

# STATE OF CONNECTICUT OFFICE OF THE TREASURER

# 2016



## COMBINED INVESTMENT FUNDS COMPREHENSIVE ANNUAL FINANCIAL REPORT

*For the fiscal year ended June 30, 2016*

# STATE OF CONNECTICUT

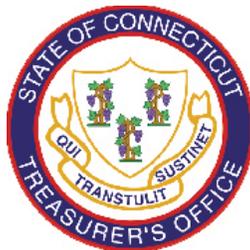
## Office of the State Treasurer



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 OFFICE OF THE TREASURER

# 2016



## COMBINED INVESTMENT FUNDS COMPREHENSIVE ANNUAL FINANCIAL REPORT

*For the fiscal year ended June 30, 2016*

Prepared by: State of Connecticut  
Office of the Treasurer  
55 Elm Street  
Hartford, CT 06106-1773

**STATE OF CONNECTICUT**  
**Office of the State Treasurer**



**COMBINED INVESTMENT FUNDS**  
**COMPREHENSIVE ANNUAL FINANCIAL REPORT**  
 FOR THE FISCAL YEAR ENDED JUNE 30, 2016

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# **Introductory Section**





DENISE L. NAPPIER  
TREASURER

State of Connecticut  
Office of the Treasurer

December 30, 2016

To the State of Connecticut  
Combined Investment Funds  
Fellow Beneficiaries,

I am pleased to submit this Comprehensive Annual Financial Report for the State of Connecticut Combined Investment Funds (CIF) for the fiscal year ended June 30, 2016. The CIF generated a net investment return of 0.35 percent for the fiscal year. Each of the State's three largest pension funds – the Teachers' Retirement Fund (TERF), the State Employees' Retirement Fund (SERF), and the Municipal Employees' Retirement Fund (MERF) – outperformed their benchmarks, posting net investment results of 0.25 percent, 0.26 percent, and 1.15 percent, respectively, versus their corresponding investment benchmarks of -0.06 percent, -0.01 percent and 0.77 percent. Longer term, the five-year returns for the two largest funds, TERF and SERF, were 5.71 percent and 5.74 percent, while the seven-year returns were 8.75 percent and 8.83 percent, respectively.

The CIF performance for Fiscal Year 2016 added \$98.6 million of market value to pension assets. After net withdrawals of \$719.6 million (largely attributed to benefit payments of \$631.3 million that were greater than contributions), the CIF ended the fiscal year with net assets of \$29.25 billion – a decline of \$621.1 million or 2 percent from the previous year

The fundamental purpose of the CIF – to help the State pay its pension obligations – deserves underscoring: Since 2001 the Fund has paid out \$20.96 billion in pension benefits, received \$10.79 billion in contributions, earned \$18.83 billion and increased total net assets to \$29.25 billion, all during a time of significant market volatility and uncertainty.

Responsibility for both the accuracy of the data and the completeness and fairness of this report rests with Treasury management. All disclosures necessary and required to enable fellow beneficiaries and the financial community to gain an understanding of CIF financial activities are contained within this report.

The enclosed financial statements and data are presented fairly in all material respects and are reported in a manner designed to present the financial position and results of CIF operations accurately.

The CIF were established pursuant to Connecticut General Statutes Section 3-31b as a means to invest pension and trust fund assets entrusted to the Treasurer in a variety of investment classes. The CIF are comprised of separate pooled investment funds: 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 Markets International Stock Fund, Emerging Markets International Stock Fund, Real Estate Fund, Commercial Mortgage Fund, and Private Investment Fund.

The units of the CIF are owned by six pension funds: Teachers' Retirement Fund; State Employees' Retirement Fund; Connecticut Municipal Employees' Retirement Fund; State Judges' Retirement Fund; Probate Court Retirement Fund; and State's Attorneys' Retirement Fund. In addition, the CIF are owned by nine trust funds: Soldiers' Sailors' and Marines' Fund; Police and Fireman' Survivors' Benefit Fund; Connecticut Arts Endowment Fund; School Fund; Ida Eaton Cotton Fund; Hopmead State Park Fund; Andrew C. Clark Fund; Agricultural College Fund and State of Connecticut Other Post-Employment Benefits Trust Fund.

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

## Financial Information

The consolidated CIF assets at the close of Fiscal Year 2016 were \$29.25 billion based on fair value and the CIF were in full compliance with the standards of the Governmental Accounting Standards Board. The CIF are invested across global public and private market equity, fixed income and alternative asset classes. Additional information on the CIF can be found in the Notes to the Financial Statements.

## Internal Control Structure

Management is responsible for maintaining a system of adequate internal accounting controls designed to provide reasonable assurance that transactions are (i) executed in accordance with management's general or specific authorization, and (ii) recorded as necessary to maintain accountability for assets and to permit preparation of financial statements consistent with generally accepted accounting principles. We believe the internal controls in effect during Fiscal Year 2016 adequately safeguarded the CIF assets and provided reasonable assurance regarding the proper recording of financial transactions. The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits likely to be derived and that the valuation of costs and benefits requires estimates and judgments by management.

## Independent Audit

The State of Connecticut's independent Auditors of Public Accounts conducted an annual audit of this Comprehensive Annual Financial Report in accordance with generally accepted auditing standards. The Auditors' report on the basic financial statements is included in the Financial Section of this report.

## Management Discussion and Analysis

The Government Accounting Standards Board requires a narrative introduction, overview and analysis to accompany the basic financial statements in the form of a Management's Discussion and Analysis (MD&A). This letter of transmittal is designed to complement and be read in conjunction with the MD&A. The MD&A can be found in the Financial Section immediately following the report of the independent auditors.

## Awards

The Government Finance Officers Association of the United States and Canada awarded the Combined Investment Funds a Certificate of Achievement for Excellence in Financial Reporting for its Comprehensive Annual Financial Report for the fiscal year ended June 30, 2015. The Certificate is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports.

## Requests for Information

This Comprehensive Annual Financial Report is designed to provide a general overview of investment activities of the CIF. We hope this report will prove both informative and useful. Questions concerning any of the information contained in this report or requests for additional financial information should be addressed to the Office of the Treasurer, 55 Elm Street, Hartford, Connecticut 06106-1773, or by telephone to (860) 702-3000. Copies of the report will also be available on the Internet at [www.ott.ct.gov](http://www.ott.ct.gov).

Sincerely,



Denise L. Nappier  
Treasurer  
State of Connecticut



DENISE L. NAPIER  
TREASURER

State of Connecticut  
Office of the Treasurer

December 30, 2016

This Comprehensive Annual Financial 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 being accurate in all material respects and prepared in conformity with generally accepted accounting principles. Such financial statements are audited annually by the State 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 Comprehensive Annual Financial Report make evident the Treasury's commitment to the safe custody and conscientious stewardship of the Combined Investment Funds.

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,

A handwritten signature in black ink, appearing to read "Lawrence A. Wilson".

Lawrence A Wilson  
Interim Deputy Treasurer  
State of Connecticut



Government Finance Officers Association

Certificate of  
Achievement  
for Excellence  
in Financial  
Reporting

Presented to

**Connecticut State Treasurer's  
Combined Investment Funds**

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended

**June 30, 2015**

Executive Director/CEO

### Mission Statement

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

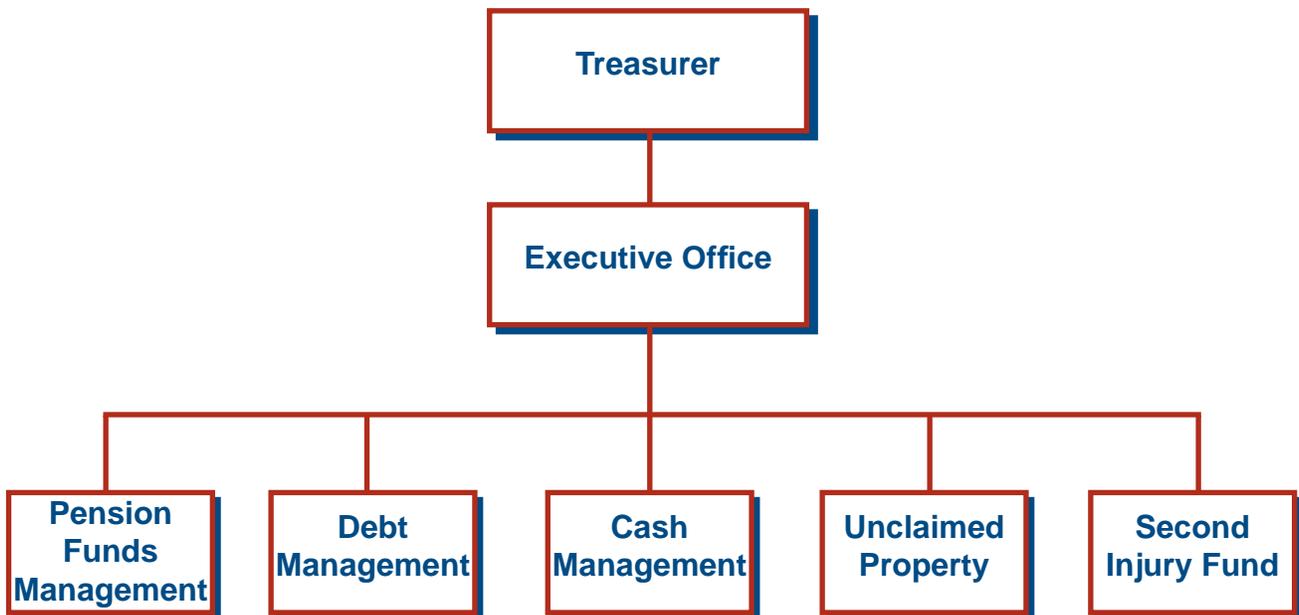
### Constitutional and Statutory Responsibilities

The Office of the Treasurer was established following the adoption of the fundamental orders of Connecticut in 1638. The Treasurer shall receive all funds belonging to the State and disburse the same only as may be directed by law, as described in Article Fourth, Section 22 of the Connecticut Constitution and in Title 3 of the Connecticut General Statutes.

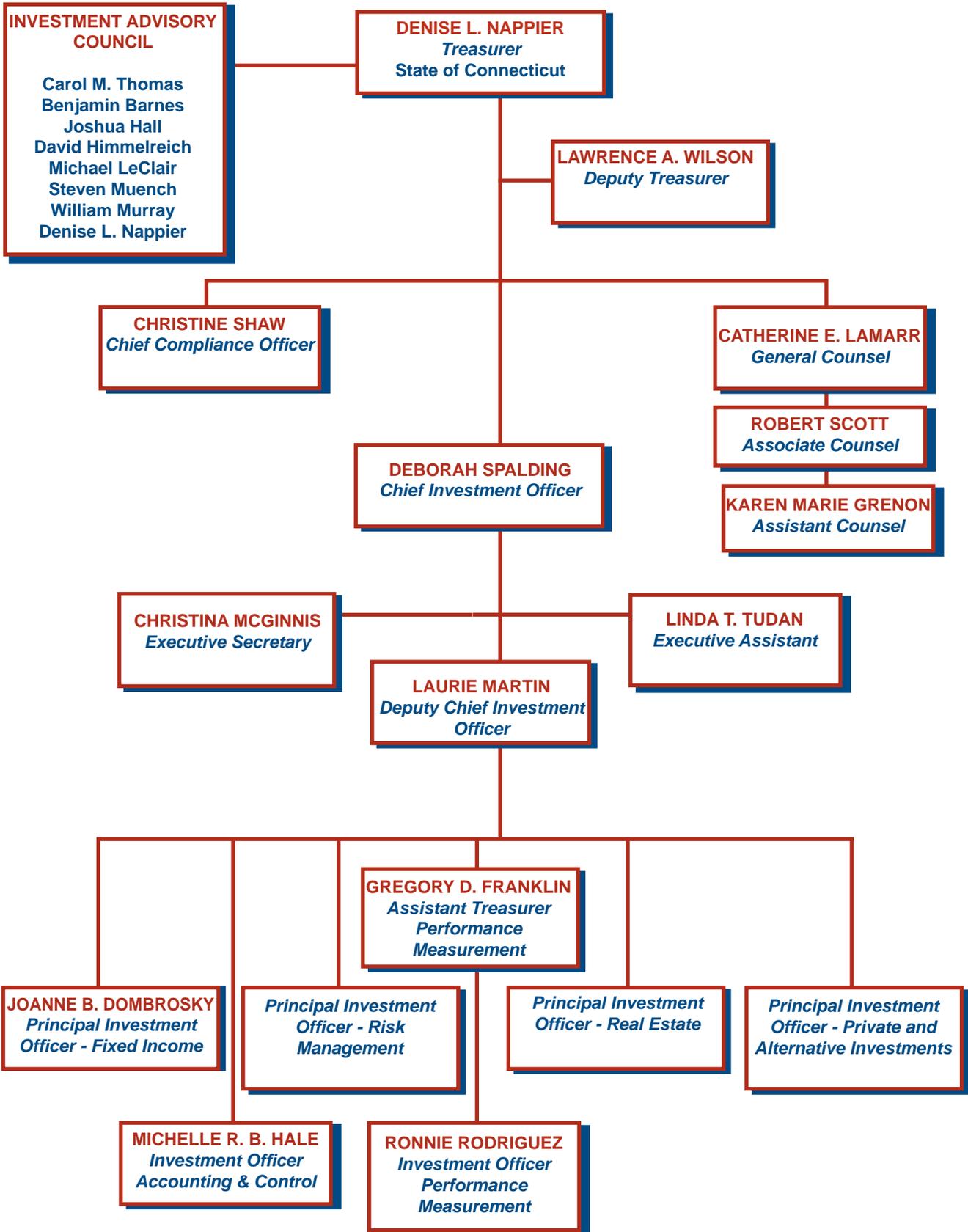
The Treasurer, as chief elected financial officer for the State, oversees the prudent preservation and management of State funds, including the investment of a \$29.25 billion portfolio of pension and trust fund assets, \$4.9 billion in total state and local short-term investments, and \$2.8 billion of assets in the Connecticut Higher Education Trust. The Treasurer maintains an accurate account of all funds through sophisticated security measures and procedures.

### Public Service

The Office of the Treasurer includes an Executive Office as well as five distinct divisions, each with specific responsibilities: Pension Funds Management, Cash Management, Debt Management, Unclaimed Property, and the Second Injury Fund.



**COMBINED INVESTMENT FUNDS ADMINISTRATION**



As of October 7, 2016

**LIST OF PRINCIPAL OFFICIALS**

**COMBINED INVESTMENT FUNDS**

**55 Elm Street, 6th Floor  
Hartford, CT. 06106-2773  
Telephone: (860) 702-3155  
Facsimile: (860) 702-3042  
World Wide Web: [www.ott.ct.gov](http://www.ott.ct.gov)**

**Treasurer, State of Connecticut  
DENISE L. NAPPIER (860) 702-3010**

**Interim Deputy Treasurer, State of Connecticut  
LAWRENCE A. WILSON, CTP (860) 702-3070**

**Chief Investment Officer  
DEBORAH SPALDING, CFA (860) 702-3101**

**Deputy Chief Investment Officer  
LAURIE MARTIN, CIA, CPA (860) 702-3195**

**Assistant Treasurer  
GREGORY D. FRANKLIN, CFA (860) 702-3162**

**Principal Investment Officer  
JOANNE B. DOMBROSKY, CFA (860) 702-3066**

**Investment Officer  
MICHELLE R. B. HALE, CPA (860) 702-3275**

**Investment Officer  
RONNIE RODRIGUEZ (860) 702-3167**

**General Counsel  
CATHERINE E. LAMARR (860) 702-3018**

**Chief Compliance Officer  
CHRISTINE SHAW (860) 702-3211**

**As of October 7, 2016**

## 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 CGS 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 policy and risk tolerance; (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)).

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Council members who contributed their time and knowledge to the IAC during Fiscal Year 2016 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)

**JANICE CARPENTER**, Independent Financial Consultant (served through January, 2016)

**LAURENCE HALE**, Managing Partner, Weiss and Hale Financial (served through January, 2016)

**JOSHUA HALL**, Representative of State teachers' unions; Hartford Federation of Teachers

**DAVID HIMMELREICH**, Principal, Hynes, Himmelreich, Glennon & Company

**MICHAEL KRAMER**, Independent Consultant (served September, 2015 – June, 2016)

**MICHAEL LeCLAIR**, Senior Vice President/Investments, Stifel (served from January, 2016)

**STEVEN MUENCH**, Representative of State teachers' unions; Conn. Education Association

**WILLIAM MURRAY**, Representative of State teachers' unions; NEA, Danbury

**DENISE L. NAPPIER**, Treasurer, State of Connecticut (Ex officio member) and Council secretary

**PETER THOR**, Representative of State employees' unions; Coordinator, Policy & Planning, AFSCME

Council 4

## LIST OF EXTERNAL ADVISORS

### **CONSULTANTS**

Cliffwater Associates - Marina del Rey, California  
Franklin Park Associates - Conshohocken, Pennsylvania  
Aon Hewitt Investment Consulting, Inc. - Chicago, Illinois  
Hudepohl & Associates, Inc. - Dublin, Ohio  
Mercer Investment Consulting, Inc. - New York, New York  
Stepstone Group, LP - New York, New York  
The Townsend Group - Cleveland, Ohio

### **MASTER CUSTODIAN**

Bank of New York Mellon - New York, New York

### **AUDITORS**

Auditors of Public Accounts - Hartford, Connecticut

### **INVESTMENT ADVISORS**

#### **LIQUIDITY FUND**

Colchester Global Investors Ltd. - London, England  
Lazard Asset Management LLC - New York, New York  
Payden & Rygel - Los Angeles, California  
Pacific Investment Management Company - Newport Beach, California  
State Street Global Advisors - Boston, Massachusetts

#### **MUTUAL EQUITY FUND**

##### **Large Cap**

State Street Global Advisors - Boston, Massachusetts  
T. Rowe Price Associates - Baltimore, Maryland

##### **All Cap**

Capital Prospects, LLC - Stamford, Connecticut  
FIS Group, Inc. - Philadelphia, Pennsylvania

##### **Small/Mid Cap Active**

Bivium Capital Partners - San Francisco, California  
Frontier Capital Management Company, LLC - Boston, Massachusetts

#### **CORE FIXED INCOME FUND**

State Street Global Advisors - Boston, Massachusetts  
BlackRock Financial Management, Inc. - New York, New York  
Conning-Goodwin Capital Advisers Inc. - Hartford, Connecticut  
Progress Investment Management Company - San Francisco, California  
Prudence Crandall Fund III Opportunistic (Rock Creek)- Washington, District of Columbia  
Prudence Crandall Fund IV Opportunistic (K2 Advisors) - Stamford, Connecticut  
Wellington - Boston, Massachusetts

#### **INFLATION LINKED BOND FUND**

BlackRock Financial Management, Inc. - New York, New York  
Colchester Global Investors Ltd. - London, England  
New Century Advisors, LLC - Chevy Chase, Maryland

#### **EMERGING MARKET DEBT FUND**

Ashmore Emerging Markets Debt Fund - London, England  
Pyramis Global Investors - Boston, Massachusetts  
Stone Harbor Investment Partners - New York, New York

## LIST OF EXTERNAL ADVISORS

### HIGH YIELD DEBT FUND

Carlyle GMS Finance, Inc. - Washington D.C.  
Carlyle NF Investment Copr. - New York, New York  
Loomis Sayles & Co., Inc. - Boston, Massachusetts  
Oaktree Capital Management, L.L.C. - Los Angeles, California  
Shenkman Capital Management - Stamford, Connecticut  
Stone Harbor Investment Partners - New York, New York

### DEVELOPED MARKET INTERNATIONAL STOCK FUND <sup>(1)</sup>

#### **Index**

State Street Global Advisors - Boston, Massachusetts

#### **Core**

Acadian Asset Management - Boston, Massachusetts  
AQR Capital Management - Greenwich, Connecticut  
Progress Investment Management Company - San Francisco, California

#### **Active - Growth**

MFS Institutional Advisors, Inc. - Boston, Massachusetts

#### **Active - Value**

Grantham, Mayo, Van Otterloo & Co. - Boston, Massachusetts

#### **Small Cap**

Dimensional Fund Advisors - Austin, Texas  
Schroder Investment Management - New York, New York  
William Blair & Company - Chicago, Illinois

### EMERGING MARKET INTERNATIONAL STOCK FUND <sup>(1)</sup>

Aberdeen Asset Management, Inc. - Philadelphia, Pennsylvania  
Grantham, Mayo, Van Otterloo & Co. - Boston, Massachusetts  
Schroder Investment Management - New York, New York

### REAL ESTATE FUND

AEW Capital Management, LP - Boston, Massachusetts  
American Realty Advisors - Glendale, California  
Apollo Real Estate Investment Fund - New York, New York  
Blackstone Real Estate Advisors - New York, New York  
Canyon Johnson Urban Funds - Beverly Hills, California  
Capri Capital Advisors - Chicago, Illinois  
Clarion Lion Industrial Trust - Baltimore, Maryland  
Colony Realty Partners II - Los Angeles, California  
Cornerstone Real Estate Advisors - Hartford, Connecticut  
Covenant Apartment Funds - Nashville, Tennessee  
Crow Holdings Realty Partners - Dallas, Texas  
Cypress Acquisition Partners - Dallas, Texas  
Gerding Edlen Green Cities II, LP - Portland, Oregon  
Hart Realty Advisors - Simsbury, Connecticut  
IL & FS India Realty Fund II, LLC - Ebene, Mauritius  
JP Morgan Investment Management, New York, New York  
Landmark Real Estate Partners, Simsbury, Connecticut  
Lone Star Global Acquisitions Ltd - Dallas, Texas  
MacFarlane Urban Real Estate Fund - San Francisco, California  
New Boston Urban Strategy America Fund - Boston, Massachusetts  
Prime Property Fund - New York, New York  
Prudential Real Estate Investors - Madison, New Jersey

(1) Not included in the listing are currency overlay managers: The Bank of New York - New York, New York and Bridgewater Associates, Inc. - Westport, Connecticut.

## LIST OF EXTERNAL ADVISORS

Rockwood Capital - Greenwich, Connecticut  
Starwood Global Opportunity Fund - Greenwich, Connecticut  
UBS Trumbull Property - Hartford, Connecticut  
Urban Strategy America Fund - Boston, Massachusetts  
USAA EAgle Fund - San Antonio, Texas  
Walton Street Real Estate Fund II- Chicago, Illinois  
WLR Recovery Associates IV LLC - New York, New York

### COMMERCIAL MORTGAGE FUND

N/A

### PRIVATE INVESTMENT FUND

#### **Corporate Buyouts**

AIG Healthcare Partners LP - New York, New York  
AIG Altaris Health Partners II LP - New York, New York  
AIG Altaris Health Partners III LP - New York, New York  
Boston Ventures VII - Boston, Massachusetts  
Candover 2008 Fund - St Peter Port, Channel Islands  
Charterhouse Equity Partners IV - New York, New York  
Court Square Capital Partners II - New York, New York  
Court Square Capital Partners III - New York, New York  
Ethos Private Equity Fund V - Jersey, Channel Islands  
FS Equity Partners V - Los Angeles, California  
FS Equity Partners VI - Los Angeles, California  
GENNX360 Capital Partners II - New York, New York  
Hicks Muse Tate & Furst Equity Fund III - Dallas, Texas  
ICV Capital Partners II LLC - New York, New York  
JFL Equity Investors III, LP - Wilmington, Delaware  
KKR 2006 Fund - New York, New York  
KKR Millenium Fund - New York, New York  
Leeds Equity Partners V LP - New York, New York  
Nogales Investors Fund II - Los Angeles, California  
RFE Investment Partners VII - New Canaan, Connecticut  
RFE Investment Partners VIII - New Canaan, Connecticut  
TA XI - Boston, Massachusetts  
Thomas H. Lee Equity Fund VI - Boston, Massachusetts  
Vista Equity Partners Fund III - San Francisco, California  
Vista Equity Partners Fund IV - San Francisco, California  
Wellspring Capital Partners V - New York, New York  
Welsh, Carson, Anderson & Stowe X – New York, New York  
Welsh, Carson, Anderson & Stowe XI – New York, New York  
Yucaipa American Alliance Fund II LP - Los Angeles, California  
Yucaipa III - Los Angeles, California

#### **Venture Capital**

Crescendo III – Minneapolis, Minnesota  
Syndicated Communications Venture Partners V - Silver Spring, Maryland

#### **Mezzanine**

Audax Mezzanine III Limited Partnership - New York, New York  
GarMark Partners II LP – Stamford, Connecticut  
SW Pelham Fund II LP - Hartford, Connecticut

#### **International**

Carlyle Asia Partners– Washington D.C.  
Compass European Partners – New York, New York  
Gilbert Global Equity Partners - Tacoma, Washington  
Pinebridge Global Emerging Markets Fund - New York, New York

## LIST OF EXTERNAL ADVISORS

### Fund of Funds

CS/CT Cleantech Opportunities Fund - New York, New York  
CT Growth Capital - Westport, Connecticut  
M<sup>2</sup> CT Emerging Private Equity - Chicago, Illinois  
M<sup>2</sup> CT Horizon Legacy Fund - Wilmington, Delaware  
Fairview Constitution II LP - Farmington, Connecticut  
Fairview Constitution III LP - Farmington, Connecticut  
Fairview Constitution IV LP - Farmington, Connecticut  
JP Morgan Nutmeg Opportunity Fund - New York, New York  
Landmark Private Equity Fund VIII – Simsbury, Connecticut  
Landmark Private Equity Fund XIV – Simsbury, Connecticut  
Landmark Private Equity Fund XV – Simsbury, Connecticut  
Lexington Capital Partners II - New York, New York  
Stepstone Pioneer Capital I LLP - Chapel Hill, North Carolina  
Stepstone Pioneer Capital Fund II - Chapel Hill, North Carolina  
The Constitution Liquidating Fund - Farmington, Connecticut

### Special Situations

Apollo Investment Fund VIII LP - New York, New York  
Castlelake II LP - Minneapolis, Minnesota  
Clearlake Capital Partners III – Santa Monica, California  
Clearlake IV – Santa Monica, California  
KPS Special Situations Fund - New York, New York  
Levine Leichtman Capital Partners IV LP - Beverly Hills, California  
Levine Leichtman Capital Partners V LP - Beverly Hills, California  
Pegasus Partners IV - Cos Cob, Connecticut  
Pegasus Partners V - Cos Cob, Connecticut  
Welsh, Carson, Anderson & Stowe Capital Partners III - New York, New York  
WLR Recovery Fund IV - New York, New York

### ALTERNATIVE INVESTMENT FUND

Arclight Energy Partners Fund - Boston, Massachusetts  
Arclight VI - Boston, Massachusetts  
Energy Fund XV Limited Partnership - Washington D.C.  
Marathon European Credit Opportunity - New York, New York  
Prudence Crandall I Permal Limited Partnership - New York, New York  
Prudence Crandall II Prisma Limited Partnership - New York, New York  
Prudence Crandall III Rock Creek Limited Partnership - Washington D.C.  
Prudence Crandall IV K2 Limited Partnership - Stamford, Connecticut  
Thomas Welles Fund I - New York, New York  
Thomas Welles Fund II - New York, New York

# **Financial**

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# **Section**



# STATE OF CONNECTICUT



## AUDITORS OF PUBLIC ACCOUNTS

State Capitol  
210 Capitol Avenue  
Hartford, Connecticut 06106-1559

JOHN C. GERAGOSIAN

### INDEPENDENT AUDITORS' REPORT

Governor Dannel P. Malloy  
Members of the General Assembly:

#### **Report on the Financial Statements**

We have audited the accompanying financial statements of the Combined Investment Funds, which comprise the statement of net position as of June 30, 2016, the statements of changes in net position for the fiscal years ended June 30, 2016 and 2015, 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 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 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 financial position of the Combined Investment Funds as of June 30, 2016, and the statements of changes in financial position for the fiscal years ended June 30, 2016 and 2015, in conformity with accounting principles generally accepted in the United States of America.

### ***Emphasis of Matter – Change in Accounting Principle***

As explained in Note 1A to the financial statements of the combined investment funds, in the fiscal year ended June 30, 2016, the Treasury adopted Governmental Accounting Standards Board (GASB) Statement No. 72, *Fair Value Measurement and Application*. As a result of the implementation of GASB Statement No. 72, Treasury changed its methodology for valuing investments that do not have a readily determinable market value. Prior to implementing GASB 72 these investments were carried at their cash adjusted fair value. The State Treasurer utilized the investment advisors' estimated fair values at the end of March or April and adjusted for cash transactions occurring before the end of the fiscal year. As a result of adopting GASB 72, these investments are carried at the investment advisor's June 30, 2016 fair value, or net asset value equivalent. The Statement of Changes in Net Position for the fiscal year ended June 30, 2015 was restated to comply with this accounting standard. Our opinion is not modified with respect to this matter.

### ***Emphasis of Matter – Investment Values***

As explained in Note 1B to the financial statements of the combined investment funds, the real estate, private investment, alternative investment, core fixed income, and high yield debt funds include investments that are carried at the investment advisors' June 30, 2016 fair value, or net asset value equivalent. The Treasurer's staff reviews the estimated fair values provided by the investment advisors for reasonableness. In those instances in which an advisor's value appears to be overstated, this estimated fair value is adjusted accordingly. We reviewed the documentation and procedures used by the Treasury 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.

### ***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 investment 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 presented fairly in all material respects in relation to the financial statements taken as a whole.

#### *Other Information*

The introductory, investment and statistical sections include information other than the schedules noted within the investment section that is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information other than the schedules specifically noted within the investment section, has not been subjected to the auditing procedures applied in the audit of the basic financial statement and, 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 30, 2016, 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, 2016*, 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.



John C. Geragosian  
Auditor of Public Accounts

December 30, 2016  
State Capitol  
Hartford, Connecticut



## MANAGEMENT'S DISCUSSION AND ANALYSIS

This section presents Management's Discussion and Analysis (MD&A) of the Comprehensive Annual Financial Report (CAFR) of the State of Connecticut's Office of the Treasurer Combined Investment Funds (CIF) financial position and performance for the fiscal year ended June 30, 2016. It is presented as a narrative overview and analysis. Management of the State of Connecticut's Office of the Treasurer encourage readers to review it in conjunction with the transmittal letter included in the Introductory Section at the front of this report and the financial statements in the Financial Section that follow.

The Combined Investment Funds serve as an investment vehicle for the six State pension plans and nine trust funds collectively known as the Connecticut Retirement Plans and Trust Funds representing the pension funds of the State teachers, State and municipal employees, as well as non-retirement trust funds that support academic programs, grants and initiatives throughout the State and are managed for the sole benefit of the participants. CIF investments range in investment diversity from domestic and international stocks to fixed income, real estate and private investment equity. Investments of the pension plans and trust funds are combined in a commingled investment pool as authorized by state statute. Each pension plan and trust fund owns an equity position in the CIF and receives proportionate investment income from the CIF in accordance with each respective ownership percentage. The pension plan and trust fund's allocated share of each type of investment in the CIF is shown in the Schedule of Changes in Net. Investment gains or losses are also reported in the Statement of Changes in Net Position of each pension plan and trust. The Market Value per share is therefore approximately the same for each of the pension plans and trust funds investments in the CIF.

The CIF financial statements reported by the Treasurer's Office for which the Treasurer has fiduciary responsibility for the investment thereof follow this MD&A and provide detailed information about the individual funds.

### FINANCIAL HIGHLIGHTS Condensed Financial Information

#### Combined Investment Funds

##### *Net Position and Changes in Net Position*

The net position of the Combined Investment Funds at the close of the 2016 fiscal year was \$29.2 billion, a decrease of \$0.6 billion from the previous year. The change in net position resulted from a minor increase from operations (realized and unrealized gains and investment income) offset by \$0.6 billion of net cash withdrawals from the Combined Investment Funds comprised of net beneficiary distributions.

The net position of the Combined Investment Funds at the close of the 2015 fiscal year was \$29.9 billion, an increase of \$0.3 billion from the previous year. The change in net position resulted from a \$0.9 billion increase from operations (realized and unrealized gains and investment income) partly offset by \$0.6 billion of net cash withdrawals from the Combined Investment Funds comprised of net beneficiary distributions.

##### *Assets held in trust for Participants*

A summary of the net position of assets held in trust for participants is presented below.

#### Condensed Statement of Net Position Fiscal Year Ended June 30,

Assets	2016	Increase (Decrease)	2015	Increase (Decrease)	2014
Investments at Fair Value	\$29,206,055,001	\$(764,201,850)	\$29,970,256,851	\$361,728,474	\$29,608,528,377
Cash, Receivables and Other	14,897,933,275	4,289,147,010	10,608,786,265	4,512,501,589	6,096,284,676
Total Assets	44,103,988,276	3,524,945,160	40,579,043,116	4,874,230,063	35,704,813,053
Liabilities	(14,858,068,515)	(4,146,001,915)	(10,712,066,600)	(4,561,378,713)	(6,150,687,887)
Net Position	<u>\$29,245,919,761</u>	<u>\$(621,056,755)</u>	<u>\$29,866,976,516</u>	<u>\$312,851,350</u>	<u>\$29,554,125,166</u>

## MANAGEMENT'S DISCUSSION AND ANALYSIS

### Condensed Statement of Changes in Net Position Fiscal Year Ended June 30,

Additions	2016	Increase (Decrease)	2015	Increase (Decrease)	2014
Dividends	\$459,953,624	\$(42,960,324)	\$502,913,948	\$28,292,279	474,621,673
Interest	337,273,496	75,263,268	262,010,228	(8,513,172)	270,523,400
Securities Lending & Other Income	28,769,032	6,012,543	22,756,489	6,236,401	16,520,088
Total Investment Income	825,996,152	38,315,487	787,680,665	26,015,504	761,665,161
Total Investment Expenses	90,654,582	3,156,155	87,498,427	3,186,367	84,312,060
Net Investment Income	735,341,570	35,159,332	700,182,238	22,829,137	677,353,101
Net Realized Gain/(Loss)	167,059,309	(1,165,638,915)	1,332,698,224	448,116,417	884,581,807
Net Change in Unrealized Gains on Investments	(887,176,041)	106,381,819	(1,119,751,860)	(3,690,961,575)	2,571,209,715
Net Increase (Decrease) in Net Position resulting from operations	15,224,838	(1,024,097,764)	913,128,602	(3,220,016,021)	4,133,144,623
Purchase of Units by Participants	2,464,381,541	(546,025,125)	3,010,406,666	55,117,743	2,955,288,923
Total Additions	2,479,606,379	(1,570,122,889)	3,923,535,268	(3,164,898,278)	7,088,433,546
Deductions					
Administrative Expense	4,602,672	(19,373)	4,622,045	(318,436)	4,940,481
Distribution of Income to Unit Owners	13,470,038	4,006,919	9,463,119	(180,962,860)	190,425,979
Redemption of Units by Participants	3,082,590,424	(514,008,330)	3,596,598,754	316,847,794	3,279,750,960
Total Deductions	3,100,663,134	(510,020,784)	3,610,683,918	135,566,498	3,475,117,420
Change in Net Position	(621,056,755)	(1,060,102,105)	312,851,350	(3,300,464,776)	3,613,316,126
Net Position – Beginning of year	29,866,976,516	439,045,350	29,554,125,166	3,613,316,126	25,940,809,040
Net Position – End of year	\$29,245,919,761	\$(621,056,755)	\$29,866,976,516	\$312,851,350	\$29,554,125,166

## OVERVIEW OF THE FINANCIAL STATEMENTS

This discussion and analysis is an introduction to the Office of the Treasurer's Combined Investment Funds basic financial statements, which are comprised of: 1) Statement of Net Position, 2) Statement of Changes in Net Position and 3) Notes to the Financial Statements.

The Statements of Net Position and Changes in Net Position are two financial statements that report information about the Combined Investment Funds. 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 all of the Combined Investment Funds assets and liabilities, with the difference between the two reported as "net position". Over time, increases and decreases in net position measure whether the Combined Investment Funds financial position is improving or deteriorating.

The Statement of Changes in Net Position presents information showing how the Combined Investment Funds net assets changed during the most recent year. All changes in net assets are reported as soon as the underlying events giving rise to the change occurs, regardless of the timing of related cash flows. Therefore, revenues and expenses are reported in this statement for some items that will only result in cash flows in future fiscal periods (e.g. security lending rebates and dividend and interest income).

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

## ECONOMIC CONDITIONS AND OUTLOOK

Domestic growth, as measured by year-over-year Gross Domestic Product (GDP), was lackluster and declining. During the fiscal year, GDP ranged between 1.3 percent and 2.2 percent. For the entire fiscal year, GDP grew at an average rate of 1.3 percent, down from 3.0 percent for Fiscal Year 2015. Meanwhile the domestic unemployment rate fell from 5.7 percent to 5.0 percent from Fiscal Year 2015. During the course of the fiscal year, over 2.4 million people were added to payrolls.

Domestic inflation (as measured by the year-over-year change in the consumer price index) averaged 0.7 percent during the fiscal year, down from 0.8 in fiscal year 2015. While domestic inflation was weak, inflation in the Eurozone was even weaker, with an average inflation rate of 0 percent (range was from -0.2 to 0.3 percent), down from 0.2 percent during the 2015 fiscal year period.

Connecticut's unemployment rate has continued to decline from a high of 9.5 percent in October 2010 to 5.7 percent in July 2016, compared to the national unemployment rate of 4.9 percent. The State Comptroller reported on September 30, 2016 that the State's General Fund ended the 2016 fiscal year with a pre-audited \$170.4 million deficit which will be eliminated through a transfer from the Budget Reserve Fund.

## CONTACTING THE OFFICE OF THE TREASURER

This Comprehensive Annual Financial Report is designed to provide a general overview of the CIF and to show the Office of the Treasurer's accountability for its stewardship of CIF assets. Questions about this report or requests for additional information should be addressed to:

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

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**STATEMENT OF NET POSITION  
JUNE 30, 2016**

	<b>TOTAL</b>
<b>ASSETS</b>	
Investments in Securities, at Fair Value	
Liquidity Fund	\$ -
Cash Equivalents	77,376,937
Asset Backed Securities	153,162,050
Government Securities	3,057,456,366
Government Agency Securities	645,770,796
Mortgage Backed Securities	402,028,499
Corporate Debt	3,046,435,721
Convertible Securities	53,746,472
Common Stock	13,540,538,586
Preferred Stock	87,632,478
Real Estate Investment Trust	385,414,819
Business Development Corporation	99,611,605
Mutual Fund	703,637,455
Limited Liability Corporation	1,156,486
Trusts	530,040
Limited Partnerships	6,951,556,691
Total Investments in Securities, at Fair Value	<u>29,206,055,001</u>
Cash	40,130,558
Receivables	
Foreign Exchange Contracts	11,918,460,854
Interest Receivable	59,453,392
Dividends Receivable	34,719,792
Due from Brokers	240,976,324
Foreign Taxes	10,073,449
Securities Lending Receivable	1,196,518
Reserve for Doubtful Receivables	(4,934,608)
Total Receivables	<u>12,259,945,721</u>
Invested Securities Lending Collateral	2,596,598,028
Prepaid Expenses	1,258,968
<b>Total Assets</b>	<u>44,103,988,276</u>
<b>LIABILITIES</b>	
Payables	
Foreign Exchange Contracts	11,876,226,059
Due to Brokers	365,495,616
Income Distribution	1,549,507
Other Payable	300,281
Total Payables	<u>12,243,571,463</u>
Securities Lending Collateral	2,596,598,028
Accrued Expenses	17,899,024
<b>Total Liabilities</b>	<u>14,858,068,515</u>
<b>NET POSITION HELD IN TRUST FOR PARTICIPANTS</b>	<u>\$ 29,245,919,761</u>

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

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**STATEMENT OF CHANGES IN NET POSITION  
FOR THE FISCAL YEAR ENDED JUNE 30, 2016**

<b>ADDITIONS</b>	<u><b>TOTAL</b></u>
<b>OPERATIONS</b>	
<b>Investment Income</b>	
Dividends	\$ 459,953,624
Interest	337,273,496
Other Income	7,688,194
Securities Lending	<u>21,080,838</u>
<b>Total Income</b>	825,996,152
<b>Expenses</b>	
Investment Advisory Fees	74,630,968
Custody and Transfer Agent Fees	3,284,270
Professional Fees	3,380,185
Security Lending Fees	1,574,507
Security Lending Rebates	5,335,764
Investment Expenses	<u>2,448,888</u>
<b>Total Expenses</b>	<u>90,654,582</u>
<b>Net Investment Income</b>	<u>735,341,570</u>
<b>Net Realized Gain (Loss)</b>	167,059,309
<b>Net Change in Unrealized Gain/(Loss)     on Investments and Foreign Currency</b>	(887,176,041)
<b>Net Increase (Decrease) in Net Position     Resulting from Operations</b>	<u>15,224,838</u>
<b>Unit Transactions</b>	
Purchase of Units by Participants	2,464,381,541
<b>TOTAL ADDITIONS</b>	<u>2,479,606,379</u>
<b>DEDUCTIONS</b>	
<b>Administrative Expenses:</b>	
Salary and Fringe Benefits	(4,602,672)
<b>Distributions to Unit Owners:</b>	
Income Distributed	(13,470,038)
<b>Unit Transactions</b>	
Redemption of Units by Participants	(3,082,590,424)
<b>TOTAL DEDUCTIONS</b>	<u>(3,100,663,134)</u>
<b>Change in Net Position Held in Trust for Participants</b>	<u>(621,056,755)</u>
<b>Net Position- Beginning of Period</b>	<u>29,866,976,516</u>
<b>Net Position- End of Period</b>	<u>\$ 29,245,919,761</u>

The accompanying notes are an integral part of these financial statements

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**STATEMENT OF CHANGES IN NET POSITION  
FOR THE FISCAL YEAR ENDED JUNE 30, 2015**

<b>ADDITIONS OPERATIONS</b>	<u><b>TOTAL</b></u>
<b>Investment Income</b>	
Dividends	\$ 502,913,948
Interest	262,010,228
Other Income	7,323,567
Securities Lending	15,432,922
<b>Total Income</b>	<u>787,680,665</u>
<b>Expenses</b>	
Investment Advisory Fees	75,901,384
Custody and Transfer Agent Fees	3,752,963
Professional Fees	2,882,621
Security Lending Fees	1,450,844
Security Lending Rebates	924,473
Investment Expenses	2,586,142
<b>Total Expenses</b>	<u>87,498,427</u>
<b>Net Investment Income</b>	<u>700,182,238</u>
<b>Net Realized Gain (Loss)</b>	1,332,698,224
<b>Net Change in Unrealized Gain/(Loss) on Investments and Foreign Currency</b>	(1,119,751,860)
<b>Net Increase (Decrease) in Net Position Resulting from Operations</b>	<u>913,128,602</u>
<b>Unit Transactions</b>	
Purchase of Units by Participants	3,010,406,666
<b>TOTAL ADDITIONS</b>	<u>3,923,535,268</u>
<b>DEDUCTIONS</b>	
<b>Administrative Expenses:</b>	
Salary and Fringe Benefits	(4,622,045)
<b>Distributions to Unit Owners:</b>	
Income Distributed	(9,463,119)
<b>Unit Transactions</b>	
Redemption of Units by Participants	(3,596,598,754)
<b>TOTAL DEDUCTIONS</b>	<u>(3,610,683,918)</u>
<b>Change in Net Position Held in Trust for Participants</b>	<u>312,851,350</u>
<b>Net Position- Beginning of Period</b>	29,554,125,166
<b>Net Position- End of Period</b>	<u>\$ 29,866,976,516</u>

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, Commercial Mortgage 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**

In February 2015, the Governmental Accounting Standards Board ("GASB") issued GASB Statement Number 72 ("GASB 72"), Fair Value Measurement and Application, which is effective for fiscal years beginning after June 15, 2015. This statement establishes a hierarchy of inputs to valuation techniques used to measure fair value for financial reporting purposes. Additionally, GASB 72 provides guidance on applying fair value to certain investments and disclosures related to all fair value measurements. The objective of the standard is to improve financial reporting by clarifying the definition of fair value, establishing general principles for measuring fair value and enhancing disclosures about fair value measurements. The standard was effective on a prospective basis and is included in both current period and prior period comparative amounts presented. Implementing GASB 72 resulted in a change in accounting policy for fiscal year end valuations for investments that do not have a readily determined fair market value ("illiquid investments"). Such illiquid investments are held in the Alternative Investment, Core Fixed Income, High Yield, Real Estate and Private Investment Funds. These illiquid investments were valued \$135,039,998 higher at June 30, 2016 as a result of GASB 72 implementation. Prior to implementing GASB 72 illiquid investments were carried at their cash adjusted fair value which utilizes the prior calendar quarter end fair value as estimated by the investment advisor, (i) plus cash flows relating to capitalized expenses and principal contributions disbursed from and (ii) minus amounts received by the Fund, to estimate the current fair value. GASB 72 requires illiquid investments to be carried at the general partner's June 30, 2016 fair value, or net asset value ("NAV") equivalent. Fiscal 2015 statements have been restated to implement GASB 72. The fiscal 2015 restatement resulted in an increase of \$126,194,000 to Net Position at Beginning of Period, a decrease of \$88,806,000 in Net Change in Unrealized Loss on Investments and Foreign Currency, an increase of \$88,806,000 in Change in Net Position Held in Trust Participants, and an increase of \$215,000,000 in Net Position at End of Period.

**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, that are carried at the general partner's June 30, 2016 fair value, or net asset value ("NAV") equivalent. The Core Fixed Income Fund and the High Yield Debt Fund also include investments that are carried at the general partner's June 30, 2016 fair value, or net asset value ("NAV") equivalent. The CIF's

## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

### NOTES TO FINANCIAL STATEMENTS (Continued)

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 valuation process, this estimated fair value presented by the General Partner may differ significantly from 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.

The Liquidity Fund at times may utilize foreign currency contracts to facilitate transactions in foreign securities and to manage the CIFs' currency exposure. Contracts to buy are used to acquire exposure to foreign currencies, while contracts to sell are used to hedge the CIFs' 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 CIFs' 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 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

The Liquidity 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, 2016, the Fund held MBSs of \$136,562,305 and ABSs of \$112,532,254.

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. The collateral is evaluated daily to ensure its fair value exceeds the current fair value of the repurchase agreements including accrued interest.

## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

### NOTES TO FINANCIAL STATEMENTS (Continued)

#### 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, 2016 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, 2016, the CIF held MBSs of \$265,466,194 and ABSs of \$41,266,798.

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, 2016 the CIF's holdings had a fair value of \$422,804 and a cost of \$781,791. 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.

Investments in securities not listed on security exchanges and investments in limited partnerships are carried at the general partner's June 30, 2016 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.

#### 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.

## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

### NOTES TO FINANCIAL STATEMENTS (Continued)

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 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, 2016, the CIF held ABSs, consisting of swaps and resulting in a fair value of (\$484,608).

#### 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. dollar-denominated 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 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, 2016, the CIF held ABSs, consisting of swaps and resulting in a fair value of (\$152,394).

#### 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.

Investments in securities not listed on security exchanges and investments in Business Development Corporations are carried at the general partner's June 30, 2016 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.

#### 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 CIFs' 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.

## NOTES TO FINANCIAL STATEMENTS (Continued)

Investing in forward currency contracts may increase the volatility of the CIFs' 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

The Emerging Market International Stock Fund at times may utilize foreign currency contracts to facilitate transactions in foreign securities and to manage the CIFs' currency exposure. Contracts to buy are used to acquire exposure to foreign currencies, while contracts to sell are used to hedge the CIFs' 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 CIFs' 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.

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, 2016 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.

Commercial Mortgage Fund

This CIF invested in commercial mortgage loans and Mortgage Backed Securities (MBSs) generally through indirect ownership vehicles such as trusts and corporations. As of June 30 2016 this CIF did not hold any MBSs and is no longer making new investments.

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, 2016 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.

## NOTES TO FINANCIAL STATEMENTS (Continued)

Fair values of the underlying investments are generally represented by cost unless there has been an additional arms-length indication of value, such as a public offering or a new investment by a third party.

**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 separately from the Net Change in Unrealized Gains and Losses 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 accounted for as a change in unrealized gain (loss). In the CIFs' 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 is 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

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**NOTES TO FINANCIAL STATEMENTS (Continued)**

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, 2016, the CIFs 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:**

<b>CIF</b>	<b>Cost</b>	<b>Fair Value</b>
Liquidity	\$395,526,850	\$390,159,202
Core Fixed Income	156,113,953	156,593,884
Inflation Linked Bond	5,579,739	5,558,883
Emerging Market Debt	1,600,024	1,475,941
High Yield Debt	28,406,423	27,441,344

**Asset Backed Securities:**

<b>CIF</b>	<b>Cost</b>	<b>Fair Value</b>
Liquidity	\$113,496,094	\$112,532,254
Core Fixed Income	40,825,819	41,266,798

**Mortgage Backed Securities, Net of CMO's:**

<b>CIF</b>	<b>Cost</b>	<b>Fair Value</b>
Liquidity	\$131,315,680	\$127,506,874
Core Fixed Income	175,574,210	176,313,668

**CMO's:**

<b>CIF</b>	<b>Cost</b>	<b>Fair Value</b>
Liquidity	\$9,015,170	\$9,055,431
Core Fixed Income	86,341,701	89,152,526

**TBA's:**

<b>CIF</b>	<b>Cost</b>	<b>Fair Value</b>
Core Fixed Income	\$41,310,353	\$41,236,111

**Interest Only:**

<b>CIF</b>	<b>Cost</b>	<b>Fair Value</b>
Core Fixed Income	\$781,791	\$422,804

**Options:**

<b>CIF</b>	<b>Cost</b>	<b>Fair Value</b>
Inflation Linked Bond	\$1,287,671	\$1,280,722

The Inflation Linked Bond Fund held futures with a negative notional cost of (\$23,281,755) and an unrealized loss of \$862,485 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 \$51,494,608 and an unrealized loss of \$1,022,698 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 CIFs' credit exposure resulting from such investments is limited to the recorded fair value of the derivative financial instruments.

