50,695,000		185.895.000	5.000	5.000	11/15/2018	11/15/2025		0,308.650
12/10/2014	210.000.000		15,000,000		195.000.000	2.000	5.000	11/15/2018	11/15/2034		9.239.400
12/10/2014	60.000.000				60.000.000	3.250	5.000	11/15/2028	11/15/2031		2,765,562
03/25/2015	340,000,000		10,000,000		330,000,000	3.250	5.000	03/15/2019	03/15/2035		15,652,700
03/25/2015	100,000,000		20,000,000		80,000,000	1.974	3.127	03/15/2019	03/15/2025		2,257,000
05/28/2015	455,000,000		2,870,000	•	452,130,000	2.000	5.000	06/15/2019	06/15/2035	•	21,188,500
05/28/2015	175,000,000	•	16,690,000	•	158,310,000	2.250	2.700	06/15/2019	06/15/2024	•	3,697,281
05/28/2015	110,035,000		45,510,000		64,525,000	2.450	2.600	06/15/2019	06/15/2022	ı	2,181,424
08/19/2015	237,500,000	•	27,940,000	•	209,560,000	4.000	5.000	08/01/2018	08/01/2035		10,676,500
08/19/2015	225,000,000		25,000,000	•	200,000,000	2.250	3.330	08/01/2018	08/01/2025	•	5,537,884
G1.07/1.0/71	000,000,000		32,300,000	•		2.000	5.000	8107/G1/11	11/15/2034	ı	24,2U3,1U0
G1.02/1.0/21	65,000,000					2.000	000 S	6102/G1/11	CSUZ/CL/LL	ı	3,093,000 27 664 000
01/20/2010	501,300,000		42,300,000 42 N70 D00		463,000,000	2.000	3.000 5.000	05/15/2019	05/15/2020		22,001,000 23,812,850
06/14/2016	300,000,000				300,000,000	3 500	3,500	05/15/2019	05/15/2034		5 009 308
08/17/2016	250.000.000		12.500.000		237.500.000	3.000	5.000	08/15/2018	08/15/2036		10.687.500
08/17/2016	250,000,000		25,000,000		225,000,000	1.100	2.600	08/15/2018	08/15/2026		4,472,500
10/26/2016	585,000,000	,	32,500,000		552,500,000	2.000	5.000	10/15/2018	10/15/2036	,	25,567,475
10/26/2016	65,000,000				65,000,000	4.000	5.000	10/15/2030	10/15/2031		3,161,650
12/21/2016	327,440,000	•	50,590,000		276,850,000	2.000	5.000	11/01/2018	11/01/2023		14,253,250
04/19/2017	197,025,000		27,840,000	•	169, 185,000	3.000	5.000	04/15/2019	04/15/2028		8,358,138
04/19/2017	550,000,000	'	42,500,000	·	507,500,000	3.000	5.000	04/15/2019	04/15/2037	ı	25,153,106
06/28/2017	300,000,000			•	300,000,000	2.450	2.450	06/01/2019	06/01/2037	•	5,651,178
06/28/2017	134,865,000		ı		134,865,000	3.500	3.500	03/01/2019	09/15/2024	ı	2,368,391
12/21/2017	•	400,000,000	•		400,000,000	5.000	5.000	09/14/2018	09/14/2018	•	
12/12/12/12/17		450,000,000		•	450,000,000	2.300	3.750	01/15/2019	01/15/2028	•	
04/11/2018		2/6,440,000			2/6,440,000	4.000	5.000	04/15/2019	04/15/2028	ı	
04/11/2018		200,000,000			250,000,000	3.750	0003	04/12/21/90	04/15/2038	ı	
UQI ZUI ZU 10		400,000,000	•	'	400,000,000	0.000	000.6	61 N7/C1 /00	0007/01/00		

	Interest Paid During FY 2018 <sup>(3)</sup> 	\$118,913,371 1,018,270 370,650 <b>\$120,302,291</b>	<ul> <li>\$ 364,645</li> <li>783,196</li> <li>225,181</li> <li>\$ 1,373,022</li> </ul>	\$23,526,700 \$23,526,700	\$ 1,284,019 \$ 1,284,019 1,295,438 6,395,438 6,306,175 7,066,175 2,466,833 156,663,351 16,663,351 16,663,351 3,223,750 20,676,800 20,676,800 20,646,800 20,646,800 20,646,800 20,646,800 20,646,800 3,309,500 20,646,800 3,309,500 20,617 3,202,125 3,201,750 3,271,801,750 2,361,801,750 2,361,801,750 2,361,801,750 3,309,500 3,376,120 3,278,750 3,278,750 3,278,750 3,278,750 3,278,750 2,361,800 2,361,800 2,362,000 2,362,000 2,362,000 2,362,000 2,362,000 2,362,000 2,362,000 2,362,000 2,375,000 2,37	
	Interest Accreted Through FY 2018 <sup>(2)</sup>	\$ 147,782,568 - <b>\$147,782,568</b>	ччч <mark>и</mark>	• • භ භ	орания и политичи и пол Состативни и политичи и Состативни и политичи и	+
ed)	Last Maturity Date 04/15/2027	8 03/15/2032 2 03/15/2025 7 09/01/2027	07/01/2017 01/01/2018 01/01/2018	10/15/2018 10/15/2027	07/01/2018 07/01/2019 02/01/2021 02/01/2017 02/01/2021 02/01/2022 11/01/2019 02/01/2022 12/01/2018 12/01/2029 12/01/2018 12/01/2029 11/01/2018 11/01/2029 11/01/2018 11/01/2033 11/01/2018 11/01/2033 11/01/2018 12/01/2033 01/01/2018 01/01/2033 01/01/2018 01/01/2033 01/01/2018 09/01/2035 09/01/2018 09/01/2035 09/01/2018 09/01/2035 09/01/2019 09/01/2038 09/01/2019 09/01/2038 09/01/2019 09/01/2038 09/01/2019 09/01/2038	
(Continu	Next Maturity Date 04/15/2022	03/15/2023 03/15/2022 09/01/2027		10/15/2018	07/01/2018 02/01/2021 11/01/2018 02/01/2018 12/01/2018 12/01/2018 11/01/2018 12/01/2018 01/01/2018 01/01/2018 09/01/2018 09/01/2018 09/01/2019 09/01/2019 09/01/2019 09/01/2019	
r Basis	High Rate 5.000	5.850 6.270 3.500		5.000	5.250         5.250         5.000	
DIVISION ATUTOR	Low Rate (%) 5.000	5.690 6.158 3.500		2.250	5.250 5.250 3.9000 3.375 3.375 3.0000 3.0000 3.0000 3.0000 3.0000 3.0000 3.0000 3.0000 3.0000 3.0000 3.0000 3.0000 3.0000 3.0000 3.0000 3.00000 3.0000 3.0000 3.00000 3.000000 3.00000000	
DEBT MANAGEMENT DIVISION DEBT OUTSTANDING <sup>(1)</sup> - STATUTORY BASIS (Continued)	Outstanding June 30, 2018 - 92,105,000 \$14,123,453,503	<pre>NDS<sup>(4)</sup> \$2,026,530,000 170,946,524 10,590,000 \$2,208,066,524</pre>	ччч • • • •	\$ 459,690,000 \$ 459,690,000	<ul> <li>\$ 16,765,000</li> <li>7,080,000</li> <li>123,455,000</li> <li>123,455,000</li> <li>116,700,000</li> <li>47,760,000</li> <li>52,340,000</li> <li>52,340,000</li> <li>79,705,000</li> <li>79,705,000</li> <li>74,425,000</li> <li>74,425,000</li> <li>74,425,000</li> <li>74,425,000</li> <li>74,425,000</li> <li>74,425,000</li> <li>74,425,000</li> <li>74,425,000</li> <li>735,000</li> <li>74,50,000</li> <li>656,650,000</li> <li>68,265,000</li> <li>800,000,000</li> <li>85,540,495,000</li> </ul>	·
	Refunded or Defeased \$394,500,000	ENT FUND BO	ччч м	۰ ، ۳	ччччччччччччччччччччччччччччччччччччч	
SCHEDULE OF	FY 2017 Retired \$1,219,105,569	<b>RS' RETIREM</b> \$18,600,000 1,316,730 <b>519,916,730</b>	\$ 78,250,000 78,250,000 20,620,000 \$177,120,000	\$34,845,000 <b>\$34,845,000</b>	\$15,385,000 11,695,000 23,970,000 13,350,000 21,245,000 21,245,000 21,245,000 21,245,000 12,310,000 12,310,000 12,310,000 12,310,000 12,310,000 22,050,000 20,050,000 22,050,000 20,000 20,0000 20,0000 20,00000000	
SCF	Issued 92,105,000 \$ 1,868,545,000	ATION TEACHE	WERY NOTES		LIGATION	
	Outstanding June 30, 2017 \$13,868,514,072	BOND TYPE: GENERAL OBLIGATION TEACHERS' RETIREMENT FUND BONDS <sup>(4)</sup> 04/30/2008         \$2,045,130,000         \$         -         \$18,600,000         \$         -         \$2,02           04/30/2008         \$2,045,130,000         \$         -         \$18,600,000         \$         -         \$2,02           04/30/2008         172,263,254         -         1,316,730         -         171           08/28/2014         10,590,000         -         -         1,316,730         -         117           08/28/2014         10,590,000         -         -         1,316,730         -         -         117           SUBTOTAL         \$2,227,983,254         -         \$19,916,730         \$         -         \$2,220	BOND TYPE: ECONOMIC RECOVERY NOTES 10/24/2013 \$ 78,250,000 \$ - 10/24/2013 78,250,000 \$ - 12/10/2014 20,620,000 \$ - SUBTOTAL \$ 177,120,000 \$ -	BOND TYPE: GAAP CONVERSION BONDS <sup>(8)</sup> 10/24/2013 \$ 494,535,000 \$ SUBTOTAL \$ 494,535,000 \$	BOND TYPE: SPECIAL TAX OBLIGATION           11/15/2004         \$2,150,000         \$           10/25/2007         11,695,000         \$           10/25/2007         11,695,000         \$           10/12/008         31,050,000         \$           11/10/2008         13,655,000         \$           11/10/2009         15,405,000         \$           11/10/2009         15,405,000         \$           11/10/2009         304,030,000         \$           11/10/2010         76,610,000         \$           11/10/2010         76,610,000         \$           11/10/2010         82,015,000         \$           11/10/2010         82,015,000         \$           11/10/2010         82,015,000         \$           11/10/2011         190,285,000         \$           11/10/2011         190,285,000         \$           11/11/11/2/2011         86,735,000         \$           11/11/11/2/2011         190,285,000         \$           11/11/11/2/2011         190,285,000         \$           11/11/11/2/2011         190,285,000         \$           11/11/11/2/2012         107,100         \$           11/11/11/2/2013         5427,135,000<	
	lssue Date <u>06/20/2018</u> SUBTOTAL	BOND TYPE: 04/30/2008 04/30/2008 08/28/2014 SUBTOTAL	BOND TYPE: 10/24/2013 10/24/2013 12/10/2014 SUBTOTAL	BOND TYPE: 10/24/2013 SUBTOTAL	BOND TYPE: 11/15/2004 10/01/2008 12/10/2008 01/29/2009 11/10/2010 11/10/2010 11/10/2010 11/10/2010 11/10/2011 12/15/2011 12/15/2014 10/15/2014 10/15/2015 09/28/2016 09/28/2016 09/28/2016 09/28/2016	

		SC	SCHEDULE OF D	DEBT OUT	DEBT MANAGEMENT DIVISION EBT OUTSTANDING <sup>(1)</sup> - STATUTORY BASIS (Continued) JUNE 30, 2018	r division tatutory 8	BASIS	(Continue	<del>f</del> o		
lssue Date	Outstanding June 30, 2017	Issued	FY 2018 Retired	Refunded or Defeased	Outstanding June 30, 2018	Low Rate (%)	High Rate (%)	Next Maturity Date	Last Maturity Date	Interest Accreted Through FY 2018 <sup>(2)</sup>	Interest Paid During FY 2018 <sup>(3)</sup>
BOND TYPI 08/19/2011 04/01/2015 SUBTOTAL	BOND TYPE: CHEFA CHILDCARE FACILITIES PROGRAM <sup>(8)</sup> 08/19/2011 \$ 21,990,000 \$ - \$ 1,465,000 04/01/2015 31,590,000 \$ - 975,000 SUBTOTAL \$ 53,580,000 \$ - \$ 2,440,000	KE FACILITIES	<b>PROGRAM</b> <sup>(8)</sup> \$ 1,465,000 975,000 <b>\$ 2,440,000</b>	ч т со со с	\$ 20,525,000 30,615,000 <b>\$ 51,140,000</b>	4.500 3.000	5.000 5.000	07/01/2018 07/01/2018	07/01/2031 \$ 07/01/2038 <b>\$</b>		\$ 1,051,300 1,293,206 \$ 2,344,506
BOND TYPI 02/15/2001 SUBTOTAL	BOND TYPE: JUVENILE TRAINING SCHOOL <sup>(8)</sup> 02/15/2001 \$ 12,400,000 \$ - SUBTOTAL \$ 12,400,000 \$ -	NG SCHOOL <sup>®</sup>	\$ 635,000 <b>\$ 635,000</b>	ා 1 භ <del>ග</del>	\$ 11,765,000 <b>\$ 11,765,000</b>	4.750	5.000	12/15/2018	12/15/2018 12/15/2030 \$		\$ 593,475 <b>\$ 593,475</b>
<b>ВОИD ТҮР</b> I 03/15/2000 <b>SUBTOTAL</b>	BOND TYPE: BRADLEY INTERNATIONAL PARKING OPERATIONS 03/15/2000 \$ 28,015,000 \$ - \$ 2,750,000 \$ SUBTOTAL \$ 28,015,000 \$ - \$ 2,750,000 \$	ATIONAL PAR	KKING OPERAT \$ 2,750,000 \$ 2,750,000	SNOI	\$ 25,265,000 <b>\$ 25,265,000</b>	6.500	6.600	07/01/2018 07/01/2024			\$ 1,753,930 <b>\$ 1,753,930</b>
BOND TYPI 09/13/2007 05/19/2009 10/19/2010 SUBTOTAL	BOND TYPE: CHFA SPECIAL NEEDS HOUSING BONDS <sup>(10)</sup> 09/13/2007         \$ 16,480,000         \$ 1,320,00           05/19/2009         26,830,000         - 1,755,00           10/19/2010         13,275,000         - 765,00           20110         13,275,000         - 765,00           20110         13,275,000         - 765,00           20110         13,275,000         - 765,00	EEDS HOUSING	<b>G BONDS</b> <sup>(10)</sup> \$ 1,320,000 1,755,000 765,000 <b>\$ 3,840,000</b>	••••	\$ 15,160,000 25,075,000 12,510,000 <b>\$ 52,745,000</b>	4.500 3.625 4.000	5.000 5.000 5.000	06/15/2019 06/15/2019 06/15/2019	06/15/2027 06/15/2029 06/15/2031		\$ 788,037 1,161,819 592,800 <b>\$ 2,542,656</b>
BOND TYPE: 10/19/2010 11/14/2011 SUBTOTAL	<ul> <li>E: CHFA EMERGENCY MORTGAGE ASSISTANCE PROGRAM<sup>(11)</sup></li> <li>\$ 22,100,000</li> <li>\$ 1,2,985,000</li> <li>\$ 38,085,000</li> <li>\$ 2,130,000</li> <li>\$ 2,130,000</li> <li>\$ -</li> </ul>	Y MORTGAGE - -	<b>ASSISTANCE</b> \$ 1,280,000 850,000 <b>\$ 2,130,000</b>	PROGRAM <sup>(11)</sup> \$	\$ 20,820,000 15,135,000 <b>\$ 35,955,000</b>	4.650 3.720	5.350 5.000	06/15/2019 06/15/2019	06/15/2030 06/15/2031		\$ 1,084,166 753,170 <b>\$ 1,837,336</b>
BOND TYPI 07/21/2004 08/04/2005 12/16/2008 SUBTOTAL	BOND TYPE: CRDA BONDS <sup>(12)</sup> 07/21/2004 \$ 55,530,000 \$ 08/04/2005 8,875,000 12/16/2008 18,280,000 SUBTOTAL \$ 82,685,000 \$		\$ 2,040,000 715,000 615,000 <b>\$ 3,370,000</b>	ч ч ч	\$ 53,490,000 8,160,000 17,665,000 <b>\$ 79,315,000</b>	3.960 5.000 5.000	3.960 5.000 5.750	06/15/2019 06/15/2019 06/15/2019	06/15/2034 06/15/2029 06/15/2034		\$ 776,309 443,750 1,000,788 <b>\$ 2,220,847</b>
GRAND TOT	GRAND TOTAL \$ 24,697,232,326 \$	\$ 2,944,620,000	\$1,956,317,299	\$ 394,500,000	\$25,291,035,027					\$ 147,782,568	\$1,083,578,828