The Liquidity, Mutual Equity, Emerging Market Debt, and the Emerging Market International Stock Funds also 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.

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**NOTES TO FINANCIAL STATEMENTS (Continued)**

**I. COMBINATION/ELIMINATION ENTRY**

The financial statements depict a full presentation of each of the CIFs. 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 CIFs 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 CIFs. 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 CIFs 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, 2016:

CIF	Netted	Capitalized	Expensed	Total
Alternative Investment	\$ 8,931,858	\$ 2,846,855	\$ -	\$11,778,713
Core Fixed Income	1,802,140	-	2,592,136	4,394,276
Private Investment	12,317,501	14,331,916	3,039,252	29,688,669
Real Estate	11,443,059	3,737,069	7,554,325	22,734,453

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 presented on the Statement of Changes in Net Position. There were no such transactions for the fiscal year ended June 30, 2016.

The Liquidity, Mutual Equity, Emerging Market Debt and the Emerging Market International Stock funds include investments in a limited partnership and 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, 2016:

CIF	Amount
Liquidity	\$ 197,490
Emerging Market Debt	4,313,152
Developed Market International Stock	6,290
Emerging Market International Stock	895,614

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 presentation. Refer to Footnote 1A for details of prior year restatement.

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**NOTES TO FINANCIAL STATEMENTS (Continued)**

**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, 2016, the reported amount of Funds deposits were \$40,130,558 and the bank balance was \$40,130,558. Of the bank amount, \$40,130,558 was uncollateralized and uninsured. Through the Securities Lending Program \$2,592,319,864 was collateralized with securities held by the counterparty's trust department or agent but not in the State's name.

**Investments:**

The CIFs measures and records its investments using fair value measurement guidelines established by GAAP. The guidelines recognize a three tiered 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, 2016 the CIFs have the following recurring fair value measurements.

Investments by Fair Value Level	Fair Value Measurements			
	Total	Level 1	Level 2	Level 3
Liquidity Fund	\$ -	\$ -	\$ -	\$ -
Cash Equivalents	77,376,937	-	77,376,937	-
Asset Backed Securities	153,162,050	-	153,162,050	-
Government Securities	3,057,456,366	1,162,573,371	1,894,882,995	-
Government Agency Securities	645,770,796	-	645,770,796	-
Mortgage Backed Securities	402,028,499	-	402,028,499	-
Corporate Debt	3,046,435,721	-	2,954,600,338	91,835,383
Convertible Securities	53,746,472	-	53,746,472	-
Common Stock	13,540,538,586	13,540,538,586	-	-
Preferred Stock	87,632,478	78,400,137	9,232,341	-
Real Estate Investment Trust	385,414,819	324,389,630	61,025,189	-
Mutual Fund	703,637,455	171,221,274	-	532,416,181
Limited Partnerships (publicly traded)	2,199,494	2,199,494	-	-
<b>Total</b>	<b>\$22,155,399,673</b>	<b>\$15,279,322,492</b>	<b>\$6,251,825,617</b>	<b>\$624,251,564</b>

## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

### NOTES TO FINANCIAL STATEMENTS (Continued)

Investments Measured at the Net Asset Value (NAV)		Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Business Development Corporation	99,611,605	\$ 45,102,415	Illiquid	N/A
Limited Liability Corporation	1,156,486	-	Illiquid	N/A
Trusts	530,040	-	Illiquid	N/A
Limited Partnerships	6,949,357,197	1,394,251,307	Illiquid	N/A
Total	<u>7,050,655,328</u>	<u>\$ 1,439,353,722</u>		
Total Investments in Securities at Fair Value	<u>\$29,206,055,001</u>			

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 CIFs minimizes 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 CIFs 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 2016 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	\$ 2,484,426,101	33.42%
Aa	573,991,097	7.72
A	672,190,956	9.04
Baa	691,469,342	9.30
Ba	631,841,195	8.50
B	805,210,744	10.83
Caa	296,878,037	3.99
Ca	11,476,150	0.15
C	1,591,657	0.02
Prime 1	374,671,001	5.04
Prime 2	10,394,004	0.14
U.S. Government fixed income securities (not rated)	50,177,985	0.67
Non US Government fixed income securities (not rated)	234,256,464	3.15
Not Rated	597,402,108	8.03
	<u>\$7,435,976,841</u>	<u>100.00%</u>

The investments in the Private Equity, Real Estate, Alternative Investment and Commercial Mortgage 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 CIFs. 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 \$2,592,319,864 is invested in various short term repurchase agreements classified which is 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. 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

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**NOTES TO FINANCIAL STATEMENTS (Continued)**

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 Type	Fair Value	Investment Maturities (in Years)			
		Less Than 1	1 - 5	6 - 10	More Than 10
Cash Equivalents	\$ 77,376,937	\$ 77,376,937	\$ -	\$ -	\$ -
Asset Backed Securities	153,162,050	9,210,825	118,312,419	15,123,816	10,514,990
Government Securities	3,057,456,366	118,521,633	1,186,623,002	695,702,548	1,056,609,183
Government Agency Securities	645,770,796	61,642,783	82,929,095	5,727,094	495,471,824
Mortgage Backed Securities	402,028,499	603,345	66,980,217	86,395,581	248,049,356
Corporate Debt	3,046,435,721	776,155,655	1,090,122,205	892,977,763	287,180,098
Convertible Debt	53,746,472	4,886,303	17,416,554	610,000	30,833,615
	<u>\$7,435,976,841</u>	<u>\$1,048,397,481</u>	<u>\$2,562,383,492</u>	<u>\$1,696,536,802</u>	<u>\$2,128,659,066</u>

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 utilizes 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.

Foreign Currency	Total	Fixed Income Securities					Equities			
		Cash Equiv	Government	Corporate	Asset	Mortgage	Common	Preferred	Real Estate	
		Cash	Securities	Debt	Backed	Backed	Stock	Stock	Investment	
		Collateral							Trust	
Argentine Peso	\$49,128	\$49,128	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Australian Dollar	390,816,445	928,085	48,244	87,102,296	7,711,934	-	265,851,437	-	29,174,449	
Brazilian Real	238,390,550	3,397,259	-	86,698,970	-	-	134,188,334	14,105,987	-	
Canadian Dollar	113,770,386	527,215	-	25,029,327	-	-	85,814,710	-	2,399,134	
Chilean Peso	4,367,452	42,899	-	151,799	-	-	4,172,754	-	-	
Colombian Peso	34,735,280	4,781	-	32,146,758	2,387,180	-	196,561	-	-	
Czech Koruna	792,549	134	-	-	-	-	792,415	-	-	
Danish Krone	85,553,243	193,720	-	1,259,628	-	-	84,099,895	-	-	
Egyptian Pound	3,812,967	293,910	-	-	-	-	3,519,057	-	-	
Euro Currency	1,805,613,094	944,585	(5,275)	233,894,118	2,084,181	167,934	1,541,800,340	12,857,972	13,869,239	
Hong Kong Dollar	558,797,653	1,384,595	-	-	-	-	551,403,575	-	6,009,483	
Hungarian Forint	35,222,573	1,992	-	8,779,311	-	-	26,441,270	-	-	
Iceland Krona	1,935	1,935	-	-	-	-	-	-	-	
Indian Rupee	1,251,513	-	-	1,251,513	-	-	-	-	-	
Indonesian Rupiah	110,265,371	77,494	-	50,759,520	2,587,292	-	56,841,065	-	-	
Israeli Shekel	20,503,712	216,057	-	-	-	-	20,287,655	-	-	
Japanese Yen	1,190,721,468	7,565,247	-	49,955,630	-	-	1,124,737,398	-	8,463,193	
Malaysian Ringgit	83,394,103	29,836	-	65,236,468	-	-	18,127,799	-	-	
Mexican Peso	194,423,156	2,017,503	-	142,149,104	3,598,367	-	43,813,318	-	2,844,864	
New Turkish Lira	153,017,221	2,276	-	48,073,417	-	-	104,941,528	-	-	
New Zealand Dollar	163,784,350	1,406,870	-	149,078,103	-	-	13,299,377	-	-	
Nigerian Naira	180,891	10,777	-	-	-	-	170,114	-	-	
Norwegian Krone	54,991,588	567,001	-	11,187,584	-	-	43,237,003	-	-	
Peruvian Nouveau Sol	4,009,209	-	-	4,009,209	-	-	-	-	-	
Philippine Peso	51,451,556	6,376	-	1,150,207	-	-	50,294,973	-	-	
Polish Zloty	108,855,963	36,054	-	80,536,427	-	-	28,283,482	-	-	
Pound Sterling	1,135,613,232	2,875,225	44,215	235,943,998	8,003,346	8,148,936	868,703,662	-	11,893,850	
Romanian Leu	3,945,934	-	-	3,945,934	-	-	-	-	-	
Russian Ruble	27,352,704	-	-	27,352,704	-	-	-	-	-	
Singapore Dollar	85,880,285	534,036	-	8,241,092	-	-	71,780,120	-	5,325,037	
South African Rand	180,584,785	914,112	-	81,865,199	-	-	97,194,977	-	610,497	
South Korean Won	323,171,394	66,308	-	495,516	-	-	311,607,136	11,002,434	-	
Sri Lanka Rupee	29,107	-	-	-	-	-	29,107	-	-	
Swedish Krona	156,962,768	183,916	-	7,603,079	-	-	149,175,773	-	-	
Swiss Franc	446,233,360	544,745	-	-	-	-	445,688,615	-	-	
Thailand Baht	103,606,459	240,405	-	19,602,523	-	-	83,554,949	-	208,582	
Uruguayan Peso	1,211,965	-	-	1,211,965	-	-	-	-	-	
	<u>\$ 7,873,365,349</u>	<u>\$25,064,476</u>	<u>\$87,184</u>	<u>\$1,463,459,886</u>	<u>\$27,623,813</u>	<u>\$167,934</u>	<u>\$8,148,936</u>	<u>\$6,230,048,399</u>	<u>\$37,966,393</u>	<u>\$80,798,328</u>

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**NOTES TO FINANCIAL STATEMENTS (Continued)**

**Securities Lending:**

Certain of the CIFs engage in securities lending transactions to provide incremental returns. The CIFs are permitted to enter into securities lending transactions pursuant to Section 3-13d of the Connecticut General Statutes. The CIFs' 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, 2016, 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 CIFs 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, 2016, the CIFs had no credit risk exposure to borrowers. The fair value of collateral held for the CIFs as of June 30, 2016 was \$2,590,852,210 as cash. The fair value of securities on loan for the CIFs as of June 30, 2016 was \$2,512,576,015 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, 2016, the cash collateral investment pool had an average duration of 49.46 days and an average weighted final maturity 57.77 days.

The fair value of collateral held and the fair value of securities on loan including pending loans (to be collateralized) are as follows for the CIFs as of June 30, 2016:

<b>CIF</b>	<b>Fair Value of Collateral</b>	<b>Fair Value of Securities Lent</b>
Mutual Equity	\$1,383,880,687	\$1,352,451,954
Core Fixed Income	151,276,599	148,202,880
Inflation Linked Bond	313,610,704	307,734,982
Emerging Market Debt	20,609,401	20,225,605
High Yield Investment	368,090,617	359,879,944
Developed Market International Stock	133,169,091	127,651,632
Emerging Market International Stock	225,960,929	219,752,917
	<u>\$2,596,598,028</u>	<u>\$2,535,899,914</u>

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:

<b>CIF</b>	<b>Cash Equivalents</b>
Mutual Equity	\$1,384,664,622
Core Fixed Income	151,362,300
Inflation Linked Bond	313,788,362
Emerging Market Debt	20,621,072
High Yield Investment	368,299,121
Developed Market International Stock	127,495,452
Emerging Market International Stock	226,088,935
Total	<u>\$2,592,319,864</u>

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

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**NOTES TO FINANCIAL STATEMENTS (Continued)**

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

For the period ended June 30, 2016, the aggregate cost of purchases and proceeds from sales of investment securities were as follows:

<b>CIF</b>	<b>Purchases</b>	<b>Sales</b>
Alternative Investment	\$211,043,852	\$115,774,223
Mutual Equity	2,797,267,099	2,923,493,101
Core Fixed Income	7,024,451,385	7,194,558,780
Inflation Linked Bond	1,610,075,792	1,440,716,076
Emerging Market Debt	959,181,367	820,049,691
High Yield Investment	1,312,710,583	1,161,968,225
Developed Market International Stock	3,187,922,937	3,207,908,207
Emerging Market International Stock	2,487,003,518	2,272,413,598
Real Estate	1,367,277,038	1,188,407,361
Commercial Mortgage	15,619	29,882
Private Investment	2,014,045,589	1,993,268,078

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, 2016, 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 CIF were as follows:

<b>CIF</b>	<b>Gross Appreciation</b>	<b>Gross Depreciation</b>	<b>Net Appreciation (Depreciation)</b>
Liquidity Investment Fund	\$8,829,482	\$27,346,439	\$(18,516,957)
Alternative Investment Fund	137,368,643	38,992,620	98,376,023
Mutual Equity	2,193,222,954	226,770,462	1,966,452,492
Core Fixed Income	80,575,351	31,943,744	48,631,607
Inflation Linked Bond	36,373,585	53,223,059	(16,849,474)
Emerging Market Debt	28,495,033	121,846,973	(93,351,940)
High Yield Investment	47,354,223	144,326,314	(96,972,091)
Developed Market International Stock	844,136,941	599,802,486	244,334,455
Emerging Market International Stock	365,591,666	203,854,357	161,737,309
Real Estate	341,426,073	75,033,260	266,392,813
Commercial Mortgage	-	-	-
Private Investment Fund	680,913,736	218,121,937	462,791,799

**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 CIFs' currency exposure. Contracts to buy are used to acquire exposure to foreign currencies, while contracts to sell are used to hedge the CIFs' 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 CIFs' 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.

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**NOTES TO FINANCIAL STATEMENTS (Continued)**

At June 30, 2016, the CIFs had recorded unrealized gains (losses) from open forward currency contracts as follows:

**Liquidity Funds:**

<u>Local Currency Name</u>	<u>Value</u>	<u>Unrealized Gain/(Loss)</u>
<b>Contracts to Buy:</b>		
Argentina Peso	\$3,608,005	\$(49,180)
Brazil Real	3,746,621	524,127
Chilean Peso	2,137,000	93,000
Chinese Yuan Renminbi	5,785,000	(111,497)
Colombian Peso	7,510,000	162,172
Dominican Rep Peso	5,401,757	3,339
Egyptian Pound	2,754,653	(102,707)
Euro Currency Unit	9,176,958	(83,708)
Hungarian Forint	1,111,827	(15,632)
Indian Rupee	4,734,178	10,694
Indonesian Rupiah	3,380,642	45,569
Israeli Shekel	7,587,090	29,481
Kazakhstan Tenge	1,900,000	(7,253)
Malaysian Ringgit	3,589,885	85,102
Mexican Peso	992,000	12,922
Norwegian Krone	1,790,152	(53,813)
Philippines Peso	3,958,000	(21,769)
Polish Zloty	4,802,398	(167,139)
Pound Sterling	11,088,426	(541,752)
Romanian Leu	2,846,067	(58,921)
Russian Ruble (New)	11,432,000	246,331
South African Rand	10,146,208	133,579
South Korean Won	2,884,000	29,299
Swedish Krona	2,951,243	(61,584)
Thailand Baht	4,253,678	30,539
Turkish Lira	7,648,000	151,908
Uganda Shilling	4,318,001	(1,883)
Uruguayan Peso	2,533,078	128,730
	<u>134,066,867</u>	<u>409,954</u>

**Contracts to Sell:**

Argentina Peso	667,653	1,620
Australian Dollar	36,485,473	(367,250)
Brazil Real	5,010,265	(958,796)
Canadian Dollar	8,234,883	24,946
Chinese Yuan Renminbi	4,776,000	36,647
Colombian Peso	1,868,418	(12,630)
Dominican Rep Peso	205,300	1,273
Egyptian Pound	2,762,012	110,066
Euro Currency Unit	18,610,375	264,471
Hungarian Forint	1,047,000	(17,130)
Indonesian Rupiah	2,361,000	(20,960)
Israeli Shekel	2,775,044	(27,976)
Japanese Yen	3,250,827	(200,292)
Malaysian Ringgit	15,124,568	(225,264)
Mexican Peso	29,304,839	509,927
New Zealand Dollar	52,819,164	(846,730)
Philippines Peso	2,063,000	19,427
Polish Zloty	25,820,295	496,060
Pound Sterling	19,443,023	984,847
Romanian Leu Total	-	56,725
Russian Ruble (New)	5,267,897	(64,532)
Singapore Dollar	8,056,077	(152,436)
South African Rand	19,282,422	(366,670)
Thailand Baht	1,422,298	1,699
Turkish Lira	3,866,239	(38,156)
Uganda Shilling	1,024,883	(926)
	<u>271,548,955</u>	<u>(792,040)</u>
Total	<u>\$ 405,615,822</u>	<u>\$ (382,086)</u>

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**NOTES TO FINANCIAL STATEMENTS (Continued)**

**Financial Statement Amounts:**

	Receivable	Payable	Net
FX Value	\$ 405,615,822	\$ 405,615,822	\$ -
Unrealized Gain/Loss	409,954	(792,040)	(382,086)
Net	<u>\$ 406,025,776</u>	<u>\$ 406,407,862</u>	<u>\$ (382,086)</u>

**Inflation Linked Bond Fund:**

Local Currency Name	Value	Unrealized Gain/(Loss)
<b>Contracts to Buy:</b>		
Australian Dollar	\$ 11,396,121	\$ 154,370
Canadian Dollar	7,921,461	(63,447)
Danish Krone	189,100	(1,529)
Euro Currency Unit	53,391,947	(282,391)
Japanese Yen	36,254,104	1,106,083
Malaysian Ringgit	14,606,649	280,297
Mexican Peso	7,591,158	45,645
New Zealand Dollar	6,904,745	7,334
Norwegian Krone	28,480,115	(749,923)
Polish Zloty	4,073,641	(58,497)
Pound Sterling	170,396,933	(7,912,740)
South African Rand	9,593,051	437,271
Swedish Krona	41,132,365	(1,404,574)
Swiss Franc	1,280,000	(15,900)
	<u>393,211,390</u>	<u>(8,458,001)</u>

**Contracts to Sell:**

Australian Dollar	49,525,397	(482,892)
Brazil Real	11,300,846	(948,726)
Canadian Dollar	2,220,342	(12,853)
Danish Krone	30,845	206
Euro Currency Unit	39,729,791	162,858
Japanese Yen	13,006,558	(181,284)
Mexican Peso	19,339,936	83,913
New Zealand Dollar	91,611,571	(1,600,477)
Norwegian Krone	971,625	(13,074)
Polish Zloty	2,897,366	26,494
Pound Sterling	27,181,214	617,386
South African Rand	2,425,573	(169,344)
Swedish Krona	5,270,649	133,742
	<u>265,511,713</u>	<u>(2,384,051)</u>
Grand total	<u>\$ 658,723,103</u>	<u>\$ (10,842,052)</u>

**Financial Statement Amounts:**

	Receivable	Payable	Net
FX Value	\$ 658,723,103	\$ 658,723,103	\$ -
Unrealized Gain/Loss	(8,458,001)	(2,384,051)	(10,842,052)
Net	<u>\$ 650,265,102</u>	<u>\$ 661,107,154</u>	<u>\$ (10,842,052)</u>

**Emerging Market Debt Fund:**

Local Currency Name	Value	Unrealized Gain/(Loss)
<b>Contracts to Buy:</b>		
Brazil Real	\$ 12,814,021	\$ 611,289
Euro Currency Unit	18,962,176	(182,629)
Hungarian Forint	4,224,000	(182,886)
Malaysian Ringgit	3,340,186	37,108
Peruvian Sol	5,181,875	66,653
Romanian Leu	10,270,587	(275,101)
Russian Ruble (New)	1,359,018	57,771
South African Rand	5,117,473	230,434
Thailand Baht	7,526,230	20,732
	<u>68,795,566</u>	<u>383,371</u>

**Contracts to Sell:**

Brazil Real	24,209,073	(1,942,861)
Colombian Peso	1,382,285	(35,625)
Euro Currency Unit	28,296,464	228,878
Indonesian Rupiah	3,466,958	(21,767)

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**NOTES TO FINANCIAL STATEMENTS (Continued)**

Mexican Peso	4,441,589	(70,512)
Polish Zloty	7,823,880	(157,521)
Russian Ruble (New)	5,660,600	(201,522)
South African Rand	20,764,575	(914,460)
Thailand Baht	4,642,856	(40,484)
Turkish Lira	2,437,801	(31,813)
	<u>103,126,081</u>	<u>(3,187,687)</u>
Total	<u>\$ 171,921,647</u>	<u>\$ (2,804,316)</u>

**Financial Statement Amounts:**

	Receivable	Payable	Net
FX Value	\$ 171,921,647	\$ 171,921,647	\$ -
Unrealized Gain/Loss	383,371	(3,187,687)	(2,804,316)
Net	<u>\$ 172,305,018</u>	<u>\$ 175,109,334</u>	<u>\$ (2,804,316)</u>

**High Yield Debt Fund:**

Local Currency Name	Value	Unrealized Gain/(Loss)
<b>Contracts to Buy:</b>		
Euro Currency Unit	\$ 2,952,707	\$ (14,406)
Pound Sterling	4,160,271	(63,712)
	<u>7,112,978</u>	<u>(78,118)</u>

**Contracts to Sell:**

Euro Currency Unit	4,837,782	17,626
Pound Sterling	7,457,332	341,216
	<u>12,295,114</u>	<u>358,842</u>
Grand total	<u>\$ 19,408,092</u>	<u>\$ 280,724</u>

**Financial Statement Amounts:**

	Receivable	Payable	Net
FX Value	\$ 19,408,092	\$ 19,408,092	\$ -
Unrealized Gain/Loss	(78,118)	358,842	280,724
Net	<u>\$ 19,329,974</u>	<u>\$ 19,049,250</u>	<u>\$ 280,724</u>

**Developed Market International Stock Fund:**

Local Currency Name	Value	Unrealized Gain/(Loss)
<b>Contracts to Buy:</b>		
Australian Dollar	\$ 498,452,262	\$ 14,915,319
Brazil Real	1,923,032	17,293
Canadian Dollar	469,281,563	(185,304)
Danish Krone	21,021,850	(153,511)
Euro Currency Unit	920,256,990	(3,819,082)
Hong Kong Dollar	9,832,230	7,670
Israeli Shekel	9,776,990	(41,817)
Japanese Yen	443,948,466	29,288,960
New Zealand Dollar	309,595,438	12,509,320
Norwegian Krone	571,644,460	(2,941,580)
Pound Sterling	461,411,069	(25,074,473)
Singapore Dollar	145,046,652	1,435,041
Swedish Krona	463,733,106	(8,370,329)
Swiss Franc	84,792,591	1,565,630
	<u>\$ 4,410,716,699</u>	<u>\$ 19,153,137</u>

**Contracts to Sell:**

Australian Dollar	821,066,042	(18,066,256)
Brazil Real	3,136	(28)
Canadian Dollar	445,427,286	647,030
Danish Krone	45,433,488	221,146
Euro Currency Unit	1,357,944,730	9,062,900
Hong Kong Dollar	78,113,438	(77,739)
Israeli Shekel	8,322,355	18,232
Japanese Yen	699,923,548	(43,363,067)
New Zealand Dollar	423,199,979	(15,383,941)
Norwegian Krone	592,438,119	2,931,912
Pound Sterling	686,202,974	53,762,806
Singapore Dollar	462,675,629	(9,014,139)
Swedish Krona	662,952,198	11,770,215

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**NOTES TO FINANCIAL STATEMENTS (Continued)**

Swiss Franc	302,676,625	(5,031,571)
	<u>6,586,379,547</u>	<u>(12,522,500)</u>
Total	<u>\$ 10,997,096,246</u>	<u>\$ 6,630,637</u>

**Financial Statement Amounts:**

	Receivable	Payable	Net
FX Value	\$10,997,096,246	\$ 10,997,096,246	\$ -
Unrealized Gain/Loss	19,153,137	(12,522,500)	6,630,637
Net	<u>\$11,016,249,383</u>	<u>\$ 11,009,618,746</u>	<u>\$ 6,630,637</u>

**Emerging Market International Stock Fund:**

Local Currency Name	Value	Unrealized Gain/(Loss)
<b>Contracts to Buy:</b>		
Indonesian Rupiah	\$ 492,484	\$ (1,998)
South Korean Won	1,434,450	(4,793)
	<u>\$ 1,926,934</u>	<u>\$ (6,791)</u>
<b>Contracts to Sell:</b>		
Brazil Real	531,949	(8,291)
Philippines Peso	142,751	80
Polish Zloty	2,963,207	(13,234)
South African Rand	4,485,530	(97,182)
South Korean Won	1,159,565	444
Thailand Baht	13,424	(32)
	<u>9,296,426</u>	<u>(118,215)</u>
Grand total	<u>\$ 11,223,360</u>	<u>\$ (125,006)</u>

**Financial Statement Amounts:**

	Receivable	Payable	Net
FX Value	\$ 11,223,360	\$ 11,223,360	\$ -
Unrealized Gain/Loss	(6,791)	(118,215)	(125,006)
Net	<u>\$ 11,216,569</u>	<u>\$ 11,341,575</u>	<u>\$ (125,006)</u>

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, Core Fixed Income and High Yield Investment Funds have outstanding commitments to make additional investments. These commitments will be fulfilled as suitable investment opportunities become available. Commitments at June 30, 2016, were as follows:

CIF	Total Commitment	Cumulative Amounts Funded	Unfunded Commitment
Real Estate	\$3,219,135,546	\$2,816,816,496	\$402,319,050
Private Investment	5,950,202,680	5,035,683,351	914,519,329
Alternative Investment	1,730,000,000	1,652,587,072	77,412,928
Core Fixed Income	550,000,000	550,000,000	-
High Yield	150,000,000	104,897,585	45,102,415

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.

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**NOTES TO FINANCIAL STATEMENTS (Continued)**

**NOTE 7: CONTINGENCY**

A limited partnership in the PIF invested \$15 million in a portfolio company that reported double digit revenue growth. In 2005, the General Partner initiated a sales process expecting to realize significant gain. Lack of cooperation from management challenged the sale process, resulting in legal action from the partnership and other investors in the portfolio company to force a sale. This process uncovered serious financial irregularities in the portfolio company, resulting in the removal and criminal investigation of the CEO and other senior managers. The portfolio company is currently in bankruptcy. In July 2008, the Bankruptcy Court approved the portfolio company's plan of liquidation. A liquidation trustee was appointed to oversee further liquidation efforts, including investigation and pursuit of potential litigation claims. The liquidation trustee has filed law suits or arbitration proceedings against certain parties, including the bank that issued the credit facility, the investment bank, an equipment manufacturer, accounting firms, and a law firm, among others. In January 2009, the liquidation trustee entered into a settlement agreement with the General Partner, exchanging mutual releases for the GP, the fund and its investors. Additionally, the settlement agreement provides for a sharing of recovery from further prosecution of the matter, including any settlement reached with the insurance carrier. Recoveries are anticipated to be quite modest, if at all. In 2009, the bank has filed a motion under seal which, if granted, may permit the bank to reduce any liability to the liquidation trustee by the proportionate amount that it can attribute to either the minority shareholders (including the fund). The liquidating trustee has prepared a motion to close out the bankruptcy case, which was heard on November 19, 2015. The bankruptcy was closed on November 20, 2015. No further recoveries from or related to Le-Natures' are expected.

**NOTE 8: SUBSEQUENT EVENT**

The CRPTF has performed an evaluation of subsequent events through December 30, 2016, the date the basic financial statements were available to be issued. No material events were identified.

**NOTE 9: COST BASIS OF INVESTMENTS**

The aggregate cost values of investments in the Funds are as follows at June 30, 2016:

	LIQUIDITY FUND	ALTERNATIVE INVESTMENT FUND	MUTUAL EQUITY FUND	CORE FIXED INCOME FUND	INFLATION LINKED BOND FUND
Investments in Securities, at Cost					
Liquidity Fund	\$ -	\$107,804,633	\$78,283,907	\$95,296,949	\$41,390,642
Cash Equivalents	83,124,000	-	-	-	447,437
Asset Backed Securities	113,496,094	-	-	40,825,819	417,438
Government Securities	516,755,304	-	-	487,410,010	1,288,936,764
Government Agency Securities	158,588,892	-	-	474,104,007	-
Mortgage Backed Securities	140,330,851	-	-	261,915,911	-
Corporate Debt	910,333,889	-	-	509,875,152	7,437,124
Convertible Securities	-	-	-	-	-
Common Stock	-	-	4,418,883,202	-	-
Preferred Stock	-	-	-	3,207,304	-
Real Estate Investment Trust	-	-	180,674,009	19,389,182	-
Business Development Corp	-	-	-	-	-
Mutual Fund	73,144,499	-	-	-	-
Limited Liability Corporation	-	-	-	-	-
Trusts	-	-	-	-	-
Limited Partnerships	-	1,598,156,411	3,188,575	550,000,000	-
Partnerships	-	-	-	-	-
Annuities	-	-	-	-	-
<b>Total Investments in Securities, at cost</b>	<b>\$1,995,773,529</b>	<b>\$1,705,961,044</b>	<b>\$4,681,029,693</b>	<b>\$2,442,024,334</b>	<b>\$1,338,629,405</b>

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**NOTES TO FINANCIAL STATEMENTS (Continued)**

<b>EMERGING MARKET DEBT FUND</b>	<b>HIGH YIELD DEBT FUND</b>	<b>DEVELOPED MARKET INTERNATIONAL STOCK FUND</b>	<b>EMERGING MARKET INTERNATIONAL STOCK FUND</b>	<b>REAL ESTATE FUND</b>	<b>COMMERCIAL MORTGAGE FUND</b>	<b>PRIVATE INVESTMENT FUND</b>
\$40,634,007	\$80,562,150	\$116,015,528	\$88,154,230	\$142,263,113	\$83	\$168,164,892
2,610,000	(330,000)	(8,371,379)	-	-	-	-
-	-	-	-	-	-	-
788,216,141	26,509,301	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
108,185,237	1,577,986,814	-	-	-	-	-
-	51,159,801	-	-	-	-	-
395,023	13,176,036	4,744,853,436	2,077,558,132	-	-	38,401
-	10,898,312	14,706,653	34,791,950	-	-	-
-	40,300,588	74,113,941	356,581	-	-	-
-	104,897,585	-	-	-	-	-
580,014,799	-	1,977,184	104,484,985	-	-	-
-	-	-	-	-	-	1,432,734
-	-	-	-	1,441,633	-	-
57,069,345	-	-	-	1,797,298,913	-	2,137,008,093
-	-	-	-	-	-	-
-	-	-	-	-	-	-
<b>\$ 1,577,124,552</b>	<b>\$1,905,160,587</b>	<b>\$ 4,943,295,363</b>	<b>\$ 2,305,345,878</b>	<b>\$1,941,003,659</b>	<b>\$ 83</b>	<b>\$2,306,644,120</b>



# **Investment**

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# **Section**



# 2016 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” or “CRPTF”), the Treasurer is responsible for managing \$29.25 billion of investment assets for retirement plans serving approximately 212,000 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 (CIF) 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 CIF 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 fair value of the CRPTF’s investments under Treasury management has grown from approximately \$22.82 billion to approximately \$29.25 billion. The Teachers’ Retirement Fund (TERF), with approximately \$15.58 billion of assets under management at June 30, 2016, is the largest participating plan. The State Employees’ Retirement Fund (SERF) and the Connecticut Municipal Employees’ Retirement Fund (CMERF) have approximately \$10.64 billion and \$2.21 billion of assets, respectively.

CRPTF’s total investments in the CIF at fair value as of June 30, 2016 were:

INVESTMENT SUMMARY AT JUNE 30, 2016		
	Fair Value <sup>(1)(4)</sup>	% of Total Fund Fair Value
Liquidity Fund (LF) <sup>(2)</sup>	\$ 1,018,293,290	3.49%
Mutual Equity Fund (MEF)	6,647,482,185	22.76%
Developed Markets International Stock Fund (DMISF)	5,187,629,818	17.76%
Emerging Markets International Stock Fund (EMISF)	2,467,083,187	8.45%
Real Estate Fund (REF)	2,207,396,472	7.56%
Core Fixed Income Fund (CFIF)	2,490,655,941	8.53%
Inflation Linked Bond Fund (ILBF)	1,321,779,931	4.52%
Emerging Market Debt Fund (EMDF)	1,483,772,612	5.08%
High Yield Debt Fund (HYDF)	1,808,188,496	6.19%
Commercial Mortgage Fund (CMF) <sup>(3)</sup>	83	0.00%
Alternative Investment Fund (AIF)	1,804,337,067	6.18%
Private Investment Fund (PIF)	2,769,435,919	9.48%
Total Fund	\$29,206,055,001	100.00%

- (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.
- (3) 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.
- (4) Fair value differs from net assets (\$29.25 billion) as net assets includes additional balance sheet items.

## Fund Management

Under the supervision of a Chief Investment Officer, appointed by the Treasurer with the approval 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 14 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 2016, The Bank of New York Mellon (BNY Mellon) served as the custodian of record for the CRPTF, maintaining physical 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 money and investment managers to manage the portfolios underlying each CIF. Money and investment managers are selected based upon asset class expertise, investment performance and style. Investment and money managers are expected to comply with the parameters, guidelines, and restrictions set forth in the CRPTF's Investment Policy Statement (IPS). As of June 30, 2016, 159 external money and investment managers were employed by the Treasury to invest the pension and trust assets, an increase of 6 managers from June 30, 2015 (See Figure 1-5).

All operating overhead is allocated directly to the earnings of the pension and trust fund assets under management. The Office of the Treasurer manages assets in a cost-effective manner, consistent with the maximization of long-term returns.

## Investment Policy

Asset allocation decisions are responsible for as much as 90 percent of investment returns. In September 2012, the IAC approved the Treasurer's latest IPS, including the asset allocation plan, which governs the CRPTF investment portfolios and each of the CIF. Subsequently, in December 2012, January 2013, April 2013, and July 2013, 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, 2016, multiple asset classes were included in the IPS, including global public market equities and fixed income, as well as alternative investments such as real estate, private investments, hedge fund and real asset investment strategies.

At fiscal year-end, domestic, global developed and emerging markets equities (stocks) comprised the largest percentage of the total CRPTF, at approximately 49 percent. Publicly traded equities have an established record of maximizing investment returns over the long term. Fixed income 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 CIF 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. A broad array of asset classes is considered for inclusion in a potential asset allocation structure. Each asset class has its own distinct characteristics, as well as expectations for long-term return and risk behavior.

The asset classes that 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/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. As of June 30, 2016, the MEF structure was approximately 82.98 percent invested in large-cap stocks, 8.66 percent in small/mid-cap stocks, 8.05 percent in all-cap stocks, and 0.31 percent in cash equivalents and other net assets. The MEF's ten largest holdings, aggregating 14.63 percent of Fund investments, included a variety of blue chip companies and were broadly diversified, with the largest holding of 2.31 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 money 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 83 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-cap" sectors of the equity markets. Small- and mid-cap 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 money 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 money 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). The DMISF is comprised of passive indexing, core developed markets and opportunistic strategies. As of June 30, 2016, the DMISF structure was approximately 84.56 percent invested in large-cap stocks, 15.22 percent in small-cap stocks, and 0.22 percent in cash equivalents and other net assets. Mandates for active growth/value and small cap developed market strategies represent roughly 22.06 percent and 15.22 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 money managers. The EMISF is invested 100 percent in active, unhedged emerging markets strategies.

### ***Fixed Income Investments***

Fixed income assets are diversified across four types of 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 CIF serve to reduce the overall volatility of CRPTF

## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

returns under various economic scenarios. Further, the fixed income CIF 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 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, 2016, the CFIF structure approximated 25.8 percent invested in treasury/agency securities, 29.6 percent in corporate securities, 25.0 percent in mortgage-backed securities, 8.0 percent in asset-backed securities, and 11.6 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, 2016, the ILBF structure was comprised of securities from the following countries or regions: 40.6 percent in the U.S., 18.5 percent in the U.K., 15.4 percent in the Eurozone, 11.3 percent in Australia and New Zealand, 3.4 percent in Mexico and 10.8 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 (50/50). As of June 30, 2016, the EMDF structure approximated 34.0 percent invested in Latin America, 32.0 percent in Europe, 19.8 percent in Asia, 7.5 percent in Africa, 4.0 percent in the Middle East and 2.7 percent in cash equivalents and other 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 above market returns.

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, 2016, the HYDF structure approximated 93.8 percent invested in corporate securities, 1.4 percent in Treasury securities, and 4.8 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 structure enables each of the CIF to remain fully invested. While the majority of the LF is invested in money market instruments, there are allocations to intermediate maturities, developed market sovereign bonds and emerging market currencies. As of June 30, 2016, the LF structure approximated 47.4 percent invested in money market securities, 29.8 percent in short duration bond securities, and 22.8 percent in international sovereign bonds and currencies. 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/or 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

## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

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, 2016, the REF structure was approximately 52.0 percent invested in core, 25.8 percent in value-added, 15.7 percent in opportunistic and 6.5 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, 2016, the PIF structure was approximately 70.75 percent invested in corporate finance, 22.92 percent in venture, and 6.33 percent in cash equivalents and other net assets. The benchmark for PIF is the Standard & Poor's 500 Index (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 that are not easily classified, categorized, or described in other CIF. Hybrid strategies which contain multiple asset classes are also considered part of the opportunity set. As of June 30, 2016, the AIF structure was approximately 87.53 percent invested in hedge fund of funds, 5.66 percent in real assets, 0.83 percent in opportunistic, and 5.98 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 2016. As of June 30, 2016, securities with a market value of approximately \$2.5 billion had been loaned against collateral of approximately \$2.6 billion. Income generated by securities lending totaled \$21.1 million for the fiscal year.

## **The Year in Review**

### **Total Fund Performance**

For the fiscal year ending June 30, 2016, the CRPTF achieved an annual total return of 0.35 percent, net of expenses. The three largest pension plans, the Teachers' Retirement Fund, the State Employees' Retirement Fund and the Connecticut Municipal Employees' Retirement Fund – which represent 98 percent of total assets – returned 0.25 percent, 0.26 percent and 1.15 percent, respectively. During the fiscal year, the value of the CRPTF's net asset position decreased from approximately \$29.87 billion to \$29.25 billion. The CRPTF's performance for Fiscal Year 2016 added \$98.6 million of market value to pension assets. After net withdrawals of \$719.6 million (largely attributed to benefit payments of \$631.3 million that were greater than contributions), the CRPTF ended the fiscal year with net assets of \$29.25 billion – a decline of \$621.1 million or 2 percent from the previous year.

The MEF returned 1.75 percent for the fiscal year. The U.S. equity markets returned 2.1 percent with large capitalization companies outperforming small capitalization companies. The utilities sector was the

## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

best performing sector with a 28.4 percent return, while the energy sector was the worst performing sector with a -8.1 percent return. U.S. equity markets significantly outperformed developed international and emerging markets, and actively managed portfolios with a strong emphasis on higher quality stocks with strong fundamentals generally underperformed their passive peers.

International equity, which is comprised of both DMISF and EMISF, returned -7.09 percent and -7.15 percent, respectively. While the local currency return versus the market was about the same as the dollar return, there were differences across currencies. Most major currencies ended the fiscal year in the red versus the U.S. dollar due to the U.K. referendum to leave the European Union (Brexit). Most prominently, the pound Sterling lost 15.0 percent versus the U.S. dollar over the period, almost half of which resulted from the Brexit vote. The Japanese Yen was the exception to the trend as it rose 19.3 percent during the fiscal year versus the U.S. dollar. DMISF portfolio returns exceeded its benchmark, the MSCI EAFE, by 217 basis points. Overall, the MSCI EAFE index returned -10.2 percent in U.S. dollar terms. Value stocks significantly underperformed growth stocks by about 1,060 basis points and small capitalization stocks outperformed large capitalization stocks during the fiscal year. The EMISF portfolio returns exceeded its benchmark, the MSCI EM IMI, by 501 basis points. Factors that contributed to negative performance early in the fiscal year included fears over a slowdown in China, Brazil's deteriorating economic outlook, weakening global growth and higher U.S. interest rates. Towards the second half of the year, oil prices rebounded and central banks around the world continued to ease monetary policy.

The EMDF, CFIF, HYDF and ILBF returned 6.01 percent, 3.46 percent, -0.31 percent and 2.29 percent, respectively, for the fiscal year. Core fixed income markets generated a positive return of approximately 6.0 percent during a very volatile 2016 fiscal year. The yield curve flattened and rates fell compared to the beginning of the period, driven by global financial and political developments (such as the sharp devaluation of the Chinese Renminbi in August 2015 and Brexit in June 2016), anemic worldwide growth, a delay in the anticipated path to policy normalization by the Federal Reserve Bank, loosening monetary policies in other countries and a sharp fall in oil prices. While interest rates moved markedly lower, credit spreads widened and narrowed multiple times during the fiscal year before settling back to levels similar to the beginning of the period, albeit at dramatically lower yields. Longer-dated instruments outperformed those with shorter durations over the period. Positive performance in core fixed income as well as high yield and emerging market debt holdings helped to offset negative performance in inflation linked bonds. This demonstrates the role of diversification in helping to provide steady long term returns with reduced volatility.

The PIF returned a strong 8.87 percent for Fiscal Year 2016, outperforming its public market equivalent benchmark, the S&P 500, return of 3.99 percent. Overall fundraising for global private equity totaled \$302.1 billion during the fiscal year, representing a 10.2 percent decrease from the prior year, while funds invested \$204.1 billion, representing a decrease of 6.3 percent. Buyout funds raised \$195.0 billion, while the funds invested \$81.2 billion. The average investment size for private equity funds during the fiscal year was \$15.3 million and the average U.S. buyout purchase price was 10.0X earnings before income taxes, depreciation and amortization. The venture capital industry demonstrated strong levels of fundraising and steady levels of investment and exits during the fiscal year.

The Real Estate Fund generally met its NCREIF benchmark, returning 11.51 percent versus the NCREIF return of 11.84 percent, driven by strong performance in open-ended core and core plus funds and new value-added strategies. Over three and five years, the REF returned 11.70 percent and 10.49 percent, indicating continued healthy fundamentals and rising property valuations across the market. The fund remains well diversified, with strong income generation versus the current low yield environment, and a lower volatility than the benchmark.

The Alternative Investment Fund, which invests in hedge funds, real assets and other opportunistic investments, returned a -5.32 percent versus its 90-day T-Bill benchmark return of 0.19 percent. The AIF was designed to reallocate funds into the most promising, risk adjusted market opportunities. During the year, hedge fund strategies generated negative returns due to market volatility, steep commodity losses and the widening of credit spreads. Losses in equity long/short, event driven, and relative-value strategies were slightly offset by gains in global macro strategies.

## 2016 Management Initiatives

The continued implementation in Fiscal Year 2016 of the CRPTF investment pacing plans established for real estate, alternative investment and private equity opportunities led to a total of \$390 million of new investment capital. Two private investment partnerships totaling \$175 million, two real estate investment partnerships totaling \$130 million and one alternative investment partnership for \$85 million were awarded. Separately, Treasurer Nappier began funding her in-state opportunistic investment mandate, first presented in Fiscal Year 2015, with a \$75 million allocation to the Private Investment Fund. In the CRPTF public market portfolios, the Treasurer hired three investment managers for the Emerging Markets Debt Fund mandate. At fiscal year end, due diligence was completed for the High Yield Debt Fund mandate, with investment manager hiring decisions pending. Both of these public market assignments were effected through competitive searches.

During Fiscal Year 2016, Treasurer Nappier hired StepStone Group as the new PIF consultant. Additionally, at the end of Fiscal Year 2016, a request for proposals was issued for a general investment consultant, with a hiring decision expected in 2017.

The Connecticut Horizon Fund, created in 2004, is an aggregate of public and private market funds. The CHF is a \$1 billion fund-of-funds public market program and additionally includes a \$155 million private equity allocation and a \$170 million alternative investment allocation designed to provide the Office of the Treasurer access to a wider number of women-owned, minority-owned, Connecticut-based and emerging firms. In Fiscal Year 2016, public market managers totaled 36 CHF sub-managers; emerging firms represented the largest allocation of total assets at 75 percent; minority-owned firms represented 42 percent; women-owned firms represented 31 percent and Connecticut-based firms represented 19 percent of total assets. As many investment firms are owned by individuals that represent more than one demographic category, the aggregate percentages exceed 100 percent. Additionally, there were 21 private equity sub-managers; including 8 minority-owned, 3 emerging strategies, 1 women-owned and 9 Connecticut-based firms. Finally, there were 24 alternative investment sub-managers; the breakdown includes 21 emerging strategies, 12 minority-owned, 5 Connecticut-based and 4 women-owned firms.

Expansion of the diversity of firms with which PFM does business continued during Fiscal Year 2016; overall, 36 minority-owned, women-owned, Connecticut-based and emerging firms, comprised 28 percent of the firms doing business with the Division. These firms earned fees of \$37.2 million, representing nearly 38 percent of all investment advisory fees paid by the Division.

## Corporate Governance

In carrying out her fiduciary responsibilities, and in conformance with state law, the Treasurer considers the financial implications on long-term shareholder value of a portfolio company's environmental, social and governance corporate 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, available on the Treasury's website, incorporate best practices on corporate structure, administration and control to reduce risk, encourage sustainability and increase opportunities for growth.

In Fiscal Year 2016, the Office of the Treasurer filed shareholder resolutions at 18 companies, and held discussions with corporate leaders of more than 25 companies about shareholder concerns. To support its efforts, the Office worked with a broad cross section of investors representing public pension funds, investment firms, labor funds, and faith-based investors.

Board diversity was among the key areas of focus for the Office during Fiscal Year 2016. The Treasurer supported, and the CRPTF voted in favor of, three shareholder resolutions requesting a report on companies' efforts to increase gender and racial diversity on their boards. In September 2015, the Office of the Treasurer and the University of Connecticut hosted a forum, *Women in the Corporate Boardroom: A Business Imperative for American Companies*, featuring panelist discussions concerning the link between increased representation of women on corporate boards and the creation of long-term shareholder value.

## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

A second area of focus was access to the proxy. The CRPTF garnered majority votes for resolutions filed at three companies that called on them to allow an individual shareholder or a group of shareholders that have held three percent of a company's common stock for at least three years to nominate up to a quarter of the number of directors for the board of directors. All shareholders of a company would then have the opportunity to elect directors to serve on the company's board. In addition to these majority votes, the CRPTF reached agreements at three companies whose boards agreed to support access to the proxy.

The CRPTF also filed a shareholder resolution at the only gun manufacturer held in CRPTF's portfolio calling for adoption of the Sandy Hook Principles, a set of measures aimed at curbing gun violence, keeping guns out of the hands of children and those with mental health problems, and encouraging gun and ammunition manufacturers and retailers to adopt responsible conduct and business practices. These principles, developed by the U.S. Conference of Mayors, followed the 2012 shooting deaths of 20 children and 6 adults at Sandy Hook Elementary School in Newtown, Connecticut.

In the area of climate change and related energy issues, the Office continued its work in conjunction with the Investor Network on Climate Risk (INCR) in advocating that the U.S. Environmental Protection Agency and the National Highway Traffic Safety Administration strengthen standards governing greenhouse gas emissions and fuel efficiency for certain vehicles. In addition, Connecticut joined members of the Ceres Investor Network on Climate Risk, as well as other international investor groups comprising the Global Investor Coalition on Climate Change, in calling on the Securities and Exchange Commission to focus on climate change and carbon asset risk as material issues and to take steps to improve disclosure by registrants on how these issues are impacting their businesses.

Copies of the CRPTF's proxy voting policies and a report of proxy votes cast are available for review and download at the Treasury website, [www.ott.ct.gov/pension\\_guidelines.html](http://www.ott.ct.gov/pension_guidelines.html).

### ***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 2016, the Treasurer's Office continued to restrict the CRPTF's managers from investing in two companies for failure to implement the MacBride 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 2016, the Treasurer's Office restricted the CRPTF's managers from investing in the following 11 companies and 6 subsidiaries: Bharat Heavy Electricals Ltd.; China North Industries Group and its subsidiaries AKM Industrial Co. Ltd., China North Industries Corporation a.k.a. NORINCO, NORINCO International Cooperation Ltd., North Huajin Chemical Industries Co. Ltd. (f.k.a. Liaoning Huajin Tongda Chemicals Co. Ltd.), North Navigation Control Technology Co. Ltd. (f.k.a. China North Optical-Electrical Technology Co. Ltd.), and Sichuan Nitrocell Co. Ltd.; China Petroleum and Chemical Corp.; CNPC (Hong Kong); Dongfeng Motor Corporation; Jiangxi Hongdu Aviation Industry Ltd.; MISC Bhd; Oil and Natural Gas Corp.; 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 2016, the Treasurer's Office prohibited direct investment in five companies and nine subsidiaries: China National Offshore Oil Corporation and its subsidiaries China Oilfield Services Ltd., China Bluechemical, Offshore Oil Engineering Co., and CNOOC; Daelim Industrial Co. Ltd.; Indian Oil Corporation Ltd. and its subsidiaries IBP Co. Ltd., Chennai Petroleum Corp. Ltd., Lanka Ioc plc, and Bongaigaon Refinery & Petrochemicals; Oil India Ltd.; and Petroleos de Venezuela S.A. and its subsidiary Ca La Electricidad de Caracas.

## 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 of the vendors of the Office. The Office maintains regular contact with other similar governmental offices and institutional investors, sharing ideas for enhancement of contract language, and 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 clarify misunderstanding. The Office, however, is 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 extra-judicial conclusion. During the six years 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 provides leadership nationally in efforts by institutional investors to address Morrison-related matters, including producing a white paper on the legal and regulatory construct of countries in Europe, Asia, and South America as well as Australia, Mexico and the Canadian provinces.

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

The Combined Investment Funds recovered \$3.3 million from class action settlements in the fiscal year ended June 30, 2016. The Office continues to closely monitor opportunities to recover lost assets through participation in class action litigation.

The Office of the Treasurer, as the Trustee for the CRPTF, was the 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 court in Amgen approved the class certification motion. Following significant procedural proceedings, including a Supreme Court opinion in favor of the plaintiffs, the matter was remanded to trial. The case settled for \$95 million prior to the commencement of the trial.

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

Litigation has not been required for corporate governance matters in the 2016 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***

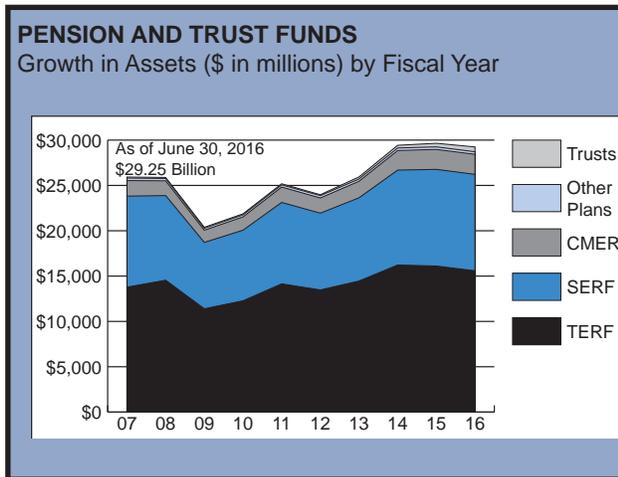
The Office of the Treasurer continues its participation in group action in Belgium adverse Fortis, N.A., France adverse Vivendi, S.A., Japan adverse Olympus and in Texas' state court adverse BP. The Fortis and Olympus matters have announced settlements, which are awaiting court approval. The Office has evaluated the merits of joining other foreign group action during the fiscal year. Participation in such group action became necessary as the Supreme Court's decision in *Morrison* foreclosed all other avenues of recovery in matters of securities fraud.

## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

Figure 1-1

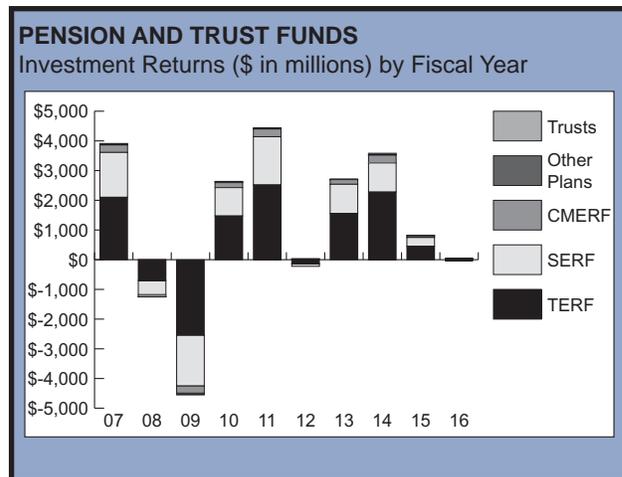
PENSION AND TRUST FUNDS ASSET ALLOCATION												
Actual vs. Policy at June 30, 2016												
	TERF				SERF				CMERF			
	Actual	Target Policy	Lower Range	Upper Range	Actual	Target Policy	Lower Range	Upper Range	Actual	Target Policy	Lower Range	Upper Range
<b>U.S. EQUITY</b>												
Mutual Equity Fund (MEF)	23.9%	21.0%	17.0%	25.0%	22.8%	21.0%	17.0%	25.0%	16.1%	16.0%	13.0%	19.0%
<b>INTERNATIONAL EQUITY</b>												
Developed Market Intl Stock Fund (DMISF)	18.5%	18.0%	14.0%	22.0%	18.2%	18.0%	14.0%	22.0%	13.4%	14.0%	11.0%	17.0%
Emerging Market Intl Stock Fund (EMISF)	8.8%	9.0%	7.0%	11.0%	8.7%	9.0%	7.0%	11.0%	7.0%	7.0%	6.0%	8.0%
<b>REAL ESTATE</b>												
Real Estate Fund (REF)	7.6%	7.0%	5.0%	9.0%	7.6%	7.0%	5.0%	9.0%	7.2%	7.0%	5.0%	9.0%
<b>FIXED INCOME</b>												
Core Fixed Income Fund (CFIF)	7.4%	7.0%	6.0%	8.0%	8.4%	8.0%	6.0%	10.0%	8.1%	8.0%	6.0%	10.0%
Inflation Linked Bond Fund (ILBF)	3.7%	3.0%	2.0%	4.0%	5.7%	5.0%	4.0%	6.0%	5.0%	5.0%	4.0%	6.0%
Emerging Market Debt Fund (EMDF)	5.4%	5.0%	4.0%	6.0%	4.2%	4.0%	3.0%	5.0%	8.1%	8.0%	6.0%	10.0%
High Yield Debt Fund (HYDF)	5.6%	5.0%	4.0%	6.0%	5.4%	5.0%	4.0%	6.0%	14.1%	14.0%	11.0%	17.0%
Liquidity Fund (LF)	4.0%	6.0%	5.0%	7.0%	3.2%	4.0%	3.0%	5.0%	2.7%	3.0%	2.0%	4.0%
Commercial Mortgage Fund (CMF)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>PRIVATE EQUITY</b>												
Private Investment Fund (PIF)	9.1%	11.0%	8.0%	14.0%	9.9%	11.0%	8.0%	14.0%	10.2%	10.0%	7.0%	13.0%
<b>ALTERNATIVE INVESTMENT</b>												
Alternative Investment Fund (AIF)	6.0%	8.0%	6.0%	10.0%	5.9%	8.0%	6.0%	10.0%	8.1%	8.0%	6.0%	10.0%
<b>TOTAL</b>	<b>100.0%</b>	<b>100.0%</b>			<b>100.0%</b>	<b>100.0%</b>			<b>100.0%</b>	<b>100.0%</b>		

Figure 1-2



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

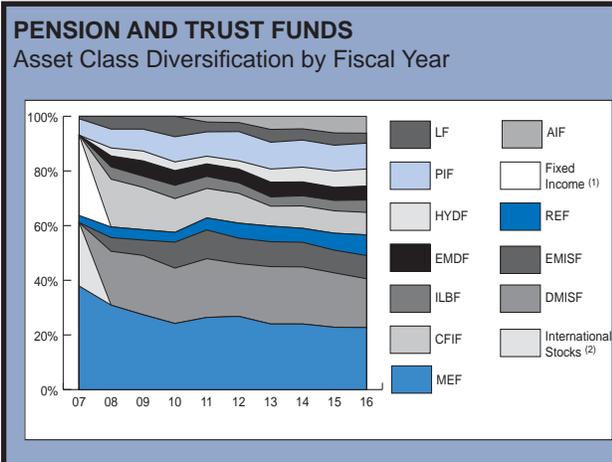
Figure 1-3



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

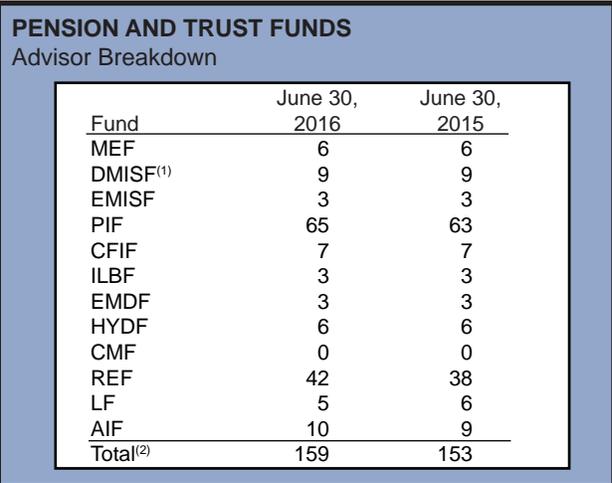
## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

Figure 1-4



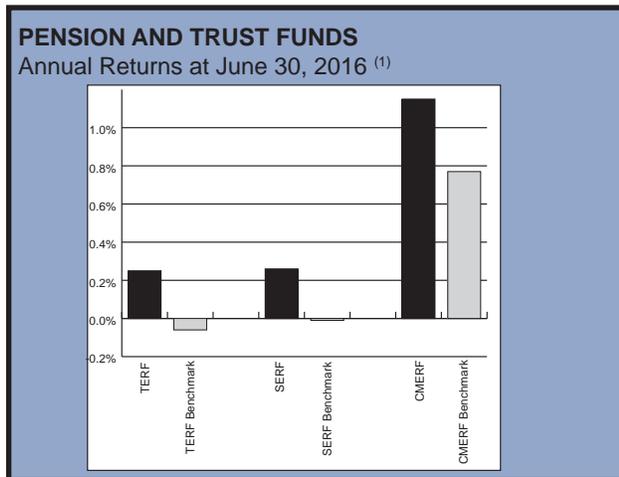
- (1) Prior to November 1, 2007 CFIF, ILBF, EMDF and HYDF were included in a Combined Investment Fund titled Mutual Fixed Income Fund.
- (2) Prior to November 1, 2007 DMISF and EMISF were included in a Combined Investment Fund titled International Stock Fund.

Figure 1-5



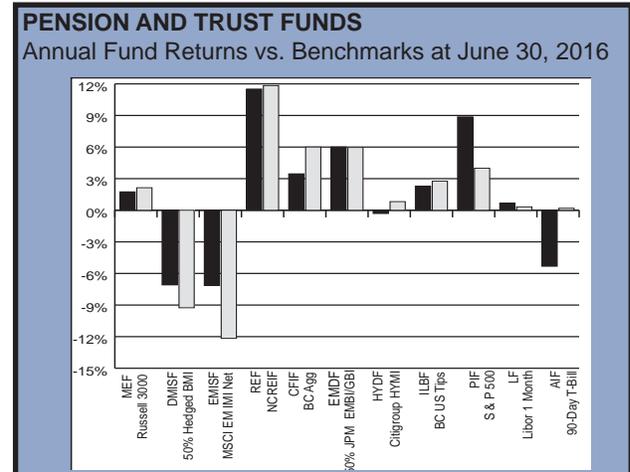
- (1) Does not include the Currency Overlay Manager.
- (2) Actual total advisors was 150 and 144, respectively when factoring in advisors across multiple funds. Private Investment partnerships with nonmaterial balances are not included.

Figure 1-6



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

Figure 1-7



Note: 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.

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

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

	Fiscal Years Ended June 30,					Annualized		
	2016	2015	2014	2013	2012	3 Years	5 Years	10 Years
<i>(Investment performance is calculated using a time-weighted rate of return based on the market rate of return.)</i>								
<b>PLANS</b>								
Teachers' Retirement Fund (TERF)	0.25	2.79	15.67	11.83	(0.96)	6.03	5.71	5.25
TERF Custom Benchmark	(0.06)	3.20	15.25	12.05	0.97	5.93	6.09	5.31
State Employees' Retirement Fund (SERF)	0.26	2.84	15.62	11.90	(0.90)	6.03	5.74	5.14
SERF Custom Benchmark	(0.01)	3.23	15.41	12.05	1.04	6.01	6.15	5.32
Connecticut Municipal Employees' Retirement Fund (CMERF)	1.15	2.57	13.58	9.60	0.47	5.62	5.35	5.09
CMERF Custom Benchmark	0.77	2.31	14.10	10.49	2.72	5.57	5.93	5.45
<u>U.S. Stocks</u>								
Mutual Equity Fund	1.75	7.32	25.28	21.15	3.38	11.01	11.37	6.62
Russell 3000 Index	2.14	7.29	25.22	21.46	3.84	11.13	11.60	7.40
<u>International Stocks</u>								
Developed Markets International Stock Fund	(7.09)	0.67	22.31	22.56	(12.48)	4.59	4.22	2.94
MSCI EAFE IMI 50% Hedged	(9.26)	3.79	21.24	21.31	(11.25)	4.52	4.21	2.64
Emerging Markets International Stock Fund	(7.15)	(6.93)	11.50	3.29	(14.16)	(1.23)	(3.07)	3.06
MSCI Emerging Market Investable Market Index	(12.16)	(4.41)	14.31	3.66	(16.29)	(1.36)	(3.59)	3.80
<u>Equity Commercial Real Estate</u>								
Real Estate Fund	11.51	12.93	10.66	10.26	7.19	11.70	10.49	2.81
NCREIF (1 Qtr. Lag)	11.84	12.72	11.18	10.52	13.41	11.91	11.93	7.61
<u>U.S. Fixed Income</u>								
Core Fixed Income Fund	3.46	1.85	4.28	(0.24)	7.63	3.19	3.39	4.71
Barclays Aggregate Bond Index	6.00	1.86	4.37	(0.69)	7.47	4.06	3.76	5.13
Emerging Market Debt	6.01	(7.57)	6.99	1.69	4.78	1.58	2.25	6.41
50% JP Morgan EMBI/50% JPM GBI EMBI	5.96	(7.72)	7.61	2.82	10.90	1.71	3.71	6.61
High Yield Debt	(0.31)	(1.31)	12.24	8.46	6.23	3.36	4.99	6.73
Citigroup High Yield Market Capped Index	0.82	(0.80)	11.25	9.05	7.66	3.62	5.51	7.06
Inflation Linked Bonds	2.29	(2.85)	4.17	(4.33)	11.91	1.16	2.11	4.59
BC World Gov't Inflation Linked Bond Index	2.76	(3.35)	9.27	(1.85)	11.66	2.76	3.14	5.00
<sup>(2)</sup> Commercial Mortgage Fund	N/A	0.25	10.17	0.88	(6.48)	N/A	N/A	N/A
Barclays Aggregate Bond Index	6.00	1.86	4.37	(0.69)	7.47	4.06	3.76	5.13
<u>Alternative Assets</u>								
Private Investment Fund	8.87	14.04	16.06	9.50	5.92	12.95	10.82	10.33
S & P 500	3.99	7.42	24.61	20.60	5.45	11.66	12.10	7.42
<u>Liquidity Fund</u>								
<sup>(1)</sup> Liquidity Fund	0.68	(1.07)	0.54	0.66	(0.14)	0.04	0.13	1.44
LIBOR 1 Month Index	0.32	0.17	0.17	0.21	0.25	0.22	0.22	1.25
<u>Alternative Investment Fund</u>								
90-Day T-Bill	(5.32)	3.98	6.63	6.39	(1.62)	1.63	1.90	N/A
	0.19	0.02	0.05	0.11	0.05	0.09	0.09	N/A

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

(2) 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.

# 2016 liquidity fund

## Fund Facts at June 30, 2016

**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:** \$1,980,093,610

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

**Management Fees:** \$1,537,535

**Benchmark:** One Month London Interbank Offered Rate (LIBOR)

**Operating Expenses:** \$421,534

**Number of Advisors:** 5 external

**Expense Ratio:** 0.09%

## Description of the Fund

The Liquidity Fund is structured into three distinct tiers to balance the need for liquidity with the need for positive investment returns.

1. The first tier is the most active portion of the LF and requires the highest liquidity. Tier I funds are invested in high quality money-market instruments, which are considered the most liquid short-term assets.
2. The second tier slightly extends duration and credit quality for a higher expected return than Tier I. Investments include money market instruments, Government and agency paper, and high quality corporate and other short duration fixed income securities.
3. Global exposure in the third tier of the LF provides diversification. Short-to-medium term high quality foreign government bonds are held in this tier, in addition to foreign currencies.

## Portfolio Characteristics

The Liquidity Fund investments include U.S. Treasury and government agency securities, commercial paper, certificates of deposit, repurchase agreements, asset-backed securities, mortgage-backed securities, domestic and foreign corporate bonds, foreign sovereign debt and currencies. (See Figure 2-4.) As of June 30, 2016, the average maturity of the LF was 387 days and the average quality rating was AA-2. (See Figure 2-5.)

## Market Review

The U.S. yield curve flattened during fiscal year 2016. The 2-year Treasury yield declined six basis points to .58 percent, while the 10-year Treasury yield fell 88 basis points to 1.47 percent. In general, yields one year and under increased, while longer maturities declined significantly. In December 2015, the Federal Reserve increased overnight lending rates for the first time since 2006 based on its view of strength in the labor market, along with improvements in household spending, business investment and housing market conditions. Initial market expectations for additional rate hikes were followed by a more acute awareness of the fragile state of the global economy at the beginning of 2016, but market risk sentiment reversed again in late February based on positive economic data. However, a weak May jobs report and continued concerns surrounding deflation risk and global economic health caused the Federal Reserve to delay further rate hikes.

Despite yields being near all-time lows, intense global demand for U.S. government bonds continued as other developed markets had lower and even negative rates as they supported their domestic economies. The June Brexit referendum in the U.K. created temporary market upheaval, but the short-term funding markets did not show signs of financial market stress and liquidity did not materially wane. An increase in corporate leveraging, in addition to record amounts of mergers and acquisitions, kept bond issuance strong. Credit performance was strong with corporate and asset-backed securities outperforming U.S. Treasuries. The Bank of America Merrill Lynch 1-3 Year Treasury Index returned 1.3 percent for the twelve months ending June 30, 2016.

Global diversification generated a positive return of 3.2 percent across sovereign bond markets of developed countries as measured by the Citi World Government 1-3 Year Bond Index. During the first half of fiscal 2016, emerging market currencies suffered markedly against the U.S. dollar amid pessimism about global growth, fears

## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

of deflation and a commodity price collapse. Beginning in February 2016, emerging local markets characterized by commodity sensitivity and yield allure began a recovery, although emerging market currency returns for the fiscal year remained negative.

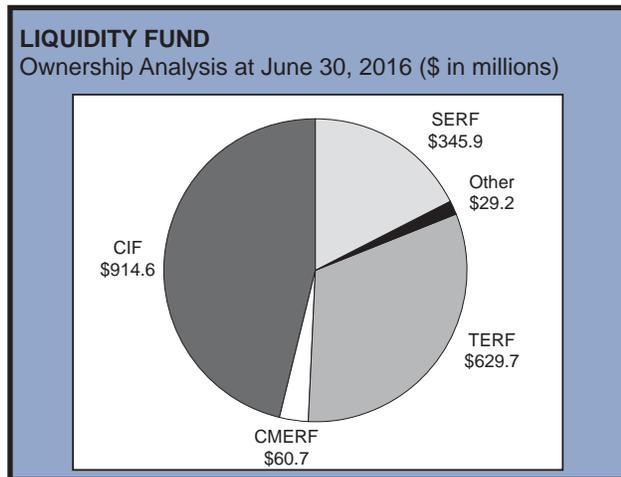
### Performance Summary

For the fiscal year ended June 30, 2016, the LF generated a return of .68 percent, outperforming one month LIBOR's return by 36 basis points. For the three- and five- year periods ending June 30th, the Fund returned 4 basis points and 13 basis points, versus 22 basis points for each time period for one month LIBOR. The cumulative total returns of the LF for the three-, five- and ten-year periods were .13 percent, .65 percent and 15.36 percent, respectively. (See Figure 2-6.)

### Risk Profile

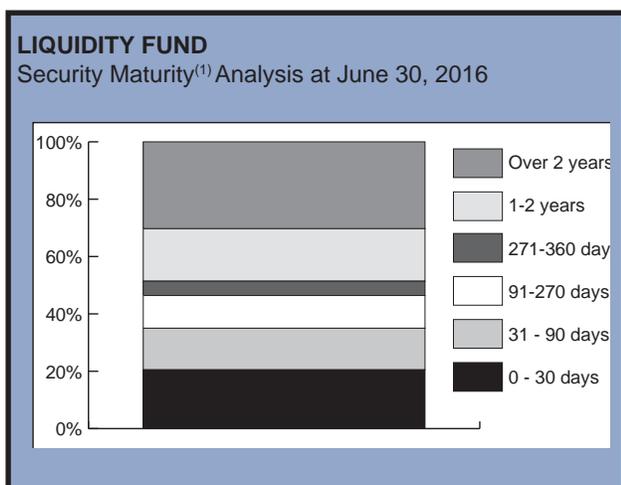
Given the LF's investment policies and objectives, the Fund is exposed to some risks. Interest rate risk is somewhat mitigated by the Fund's short average maturity and credit risk is moderated by investments being concentrated in high quality securities. Other potential risks include currency risk, reinvestment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

Figure 2-1



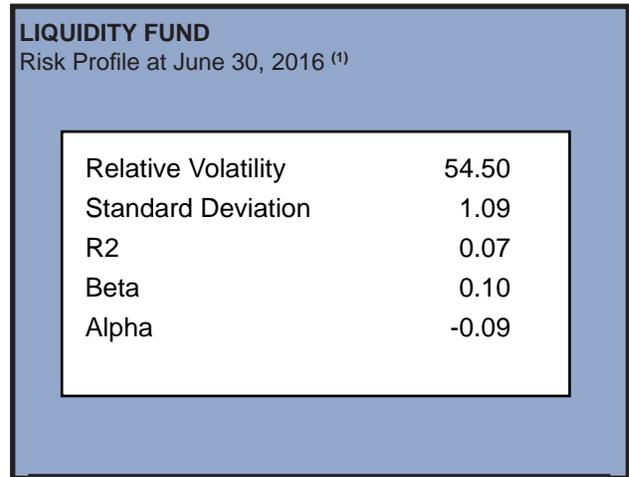
TERF - Teachers' Retirement Fund  
 SERF - State Employees' Retirement Fund  
 CMERF - Connecticut Municipal Employees' Retirement Fund  
 CIF - Combined Investment Funds

Figure 2-3



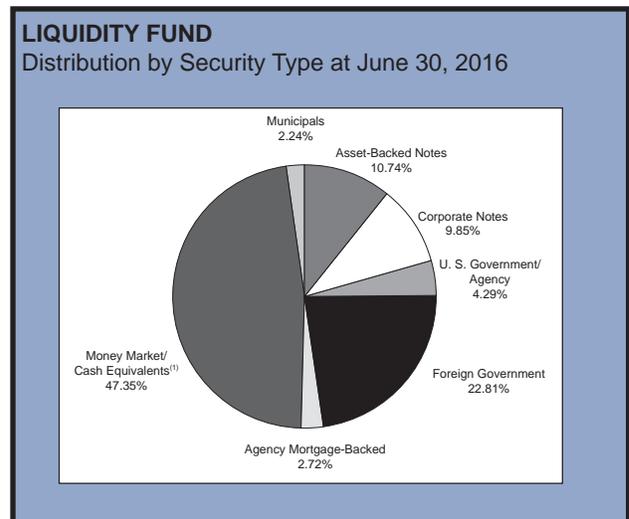
(1) Or Interest Rate Reset Period.

Figure 2-2



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

Figure 2-4



(1) Includes Commercial Paper, Certificates of Deposit and Repurchase Agreements.

## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

Figure 2-5

LIQUIDITY FUND Comprehensive Profile by Fiscal Year				
Date	Number of Issues	Yield <sup>(1)</sup>	Average Maturity	Average Quality
2016	776	0.68%	387 days	AA-2
2015	742	-1.07%	347 days	AA-2
2014	767	0.54%	343 days	AA-2
2013	495	0.66%	631 days	AA+
2012	329	-0.14%	482 days	AA-2
2011	337	1.20%	321 days	AA-1
2010	244	0.98%	202 days	AA-1
2009	162	1.54%	36 days	AA-2
2008	71	4.59%	39 days	A-1+/AA+
2007	97	5.61%	87 days	A-1+/AA+

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

Figure 2-6

LIQUIDITY FUND Periods ending June 30, 2016				
	1 YR	3 YRS	5 YRS	10 YRS
<b>Compounded, Annual Total Return (%)</b>				
LF	0.68	0.04	0.13	1.44
LIBOR 1 MONTH INDEX	0.32	0.22	0.22	1.25
CPI-URBAN	1.01	1.06	1.32	1.74
<b>Cumulative Total Return (%)</b>				
LF	0.68	0.13	0.65	15.36
LIBOR 1 MONTH INDEX	0.32	0.65	1.11	13.21
CPI-URBAN	1.01	3.23	6.79	18.80

Figure 2-7

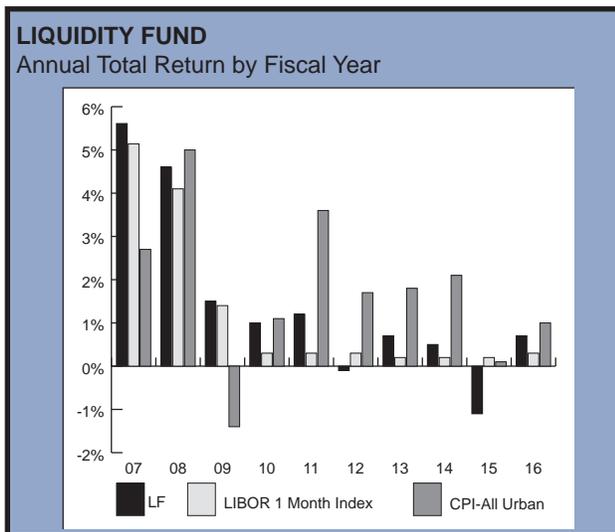


Figure 2-9

LIQUIDITY FUND Investment Advisors at June 30, 2016		
Investment Advisor	Net Asset Value	% of Fund
State Street Global Advisors	785,823,455	39.69%
Payden & Rygel	453,584,677	22.91%
PIMCO	344,494,258	17.39%
Lazard	95,837,974	4.84%
Colchester Global Investors Ltd.	300,352,910	15.17%
Other <sup>(1)</sup>	336	0.00%
<b>Total LF</b>	<b>\$1,980,093,610</b>	<b>100.00%</b>

(1) Other Represents cash equivalents, terminated advisors and other net assets.

Figure 2-8

LIQUIDITY FUND Investment Advisor Tiers at June 30, 2016		
Investments	Net Asset Value	% of Fund
Tier I	\$785,823,455	39.69%
Tier II	798,079,271	40.30%
Tier III	396,190,884	20.01%
<b>Total LF</b>	<b>\$1,980,093,610</b>	<b>100.00%</b>

Figure 2-10

LIQUIDITY FUND Ten Largest Holdings* at June 30, 2016			
Security Name	Maturity Date	Market Value	%
HSBC AGCY REPO	7/1/2016	\$50,000,000	2.53%
LLOYDS BK PLC DISC	7/1/2016	29,999,750	1.52%
BANK OF AMERICA NA	8/30/2016	29,999,070	1.52%
KFW DISC	7/15/2016	29,953,250	1.52%
ERSTE ABWICKLUN DISC	8/3/2016	29,934,458	1.52%
U S TREASURY NOTE	2/15/2018	27,723,315	1.40%
NEW ZEALAND GOVERNMENT BO REGS	3/15/2019	25,537,429	1.29%
CITIBANK N A NY BRH INSTL C/D	7/11/2016	25,000,000	1.26%
NRW BANK DISC	7/20/2016	24,994,653	1.26%
PSP CAPITAL INC DISC	7/6/2016	24,964,222	1.26%
<b>Top Ten</b>		<b>\$298,106,147</b>	<b>15.08%</b>

\* 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.

# 2016 alternative investment fund

## Fund Facts at June 30, 2016

**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.

**Date of Inception:** February 1, 2011

**Total Net Position:** \$1,804,340,644

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

**Expensed Management Fees:** \$0

**Benchmark:** 90 Day T-Bills

**Capitalized and Netted Fees:** \$11,778,713

**Number of Partnerships:** 9 external

**Operating Expenses:** \$1,114,232

**Expense Ratio\*:** 0.06%

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

## 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 invests 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 a fund of funds portfolio or through direct investments in single manager funds.

## Portfolio Characteristics

As of June 30, 2016, 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 \$1.58 billion. The portfolio also includes two real asset oriented private equity style funds that invest in energy infrastructure with a combined market value of \$102.18 million and a European distressed credit partnership with a market value of \$15.02 million.

## Market Review

Fiscal year 2016 was volatile for equity markets with significant sell-offs early in the year and a recovery of losses towards the end of the year. The last month of the fiscal year was dominated by the market's anticipation of the United Kingdom referendum to leave the European Union (Brexit). The U.S. Federal Reserve raised interest rates once in December 2015, while central banks outside the U.S., particularly in Europe and Japan, expanded their asset buying programs. Credit markets experienced significant volatility ending the fiscal year with spreads wider relative to the beginning of the year. Foreign bonds posted the best returns for the period as the proportion of global sovereign debt trading at negative yields increased from approximately 10 percent to 25 percent.

During the fiscal year, hedge fund strategies generated negative returns due to market volatility, steep commodity losses and the widening of credit spreads. Losses in equity long/short, event driven, and relative value were slightly offset by gains in global macro strategies.

### Performance Summary

For the fiscal year ended June 30, 2016, the AIF generated a return of -5.32 percent, net of all expenses, which underperformed the 90-day Treasury bill return of 0.19 percent by 551 basis points. As of June 30, 2016, the trailing three- and five-year net annualized returns of the AIF were 1.63 percent and 1.90 percent, respectively. These returns outperformed the compounded 90-day Treasury bill return of 0.09 percent for both periods by 154 and 181 basis points, respectively.

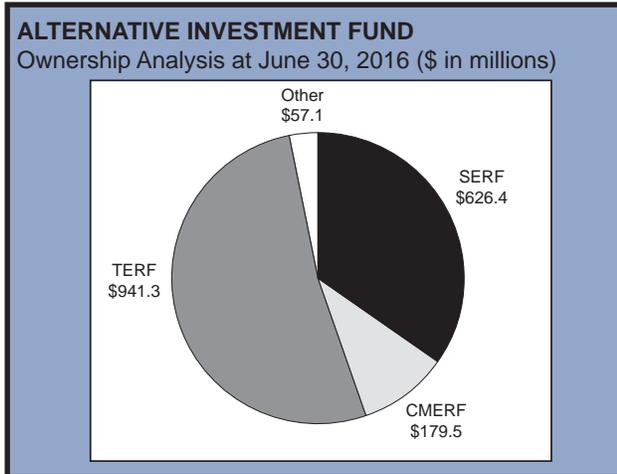
Within the AIF, the fund of hedge funds portfolio returned -3.57 percent as of June 30, 2016. The consolidated hedge fund portfolios outperformed their fund of funds peer group (Hedge Fund Research, Inc. Fund of Funds Composite Index), which decreased by 441 basis points over the same period. It underperformed the broader Hedge Fund Research, Inc. Fund Weighted Composite Index, which declined by 18 basis points.

### 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.

## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

Figure 3-1



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

Figure 3-2

**ALTERNATIVE INVESTMENT FUND**  
Periods ending June 30, 2016

	1 YR	3 YRS	5 YRS	10 YRS
<b>Compounded, Annual Total Return (%)</b>				
AIF	-5.32	1.63	1.90	-
90 Day T-Bill	0.19	0.09	0.09	-
<b>Cumulative Total Return (%)</b>				
AIF	-5.32	4.97	9.86	-
90 Day T-Bill	0.19	0.27	0.44	-

Figure 3-3

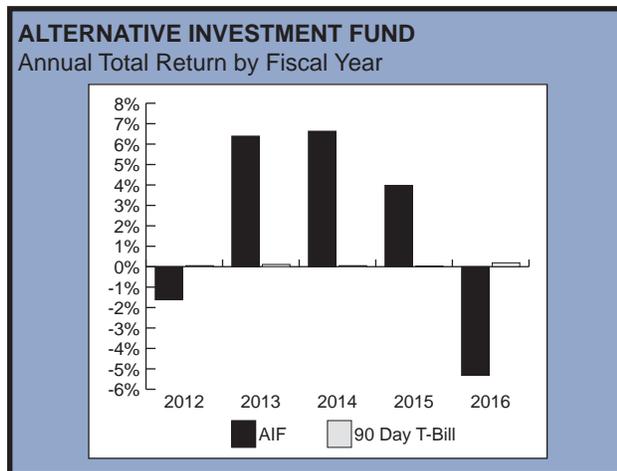


Figure 3-5

**ALTERNATIVE INVESTMENT FUND**  
Investment Funds at June 30, 2016

Investment Advisor	Net Asset Value	% of Fund
Arclight Energy Partners Fund V	\$32,334,181	1.79%
Arclight VI	28,715,195	1.59%
EIG Energy Fund XV LP	41,133,382	2.28%
Marathon European Credit Opportunity	15,024,290	0.83%
Prudence Crandall I Permal LP	557,826,324	30.92%
Prudence Crandall II Prisma LP	298,161,764	16.52%
Prudence Crandall III Rock Creek LP	276,654,010	15.33%
Prudence Crandall IV K2 LP	280,371,436	15.54%
THOMAS WELLES FUND I	82,373,979	4.57%
THOMAS WELLES FUND II	83,998,157	4.66%
Other <sup>(1)</sup>	107,747,926	5.97%
<b>Total</b>	<b>\$1,804,340,644</b>	<b>100.00%</b>

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

Figure 3-4

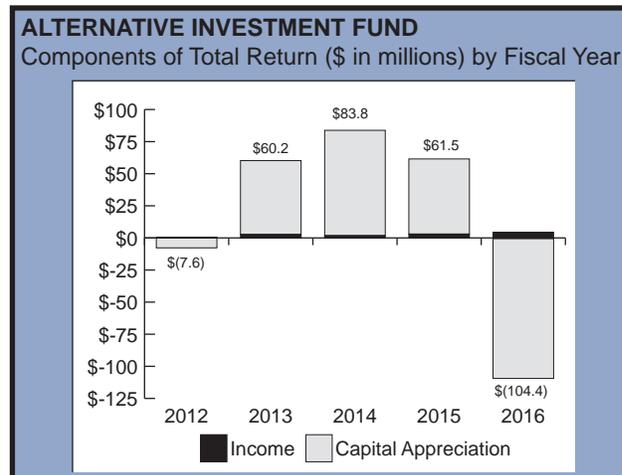


Figure 3-6

**ALTERNATIVE INVESTMENT FUND**  
Ten Largest Holdings\* at June 30, 2016

Partnership Name	Type	Market Value	%
PC I Permal LP	Hedge F-o-F	\$557,826,324	30.92%
PC II Prisma LP	Hedge F-o-F	298,161,764	16.52%
PC IV K2 LP	Hedge F-o-F	280,371,436	15.54%
PC III Rock Creek LP	Hedge F-o-F	276,654,010	15.33%
Thomas Welles Fund II	Hedge F-o-F	83,998,157	4.66%
Thomas Welles Fund I	Hedge F-o-F	82,373,979	4.57%
EIG Energy Fund XV LP Real Assets		41,133,382	2.28%
Arclight Energy Prtnrs V Real Assets		32,334,181	1.79%
Arclight Energy Prtnrs VI Real Assets		28,715,195	1.59%
Marathon Euro Credit Opp	Opportunistic	15,024,290	0.83%
<b>Top Ten</b>		<b>\$1,696,592,718</b>	<b>94.03%</b>

\* 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.

# 2016 mutual equity fund

## Fund Facts at June 30, 2016

**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:** \$6,642,104,816

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

**Management Fees:** \$13,228,298

**Benchmark:** Russell 3000 Index

**Operating Expenses:** \$5,951,714

**Number of Advisors:** 6

**Expense Ratio:** 0.29%

## 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, 2016 were financials (18.4 percent), followed by information technology (17.4 percent) and health care (14.4 percent) (See Figure 4-3).

The MEF's ten largest holdings, aggregating 14.6 percent of Fund investments, included a variety of blue chip companies and were broadly diversified, with the largest holding of 2.3 percent in Apple Inc. (See Figure 4-9).

## Market Review

Capital markets in the U.S. experienced another year of uncertainty. Central bank activity continued to be the focus, driving investor sentiment and market returns. During the fiscal year there were three sharp downturns followed by quick recoveries. The first occurred in August 2015 when the People's Bank of China decided to devalue its currency followed by the second in January 2016 when concerns over slow global growth led risk markets lower. Finally, in June 2016, the market decline was related to the United Kingdom's referendum to leave the European Union. The continuing loosening of monetary policy by the European Central Bank and the Bank of Japan, along with expectations that the Federal Reserve would further delay policy rate hikes, helped to fuel positive investor sentiment for much of the second half of the fiscal year.

The U.S. stock market, as measured by the Russell 3000 index, increased 2.1 percent. Within the Russell 3000, large capitalization companies outperformed small capitalization companies. The utilities sector was the best performing sector in the index with a 28.4 percent return, while the energy sector was the worst performing sector with a -8.1 percent return. U.S. equities significantly outperformed developed international and emerging market equities during the year. Actively managed portfolios with a strong emphasis on higher quality stocks with strong fundamentals generally underperformed the broader index.

### Performance Summary

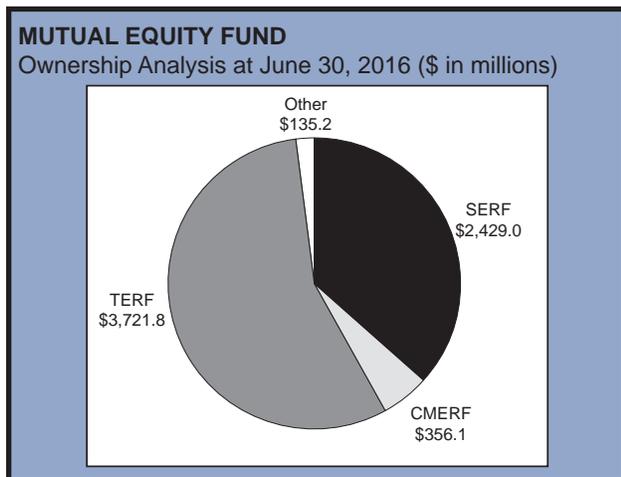
For fiscal year 2016, the MEF generated a return of 1.75 percent, net of all expenses, which underperformed the Russell 3000 Index return of 2.14 percent (See figure 4-4). As of June 30, 2016, the MEF compounded net annualized total returns, for the trailing three-, five- and ten-year periods were 11.01 percent, 11.37 percent and 6.62 percent, respectively.

### 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 a relative volatility of 1.01, 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 -0.23 (See figure 4-2).

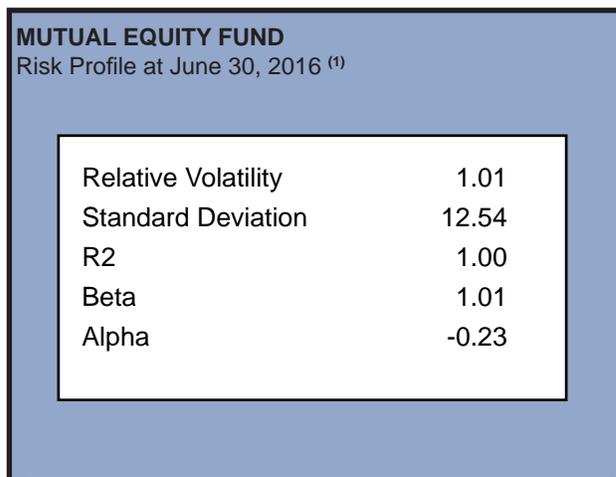
**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

Figure 4-1



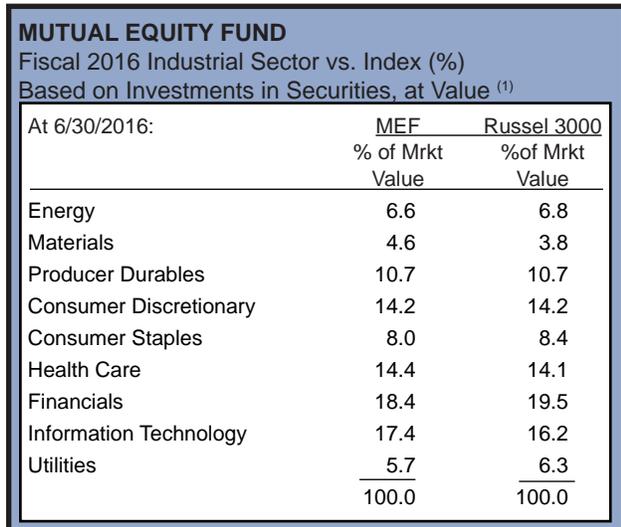
TERF - Teachers' Retirement Fund  
SERF - State Employees' Retirement Fund  
CMERF - Connecticut Municipal Employees' Retirement Fund

Figure 4-2



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

Figure 4-3



(1) Excludes the Liquidity Fund.

Figure 4-4

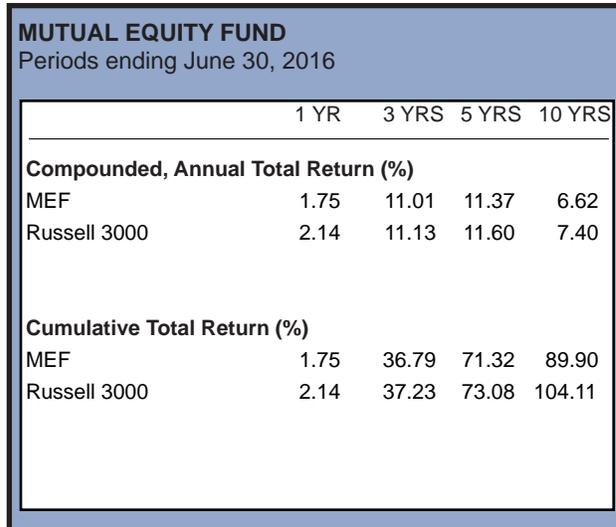


Figure 4-5

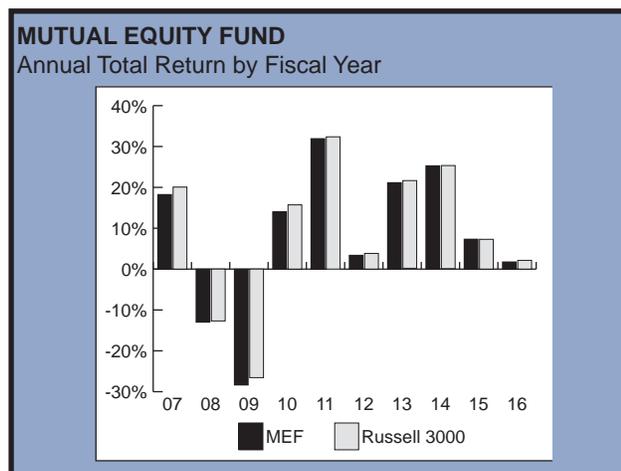
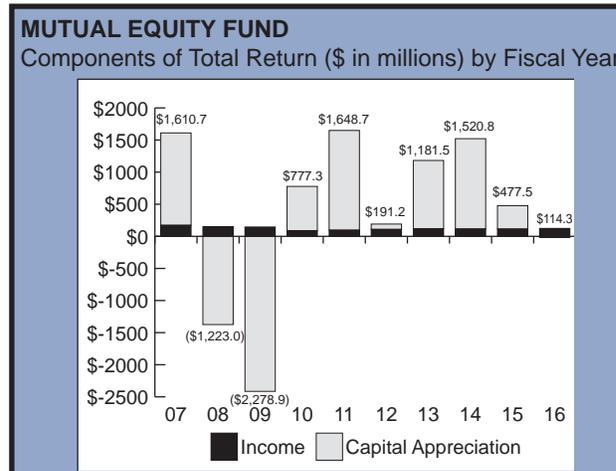


Figure 4-6



**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

Figure 4-7

	2016		2015		2014		2013		2012	
	MEF	Russell	MEF	Russell	MEF	Russell	MEF	Russell	MEF	Russell
<b># of Issues</b>	1,706	3,000	1,807	3,000	1,806	3,000	1,721	3,000	1,629	3,000
<b>Cap (\$ Bil)</b>	\$114.1	\$114.6	\$108.1	\$108.9	\$102.1	\$101.7	\$85.5	\$85.8	\$96.9	\$89.2
<b>P/E</b>	22.8	22.1	22.0	21.7	21.2	20.8	19.3	19.2	18.0	18.3
<b>Div Yield</b>	1.92%	2.06%	1.81%	1.93%	1.74%	1.84%	1.90%	2.10%	1.99%	2.05%
<b>ROE</b>	16.6%	16.4%	17.7%	17.5%	16.9%	17.0%	17.3%	17.8%	21.1%	20.5%
<b>P/B</b>	2.6	2.4	2.8	2.8	2.8	2.7	3.8	3.7	3.7	3.7
<b>Cash &amp; Equiv.</b>	1.2%	0.0%	1.1%	0.0%	0.9%	0.0%	0.8%	0.0%	0.6%	0.0%

Source: Custodian Bank

Figure 4-8

<b>MUTUAL EQUITY FUND</b>		
Investment Advisors at June 30, 2016		
Investment Advisor	Net Asset Value	% of Fund
<b>Large Cap</b>	<b>\$5,511,292,749</b>	<b>82.98%</b>
T. Rowe Price Associates	1,886,235,987	28.40%
State Street Global Advisors	3,625,056,762	54.58%
<b>All Cap</b>	<b>534,712,267</b>	<b>8.05%</b>
Capital Prospects	274,567,698	4.13%
FIS Group, Inc.	260,144,569	3.92%
<b>Small/Mid Cap</b>	<b>575,455,111</b>	<b>8.66%</b>
Frontier Capital Mgmt Co	316,496,990	4.76%
Bivium	258,958,121	3.90%
Other <sup>(1)</sup>	20,644,689	0.31%
<b>TOTAL MEF</b>	<b>\$6,642,104,816</b>	<b>100.00%</b>

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

Figure 4-9

<b>MUTUAL EQUITY FUND</b>			
Ten Largest Holdings* at June 30, 2016			
Security Name	Sector	Market Value	%
Apple Inc	Information Tech	\$153,405,018	2.31%
Microsoft Corp	Information Tech	129,874,884	1.95%
Exxon Mobil Corp	Energy	122,591,766	1.84%
Johnson & Johnson	Health Care	96,737,235	1.46%
Amazon.Com Inc	Consumer Discr	95,057,236	1.43%
Facebook Inc	Information Tech	83,849,064	1.26%
General Electric Co	Producer Durables	76,863,205	1.16%
Procter & Gamble Co	Consumer Staples	73,451,394	1.10%
JPMorgan Chase & Co	Financials	71,857,391	1.08%
AT&T Inc	Utilities	69,093,913	1.04%
<b>Top Ten</b>		<b>\$972,781,106</b>	<b>14.63%</b>

\* 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.

# 2016 core fixed income fund

## Fund Facts at June 30, 2016

**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

**Total Net Position:** \$2,406,864,366

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

**Expensed Management Fees:** \$2,592,136

**Capitalized and Netted Fees:** \$1,802,140

**Benchmark:** Barclays U.S. Aggregate Bond Index

**Operating Expenses:** \$1,258,671

**Number of Advisors:** 7 external

**Expense Ratio\*:** 0.16%

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

## Description of the Fund

The CFIF assets are invested across debt instruments issued by the U.S. Government and its agencies, U.S. corporations, Euro bonds, 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 2016, the composition of the CFIF was: corporate bonds 29.6 percent, mortgage-backed securities 25.0 percent, U.S. Treasuries 24.3 percent, asset-backed securities 8.0 percent, and government agency securities 1.5 percent. The remaining 11.6 percent was invested in the Liquidity Fund and other assets, excluding two opportunistic funds. (See Figure 5-4.) The asset value of the two opportunistic funds was \$534.4 million at fiscal year-end. (See Figure 5-10.) As of June 30, 2016, the CFIF was overweight asset backed securities, corporate bonds and opportunistic investments compared to the Barclays U.S. Aggregate Bond Index, and underweight U.S. Treasury, agency and mortgage-backed securities. Sixty percent of the CFIF was invested in AAA-rated securities. (See Figure 5-5.) The duration of the fund was 5.86 years, compared to 5.76 years for the benchmark. The yield to maturity was 2.20 percent for the CFIF versus 1.74 percent for the Barclays U.S. Aggregate Bond Index. (See Figure 5-11.)

## Market Review

The Barclays U.S. Aggregate Index generated a positive return of 6.0 percent during a very volatile 2016 fiscal year. The yield curve flattened and rates fell compared to the beginning of the period, driven by global financial and political developments (such as the sharp devaluation of the Chinese Renminbi in August 2015 and Brexit in June 2016), anemic worldwide growth, a delay in the anticipated path to policy normalization by the Federal Reserve Bank, loosening monetary policies in other countries and a sharp fall in oil prices later followed by some retracement. While interest rates moved markedly lower, credit spreads widened and narrowed multiple times during the fiscal year before settling back to levels similar to the beginning of the period, albeit it at dramatically lower yields. Longer-dated instruments outperformed those with shorter durations over the period.