OFFICE OF THE STATE TREASURER, DENISE L. NAPPIER

(1) (2) (3) (4) (4) (5) (5) (5) (6) (6) (7) (7) (7) (7) (7) (7) (10) (11) (11) (12) (12) (12) (12) (2) (2) (2) (2) (2) (2) (2) (2) (2) (
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		DEBT MANAGEMENT DIVISION	NT DIVISION			
	SCHEDULE OF AUT	OF AUTHORIZED AND ISSUED DEBT OUTSTANDING <sup>(1)</sup> JUNE 30, 2018	SUED DEBT OU 018	TSTANDING <sup>(1)</sup>		
CORE Fund No.	Name	Inception to Date Amount Authorized I	<u>to Date</u> Amount Issued	Principal Outstanding June 30, 2018	Interest Accreted Through Fiscal Year 2018 <sup>(2)</sup>	Outstanding Incl. Accreted Interest June 30, 2018
BOND T	BOND TYPE: GENERAL OBLIGATION-TAX SUPPORTED					
12033	ECONOMIC DEVELOPMENT FUND	\$145,930,000	\$140,430,000	\$28,965,000	÷	\$28,965,000
12034	ECONOMIC DEVELOPMENT ASSISTANCE	1,801,800,000	1,380,669,575	603,703,715	·	603,703,715
12036	ECONOMIC STABILIZATION FUND	95,000,000	95,000,000	8,537,294	•	8,537,294
12050	LOCAL CAPITAL IMPROVEMENT FUND	915,000,000	825,000,000	214,091,000	•	214,091,000
12051	CAPILAL EQUIPMENT PURCHASE FUND	517,540,000	467,408,375	40,000,947		40,000,947
12021	GRANIS TO LOCAL GOVIS, & UTHERS HOLISING HOMFLESS PERSONS	4,512,461,937 28,386,280	3,373,600,000 7.488.825	1,130,430,720		1,130,430,720 303 120
12059		491,880.000	491.880.000	16.070.000		16.070.000
12063	HOUSING BONDS	1,259,382,689	955,690,069	335,404,834		335,404,834
12066	DECD - HOUSING TRUST FUND	285,000,000	233,553,752	105,588,752		105,588,752
12067	CT BIOSCIENCE COLLABORATION PROGRAM	257,025,000	242,359,000	111,559,000		111,559,000
12068	CT BIOSCIENCE INNOVATION FUND	65,000,000	35,000,000	35,000,000	•	35,000,000
13009	SCHOOL CONSTRUCTION	1,857,139,500	1,854,139,500	5,100,000		5,100,000
13010		10,260,130,770	9,742,253,719	4,517,214,025		4,517,214,025
13015	AGRICULI URAL LAND PRESERVATION	165,250,000	130,248,716	45,750,000		45,750,000
13019	GRANIS FUR URBAN AUTIUN CELES 2020 ELIND INEBA ETBLICTTIDE DECCEAM	1,034,487,544	1,449,012,240 765 4 20 722	388,321,028 627 112 723		388,521,528 627,112,725
17001	GENERAL STATE PLIRPOSES	303 906 294	7 03, 1 30, 7 2 3 3 0 3 0 7 4 5 1 2	3 975 363		3 975 363
17011	GENERAL STATE PURPOSES	564,326,029	551,032,612	46,678,157		46,678,157
17021	GENERAL STATE PURPOSES	443,943,095	445,038,198	5,903,752		5,903,752
17041	GENERAL STATE PURPOSES	249,581,385	249,332,976	46,736,315		46,736,315
17051	GENERAL STATE PURPOSES	175,929,116	175,929,116	14,429,116		14,429,116
17061	GENERAL STATE PURPOSES	168,994,995 244,404,204	168,636,646	130,688,660		130,688,660
17081	GENERAL STATE FURPOSES GENERAL STATE PLIRPOSES	241,134,304 217 535 361	233,003,730 201 585 444	185 398 196		140,040,390 185 398 196
17091	STATE	11,600,000	11,600,000	11,600,000		11,600,000
17101	STATE	19,138,454	16,138,454	14,913,111		14,913,111
17111	GENERAL STATE PURPOSES	67,878,234	63,098,403	51,678,403		51,678,403
17121		315,011,406	284,636,193	227,775,070		227,775,070
1/131	GENERAL STATE PURPOSES	600,996,338 206 702 086	502,647,233 246 447 002	482,442,233		482,442,233
17151	STATE	374 113 008	240, 147, 303 244 013 506	739,333,001 239,018,506		239 018 506
17161	STATE	349 813 300	182 459 457	182 459 457		182 459 457
17171	GENERAL STATE PURPOSES	519,872,176	206,879,571	206,879,571	•	206,879,571
17861	GENERAL STATE PURPOSES	119,859,926	119,463,359	8,100,000		8,100,000
17891	GENERAL STATE PURPOSES	416,558,089	414,478,686	2,500,000		2,500,000
17931		628,254,036	626,235,971	10,500,000		10,500,000
17961	GENERAL STATE PURPOSES	262,574,910	260,374,910	4,703,097		4,703,097
17971	GENERAL STATE PURPOSES	195,280,711	191,057,040 208,040,656	2,500,000	•	2,500,000
17001	GENERAL STATE PURPOSES	208,069,445	208,049,050 200 807 814	000,CUZ,T 11,772,066		1,2U5,UUU 1773 D66
1001		F31,100,004	+10'100'007	44,770,3000		44,770,300

CORE Fund No. Name 21014 21017 CLEAN WATE 21017 DRINKING W GENERAL OF GENERAL OF	SCHEDULE OF AUTHORIZE	D AND ISSUED DEI JUNE 30, 2018	D DEBT OUTSTA 2018	rhorized AND ISSUED DEBT OUTSTANDING <sup>(1)</sup> (Continued) JUNE 30, 2018	(pər	
		JUNE 30,	2018			
_						
		<u>Inceptio</u> Amount Authorized	<u>Inception to Date</u> nt Amount zed Issued	Principal Outstanding June 30, 2018	Interest Accreted Through Fiscal Year 2018 <sup>(2)</sup>	Outstanding Incl. Accreted Interest June 30, 2018
	CLEAN WATER FUND - STATE DRINKING WATER FUND - STATE GENERAL ORLIGATION ROND ANTICIPATION	1,558,132,510 20,000,000	\$ 1,202,348,884 10,000,000	\$ 460,153,503 10,000,000	۰ ج	\$ 460,153,503 10,000,000
GENERAL OF GENERAL OF GENERAL OF GENERAL OF GENERAL OF GENERAL OF GENERAL OF		ı	1,334,330,000	508,160,000 474 630 000	I	508,160,000 171,620,000
GENERAL OF GENERAL OF GENERAL OF GENERAL OF GENERAL OF GENERAL OF	ດ ດ		335,550,000 74,215,000			
GENERAL OF GENERAL OF GENERAL OF GENERAL OF	GENERAL OBLIGATION REFUNDING BONDS SERIES 2010 C <sup>(4)</sup> GENERAL OBLIGATION REFUNDING BONDS SERIES 2010 D <sup>(4)</sup>		258,235,000 47 035 000	119,495,000 40.250.000		119,495,000 40.250.000
GENERAL OF GENERAL OF	S 2011	ı	150,820,000	2,610,000	·	2,610,000
	GENERAL OBLIGATION REFUNDING BONDS SERIES 2012 C <sup>(4)</sup> GENERAL OBLIGATION REFUNDING BONDS SERIES 2014 C <sup>(4)</sup>		523,245,000 822,225,000	396,045,000 237,525,000		396,045,000 237,525,000
GENERAL OF		•	256,620,000	185,895,000	ı	185,895,000
GENERAL OF	GENERAL OBLIGATION SIFMA REFUNDING BONDS SERIES 2015 D <sup>(4)</sup> CENERAL OBLICATION PERIMINING PONDS SERIES 2016 D <sup>(4)</sup>	015 D <sup>(4)</sup> -	180,745,000	64,525,000 450 270 000	·	64,525,000
GENERAL OF	GENERAL OBLIGATION REFUNDING BONDS SERIES 2018 BY GENERAL OBLIGATION REFUNDING BONDS SERIES 2016 G(4)		327.440.000	439,370,000 276.850.000		439,370,000 276.850.000
GENERAL OF			197,025,000	169,185,000		169,185,000
GENERAL OI		017 B <sup>(4)</sup>	134,865,000	134,865,000		134,865,000
GENERAL OI GENERAL OI	GENERAL OBLIGATION REFUNDING BONDS 2018 SERIES B <sup>(4)</sup> GENERAL OBLIGATION REFUNDING BONDS 2018 SERIES D <sup>(4)</sup>		276,440,000 92,105,000	276,440,000 92,105,000		276,440,000 92.105.000
SUBTOTAL		\$33,870,902,922	\$35,213,798,430	\$14,123,453,503	ج	\$14,123,453,503
BOND TYPE: GENERA 31006 TEACHER'S	TION TEACHERS' RETIREMENT FUND ENT FUND GO BONDS TAXABLE	BONDS <sup>(5)</sup>				
SE TAXABLE GC	SERIES 2008 \$2,5 TAXABLE GO TEACHER'S RETIREMENT REFUNDING BONDS <sup>(4)</sup>	\$2,276,578,271 S <sup>(4)</sup> -	\$2,276,578,271 10,590,000	\$2,197,476,524 10,590,000	\$147,782,568 -	\$2,345,259,092 10,590,000
SUBTOTAL		\$2,276,578,271	\$2,287,168,271	\$2,208,066,524	\$147,782,568	\$2,355,849,092
2013 ERN REFUNDING 2013 ERN REFUNDING <sup>(4)</sup> 2014 ERN REFUNDING <sup>(4)</sup>	BOND TYPE: ECONOMIC RECOVERY NOTES 2013 ERN REFUNDING <sup>(4)</sup> 2014 ERN REFUNDING <sup>(4)</sup>		\$61,610,000 311 205 000	۰ ، ج	۰ ، ب	\$
SUBTOTAL	φ 		\$375,905,000	ج	- ج	۔ ج
BOND TYPE: GENERA 50001 GAAP CONVI	BOND TYPE: GENERAL OBLIGATION GAAP CONVERSION BONDS <sup>(6)</sup> 50001 GAAP CONVERSION BONDS	\$560,430,000	\$560.430,000	\$459,690,000	، س	\$459.690.000
BI		\$560,430,000	\$560,430,000	\$459,690,000	د	\$459,690,000
BOND TYPE: SPECIAL TAX OBLIGATION 13033 INFRASTRUCTURE IMPROVEI 14005 SPECIAL TAX OBLIGATION RE	MENT FUNDING BONDS <sup>(4)</sup>	\$16,076,208,460 -	\$11,520,170,752 1,827,035,000	\$4,823,040,000 717,455,000	۰ ، چ	\$4,823,040,000 717,455,000
SUBTOTAL	à	\$16,076,208,460	\$13,347,205,752	\$5,540,495,000	ج	\$5,540,495,000