U.S. Treasury securities were in high demand during the fiscal year as investors sought safety from global market fluctuations, resulting in a decline of 88 basis points in the 10 year U.S. Treasury yield compared to the beginning of the period. Within the Barclays U. S. Aggregate Index, Treasuries, which account for almost 37 percent of the index, drove performance with a return of 6.22 percent. Investment grade corporate bonds, representing about one quarter of the index, had an excess return over Treasuries of 14 basis points for the

period. The energy sub-sector suffered due to plummeting oil prices in the first half of the reporting period and was not able to catch up when oil prices appeared to stabilize in February. The utility sector posted strong returns over the period as issuers in this sector benefitted from the falling costs of oil and coal. While asset backed holdings generated a solid 75 basis points of excess return, they were not a significant contributor to overall index performance since they represent less than one percent of the index.

### Performance Summary

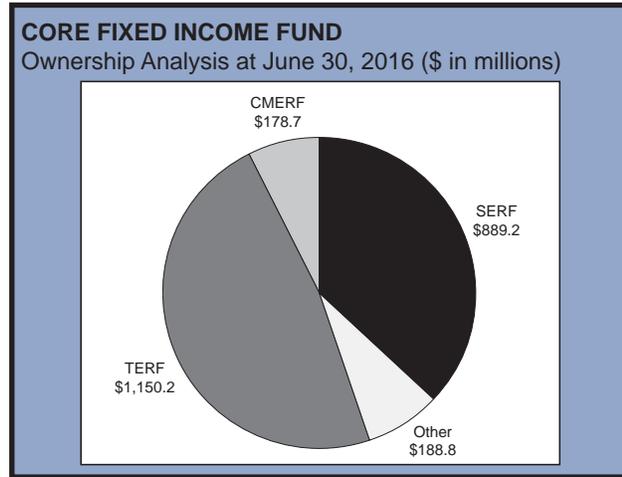
For the fiscal year ended June 30, 2016, the CFIF generated a total return of 3.46 percent, net of all expenses, compared to the benchmark return of 6.00 percent. As of June 30, 2016, the CFIF compounded net annualized total returns for the trailing three- and five-year periods were 3.19 percent and 3.39 percent, respectively, underperforming the benchmark returns of 4.06 percent and 3.76 percent. The cumulative returns for the CFIF for the three- and five-year periods were 9.88 percent and 18.13 percent, underperforming the Barclays U.S. Aggregate Bond Index that returned 12.69 percent and 20.28 percent respectively. (See Figure 5-8.)

### 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 and counter party 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, 60.0 percent of the CFIF was rated AAA. (See Figure 5-5.)

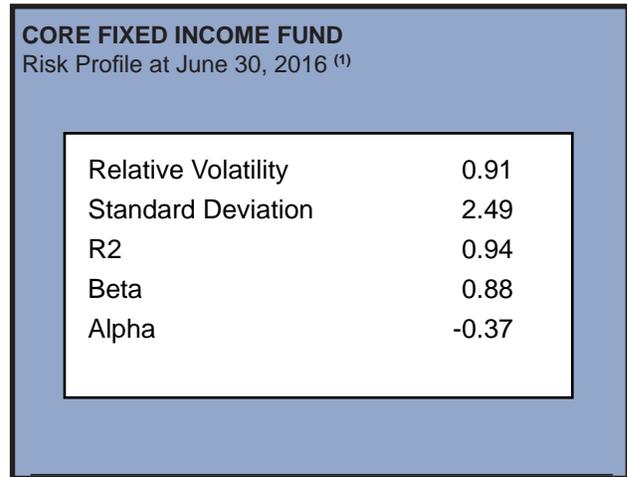
**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

Figure 5-1



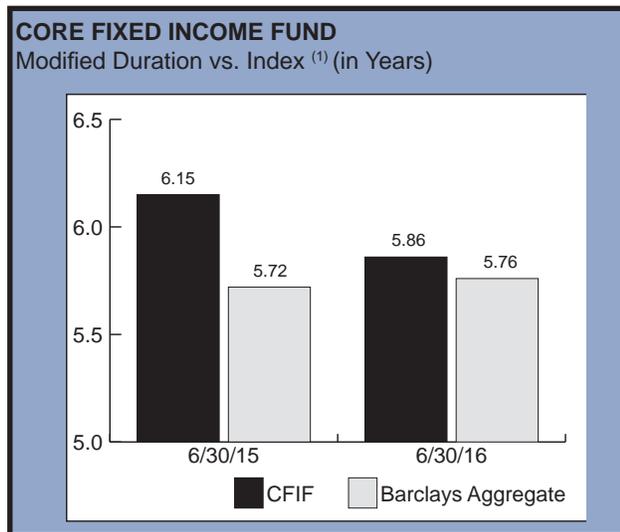
TERF - Teachers' Retirement Fund  
SERF - State Employees' Retirement Fund  
CMERF - Connecticut Municipal Employees' Retirement Fund

Figure 5-2



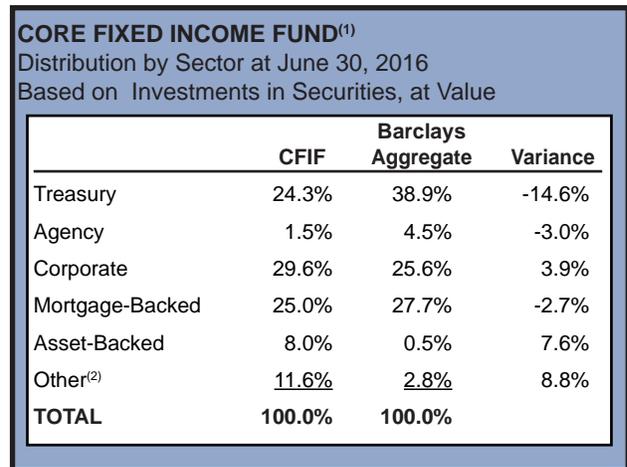
(1) Based upon returns over the last five years.

Figure 5-3



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

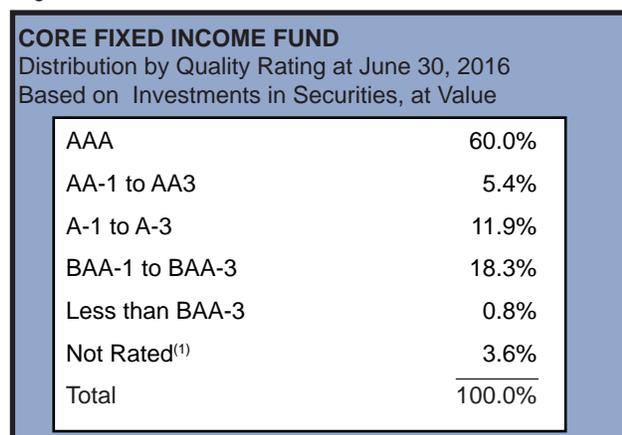
Figure 5-4



(1) Excludes holdings in two opportunistic funds.

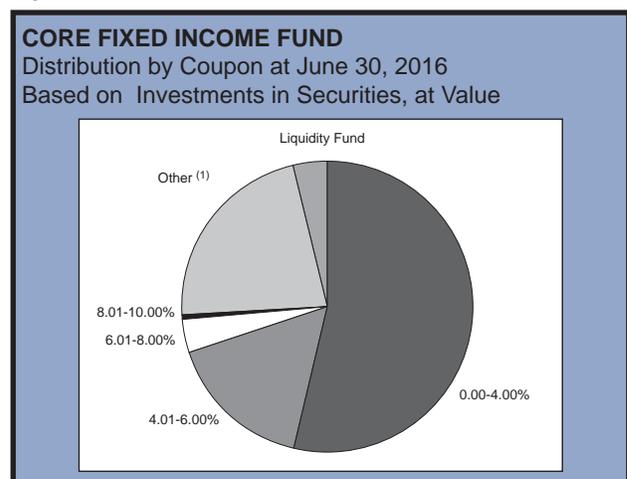
(2) Other category includes Liquidity Fund and other assets.

Figure 5-5



(1) Represents securities for which ratings are unavailable.

Figure 5-6



(1) Other category includes other assets.

## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

Figure 5-7

<b>CORE FIXED INCOME FUND</b>	
Duration Distribution at June 30, 2016 Based on Investments in Securities, at Value	
0-3 Years	43.7%
3-5 Years	18.4%
5-7 Years	13.7%
7-10 Years	9.1%
10+ Years	12.0%
Unknown <sup>(1)</sup>	3.1%
<b>Total</b>	<b>100.0%</b>

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

Figure 5-8

<b>CORE FIXED INCOME FUND</b>		1 YR	3 YRS	5 YRS	10 YRS
Periods ending June 30, 2016					
<b>Compounded, Annual Total Return (%)</b>					
CFIF		3.46	3.19	3.39	4.71*
Barclays Aggregate		6.00	4.06	3.76	5.13
<b>Cumulative Total Return (%)</b>					
CFIF		3.46	9.88	18.13	58.40*
Barclays Aggregate		6.00	12.69	20.28	64.97

\*Represents historical returns at the portfolio composite level.

Figure 5-9

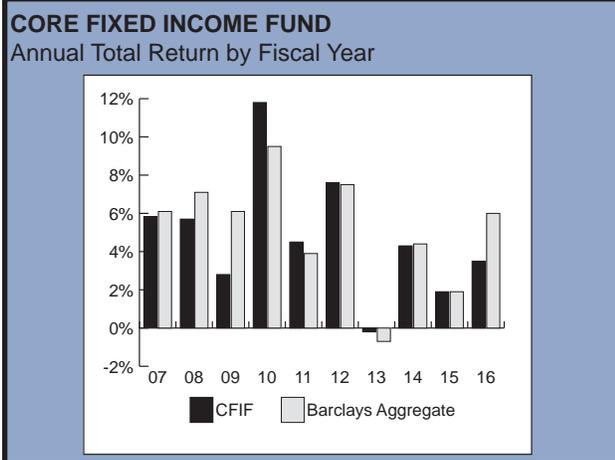


Figure 5-10

<b>CORE FIXED INCOME FUND</b>		Net Asset Value	% of Fund
Investment Advisors at June 30, 2016			
Investment Advisor			
State Street Global Advisors	\$252,950,399		10.51%
BlackRock Financial Management, Inc.	527,137,815		21.90%
Wellington	532,430,711		22.12%
Conning-Goodwin Capital	375,863,621		15.62%
Progress	118,042,901		4.91%
Prudence Crandall Fund III Opportunistic	266,969,392		11.09%
Prudence Crandall Fund IV Opportunistic	267,446,429		11.11%
Other <sup>(1)</sup>	66,023,098		2.74%
<b>TOTAL CFIF</b>	<b>\$2,406,864,366</b>		<b>100.00%</b>

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

Figure 5-11

<b>CORE FIXED INCOME FUND</b>		Comprehensive Profile for the Fiscal Year ending June 30,									
	2016		2015		2014		2013		2012		
	CFIF	BC AGG*	CFIF	BC AGG*	CFIF	BC AGG*	CFIF	BC AGG*	CFIF	LBAI*	
Number of Issues	3,844	9,804	3,448	9,496	3,080	8,818	3,227	8,382	3,732	7,664	
Average Coupon	3.35%	3.21%	3.54%	3.31%	3.47%	3.41%	3.60%	3.50%	4.20%	3.90%	
Yield Maturity	2.20%	1.74%	2.59%	2.29%	2.31%	2.10%	2.30%	2.30%	2.20%	1.80%	
Average Maturity	7.78	7.85	8.73	7.57	8.05	7.29	7.20	6.90	7.10	6.70	
Modified Duration	5.86	5.76	6.15	5.72	5.85	5.58	5.50	5.20	4.90	4.60	
Average Quality	AA-2	AA-2	AA-2	AA-2	AA-2	AA-2	AA-2	AA-2	AA-2	AA-1	
Liquidity Fund*	3.8%	0.0%	7.2%	0.0%	6.5%	0.0%	8.4%	0.0%	7.4%	0.0%	

\* Note: Index changed from LBAI to Barclays Aggregate

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

Figure 5-12

**CORE FIXED INCOME FUND**

Ten Largest Holdings\* at June 30, 2016

Security Name	Maturity	Market Value	%
U.S. TREASURY NOTE	5/31/2018	\$25,623,384	1.03%
U.S. TREASURY NOTE	6/30/2021	24,703,927	0.99%
U.S. TREASURY NOTE	6/30/2018	24,166,353	0.97%
U.S. TREASURY NOTE	4/30/2021	18,839,840	0.76%
FNMA TBA	7/1/2046	16,349,704	0.66%
U.S. TREASURY NOTE	4/30/2018	15,645,084	0.63%
U.S. TREAS-CPI INFLAT	7/15/2024	14,811,390	0.59%
U.S. TREAS-CPI INFLAT	1/15/2025	14,324,591	0.57%
U.S. TREASURY NOTE	4/30/2023	13,401,997	0.54%
U.S. TREASURY BOND	2/15/2036	12,784,902	0.51%
<b>Top Ten</b>		<b>\$180,651,172</b>	<b>7.25%</b>

\* 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

**CORE FIXED INCOME FUND**

Quarterly Current Yield <sup>(1)</sup> vs. Indices (%)

	6/30/16	3/31/16	12/31/15	9/30/15	6/30/15
CORE FIXED INCOME	3.48	3.51	3.62	3.59	3.40
Barclays Aggregate	2.90	2.97	3.07	3.06	3.09
Citigroup 3 Month T-Bill	0.00	0.00	0.00	0.00	0.00
Barclays Treasury	1.92	1.96	2.02	1.99	2.01
Barclays Agency	2.09	2.17	2.25	2.28	2.30
Barclays Mortgage	3.48	3.52	3.58	3.56	3.58
Barclays Corporate	3.74	3.87	4.04	4.02	4.02
Barclays Asset Backed	2.04	1.99	1.96	1.89	1.83

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

# 2016 inflation linked bond fund

## Fund Facts at June 30, 2016

**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

**Total Net Position:** \$1,321,973,944

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

**Management Fees:** \$2,280,298

**Benchmark:** Barclays World Government Inflation Linked Bond Index

**Operating Expenses:** \$2,146,980

**Number of Advisors:** 3 external

**Expense Ratio:** 0.36%

## 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. During fiscal year 2016, three firms were hired to invest in global inflation-linked bonds, replacing the firms who previously managed U.S. inflation-linked bonds.

## Portfolio Characteristics

At June 30, 2016, the ILBF was well diversified with 587 issues of inflation-linked and nominal sovereign bonds from nine countries plus the Eurozone. (See Figure 6-3.) The average coupon of this Fund was 1.65 percent compared to 1.23 percent for the benchmark. Duration of the ILBF at 11.73 years was shorter than the 12.36 years of the benchmark. Credit quality of this Fund was AA-2 on June 30, 2016. (See Figure 6-9.)

## Market Review

Fiscal year 2016 was marked by divergent monetary policies in the developed economies and renewed market volatility. Volatility and risk premiums rose, reflecting concerns about weaker global growth. Declines in oil and commodity prices dragged inflation lower across many countries. In this environment, global inflation linked bond yields fell, recording strong performance over the 12 month period with the Barclays World Government Inflation Linked Bond Index returning 7.93 percent in U.S. dollar hedged terms. The unhedged return was 2.76 percent, reflecting currency depreciation against the U.S. dollar.

In December 2015, the Federal Reserve increased interest rates for the first time in nine years, but the market remained nervous about falling commodity prices, low inflation and slowing growth in emerging markets. The Bank of Japan surprised markets with its move in January to negative interest rates as it attempted to lift inflation in its ongoing deflationary environment. The European Central Bank reduced rates further in March and expanded its asset purchase program. The June vote of the U.K. to leave the European Union created a "risk-off" tone to the markets with the pound Sterling depreciating 7 percent to multi-decades lows against the U.S. dollar.

Despite overall volatility, central bank actions had a different impact on high quality yields as the gravitational pull from yield-suppressed markets like Germany, Japan, Switzerland and other countries exacerbated the global hunt for yield. This global grab for yield left real rates lower, real yield curves flatter and global inflation break-even rates cheaper.

### **Performance Summary**

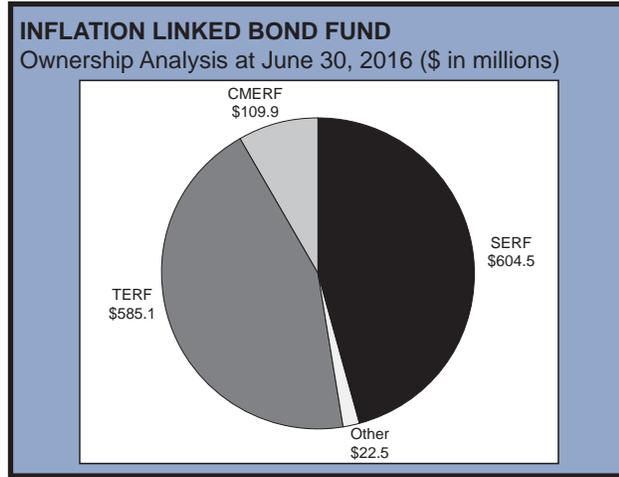
For the fiscal year ended June 30, 2016 the ILBF underperformed the Barclays World Government Inflation-Linked Bond Index by 47 basis points, generating a 2.29 percent net return compared to a 2.76 percent return for the benchmark. During the three- and five-year periods ending June 30th, assets were invested primarily in U.S. inflation-linked bonds and underperformed when measured against the current global benchmark. Global inflation-linked bond managers were hired in September 2014. The cumulative total returns of the Fund were 3.53 percent over the past three years and 11.02 percent for the five-year period ending June 30th. (See Figure 6-7.)

### **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.

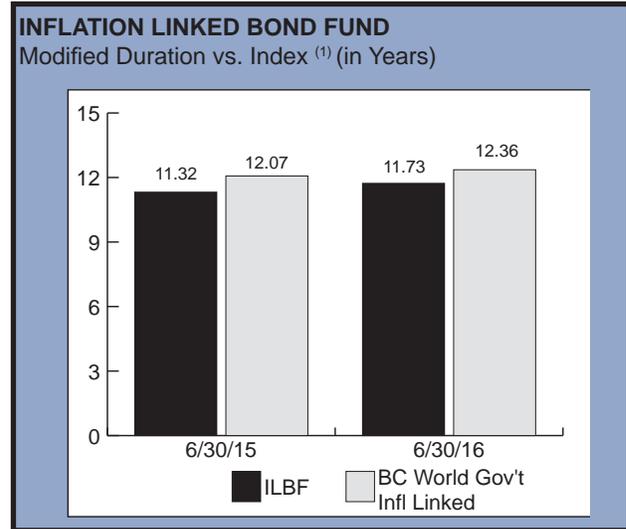
## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

Figure 6-1



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

Figure 6-2



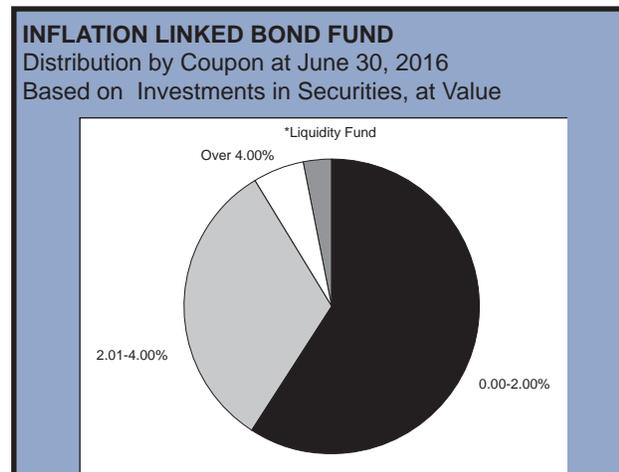
(1) Computed without the effect of Cash and other Net Assets.

Figure 6-3

**INFLATION LINKED BOND FUND**  
Distribution by Country at June 30, 2016  
Based on Investments in Securities, at Value

	BC World Gov't		
	ILBF	Infl Linked	Variance
U.S.	40.6%	44.0%	-3.4%
U.K.	18.5%	28.3%	-9.7%
E.U. Euro Currency	15.4%	20.5%	-5.0%
Mexico	3.4%	0.0%	3.4%
Brazil	1.8%	0.0%	1.8%
Canada	1.3%	2.1%	-0.8%
South Africa	1.2%	0.0%	1.2%
Japan	1.6%	2.4%	-0.7%
Australia	3.9%	1.1%	2.7%
New Zealand	7.4%	0.4%	7.0%
Other	1.8%	1.2%	0.6%
Liquidity Fund	3.1%	0.0%	3.1%
<b>TOTAL</b>	<b>100.0%</b>	<b>100.0%</b>	

Figure 6-5



\*Note: Ending weights

Figure 6-4

**INFLATION LINKED BOND FUND**  
Distribution by Quality Rating at June 30, 2016  
Based on Investments in Securities, at Value

AAA	49.5%
AA-1 to AA-3	31.8%
A-1 to A-3	6.1%
BAA-1 to BAA-3	7.6%
Less than BAA-1	1.9%
Liquidity Fund <sup>(1)</sup>	3.1%
<b>Total</b>	<b>100.0%</b>

(1) Represents monies invested in the Cash Equivalents at the end of the quarter.

Figure 6-6

**INFLATION LINKED BOND FUND**  
Duration Distribution at June 30, 2016  
Based on Investments in Securities, at Value

0-3 Years	15.5%
3-5 Years	15.0%
5-7 Years	13.2%
7-10 Years	16.3%
10+ Years	36.9%
Liquidity Fund <sup>(1)</sup>	3.1%
<b>Total</b>	<b>100.0%</b>

(1) Represents monies invested in the Cash Equivalents at the end of the quarter.

## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

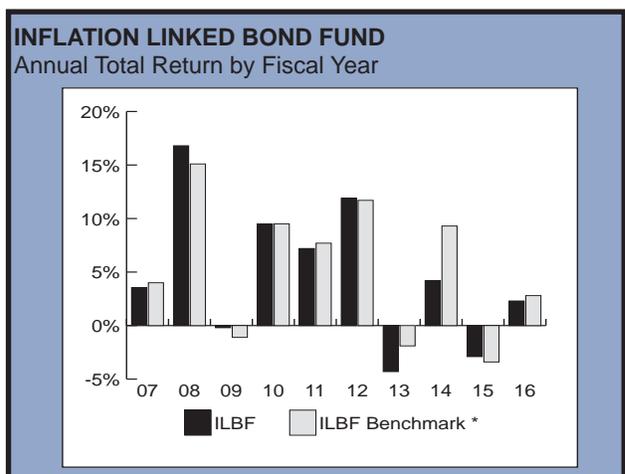
Figure 6-7

	1 YR	3 YRS	5YRS	10YRS
<b>INFLATION LINKED BOND FUND</b>				
Periods ending June 30, 2016				
<b>Compounded, Annual Total Return (%)</b>				
ILBF	2.29	1.16	2.11	4.59*
BC World Gov't Infl Linked Bond Index <sup>(1)</sup>	2.76	2.76	3.14	5.00
<b>Cumulative Total Return (%)</b>				
ILBF	2.29	3.53	11.02	56.68*
BC World Gov't Infl Linked Bond Index <sup>(1)</sup>	2.76	8.52	16.69	62.95

(1) The benchmark was changed during Fiscal Year 2013 from BC U.S. Treasury TIPS to BC World Government Inflation Linked Bond Index.

\*Represents historical returns at the portfolio composite level.

Figure 6-8



\*Note: 2013 Benchmark is BC World Government Inflation Linked Bond Index; prior years the benchmark is BC U.S. Treasury TIPS Index.

Figure 6-9

	2016		2015		2014		2013		2012	
	ILBF	BC World Gov't Infl	ILBF	BC World Gov't Infl	ILBF	Barclays U.S. TIPS	ILBF	Barclays U.S. TIPS	ILBF	Barclays U.S. TIPS
	Number of Issues	587	134	418	131	37	35	33	34	29
Average Coupon	1.65%	1.23%	2.08%	1.35%	1.53%	1.22%	1.45%	1.39%	1.69%	1.70%
Average Maturity	13.71	13.49	12.63	13.40	8.68	8.57	8.79	8.70	9.32	9.27
Modified Duration	11.73	12.36	11.32	12.07	7.31	7.72	8.20	7.96	8.28	8.17
Average Quality	AA-2	AA-1	AA-2	AA-1	AAA	AAA	AAA	AAA	AAA	AAA
Liquidity Fund <sup>(1)</sup>	3.1%	0.0%	2.4%	0.0%	5.6%	0.0%	3.6%	0.0%	1.0%	0.0%

(1) Ending Weights

Figure 6-10

<b>INFLATION LINKED BOND FUND</b>		
Investment Advisors at June 30, 2016		
Investment Advisor	Net Asset Value	% of Fund
BlackRock	\$509,902,537	38.57%
Colchester	606,730,111	45.90%
New Century	187,605,748	14.19%
Other <sup>(1)</sup>	17,735,548	1.34%
<b>TOTAL ILBF</b>	<b>\$1,321,973,944</b>	<b>100.00%</b>

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

Figure 6-11

<b>INFLATION LINKED BOND FUND</b>			
Ten Largest Holdings <sup>(1)</sup> at June 30, 2016			
Security Name	Maturity	Market Value	%
U.S. TREAS-CPI INFLAT	4/15/2029	\$68,821,784	5.21%
U.S. TREAS-CPI INFLAT	4/15/2019	62,894,161	4.76%
U.S. TREAS-CPI INFLAT	1/15/2027	53,148,530	4.02%
U.S. TREAS-CPI INFLAT	2/15/2042	52,343,973	3.96%
U.S. TREAS-CPI INFLAT	7/15/2022	51,302,602	3.88%
FRANCE GOVERNMENT BOND	7/25/2040	47,699,063	3.61%
NEW ZEALAND GOVERNMENT BOND	9/20/2030	44,123,570	3.34%
UNITED KINGDOM GILT INFLA REGS	3/22/2044	42,167,944	3.19%
NEW ZEALAND GOVERNMENT BOND	9/20/2025	32,939,440	2.49%
ITALY GOVERNMENT BOND	9/15/2023	32,506,990	2.46%
<b>Top Ten</b>		<b>\$487,948,057</b>	<b>36.92%</b>

(1) 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.

# 2016 emerging market debt fund

## Fund Facts at June 30, 2016

**Investment Strategy/Goals:** The purpose of the Emerging Market Debt Fund (EMDF) is to (1) achieve long-term, real rate 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

**Total Net Position:** \$1,497,780,484

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

**Management Fees:** \$3,837,786

**Operating Expenses:** \$564,266

**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:** 3

**Expense Ratio:** 0.30%

## 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 and/or The World Bank. 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 7.56 percent compared to the EMBI benchmark yield of 5.81 percent. The average quality of EMDF was Ba-1 versus the EMBI benchmark average of Baa-3. The duration of the EMDF was 6.30 years versus 6.02 years for the benchmark. (See Figure 7-11.)

## Market Review

Emerging Market Debt (EMD) markets delivered positive absolute returns despite significant volatility in the twelve month period ending June 30, 2016. From July 1, 2015 through mid-February 2016, EMD assets were under pressure due to a variety of concerns including slow growth and currency depreciation in China, commodity price declines, and poor economic growth, especially in the recessionary environments of Brazil and Russia. Beginning in February 2016, conditions improved as developed market central banks committed to extraordinarily easy monetary policies, commodity prices rebounded and emerging markets' fundamentals showed signs of improvement. This led to a more supportive environment and a significant rally across emerging market assets.

U.S. dollar-denominated emerging market debt, as measured by the JPM EMBI GD, returned 9.8 percent during fiscal year 2016, outpacing other EMD assets. Two thirds of this return emanated from income with the remaining third the result of price appreciation driven primarily by the decline in U.S. Treasury yields. The spread of U.S. dollar-denominated emerging market debt over U.S. Treasuries widened 34 basis points during this period. In contrast to the returns of EMD sovereign bonds, corporate EMD issues lagged but still generated a positive return of 5.3 percent, a result of interest income and duration-related capital appreciation.

Emerging market local currency debt, as measured by the JPM GBI EM GD, benefitted from a meaningful decline in yields in a low inflation environment. On a local currency basis, this index returned 9.4 percent for the year, driven by coupon income and the decline in rates. However, these gains were offset by currency depreciation against the U.S. dollar. Strength in the U.S. dollar, prompted by the prospect of tighter U.S. monetary policy, coupled with weakening growth prospects across most emerging market countries led to the relative weakness in emerging market local currencies. The highest depreciation levels for the year were found in the South African rand (-17.4 percent), Mexican peso (-13.9 percent) and the Russian ruble (-13.6 percent). Of the fifteen countries in this benchmark, only Indonesia outperformed in U.S. dollar terms due to currency strengthening on an improved macro-economic outlook. These opposing forces resulted in a total return of 2.0 percent for emerging markets' local currency debt when converted back to U.S. dollars.

### **Performance Summary**

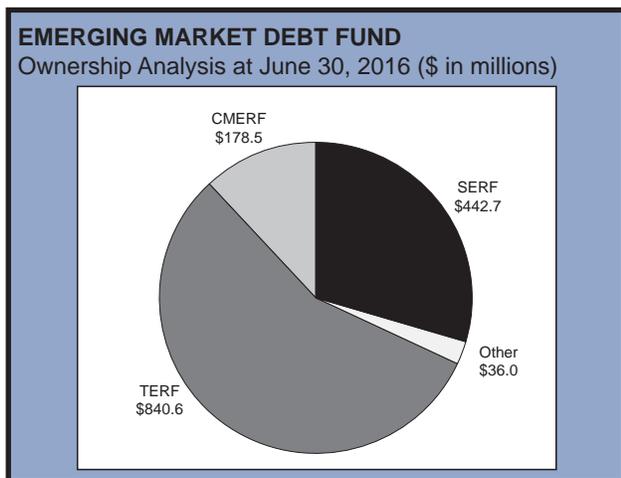
For the fiscal year ended June 30 2016, the EMDF generated a return of 6.01 percent net of all expenses, outperforming the benchmark return of 5.96 percent by 5 basis points. As of June 30, 2016, the EMDF compounded net annualized returns for the three- and five-year periods were 1.58 percent, and 2.25 percent, respectively, versus 1.71 percent and 3.71 percent for the blended benchmark. The cumulative returns of the EMDF for the three- and five-year periods were 4.83 percent and 11.75 percent, respectively, compared to the benchmark returns of 5.22 percent and 19.98 percent. (See Figure 7-7).

### **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. Over two thirds of the Fund is rated as investment grade.

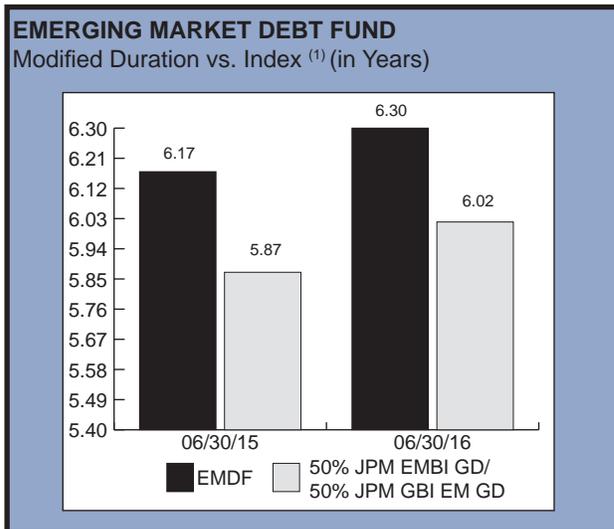
**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

Figure 7-1



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

Figure 7-2



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

Figure 7-3

**EMERGING MARKET DEBT FUND**  
Distribution by Region at June 30, 2016

	50% JPM EMBI GD / 50% JPM GBI EM GD		Variance
	EMDF	50% JPM GBI EM GD	
Asia	19.8%	19.0%	0.8%
Africa	7.5%	8.2%	-0.7%
Europe	32.0%	34.0%	-2.0%
Latin America	34.0%	32.0%	2.0%
Middle East	4.0%	6.8%	-2.8%
United States <sup>(1)</sup>	2.7%	0.0%	2.7%
<b>TOTAL</b>	<b>100.0%</b>	<b>100.0%</b>	

(1) Holdings comprised mainly of Liquidity Fund Exposure.

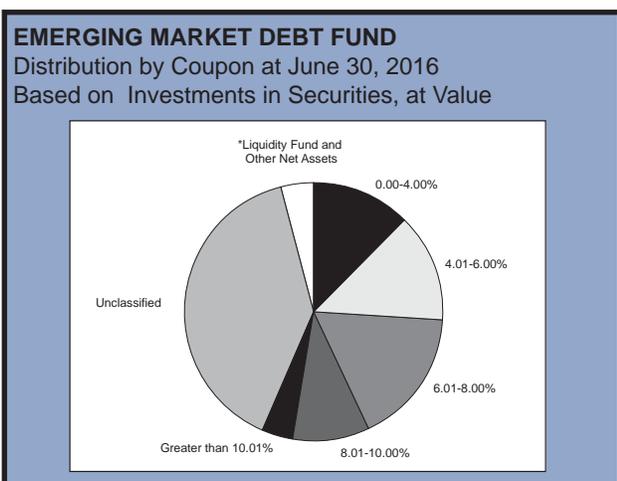
Figure 7-4

**EMERGING MARKET DEBT FUND**  
Distribution by Quality Rating at June 30, 2016  
Based on Investments in Securities, at Value

Aaa	0.5%
AA-1 to AA3	0.6%
A-1 to A-3	14.5%
BAA-1 to BAA3	38.3%
Less than BAA-3	44.6%
Not Rated <sup>1</sup>	1.5%
<b>Total</b>	<b>100.0%</b>

(1) Represents securities for which ratings are unavailable.

Figure 7-5



\* Includes Liquidity Fund and other assets. Note: Ending weights.

Figure 7-6

**EMERGING MARKET DEBT FUND**  
Duration Distribution at June 30, 2016  
Based on Investments in Securities, at Value

0-3 Years	14.7%
3-5 Years	23.9%
5-7 Years	29.0%
7-10 Years	13.7%
10+ Years	14.6%
Unknown <sup>(1)</sup>	1.4%
Liquidity Fund <sup>(2)</sup>	2.7%
<b>Total</b>	<b>100.0%</b>

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

(2) Represents monies invested in the Liquidity Fund and other net assets at the end of the quarter.

## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

Figure 7-7

	1 YR	3 YRS	5YRS	10 YRS
<b>EMERGING MARKET DEBT FUND</b>				
Periods ending June 30, 2016				
<b>Compounded, Annual Total Return (%)</b>				
EMDF	6.01	1.58	2.25	6.41*
50% JPM EMBI GD/ 50% JPM GBI EM GD	5.96	1.71	3.71	6.61
<b>Cumulative Total Return (%)</b>				
EMDF	6.01	4.83	11.75	86.18*
50% JPM EMBI GD/ 50% JPM GBI EM GD	5.96	5.22	19.98	89.68

\* Represents historical returns at the portfolio composite level.

Figure 7-8

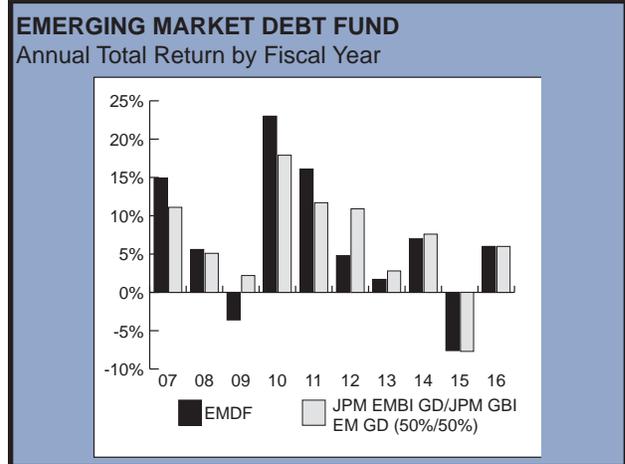


Figure 7-9

Investment Advisor	Net Asset Value	% of Fund
Ashmore	\$591,405,097	39.49%
Stone Harbor Investment Partners	533,272,541	35.60%
Pyramis	359,918,454	24.03%
Other <sup>(1)</sup>	13,184,392	0.88%
<b>TOTAL EMDF</b>	<b>\$1,497,780,484</b>	<b>100.00%</b>

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

Figure 7-10

Security Name	Maturity	Market Value	%
South Africa Gvmt Bond	12/21/2026	\$19,150,244	1.29%
Poland Gvmt Bond	7/25/2025	13,929,700	0.94%
Colombia Gvmt Bond	4/14/2021	10,713,985	0.72%
Mexican Bonds	12/11/2019	10,618,080	0.71%
Brazil Notas Do Tesouro	1/1/2025	10,346,074	0.70%
Turkey Gvmt Bond	1/15/2020	9,871,971	0.66%
Indonesia Treasury Bond	3/15/2024	9,583,452	0.65%
Indonesia Treasury Bond	3/15/2029	9,432,616	0.64%
Colombia Gvmt Bond	3/21/2023	9,369,666	0.63%
Mexican Bonds	12/5/2024	9,291,860	0.63%
<b>Top Ten</b>		<b>\$112,307,648</b>	<b>7.57%</b>

\* 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 7-11

	2016		2015		2014		2013		2012	
	EMDF	EMBI	EMDF	EMBI	EMDF	EMBI	EMDF	EMBI	EMDF	EMBI
Number of Issues	978	714	968	686	880	631	866	368	724	307
Yield to Maturity	7.56%	5.81%	8.54%	6.68%	5.32%	5.86%	6.66%	5.82%	6.57%	4.98%
Average Maturity	9.25%	9.28%	9.23%	9.23%	7.57%	8.60%	10.31%	12.52%	10.88%	12.40%
Modified Duration	6.30	6.02	6.17	5.87	5.69	5.74	6.06	7.10	7.00	7.30
Average Quality	Ba-1	Baa-3	Ba-1	Baa-2	Baa-3	Baa-2	Baa-2	Baa-2	Baa-3	Baa-2
*Other	2.7%	0.0%	4.4%	0.0%	3.2%	0.00%	2.0%	0.0%	4.5%	0.0%

\* Includes Liquidity Fund and other assets. Note: Ending weights

# 2016

## high yield debt fund

### Fund Facts at June 30, 2016

**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:** \$1,823,148,770

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

**Management Fees:** \$5,689,980

**Benchmark:** Citigroup U.S. High Yield Market Capped Index

**Operating Expenses:** \$1,251,682

**Number of Advisors:** 6 external

**Expense Ratio:** 0.39%

### 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, 2016, matching the average quality of the benchmark and had a yield to maturity of 6.87 percent. As of June 30, 2016, the duration of the HYDF was 5.12 years, compared to the benchmark duration of 4.77 years. (See Figure 8-10.)

### Market Review

The fiscal year began with a severe market dislocation fueled by Chinese growth concerns and plunging commodity prices. During the "risk-off" environment of the first half of the fiscal year, the lowest rated credits underperformed by the widest margin. The spread between BB-rated and CCC-rated bonds reached extreme levels as investors preferred to invest based on ratings and liquidity rather than fundamentals. The interest rate increase in December 2015 by the U.S. Federal Reserve sparked a uniform and correlated decline in risk assets, including oil, equities and credit. The sell-off accelerated in early 2016, exacerbated by rising political tensions, accumulating stress in European financials and a sagging world economy. Dovish actions by the central banks of the U.S., Japan and Europe, the beginnings of an oil price recovery, persistently low 10-year U.S. Treasury yields and fading fears of a U.S. recession combined to ignite a remarkable "risk-on" rally in mid-third quarter. U.S. energy firms began to repair their balance sheets as both public and private equity flowed into the sector. Later in fiscal 2016, the rebound in oil prices, as well as the general "risk-on" environment, resulted in a significant chase for yield in some segments of the market. CCC-rated and unrated bonds rallied significantly; CCC spreads tightened 212 basis points while BB spreads tightened only 43 basis points.

Despite spread tightening, default activity ticked up in the first half of 2016 compared to a year earlier, as 29 companies representing \$35.2 billion in high yield bonds defaulted. Much of the default activity was concentrated in the energy and metals and mining sectors. Liquidity in the high yield market deteriorated as several high yield funds experienced significant redemptions, primarily from retail investors.

## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

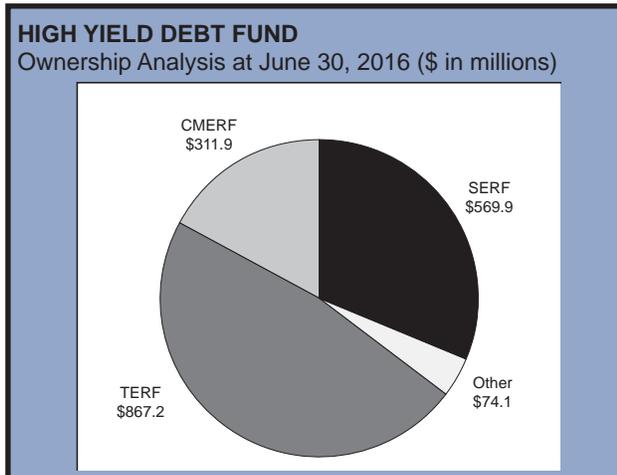
### Performance Summary

For the fiscal year ended June 30, 2016, the HYDF generated a return of -0.31 percent, net of all expenses, versus the Citigroup U.S. High Yield Market Capped Index return of .82 percent. Cumulative net total returns over the three-year and five-year periods ending June 30th were 10.42 percent and 27.54 percent, respectively, for the Fund, and 11.26 percent and 30.77 percent, respectively, for the benchmark. (See Figure 8-8.)

### Risk Profile

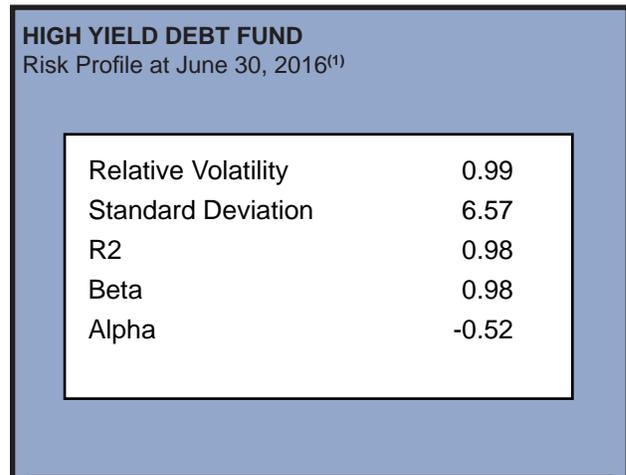
Given the HYDF's investment policies and objective, the Fund is exposed to several forms of risk. These risks include, but are not limited to, credit default risk, interest rate risk, liquidity risk, pre-payment risk, reinvestment risk and inflation risk. In addition, the Fund is occasionally exposed 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.

Figure 8-1



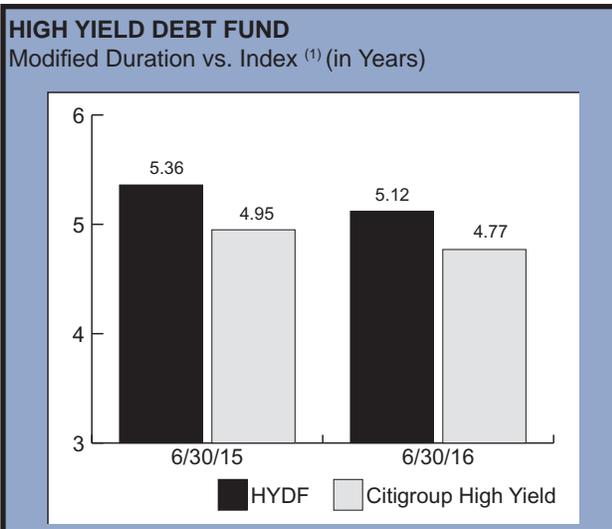
TERF - Teachers' Retirement Fund  
 SERF - State Employees' Retirement Fund  
 CMERF - Connecticut Municipal Employees' Retirement Fund

Figure 8-2



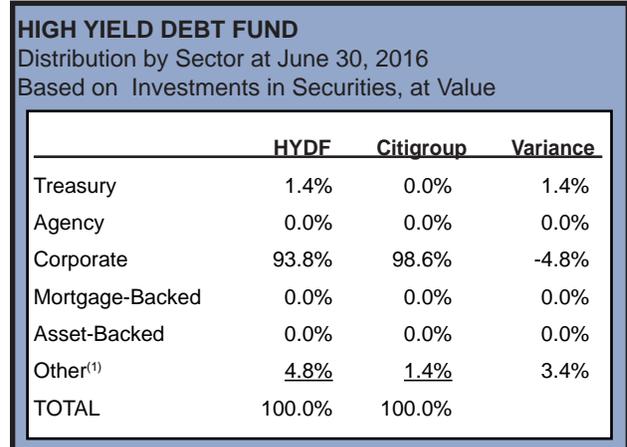
(1) Based upon returns over the last five years.

Figure 8-3



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

Figure 8-4



(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 net assets.

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

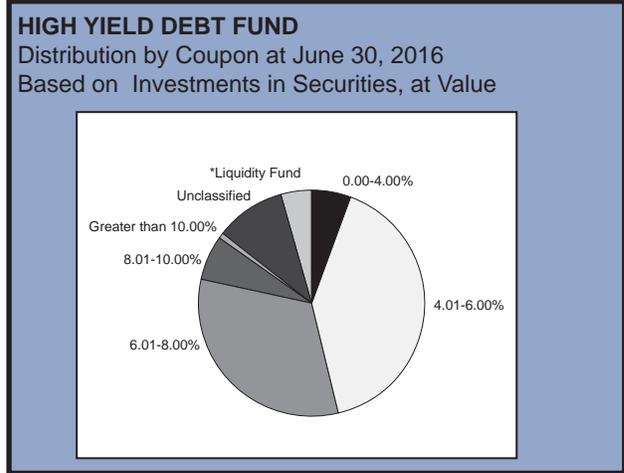
Figure 8-5

**HIGH YIELD DEBT FUND**  
Distribution by Quality Rating at June 30, 2016  
Based on Investments in Securities, at Value

AAA to A3	1.4%
BAA1 to BAA3	3.7%
BA1 to BA3	31.7%
B1 to B3	44.8%
CAA1 to CAA3	12.3%
CA to C	0.2%
Not Rated <sup>(1)</sup>	5.9%
<b>Total</b>	<b>100.0%</b>

(1) Represents securities for which ratings are unavailable.

Figure 8-6



\* Note: Ending weights.

Figure 8-7

**HIGH YIELD DEBT FUND**  
Duration Distribution at June 30, 2016  
Based on Investments in Securities, at Value

0-3 Years	18.4%
3-5 Years	33.3%
5-7 Years	23.2%
7-10 Years	7.3%
10+ Years	2.3%
Unknown <sup>(1)</sup>	11.1%
Liquidity Fund <sup>(2)</sup>	4.4%
<b>Total</b>	<b>100.0%</b>

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

(2) Represents monies invested in the Liquidity Fund at the end of quarter.

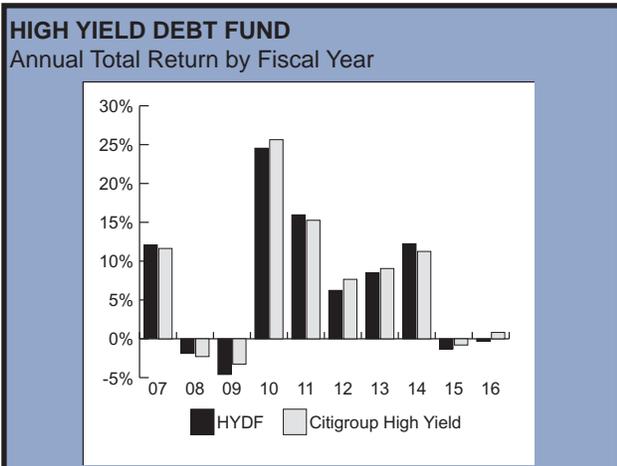
Figure 8-8

**HIGH YIELD DEBT FUND**  
Periods ending June 30, 2016

	1 YR	3 YRS	5 YRS	10 YRS
<b>Compounded, Annual Total Return (%)</b>				
HYDF	-0.31	3.36	4.99	6.73*
Citigroup High Yield Market Capped Index	0.82	3.62	5.51	7.06
<b>Cumulative Total Return (%)</b>				
HYDF	-0.31	10.42	27.54	91.75*
Citigroup High Yield Market Capped Index	0.82	11.26	30.77	97.80

\*Represents historical returns at the portfolio composite level.