DE	DEBT MANAGEMENT DIVISION	ENT DIVISION			
SCHEDULE OF AUTHORIZI	ED AND ISSUED DEF JUNE 30, 2018	HORIZED AND ISSUED DEBT OUTSTANDING <sup>(1)</sup> (Continued) JUNE 30, 2018	VDING <sup>(1)</sup> (Continu	(pər	
CORE Fund No. Name	<u>Inceptio</u> Amount Authorized	<u>Inception to Date</u> nt Amount zed Issued	Principal Outstanding June 30, 2018	Interest Accreted Through Fiscal Year 2018 <sup>(2)</sup>	Outstanding Incl. Accreted Interest June 30, 2018
BOND TYPE: BRADLEY INTERNATIONAL AIRPORT BRADLEY AIRPORT GENERAL REVENUE REFUNDING BONDS <sup>(4)</sup>	୍ୟ <mark>କ</mark>	\$183,020,000 <b>\$183,020,000</b>	\$109,330,000 <b>\$109,330,000</b>	, , ୫	\$109,330,000 <b>\$109,330,000</b>
BOND TYPE: CLEAN WATER FUND 21015 CLEAN WATER FUND - FEDERAL ACCOUNT 21018 DRINKING WATER FUND - FEDERAL REVOLVING CLEAN WATER REFUNDING BONDS <sup>(4)</sup> SUBTOTAL	\$3,189,797,442 343,982,558 <b>-</b> <b>\$3,533,780,000</b>	\$2,010,507,408 206,082,592 618,430,000 <b>\$2,835,020,000</b>	\$608,236,650 107,438,350 193,745,000 <b>\$909,420,000</b>		\$608,236,650 107,438,350 193,745,000 <b>\$909,420,000</b>
BOND TYPE: UCONN 2000 <sup>(7)</sup> 13045 UCONN 2000 UCONN 2000 REFUNDING BONDS <sup>(4)</sup> SUBTOTAL	\$2,951,852,147 - <b>\$2,951,852,147</b>	\$2,949,452,147 685,190,000 <b>\$3,632,147</b>	\$1,474,040,000 187,745,000 <b>\$1,661,785,000</b>	чч м	\$1,474,040,000 187,745,000 <b>\$1,661,785,000</b>
BOND TYPE: CI INCREMENT FINANCING <sup>(8)</sup> CI CABELAS'S INC. TAX INCREMENTAL FINANCING CI BASS PRO SHOPS TAX INCREMENTAL FINANCING CI REFUNDING BONDS SERIES A, B & C <sup>(4)</sup> SUBTOTAL	\$9,950,000 22,000,000 - <b>\$31,950,000</b>	\$9,825,000 18,885,000 22,435,000 <b>\$51,145,000</b>	\$2,580,000 16,325,000 3,705,000 <b>\$22,610,000</b>	ччч <mark>и</mark>	\$2,580,000 16,325,000 3,705,000 <b>\$22,610,000</b>
BOND TYPE: CHEFA CHILDCARE FACILITIES PROGRAM <sup>(8)</sup> CHEFA CHILDCARE REFUNDING BONDS SERIES 2011 <sup>(4)</sup> CHEFA CHILDCARE REFUNDING BONDS SERIES 2015 <sup>(4)</sup> SUBTOTAL	чч м	\$28,840,000 33,475,000 <b>\$62,315,000</b>	\$20,525,000 30,615,000 <b>\$51,140,000</b>	чч <b>ч</b>	\$20,525,000 30,615,000 <b>\$51,140,000</b>
BOND TYPE: JUVENILE TRAINING SCHOOL <sup>(10)</sup> 88800 CT JUVENILE TRAINING SCHOOL ENERGY CENTER PROJECT SUBTOTAL	ст СТ СТ	\$19,165,000 <b>\$19,165,000</b>	\$11,765,000 <b>\$11,765,000</b>	ං <b>ශ</b>	\$11,765,000 <b>\$11,765,000</b>
BOND TYPE: BRADLEY INTERNATIONAL PARKING OPERATIONS 21008 BRADLEY INTERNATIONAL PARKING OPERATIONS SUBTOTAL	\$55,000,000 <b>\$55,000,000</b>	\$53,800,000 <b>\$53,800,000</b>	\$25,265,000 <b>\$25,265,000</b>	• • ዓ	\$25,265,000 <b>\$25,265,000</b>
BOND TYPE: CHFA SPECIAL NEEDS HOUSING BONDS <sup>(11)</sup> 12060 CHFA SUPPORTIVE HOUSING BONDS SUBTOTAL	\$85,000,000 <b>\$85,000,000</b>	\$83,540,000 <b>\$83,540,000</b>	\$52,745,000 <b>\$52,745,000</b>	୍ୟ କ	\$52,745,000 <b>\$52,745,000</b>
BOND TYPE: CHFA EMERGENCY MORTGAGE ASSISTANCE PROGRAM <sup>(13)</sup> 15999 CHFA EMERGENCY MORTGAGE ASSISTANCE PROGRAM SUBTOTAL SUBTOTAL SUBTOTAL	\M <sup>(12)</sup> \$50,000,000 <b>\$50,000,000</b>	\$50,000,000 \$50,000,000	\$35,955,000 <b>\$35,955,000</b>	୍ୟ <b>ଜ</b>	\$35,955,000 <b>\$35,955,000</b>

	DE	DEBT MANAGEMENT DIVISION	NT DIVISION			
	SCHEDULE OF AUTHORIZ	ED AND ISSUED	DEBT OUTSTA	THORIZED AND ISSUED DEBT OUTSTANDING <sup>(1)</sup> (Continued)	(pər	
		JUNE 30, 2018	2018			
CORE Fund No.	Name	Inception to Date Amount A Authorized I	<u>to Date</u> Amount Issued	Principal Outstanding June 30, 2018	Interest Accreted Through Fiscal Year 2018 <sup>(2)</sup>	Outstanding Incl. Accreted Interest June 30, 2018
BOND 12060	BOND TYPE: CRDA BONDS <sup>(13)</sup> 12060 CAPITAL REGION DEVELOPMENT AUTHORITY	، بە	\$110.000.000 \$110.000.000	\$79.315.000 \$70.315.000	୍' ମ	\$79.315.000 \$70.345.000
GRAND TO	TAL	\$59,491,701,800	\$110,000,000 \$58,867,154,600	\$/3.15,000 \$25,291,035,027	\$ \$147,782,568	\$/3,313,000 \$25,438,817,595
(1) Inc Cc bo	(1) Includes all outstanding debt issued by the State of Connecticut as of June 30, 2018. All debt except refunding issues are authorized by the General Assembly and the State Bond Commission prior to issuance. Total amount issued includes refunding issues for which no additional authorization is required. Does not include authorizations that are fully issued bonds are no longer outstanding.	une 30, 2018. All deb issues for which no a	t except refunding iss dditional authorizatio	sues are authorized by n is required. Does not	ut as of June 30, 2018. All debt except refunding issues are authorized by the General Assembly and the State Bond refunding issues for which no additional authorization is required. Does not include authorizations that are fully issued and	nd the State Bond hat are fully issued and
(2) Inc pri	Includes interest accreted on Capital Appreciation Bonds (CABs) only. Interest on CABs accretes over the life of the bond and is paid at maturity. This amount is not included in the principal outstanding as of June 30, 2018.	Interest on CABs acc	rretes over the life of t	the bond and is paid at	maturity. This amount is	not included in the
(3) (3) (3) (3) (3) (3) (3) (3) (3) (3)	On April 28, 2009, the State issued \$581,245,000 Bond Anticipation Notes (BANs) Series A and Series B. On April 28, 2010, \$353,085,000 Bond Anticipation Notes (BANs) were issued to pay down the 2009 Series A BANs maturing on April 28, 2010. The 2009 B and 2010 A BANs were refunded with General Obligation Bonds on May 19, 2011 and May 31, 2011. On February 25, 2015 \$400,000,000 Bond Anticipation Notes (BANs) Series A were issued. On March 25, 2015 \$400,000,000 General Obligation Bonds 2015 A & 2015 A Taxable were issued and used to retire the 2015 BANs.	tes (BANs) Series A t . The 2009 B and 20 Notes (BANs) Series	and Series B. On Apr 10 A BANs were refu A were issued. On M	ril 28, 2010, \$353,085,0 nded with General Obli larch 25, 2015 \$400,000	00 Bond Anticipation Nc gation Bonds on May 19 0,000 General Obligation	ites (BANs) were , 2011 and n Bonds 2015 A &
(4) Re	Refunding issues. Proceeds were used to refund other bonds reducing overall debt service expense.	overall debt service e	expense.			
(5) Ge Te	General Obligation Teachers' Retirement Fund bonds were issued as taxable bonds pursuant to Public Act 07-186 to fund \$2 billion of the unfunded liability of the Connecticut Teachers' Retirement Fund, capitalized interest and costs of issuance.	axable bonds pursuar	t to Public Act 07-186	3 to fund \$2 billion of th	e unfunded liability of the	e Connecticut
(6) 0v	General Obligation GAAP Conversion bonds were issued in fiscal year over time through budget appropriation as part of a bond covenant.	2014 to fund half of th	he General Fund GA/	AP deficit at that time a	fiscal year 2014 to fund half of the General Fund GAAP deficit at that time and commit the State to funding the balance enant.	unding the balance
00 (7) 00	UConn 2000 bonds were authorized in three stages in a total amount of \$4.3 billion over a 32 year period to be paid by the University of Connecticut from a State debt service commitment. As each series is issued, the debt service is appropriated from the State's General Fund.	f \$4.3 billion over a 3 from the State's Gen	2 year period to be pe ieral Fund.	aid by the University of	Connecticut from a State	e debt service
(8) Ge	Connecticut Innovations (CI) has issued tax increment bonds for certain economic development projects. The debt service on the bonds is deemed appropriated from the State's General Fund.	r economic developm	rent projects. The del	bt service on the bonds	is deemed appropriated	d from the State's
or (9) Or	On July 1, 1999, the State Treasurer assumed the responsibility for the Connecticut Health and Educational Facilities Authority (CHEFA) Childcare debt service appropriation per Public Act 97-259.	Connecticut Health a	and Educational Facili	ities Authority (CHEFA)	Childcare debt service a	appropriation
(10) A	(10) A lease purchase financing of the heating and cooling plant at the Juv	at the Juvenile Training School in Middletown, CT.	in Middletown, CT.			
(11) C N S	(11) Connecticut Housing Finance Authority (CHFA) Special Needs Housing bonds were issued pursuant to Public Act 05-280 and Public Act 05-3 for the purpose of financing costs of the Next Step initiative. The State is required to make debt service payments on the bonds under a contract for state assistance agreement between CHFA, the State Treasurer, and the Secretary of the Office of Policy and Management.	g bonds were issued its on the bonds unde	pursuant to Public Ac	t 05-280 and Public Act assistance agreement	. 05-3 for the purpose of between CHFA, the Stat	financing costs of the ie Treasurer, and the