Figure 8-9



## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

Figure 8-10

<b>HIGH YIELD DEBT FUND</b>											
Comprehensive Profile for the Fiscal Year ending June 30,											
	<u>2016</u>		<u>2015</u>		<u>2014</u>		<u>2013</u>		<u>2012</u>		
	HYDF	Citigroup									
Number of Issues	1,016	2,179	972	2,220	884	2,183	740	1,752	683	1,621	
Average Coupon	5.67%	6.54%	5.80%	6.73%	5.88%	7.08%	6.90%	7.60%	7.60%	8.20%	
Yield Maturity	6.87%	7.32%	6.34%	6.77%	5.13%	5.73%	6.90%	7.00%	7.50%	7.50%	
Average Maturity	6.17	5.64	6.29	5.74	5.99	5.04	7.30	5.30	7.50	6.30	
Modified Duration	5.12	4.77	5.36	4.95	5.42	5.12	5.60	4.40	4.60	4.00	
Average Quality	B-1	B-1	B-1	B-1	B-1	B-1	B-2	B-2	B-2	B-2	
Liquidity Fund*	4.4%	0.0%	4.6%	0.0%	6.6%	0.0%	6.1%	0.0%	4.2%	0.0%	

\*Note: Ending Weights

Figure 8-11

<b>HIGH YIELD DEBT FUND</b>		
Investment Advisors at June 30, 2016		
Investment Advisor	Net Asset Value	% of Fund
Loomis Sayles & Co., Inc.	\$594,433,937	32.61%
Stone Harbor Investment Partners	301,054,486	16.51%
Shenkman Capital Management	459,175,109	25.19%
Oaktree Capital Management, LLC	352,638,637	19.34%
Carlyle GMS Finance, Inc.	41,110,143	2.25%
Carlyle NF Investment Corp.	58,501,462	3.21%
Other <sup>(1)</sup>	16,234,996	0.89%
<b>TOTAL HYDF</b>	<b>\$1,823,148,770</b>	<b>100.00%</b>

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

Figure 8-12

<b>HIGH YIELD DEBT FUND</b>			
Ten Largest Holdings* at June 30, 2016			
Security Name	Maturity	Market Value	%
Dish DBS Corp	7/1/2026	\$10,207,300	0.56%
Indonesia Gvmnt Bond	1/15/2024	9,945,642	0.55%
CCO Holdings LLC	1/15/2024	9,503,172	0.53%
Sprint Capital Corp	11/15/2028	8,336,700	0.46%
Morgan Stanley	11/16/2018	7,711,934	0.43%
Tribune Media Co 144A	7/15/2022	7,691,350	0.42%
Tenet Healthcare Corp	11/15/2031	6,981,319	0.39%
HD Supply Inc 144A	4/15/2024	6,479,200	0.36%
Griffon Corp	3/1/2022	6,358,513	0.35%
First Data Corp 144A	12/1/2023	6,312,938	0.35%
<b>Top Ten</b>		<b>\$79,528,068</b>	<b>4.40%</b>

\* 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.

# 2016 developed market international stock fund

## Fund Facts at June 30, 2016

**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 U.S. 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, 2007

**Total Net Position:** \$5,223,804,912

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

**Management Fees:** \$21,720,999

**Benchmark:** Morgan Stanley Capital International Europe, Australasia and Far East Investable Market Index (MSCI EAFE IMI) <sup>(1)</sup>

**Operating Expenses:** \$2,321,815

**Number of Advisors:** 10 external

**Expense Ratio:** 0.43%

- (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 (22.3 percent) and the United Kingdom (15.7 percent) (see Figure 9.5). The portfolio's largest country overweight positions relative to the benchmark were Canada (2.1 percent vs. the benchmark's 0.0 percent) and the Netherlands (4.0 percent vs. the benchmark's 3.0 percent). The largest underweights were the United Kingdom (15.7 percent vs. the benchmark's 19.3 percent) and Japan (22.3 percent vs. the benchmark's 24.5 percent).

## Market Review

International developed equities posted negative returns for the fiscal year. While the local currency return versus the market was about the same as the U.S. dollar return, there were differences across currencies. Most major currencies ended the fiscal year in the red versus the U.S. dollar due to the U.K. referendum to leave the European Union (Brexit). Most prominently, the pound Sterling lost 15.0 percent versus the dollar over the period, almost half of which resulted from the Brexit vote. The Japanese Yen was the exception to the trend as it rose 19.3 percent during the fiscal year versus the U.S. dollar.

Overall, the MSCI EAFE index returned -10.2 percent in U.S. dollar terms. Value stocks significantly underperformed growth stocks by about 1,060 basis points and small capitalization stocks outperformed large capitalization stocks during the year. The best performing sectors were consumer staples (10.1 percent) and utilities (-0.2 percent). The worst performing sectors were financials (-23.2 percent), consumer discretionary (-17.6 percent) and materials (-15.7 percent). The energy sector finished the fiscal year down

(-2.9 percent) after negative performance (-16.4 percent) during the first half of the year and rebounding in the second half of the year (16.1 percent). Oil prices dropped more than 50 percent through February and rapidly recovered to end the fiscal year down 18.7 percent. This shift in oil prices also drove price momentum to outperform in the second half of the fiscal year, after underperformance in the first half, finishing the fiscal year relatively flat.

### **Performance Summary**

For the fiscal year ended June 30, 2016, the DMISF generated a return of -7.09 percent, net of all expenses, which outperformed the benchmark return of -9.26 percent by 217 basis points (See Figure 9.3). As of June 30, 2016, the DMISF compounded net annualized total returns, for the trailing three-, five- and ten-year periods were 4.59 percent, 4.22 percent, and 2.94 percent, respectively. The returns outperformed the DMISF's benchmark for the three-, five- and ten-year periods.

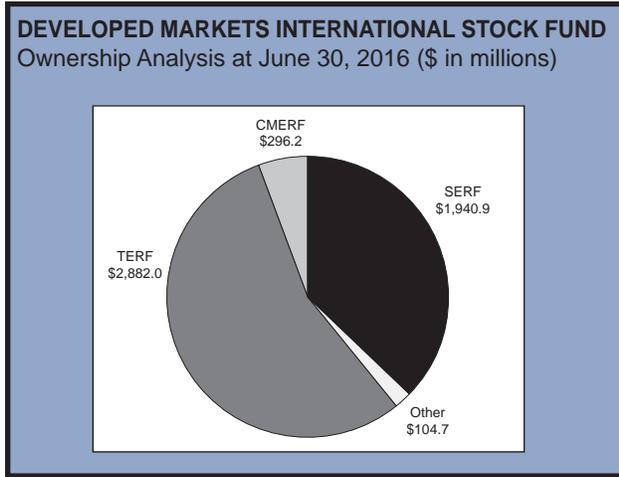
The cumulative returns of the DMISF for the three-, five-, and ten-year periods were 14.40 percent, 22.97 percent, and 33.55 percent, respectively.

### **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 volatility over a five year period is only slightly lower than the market at 0.99. On a risk adjusted basis, the Fund has generated excess return of 0.01, which indicates that it is producing a slightly higher risk adjusted return than the benchmark.

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

Figure 9-1



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

Figure 9-2



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

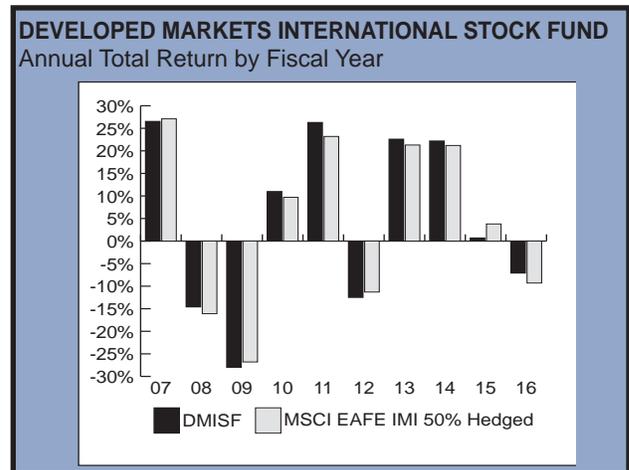
Figure 9-3

**DEVELOPED MARKETS INTERNATIONAL STOCK FUND**  
Periods ending June 30, 2016

	1 YR	3 YRS	5YRS	10YRS
<b>Compounded, Annual Total Return (%)</b>				
DMISF	-7.09	4.59	4.22	2.94*
MSCI EAFE				
IMI 50% Hedged	-9.26	4.52	4.21	2.64
<b>Cumulative Total Return (%)</b>				
DMISF	-7.09	14.40	22.97	33.55*
MSCI EAFE				
IMI 50% Hedged	-9.26	14.18	22.92	29.71

\*Represents historical returns at the portfolio composite level.

Figure 9-4



**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

Figure 9-5

<b>DEVELOPED MARKETS INTERNATIONAL STOCK FUND</b>			
Diversification by Benchmark Country at June 30, 2016 <sup>(1)</sup>			
	<b>DMISF % of Net Assets 6/30/16</b>	<b>Benchmark % of Net Assets 6/30/16</b>	<b>Variance</b>
Japan	22.3	24.5	-2.2
United Kingdom	15.7	19.3	-3.6
Korea	0.0	0.0	0.0
Hong Kong	3.1	3.2	-0.2
United States	0.2	0.0	0.2
France	9.3	8.9	0.4
Germany	8.8	8.3	0.5
Switzerland	9.1	8.6	0.5
Australia	5.9	7.1	-1.3
China	0.2	0.0	0.2
Netherlands	4.0	3.0	1.0
Italy	2.3	2.2	0.1
Spain	2.4	2.9	-0.5
Sweden	2.9	3.1	-0.2
Singapore	1.4	1.5	0.0
Canada	2.1	0.0	2.1
Turkey	0.1	0.0	0.1
Other	10.2	7.4	2.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	

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

Figure 9-6

<b>DEVELOPED MARKETS INTERNATIONAL STOCK FUND</b>		
Investment Advisors at June 30, 2016		
<b>Investment Advisor</b>	<b>Net Asset Value</b>	<b>% of Fund</b>
<b>Index</b>	<b>\$1,903,986,941</b>	<b>36.45%</b>
State Street Global Advisors	1,903,986,941	36.45%
<b>Core</b>	<b>1,360,679,992</b>	<b>26.05%</b>
AQR Capital Management	641,039,663	12.27%
Acadian Asset Management	599,703,005	11.48%
Progress	119,937,324	2.30%
<b>Active-Growth</b>	<b>738,598,450</b>	<b>14.14%</b>
MFS Institutional Advisors, Inc.	738,598,450	14.14%
<b>Active-Value</b>	<b>413,509,754</b>	<b>7.92%</b>
Grantham, Mayo, Van Otterloo	413,509,754	7.92%
<b>Small Cap</b>	<b>795,123,338</b>	<b>15.22%</b>
Schroder Investment Mgmt.	277,783,213	5.32%
DFA	241,949,700	4.63%
William Blair & Company	275,390,425	5.27%
Other <sup>(1)</sup>	11,906,437	0.22%
<b>TOTAL DMISF</b>	<b>\$5,223,804,912</b>	<b>100.00%</b>

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

Figure 9-7

<b>DEVELOPED MARKETS INTERNATIONAL STOCK FUND</b>			
Ten Largest Holdings* at June 30, 2016			
<b>Security Name</b>	<b>Country</b>	<b>Market Value</b>	<b>%</b>
Nestle SA REG	Switzerland	\$98,536,523	1.90%
Roche Holding AG Genusschein	Switzerland	73,338,922	1.41%
Novartis AG REG	Switzerland	53,691,203	1.04%
Bayer AG REG	Germany	41,625,163	0.80%
HSBC Holdings PLC	United Kingdom	40,380,281	0.78%
WPP PLC	United Kingdom	38,925,922	0.75%
Reckitt Benckiser Group PLC	United Kingdom	36,402,726	0.70%
Total SA	France	34,506,292	0.67%
BP PLC	United Kingdom	34,328,306	0.66%
Astrazeneca ORD USD 0.25	United Kingdom	33,425,749	0.64%
<b>TOP TEN</b>		<b>\$485,161,087</b>	<b>9.35%</b>

\* 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.

# 2016 emerging markets international stock fund

## Fund Facts at June 30, 2016

**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 U.S. inflation rate; and (2) provide additional measures of diversification within the CRPTF under different economic scenarios.

**Date of Inception:** November 1, 2007

**Total Net Position:** \$2,483,470,514

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

**Management Fees:** \$13,834,642

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

**Operating Expenses:** \$2,412,475

**Number of Advisors:** 3 external

**Expense Ratio:** 0.65%

- (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 positions versus the benchmark include Hong Kong (8.9 percent versus the benchmark's 0.0 percent), and Russia (7.3 percent versus the benchmark's 3.3 percent). Underweight positions include China (9.3 percent versus the benchmark's 25.3 percent), South Africa (2.9 percent versus the benchmark's 7.0 percent), and Malaysia (0.7 percent versus the benchmark's 3.0 percent) (See Figure 10.6 ).

## Market Review

Emerging market equities ended the fiscal year in negative territory although the second half of the fiscal year helped to pare back losses. Factors that contributed to negative performance early in the fiscal year included fears over a slowdown in China, Brazil's deteriorating economic outlook, weakening global growth and higher U.S. interest rates. Towards the second half of the year, oil prices rebounded and central banks around the world continued to ease monetary policy. The Bank of Japan moved into negative rate territory, while the U.S. lowered expectations for rate hikes in calendar year 2016. Finally, in June, the U.K.'s vote to leave the European Union (Brexit) sent shockwaves across global markets and the pound Sterling crashed to a 30 year low versus the U.S. dollar.

Emerging Europe was the worst performing region, driven by weakness in Greece, Egypt and Poland. Turkey's political turmoil also caused concern as Prime Minister Ahmet Davutoglu suddenly resigned in May, just four months after taking office. Latin America ended the fiscal year strong with Brazil outperforming in the region as regime change was realized. In Mexico, fiscal year first quarter economic growth rose to 2.7 percent from the prior year, aided by domestic demand that outweighed weak exports and lower oil prices.

### Performance Summary

For the fiscal year ended June 30, 2016, the EMISF generated a return of -7.15 percent, net of all expenses, which outperformed the benchmark return of -12.16 percent by 501 basis points (See Figure 10.4). As of June 30, 2016, the EMISF compounded net annualized total returns, for the trailing three-, five- and ten-year periods were -1.23 percent, -3.07 percent, and 3.06 percent, respectively. The returns outperformed the EMISF's benchmark for the three- and five-year periods.

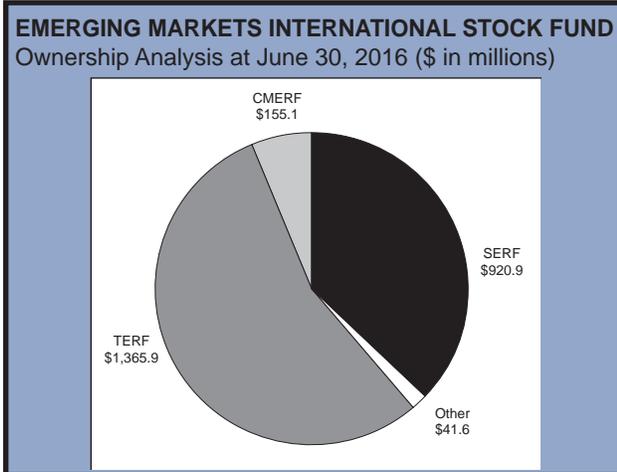
The cumulative returns of the EMISF for the three-, five-, and ten-year periods were -3.65 percent, -14.44 percent, and 35.23 percent, respectively.

### 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 is slightly lower than that of the benchmark as evidenced by a relative volatility of 0.98. The EMISF's annualized alpha over the five-year period was 0.52, indicating that the fund outperformed the benchmark for the five years on a risk adjusted basis (see Figure 10.2).

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

Figure 10-1



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

Figure 10-2



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

Figure 10-3

**EMERGING MARKETS INTERNATIONAL STOCK FUND**  
Fiscal Year 2016 Economic Sector vs. Index (%)

	EM ISF	MSCI Index	Variance
Energy	6.6	6.6	0.0
Materials	4.9	6.9	-2.1
Industrials	3.8	7.5	-3.6
Consumer Discretionary	10.3	11.6	-1.2
Consumer Staples	7.1	8.3	-1.2
Health Care	1.4	3.7	-2.3
Financials	28.3	24.9	3.4
Information Technology	23.4	21.5	1.9
Telecommunication Services	8.9	5.9	3.0
Utilities	1.7	3.1	-1.4
Commingled Fund	0.0	0.0	0.0
Preferred Stock	0.0	0.0	0.0
Private Placement	0.0	0.0	0.0
Other	0.0	0.0	0.0
Liquidity Fund	<u>3.6</u>	<u>0.0</u>	3.6
	100.0	100.0	

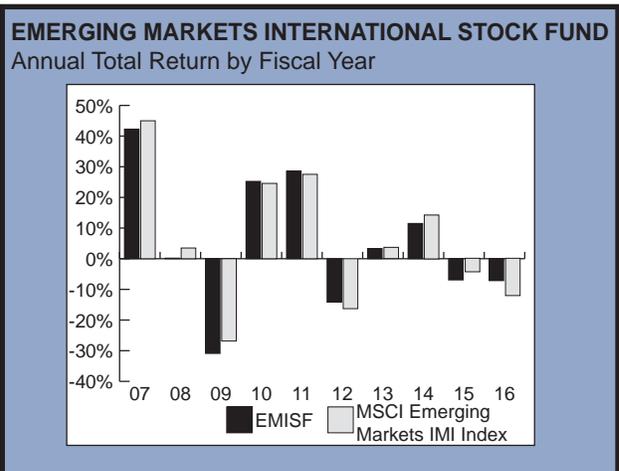
Figure 10-4

**EMERGING MARKETS INTERNATIONAL STOCK FUND**  
Periods ending June 30, 2016

	1 YR	3 YRS	5 YRS	10 YRS
<b>Compounded, Annual Total Return (%)</b>				
EMISF	-7.15	-1.23	-3.07	3.06*
MSCI EMERGING MARKETS IMI INDEX	-12.16	-1.36	-3.59	3.80
<b>Cumulative Total Return (%)</b>				
EMISF	-7.15	-3.65	-14.44	35.23*
MSCI EMERGING MARKETS IMI INDEX	-12.16	-4.02	-16.72	45.24

\*Represents historical returns at the portfolio composite level.

Figure 10-5



**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

Figure 10-6

<b>EMERGING MARKETS INTERNATIONAL STOCK FUND</b>		
Diversification by Benchmark Country at June 30, 2016 <sup>(1)</sup>		
	EMISF Percent of Net Assets 6/30/16	Benchmark Percent of Net Assets 6/30/16
Brazil	9.1%	6.7%
Korea	14.4	15.4
Hong Kong	8.9	0.0
Russia	7.3	3.3
China	9.3	25.3
Taiwan	11.9	12.8
United States	3.6	0.0
Mexico	3.1	4.0
Thailand	3.0	2.5
South Africa	2.9	7.0
Turkey	4.1	1.3
Indonesia	2.2	2.7
Malaysia	0.7	3.0
India	10.6	8.8
Philippines	1.9	1.5
United Kingdom	1.0	0.0
Other Countries	6.0	5.7
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>

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

Figure 10-7

<b>EMERGING MARKETS INTERNATIONAL STOCK FUND</b>		
Investment Advisors at June 30, 2016		
Investment Advisor	Net Asset Value	% of Fund
Grantham, Mayo, Van Otterloo	\$644,962,506	25.97%
Aberdeen Asset Management	802,447,807	32.31%
Schroders Investment Mgt	1,000,771,414	40.30%
Other <sup>(1)</sup>	35,288,787	1.42%
<b>TOTAL EMISF</b>	<b>\$2,483,470,514</b>	<b>100.00%</b>

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

Figure 10-8

<b>EMERGING MARKETS INTERNATIONAL STOCK FUND</b>			
Ten Largest Holdings* at June 30, 2016			
Security Name	Country	Market Value	%
Taiwan Semiconductor Manufacture	Taiwan	\$111,386,220	4.52%
China Mobile LTD	Hong Kong	86,457,698	3.50%
Samsung Electronics Co LTD	Republic of Korea	81,877,691	3.32%
Tencent Holdings LTD	China	67,317,031	2.73%
China Construction Bank Corp	China	57,841,227	2.35%
AIA Group LTD	Hong Kong	55,713,561	2.26%
HDFC Bank LTD	India	46,948,464	1.90%
Samsung Electronic Co LTD Preferred Security	Republic of Korea	37,014,912	1.50%
Astra International TBK PT	Indonesia	35,387,195	1.43%
Alibaba Group Holding LTD	Cayman Islands	34,819,109	1.41%
<b>Top Ten</b>		<b>\$614,763,108</b>	<b>24.92%</b>

\* 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.

# 2016 real estate fund

## Fund Facts at June 30, 2016

**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

**Total Net Position:** \$2,207,088,905

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

**Management Fees** <sup>(1)</sup>: \$7,554,325

**Capitalized and Netted Fees:** \$15,180,128

**Benchmark:** National Council of Real Estate Investment Fiduciaries - National Properties Index (NCREIF-NPI)

**Operating Expenses:** \$1,083,872

**Expense Ratio**\*: 0.42%

**Number of Investment Partnerships:** 42

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

(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/or other indirect ownership structures managed by professional real estate investment managers.

## Portfolio Characteristics

As of June 30, 2016, the portfolio was approximately 31.6 percent invested in close-end fund vehicles, 54.7 percent in open-end funds, and 13.8 percent held in two separate accounts, in which the REF holds 100 percent ownership interest in properties within the portfolio. These separate account vehicles are managed by external managers and employ a core investment strategy. The majority of investments in the REF are comprised of co-mingled private equity funds vehicles in which the CRPTF holds limited partnership interests. These commingled funds employ three main real estate investment sub-asset classes: core, value-add, and opportunistic strategies. In accordance with the Investment Policy Statement, leverage levels in the REF shall not exceed 60 percent, and are diversified across geography and property types, with approximately 94.6 percent located in the markets within the United States and 5.4 percent to real estate markets abroad.

As of June 30, 2016, the REF allocation to sub-strategies was 52.0 percent to core, 25.8 percent to value, 15.7 percent to opportunistic and 6.5 percent to LF/cash. The portfolio is well diversified geographically. While the National Properties Index (NPI) remains the tracked real estate investments benchmark, the CRPTF at any given time may be tactically under- or over-weight in specific property types, regions, vintage years or other characteristics of the Index.

## Market Review

The U.S. economy and financial markets have absorbed a series of mini-shocks over the past year, including a Chinese slowdown, slumping commodity prices, a soaring U.S. dollar, a tightening energy industry, a modest interest rate hike, and the United Kingdom's "Brexit" vote to leave the European Union. U.S. commercial real estate has not been immune to these developments, but it has proved remarkably resilient.

Acquisition activity continued at a moderate pace in second quarter of 2016, less active than in 2015, but above the prior six year average. The second quarter of 2016 saw \$63.5 billion in U.S. commercial real estate transaction volume or 41 percent of global activity. While solid, this represented a 16 percent drop compared to record 2015 levels. The U.S. decline was on trend with the broad moderation of global transaction activity during the quarter. U.S. cities continue to be attractive targets for global investment capital with New York and Los Angeles (1st and 3rd respectively), accounting for 12 percent of global transactions. Foreign investment represented approximately 12 percent of total U.S. activity, with China overtaking Canada as the primary foreign capital source year-to-date.

U.S. real estate fundamentals remain relatively healthy, but the property cycle is entering a new phase in which deliveries are catching up and, in some case, outpacing demand. As a result, macro indicators for U.S. real estate came in tepid during the second quarter of 2016 with residential housing starts and total construction investment flat to marginally down year over year. Building permits, which signal future construction activity, also fell nine percent compared to same period 2015. CMBS issuances slowed to \$11.4 billion in the second quarter of 2016, less than half of the \$27.5 billion a year ago.

Cap rates are fairly stable, but the recent quarter reflected modest widening in some property sectors. Performance returns remain favorable and above long term averages, however the one year period ending June 30, 2016 for the NPI was 10.6 percent compared to the one year period ending June 30, 2015 of 13.0 percent, but compared favorably with returns on stocks (4.0 percent) and bonds (6.7 percent).

### **Performance Summary**

For fiscal year 2016 the Fund generated a total return of 11.5 percent, net of all expenses, modestly underperforming its benchmark NCREIF-NPI, which posted a gross return of 11.8 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-, five- and ten-year periods, the REF's compounded annual returns, net of all expenses, were 11.7 percent, 10.5 percent, and 2.8 percent, respectively (See Figure 11-8). Longer-term portfolio returns continue to lag the benchmark, with five- and ten-year returns underperforming by 144 basis points and 480 basis points, respectively. The Fund has continued to invest through the recent real estate cycle, with new commitments in open end vehicles in core and value-add strategies during the fiscal year, which has helped to maintain diversification in the fund.

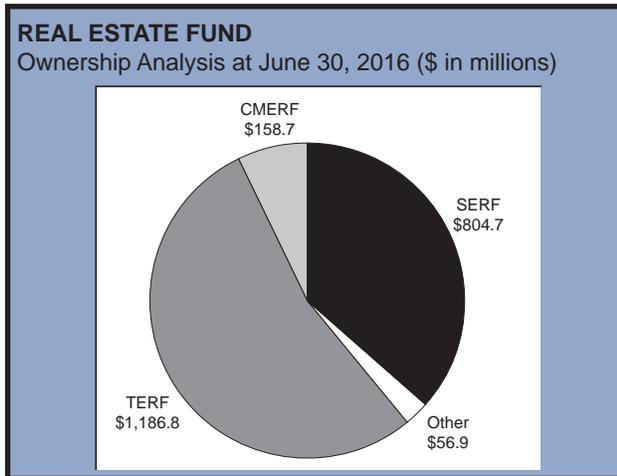
### **Risk Profile**

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 has lower volatility than NPI, as expected (See Figure 11-2) largely due to allocations to core funds, which generally have lower leverage than value-add and opportunistic strategies and have reduced risk to 63 percent as of 2016 versus 2012 levels. Also, the REF's core sub-portfolio, which most closely tracks NPI, has a leveraged amount of approximately 35.81 percent. NPI is comprised of a portfolio of 6,000+ properties, many of which are leveraged, 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.

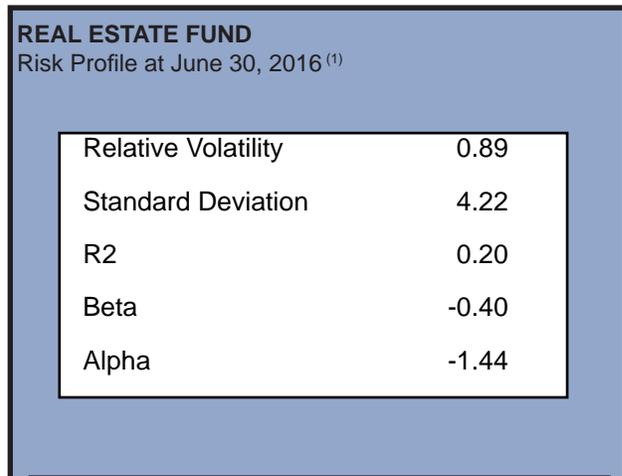
## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

Figure 11-1



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

Figure 11-2



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

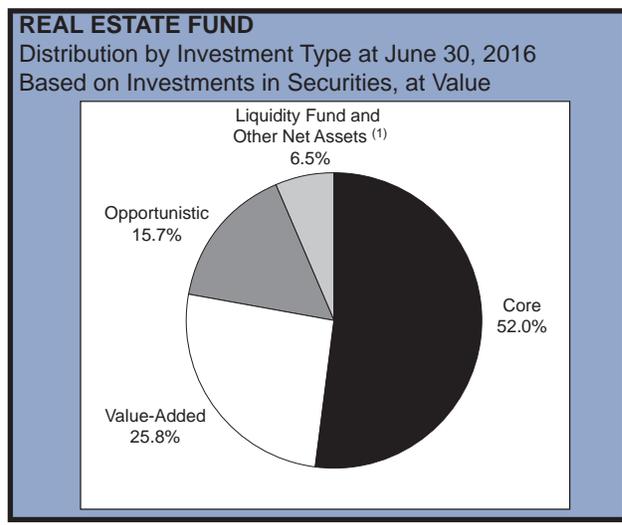
Figure 11-3

**REAL ESTATE FUND**  
Investments Analysis <sup>(1)</sup> by Fiscal Year

At	No. of REF Investments	REF Book Value	REF Market Value
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
6/30/2007	23	485,341,324	531,570,750

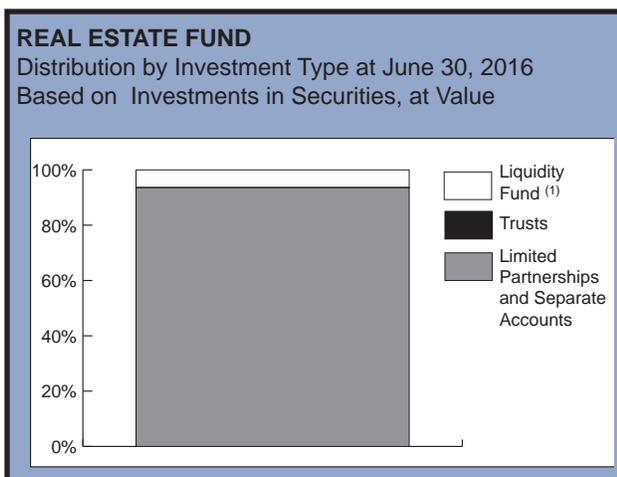
(1) Number of investments in annuities, partnerships, corporations, and trusts, excluding the Liquidity Fund.

Figure 11-4



(1) Liquidity Fund and Other Net Assets

Figure 11-5



(1) Liquidity Fund and other monetary assets.

Figure 11-6

**REAL ESTATE FUND**  
Distribution by Geographic Location at June 30, 2016  
Based on Investments in Securities, at Value

	REF	NCREIF	Variance
East	35.3%	41.4%	-6.1%
Midwest	2.8%	5.7%	-2.9%
South	11.3%	10.7%	0.6%
West	38.6%	42.2%	-3.6%
International	5.4%	0.0%	5.4%
Liquidity Fund and Other Net Assets	<u>6.6%</u>	<u>0.0%</u>	6.6%
	100.0%	100.0%	

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

Figure 11-7

**REAL ESTATE FUND**  
Diversification by Property Type at June 30, 2016  
Based on Investments in Securities, at Value

	REF	NCREIF	Variance
Apartment	23.6%	24.5%	-0.9%
Industrial	16.9%	14.2%	2.7%
Office	22.7%	36.9%	-14.2%
Retail	20.8%	23.2%	-2.4%
Hotel	6.8%	1.2%	5.6%
Liquidity Fund and Other Net Assets <sup>(1)</sup>	<u>9.2%</u>	<u>0.0%</u>	9.2%
	100.0%	100.0%	

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

Figure 11-8

**REAL ESTATE FUND**  
Periods ending June 30, 2016

	1 YR	3 YRS	5 YRS	10 YRS
<b>Compounded, Annual Total Return (%)</b>				
REF	11.51	11.70	10.49	2.81
NCREIF Property	11.84	11.91	11.93	7.61
<b>Cumulative Total Return (%)</b>				
REF	11.51	39.35	64.70	31.90
NCREIF Property	11.84	40.16	75.67	108.25

Figure 11-9

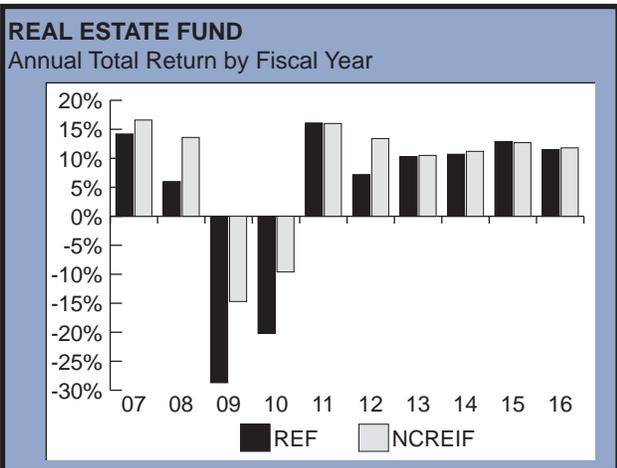
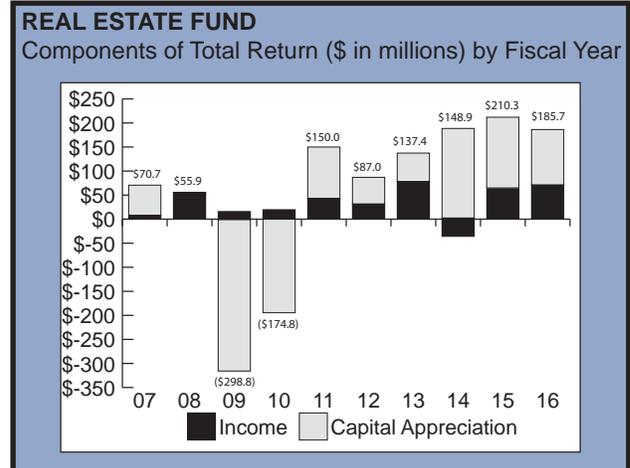


Figure 11-10



## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

Figure 11-11

<b>REAL ESTATE FUND</b>		
Funds at June 30, 2016		
Fund	Net Asset Value	% of Fund
AEW Partners III	\$5,688,097	0.26%
American Realty Advisors	41,258,707	1.87%
Apollo Real Estate	183,759	0.01%
Blackstone Real Estate Partner Europe III LP	34,432,319	1.56%
Blackstone Real Estate Spec Sit II LP	2,519,325	0.11%
Blackstone Real Estate VI LP	57,911,637	2.62%
Blackstone Real Estate Partners VIII LP	41,465,523	1.88%
Canyon Johnson Urban Fund II	3,509,387	0.16%
Canyon Johnson Urban Fund III	1,283,372	0.06%
Capri Select Income II LLC	67,002	0.00%
Clarion Lion Industrial Trust	106,730,379	4.83%
Colony Realty Partners II LP	12,468,300	0.56%
Cornerstone Patriot Fund LP	282,808,340	12.81%
Covenant Apartment Fund V LP	1,101,672	0.05%
Covenant Apartment Fund VI	3,074,086	0.14%
Covenant Apartment Fund VIII	12,550,698	0.57%
Crow Hldgs Realty Partners VII LP	32,425,778	1.47%
Cypress Acquisition Prtnrs Retail FD LP	35,907,926	1.63%
Gerding Edlen Green Cities II	32,201,791	1.46%
Hart Realty Advisors	205,840,263	9.33%
IL & FS India Realty Fund II LLC	33,310,574	1.51%
JP Morgan Strategic Property	82,699,608	3.75%
Landmark RE Partners VII LP	19,423,169	0.88%
Lone Star Real Estate Part II LP	16,263,015	0.74%
Macfarlane Urban Real Estate Fund II LP	21,896,671	0.99%
New Boston IV	530,040	0.02%
Prime Property Fund LLC	294,155,843	13.33%
PRISA	112,034,324	5.08%
Rockwood Capital Fund V	785,376	0.04%
Rockwood Capital VI Limited Partnership	6,076,637	0.27%
Rockwood Capital VII Limited Partnership	25,118,373	1.14%
Starwood Opportunity Fund VII	19,602,882	0.89%
Starwood Opportunity Fund VIII	19,340,753	0.88%
Starwood Opportunity Fund IX	43,852,326	1.99%
Starwood Opportunity Fund X	58,660,456	2.66%
UBS-Trumbull Property Income	58,103,715	2.63%
UBS-Trumbull Property G&I (TPG)	63,515,469	2.88%
UBS-Trumbull Property Fund LP	85,466,287	3.87%
Urban Strategy America Fund LP	33,534,000	1.52%
USAA Eagle RE Fund	129,558,392	5.87%
Walton Street Real Estate	1,202,101	0.05%
WLR IV PPIP Co Invest LP	26,574,155	1.20%
Other <sup>(1)</sup>	141,956,378	6.43%
<b>SUBTOTAL REF</b>	<b>2,207,088,905</b>	<b>100.00%</b>

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

Figure 11-12

<b>REAL ESTATE FUND</b>			
Ten Largest Holdings* at June 30, 2016			
Property Name	Type	Market Value	%
Prime Property Fund LLC	Core	\$294,155,843	13.33%
Cornerstone Patriot Fund LP	Core	282,808,340	12.81%
Hart Realty Advisors	Core	205,840,263	9.32%
USAA Eagle RE Fund	Core	129,558,392	5.87%
PRISA	Core	112,034,324	5.07%
Clarion Lion Industrial Trust	Value Added	106,730,379	4.84%
UBS-Trumbull Property Fund LP	Core	85,466,287	3.87%
JP Morgan Strategic Property	Core	82,699,608	3.75%
UBS-Trumbull Property G&I (TPG)	Core	63,515,469	2.88%
Starwood Opportunity Fund X	Opportunistic	58,660,456	2.66%
<b>Top Ten</b>		<b>\$1,421,469,361</b>	<b>64.40%</b>

\* 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

<b>REAL ESTATE FUND</b>		
New Investments Made in Fiscal Year 2016 (in Excess of \$3 Million)		
Partnership Name	Commitment Amount	Investment Type
Covenant Apartment Fund VIII, LP	\$30 million	Value-Add
Crow Holding Realty Partners VII, LP	75 million	Value-Add
Total	\$105 million	

# 2016 commercial mortgage fund

## Fund Facts at June 30, 2016

**Investment Strategy/Goals:** The Commercial Mortgage Fund (CMF) provides an alternate source of domestic fixed income investment for the retirement funds. It was the vehicle for investing CRPTF's assets in mortgages on income-producing commercial property for expected yields superior to Treasury and corporate fixed income securities, in exchange for reduced liquidity. Commercial mortgages were expected to perform similarly to other domestic fixed income securities that are driven by U.S. interest rate changes.

**Date of Inception:** November 2, 1987

**Total Net Position:** \$83

**Performance Objective:** A net return equal to the Barclays U.S. Aggregate Bond Index plus 100 basis points.

**Management Fees:** N/A

**Benchmark:** Barclays U.S. Aggregate Bond Index

**Operating Expenses:** N/A

**Number of Advisors:** N/A

**Expense Ratio:** N/A

## Description of the Fund

CMF is no longer making new investments. There was one remaining securitized Yankee Mac Commercial Mortgage-Backed Security (CMO) in the fund that was sold on February 29, 2016. This asset class is no longer a part of the most recent asset allocation structure of the CRPTF, adopted in July, 2013. The remaining net position of \$83 in the Fund at the end of the fiscal year represents residual cash that will be distributed in fiscal year 2017.

# 2016

## private investment fund

### Fund Facts at June 30, 2016

**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

**Total Net Position:** \$2,769,810,105

**Performance Objective:** A net return that outperforms the Standard & Poor Index (S&P 500) over rolling ten year periods.

**Management Fees<sup>(1)</sup>:** \$3,039,252

**Benchmark:** S&P 500

**Capitalized and Netted Fees:** \$26,649,417

**Number of Partnerships:** 65

**Operating Expenses:** \$2,283,812

**Expense Ratio\*:** 0.19%

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

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

### Description of the Fund

The PIF is an externally managed fund whose strategic focus is 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 (FOF) 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 (seed, early stage, later stage).
- 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 often offer higher return potential, with higher risk, as a result of the above average rates of growth available in select international economies.

#### 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.

## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

Excluding commitments made under the Connecticut Horizon Fund program, the PIF had 65 active funds and aggregate capital commitments totaling \$7.7 billion as of June 30, 2016. Approximately 91 percent, or \$7.0 billion, has been “drawn down” for investment purposes as of that date while the balance of approximately \$700 million, or 9 percent, is committed but not “drawn” (See Figure 13-6).

### Market Review

Public market volatility continued during the fiscal year with the final month of the year especially volatile due to the U.K. referendum to leave the European Union (Brexit). The long-term impact of Brexit combined with U.S. electoral/political uncertainty and geopolitical risks across the globe could contribute to continued market volatility. As a result, public market valuations have been very strong with debt at a low cost causing purchase price multiples in private equity to reach record highs.

Fundraising for global private equity totaled \$302.1 billion during the fiscal year representing a 10.2 percent decrease from prior year, while funds invested \$204.1 billion, representing a decrease of 6.3 percent. Buyout funds raised \$195.0 billion, while funds invested \$81.2 billion. The average investment size for private equity funds during the fiscal year was \$15.3 million and the average U.S. buyout purchase price was 10.0X earnings before income taxes, depreciation and amortization.

The venture capital industry demonstrated strong levels of fundraising and steady levels of investment and exits during the fiscal year. Fundraising totaled \$39.1 billion invested in over 9,000 transactions, up around 40 percent for the same period from 2013 to 2014. The industry continues to see activity from non-traditional venture investors such as hedge funds, mutual funds and other pre-IPO investors that are deploying large amounts of capital into later stage, follow on investments. The software sector accounted for approximately 50 percent of invested capital, followed by biotechnology, which received 12 percent.

### Performance Summary

For the fiscal year ended June 30, 2016, PIF generated a net compounded annual rate of return of 8.87 percent (See Figure 13-5). This return was measured using a Time Weighted Return (TWR) calculation methodology.

While short-term returns are evaluated, longer term (e.g., 10 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 last 10 years through June 30, 2016, PIF's performance has exceeded that of the S&P 500 by 291 basis points on a compounded annual basis (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 9.0 percent IRR. A tool commonly used by institutional investors to benchmark IRR performance is the public market equivalent (PME). From inception through June 30, 2016, PIF has generated 230 basis points of annual performance in excess of its S&P 500 PME.

During Fiscal Year 2016, four new partnerships were completed (See Figure 13-10).

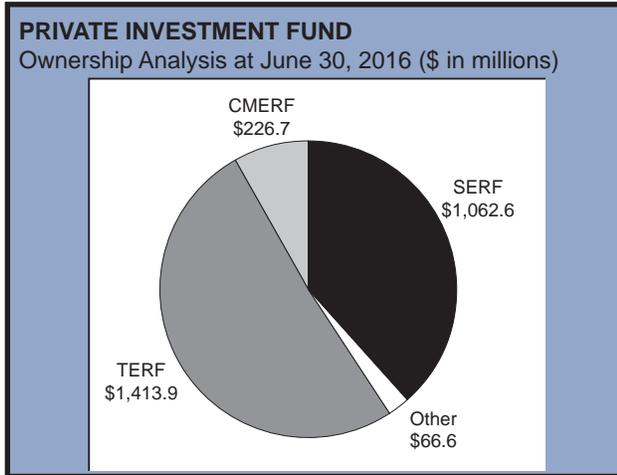
### Risk Profile

Given PIF's investment policy and objectives, the Fund is exposed to several forms of risk. These include, but are not limited to, the risks attendant with alternative investments, such as management, operations, and product risk, as well as overall liquidity risk. Assuming these risks as part of a prudent, total portfolio strategy enables PIF to participate in the possibility of substantial long-term investment returns.

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, PIF's volatility relative to its benchmark has been 0.43 with a correlation of -0.02. Over the last five years, the Fund has returned an annual alpha, or return relative to that predicted by its benchmark, of -1.28 (See Figure 13-2).

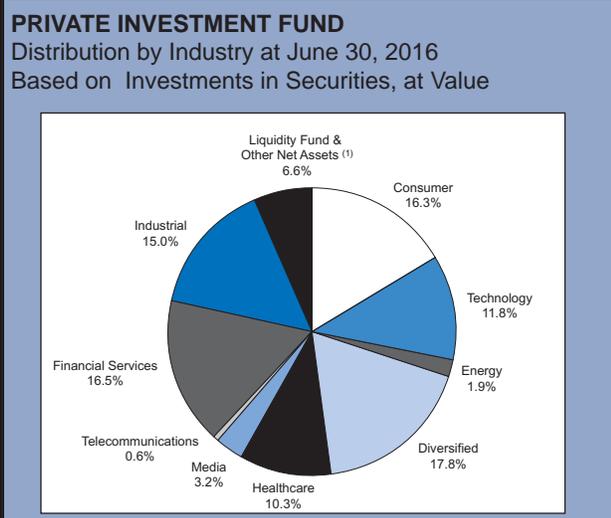
## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

Figure 13-1



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

Figure 13-3



(1) Includes the Liquidity Fund and other assets at the partnership level.

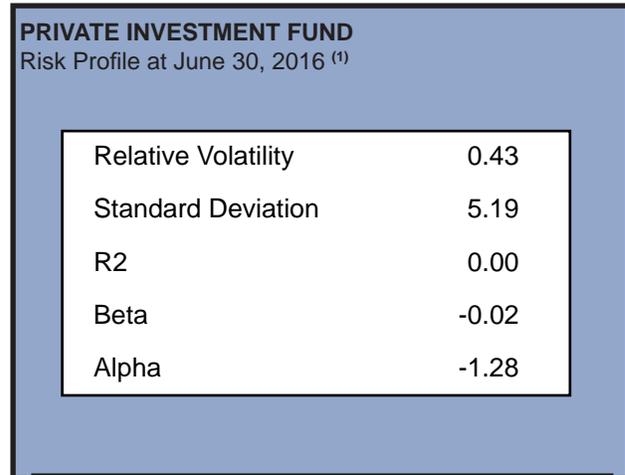
Figure 13-5

**PRIVATE INVESTMENT FUND**  
Periods ending June 30, 2016

	1 YR	3 YRS	5 YRS	10 YRS
<b>Compounded, Annual Total Return (%)</b>				
PIF	8.87	12.95	10.82	10.33
S & P 500	3.99	11.66	12.10	7.42
<b>Cumulative Total Return (%)</b>				
PIF	8.87	44.09	67.12	167.18
S & P 500	3.99	39.20	77.02	104.65

Calculated with Time Weighted Return methodology.

Figure 13-2



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

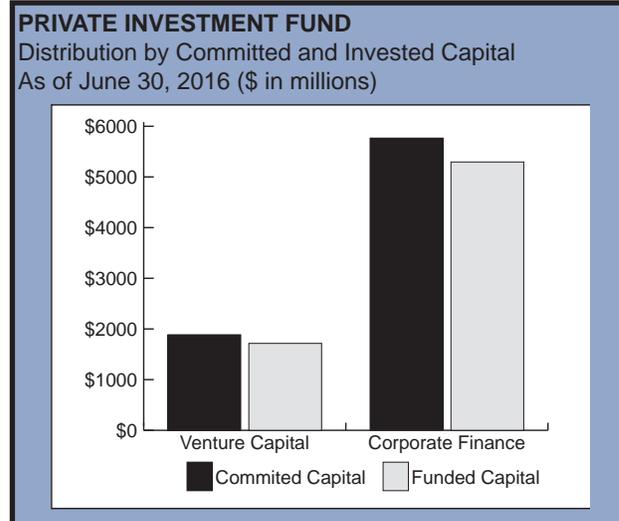
Figure 13-4

**PRIVATE INVESTMENT FUND**  
Distribution by Geographic Location at June 30, 2016  
Based on Investments in Securities, at Value

Region	%
Northeast (Excludes Connecticut)	6.1%
International	9.1%
West Coast	16.1%
Liquidity Fund/Other Assets & Liabilities (1)	17.7%
Southeast	15.0%
Mid-Atlantic	9.6%
MidWest	19.0%
Southwest	2.9%
Connecticut	3.6%
Northwest	0.9%
<b>TOTAL</b>	<b>100.00%</b>

(1) Includes the Liquidity Fund and other assets at the partnership level.

Figure 13-6



## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

Figure 13-7

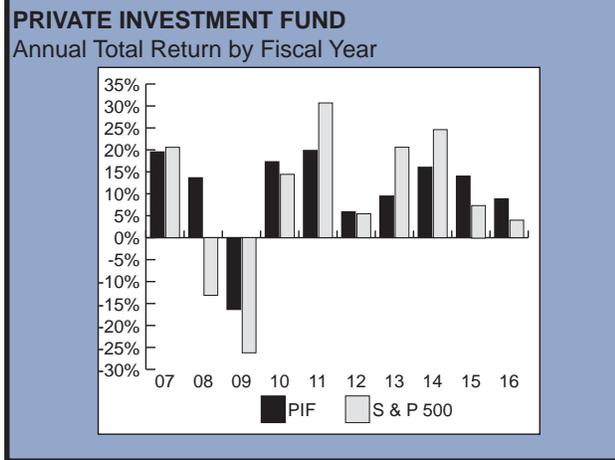


Figure 13-8

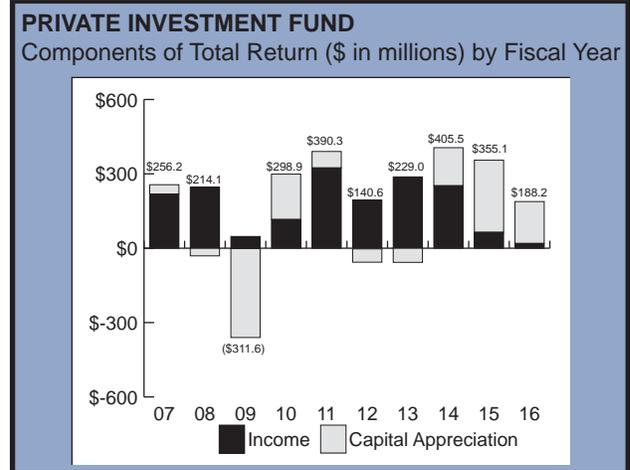


Figure 13-9

**PRIVATE INVESTMENT FUND**  
Ten Largest Holdings\* at June 30, 2016

Partnership Name	Partnership Type	Market Value	%
Fairview Constitution III	Fund of Funds	\$349,539,238	12.62%
Stepstone Pioneer Capital II LP	Fund of Funds	138,493,487	5.00%
Fairview Constitution IV LP	Fund of Funds	115,818,599	4.18%
Fairview Constitution II LP	Fund of Funds	113,869,327	4.11%
Vista Equity Partners Fund IV	Buyout	95,173,922	3.44%
Wellspring Capital Partners V	Buyout	82,279,022	2.97%
KKR 2006 Fund	Buyout	79,697,136	2.88%
Yucaipa American Alliance Fund II LP	Buyout	78,421,991	2.83%
CT Emerging Pvt Equity	Fund of Funds	77,135,060	2.79%
Thomas H. Lee Equity Fund VI	Buyout	76,011,598	2.74%
<b>Top Ten</b>		<b>\$1,206,439,380</b>	<b>43.56%</b>

\* 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 2016<sup>(1)</sup>

Partnership Name	Commitment Amount	Investment Type	Investment Date
Yucaipa American Alliance Fund III	\$39 million	Buyout	July 15, 2015
Clearlake Capital Partners IV	50 million	Special Situations	August 18, 2015
Connecticut Growth Capital	75 million	Special Situations	December 15, 2015
Welsh, Carson, Anderson & Stowe XII, L.P.	<u>100 million</u>	Buyout	May 25, 2016
<b>Total:</b>	<b>\$264 million</b>		

(1) These represent new Private Equity Partnerships that were invested in by the Fund during fiscal year 2016.

## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

Figure 13-11

### PRIVATE INVESTMENT FUND

Investment Funds at June 30, 2016

Investment Advisor	Net Asset Value	% of Fund		45,256,245	1.63%
<b>Buyout</b>	<b>\$1,049,014,407</b>	<b>37.87%</b>	<b>International</b>		
AIG Altaris Health Partners II	14,818,242	0.53%	Carlyle Asia Partners	347,901	0.01%
AIG Altaris Health Partners III	19,878,810	0.72%	Compass Partners European Equity Fund	469,368	0.02%
AIG Healthcare Partners LP	594,323	0.02%	Gilbert Global Equity Partners	42,514,773	1.53%
Boston Ventures VII	49,389,843	1.78%	Pinebridge Global Emerging Markets Fund	1,924,203	0.07%
Candover 2008 Fund	391,125	0.01%	<b>Fund of Funds</b>	<b>1,032,795,331</b>	<b>37.29%</b>
Charterhouse Equity Partners IV	4,302,030	0.16%	Connecticut Horizon Legacy	6,575,732	0.24%
Court Square Capital Partners II	48,368,974	1.75%	CT Growth Capital	9,774,704	0.35%
Court Square Capital Partners III LP	15,552,855	0.56%	CS/CT Cleantech Opp Fund	10,683,042	0.39%
Ethos Private Equity Fund V	14,008,111	0.51%	CT Emerging Pvt Equity	77,135,060	2.78%
FS Equity Partners V	6,950,867	0.25%	Fairview Constitution II LP	113,869,327	4.11%
FS Equity Partners VI	74,603,360	2.69%	Fairview Constitution III	349,539,238	12.62%
GENNX360 Capital Partners II	17,013,854	0.61%	Fairview Constitution IV LP	115,818,599	4.18%
Hicks, Muse Tate & Furst Equity Fund III	10,539,969	0.38%	JP Morgan Nutmeg I	73,291,162	2.65%
ICV Partners II LP	14,379,521	0.52%	Landmark Equity Partners XIV LP	45,598,223	1.65%
JFL Equity Investors III, LP	42,684,211	1.54%	Landmark Equity Partners XV LP	26,616,558	0.96%
KKR 2006 Fund	79,697,136	2.88%	Landmark Private Equity Fund VIII	6,811,039	0.25%
KKR Millennium Fund	13,105,933	0.47%	Lexington Capital Partners II	412,781	0.01%
Leeds Equity Partners V LP	26,272,113	0.95%	Stepstone Pioneer Capital I LP	20,420,048	0.74%
Nogales Investors Fund II	3,755,606	0.14%	Stepstone Pioneer Capital II LP	138,493,487	5.00%
RFE Investment Partners VII	42,243,620	1.53%	The Constitution Liquidating Fund	37,756,331	1.36%
RFE Investments Partners VIII	34,547,232	1.25%	<b>Special Situations</b>	<b>395,921,506</b>	<b>14.29%</b>
TA XI, L.P.	70,584,747	2.55%	Apollo Investment Fund VIII LP	57,827,335	2.09%
Thomas H. Lee Equity Fund VI	76,011,598	2.74%	Castlelake II LP	59,842,113	2.16%
Vista Equity Partners Fund III	23,249,553	0.84%	Clearlake Capital Partners III LP	46,082,841	1.67%
Vista Equity Partners Fund IV	95,173,922	3.44%	Clearlake IV	17,392,913	0.63%
Wellspring Capital Partners V	82,279,022	2.97%	KPS Special Situations Fund II	10,025	0.00%
Welsh Carson Anderson & Stowe X LP	23,034,817	0.83%	Levine Leichtman Capital Partners	57,733,688	2.08%
Welsh Carson Anderson & Stowe XI	64,816,748	2.34%	Levine Leichtman Capital Partners IV LP	37,876,689	1.37%
Yucaipa American Alliance Fund II LP	78,421,991	2.83%	Pegasus Partners IV	44,679,703	1.61%
Yucaipa III	2,344,274	0.08%	Pegasus Partners V	54,686,363	1.97%
<b>Venture Capital</b>	<b>9,149,787</b>	<b>0.33%</b>	Welsh Carson Anderson & Stowe Capital Partners III	70,941	0.00%
Crescendo III	1,156,486	0.04%	WLR Recovery Fund IV	19,718,895	0.71%
Syndicated Communications	7,993,301	0.29%	Other <sup>(1)</sup>	175,228,041	6.33%
<b>Mezzanine</b>	<b>62,444,788</b>	<b>2.26%</b>	<b>SUBTOTAL PIF</b>	<b>\$2,769,810,105</b>	<b>100.00%</b>
Audax Mezzanine III Limited Partnership	42,076,592	1.52%			
GarMark Partners II LP	19,374,244	0.70%			
SW Pelham Fund	993,952	0.04%			

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

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**  
**SCHEDULE OF INVESTMENT ADVISORS AND FEES IN EXCESS OF \$5,000<sup>(1)</sup>**  
**FOR PERIODS ENDED JUNE 30**

Name of Firm	Description of Services	Aggregate Compensation Paid in Fiscal Year:				
		2016	2015	2014	2013	2012
<b>INVESTMENT ADVISORY SERVICES</b>						
<b>Domestic Equity Investment Advisory Services</b>						
Bivium Capital Partners, LLC	Equity Advisor	2,634,973	2,694,595	2,516,721	2,018,418	1,883,917
Capital Prospects LLC	Equity Advisor	1,681,144	1,614,485	1,394,404	1,168,860	1,084,308
FIS Group Inc.	Equity Advisor	1,426,935	1,404,121	1,235,726	1,057,530	979,549
Frontier Capital Management Co., LLC	Equity Advisor	2,421,327	2,375,113	2,503,435	1,932,133	1,794,233
State Street Global Advisors	Equity Advisor	273,424	290,981	277,284	241,823	232,397
T. Rowe Price Associates	Equity Advisor	4,904,217	4,639,030	4,159,025	2,803,150	2,609,349
<b>Total Equity Advisor Compensation</b>		<b>\$13,342,020</b>	<b>\$13,018,325</b>	<b>\$12,086,595</b>	<b>\$9,221,914</b>	<b>\$8,583,753</b>
<b>Core Fixed Income Investment Advisory Services</b>						
Blackrock Financial Management	Core Income Advisor	706,346	937,708	883,078	1,491,702	543,090
Goodwin Capital Advisors (Phoenix)	Core Income Advisor	537,065	528,174	541,242	553,002	568,276
Progress Investment Management	Core Income Advisor	389,850	702,682	884,470	931,821	903,128
State Street Global Advisors	Core Income Advisor	127,519	69,745	112,242	214,871	244,219
Wellington Asset Management	Core Income Advisor	512,458	710,691	690,810	667,881	642,278
<b>Total Fixed Income Advisor Compensation</b>		<b>\$2,273,238</b>	<b>\$2,949,000</b>	<b>\$3,111,842</b>	<b>\$3,859,277</b>	<b>\$2,900,991</b>
<b>Inflation Linked Bond Investment Advisory Services</b>						
Blackrock Financial Management	Inflation Income Advisor	759,585	118,909	-	-	-
Brown Brothers Harriman & Co.	Inflation Income Advisor	-	431,260	305,547	523,710	368,991
Colchester Global Investors Limited	Inflation Income Advisor	1,206,733	506,922	-	-	-
Hartford Investment Management Co.	Inflation Income Advisor	-	108,467	544,511	350,428	528,760
New Century Advisors, LLC	Inflation Income Advisor	300,339	139,971	-	-	-
<b>Total Fixed Income Advisor Compensation</b>		<b>\$2,266,657</b>	<b>\$1,305,529</b>	<b>\$850,058</b>	<b>\$874,138</b>	<b>\$897,751</b>
<b>Emerging Market Debt Investment Advisory Services</b>						
Blackrock Institutional Trust Co.	Transition Manager	-	52,003	56,855	-	-
ING Investment Management Co.	Emerging Market Advisor	-	-	268,795	927,229	1,468,565
Pyramis Global Advisors	Emerging Market Advisor	1,428,727	680,028	879,258	864,929	783,732
Stone Harbor Investment Partners	Emerging Market Advisor	2,227,405	2,447,830	3,163,978	1,079,389	1,307,511
UBS Global Asset Management Co.	Emerging Market Advisor	-	1,282,723	1,090,999	1,076,458	959,189
<b>Total Fixed Income Advisor Compensation</b>		<b>\$3,656,132</b>	<b>\$4,462,584</b>	<b>\$5,459,885</b>	<b>\$3,948,005</b>	<b>\$4,518,997</b>
<b>High Yield Debt Investment Advisory Services</b>						
Loomis Sayles & Co., Inc.	High Yield Income Advisor	1,158,904	1,209,408	988,610	539,133	449,946
Oaktree Capital Management	High Yield Income Advisor	1,661,197	1,449,222	1,374,108	902,744	700,256
Shenkman Capital Management	High Yield Income Advisor	1,605,144	1,177,774	1,119,296	956,125	909,998
Stone Harbor Investment Partners	High Yield Income Advisor	1,148,654	1,180,281	949,575	335,754	447,972
<b>Total Fixed Income Advisor Compensation</b>		<b>\$5,573,899</b>	<b>\$5,016,685</b>	<b>\$4,431,589</b>	<b>\$2,733,756</b>	<b>\$2,508,172</b>
<b>Liquidity Fund Advisory Services</b>						
Ambassador Capital Management	Liquidity Fund Advisor	-	120,951	278,995	281,069	253,147
Colchester Global Investors	Liquidity Fund Advisor	693,862	723,758	732,857	744,008	665,944
Lazard Asset Management	Liquidity Fund Advisor	776,093	2,327,952	3,168,731	3,477,697	3,315,579
Pacific Investment Management	Liquidity Fund Advisor	459,884	493,516	405,103	405,694	389,382
Payden & Rygel	Liquidity Fund Advisor	448,090	302,587	212,808	216,555	201,520
State Street Global Advisors	Liquidity Fund Advisor	197,040	198,034	239,185	126,595	130,640
<b>Total Liquidity Fund Advisor Compensation</b>		<b>\$2,574,969</b>	<b>\$4,166,798</b>	<b>\$5,037,679</b>	<b>\$5,251,618</b>	<b>\$4,956,212</b>

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**SCHEDULE OF INVESTMENT ADVISORS AND FEES IN EXCESS OF \$5,000<sup>(1)</sup>  
FOR PERIODS ENDED JUNE 30 (Continued)**

Name of Firm	Description of Services	Aggregate Compensation Paid in Fiscal Year:				
		2016	2015	2014	2013	2012
<b>Developed Market International Equity Investment Advisory Services</b>						
Acadian Asset Management	Intrntl Equity Advisor	2,253,340	2,248,085	2,000,815	1,415,573	1,117,423
AQR Capital Management, LLC	Intrntl Equity Advisor	3,393,559	3,376,598	3,241,015	2,803,762	2,926,336
Artio Global Asset Management	Intrntl Equity Advisor	-	-	-	-	1,192,928
Blackrock Financial Management (Merrill Lynch)	Intrntl Equity Advisor	-	-	-	595,887	948,327
Dimensional Fund Advisors	Intrntl Equity Advisor	1,714,176	1,761,874	1,790,174	1,571,559	1,623,569
First Quadrant LP	Intrntl Equity Advisor	3,955,139	2,686,199	-	-	-
Grantham, Mayo, Van Otterloo & Co.	Intrntl Equity Advisor	2,366,253	2,521,994	2,516,179	2,783,996	2,863,396
Invesco Global Asset Management	Intrntl Equity Advisor	-	-	-	301,479	898,034
MFS Institutional Advisors	Intrntl Equity Advisor	2,531,050	2,535,266	2,401,538	2,137,031	2,053,695
Pareto Partners (Bank of New York)	Intrntl Equity Advisor	-	931,828	2,729,445	2,481,860	2,491,470
Progress Investment Management	Intrntl Equity Advisor	817,113	861,246	805,075	709,924	718,391
Pyramis Invmtmnt Global Adv Trust (Fidelity)	Intrntl Equity Advisor	-	-	-	561,305	1,301,082
Schroder Investment Management	Intrntl Equity Advisor	1,693,267	1,652,005	1,652,004	1,498,612	1,550,463
State Street Global Advisors	Intrntl Equity Advisor	1,058,247	1,102,818	1,036,286	777,213	479,389
William Blair & Comapny	Intrntl Equity Advisor	2,065,637	2,077,967	2,694,182	2,284,387	2,205,475
<b>Total International Equity Advisor Compensation</b>		<b>\$21,847,791</b>	<b>\$21,755,880</b>	<b>\$20,866,713</b>	<b>\$19,922,588</b>	<b>\$22,369,978</b>
<b>Emerging Market International Equity Investment Advisory Services</b>						
Aberdeen Asset Management	Intrntl Equity Advisor	3,605,114	3,887,575	3,845,010	3,796,552	3,477,681
Ashmore Emerging Markets Management LLC	Intrntl Equity Advisor	-	-	635,018	4,392,678	4,524,091
Grantham, Mayo, Van Otterloo & Co.	Intrntl Equity Advisor	5,225,304	5,904,462	5,787,770	4,937,959	4,953,038
Schroder Investment Management	Intrntl Equity Advisor	5,412,513	5,862,278	5,227,618	3,231,449	3,021,727
<b>Total International Equity Advisor Compensation</b>		<b>\$14,242,931</b>	<b>\$15,654,315</b>	<b>\$15,495,416</b>	<b>\$16,358,638</b>	<b>\$15,976,537</b>
<b>Alternative Investment Advisory Services <sup>(2)</sup></b>						
ArcLight Energy Partner Fund V	Alternative Inv Advisor	605,192	220,687	723,344	728,883	1,076,537
ArcLight Energy Partner Fund VI	Alternative Inv Advisor	2,002,465	-	-	-	-
Energy Fund XV	Alternative Inv Advisor	239,198	-	-	154,341	533,629
<b>Total Alternative Investment Advisor Compensation</b>		<b>\$2,846,855</b>	<b>\$220,687</b>	<b>\$723,344</b>	<b>\$883,224</b>	<b>\$1,610,166</b>
<b>Real Estate Investment Advisory Services <sup>(2)</sup></b>						
AEW Capital Management, L.P.	Real Estate Advisor	-	-	-	-	914,325
American Realty Advisors	Real Estate Advisor	577,125	471,063	240,685	125,606	-
Apollo Real Estate Investment Fund III	Real Estate Advisor	-	-	-	-	-
Blackstone Real Estate Partners VI	Real Estate Advisor	514,332	946,984	1,173,852	1,278,613	1,367,098
Blackstone Real Estate Partners VIII	Real Estate Advisor	958,333	-	-	-	-
Blackstone Real Estate Partners Europe III	Real Estate Advisor	438,879	532,577	654,338	750,000	750,000
Blackstone Real Estate Special Situations Fund II	Real Estate Advisor	43,174	255,352	574,361	550,595	-
Canyon Johnson Urban Fund III, LP	Real Estate Advisor	64,455	318,809	608,590	675,658	921,875
Clarion Lion Industrial Trust LP	Real Estate Advisor	459,494	-	-	-	-
Cornerstone Patriot Fund LP	Real Estate Advisor	1,712,753	1,611,267	881,306	-	-
Crowe Holdings Realty Partners VII, LP	Real Estate Advisor	1,754,755	-	-	-	-
Cypress Realty Fund LP	Real Estate Advisor	527,397	874,521	573,424	-	-
Gerding Elden Fund Management LP	Real Estate Advisor	198,799	337,500	725,548	-	-
Hart Realty Advisors, Inc.	Real Estate Advisor	1,175,314	864,000	947,345	1,111,617	276,300
JP Morgan investment Management	Real Estate Advisor	728,601	-	-	-	-
MacFarlane Urban Real Estate	Real Estate Advisor	-	-	-	1,543,436	802,421
Rockwood Capital Partners VI	Real Estate Advisor	226,545	-	-	-	-
Rockwood Capital Partners VII	Real Estate Advisor	23,469	-	23,469	9,388	113,731
Rockwood Capital Partners VIII	Real Estate Advisor	-	18,775	-	-	-
UBS Trumbull Property Growth & Income Fund LP	Real Estate Advisor	538,290	194,657	-	-	-
UBS Trumbull Property Fund LP	Real Estate Advisor	816,517	688,195	-	-	-
UBS Trumbull Property Income Fund LP	Real Estate Advisor	448,204	378,483	-	-	-
<b>Total Real Estate Advisor Compensation</b>		<b>\$11,206,436</b>	<b>\$7,192,183</b>	<b>\$6,402,918</b>	<b>\$6,044,913</b>	<b>\$5,145,750</b>

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**  
**SCHEDULE OF INVESTMENT ADVISORS AND FEES IN EXCESS OF \$5,000<sup>(1)</sup>**  
**FOR PERIODS ENDED JUNE 30 (Continued)**

Name of Firm	Description of Services	Aggregate Compensation Paid in Fiscal Year:				
		2016	2015	2014	2013	2012
<b>Commercial Mortgage Investment Advisory Services<sup>(2)</sup></b>						
AEW Capital Management, L.P.	Comm Mortgage Advisor	-	-	6,250	25,000	
Total Commercial Mortgage Advisor Compensation		\$-	\$-	\$6,250	\$25,000	
<b>Private Investment Advisory Services<sup>(2)</sup></b>						
Altaris Health Partners, LP (AIG Altaris)	Private Inv Advisor	92,684	244,617	297,539	329,934	270,860
Altaris Healthcare Partners II, LP (AIG Altaris)	Private Inv Advisor	28,025	228,058	426,671	492,146	478,337
Altaris Healthcare Partners III, LP (AIG Altaris)	Private Inv Advisor	850,828	637,422	187,438	-	-
AIG Global Emerging Mkts Fund LP	Private Inv Advisor	-	-	-	-	51,468
Apollo Advisors VIII, LP	Private Inv Advisor	1,118,699	1,395,443	1,255,435	-	-
Audax Mezzanine Fund III, LP	Private Inv Advisor	759,278	910,911	429,352	743,313	904,984
Boston Venture Capital Partners VII, LP	Private Inv Advisor	-	-	-	719,424	750,000
Carlyle Asia Partners LP	Private Inv Advisor	-	319,977	-	-	-
Clearlake Capital Partners III, LP	Private Inv Advisor	381,334	327,653	262,189	534,459	-
Clearlake Capital Partners IV, LP	Private Inv Advisor	862,088	-	-	-	-
Compass Partners European Equity Fund LP	Private Inv Advisor	-	-	-	-	379,517
Connecticut Growth Capital, LLC	Private Inv Advisor	613,805	-	-	-	-
Constitution Liquidating Fund LP (Crossroads)	Private Inv Advisor	132,802	225,385	178,022	182,005	389,972
Courthouse Square Capital II Partners	Private Inv Advisor	-	215,650	323,776	258,832	555,244
Courthouse Square Capital III Partners	Private Inv Advisor	331,792	400,330	-	-	-
CT Horizon Legacy Fund, LP	Private Inv Advisor	62,500	50,000	50,000	50,000	50,000
Ethos Capital Fund V, LP	Private Inv Advisor	252,621	304,550	489,108	370,980	525,989
Fairview Constitution II, LP	Private Inv Advisor	700,000	1,050,000	700,000	650,000	1,950,000
Fairview Constitution III, LP	Private Inv Advisor	1,050,000	2,475,000	1,950,000	975,000	2,925,000
Fairview Constitution IV, LP	Private Inv Advisor	487,500	1,800,000	1,200,000	1,200,000	600,000
FS Equity Partners V LP	Private Inv Advisor	43,924	72,093	69,592	77,240	128,464
FS Equity Partners VI LP	Private Inv Advisor	309,067	244,2049	1,125,000	919,953	1,031,121
Garmark Partners, II LP	Private Inv Advisor	621,484	160,927	829,234	423,463	655,133
GCM Grosverno-CT/Cleantech Opp. Fund LP	Private Inv Advisor	139,700	103,523	143,070	163,500	176,253
GenNx360 II LP	Private Inv Advisor	290,465	563,884	1,164,613	-	-
Goldman Sachs Private Equity Fund LP	Private Inv Advisor	-	-	16,208	-	59,416
Greenwich Street Capital Partners II LP	Private Inv Advisor	-	-	-	11,344	-
ICV Associates II LP	Private Inv Advisor	-	-	-	-	317,377
JFL Investors III, LP	Private Inv Advisor	574,107	786,849	681,529	613,404	935,830
KKR 1996 Fund LP	Private Inv Advisor	-	-	6,111	-	-
KKR Millenium Fund LP	Private Inv Advisor	6,160	-	-	-	-
KKR 2006 Fund LP	Private Inv Advisor	-	188,852	411,425	-	691,109
Leeds Equity Associates V LP	Private Inv Advisor	-	197,849	240,716	426,756	209,214
Levine Leichtman Capital Partners IV, LP	Private Inv Advisor	480,020	454,848	711,376	720,979	832,609
Levine Leichtman Capital Partners V, LP	Private Inv Advisor	967,040	1,187,307	1,528,336	-	-
Muller & Monroe - CT Emerging Private Equity Funds-of-Funds	Private Inv Advisor	698,764	672,514	777,514	882,514	987,514
Nogales Investors II, LP	Private Inv Advisor	55,686	129,468	183,759	182,826	167,243
Nutmeg Opportunities Fund, LP	Private Inv Advisor	569,555	507,082	385,249	310,022	169,747
Pegasus Investors IV, LP	Private Inv Advisor	725,239	761,100	801,045	846,071	685,535
Pegasus Investors V, LP	Private Inv Advisor	979,166	951,916	845,016	854,445	1,128,263
REF Associates VII, LP	Private Inv Advisor	-	-	201,644	906,173	602,195
REF Associates VIII, LP	Private Inv Advisor	801,102	201,644	800,000	837,366	585,928
Snycom Partners V, LP	Private Inv Advisor	269,700	267,829	267,585	346,079	594,154
Stepstone Pioneer Capital Buyout Fund II, LP	Private Inv Advisor	368,273	-	-	-	-
Stepstone Pioneer Capital Buyout Fund III, LP	Private Inv Advisor	76,423	212,273	-	-	-
SW Pelham Fund II, LP	Private Inv Advisor	-	-	-	-	46,036
Thomas H. Lee Equity Fund VI LP	Private Inv Advisor	-	-	-	178,333	1,014,946
Vista Equity Partners III, LP	Private Inv Advisor	-	-	378,300	339,658	462,644
Vista Equity Partners IV, LP	Private Inv Advisor	1,099,047	1,130,190	601,380	879,810	1,027,294
Wellspring Capital Partners IV LP	Private Inv Advisor	-	-	-	-	1,620,773

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**SCHEDULE OF INVESTMENT ADVISORS AND FEES IN EXCESS OF \$5,000<sup>(1)</sup>  
FOR PERIODS ENDED JUNE 30 (Continued)**

Name of Firm	Description of Services	Aggregate Compensation Paid in Fiscal Year:				
		2016	2015	2014	2013	2012
Wellspring Capital Partners V LP	Private Inv Advisor	292,457	1,058,343	1,153,261	1,096,538	-
WLR Recovery Associates IV, LP	Private Inv Advisor	-	-	-	-	-
Yucaipa American Alliance Fund II LP	Private Inv Advisor	275,653	493,989	1,216,979	609,788	958,484
Yucaipa American Alliance Fund III LP	Private Inv Advisor	472,814	-	-	-	-
<b>Total Private Investment Advisor Compensation</b>		<b>\$17,839,802</b>	<b>\$20,931,685</b>	<b>\$22,288,472</b>	<b>\$18,132,355</b>	<b>\$24,918,653</b>
<b>TOTAL COMPENSATION TO INVESTMENT ADVISORS</b>		<b>\$97,670,802</b>	<b>\$96,673,671</b>	<b>\$96,754,511</b>	<b>\$87,236,676</b>	<b>\$96,534,108</b>
<b>CUSTODY SERVICES</b>						
Bank of New York Mellon	Custody of Assets	4,093,629	3,378,513	621,250	-	-
State Street Bank & Trust	Custody of Assets	-	-	4,677,364	2,216,866	2,122,148
<b>TOTAL CUSTODY SERVICES COMPENSATION</b>		<b>\$4,093,629</b>	<b>\$3,378,513</b>	<b>\$5,295,614</b>	<b>\$2,216,866</b>	<b>\$2,122,148</b>

(1) Expenses are presented on a cash basis.

(2) Investment management fees for the Alternative Investment Fund, 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. Not included in the above amounts are those amounts that are netted. Netted amounts include credits and fees paid out of cash on hand at the partnership level. Netted amounts are disclosed in Note 1 of the Combined Investment Funds Financial Statements.

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**SCHEDULE OF BROKERAGE COMMISSIONS  
FOR THE FISCAL YEAR ENDED JUNE 30, 2016**

Broker Name	\$ Commission	Shares/ Par Value	Avg Comm	Broker Name	\$ Commission	Shares/ Par Value	Avg Comm
ABEL NOSER CORP, NEW YORK	\$ 1,659.90	91,551.00	0.02	CIMB GK SECURITIES PTE LTD, SINGAPORE	677.42	482,964.00	0.00
ABG SEC AS (NORGE), FILIAL, STOCKHOLM	3,208.84	44,886.00	0.07	CIMB INVESTMENT BK BERHAD, KUALA LUMPUR	994.56	2,371,400.00	0.00
ABG SECS, OSLO	2,043.32	166,923.00	0.01	CIMB SECURITIES (USA), INC, NEW YORK	174.64	361,333.00	0.00
ABN AMRO MORGANS, BRISBANE	1,114.26	279,090.00	0.00	CIMB SECURITIES LTD., KOREA BRANCH	1,398.81	11,598.00	0.12
ACADEMY SECURITIES, INC, NEW YORK	340.00	17,000.00	0.02	CITIBANK (COR), NEW YORK	2,312.50	1,460,608.00	0.00
AGORA CTVM, RIO DE JANEIRO	443.87	62,700.00	0.01	CITIBANK LTD, MELBOURNE	192.15	184,763.00	0.00
ALBERT FRIED & COMPANY LLC, NEW YORK	236.00	11,800.00	0.02	CITIBANK NA, HONG KONG	7,238.69	11,831,308.00	0.00
ALLEN & COMPANY LLC, JERSEY CITY	3,189.00	106,300.00	0.03	CITIBANK NA, LONDON	16.40	479.00	0.03
AUERBACH GRAYSON & CO INC, JERSEY CITY	412.60	20,630.00	0.02	CITIBANK NY (MER)	660.73	24,133.00	0.03
AUTONOMOUS RESEARCH US LP, NEW YORK	1,233.00	41,100.00	0.03	CITIC CAPITAL SEC, HONG KONG	6,269.50	7,915,800.00	0.00
AVONDALE PARTNERS LLC, NASHVILLE	1,504.46	47,128.00	0.03	CITIGROUP GBL MKTS AUSTRALIA PTY, SYDNEY	281.60	107,211.00	0.00
B.RILEY & CO.,LLC, LOS ANGELES	13,999.60	481,707.00	0.03	CITIGROUP GBL MKTS INC, NEW YORK	101,515.34	4,725,232.00	0.02
BAADER WERTPAPIERHANDELSBANK, UNTERSCHLE	644.71	19,119.00	0.03	CITIGROUP GBL MKTS SINGAPORE SEC PVT LTD	590.27	1,137,500.00	0.00
BAIRD, ROBERT W & CO INC, MILWAUKEE	19,574.52	538,886.00	0.04	CITIGROUP GBL MKTS/SALOMON, NEW YORK	53,191.53	22,797,516.00	0.00
BANCO BTG PACTUAL SA, RIO DE JANEIRO	4,872.70	2,057,995.00	0.00	CITIGROUP GLOBAL MARKETS LTD, LONDON	230,624.23	42,966,692.00	0.01
BANCO DE INVESTIMENTOS GARATIA	7,875.38	765,800.00	0.01	CJS SECURITIES INC, JERSEY CITY	78.02	2,229.00	0.04
BANCO ITAU S.A., NEW YORK	2,880.72	409,600.00	0.01	CLEARSTREAM BK, LUXEMBOURG (CEDELULL)	578.73	24,379.00	0.02
BANCO ITAU, SAO PAULO	16,458.57	3,814,573.00	0.00	CLSA AUSTRALIA PTY LTD, SYDNEY	2,306.31	570,333.00	0.00
BANCO SANTANDER, NEW YORK	32,427.52	63,469,531.00	0.00	CLSA SECURITIES, KUALA LUMPUR	351.06	253,700.00	0.00
BANK AM BELLEVUE, ZURICH	1,806.97	8,620.00	0.21	COMMERZBANK AG, LONDON	238.76	1,885.00	0.13
BANK J VONTOBEL & CO LTD, ZURICH	8,680.00	48,317.00	0.18	COMPASS POINT RESEARCH & TR, JERSEY CITY	4,531.88	129,389.00	0.04
BANK OF NEW YORK, BRUSSELS	2.51	4,100.00	0.00	CONCORDIA SA CVMCC, RIO DE JANEIRO	43.16	17,700.00	0.00
BANQUE PARIBAS, FRANKFURT	780.58	51,439.00	0.02	CONVERGE LLC, NEW YORK	6,606.52	250,285.00	0.03
BANQUE PARIBAS, PARIS	1,264.78	218,029.00	0.01	CORMARK SECURITIES INC./CDS, TORONTO	2,364.64	88,603.00	0.03
BARCLAYS BK PLC, NEW YORK	2,532.79	93,755.00	0.03	CORMARK SECURITIES INC, TORONTO	712.00	17,800.00	0.04
BARCLAYS CAPITAL INC./LE, NEW JERSEY	1,232.89	95,392.00	0.01	CORNERSTONE MACRO LLC, NEW YORK	1,668.75	46,655.00	0.04
BARCLAYS CAPITAL INC, JERSEY CITY	308.00	7,700.00	0.04	COWEN AND COMPANY LLC, NEW YORK	17,749.96	934,873.00	0.02
BARCLAYS CAPITAL LE, JERSEY CITY	51,861.31	2,606,222.00	0.02	COWEN AND COMPANY, LLC, NEW YORK	1,727.66	86,383.00	0.02
BARCLAYS CAPITAL SEC LTD, SEOUL BRANCH	123.93	26,662.00	0.00	CRAIG HALLUM, MINNEAPOLIS	11,549.91	437,767.00	0.03
BARCLAYS CAPITAL, LONDON (BARCGB33)	48,724.07	10,390,593.00	0.00	CREDIT AGRICOLE SECURITIES, NEW YORK	316.00	7,900.00	0.04
BARCLAYS CAPITAL, NEW YORK	1,251.78	214,103.00	0.01	CREDIT LYONNAIS SEC, SEOUL	4,850.27	149,464.00	0.03
BARRINGTON RESEARCH ASSOCIATES, BROOKLYN	869.86	25,883.00	0.03	CREDIT LYONNAIS SECS (ASIA), HONG KONG	26,818.68	20,908,455.00	0.00
BB&T SECURITIES, LLC, RICHMOND	11,943.13	372,354.00	0.03	CREDIT LYONNAIS SECS, SINGAPORE	18,822.07	30,025,400.00	0.00
BENCHMARK COMPANY, LLC, NEW YORK	1,228.07	40,143.00	0.03	CREDIT RESEARCH & TRADING LLC, JERSEY	18,365.57	558,811.00	0.03
BERENBERG GOSSLER & CIE, HAMBURG	13,666.56	390,554.00	0.03	CREDIT SUISSE (EUROPE), LONDON	62,991.75	5,000,697.00	0.01
BERNSTEIN SANFORD C & CO, NEW YORK	86,701.10	23,485,693.00	0.00	CREDIT SUISSE (EUROPE), SEOUL	31,586.81	1,310,475.00	0.02
BLAYLOCK & CO INC, JERSEY CITY	195.00	9,750.00	0.02	CREDIT SUISSE (HK) LIMITED, HONG KONG	28,754.19	11,355,090.00	0.00
BLOOMBERG TRADEBOOK LLC, NEW YORK	1,710.07	78,073.00	0.02	CREDIT SUISSE AUSTRALIA EQ, MELBOURNE	55.13	33,452.00	0.00
BLOOMBERG TRADEBOOK, LONDON	2,091.67	262,262.00	0.01	CREDIT SUISSE SECURITIES (USA) LLC, NY	1,945.76	58,490.00	0.03
BLOOMBERG TRADEBOOK, NEW YORK	23,941.68	628,557.00	0.04	CREDIT SUISSE, NEW YORK (CSUS)	251,913.43	675,272,370.00	0.00
BMO CAPITAL MARKETS CORP, NEW YORK	13,060.39	405,409.00	0.03	CREDIT SUISSE, SAO PAULO	14,909.80	1,809,603.00	0.01
BNP PARIBAS PEREGRINE SEC LTD, HONG KONG	26,351.74	21,736,516.00	0.00	CREDIT SUISSE, ZURICH	75.84	3,425.00	0.02
BNP PARIBAS PRIME BROKERAGE, JERSEY CITY	1,986.00	66,200.00	0.03	CSL STOCKBROKERS LIMITED, LAGOS	1,338.15	4,153,150.00	0.00
BNP PARIBAS SEC SRVS SA, SINGAPORE	4,739.01	244,200.00	0.04	CUTTONE & CO, JERSEY CITY	150.36	7,518.00	0.02
BNP PARIBAS SEC SVCS, LONDON (PARBGB2L)	1,028.67	27,176.00	0.02	CV BROKERAGE INC., NEW YORK	663.24	33,162.00	0.02
BNP PARIBAS SECURITIES SVCS, HONG KONG	9,279.30	7,387,904.00	0.00	D CARNEGIE AB, STOCKHOLM	20,943.99	1,139,951.00	0.02
BNY BROKERAGE, NEW YORK	2,776.32	93,369.00	0.03	DAEWOO SECURITIES CO LTD, SEOUL	16,255.21	252,547.00	0.06
BNY CONVERGEX EXECUTION SOL, NEW YORK	77,850.84	18,758,758.00	0.00	DAIWA SEC SMBC SECURITIES LTD, SINGAPORE	11.28	4,000.00	0.00
BNY CONVERGEX, NEW YORK	18,232.73	604,391.00	0.03	DAIWA SECS (HK) LTD, HONG KONG	9,897.28	3,106,874.00	0.00
BRADESCO S.A. CTVM, SAO PAULO	2,786.19	310,866.00	0.01	DAIWA SECS AMER INC, NEW YORK	8,162.73	1,671,072.00	0.00
BRADESCO S/A CTVM, SAO PAULO	3,210.87	406,000.00	0.01	DAVIDSON(D A) & CO INC, NEW YORK	2,458.57	85,077.00	0.03
BREAN CAPITAL LLC, JERSEY CITY	4,097.81	338,253.00	0.01	DAVY STOCKBROKERS, DUBLIN	226.13	24,317.00	0.01
BROADCORT CAPITAL CORP FI, NEW YORK	2,501.00	67,700.00	0.04	DBS VICKERS (HONG KONG) LTD, HONG KONG	1,391.55	356,600.00	0.00
BROCKHOUSE AND COOPER, MONTREAL	21.82	2,047.00	0.01	DBS VICKERS SEC PTE LTD, SINGAPORE	94.81	210,400.00	0.00
BT SECURITIES COMPANY LTD, BANGKOK	26.14	2,200.00	0.01	DEN DANSKE BANK, COPENHAGEN	315.30	12,221.00	0.03
BTIG LLC, SAN FRANCISCO	4,939.05	260,650.00	0.02	DEN NORSCHE CREDITBANK, OSLO	263.78	59,614.00	0.00
BUCKINGHAM RESEARCH GRP INC, BROOKLYN	84.00	2,100.00	0.04	DEUTSCHE BK INTL EQ, LONDON (DEUTGB22EEQ)	36,286.01	7,737,912.00	0.00
CABRERA CAPITAL MARKETS, CHICAGO	17,080.32	1,135,705.00	0.02	DEUTSCHE BK SECS INC, NY (NWSCUS33)	130,169.02	60,318,160.00	0.00
CACEIS BANK DEUTSCHLAND, GERMANY	1,555.41	70,354.00	0.02	DEUTSCHE MORGAN GRENPELL SEC, SYDNEY	36.57	19,834.00	0.00
CANACCORD GENUITY CORP, MONTREAL (CCAM)	716.63	22,906.00	0.03	DEUTSCHE SEC ASIA LTD, HONG KONG	4,563.38	2,572,309.00	0.00
CANACCORD GENUITY INC, NEW YORK	5,294.47	147,699.00	0.04	DEUTSCHE SEC ASIA LTD, SEOUL	194.64	1,253.00	0.16
CANACCORD GENUITY LTD, LONDON	682.09	289,111.00	0.00	DMG N PARTNERS SEC, SINGAPORE	689.61	731,200.00	0.00
CANTOR CLEARING SERV, NEW YORK	222.75	16,500.00	0.01	DNB NOR MARKETS CUSTODY, OSLO	79.98	27,855.00	0.00
CANTOR FITZGERALD & CO INC, NEW YORK	14,960.83	728,399.00	0.02	DOUGHERTY & COMPANY LLC, MINNEAPOLIS	2,242.41	82,525.00	0.03
CAP INSTL SVCS INC-EQUITIES, DALLAS	4,470.46	148,069.00	0.03	DOUGHERTY COMPANY, BROOKLYN	2,486.00	77,014.00	0.03
CARNEGIE ASA, OSLO	2,903.91	287,959.00	0.01	DOWLING & PARTNERS, JERSEY CITY	11,007.24	343,708.00	0.03
CARNEGIE BANK AS, COPENHAGEN	256.63	7,342.00	0.03	DREXEL HAMILTON LLC, JERSEY CITY	7,651.73	285,608.00	0.03
CARNEGIE SECS LTD, HELSINKI (CASFFIH1)	3,873.55	187,106.00	0.02	DREXEL HAMILTON LLC, NEW JERSEY	120.45	4,015.00	0.03
CASABLANCA FIN GROUP, CASABLANCA	222.18	21,374.00	0.01	DUNDAS UNLU SECURITIES INC, ISTANBUL	604.26	184,035.00	0.00
CELADON FINANCIAL GROUP, LLC, NEW YORK	261.80	30,800.00	0.01	DZ BANK AG DEUTSCHE ZENTRAL, FRANKFURT	446.96	27,440.00	0.02
CELFIN CAPITAL SA CORREDORES, SANTIAGO	1,768.94	344,365.00	0.01	ED AND F MAN CAPITAL MARKETS LTD, LONDON	2,776.75	454,913.00	0.01
CHASE BK, LONDON	1,540.10	11,534.00	0.13	EQUITA SIM SPA, MILAN	1,859.67	57,559.00	0.03
CHEEVERS & CO. INC., CHICAGO	8,780.19	357,360.00	0.02	ERB EUROBANK SECURITIES S.A., ATHENS	86.67	6,172.00	0.01
CHINA INTL CAP CORP HK SECS, HONG KONG	9,810.10	6,209,660.00	0.00	ERSTE AND STEIERMAERKISCHE BANK, RIJEKA	334.21	3,790.00	0.09
CHINA INTL CAP CORP LTD, BEIJING	3,580.93	1,544,606.00	0.00	ERSTE BK BEFEKTETESI RT, BUDAPEST	1,789.48	31,416.00	0.06
CIBC WORLD MKTS INC, TORONTO	866.35	32,073.00	0.03	ERSTE BK SPARKASSEN, PRAGUE	957.59	20,407.00	0.05
CIBC WORLD MKTS INC, TORONTO (WGDB)	622.53	81,100.00	0.01	EXANE, PARIS (EXANFRPP)	14,289.76	3,748,968.00	0.00

## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

SCHEDULE OF BROKERAGE COMMISSIONS (Continued)  
FOR THE FISCAL YEAR ENDED JUNE 30, 2016

Broker Name	\$ Commission	Shares/ Par Value	Avg Comm	Broker Name	\$ Commission	Shares/ Par Value	Avg Comm
FBN SECURITIES INC, JERSEY CITY	102.00	3,400.00	0.03	JP MORGAN SECS (FAR EAST) LTD, SEOUL	1,425.28	39,828.00	0.04
FBR CAPITAL MARKETS & CO, ARLINGTON	3,483.66	107,922.00	0.03	JP MORGAN SECS ASIA PACIFIC, HONG KONG	20,050.49	11,462,501.00	0.00
FIG PARTNERS LLC, ATLANTA	5,957.11	211,925.00	0.03	JP MORGAN SECS, SINGAPORE	7,909.02	4,891,841.00	0.00
FINANCIAL BROKERAGE GROUP (FBG), CAIRO	210.86	46,136.00	0.00	JPMORGAN SECURITIES INC, NEW YORK	23,016.60	5,791,626.00	0.00
FIRST ANALYSIS SECS CORP, CHICAGO	12,535.37	417,823.00	0.03	KAS BANK NV, AMSTERDAM	300.41	15,660.00	0.02
FIRST SOUTHWEST CO, DALLAS	4,168.50	119,100.00	0.04	KB SEC NV, ANTWERPEN	679.11	24,929.00	0.03
FOX RIVER EXECUTION TECH,LLC,JERSEY CITY	159.00	31,800.00	0.01	KEB SALOMON SMITH BARNEY SECS, SEOUL	4,632.12	57,228.00	0.08
FRANK RUSSELL SEC INC, NEW YORK	72.00	1,800.00	0.04	KEEFE BRUYETTE AND WOODS, JERSEY CITY	9,127.21	272,882.00	0.03
FREIMARK BLAIR & CO INC/BCC CLR, NJ	1,009.78	134,637.00	0.01	KEYBANC CAPITAL MARKETS INC, JERSEY CITY	13,553.79	400,495.00	0.03
GABELLI & COMPANY, JERSEY CITY	129.00	4,300.00	0.03	KEYBANC CAPITAL MARKETS INC, NEW YORK	7,923.00	240,800.00	0.03
GK GOH SECURITIES	10,008.79	7,688,300.00	0.00	KIM ENG SEC (PTE) LTD, SINGAPORE	40.74	9,800.00	0.00
GOLDMAN SACHS & CO, NY	166,439.17	84,710,100.00	0.00	KIM ENG SEC LTD, HONG KONG	107.64	4,600.00	0.02
GOLDMAN SACHS ASIA SEC LTD, HONG KONG	2,822.21	2,766,300.00	0.00	KIM ENG SEC USA INC, NY	46.42	49,400.00	0.00
GOLDMAN SACHS AUSTRALIA PTY LTD,MELBOURN	7.56	7,709.00	0.00	KIM ENG SECS PT, JAKARTA	120.47	308,100.00	0.00
GOLDMAN SACHS DO BRASIL, SAO PAULO	6,198.09	1,774,100.00	0.00	KING (CL) & ASSOCIATES, ALBANY	25,982.55	867,554.00	0.03
GOLDMAN SACHS EXECUTION & CLEARING, NY	24,295.95	1,835,807.00	0.01	KNIGHT CAPITAL EUROPE LTD, LONDON	2,628.23	832,874.00	0.00
GOLDMAN SACHS INTL, LONDON (GSLGB2X)	67,762.21	15,256,810.00	0.00	KNIGHT CLEARING SERVICES LLC, JERSEY CIT	376.72	37,118.00	0.01
GOLDMAN SACHS INTL, TORONTO (GSCI)	105.62	5,900.00	0.02	KNIGHT DIRECT LLC, JERSEY CITY	422.25	56,300.00	0.01
GOODBODY STOCKBROKERS, DUBLIN	1,878.88	320,243.00	0.01	KNIGHT EQUITY MARKETS L.P.,JERSEY CITY	1,597.97	89,396.00	0.02
GOODBODY STOCKBROKERS, DUBLIN	3,318.60	411,195.00	0.01	KNIGHT SECS, NEW JERSEY	737.29	69,047.00	0.01
GORDON HASKETT CAP CORP, NJ	1,663.00	42,800.00	0.04	KOREA INVESTMENT AND SEC CO.LTD,SEOUL	9,259.07	183,918.00	0.05
GREAT PACIFIC SECS INC, CALIFORNIA	943.82	33,182.00	0.03	LARRAIN VIAL, SANTIAGO	346.76	6,720,409.00	0.00
GREENTREE BROKERAGE SERVICES,JERSEY CITY	5,104.55	204,182.00	0.03	LEERINK SWANN & CO, JERSEY CITY	2,915.80	72,895.00	0.04
GUGGENHEIM CAPITAL MKT LLC, JERSEY CITY	4,853.67	147,144.00	0.03	LIBERUM CAPITAL INC, NEW YORK	792.90	90,297.00	0.01
GUZMAN & COMPANY, CORAL GABLES	2,040.60	98,630.00	0.02	LIQUIDNET CANADA INC, TORONTO	837.33	53,847.00	0.02
HANWHA SECS CO LTD, SEOUL	1,264.83	134,747.00	0.01	LIQUIDNET INC, BROOKLYN	13,402.96	754,382.00	0.02
HC ISTANBUL MENKUL DEGERLER, ISTANBUL	6,707.04	1,714,084.00	0.00	LIQUIDNET INC, NEW YORK	16,547.94	1,100,186.00	0.02
HONG KONG & SHANGHAI BKG CORP, HONG KONG	10,044.07	10,532,500.00	0.00	LIVINGSTON MONROE CAP GRP INC, NEW YORK	331.50	39,000.00	0.01
HSBC BANK BRASIL SA (COR), SAO PAULO	1,144.56	128,500.00	0.01	LONGBOW SECURITIES LLC, JERSEY CITY	1,647.49	42,306.00	0.04
HSBC BANK PLC (MIDLAND BK)(JAC), LONDON	58,232.61	12,435,835.00	0.00	LOOP CAPITAL MARKETS LLC, JERSEY CITY	271.28	18,004.00	0.02
HSBC BROKERAGE (USA) INC., NEW YORK	8,949.76	371,888.00	0.02	LOOP CAPITAL MARKETS, JERSEY CITY	60,469.00	3,675,318.00	0.02
HSBC JAMES CAPEL, SEOUL	41.23	483.00	0.09	LUMINEX TRADING AND ANALYTICS, BOSTON	265.18	106,063.00	0.00
HSBC SECS INC, NEW YORK	21,264.27	1,994,847.00	0.01	M RAMSEY KING SECURITIES INC, BROOKLYN	10,712.59	356,571.00	0.03
HSBC,(ALL HK OFFICES & HEAD OFFICE), HK	4,119.68	20,430,300.00	0.00	MACQUARIE BANK LIMITED, SYDNEY	5,744.73	1,869,860.00	0.00
HYUNDAI SECURITIES, SEOUL	517.74	1,716.00	0.30	MACQUARIE BANK LTD, HONG KONG	48,560.90	60,221,704.00	0.00
ICAP DO BRASIL DTVM LTDA, RIO DE JANEIRO	1,389.34	180,100.00	0.01	MACQUARIE BANK LTD, SYDNEY	184.74	18,300.00	0.01
ICBC FINCL SVCS, NEW YORK	1,754.68	75,686.00	0.02	MACQUARIE CAPITAL (USA) INC., NEW YORK	4,318.18	718,713.00	0.01
ICHIYOSHI SEC CO LTD, TOKYO	845.13	60,400.00	0.01	MACQUARIE CAPITAL LTD, LONDON	2,187.45	165,676.00	0.01
ING FINANCIAL MARKETS LLC, NEW YORK	254.04	30,333.00	0.01	MACQUARIE SECS (SINGAPORE), SINGAPORE	189.17	250,000.00	0.00
INSTINET AUSTRALIA CLEARING SERV, SYDNEY	3,987.77	4,755,851.00	0.00	MACQUARIE SECURITIES LIMITED, HONG KONG	24.96	34,900.00	0.00
INSTINET CANADA, TORONTO	370.16	66,251.00	0.01	MACQUARIE SECURITIES LIMITED, HONG KONG	3,827.70	751,344.00	0.01
INSTINET CORP, NEW YORK	6,210.51	1,274,178.00	0.00	MACQUARIE SECURITIES LTD, AUCKLAND	227.74	59,762.00	0.00
INSTINET CORP, NY	58,701.84	3,275,111.00	0.02	MACQUARIE SECURITIES LTD, SEOUL	3,887.36	262,851.00	0.01
INSTINET EUROPE LIMITED, LONDON	183,459.25	60,331,141.00	0.00	MACQUARIE SECURITIES(USA)JNC JERSEY CITY	16,812.57	678,035.00	0.02
INSTINET PACIFIC LTD, HONG KONG	86,128.58	87,008,514.00	0.00	MAINFIRST BANK AG,FRANKFURT AM MAIN	2,181.76	88,082.00	0.02
INSTINET, SINGAPORE	1,150.43	1,692,025.00	0.00	MALAYAN BANKING, KUALA LUMPUR	13.83	18,349.00	0.00
INVESTEC HENDERSON CROSTHWAITE,LONDON	13,761.77	1,512,737.00	0.01	MAXIM GROUP, JERSEY CITY	3,766.27	173,095.00	0.01
INVESTEC SECURITIES (331), LONDON	3,910.53	3,111,703.00	0.00	MEDIOBANCA SPA, MILANO	1,653.46	33,508.00	0.05
INVESTEC SECURITIES LTD, JOHANNESBURG	489.40	55,384.00	0.01	MERIDIAN EQUITY PARTNERS, NEW YORK	487.82	32,521.00	0.02
INVESTMENT TECHNOLOGY GROUP LTD,DUBLIN	30,307.92	8,306,461.00	0.00	MERLIN SECURITIES LLC, JERSEY CITY	2,362.59	314,973.00	0.01
INVESTMENT TECHNOLOGY GROUP, NEW YORK	20,924.14	1,577,168.00	0.01	MERRILL LYNCH (SINGAPORE) PTE LTD	1,349.82	1,399,655.00	0.00
ISI GROUP INC, NY	28,919.72	1,140,787.00	0.03	MERRILL LYNCH & CO INC ATLAS GLOBAL, NY	2,468.56	157,500.00	0.02
ITAU CHILE CORRE DE BOLSA LTD, SANTITGO	206.42	9,934,538.00	0.00	MERRILL LYNCH BROADCORT CAP, NEW YORK	872.80	85,990.00	0.01
ITAU USA SECURITIES INC, NEW YORK	279.90	5,598.00	0.05	MERRILL LYNCH CORREDORES, SANTIAGO	1,046.55	66,481,434.00	0.00
ITAU USA SECURITIES INC, NEW YORK	944.66	102,642.00	0.01	MERRILL LYNCH GILTS LTD, LONDON	60,246.57	16,652,042.00	0.00
ITG AUSTRALIA LTD, MELBOURNE	5,907.87	3,349,751.00	0.00	MERRILL LYNCH INTL (KSI), LONDON	537.87	38,000.00	0.01
ITG CANADA CORP, TORONTO	980.43	64,028.00	0.02	MERRILL LYNCH INTL LONDON EQUITIES	156,096.44	81,703,601.00	0.00
ITG HONG KONG LIMITED, HONG KONG	1,829.92	3,388,149.00	0.00	MERRILL LYNCH PIERCE FENNER SMITH INC NY	162,364.02	11,641,855.00	0.01
ITG INC, NEW YORK	2,583.68	295,085.00	0.01	MERRILL LYNCH PIERCE FENNER, WILMINGTON	27,918.07	4,613,879.00	0.01
ITG INC, NY	1,262.44	264,388.00	0.00	MERRILL LYNCH PROFESSIONAL CLRG, PURCHAS	29.00	780.00	0.04
IXIS SECURITIES, PARIS	3,122.27	66,379.00	0.05	MERRILL LYNCH SA CVTM, SAO PAULO	8,381.98	1,535,370.00	0.01
J & E DAVY, DUBLIN	5,719.96	187,524.00	0.03	MIRAE ASSET SECURITIES, SEOUL	2,467.36	5,285.00	0.47
J P MORGAN SEC LTD/STOCK LENDING, LONDON	3,182.94	310,960.00	0.01	MISCHLER FINL/EQUITIES, CORONA DELMAR	7,267.28	346,264.00	0.02
J P MORGAN SEC, SYDNEY	3,220.99	1,315,008.00	0.00	MITSUBISHI UFJ SECS INTL PLC, LONDON	410.50	16,600.00	0.02
J P MORGAN SECS LTD, LONDON	108,097.86	14,750,196.00	0.01	MITSUBISHI UFJ SECURITIES, NEW YORK	3,007.28	337,300.00	0.01
J P MORGAN SECURITIES INC, BROOKLYN	70,118.92	5,674,255.00	0.01	MIZUHO SECURITIES ASIA, HONG KONG	2,097.49	95,500.00	0.02
J.P. MORGAN CLEARING CORP, NEW YORK	166,959.00	14,488,075.00	0.01	MIZUHO SECURITIES USA INC, NEW YORK	3,446.02	291,000.00	0.01
JANNEY MONTGOMERY SCOTT, PHILADELPHIA	909.97	25,051.00	0.04	MKM PARTNERS LLC, GREENWICH	19,895.42	681,647.00	0.03
JEFFERIES & CO INC, NEW YORK	124,955.05	16,443,298.00	0.01	MONTRORSE SECURITIES EQ, SAN FRANCISCO	8,870.40	373,419.00	0.02
JEFFERIES & CO LTD, LONDON	18,666.82	14,202,824.00	0.00	MORGAN STANLEY & CO INC, NY	244,181.91	79,627,629.00	0.00
JEFFERIES HONG KONG LIMITED, HONG KONG	45.07	407,000.00	0.00	MORGAN STANLEY & CO INTL LTD, SEOUL	1,991.25	77,714.00	0.03
JMP SECURITIES, SAN FRANCISCO	1,840.00	57,900.00	0.03	MORGAN STANLEY & CO, LONDON (MSLNGB2X)	66,144.25	26,515,278.00	0.00
JMP SECURITIES, SAN FRANCISCO	7,072.02	231,923.00	0.03	NATIONAL FINL SVCS CORP, NEW YORK	4,447.00	383,500.00	0.01
JOHNSON RICE & CO, NEW ORLEANS	974.85	27,710.00	0.04	NATIONAL SECS CO LTD, BANGKOK	11,488.20	13,313,345.00	0.00
JOHNSON RICE & COMPANY LLC, NEW ORLEANS	447.47	12,063.00	0.04	NEEDHAM & CO, NEW YORK	1,754.19	56,433.00	0.03
JONESTRADING INSTL SVCS LLC, WESTLAKE	14,344.67	676,633.00	0.02	NEEDHAM AND COMPANY LLC, JERSEY CITY	6,885.88	225,909.00	0.03
JP MORGAN CHASE BANK NA (GST), LONDON	2,393.34	1,161,277.00	0.00	NESBITT BURNS, TORONTO (NTDT)	5,927.09	305,165.00	0.02