DEBT MANAGEMENT DIVISION SCHEDULE OF AUTHORIZED AND ISSUED DEBT OUTSTANDING <sup>(1)</sup> (Continued) JUNE 30, 2018	(12) Connecticut Housing Finance Authority (CHFA) Emergency Mortgage Assistance Program bonds were issued pursuant to Public Act 08-176 to fund the Emergency Mortgage Assistance Program. The State is required to make debt service payments on the bonds under a contract for state assistance agreement between CHFA, the State Treasurer and the Secretary of the Office of Policy and Management.	(13) Capital Region Development Authority (CRDA) Bonds were issued to provide funding for the Adriaen's Landing development project in Hartford. The bonds, issued in a combination of fixed and variable rate securities, have a final maturity of 2034. The State is required to make debt service payments on the bonds up to a maximum annual amount of \$9 million pursuant to a contract for financial assistance agreement between CRDA, the State Treasurer and the Secretary of the Office of Policy and Management. CRDA is required to reimburse the State for the debt service payments from net parking and central utility plant revenues.			
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			CIVIL LIST FUNDS	SUNS				
		SCHEI FISCAL PRESENTED UNDER	רא מי מי ≺ צ	STMENTS <sup>(1) (2)</sup> JUNE 30, 201 BASIS OF ACC	8 COUNTING <sup>(4)</sup>	(5)		
Legal No. Type	GAAP No. Type	Fund Name	STIF Investments 6/30/18	Investments with Treasurer as Trustee Short-Term Long 6/30/18 6/37	nts with <u>is Trustee</u> 6/30/18	Investments with Others as Trustee Short-Tem Lo 6/30/18	nts with Trustee Long-Term 6/30/18	Total
GENERAL FUND <sup>(3)</sup> 11000 Gen. Fund 1100 Gen SUBTOTAL GENERAL FUND	3) 1100 Gen.Fund ERAL FUND	General Fund	\$879,433,210.94 \$879,433,210.94	\$910,744,588.11 <sup>(12)</sup> \$910,744,588.11	ቀ <del>ሳ</del>	<b>نه</b> ف	ቀ ቀ	\$1,790,177,799.05
SPECIAL REVENUE FUNDS 12001 Spec. Rev. 1201 Spe 12005 Spec. Rev. 1215 Spe 12012 Spec. Rev. 1215 Spe	UE FUNDS 1201 Spec. Rev. 1215 Spec. Rev. 1215 Spec. Rev.	Transportation Probate Court Administration Municipal Employees Retirement Administration	\$126,240,482.06 13,464,562.58 1,305,137.75	\$	φ.	ф	φ	\$126,240,482.06 13,464,562.58 1,305,137.75
12013 Spec. Rev. 12016 Spec. Rev. 12018 Spec. Rev. 12021 Spec. Rev. 12023 Spec. Rev. 12035 Spec. Rev. 12035 Spec. Rev.	1208 Spec. Rev. 1213 Spec. Rev. 2107 Enterprise 2107 Enterprise 1210 Spec. Rev. 1212 Spec. Rev.	Regional Market Operation Recreation and Natural Heritage Trust Fund University Health Center Operating Fund Grants - Tax Exempt Proceeds University Health Center Research Foundation Employment Security - Special Administration Economic Assistance Revolving Fund	97.25 1,588,140.47 88,975,86 3,455,525,11 35,555,474,63 35,555,474,63 35,555,474,63 27,761,101,98 27,761,101,98					1,588,140.47 1,588,140.47 3,455,252,11 35,555,474.63 53,074,19 53,074,19 27,761,101,98
12038 Spec. Rev. 12047 Spec. Rev. 12050 Spec. Rev. 12053 Spec. Rev. 12053 Spec. Rev. 12062 Spec. Rev. 12065 Spec. Rev. 12065 Spec. Rev.	1212 Spec. Rev. 1212 Spec. Rev. 1212 Spec. Rev. 1215 Spec. Rev. 1215 Spec. Rev. 1211 Spec. Rev. 1214 Spec. Rev. 1214 Spec. Rev. 1214 Spec. Rev.	Individual Development Account Reserve Fund Child Care Facilities Child Care Facilities Cool Capital Improvements Fund Coapital Equipment Purchase Fund Economic Development and Other Grants Federal And Other Restricted Accounts Transportation Grants And Restricted Accounts Housing Asstance Bond Fund - Tax Exempt Housing Trust Fund - Tax able	224,132,18 224,132,18 318,461,61 759,824,61 257,906,77 240,163,66 52,614,328,83 7,648,988,80		\$49,604.77			49,604.77 49,604.77 224,152.18 319,550.57 759,824.61 759,824.61 759,824.61 257,906.77 240,163.66 52,614,328.83 7,648,988.80
12067 Spec.Rev. SUBTOTAL SPEC	12067 Spec.Rev. 1214 Spec.Rev. C SUBTOTAL SPECIAL REVENUE FUNDS	CT. Bioscience Collaboration	3,784,957.83 <b>\$297,427,886.54</b>	ት	\$49,604.77	\$	\$	3,784,957.83 <b>\$297,477,491.31</b>
CAPITAL PROJECTS FUNDS 13009 Cap. Proj. 1212 Spec	CTS FUNDS 1212 Spec.Rev.	School Construction	\$1,013,658.37	ф	φ.	φ.	ф	\$1,013,658.37
13010 Cap. Proj. 13015 Cap. Proj. 13010 Cap. Proj.	1212 Spec.Rev. 1212 Spec.Rev. 1212 Spec.Bev.	School Construction - Magnet Schools Agricultural Land Preservation Community Conservation and Development	221,989,825.24 9,197,576.88 128 201 271 87					221,989,825.24 9,197,576.88 128 201 274 87
13033 Cap. Proj.	1302 Cap.Proj.	Continuity Conservation and Development Infrastructure Improvement Fund	362,024,624.32					362,024,624.32
Cap. Cap.		University and state University Facilities CSUS 2020	1,447,786.22 137,594,574.83					1,447,780.22 137,594,574.83
17001 Cap. Proj. 17011 Cap. Proj.	1301 Cap.Proj. 1301 Cap.Proj.	Capital Improvements and Other Purposes Capital Improvements and Other Purposes	3,537,077.26 7,987,625.62					3,537,077.26 7,987,625.62
Cap.		Capital Improvements and Other Purposes	2,056,799.29 6 4 8 1 8 7 2 2					2,056,799.29 6 4 1 1 1 2 2 2 2
Cap.		Capital Improvements and Other Purposes Capital Improvements and Other Purposes	0,401,107.23					0,401,101.23
17061 Cap. Proj.	1301 Cap.Proj.	Capital Improvements and Other Purposes	4,411,877.67					4,411,877.67
Cap.		Capital Improvements and Other Purposes	2,860,728.94					2,860,728.94
17091 Cap. Proj. 17101 Cap. Proj.	1301 Cap.Proj. 1301 Cap Proj	Capital Improvements and Other Purposes Canital Improvements and Other Purposes	6,351.22 2 275 031 50					6,351.22 2 275 031 50
Cap.		Capital Improvements and Other Purposes	5,968,212.98					5,968,212.98
		Capital Improvements and Other Purposes	14,990,700.04					14,990,700.04
17151 Cap. Proj. 17151 Cap. Proj.	1301 Cap. Proj. 1301 Cap. Proj.	Capital Improvements and Other Purposes Capital Improvements and Other Purposes	31,374,457.99 30,851,915.33					31,374,457.99 30,851,915.33
17161 Cap. Proj.		Capital Improvements and Other Purposes	24,068,002.76					24,068,002.76
17171 Cap. Proj.								

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		Total	2,534,200.63 8,061,559,47 556,472.02 969,704,27 1,502,205,86 1,188,977.13 1,888,508,55 1,038,508,55 7,032,039,31 <b>\$1,188,981,515,17</b>	82,268,722.66 908,543,558.59 <b>\$990,812,281.25</b>	15,861,525.37 220,804,597.38 1,003,405.94 7,3831,278.61 534,061,971,45 3,532,448.20 7,955,087.71 145,980,607.39 \$1,003,830,922.05	\$12,506,984,183,00 1,932,098,00 222,77,722,00 17,736,775,00 17,738,957,500 34,619,821,00 94,850,918,00 845,559,505,00 29,819,320,48 29,819,320,48 29,819,320,48 29,605,492 6,428,674,92 576,873,552,26 6,428,674,92 303,295,12 534,985,477,070,78	\$40,256,757,029.61
		ts with <u>Trustee</u> 6/30/18	<b>ம்</b>	\$257,738,500.00 <sup>(6)</sup> <b>\$257,738,500.00</b>	\$- 730,000,00 (7 39,925,490,69 (6) 10, <u>565,740,38 (6)</u> <b>\$51,221,231,07</b>	φ <b>φ</b>	\$308,959,731.07
	(e) (e)	Investments with Others as Trustee Short-Term Lo 6/30/18 6	ιά-	\$	\$- 400,000.00 <sup>(7)</sup> 73,977,620.82 <sup>(8)</sup> 2.674,504.54 <sup>(8)</sup> \$77,052,125.36	\$- 576,873,522.26 (**) \$576,873,522.26	\$653,925,647.62
	CIVIL LIST FUNDS ULE OF INVESTMENTS (1)(2) YEAR ENDED JUNE 30, 2018 STATUTORY BASIS OF ACCOUNTING (4)(5)	Investments with Investments with Treasurer as Trustee Long-Term 0/18 6/30/18	ιά	φ	ىلەن ئە	<ul> <li>\$12,344,139,589,00 (*)</li> <li>1,914,481,49 (*)</li> <li>1,221,133,051,38 (*)</li> <li>17,435,890,098,96 (*)</li> <li>2,616,823,851,01 (*)</li> <li>34,027,917,75 (*)</li> <li>99,166,470,49 (*)</li> <li>815,157,512,61 (*)</li> <li>19,860,420,55 (*)</li> <li>75,347,224,54 (*)</li> <li>75,347,224,54 (*)</li> </ul>	\$33,663,202,222.55
CASH MANAGEMENT DIVISION CIVIL LIST FUNDS SCHEDULE OF INVESTMENTS (1)(2) FISCAL YEAR ENDED JUNE 30, 2018	UNDS STMENTS JUNE 30, 2 BASIS OF 1	Investr Investr Short-Term 6/30/18	ம்	φ	الله الله	\$162,844,594,00 17,616,51 1,614,670,62 500,869,576,04 10,865,101.99 591,903,25 591,903,25 591,903,25 30,401,992,39 210,069,45 771,618,46 771,618,46	,619,644,178.33
			2,594,200,63 8,061,559,47 556,472,02 969,704,27 1,502,205,86 1,188,977,13 732,002,03 1,888,508,55 7,032,0331 <b>513,17</b> <b>\$1,188,981,515,17</b>	82,268,722.66 650,805,058.59 <sup>(h)</sup> <b>\$ 733,073,781.25</b>	\$15,861,525.37 (%) 220,804,597.38 (%) 1,003,405,04 7,2701,278.61 (%) 420,158,859.94 (%) 3,552,488,20 7,552,488,20 132,740,352,41 (%) 132,740,352,47 (%) 132,740,352,47 (%)	\$- 29,819,320,48 6,428,674,92 303,295,12 \$36,551,390,52	<del>69</del>
	SCHED FISCAL PRESENTED UNDER	Fund Name	Capital Improvements and Other Purposes Capital Improvements and Other Purposes NaDS	State University Dormitory Transportation Fund Reserve	Bradley International Parking Operations Bradley International Airport Operations Local Bradge Revolving Fund - Revenue Financed Clean Water Fund - State Clean Water Fund - Long Island Sound Clean Water Fund - Long Island Sound Drinking Water Fund - Federal Revolving Loan Drinking Water Fund - Federal Revolving Loan	State Employees' Retirement Fund State Attorneys' Retirement Fund Judges and Compensation Commissioners' Retirement Fund Teachers' Retirement Fund Municipal Employees Retirement Fund Probate Judges and Employees Retirement Fund Probate Judges and Employees Retirement Fund State Employee OPEB Fund OPEB Teachers' Fund OPEB Teachers' Fund OPEB Teachers' Fund State Employment Compensation Fund John Dempesy Hospital Mainrest Trust Fund John Dempesy Hospital Mainrestice Trust Fund CHET Administrative Fund	
		GAAP No. Type	17851Cap. Proj. 1301 Cap.Proj. Cal 17861Cap. Proj. 1301 Cap.Proj. Cal 17891Cap. Proj. 1301 Cap.Proj. Cal 17901Cap. Proj. 1301 Cap.Proj. Cal 17921Cap. Proj. 1301 Cap.Proj. Cal 17951Cap. Proj. 1301 Cap.Proj. Cal 17951Cap. Proj. 1301 Cap.Proj. Cal 17991Cap. Proj. 1301 Cap.Proj. Cal 17991Cap. Proj. 1301 Cap.Proj. Cal 17991Cap. Proj. 1301 Cap.Proj. Cal <b>17991Cap. Proj.</b> 1301 Cap.Proj. Cal <b>17991Cap.</b> 1401 Cap.Proj. Cal <b>17991Cap.</b> 1501 Cap.Proj. Cal <b>17991Cap.</b> 1702 Cap.Proj. Cap.Proj. Cal <b>17991Cap.</b> 1703 Cap.Proj. Cal <b>17991Cap.</b> 1704 Cap.Proj. Cap.Proj. Cal <b>17991Cap.</b> 1704 Cap.Proj. Cal <b>17991Cap.</b> 1704 Cap.Proj. Cap.Proj. Cal <b>17991Cap.</b> 1705 Cap.Proj. Cap.Proj. Cap.Proj. Cal <b>17991Cap.</b> 1705 Cap.Proj. Cap.Proj. Cap.Proj. Cal <b>17991Cap.</b> 1704 Cap.Proj. 1301 Cap.Proj. Cal <b>17991Cap.</b> 1705 Cap.Proj. Cap.Pr	DEBT SERVICE FUNDS 14002Debt Service 2109 Enterprise 14005Debt Service 1401 Debt Service SUBTOTAL DEBT SERVICE FUNDS	NDS 2110 Enterprise 2101 Enterprise 1213 Spec. Rev. 1213 Spec. Rev. 1213 Spec. Rev. 1213 Spec. Rev. 2111 Spec. Rev. 2111 Spec. Rev. 2111 Spec. Rev.	<b>BS</b> 3103 Pension 3105 Pension 3104 Pension 3104 Pension 13102 Agency 13103 Agency 1501 Agency 1501 Non-Exp. 2103 Exp. Trust 2105 Exp. Trust 2105 Exp. Trust 2103 Exp. Trust	T FUNDS
		Legal No. Type	17851Cap. Proj. 17861Cap. Proj. 17891Cap. Proj. 17891Cap. Proj. 17901Cap. Proj. 17951Cap. Proj. 17991Cap. Proj. 17991Cap. Proj. 17991Cap. Proj. 17991Cap. Proj.	DEBT SERVICE FUNDS 14002Debt Service 2109 14005Debt Service 1401 SUBTOTAL DEBT SERV	<b>ENTERPRISE FUNDS</b> 21008Enterprise 2110 Enterprise 21008Enterprise 2101 Enterprise 21011Enterprise 1213 Spec. Rev 21014Enterprise 1213 Spec. Rev 21015Enterprise 1213 Spec. Rev 21015Enterprise 2113 Spec. Rev 21015Enterprise 2113 Spec. Rev 21013Enterprise 2113 Spec. Rev 21013Enterprise 2113 Spec. Rev 21013Enterprise 2113 Spec. Rev 21013Enterprise 2113 Spec. Rev 2008TOTAL ENTERPRISE FUNDS	FIDUCLARY FUNDS 31001Pension 3103 Pension 31004Pension 3105 Pension 31004Pension 3105 Pension 31004Pension 3104 Pension 31008Pension 3101 Pension 31008Pension 3101 Pension 31010Pension 3103 Agensy 31010Pension 3101 Agensy 31010Pension 3101 Agensy 31010Pension 3103 Agensy 31010Pension 3103 Agensy 35010Fiduciary 1502 Perman 35014Fiduciary 2103 Exp.Tru 35016Fiduciary 2103 Exp.Tru 35016Fiduciary 2103 Exp.Tru 35016Fiduciary 2103 Exp.Tru 35016Fiduciary 2103 Exp.Tru	TOTAL CIVIL LIST FUNDS

	CASH MANGEGIATIONISION         CASH MANGEGIATIONISION         CASH COLLEST FUNDS         CIVIL LIST FUNDS FORMING CIVILIAND CIART FOULD LINES AND TALL THE CIRCUMANT CIART FOULD CIART FO
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### SECURITIES HELD IN TRUST FOR POLICYHOLDERS

### JUNE 30, 2018

Name of Insurance Company	Par Amount of Collateral		Market Value
The following securities are on deposit with the St	ate Treasurer for the Ins	urance De	nartment under
Sec 38a-83:			
560 308-03.			
ACE Life Insurance Company \$	2,650,000.00	\$	2,655,131.15
Aetna Better Health, Inc.	500,000.00	Ŷ	495,355.42
Aetna Health and Life Insurance Company	3,075,000.00		2,966,049.31
Aetna Health Inc. (CT)	525,000.00		532,046.28
Aetna Insurance Company of Connecticut	2,550,000.00		2,503,014.59
Aetna Life Insurance Company	1,600,000.00		1,628,449.87
American Equity Specialty Insurance Company	2,600,000.00		2,647,355.76
American Maturity Life Insurance Company	6,550,000.00		6,459,191.79
Anthem Health Plans, Inc.	500,000.00		499,027.68
Arbella Indemnity Insurance Company, Inc.	50,000.00		61,859.19
Arbella Protection Insurance Company	50,000.00		61,859.19
Associated Employers Insurance Company	50,000.00		49,506.05
Associated Industries of MA Mutual Ins Co (AIM Mutual)	50,000.00		50,156.11
Automobile Insurance Company of Hartford, CT (The)	4,050,000.00		4,448,570.77
AXIS Specialty Insurance Company	3,000,000.00		2,726,296.08
Beazley Insurance Company, Inc.	2,500,000.00		2,481,518.31
C.M. Life Insurance Company	1,600,000.00		1,549,770.52
California Insurance Company	15,920,000.00		15,730,478.08
CarePartners of Connecticut, Inc.	501,000.00		501,460.97
Carolina Casualty Insurance Company	200,000.00		221,902.67
Charter Oak Fire Insurance Company (The)	4,525,000.00		4,922,055.92
CIGNA Health and Life Insurance Company	2,600,000.00		2,730,433.64
CIGNA Healthcare of Connecticut, Inc.	525,000.00		557,395.13
Clearwater Select Insurance Company	3,000,000.00		3,060,015.00
Connecticare, Inc.	500,000.00		492,219.57
Connecticut General Life Insurance Company	1,735,000.00		1,744,037.38
Covenant Insurance Company	600,000.00		742,310.25
Discover Property and Casualty Insurance Company	3,120,000.00		3,146,365.27
Discover Specialty Insurance Company	2,750,000.00		2,908,152.40
Electric Insurance Company	60,000.00		67,453.80
Employers Compensation Insurance Company	100,000.00		96,407.50
Executive Risk Specialty Insurance Company	3,115,000.00		3,092,398.53
Explorer Insurance Company	100,000.00		102,938.33
Farmington Casualty Company	3,000,000.00		3,484,044.50
Finial Reinsurance Company	3,550,000.00		3,504,319.99
Fireman's Fund Insurance Company	16,615,000.00		18,874,627.51
First State Insurance Company	2,200,000.00		2,164,854.70
Fitchburg Mutual Insurance Company	50,000.00		47,879.25
General Re Life Corporation	1,500,000.00		1,639,537.29
General Star Indemnity Company	2,980,000.00		2,983,034.42
Genworth Mortgage Ins Corporation of North Carolina	60,000.00		59,884.82
Gulf Underwriters Insurance Company	3,000,000.00		3,233,955.08
Hartford Accident and Indemnity Company	3,810,000.00		3,749,611.32
Hartford Fire Insurance Company	3,300,000.00		3,425,154.33
Hartford Insurance Company of the Southeast	1,710,000.00		1,656,308.02
Hartford Life and Accident Insurance Company	1,915,000.00		2,031,161.46
Hartford Steam Boiler Inspection & Ins Co of CT (The)	4,000,000.00		3,922,307.98
Hartford Steam Boiler Inspection & Insurance Company (The)	4,000,000.00		3,956,366.12
Hartford Underwriters Insurance Company	3,250,000.00		3,673,971.67
Harvard Pilgrim Health Care of Connecticut, Inc. (HPHC-CT)	500,000.00		653,770.14
HNE of Connecticut, Inc.	500,000.00		498,498.89
HSB Speciality Insurance Company	2,575,000.00		2,453,505.76
IdeaLife Insurance Company	1,601,500.00		1,598,608.68
Insurance Company of the West	100,000.00		116,146.70
Knights of Columbus	2,000,000.00		2,403,287.22
Liberty Mutual Insurance Company Massachusetts Mutual Life Insurance Company	50,000.00		49,587.36
	1,600,000.00		1,860,089.02