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**SCHEDULE OF BROKERAGE COMMISSIONS (Continued)  
FOR THE FISCAL YEAR ENDED JUNE 30, 2016**

Broker Name	\$ Commission	Shares/ Par Value	Avg Comm	Broker Name	\$ Commission	Shares/ Par Value	Avg Comm
NOMURA FINANCIAL & INVESTMENT, SEOUL	4,935.82	280,053.00	0.02	STEPHENS INC, LITTLE ROCK	19,058.96	619,621.00	0.03
NOMURA SECS INTL, LONDON	654.59	25,000.00	0.03	STIFEL NICOLAUS	34,540.15	1,457,905.00	0.02
NORDEA BANK FINLAND PLC, HELSINKI	362.33	160,797.00	0.00	STRATEGAS SECURITIES LLC, NEW YORK	2,953.12	113,141.00	0.03
NORDEA BANK FINLAND PLC, HELSINKI	5,409.62	821,616.00	0.01	STURDIVANT & CO INC, BROOKLYN	220.00	11,000.00	0.02
NORDEA BK PLC, HELSINKI (NDEAFIHH030)	724.52	8,413.00	0.09	SUNTRUST CAPITAL MARKETS INC, ATLANTA	17,477.10	516,375.00	0.03
NORTH SOUTH CAPITAL LLC, JERSEY CITY	16,896.53	799,187.00	0.02	SUSQUEHANNA FINL GROUP LLLP, NEW YORK	1,570.64	41,591.00	0.04
NORTHLAND SECS INC, JERSEY CITY	693.78	20,695.00	0.03	SVENSKA HANDELSBANKEN, STOCKHOLM	1,577.17	43,010.00	0.04
NUMIS SECURITIES INC., NEW YORK	12,063.49	1,491,957.00	0.01	TEB YATIRIM MENKUL DEGERLER AS, ISTANBUL	9,008.29	2,448,515.00	0.00
NUMIS SECURITIES LTD, LONDON	248.94	26,407.00	0.01	TELSEY ADVISORY GROUP LLC, DALLAS	11,313.62	619,840.00	0.02
ODDO ET CIE, PARIS	40.02	2,643.00	0.02	THEMIS TRADING LLC, JERSEY CITY	148.00	14,800.00	0.01
OLIVETREE USA LLC, NEW YORK	251.62	7,189.00	0.04	THINKEQUITY PARTNERS LLC, MINNEAPOLIS	700.00	17,500.00	0.04
ONEIL WILLIAM & CO INC/BCC, LOS ANGELES	1,377.87	45,929.00	0.03	TONG YANG SECURITIES INC, SEOUL	9,851.82	126,277.00	0.08
OPPENHEIMER & CO INC, NEW YORK	16,763.61	538,073.00	0.03	TOPEKA CAPITAL MARKETS INC., NEW YORK	37,726.10	2,146,516.00	0.02
ORIEL SECURITIES LTD, LONDON	1,119.29	155,773.00	0.01	TOPEKA CAPITAL MARKETS INC, JERSEY CITY	2,771.00	73,300.00	0.04
OSK INVESTMENT BANK BERHAD, KUALA LUMPUR	1,800.34	1,050,589.00	0.00	UBS EQUITIES, LONDON	23,199.99	26,566,748.00	0.00
OTR GLOBAL TRADING LLC, NEW YORK	1,800.00	52,600.00	0.03	UBS SECS SINGAPORE PTE LTD	567.17	842,800.00	0.00
PACIFIC CREST SECURITIES, PORTLAND	344.00	8,600.00	0.04	UBS SECURITIES CANADA, TORONTO (BWIT)	2,307.62	333,906.00	0.01
PANMURE GORDON & CO LTD, LONDON	763.58	26,980.00	0.03	UBS SECURITIES HONG KONG LTD, HONG KONG	101.01	304,400.00	0.00
PAREL, PARIS	5,651.07	254,623.00	0.02	UBS SECURITIES LLC, STAMFORD	149,336.10	51,860,125.00	0.00
PEEL HUNT LLP, LONDON	5,665.41	858,906.00	0.01	UBS WARBURG ASIA LTD, HONG KONG	67,546.92	32,740,170.00	0.00
PENSERRA SECURITIES, NEW YORK	8,998.07	768,220.00	0.01	UBS WARBURG AUSTRALIA EQUITIES, SYDNEY	277.99	35,710.00	0.01
PERCIVAL FINL PARTNERS LTD, LAKE SUCCESS	5,673.50	162,100.00	0.04	UBS WARBURG, LONDON	98,806.55	16,887,350.00	0.01
PEREGRINE SECS PHILIPPINES INC, MANILA	1,282.20	203,590.00	0.01	UOB KAY HIAN PTE LTD, HONG KONG	2,106.26	3,502,900.00	0.00
PERSHING LLC, JERSEY CITY	34,831.70	3,818,711.00	0.01	VANDHAM SECURITIES CORP, NEW YORK	616.55	33,110.00	0.02
PERSHING SECURITIES LTD, LONDON	3,356.15	912,475.00	0.00	VTB BANK EUROPE PLC, LONDON	693.62	75,323.00	0.01
PICKERING ENERGY PARTNERS, HOUSTON	516.00	12,900.00	0.04	WEDBUSH MORGAN SECS INC, LOS ANGELES	17,153.55	757,396.00	0.02
PIPER JAFFRAY & CO, MINNEAPOLIS	11,599.60	324,079.00	0.04	WEEDEN & CO, GREENWICH	2,230.36	412,000.00	0.01
PT. MANDIRI SEKURITAS, JAKARTA	256.99	237,500.00	0.00	WEEDEN & CO, NEW YORK	184.00	4,600.00	0.04
RABOBANK NEDERLAND, UTRECHT	2,571.55	43,942.00	0.06	WEEDEN & CO, NEW YORK	76,874.75	5,483,772.00	0.01
RAMIREZ SAMUEL A & CO, NEW YORK	26.18	3,490.00	0.01	WELLS FARGO BANK NA, SAN FRANCISCO	24.23	3,230.00	0.01
RAYMOND JAMES & ASSOC INC, ST PETERSBURG	26,690.36	815,935.00	0.03	WELLS FARGO SECURITIES LLC, CHARLOTTE	5,830.81	242,367.00	0.02
RBC CAPITAL MARKETS LLC, NEW YORK	42,733.72	2,535,738.00	0.02	WELLS FARGO SECURITIES LLC, CHARLOTTE	2,645.00	83,000.00	0.03
RBC DOMINION SECS INC, TORONTO (DOMA)	6,710.97	520,375.00	0.01	WILLIAM BLAIR & CO, CHICAGO	36,140.38	1,079,325.00	0.03
REDBURN PARTNERS LLP, LONDON	65.02	25,678.00	0.00	WILLIAMS CAPITAL GROUP LP, JERSEY CITY	21,381.71	1,106,294.00	0.02
RENAISSANCE CAPITAL LTD, LONDON	20,300.39	1,450,785.00	0.01	WILSON HTM LTD, BRISBANE	9.96	50,844.00	0.00
RENAISSANCE MACRO SEC. LLC, NEW YORK, NY	180.39	6,013.00	0.03	WM SMITH & CO, JERSEY	139.81	4,262.00	0.03
ROSENBLATT SECURITIES LLC, JERSEY CITY	16.00	400.00	0.04	WOLFE TRAHAN SECURITIES, NEW YORK	3,773.03	111,301.00	0.03
ROTH CAPITAL PARTNERS LLC, IRVINE	1,942.72	55,103.00	0.04	WOORI INVESTMENT & SECURITIES, SEOUL	24,184.48	454,364.00	0.05
ROYAL BANK OF CANADA EUROPE LTD, LONDON	1,374.17	209,937.00	0.01	WUNDERLICH SECURITIES INC, MEMPHIS	342.09	9,774.00	0.04
ROYAL TR CORP OF CDA/GBL CUSTODY, LONDON	107.21	15,163.00	0.01	XP INVESTIMENTOS CCTVM SA, RIO DE JANEIRO	14,712.69	5,233,600.00	0.00
S G WARBURG, SEOUL	11,279.11	958,262.00	0.01	YAMNER & COMPANY INC, JERSEY CITY	1,930.20	193,020.00	0.01
SAMSUNG SECS, SEOUL	13,085.61	293,192.00	0.04				
SAMUEL A RAMIREZ & COMPANY, BROOKLYN	146.90	9,253.00	0.02	<b>TOTAL</b>	<b>\$5,537,082.99</b>		
SAMUEL A. RAMIREZ & COMPANY INC, JERSEY	487.04	64,935.00	0.01				
SAMUEL RAMIREZ & CO, NEW YORK	34.19	4,558.00	0.01				
SANDLER O'NEILL & PARTNERS LP, NEW YORK	3,518.32	99,075.00	0.04				
SANDLER O'NEILL & PARTNERS, NEW YORK	4,333.55	129,619.00	0.03				
SANFORD C BERNSTEIN & CO INC, LONDON	15,884.77	2,022,762.00	0.01				
SANFORD C. BERNSTEIN & CO, WHITE PLAINS	840.04	1,259,002.00	0.00				
SANTANDER CENTRAL HISPANO INVT, MADRID	5,234.23	42,341,411.00	0.00				
SANTANDER INVESTMENT SECS, JERSEY CITY	2,886.39	384,852.00	0.01				
SBC WARBURG, AUCKLAND	858.92	194,056.00	0.00				
SCB SECURITIES CO LTD, BANGKOK	7,938.81	6,274,250.00	0.00				
SCOTIA CAPITAL (USA) INC, NEW YORK	537.88	35,080.00	0.02				
SCOTIA CAPITAL INC, NEW YORK	67.36	55,471.00	0.00				
SCOTIA CAPITAL MKTS, TORONTO	680.28	22,020.00	0.03				
SEAGROTT & CAMPBELL SDN, KUALA LUMPUR	9,026.39	3,682,492.00	0.00				
SEAPORT GROUP SECS LLC, NEW YORK	2,956.74	277,560.00	0.01				
SG AMERICAS SECURITIES LLC, NEW YORK	659.17	110,219.00	0.01				
SG SEC (LONDON) LTD, LONDON	37,253.80	5,212,095.00	0.01				
SG SECURITIES, HONG KONG	10,641.73	9,124,641.00	0.00				
SHENYIN WANGUO SECS LTD, HONG KONG	6,481.13	9,336,400.00	0.00				
SHORE CAPITAL STOCKBROKERS, LONDON	311.91	6,963.00	0.04				
SIDCO / CONVERGEX, NEW YORK	135.13	3,860.00	0.04				
SIDOTI & CO LLC, NEW YORK	8,336.79	287,298.00	0.03				
SIMMONS & CO INTL, HOUSTON	452.00	11,300.00	0.04				
SINGER CAPITAL MARKETS LTD, LONDON	16.97	3,770.00	0.00				
SKANDINAVISKA ENSKILDA BANKEN, LONDON	46.05	1,179.00	0.04				
SKANDINAVISKA ENSKILDA BANKEN, STOCKHOLM	3,822.87	133,580.00	0.03				
SMBC NIKKO SECURITIES LTD, WAN CHAI	2,171.21	147,300.00	0.01				
SMBC SECURITIES, INC NEW YORK	4,459.65	425,450.00	0.01				
SOCIETE DE BOURSE GILBERT DUPONT, PARIS	482.19	3,280.00	0.15				
SOCIETE GENERALE LONDON BRANCH, LONDON	3,827.53	1,514,507.00	0.00				
STANDARD BANK, LONDON	11,183.55	1,741,561.00	0.01				
STATE STREET BK & TR CO (SEC), LONDON	89.88	9,743.00	0.01				
STATE STREET BK & TR CO, LONDON	34.71	5,116.00	0.01				
STATE STREET BROKERAGE SVCS, BOSTON	18,985.44	1,276,876.00	0.01				

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**COMBINED INVESTMENT FUNDS  
TOTAL NET POSITION VALUE BY PENSION PLANS AND TRUST FUNDS  
JUNE 30, 2016**

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<b><u>Retirement Funds</u></b>	<b><u>Net Position Value</u></b>
Teachers' Retirement Fund	\$15,584,564,214
State Employees' Retirement Fund	10,636,702,645
Municipal Employees' Retirement Fund	2,212,023,198
State Judges' Retirement Fund	189,678,051
The Probate Court Retirement Fund	87,267,503
State's Attorneys Retirement Fund	1,545,656
<b><u>Non-retirement Trust Funds</u></b>	
Soldiers' Sailors' & Marines' Fund	72,322,129
Police & Firemans' Survivors' Benefit Fund	28,587,494
Connecticut Arts Endowment Fund	18,958,582
School Fund	11,039,724
Ida Eaton Cotton Fund	2,447,813
Hopemead State Park Fund	3,533,357
Andrew C. Clark Fund	1,151,268
Agricultural College Fund	662,613
OPEB Fund	395,435,514
TOTAL	<u>\$29,245,919,761</u>



**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**SCHEDULE OF NET POSITION BY INVESTMENT FUND**

**JUNE 30, 2016**

	<b>LIQUIDITY FUND</b>	<b>ALTERNATIVE INVESTMENT FUND</b>	<b>MUTUAL EQUITY FUND</b>	<b>CORE FIXED INCOME FUND</b>	<b>INFLATION LINKED BOND FUND</b>	<b>EMERGING MARKET DEBT FUND</b>
<b>ASSETS</b>						
Investments in Securities , at Fair Value						
Liquidity Fund	\$ -	\$107,744,348	\$78,394,740	\$95,349,597	\$41,242,414	\$40,584,644
Cash Equivalents	83,124,000	-	-	-	344,316	2,610,000
Asset Backed Securities	112,532,254	-	-	41,266,798	(484,608)	(152,394)
Government Securities	505,044,634	-	-	510,179,947	1,273,387,922	744,801,239
Government Agency Securities	157,070,148	-	-	488,700,648	-	-
Mortgage Backed Securities	136,562,305	-	-	265,466,194	-	-
Corporate Debt	909,778,732	-	-	531,354,372	7,289,887	104,524,026
Convertible Securities	-	-	-	-	-	-
Common Stock	-	-	6,323,296,649	-	-	-
Preferred Stock	-	-	-	3,420,561	-	-
Real Estate Investment Trust	-	-	243,591,302	20,502,003	-	-
Business Development Corporation	-	-	-	-	-	-
Mutual Fund	73,144,499	-	-	-	-	532,416,181
Limited Liability Corporation	-	-	-	-	-	-
Trusts	-	-	-	-	-	-
Limited Partnerships	-	1,696,592,719	2,199,494	534,415,821	-	58,988,916
<b>Total Investments in Securities, at Fair Value</b>	<b>1,977,256,572</b>	<b>1,804,337,067</b>	<b>6,647,482,185</b>	<b>2,490,655,941</b>	<b>1,321,779,931</b>	<b>1,483,772,612</b>
Cash	2,578,866	-	-	453,807	8,921,920	2,809,211
Receivables						
Foreign Exchange Contracts	406,025,776	-	-	-	650,265,102	172,305,018
Interest Receivable	5,462,884	134,074	112,160	11,254,856	5,101,452	14,933,960
Dividends Receivable	-	-	7,387,741	-	-	-
Due from Brokers	-	-	16,496,707	166,077,449	3,484,467	9,170,430
Foreign Taxes	179,060	-	-	40	97,466	470,152
Securities Lending Receivable	-	-	527,597	52,869	61,536	12,762
Reserve for Doubtful Receivables	-	-	(98,718)	(1,131,492)	(20,606)	(280,248)
<b>Total Receivables</b>	<b>411,667,720</b>	<b>134,074</b>	<b>24,425,487</b>	<b>176,253,722</b>	<b>658,989,417</b>	<b>196,612,074</b>
Invested Securities Lending Collateral	-	-	1,383,880,687	151,276,599	313,610,704	20,609,401
Prepaid Expenses	-	-	-	-	-	-
<b>Total Assets</b>	<b>2,391,503,158</b>	<b>1,804,471,141</b>	<b>8,055,788,359</b>	<b>2,818,640,069</b>	<b>2,303,301,972</b>	<b>1,703,803,298</b>
<b>LIABILITIES</b>						
Payables						
Foreign Exchange Contracts	406,407,862	-	-	-	661,107,154	175,109,334
Due to Brokers	1,548,001	-	26,049,281	259,794,509	6,005,183	9,283,446
Income Distribution	2,821,985	-	-	-	-	-
Other Payable	-	-	300,281	-	-	-
<b>Total Payables</b>	<b>410,777,848</b>	<b>-</b>	<b>26,349,562</b>	<b>259,794,509</b>	<b>667,112,337</b>	<b>184,392,780</b>
Securities Lending Collateral	-	-	1,383,880,687	151,276,599	313,610,704	20,609,401
Accrued Expenses	631,700	130,497	3,453,294	704,595	604,987	1,020,633
<b>Total Liabilities</b>	<b>411,409,548</b>	<b>130,497</b>	<b>1,413,683,543</b>	<b>411,775,703</b>	<b>981,328,028</b>	<b>206,022,814</b>
<b>NET POSITION HELD IN TRUST FOR PARTICIPANTS</b>	<b>\$1,980,093,610</b>	<b>\$1,804,340,644</b>	<b>\$6,642,104,816</b>	<b>\$2,406,864,366</b>	<b>\$1,321,973,944</b>	<b>\$1,497,780,484</b>
Units Outstanding	2,026,683,361	1,608,446,218	4,281,797	18,583,007	8,528,631	9,379,801
Net Position Value and Redemption Price per Unit	\$0.98	\$1.12	\$1,551.24	\$129.52	\$155.00	\$159.68

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**SCHEDULE OF NET POSITION BY INVESTMENT FUND  
JUNE 30, 2016**

<b>HIGH YIELD- DEBT FUND</b>	<b>DEVELOPED MARKET INTERNATIONAL STOCK FUND</b>	<b>EMERGING MARKET INTERNATIONAL STOCK FUND</b>	<b>REAL ESTATE FUND</b>	<b>COMMERCIAL MORTGAGE FUND</b>	<b>PRIVATE INVESTMENT FUND</b>	<b>ELIMINATION ENTRY</b>	<b>TOTAL</b>
\$80,618,770 (330,000)	\$116,158,689 (8,371,379)	\$88,211,992	\$142,263,946	\$83	\$168,394,059	\$(958,963,282)	\$ -
-	-	-	-	-	-	-	77,376,937
24,042,624	-	-	-	-	-	-	153,162,050
-	-	-	-	-	-	-	3,057,456,366
-	-	-	-	-	-	-	645,770,796
1,493,488,704	-	-	-	-	-	-	402,028,499
53,746,472	-	-	-	-	-	-	3,046,435,721
7,256,524	4,984,163,224	2,220,694,070	-	-	5,128,119	-	53,746,472
9,230,611	13,369,054	61,612,252	-	-	-	-	13,540,538,586
40,523,186	80,404,033	394,295	-	-	-	-	87,632,478
99,611,605	-	-	-	-	-	-	385,414,819
-	1,906,197	96,170,578	-	-	-	-	99,611,605
-	-	-	-	-	1,156,486	-	703,637,455
-	-	-	530,040	-	-	-	1,156,486
-	-	-	2,064,602,486	-	2,594,757,255	-	530,040
-	-	-	-	-	-	-	6,951,556,691
1,808,188,496	5,187,629,818	2,467,083,187	2,207,396,472	83	2,769,435,919	(958,963,282)	29,206,055,001
517,255	25,446,889	1,950,035	-	-	31,441	(2,578,866)	40,130,558
19,329,974	11,016,249,383	11,216,569	-	-	-	(356,930,968)	11,918,460,854
27,276,851	148,111	143,485	179,876	-	168,567	(5,462,884)	59,453,392
35,265	10,649,187	16,647,599	-	-	-	-	34,719,792
4,728,802	28,536,041	12,482,428	-	-	-	-	240,976,324
-	9,319,356	186,435	-	-	-	(179,060)	10,073,449
188,608	230,308	122,838	-	-	-	-	1,196,518
(1,472,581)	(1,264,428)	(666,535)	-	-	-	-	(4,934,608)
50,086,919	11,063,867,958	40,132,819	179,876	-	168,567	(362,572,912)	12,259,945,721
368,090,617	133,169,091	225,960,929	-	-	-	-	2,596,598,028
-	-	-	-	-	1,258,968	-	1,258,968
2,226,883,287	16,410,113,756	2,735,126,970	2,207,576,348	83	2,770,894,895	(1,324,115,060)	44,103,988,276
19,049,250	11,009,618,746	11,341,575	-	-	-	(406,407,862)	11,876,226,059
15,191,968	38,091,576	11,079,653	-	-	-	(1,548,001)	365,495,616
-	-	-	-	-	-	(1,272,478)	1,549,507
-	-	-	-	-	-	-	300,281
34,241,218	11,047,710,322	22,421,228	-	-	-	(409,228,341)	12,243,571,463
368,090,617	133,169,091	225,960,929	-	-	-	-	2,596,598,028
1,402,682	5,429,431	3,274,299	487,443	-	1,084,790	(325,327)	17,899,024
403,734,517	11,186,308,844	251,656,456	487,443	-	1,084,790	(409,553,668)	14,858,068,515
\$1,823,148,770	\$5,223,804,912	\$2,483,470,514	\$2,207,088,905	\$83	\$2,769,810,105	\$(914,561,392)	\$29,245,919,761
13,229,031	12,138,414	7,236,490	43,605,017	6	39,683,008		
\$137.81	\$430.35	\$343.19	\$50.62	\$14.99	\$69.80		

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**SCHEDULE OF CHANGES IN NET POSITION BY INVESTMENT FUND  
FOR THE FISCAL YEAR ENDED JUNE 30, 2016**

	LIQUIDITY FUND	ALTERNATIVE INVESTMENT FUND	MUTUAL EQUITY FUND	CORE FIXED INCOME FUND	INFLATION LINKED BOND FUND	EMERGING MARKET DEBT FUND
<b>ADDITIONS</b>						
<b>OPERATIONS</b>						
<b>Investment Income</b>						
Dividends	\$ -	\$4,592,789	\$128,695,580	\$188	\$ -	\$ -
Interest	26,545,360	924,448	775,588	56,716,843	1,885,985	143,311,719
Other Income	3,647	-	2,812,646	495,044	-	4,313,152
Securities Lending	-	-	10,003,339	1,046,315	1,680,725	359,452
<b>Total Income</b>	<b>26,549,007</b>	<b>5,517,237</b>	<b>142,287,153</b>	<b>58,258,390</b>	<b>3,566,710</b>	<b>147,984,323</b>
<b>Expenses</b>						
Investment Advisory Fees	1,537,535	-	13,228,298	2,592,136	2,280,298	3,837,786
Custody and Transfer Agent Fees	45,602	215,561	749,893	267,116	125,742	144,601
Professional Fees	32,873	613,483	264,026	56,812	27,247	33,011
Security Lending Fees	-	-	701,246	58,626	62,343	34,670
Security Lending Rebates	-	-	2,990,883	460,056	1,057,297	12,757
Investment Expenses	72,372	13,999	59,966	8,500	677,354	100,893
<b>Total Expenses</b>	<b>1,688,382</b>	<b>843,043</b>	<b>17,994,312</b>	<b>3,443,246</b>	<b>4,230,281</b>	<b>4,163,718</b>
<b>Net Investment Income</b>	<b>24,860,625</b>	<b>4,674,194</b>	<b>124,292,841</b>	<b>54,815,144</b>	<b>(663,571)</b>	<b>143,820,605</b>
<b>Net Realized Gain (Loss)</b>	<b>(30,966,885)</b>	<b>3,204,692</b>	<b>224,364,630</b>	<b>9,535,194</b>	<b>(6,431,184)</b>	<b>(85,732,666)</b>
<b>Net Change in Unrealized Gain/(Loss) on Investments and Foreign Currency</b>	<b>20,031,127</b>	<b>(111,985,090)</b>	<b>(233,128,928)</b>	<b>18,798,349</b>	<b>36,308,764</b>	<b>27,608,963</b>
<b>Net Increase (Decrease) in Net Position Resulting from Operations</b>	<b>13,924,867</b>	<b>(104,106,204)</b>	<b>115,528,543</b>	<b>83,148,687</b>	<b>29,214,009</b>	<b>85,696,902</b>
<b>Unit Transactions</b>						
Purchase of Units by Participants	7,876,647,399	95,771,498	36,280,951	35,482,297	165,326,702	9,496,930
<b>TOTAL ADDITIONS</b>	<b>7,890,572,266</b>	<b>(8,334,706)</b>	<b>151,809,494</b>	<b>118,630,984</b>	<b>194,540,711</b>	<b>95,193,832</b>
<b>DEDUCTIONS</b>						
<b>Administrative Expenses:</b>						
Salary and Fringe Benefits	(270,687)	(271,189)	(1,185,700)	(407,561)	(196,997)	(238,334)
<b>Distributions to Unit Owners:</b>						
Income Distributed	(24,272,621)	-	-	-	-	-
<b>Unit Transactions</b>						
Redemption of Units by Participants	(8,079,489,731)	(8,487,904)	(279,384,694)	(148,326,233)	(3,149,355)	(11,753,875)
<b>TOTAL DEDUCTIONS</b>	<b>(8,104,033,039)</b>	<b>(8,759,093)</b>	<b>(280,570,394)</b>	<b>(148,733,794)</b>	<b>(3,346,352)</b>	<b>(11,992,209)</b>
<b>Change in Net Position Held in Trust for Participants</b>	<b>(213,460,773)</b>	<b>(17,093,799)</b>	<b>(128,760,900)</b>	<b>(30,102,810)</b>	<b>191,194,359</b>	<b>83,201,623</b>
<b>Net Position- Beginning of Period</b>	<b>2,193,554,383</b>	<b>1,821,434,443</b>	<b>6,770,865,716</b>	<b>2,436,967,176</b>	<b>1,130,779,585</b>	<b>1,414,578,861</b>
<b>Net Position- End of Period</b>	<b>\$1,980,093,610</b>	<b>\$1,804,340,644</b>	<b>\$6,642,104,816</b>	<b>\$2,406,864,366</b>	<b>\$1,321,973,944</b>	<b>\$1,497,780,484</b>
<b>Other Information:</b>						
<b>Units</b>						
Purchased	8,075,012,237	82,949,169	25,101	282,187	1,087,346	65,636
Redeemed	(8,283,939,204)	(7,373,331)	(184,532)	(1,168,906)	(21,090)	(76,803)
<b>Net Increase (Decrease)</b>	<b>(208,926,967)</b>	<b>75,575,838</b>	<b>(159,431)</b>	<b>(886,719)</b>	<b>1,066,256</b>	<b>(11,167)</b>

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**SCHEDULE OF CHANGES IN NET POSITION BY INVESTMENT FUND (Continued)  
FOR THE FISCAL YEAR ENDED JUNE 30, 2016**

HIGH YIELD- DEBT FUND	DEVELOPED MARKET INTERNATIONAL STOCK FUND	EMERGING MARKET INTERNATIONAL STOCK FUND	REAL ESTATE FUND	COMMERCIAL MORTGAGE FUND	PRIVATE INVESTMENT FUND	ELIMINATION ENTRY	TOTAL
\$8,541,540	\$162,777,688	\$54,678,155	\$78,117,664	\$ -	\$22,550,020	\$ -	\$459,953,624
109,098,735	1,346,352	5,511,628	1,079,732	136	1,891,043	(11,814,073)	337,273,496
62,838	559	1,905	-	-	26	(1,623)	7,688,194
2,906,369	3,103,844	1,980,794	-	-	-	-	21,080,838
120,609,482	167,228,443	62,172,482	79,197,396	136	24,441,089	(11,815,696)	825,996,152
5,689,980	21,720,999	13,834,642	7,554,325	-	3,039,252	(684,283)	74,630,968
186,649	779,277	218,278	244,560	1	327,285	(20,295)	3,284,270
40,587	163,611	68,746	539,176	-	1,555,243	(14,630)	3,380,185
243,093	305,401	169,128	-	-	-	-	1,574,507
475,436	49,822	289,513	-	-	-	-	5,335,764
13,596	168,859	1,330,774	14,166	-	20,618	(32,209)	2,448,888
6,649,341	23,187,969	15,911,081	8,352,227	1	4,942,398	(751,417)	90,654,582
113,960,141	144,040,474	46,261,401	70,845,169	135	19,498,691	(11,064,279)	735,341,570
(69,805,380)	17,119,757	(224,848,281)	3,764,103	(15,488)	313,088,934	13,781,883	167,059,309
(45,351,960)	(569,539,822)	12,538,813	111,357,953	35	(143,969,587)	(9,844,658)	(887,176,041)
(1,197,199)	(408,379,591)	(166,048,067)	185,967,225	(15,318)	188,618,038	(7,127,054)	15,224,838
60,674,737	42,596,214	193,164,163	131,094,177	-	16,552,334	(6,198,705,861)	2,464,381,541
59,477,538	(365,783,377)	27,116,096	317,061,402	(15,318)	205,170,372	(6,205,832,915)	2,479,606,379
(292,321)	(854,845)	(336,036)	(285,970)	(2,836)	(380,666)	120,470	(4,602,672)
-	-	-	-	-	-	10,802,583	(13,470,038)
(10,302,127)	(318,801,669)	(16,597,298)	(27,923,172)	(14,400)	(330,071,249)	6,151,711,283	(3,082,590,424)
(10,594,448)	(319,656,514)	(16,933,334)	(28,209,142)	(17,236)	(330,451,915)	6,162,634,336	(3,100,663,134)
48,883,090	(685,439,891)	10,182,762	288,852,260	(32,554)	(125,281,543)	(43,198,579)	(621,056,755)
1,774,265,680	5,909,244,803	2,473,287,752	1,918,236,645	32,637	2,895,091,648	(871,362,813)	29,866,976,516
\$1,823,148,770	\$5,223,804,912	\$2,483,470,514	\$2,207,088,905	\$83	\$2,769,810,105	\$(914,561,392)	\$29,245,919,761
452,139	98,517	595,224	2,730,330	-	245,166		
(75,718)	(716,920)	(50,439)	(586,760)	(968)	(5,015,234)		
376,421	(618,403)	544,785	2,143,570	(968)	(4,770,068)		

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**SCHEDULE OF CHANGES IN NET POSITION BY INVESTMENT FUND  
FOR THE FISCAL YEAR ENDED JUNE 30, 2015**

	LIQUIDITY FUND	ALTERNATIVE INVESTMENT FUND	MUTUAL EQUITY FUND	CORE FIXED INCOME FUND	INFLATION LINKED BOND FUND	EMERGING MARKET DEBT FUND
<b>ADDITIONS</b>						
<b>OPERATIONS</b>						
<b>Investment Income</b>						
Dividends	\$2,798	\$3,667,951	\$122,875,650	\$5,451	\$ -	\$787
Interest	23,532,283	581,175	852,018	53,613,840	(3,420,391)	94,663,964
Other Income	38	-	1,748,415	922,828	-	4,394,655
Securities Lending	-	-	4,677,391	845,802	974,411	199,223
<b>Total Income</b>	<b>23,535,119</b>	<b>4,249,126</b>	<b>130,153,474</b>	<b>55,387,921</b>	<b>(2,445,980)</b>	<b>99,258,629</b>
<b>Expenses</b>						
Investment Advisory Fees	4,742,508	-	13,224,485	2,986,694	1,847,122	4,292,272
Custody and Transfer Agent Fees	221,920	176,102	824,968	294,557	139,186	182,246
Professional Fees	67,525	696,311	240,242	54,533	25,584	32,771
Security Lending Fees	-	-	443,096	68,345	57,082	19,440
Security Lending Rebates	-	-	246,428	162,353	403,590	4,818
Investment Expenses	16,686	14,123	74,007	36,192	389,953	134,774
<b>Total Expenses</b>	<b>5,048,639</b>	<b>886,536</b>	<b>15,053,226</b>	<b>3,602,674</b>	<b>2,862,517</b>	<b>4,666,321</b>
<b>Net Investment Income</b>	<b>18,486,480</b>	<b>3,362,590</b>	<b>115,100,248</b>	<b>51,785,247</b>	<b>(5,308,497)</b>	<b>94,592,308</b>
<b>Net Realized Gain (Loss)</b>	<b>(4,602,089)</b>	<b>5,028,776</b>	<b>605,914,006</b>	<b>14,841,191</b>	<b>54,193,275</b>	<b>(55,603,561)</b>
<b>Net Change in Unrealized Gain/(Loss) on Investments and Foreign Currency</b>	<b>(39,899,693)</b>	<b>50,463,829</b>	<b>(242,461,952)</b>	<b>(21,371,772)</b>	<b>(81,615,640)</b>	<b>(153,532,525)</b>
<b>Net Increase (Decrease) in Net Position Resulting from Operations</b>	<b>(26,015,302)</b>	<b>58,855,195</b>	<b>478,552,302</b>	<b>45,254,666</b>	<b>(32,730,862)</b>	<b>(114,543,778)</b>
<b>Unit Transactions</b>						
Purchase of Units by Participants	11,042,574,984	396,438,171	13,796,284	30,270,065	98,295,890	18,192,697
<b>TOTAL ADDITIONS</b>	<b>11,016,559,682</b>	<b>455,293,366</b>	<b>492,348,586</b>	<b>75,524,731</b>	<b>65,565,028</b>	<b>(96,351,081)</b>
<b>DEDUCTIONS</b>						
<b>Administrative Expenses:</b>						
Salary and Fringe Benefits	(402,960)	(328,758)	(1,084,979)	(351,364)	(167,022)	(208,742)
<b>Distributions to Unit Owners:</b>						
Income Distributed	(16,968,808)	-	-	-	-	-
<b>Unit Transactions</b>						
Redemption of Units by Participants	(10,993,810,556)	(3,420,717)	(778,881,605)	(58,894,010)	(13,299,326)	(2,538,296)
<b>TOTAL DEDUCTIONS</b>	<b>(11,011,182,324)</b>	<b>(3,749,475)</b>	<b>(779,966,584)</b>	<b>(59,245,374)</b>	<b>(13,466,348)</b>	<b>(2,747,038)</b>
<b>Change in Net Position Held in Trust for Participants</b>	<b>5,377,358</b>	<b>451,543,891</b>	<b>(287,617,998)</b>	<b>16,279,357</b>	<b>52,098,680</b>	<b>(99,098,119)</b>
<b>Net Position- Beginning of Period</b>	<b>2,188,177,025</b>	<b>1,369,890,552</b>	<b>7,058,483,714</b>	<b>2,420,687,819</b>	<b>1,078,680,905</b>	<b>1,513,676,980</b>
<b>Net Position- End of Period</b>	<b>\$2,193,554,383</b>	<b>\$1,821,434,443</b>	<b>\$6,770,865,716</b>	<b>\$2,436,967,176</b>	<b>\$1,130,779,585</b>	<b>\$1,414,578,861</b>
<b>Other Information:</b>						
<b>Units</b>						
Purchased	11,149,973,287	343,475,978	9,102	241,766	632,427	118,893
Redeemed	(11,105,662,561)	(2,950,614)	(536,556)	(468,554)	(85,967)	(15,637)
<b>Net Increase (Decrease)</b>	<b>44,310,726</b>	<b>340,525,364</b>	<b>(527,454)</b>	<b>(226,788)</b>	<b>546,460</b>	<b>103,256</b>

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**SCHEDULE OF CHANGES IN NET POSITION BY INVESTMENT FUND (Continued)  
FOR THE FISCAL YEAR ENDED JUNE 30, 2015**

<b>HIGH YIELD- DEBT FUND</b>	<b>DEVELOPED MARKET INTERNATIONAL STOCK FUND</b>	<b>EMERGING MARKET INTERNATIONAL STOCK FUND</b>	<b>REAL ESTATE FUND</b>	<b>COMMERCIAL MORTGAGE FUND</b>	<b>PRIVATE INVESTMENT FUND</b>	<b>ELIMINATION ENTRY</b>	<b>TOTAL</b>
\$4,058,514	\$166,649,666	\$68,371,751	\$69,270,904	\$-	\$68,011,714	\$(1,238)	\$502,913,948
97,162,199	1,003,799	2,872,048	578,558	1,097	978,504	(10,408,866)	262,010,228
248,005	9,643	-	-	-	-	(17)	7,323,567
1,839,648	4,955,071	1,941,376	-	-	-	-	15,432,922
103,308,366	172,618,179	73,185,175	69,849,462	1,097	68,990,218	(10,410,121)	787,680,665
5,034,481	21,897,221	15,665,100	5,429,945	-	2,879,276	(2,097,720)	75,901,384
199,991	799,001	351,360	233,310	4	428,478	(98,160)	3,752,963
36,105	147,711	69,546	401,061	-	1,141,100	(29,868)	2,882,621
178,163	494,817	189,901	-	-	-	-	1,450,844
58,022	6,897	42,365	-	-	-	-	924,473
14,723	350,912	1,521,928	14,740	-	25,485	(7,381)	2,586,142
5,521,485	23,696,559	17,840,200	6,079,056	4	4,474,339	(2,233,129)	87,498,427
97,786,881	148,921,620	55,344,975	63,770,406	1,093	64,515,879	(8,176,992)	700,182,238
6,900,522	357,166,341	(20,301,641)	92,810,550	(1,013)	274,316,258	2,035,609	1,332,698,224
(124,181,761)	(467,803,648)	(218,071,430)	71,162,966	79	90,636,808	16,922,879	(1,119,751,860)
(19,494,358)	38,284,313	(183,028,096)	227,743,922	159	429,468,945	10,781,496	913,128,602
205,508,562	26,626,714	17,921,069	232,332,363	-	11,511,397	(9,083,061,530)	3,010,406,666
186,014,204	64,911,027	(165,107,027)	460,076,285	159	440,980,342	(9,072,280,034)	3,923,535,268
(233,745)	(788,966)	(339,128)	(453,417)	-	(441,202)	178,238	(4,622,045)
-	-	-	-	-	-	7,505,689	(9,463,119)
(128,699)	(290,021,999)	(16,342,897)	(104,701,423)	(38,000)	(511,529,663)	9,177,008,437	(3,596,598,754)
(362,444)	(290,810,965)	(16,682,025)	(105,154,840)	(38,000)	(511,970,865)	9,184,692,364	(3,610,683,918)
185,651,760	(225,899,938)	(181,789,052)	354,921,445	(37,841)	(70,990,523)	112,412,330	312,851,350
1,588,613,920	6,135,144,741	2,655,076,804	1,563,315,200	70,478	2,966,082,171	(983,775,143)	29,554,125,166
\$1,774,265,680	\$5,909,244,803	\$2,473,287,752	\$1,918,236,645	\$32,637	\$2,895,091,648	\$(871,362,813)	\$29,866,976,516
1,491,397	59,074	46,796	5,748,603	-	191,536		
(933)	(635,370)	(40,963)	(2,546,553)	(1,134)	(9,085,165)		
1,490,464	(576,296)	5,833	3,202,050	(1,134)	(8,893,629)		

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**COMBINED INVESTMENT FUNDS  
SCHEDULE OF INVESTMENT ACTIVITY BY PENSION PLAN  
FOR THE FISCAL YEAR ENDED JUNE 30, 2016**

	<b>LIQUIDITY FUND</b>	<b>ALTERNATIVE INVESTMENT FUND</b>	<b>MUTUAL EQUITY FUND</b>	<b>CORE FIXED INCOME FUND</b>	<b>INFLATION LINKED BOND FUND</b>	<b>EMERGING MARKET DEBT FUND</b>
<b>Teachers' Retirement Fund</b>						
Book Value at June 30, 2015	\$824,588,476	\$844,868,000	\$554,398,211	\$1,006,191,273	\$403,447,781	\$651,600,289
Market Value at June 30, 2015	\$817,243,850	\$963,753,681	\$3,809,624,346	\$1,165,687,413	\$477,369,486	\$793,001,042
Shares Purchased	1,414,854,545	33,000,000	-	-	95,000,000	-
Shares Redeemed	(1,598,000,000)	-	(150,000,000)	(55,000,000)	-	-
Returns of Capital	-	-	-	-	-	-
Gain/(Loss) on Shares Redeemed	(11,581,547)	-	127,900,088	8,228,126	-	-
Net Investment Income Earned	8,268,710	-	-	-	-	-
Net Investment Income Distributed	(8,268,710)	-	-	-	-	-
Changes in Market Value of Fund Shares	7,144,258	(55,437,508)	(65,716,597)	31,238,051	12,717,667	47,641,718
Market Value at June 30, 2016	\$629,661,106	\$941,316,173	\$3,721,807,837	\$1,150,153,590	\$585,087,153	\$840,642,760
Book Value at June 30, 2016	\$629,861,474	\$877,868,000	\$532,298,299	\$959,419,399	\$498,447,781	\$651,600,289
Shares Outstanding	644,476,427	839,118,956	2,399,243	8,880,149	3,774,653	5,264,498
Market Value per Share	\$0.98	\$1.12	\$1,551.24	\$129.52	\$155.00	\$159.68
<b>State Employees' Retirement Fund</b>						
Book Value at June 30, 2015	\$421,503,260	\$558,420,000	\$324,700,381	\$821,302,427	\$474,055,068	\$318,201,035
Market Value at June 30, 2015	\$414,492,232	\$633,168,692	\$2,497,203,053	\$938,163,640	\$526,207,497	\$417,573,743
Shares Purchased	78,093,309	30,000,000	-	-	65,000,000	-
Shares Redeemed	(144,620,338)	-	(110,000,000)	(80,000,000)	-	-
Returns of Capital	-	-	-	-	-	-
Gain/(Loss) on Shares Redeemed	(3,260,568)	-	95,698,277	11,001,734	-	-
Net Investment Income Earned	3,967,421	-	-	-	-	-
Net Investment Income Distributed	(3,967,421)	-	-	-	-	-
Changes in Market Value of Fund Shares	1,253,152	(36,808,197)	(53,890,628)	20,065,928	13,275,243	25,086,889
Market Value at June 30, 2016	\$345,957,787	\$626,360,495	\$2,429,010,702	\$889,231,302	\$604,482,740	\$442,660,632
Book Value at June 30, 2016	\$351,715,663	\$588,420,000	\$310,398,658	\$752,304,161	\$539,055,068	\$318,201,035
Shares Outstanding	354,097,851	558,357,521	1,565,849	6,865,610	3,899,782	2,772,148
Market Value per Share	\$0.98	\$1.12	\$1,551.24	\$129.52	\$155.00	\$159.68
<b>Municipal Employees' Retirement Fund</b>						
Book Value at June 30, 2015	\$65,639,139	\$155,934,446	\$57,682,268	\$156,756,277	\$94,022,908	\$160,070,241
Market Value at June 30, 2015	\$64,730,711	\$179,182,429	\$352,693,709	\$175,835,597	\$107,562,565	\$172,750,227
Shares Purchased	39,643,597	17,237,197	11,812,581	5,504,213	2,570,680	5,513,290
Shares Redeemed	(43,411,703)	(7,330,665)	(15,339,120)	(8,542,927)	(2,682,630)	(10,262,505)
Returns of Capital	-	-	-	-	-	-
Gain/(Loss) on Shares Redeemed	(658,734)	742,455	12,557,412	937,771	298,134	897,843
Net Investment Income Earned	650,571	-	-	-	-	-
Net Investment Income Distributed	(650,571)	-	-	-	-	-
Changes in Market Value of Fund Shares	422,824	(10,288,548)	(5,633,770)	4,999,423	2,169,938	9,603,880
Market Value at June 30, 2016	\$60,726,695	\$179,542,868	\$356,090,812	\$178,734,077	\$109,918,687	\$178,502,735
Book Value at June 30, 2016	\$61,212,299	\$166,583,433	\$66,713,141	\$154,655,334	\$94,209,092	\$156,218,869
Shares Outstanding	62,155,543	160,050,181	229,552	1,379,977	709,133	1,117,868
Market Value per Share	\$0.98	\$1.12	\$1,551.24	\$129.52	\$155.00	\$159.68