OFFICE OF THE STATE TREASURER, DENISE L. NAPPIER

# SECURITIES HELD IN TRUST FOR POLICYHOLDERS (Continued)

JUNE 30, 2018

Name of Insurance Company	Par Amount of Collateral	Market Value
Maxum Casualty Insurance Company	2,750,000.00	2,642,551.69
Maxum Indemnity Company	2,750,000.00	2,633,895.52
MEMBERS Life Insurance Company	350,000.00	340,424.52
MML Bay State Life Insurance Company	1,500,000.00	1,452,909.86
National Liability & Fire Insurance Company	2,750,000.00	2,761,914.60
New England Insurance Company	2,995,000.00	2,925,281.17
New England Reinsurance Corporation	3,225,000.00	4,240,389.65
New London County Mutual Insurance Company	125,000.00	117,463.04
Northland Casualty Company	2,560,000.00	2,680,250.68
Northland Insurance Company	2,675,000.00	2,584,689.08
Nutmeg Insurance Company	3,282,000.00	3,340,226.01
Odyssey Reinsurance Company	5,000,000.00	4,968,652.46
Oxford Health Plans (CT), Inc.	1,040,000.00	1,051,597.95
Pacific Insurance Company, Limited	2,820,000.00	3,333,948.17
Patrons Mutual Insurance Company of Connecticut	120,000.00	129,039.90
PHL Variable Insurance Company	1,500,000.00	1,511,601.92
Phoenix Insurance Company	4,645,000.00	5,221,272.62
Phoenix Life and Annuity Company	1,540,000.00	1,468,334.01
Prudential Annuities Life Assurance Corporation	1,500,000.00	1,490,595.74
Prudential Retirement Insurance and Annuity Company	5,015,000.00	4,978,906.83
R.V.I. America Insurance Company	2,550,000.00	2,731,230.00
Safeco Surplus Lines Insurance Company	100,000.00	120,438.76
San Francisco Reinsurance Company	6,000,000.00	7,034,100.00
Seneca Insurance Company, Inc.	260,000.00	257,621.61
Sentinel Insurance Co., Limited	3,610,000.00	3,563,899.36
Sequoia Insurance Company	125,000.00	136,180.00
Sparta Insurance Company	3,070,000.00	3,049,821.55
St. Paul Fire and Marine Insurance Company	3,250,000.00	3,368,588.89
St. Paul Guardian Insurance Company	2,625,000.00	2,735,400.54
St. Paul Mercury Insurance Company	2,550,000.00	2,610,316.00
St. Paul Protective Insurance Company	4,100,000.00	4,433,404.48
Standard Fire Insurance Company (The)	4,000,000.00	4,711,320.00
StarStone National Insurance Company	100,000.00	99,373.05
T.H.E. Insurance Company	300,000.00	302,186.85
Talcott Resolution International Life Reassurance Corporation	5,645,000.00	5,980,189.38
Talcott Resolution Life and Annuity Insurance Company	2,860,000.00	3,095,439.31
Talcott Resolution Life Insurance Company	2,350,000.00	2,376,206.91
Thames Insurance Company, Inc.	125,000.00	117,463.04
TIG Insurance Company	4,600,000.00	4,591,695.24
Tower National Insurance Company TravCo Insurance Company	76,500.00 4,875,000.00	76,416.06 5,323,082.32
Travelers Casualty and Surety Company	3,000,000.00	3,077,307.86
Travelet's Casualty and Surety Company of America	3,200,000.00	3,168,387.15
Travelers Casualty Company (The)	2,940,000.00	3,000,680.13
Travelers Casualty Company of Connecticut	2,500,000.00	2,670,363.66
Travelers Casualty Insurance Company of America	3,400,000.00	3,831,982.59
Travelers Commercial Casualty Company	3,500,000.00	3,471,355.02
Travelers Commercial Insurance Company	2,150,000.00	2,105,050.10
Travelers Continuercial insurance Company	3,000,000.00	2,925,379.73
Travelers Excess and Surplus Lines Company	3,000,000.00	2,925,379.73
Travelers Home and Marine Insurance Company (The)	5,125,000.00	5,557,488.66
Travelers Indemnity Company (The)	6,630,000.00	6,874,860.54
Travelers Indemnity Company of America	3,565,000.00	3,551,570.86
Travelers Indemnity Company of Connecticut (The)	3,000,000.00	3,384,769.75
Travelers Personal Insurance Company	5,500,000.00	5,547,665.12
Travelers Personal Security Insurance Company	4,200,000.00	4,229,194.20
Travelers Personal Security Insurance Company Travelers Property Casualty Company of America	3,005,000.00	3,387,067.47
Travelers Property Casualty Insurance Company	2,050,000.00	2,180,751.50
Trenwick America Reinsurance Corporation	1,580,000.00	1,568,771.78
Truck Insurance Exchange	370,000.00	366,273.74
	0,0,000.00	000,210.14

### SECURITIES HELD IN TRUST FOR POLICYHOLDERS (Continued)

### JUNE 30, 2018

Name of Insurance Company	Par Amount of Collateral	Market Value
United States Fidelity and Guaranty Company	6,000,000.00	6,857,580.00
United Guaranty Residential Ins Company of North Carolina	55,000.00	54,456.65
UnitedHealthcare Insurance Company	1,610,000.00	1,615,026.79
Vantis Life Insurance Company	2,325,000.00	2,585,733.70
Voya Retirement Insurance and Annuity Company	3,750,000.00	3,656,724.66
Wellcare of Connecticut, Inc.	535,000.00	531,118.52
Zenith Insurance Company	1,111,000.00	1,104,423.43
TOTAL \$	316,212,000.00	\$ 329,841,155.98

#### UNEMPLOYMENT COMPENSATION FUND

On Account with the Secretary of the Treasury of the United States as Trustee of the Unemployment Compensation Fund

The Act which established Unemployment Compensation provides that contributions from employers be collected by the Labor Commissioner as Administrator of the Act and be deposited with the State Treasurer. (Chapter 2, Public Act, Special Session 1936). These funds are then sent to the Secretary of the Treasury of the United States. The Administrator requests withdrawals as needed to pay benefits to employees.

BALANCE at JUNE 30, 2017		\$	482,330,114.64
Deposits Combined Wage Transfers to Connecticut Interest on Deposits Federal Employee & Ex-Servicemen Contributions FUTA Credit Reductions	\$ 755,647,000.00 14,739,124.90 10,515,377.74 4,041,000.00 460,530.9	3 4 )	785,403,033.63
TOTAL CASH AVAILABLE		\$	1,267,733,148.27
Connecticut Withdrawals for Benefits Combined Wage Withdrawals Federal Employee & Ex-Servicemen Withdrawals Returned Excess Federal Funds Refund of Reduced FUTA Tax Credits Social Security Act Title IX	675,824,000.00 5,992,549.80 4,041,000.00 863,995.29 10,792.80 4,127,287.90	6 ) ) 3	690,859,626.01
BALANCE at JUNE 30, 2018		\$	576,873,522.26

# Office of the State Treasurer LIST OF PRINCIPAL OFFICIALS AND PHONE NUMBERS

### Denise L. Nappier

Treasurer, State of Connecticut Tel: (860) 702-3010 Fax: (860) 702-3043

### Lawrence A. Wilson

Interim Deputy Treasurer Tel: (860) 702-3070 Fax: (860) 728-1290

# Laurie Martin

Chief Investment Officer Pension Funds Management Tel: (860) 702-3195 Fax: (860) 702-3042

# Christopher P. Martin

Assistant Treasurer Debt Management Tel: (860) 702-3288 Fax: (860) 702-3034

# Maria M. Greenslade

Assistant Deputy Treasurer Second Injury Fund and Unclaimed Property Tel: (860) 702-3125 Fax: (860) 702-3021

### Lawrence A. Wilson

Assistant Treasurer Cash Management Tel: (860) 702-3126 Fax: (860) 702-3041

As of June 30, 2018



# CONNECTICUT STATE TREASURY

55 Elm Street Hartford, CT 06106-1773 Tel: (860) 702-3000 www.ott.ct.gov