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**COMBINED INVESTMENT FUNDS  
SCHEDULE OF INVESTMENT ACTIVITY BY PENSION PLAN (Continued)  
FOR THE FISCAL YEAR ENDED JUNE 30, 2016**

<b>HIGH YIELD DEBT FUND</b>	<b>DEVELOPED MARKET INTERNATIONAL STOCK FUND</b>	<b>EMERGING MARKET INTERNATIONAL STOCK FUND</b>	<b>REAL ESTATE FUND</b>	<b>COMMERCIAL MORTGAGE FUND</b>	<b>PRIVATE INVESTMENT FUND</b>	<b>TOTAL</b>
\$715,399,049	\$1,716,508,490	\$835,417,118	\$1,007,240,158	\$39,643	\$1,593,689,024	\$10,153,387,512
\$848,636,229	\$3,345,856,734	\$1,392,332,538	\$1,046,239,437	\$17,758	\$1,566,014,000	\$16,225,776,514
20,000,000	-	70,000,000	40,000,000	-	-	1,672,854,545
-	(234,000,000)	-	-	(7,835)	(250,000,000)	(2,287,007,835)
-	-	-	-	-	-	-
-	108,979,658	-	-	(31,583)	(1,059,429)	232,435,313
-	-	-	-	-	-	8,268,710
-	-	-	-	-	-	(8,268,710)
(1,454,136)	(338,795,350)	(96,399,893)	100,552,818	21,700	98,992,949	(259,494,323)
\$867,182,093	\$2,882,041,042	\$1,365,932,645	\$1,186,792,255	\$40	\$1,413,947,520	\$15,584,564,214
\$735,399,049	\$1,591,488,148	\$905,417,118	\$1,047,240,158	\$225	\$1,342,629,595	\$9,771,669,535
6,292,400	6,696,921	3,980,139	23,447,219	3	20,257,595	1,564,588,204
\$137.81	\$430.35	\$343.19	\$50.62	\$14.99	\$69.80	
\$479,458,589	\$1,049,005,470	\$536,857,122	\$640,514,538	\$27,937	\$1,075,097,430	\$6,699,143,257
\$555,866,700	\$2,172,554,998	\$901,804,814	\$658,432,896	\$12,581	\$1,022,011,228	\$10,737,492,074
15,000,000	-	80,000,000	80,000,000	-	-	348,093,309
-	(80,000,000)	-	-	(5,550)	(30,000,000)	(444,625,888)
-	-	-	-	-	-	-
-	39,721,136	-	-	(22,223)	(2,141,347)	140,997,009
-	-	-	-	-	-	3,967,421
-	-	-	-	-	-	(3,967,421)
(954,529)	(191,381,896)	(60,893,442)	66,275,251	15,225	72,703,145	(145,253,859)
\$569,912,171	\$1,940,894,238	\$920,911,372	\$804,708,147	\$33	\$1,062,573,026	\$10,636,702,645
\$494,458,589	\$1,008,726,606	\$616,857,122	\$720,514,538	\$164	\$1,042,956,083	\$6,743,607,687
4,135,365	4,510,004	2,683,409	15,898,459	2	15,223,460	970,009,459
\$137.81	\$430.35	\$343.19	\$50.62	\$14.99	\$69.80	
\$277,559,731	\$141,022,497	\$99,865,402	\$151,621,547	\$4,303	\$238,723,234	\$1,598,901,993
\$306,678,275	\$301,355,591	\$144,990,988	\$166,279,048	\$1,953	\$247,250,539	\$2,219,311,632
13,973,978	19,768,172	31,205,400	2,120,700	-	6,989,856	156,339,664
(9,099,279)	(3,751,829)	(13,344,191)	(23,897,240)	(861)	(43,026,144)	(180,689,094)
-	-	-	-	-	-	-
732,183	1,812,461	2,538,696	2,722,357	(3,417)	2,071,020	24,648,181
-	-	-	-	-	-	650,571
-	-	-	-	-	-	(650,571)
(378,022)	(23,039,079)	(10,253,343)	11,434,292	2,331	13,372,889	(7,587,185)
\$311,907,135	\$296,145,316	\$155,137,550	\$158,659,157	\$6	\$226,658,160	\$2,212,023,198
\$283,166,613	\$158,851,301	\$120,265,307	\$132,567,364	\$25	\$204,757,966	\$1,599,200,744
2,263,243	688,145	452,049	3,134,597	0	3,247,326	235,427,615
\$137.81	\$430.35	\$343.19	\$50.62	\$14.99	\$69.80	

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**COMBINED INVESTMENT FUNDS  
SCHEDULE OF INVESTMENT ACTIVITY BY PENSION PLAN (Continued)  
FOR THE FISCAL YEAR ENDED JUNE 30, 2016**

	LIQUIDITY FUND	ALTERNATIVE INVESTMENT FUND	MUTUAL EQUITY FUND	CORE FIXED INCOME FUND	INFLATION LINKED BOND FUND	EMERGING MARKET DEBT FUND
<b>Probate Court Retirement Fund</b>						
Book Value at June 30, 2015	\$2,339,686	\$3,909,096	\$1,701,107	\$6,836,384	\$3,804,645	\$6,358,812
Market Value at June 30, 2015	\$2,323,811	\$4,555,018	\$14,346,092	\$8,045,754	\$4,374,545	\$7,026,050
Shares Purchased	4,687,997	406,970	290,873	244,388	51,760	139,521
Shares Redeemed	(4,792,000)	(282,042)	(802,823)	(598,771)	(171,879)	(511,160)
Returns of Capital	-	-	-	-	-	-
Gain/(Loss) on Shares Redeemed	(27,103)	32,279	699,761	90,588	19,040	50,264
Net Investment Income Earned	24,538	-	-	-	-	-
Net Investment Income Distributed	(24,538)	-	-	-	-	-
Changes in Market Value of Fund Shares	17,657	(272,336)	(444,727)	173,848	75,592	357,957
Market Value at June 30, 2016	\$2,210,362	\$4,439,889	\$14,089,176	\$7,955,807	\$4,349,058	\$7,062,632
Book Value at June 30, 2016	\$2,208,580	\$4,066,303	\$1,888,918	\$6,572,589	\$3,703,566	\$6,037,437
Shares Outstanding	2,262,370	3,957,857	9,083	61,425	28,058	44,230
Market Value per Share	\$0.98	\$1.12	\$1,551.24	\$129.52	\$155.00	\$159.68
<b>Judges' Retirement Fund</b>						
Book Value at June 30, 2015	\$5,511,437	\$13,418,971	\$5,575,185	\$13,405,657	\$8,052,615	\$13,628,728
Market Value at June 30, 2015	\$5,438,235	\$15,442,967	\$30,397,289	\$15,154,500	\$9,270,290	\$14,888,547
Shares Purchased	2,827,661	1,531,519	857,602	503,099	208,165	387,604
Shares Redeemed	(2,892,000)	(771,885)	(1,319,168)	(851,895)	(269,606)	(874,957)
Returns of Capital	-	-	-	-	-	-
Gain/(Loss) on Shares Redeemed	(45,602)	78,903	1,057,995	99,491	30,157	84,050
Net Investment Income Earned	54,670	-	-	-	-	-
Net Investment Income Distributed	(54,670)	-	-	-	-	-
Changes in Market Value of Fund Shares	23,584	(898,128)	(484,289)	409,049	179,314	809,900
Market Value at June 30, 2016	\$5,351,878	\$15,383,376	\$30,509,429	\$15,314,244	\$9,418,320	\$15,295,144
Book Value at June 30, 2016	\$5,401,496	\$14,257,508	\$6,171,614	\$13,156,352	\$8,021,331	\$13,225,425
Shares Outstanding	5,477,803	13,713,227	19,668	118,239	60,762	95,785
Market Value per Share	\$0.98	\$1.12	\$1,551.24	\$129.52	\$155.00	\$159.68
<b>State's Attorneys' Retirement Fund</b>						
Book Value at June 30, 2015	\$21,741	\$-	\$145,446	\$315,524	\$22,923	\$72,409
Market Value at June 30, 2015	\$21,587	\$-	\$445,282	\$352,212	\$29,986	\$90,280
Shares Purchased	25,808	-	9,148	17,826	851	2,334
Shares Redeemed	(25,762)	-	(11,535)	(22,680)	(767)	(4,398)
Returns of Capital	-	-	-	-	-	-
Gain/(Loss) on Shares Redeemed	(231)	-	7,622	2,396	158	863
Net Investment Income Earned	205	-	-	-	-	-
Net Investment Income Distributed	(205)	-	-	-	-	-
Changes in Market Value of Fund Shares	129	-	503	9,448	515	4,546
Market Value at June 30, 2016	\$21,531	\$-	\$451,020	\$359,202	\$30,743	\$93,625
Book Value at June 30, 2016	\$21,556	\$-	\$150,681	\$313,066	\$23,165	\$71,208
Shares Outstanding	22,034	-	291	2,773	198	586
Market Value per Share	\$0.98	\$-	\$1,551.24	\$129.52	\$155.00	\$159.68

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**COMBINED INVESTMENT FUNDS**

**SCHEDULE OF INVESTMENT ACTIVITY BY PENSION PLAN (Continued)  
FOR THE FISCAL YEAR ENDED JUNE 30, 2016**

<b>HIGH YIELD DEBT FUND</b>	<b>DEVELOPED MARKET INTERNATIONAL STOCK FUND</b>	<b>EMERGING MARKET INTERNATIONAL STOCK FUND</b>	<b>REAL ESTATE FUND</b>	<b>COMMERCIAL MORTGAGE FUND</b>	<b>PRIVATE INVESTMENT FUND</b>	<b>TOTAL</b>
\$12,008,827	\$5,429,173	\$3,817,973	\$6,378,242	\$259	\$9,275,878	\$61,860,082
\$13,364,829	\$13,132,839	\$5,896,193	\$6,764,122	\$114	\$10,059,354	\$89,888,721
263,988	625,289	1,102,664	81,562	-	275,788	8,170,800
(399,570)	(278,939)	(528,062)	(1,133,389)	(51)	(1,982,391)	(11,481,077)
-	-	-	-	-	-	-
34,705	154,997	122,345	94,567	(207)	180,429	1,451,665
-	-	-	-	-	-	24,538
-	-	-	-	-	-	(24,538)
(41,469)	(1,079,895)	(454,942)	470,731	144	434,834	(762,606)
\$13,222,483	\$12,554,291	\$6,138,198	\$6,277,593	\$-	\$8,968,014	\$87,267,503
\$11,907,950	\$5,930,520	\$4,514,920	\$5,420,982	\$1	\$7,749,704	\$60,001,470
95,944	29,172	17,886	124,025	0	128,485	6,758,534
\$137.81	\$430.35	\$343.19	\$50.62	\$14.99	\$69.80	
\$23,860,509	\$12,303,593	\$8,319,606	\$13,676,251	\$454	\$21,424,788	\$139,177,794
\$26,431,302	\$25,972,560	\$12,495,965	\$14,331,034	\$204	\$21,309,912	\$191,132,805
998,669	1,578,645	2,587,669	207,864	-	638,156	12,326,653
(720,969)	(339,542)	(1,111,957)	(2,159,882)	(91)	(3,852,030)	(15,163,982)
-	-	-	-	-	-	-
59,763	164,940	235,525	157,376	(360)	34,149	1,956,387
-	-	-	-	-	-	54,670
-	-	-	-	-	-	(54,670)
(44,237)	(2,002,461)	(913,791)	1,057,282	247	1,289,718	(573,812)
\$26,724,528	\$25,374,142	\$13,293,411	\$13,593,674	\$-	\$19,419,905	\$189,678,051
\$24,197,972	\$13,707,636	\$10,030,843	\$11,881,609	\$3	\$18,245,063	\$138,296,852
193,917	58,961	38,735	268,568	0	278,229	20,323,893
\$137.81	\$430.35	\$343.19	\$50.62	\$14.99	\$69.80	
\$132,536	\$283,865	\$99,458	\$-	\$-	\$-	\$1,093,902
\$152,608	\$329,915	\$101,082	\$-	\$-	\$-	\$1,522,952
4,514	19,986	19,972	-	-	-	100,439
(1,416)	(988)	(7,010)	-	-	-	(74,556)
-	-	-	-	-	-	-
165	103	(539)	-	-	-	10,537
-	-	-	-	-	-	205
-	-	-	-	-	-	(205)
(146)	(23,721)	(4,990)	-	-	-	(13,716)
\$155,725	\$325,295	\$108,515	\$-	\$-	\$-	\$1,545,656
\$135,799	\$302,966	\$111,881	\$-	\$-	\$-	\$1,130,322
1,130	756	316	-	-	-	28,085
\$137.81	\$430.35	\$343.19	\$-	\$-	\$-	

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**COMBINED INVESTMENT FUNDS  
SCHEDULE OF INVESTMENT ACTIVITY BY TRUST  
FOR THE FISCAL YEAR ENDED JUNE 30, 2016**

	LIQUIDITY FUND	ALTERNATIVE INVESTMENT FUND	MUTUAL EQUITY FUND	CORE FIXED INCOME FUND	INFLATION LINKED BOND FUND	EMERGING MARKET DEBT FUND
<b>Soldiers' Sailors' &amp; Marines' Fund</b>						
Book Value at June 30, 2015	\$2,455,560	\$-	\$3,618,620	\$41,361,133	\$-	\$-
Market Value at June 30, 2015	\$2,436,919	\$-	\$10,998,263	\$48,968,407	\$-	\$-
Shares Purchased	1,477,174	-	434,217	605,245	-	-
Shares Redeemed	(2,246,978)	-	(690,037)	(2,068,994)	-	-
Returns of Capital	-	-	-	-	-	-
Gain/(Loss) on Shares Redeemed	(22,175)	-	450,753	323,315	-	-
Net Investment Income Earned	19,170	-	-	-	-	-
Net Investment Income Distributed	(19,170)	-	-	-	-	-
Changes in Market Value of Fund Shares	12,144	-	(228,198)	1,322,709	-	-
Market Value at June 30, 2016	\$1,657,084	\$-	\$10,964,998	\$49,150,682	\$-	\$-
Book Value at June 30, 2016	\$1,663,581	\$-	\$3,813,553	\$40,220,699	\$-	\$-
Shares Outstanding	1,696,075	-	7,069	379,484	-	-
Market Value per Share	\$0.98	\$-	\$1,551.24	\$129.52	\$-	\$-
<b>Endowment for the Arts</b>						
Book Value at June 30, 2015	\$580,812	\$-	\$1,880,341	\$11,324,054	\$-	\$-
Market Value at June 30, 2015	\$576,193	\$-	\$2,876,829	\$12,809,891	\$-	\$-
Shares Purchased	377,838	-	90,537	231,899	-	-
Shares Redeemed	(389,688)	-	(167,315)	(673,890)	-	-
Returns of Capital	-	-	-	-	-	-
Gain/(Loss) on Shares Redeemed	(6,291)	-	56,679	79,339	-	-
Net Investment Income Earned	5,777	-	-	-	-	-
Net Investment Income Distributed	(5,777)	-	-	-	-	-
Changes in Market Value of Fund Shares	3,860	-	(2,433)	348,574	-	-
Market Value at June 30, 2016	\$561,912	\$-	\$2,854,297	\$12,795,813	\$-	\$-
Book Value at June 30, 2016	\$562,671	\$-	\$1,860,242	\$10,961,402	\$-	\$-
Shares Outstanding	575,134	-	1,840	98,794	-	-
Market Value per Share	\$0.98	\$-	\$1,551.24	\$129.52	\$-	\$-
<b>Agricultural College Fund</b>						
Book Value at June 30, 2015	\$28	\$-	\$-	\$601,740	\$-	\$-
Market Value at June 30, 2015	\$29	\$-	\$-	\$653,704	\$-	\$-
Shares Purchased	1,631	-	-	1,000	-	-
Shares Redeemed	(1,029)	-	-	(15,000)	-	-
Returns of Capital	-	-	-	-	-	-
Gain/(Loss) on Shares Redeemed	(5)	-	-	1,218	-	-
Net Investment Income Earned	7	-	-	-	-	-
Net Investment Income Distributed	(7)	-	-	-	-	-
Changes in Market Value of Fund Shares	1	-	-	21,064	-	-
Market Value at June 30, 2016	\$627	\$-	\$-	\$661,986	\$-	\$-
Book Value at June 30, 2016	\$625	\$-	\$-	\$588,958	\$-	\$-
Shares Outstanding	642	-	-	5,111	-	-
Market Value per Share	\$0.98	\$-	\$1,551.24	\$129.52	\$-	\$-

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**COMBINED INVESTMENT FUNDS  
SCHEDULE OF INVESTMENT ACTIVITY BY TRUST (Continued)  
FOR THE FISCAL YEAR ENDED JUNE 30, 2016**

<b>HIGH YIELD DEBT FUND</b>	<b>DEVELOPED MARKET INTERNATIONAL STOCK FUND</b>	<b>EMERGING MARKET INTERNATIONAL STOCK FUND</b>	<b>REAL ESTATE FUND</b>	<b>COMMERCIAL MORTGAGE FUND</b>	<b>PRIVATE INVESTMENT FUND</b>	<b>TOTAL</b>
\$-	\$5,891,883	\$2,805,623	\$-	\$-	\$-	\$56,132,819
\$-	\$7,874,247	\$2,752,699	\$-	\$-	\$-	\$73,030,535
-	574,150	616,205	-	-	-	3,706,991
-	(260,620)	(314,131)	-	-	-	(5,580,760)
-	-	-	-	-	-	-
-	54,837	(32,730)	-	-	-	774,000
-	-	-	-	-	-	19,170
-	-	-	-	-	-	(19,170)
-	(602,124)	(113,168)	-	-	-	391,363
\$-	\$7,640,490	\$2,908,875	\$-	\$-	\$-	\$72,322,129
\$-	\$6,260,250	\$3,074,967	\$-	\$-	\$-	\$55,033,050
-	17,754	8,476	-	-	-	2,108,858
\$-	\$430.35	\$343.19	\$-	\$-	\$-	
\$-	\$1,547,500	\$733,742	\$-	\$-	\$-	\$16,066,449
\$-	\$2,059,805	\$720,287	\$-	\$-	\$-	\$19,043,005
-	132,070	152,654	-	-	-	984,998
-	(57,616)	(76,013)	-	-	-	(1,364,522)
-	-	-	-	-	-	-
-	12,052	(8,085)	-	-	-	133,694
-	-	-	-	-	-	5,777
-	-	-	-	-	-	(5,777)
-	(157,220)	(31,374)	-	-	-	161,407
\$-	\$1,989,091	\$757,469	\$-	\$-	\$-	\$18,958,582
\$-	\$1,634,006	\$802,298	\$-	\$-	\$-	\$15,820,619
-	4,622	2,207	-	-	-	682,597
\$-	\$430.35	\$343.19	\$-	\$-	\$-	
\$-	\$-	\$-	\$-	\$-	\$-	\$601,768
\$-	\$-	\$-	\$-	\$-	\$-	\$653,733
-	-	-	-	-	-	2,631
-	-	-	-	-	-	(16,029)
-	-	-	-	-	-	-
-	-	-	-	-	-	1,213
-	-	-	-	-	-	7
-	-	-	-	-	-	(7)
-	-	-	-	-	-	21,065
\$-	\$-	\$-	\$-	\$-	\$-	\$662,613
\$-	\$-	\$-	\$-	\$-	\$-	\$589,583
-	-	-	-	-	-	5,753
\$-	\$-	\$-	\$-	\$-	\$-	

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**COMBINED INVESTMENT FUNDS  
SCHEDULE OF INVESTMENT ACTIVITY BY TRUST (Continued)  
FOR THE FISCAL YEAR ENDED JUNE 30, 2016**

	LIQUIDITY FUND	ALTERNATIVE INVESTMENT FUND	MUTUAL EQUITY FUND	CORE FIXED INCOME FUND	INFLATION LINKED BOND FUND	EMERGING MARKET DEBT FUND
<b>Ida Eaton Cotton Fund</b>						
Book Value at June 30, 2015	\$75,129	\$-	\$42,522	\$1,469,204	\$-	\$-
Market Value at June 30, 2015	\$74,345	\$-	\$371,189	\$1,652,844	\$-	\$-
Shares Purchased	49,674	-	16,761	30,972	-	-
Shares Redeemed	(51,148)	-	(26,998)	(86,970)	-	-
Returns of Capital	-	-	-	-	-	-
Gain/(Loss) on Shares Redeemed	(837)	-	23,325	9,830	-	-
Net Investment Income Earned	738	-	-	-	-	-
Net Investment Income Distributed	(738)	-	-	-	-	-
Changes in Market Value of Fund Shares	518	-	(15,750)	45,439	-	-
Market Value at June 30, 2016	\$72,552	\$-	\$368,527	\$1,652,115	\$-	\$-
Book Value at June 30, 2016	\$72,818	\$-	\$55,610	\$1,423,036	\$-	\$-
Shares Outstanding	74,258	-	238	12,756	-	-
Market Value per Share	\$0.98	\$-	\$1,551.24	\$129.52	\$-	\$-
<b>Andrew Clark Fund</b>						
Book Value at June 30, 2015	\$35,316	\$-	\$20,097	\$706,507	\$-	\$-
Market Value at June 30, 2015	\$34,970	\$-	\$174,579	\$777,372	\$-	\$-
Shares Purchased	23,362	-	7,882	14,460	-	-
Shares Redeemed	(24,057)	-	(12,698)	(40,798)	-	-
Returns of Capital	-	-	-	-	-	-
Gain/(Loss) on Shares Redeemed	(380)	-	10,963	3,800	-	-
Net Investment Income Earned	346	-	-	-	-	-
Net Investment Income Distributed	(346)	-	-	-	-	-
Changes in Market Value of Fund Shares	230	-	(7,399)	22,194	-	-
Market Value at June 30, 2016	\$34,125	\$-	\$173,327	\$777,028	\$-	\$-
Book Value at June 30, 2016	\$34,241	\$-	\$26,244	\$683,969	\$-	\$-
Shares Outstanding	34,925	-	112	5,999	-	-
Market Value per Share	\$0.98	\$-	\$1,551.24	\$129.52	\$-	\$-
<b>School Fund</b>						
Book Value at June 30, 2015	\$337,242	\$-	\$192,612	\$6,628,066	\$-	\$-
Market Value at June 30, 2015	\$335,391	\$-	\$1,675,771	\$7,459,418	\$-	\$-
Shares Purchased	281,685	-	90,061	-	-	-
Shares Redeemed	(288,130)	-	(137,891)	(259,675)	-	-
Returns of Capital	-	-	-	-	-	-
Gain/(Loss) on Shares Redeemed	(3,659)	-	117,273	29,701	-	-
Net Investment Income Earned	2,966	-	-	-	-	-
Net Investment Income Distributed	(2,966)	-	-	-	-	-
Changes in Market Value of Fund Shares	1,747	-	(82,539)	221,551	-	-
Market Value at June 30, 2016	\$327,034	\$-	\$1,662,675	\$7,450,995	\$-	\$-
Book Value at June 30, 2016	\$327,138	\$-	\$262,055	\$6,398,092	\$-	\$-
Shares Outstanding	334,733	-	1,072	57,528	-	-
Market Value per Share	\$0.98	\$-	\$1,551.24	\$129.52	\$-	\$-

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**COMBINED INVESTMENT FUNDS  
SCHEDULE OF INVESTMENT ACTIVITY BY TRUST (Continued)  
FOR THE FISCAL YEAR ENDED JUNE 30, 2016**

<b>HIGH YIELD DEBT FUND</b>	<b>DEVELOPED MARKET INTERNATIONAL STOCK FUND</b>	<b>EMERGING MARKET INTERNATIONAL STOCK FUND</b>	<b>REAL ESTATE FUND</b>	<b>COMMERCIAL MORTGAGE FUND</b>	<b>PRIVATE INVESTMENT FUND</b>	<b>TOTAL</b>
\$-	\$198,937	\$94,779	\$-	\$-	\$-	\$1,880,571
\$-	\$265,773	\$92,939	\$-	\$-	\$-	\$2,457,090
-	16,816	19,602	-	-	-	133,825
-	(7,513)	(9,819)	-	-	-	(182,448)
-	-	-	-	-	-	-
-	1,603	(1,038)	-	-	-	32,883
-	-	-	-	-	-	738
-	-	-	-	-	-	(738)
-	(19,858)	(3,886)	-	-	-	6,463
\$-	\$256,821	\$97,798	\$-	\$-	\$-	\$2,447,813
\$-	\$209,843	\$103,524	\$-	\$-	\$-	\$1,864,831
-	597	285	-	-	-	88,133
\$-	\$430.35	\$343.19	\$-	\$-	\$-	
\$-	\$93,562	\$44,602	\$-	\$-	\$-	\$900,084
\$-	\$125,000	\$43,713	\$-	\$-	\$-	\$1,155,634
-	7,909	9,220	-	-	-	62,833
-	(3,534)	(4,618)	-	-	-	(85,705)
-	-	-	-	-	-	-
-	754	(491)	-	-	-	14,646
-	-	-	-	-	-	346
-	-	-	-	-	-	(346)
-	(9,341)	(1,824)	-	-	-	3,860
\$-	\$120,788	\$46,000	\$-	\$-	\$-	\$1,151,268
\$-	\$98,691	\$48,713	\$-	\$-	\$-	\$891,858
-	281	134	-	-	-	41,451
\$-	\$430.35	\$343.19	\$-	\$-	\$-	
\$-	\$904,245	\$426,830	\$-	\$-	\$-	\$8,488,995
\$-	\$1,199,581	\$419,046	\$-	\$-	\$-	\$11,089,207
-	104,262	99,183	-	-	-	575,191
-	(62,865)	(55,556)	-	-	-	(804,117)
-	-	-	-	-	-	-
-	12,775	(5,646)	-	-	-	150,444
-	-	-	-	-	-	2,966
-	-	-	-	-	-	(2,966)
-	(95,462)	(16,298)	-	-	-	28,999
\$-	\$1,158,291	\$440,729	\$-	\$-	\$-	\$11,039,724
\$-	\$958,417	\$464,811	\$-	\$-	\$-	\$8,410,513
-	2,691	1,284	-	-	-	397,308
\$-	\$430.35	\$343.19	\$-	\$-	\$-	

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**COMBINED INVESTMENT FUNDS  
SCHEDULE OF INVESTMENT ACTIVITY BY TRUST (Continued)  
FOR THE FISCAL YEAR ENDED JUNE 30, 2016**

	LIQUIDITY FUND	ALTERNATIVE INVESTMENT FUND	MUTUAL EQUITY FUND	CORE FIXED INCOME FUND	INFLATION LINKED BOND FUND	EMERGING MARKET DEBT FUND
<b>Hopemead Fund</b>						
Book Value at June 30, 2015	\$107,331	\$-	\$101,243	\$2,138,684	\$-	\$-
Market Value at June 30, 2015	\$105,152	\$-	\$524,998	\$2,337,731	\$-	\$-
Shares Purchased	3,367	-	27,062	43,358	-	-
Shares Redeemed	(3,339)	-	(30,970)	(75,906)	-	-
Returns of Capital	-	-	-	-	-	-
Gain/(Loss) on Shares Redeemed	(97)	-	24,142	6,558	-	-
Net Investment Income Earned	1,069	-	-	-	-	-
Net Investment Income Distributed	(1,069)	-	-	-	-	-
Changes in Market Value of Fund Shares	(358)	-	(13,271)	73,047	-	-
Market Value at June 30, 2016	\$104,725	\$-	\$531,961	\$2,384,788	\$-	\$-
Book Value at June 30, 2016	\$107,262	\$-	\$121,477	\$2,112,694	\$-	\$-
Shares Outstanding	107,189	-	343	18,413	-	-
Market Value per Share	\$0.98	\$-	\$1,551.24	\$129.52	\$-	\$-
<b>Police &amp; Fireman's Survivors' Benefit Fund</b>						
Book Value at June 30, 2015	\$892,491	\$2,330,063	\$2,326,498	\$1,788,004	\$973,522	\$1,619,269
Market Value at June 30, 2015	\$877,645	\$2,567,415	\$4,772,432	\$1,959,637	\$1,096,161	\$1,925,365
Shares Purchased	182,712	279,604	174,746	80,509	37,652	72,740
Shares Redeemed	(225,894)	(103,313)	(158,920)	(88,727)	(24,473)	(100,856)
Returns of Capital	-	-	-	-	-	-
Gain/(Loss) on Shares Redeemed	(4,918)	6,181	79,374	7,910	2,196	17,075
Net Investment Income Earned	8,701	-	-	-	-	-
Net Investment Income Distributed	(8,701)	-	-	-	-	-
Changes in Market Value of Fund Shares	824	(143,181)	14,777	59,030	23,423	101,679
Market Value at June 30, 2016	\$830,369	\$2,606,706	\$4,882,409	\$2,018,359	\$1,134,959	\$2,016,003
Book Value at June 30, 2016	\$844,391	\$2,512,535	\$2,421,698	\$1,787,696	\$988,897	\$1,608,228
Shares Outstanding	849,908	2,323,700	3,147	15,583	7,322	12,625
Market Value per Share	\$0.98	\$1.12	\$1,551.24	\$129.52	\$155.00	\$159.68
<b>OPEB Fund</b>						
Book Value at June 30, 2015	\$13,511,865	\$21,329,369	\$37,031,984	\$55,623,754	\$4,963,397	\$7,664,749
Market Value at June 30, 2015	\$13,500,500	\$22,764,241	\$44,761,884	\$57,109,056	\$4,869,055	\$7,323,607
Shares Purchased	135,411,178	13,316,207	22,469,483	28,205,329	2,457,594	3,381,441
Shares Redeemed	(130,806,382)	-	(687,220)	-	-	-
Returns of Capital	-	-	-	-	-	-
Gain/(Loss) on Shares Redeemed	(120,666)	-	92,979	-	-	-
Net Investment Income Earned	83,968	-	-	-	-	-
Net Investment Income Distributed	(83,968)	-	-	-	-	-
Changes in Market Value of Fund Shares	29,801	(1,389,311)	2,070,520	2,909,993	225,635	801,905
Market Value at June 30, 2016	\$18,014,431	\$34,691,137	\$68,707,646	\$88,224,378	\$7,552,284	\$11,506,953
Book Value at June 30, 2016	\$17,995,995	\$34,645,576	\$58,907,226	\$83,829,083	\$7,420,991	\$11,046,190
Shares Outstanding	18,438,299	30,924,775	44,292	681,166	48,723	72,062
Market Value per Share	\$0.98	\$1.12	\$1,551.24	\$129.52	\$155.00	\$159.68

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**COMBINED INVESTMENT FUNDS  
SCHEDULE OF INVESTMENT ACTIVITY BY TRUST (Continued)  
FOR THE FISCAL YEAR ENDED JUNE 30, 2016**

<b>HIGH YIELD DEBT FUND</b>	<b>DEVELOPED MARKET INTERNATIONAL STOCK FUND</b>	<b>EMERGING MARKET INTERNATIONAL STOCK FUND</b>	<b>REAL ESTATE FUND</b>	<b>COMMERCIAL MORTGAGE FUND</b>	<b>PRIVATE INVESTMENT FUND</b>	<b>TOTAL</b>
\$-	\$283,183	\$133,999	\$-	\$-	\$-	\$2,764,440
\$-	\$375,901	\$131,450	\$-	\$-	\$-	\$3,475,232
-	31,831	30,667	-	-	-	136,285
-	(10,828)	(14,174)	-	-	-	(135,217)
-	-	-	-	-	-	-
-	2,215	(1,456)	-	-	-	31,362
-	-	-	-	-	-	1,069
-	-	-	-	-	-	(1,069)
-	(28,408)	(5,315)	-	-	-	25,695
\$-	\$370,711	\$141,172	\$-	\$-	\$-	\$3,533,357
\$-	\$306,401	\$149,036	\$-	\$-	\$-	\$2,796,870
-	861	411	-	-	-	127,217
\$-	\$430.35	\$343.19	\$-	\$-	\$-	
\$2,963,406	\$3,532,377	\$2,076,009	\$1,930,952	\$63	\$2,558,207	\$22,990,861
\$3,347,959	\$4,112,337	\$2,111,179	\$2,117,309	\$27	\$3,462,731	\$28,350,197
178,594	302,821	471,385	38,291	-	116,255	1,935,309
(80,893)	(27,396)	(182,876)	(289,969)	(12)	(579,278)	(1,862,607)
-	-	-	-	-	-	-
8,011	2,828	(13,367)	33,357	(50)	157,434	296,031
-	-	-	-	-	-	8,701
-	-	-	-	-	-	(8,701)
(3,406)	(295,652)	(97,706)	148,409	39	60,328	(131,436)
\$3,450,265	\$4,094,938	\$2,288,615	\$2,047,397	\$4	\$3,217,470	\$28,587,494
\$3,069,118	\$3,810,630	\$2,351,151	\$1,712,631	\$1	\$2,252,618	\$23,359,594
25,036	9,515	6,669	40,450	0	46,097	3,340,053
\$137.81	\$430.35	\$343.19	\$50.62	\$14.99	\$69.80	
\$19,043,847	\$30,608,424	\$9,728,672	\$20,208,781	\$-	\$19,918,391	\$239,633,233
\$19,787,778	\$34,029,522	\$9,394,859	\$24,072,799	\$-	\$24,983,884	\$262,597,185
10,254,993	19,434,266	6,849,544	8,645,760	-	8,532,280	258,958,075
-	-	(948,891)	(442,693)	-	(631,406)	(133,516,592)
-	-	-	-	-	-	-
-	-	(37,813)	65,137	-	121,631	121,268
-	-	-	-	-	-	83,968
-	-	-	-	-	-	(83,968)
551,599	(2,624,330)	10,466	2,669,679	-	2,019,621	7,275,578
\$30,594,370	\$50,839,458	\$15,268,165	\$35,010,682	\$-	\$35,026,010	\$395,435,514
\$29,298,840	\$50,042,690	\$15,591,512	\$28,476,985	\$-	\$27,940,896	\$365,195,984
221,997	118,134	44,489	691,699	-	501,817	51,787,454
\$137.81	\$430.35	\$343.19	\$50.62	\$-	\$69.80	

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**LIST OF INVESTMENT ADVISORS AND NET ASSETS UNDER MANAGEMENT  
JUNE 30, 2016**

<b>Name of Fund</b>	<b>Investment Strategy</b>	<b>Net Assets Under Management</b>	<b>Percent of Fund Total</b>
<b>LIQUIDITY (LF)</b>			
State Street Global Advisors	Active	\$ 785,823,455	39.69%
Payden & Rygel	Active	453,584,677	22.91%
PIMCO	Active	344,494,258	17.39%
Lazard	Active	95,837,974	4.84%
Colchester Global Investors Ltd.	Active	300,352,910	15.17%
<b>Other <sup>(1)</sup></b>		<b>336</b>	<b>0.00%</b>
<b>SUBTOTAL LF</b>		<b>\$ 1,980,093,610</b>	<b>100.00%</b>
<b>MUTUAL EQUITY FUND (MEF)</b>			
<b>Large Cap</b>		<b>\$ 5,511,292,749</b>	<b>82.98%</b>
T. Rowe Price Associates	Enhanced - Index	1,886,235,987	28.40%
State Street Global Advisors	Passive - Indexed	3,625,056,762	54.58%
<b>All Cap</b>		<b>534,712,267</b>	<b>8.05%</b>
Capital Prospects	Active	274,567,698	4.13%
FIS Group, Inc.	Active	260,144,569	3.92%
<b>Small/Mid Cap</b>		<b>575,455,111</b>	<b>8.66%</b>
Frontier Capital Mgmt Co	Active	316,496,990	4.76%
Bivium	Active	258,958,121	3.90%
<b>Other <sup>(1)</sup></b>		<b>20,644,689</b>	<b>0.31%</b>
<b>SUBTOTAL MEF</b>		<b>\$ 6,642,104,816</b>	<b>100.00%</b>
<b>CORE FIXED INCOME FUND (CFIF)</b>			
State Street Global Advisors	Passive	\$ 252,950,399	10.51%
BlackRock Financial Management, Inc.	Active	527,137,815	21.90%
Wellington	Active	532,430,711	22.12%
Conning-Goodwin Capital	Active	375,863,621	15.62%
Progress	Active	118,042,901	4.91%
Prudence Crandall Fund III Opportunistic	Active	266,969,392	11.09%
Prudence Crandall Fund IV Opportunistic	Active	267,446,429	11.11%
<b>Other <sup>(1)</sup></b>		<b>66,023,098</b>	<b>2.74%</b>
<b>SUBTOTAL CFIF</b>		<b>\$ 2,406,864,366</b>	<b>100.00%</b>
<b>INFLATION LINKED BOND FUND (ILBF)</b>			
BlackRock	Active	\$ 509,902,537	38.57%
Colchester	Active	606,730,111	45.90%
New Century	Active	187,605,748	14.19%
<b>Other <sup>(1)</sup></b>		<b>17,735,548</b>	<b>1.34%</b>
<b>SUBTOTAL ILBF</b>		<b>\$ 1,321,973,944</b>	<b>100.00%</b>
<b>EMERGING MARKET DEBT FUND (EMDF)</b>			
Ashmore	Active	\$ 591,405,097	39.49%
Stone Harbor Investment Partners	Active	533,272,541	35.60%
Pyramis	Active	359,918,454	24.03%
<b>Other <sup>(1)</sup></b>		<b>13,184,392</b>	<b>0.88%</b>
<b>SUBTOTAL EMDF</b>		<b>\$ 1,497,780,484</b>	<b>100.00%</b>
<b>HIGH YIELD DEBT FUND (HYDF)</b>			
Loomis Sayles & Co., Inc.	Active	\$ 594,433,937	32.61%
Stone Harbor Investment Partners	Active	301,054,486	16.51%
Shenkman Capital Management	Active	459,175,109	25.19%
Oaktree Capital Management, L.L.C.	Active	352,638,637	19.34%
Carlyle GMS Finance, Inc.	Active	41,110,143	2.25%
Carlyle NF Investment Corp.	Active	58,501,462	3.21%
<b>Other <sup>(1)</sup></b>		<b>16,234,996</b>	<b>0.89%</b>
<b>SUBTOTAL HYDF</b>		<b>\$ 1,823,148,770</b>	<b>100.00%</b>

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**LIST OF INVESTMENT ADVISORS AND NET ASSETS UNDER MANAGEMENT (Continued)  
JUNE 30, 2016**

<b>Name of Fund</b>	<b>Investment Strategy</b>	<b>Net Assets Under Management</b>	<b>Percent of Fund Total</b>
<b>DEVELOPED MARKET INTERNATIONAL STOCK FUND (DMISF)</b>			
<b>Index</b>		<b>\$ 1,903,986,941</b>	<b>36.45%</b>
State Street Global Advisors	Index-Passive	1,903,986,941	36.45%
<b>Core</b>		<b>1,360,679,992</b>	<b>26.05%</b>
AQR Capital Management	Active	641,039,663	12.27%
Acadian Asset Management	Active	599,703,005	11.48%
Progress	Active	119,937,324	2.30%
<b>Active-Growth</b>		<b>738,598,450</b>	<b>14.14%</b>
MFS Institutional Advisors, Inc.	Active	738,598,450	14.14%
<b>Active-Value</b>		<b>413,509,754</b>	<b>7.92%</b>
Grantham, Mayo, Van Otterloo	Active	413,509,754	7.92%
<b>Small Cap</b>		<b>795,123,338</b>	<b>15.22%</b>
Schroder Investment Mgmt.	Active	277,783,213	5.32%
DFA	Active	241,949,700	4.63%
William Blair & Company	Active	275,390,425	5.27%
<b>Other <sup>(1)</sup></b>		<b>11,906,437</b>	<b>0.22%</b>
<b>SUBTOTAL DMISF</b>		<b>\$ 5,223,804,912</b>	<b>100.00%</b>
<b>EMERGING MARKET INTERNATIONAL STOCK FUND (EMISF)</b>			
Aberdeen Asset Management	Active	\$ 802,447,807	32.31%
Schroders Investment Mgt	Active	1,000,771,414	40.30%
Grantham, Mayo, Van Otterloo	Active	644,962,506	25.97%
<b>Other <sup>(1)</sup></b>		<b>35,288,787</b>	<b>1.42%</b>
<b>SUBTOTAL EMISF</b>		<b>\$ 2,483,470,514</b>	<b>100.00%</b>
<b>REAL ESTATE FUND (REF)</b>			
AEW Partners III	Active	\$ 5,688,097	0.26%
American Realty Advisors	Active	41,258,707	1.87%
Apollo Real Estate	Active	183,759	0.01%
Blackstone Real Estate Partner Europe III LP	Active	34,432,319	1.56%
Blackstone Real Estate Spec Sit II LP	Active	2,519,325	0.11%
Blackstone Real Estate VI LP	Active	57,911,637	2.62%
Blackstone Real Estate Partners VIII LP	Active	41,465,523	1.88%
Canyon Johnson Urban Fund II	Active	3,509,387	0.16%
Canyon Johnson Urban Fund III	Active	1,283,372	0.06%
Capri Select Income II LLC	Active	67,002	0.00%
Clarion Lion Industrial Trust	Active	106,730,379	4.83%
Colony Realty Partners II LP	Active	12,468,300	0.56%
Cornerstone Patriot Fund LP	Active	282,808,340	12.81%
Covenant Apartment Fund V LP	Active	1,101,672	0.05%
Covenant Apartment Fund VI	Active	3,074,086	0.14%
Covenant Apartment Fund VIII	Active	12,550,698	0.57%
Crow Hldgs Realty Partners VII LP	Active	32,425,778	1.47%
Cypress Acquisition Prtnrs Retail FD LP	Active	35,907,926	1.63%
Gerding Edlen Green Cities II	Active	32,201,791	1.46%
Hart Realty Advisors	Active	205,840,263	9.33%
IL & FS India Realty Fund II LLC	Active	33,310,574	1.51%
JP Morgan Strategic Property	Active	82,699,608	3.75%
Landmark RE Partners VII LP	Active	19,423,169	0.88%
Lone Star Real Estate Part II LP	Active	16,263,015	0.74%
Macfarlane Urban Real Estate Fund II LP	Active	21,896,671	0.99%
New Boston IV	Active	530,040	0.02%
Prime Property Fund LLC	Active	294,155,843	13.33%
PRISA	Active	112,034,324	5.08%
Rockwood Capital Fund V	Active	785,376	0.04%
Rockwood Capital VI Limited Partnership	Active	6,076,637	0.27%
Rockwood Capital VII Limited Partnership	Active	25,118,373	1.14%
Starwood Opportunity Fund VII	Active	19,602,882	0.89%
Starwood Opportunity Fund VIII	Active	19,340,753	0.88%
Starwood Opportunity Fund IX	Active	43,852,326	1.99%
Starwood Opportunity Fund X	Active	58,660,456	2.66%

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**LIST OF INVESTMENT ADVISORS AND NET ASSETS UNDER MANAGEMENT (Continued)  
JUNE 30, 2016**

<b>Name of Fund</b>	<b>Investment Strategy</b>	<b>Net Assets Under Management</b>	<b>Percent of Fund Total</b>
UBS-Trumbull Property Income	Active	58,103,715	2.63%
UBS-Trumbull Property G&I (TPG)	Active	63,515,469	2.88%
UBS-Trumbull Property Fund LP	Active	85,466,287	3.87%
Urban Strategy America Fund LP	Active	33,534,000	1.52%
USAA Eagle RE Fund	Active	129,558,392	5.87%
Walton Street Real Estate	Active	1,202,101	0.05%
WLR IV PPIP Co Invest LP	Active	26,574,155	1.20%
<b>Other <sup>(2)</sup></b>	<b>Active</b>	<b>141,956,378</b>	<b>6.43%</b>
<b>SUBTOTAL REF</b>		<b>\$ 2,207,088,905</b>	<b>100.00%</b>
<b>COMMERCIAL MORTGAGE FUND (CMF)</b>			
<b>Other <sup>(2)</sup></b>		<b>\$ 83</b>	<b>100.00%</b>
<b>SUBTOTAL CMF</b>		<b>\$ 83</b>	<b>100.00%</b>
<b>PRIVATE INVESTMENT FUND (PIF)</b>			
<b>Buyout</b>		<b>\$ 1,049,014,407</b>	<b>37.87%</b>
AIG Altaris Health Partners II	Active	14,818,242	0.53%
AIG Altaris Health Partners III	Active	19,878,810	0.72%
AIG Healthcare Partners LP	Active	594,323	0.02%
Boston Ventures VII	Active	49,389,843	1.78%
Candover 2008 Fund	Active	391,125	0.01%
Charterhouse Equity Partners IV	Active	4,302,030	0.16%
Court Square Capital Partners II	Active	48,368,974	1.75%
Court Square Capital Partners III LP	Active	15,552,855	0.56%
Ethos Private Equity Fund V	Active	14,008,111	0.51%
FS Equity Partners V	Active	6,950,867	0.25%
FS Equity Partners VI	Active	74,603,360	2.69%
GENNX360 Capital Partners II	Active	17,013,854	0.61%
Hicks, Muse Tate & Furst Equity Fund III	Active	10,539,969	0.38%
ICV Partners II LP	Active	14,379,521	0.52%
JFL Equity Investors III, LP	Active	42,684,211	1.54%
KKR 2006 Fund	Active	79,697,136	2.88%
KKR Millennium Fund	Active	13,105,933	0.47%
Leeds Equity Partners V LP	Active	26,272,113	0.95%
Nogales Investors Fund II	Active	3,755,606	0.14%
RFE Investment Partners VII	Active	42,243,620	1.53%
RFE Investments Partners VIII	Active	34,547,232	1.25%
TA XI, L.P.	Active	70,584,747	2.55%
Thomas H. Lee Equity Fund VI	Active	76,011,598	2.74%
Vista Equity Partners Fund III	Active	23,249,553	0.84%
Vista Equity Partners Fund IV	Active	95,173,922	3.44%
Wellspring Capital Partners V	Active	82,279,022	2.97%
Welsh Carson Anderson & Stowe X LP	Active	23,034,817	0.83%
Welsh Carson Anderson & Stowe XI	Active	64,816,748	2.34%
Yucaipa American Alliance Fund II LP	Active	78,421,991	2.83%
Yucaipa III	Active	2,344,274	0.08%
<b>Venture Capital</b>		<b>9,149,787</b>	<b>0.33%</b>
Crescendo III	Active	1,156,486	0.04%
Syndicated Communications	Active	7,993,301	0.29%
<b>Mezzanine</b>		<b>62,444,788</b>	<b>2.26%</b>
Audax Mezzanine III Limited Partnership	Active	42,076,592	1.52%
GarMark Partners II LP	Active	19,374,244	0.70%
SW Pelham Fund	Active	993,952	0.04%
<b>International</b>		<b>45,256,245</b>	<b>1.63%</b>
Carlyle Asia Partners	Active	347,901	0.01%
Compass Partners European Equity Fund	Active	469,368	0.02%
Gilbert Global Equity Partners	Active	42,514,773	1.53%
Pinebridge Global Emerging Markets Fund	Active	1,924,203	0.07%
<b>Fund of Funds</b>		<b>1,032,795,331</b>	<b>37.29%</b>
Connecticut Horizon Legacy	Active	6,575,732	0.24%

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**LIST OF INVESTMENT ADVISORS AND NET ASSETS UNDER MANAGEMENT (Continued)  
JUNE 30, 2016**

<b>Name of Fund</b>	<b>Investment Strategy</b>	<b>Net Assets Under Management</b>	<b>Percent of Fund Total</b>
CT Growth Capital	Active	9,774,704	0.35%
CS/CT Cleantech Opp Fund	Active	10,683,042	0.39%
CT Emerging Pvt Equity	Active	77,135,060	2.78%
Fairview Constitution II LP	Active	113,869,327	4.11%
Fairview Constitution III	Active	349,539,238	12.62%
Fairview Constitution IV LP	Active	115,818,599	4.18%
JP Morgan Nutmeg I	Active	73,291,162	2.65%
Landmark Equity Partners XIV LP	Active	45,598,223	1.65%
Landmark Equity Partners XV LP	Active	26,616,558	0.96%
Landmark Private Equity Fund VIII	Active	6,811,039	0.25%
Lexington Capital Partners II	Active	412,781	0.01%
Stepstone Pioneer Capital I LP	Active	20,420,048	0.74%
Stepstone Pioneer Capital II LP	Active	138,493,487	5.00%
The Constitution Liquidating Fund	Active	37,756,331	1.36%
<b>Special Situations</b>		<b>395,921,506</b>	<b>14.29%</b>
Apollo Investment Fund VIII LP	Active	57,827,335	2.09%
Castlelake II LP	Active	59,842,113	2.16%
Clearlake Capital Partners III LP	Active	46,082,841	1.67%
Clearlake IV	Active	17,392,913	0.63%
KPS Special Situations Fund II	Active	10,025	0.00%
Levine Leichtman Capital Partners	Active	57,733,688	2.08%
Levine Leichtman Capital Partners IV LP	Active	37,876,689	1.37%
Pegasus Partners IV	Active	44,679,703	1.61%
Pegasus Partners V	Active	54,686,363	1.97%
Welsh Carson Anderson & Stowe Capital Partners III	Active	70,941	0.00%
WLR Recovery Fund IV	Active	19,718,895	0.71%
<b>Other <sup>(2)</sup></b>		<b>175,228,041</b>	<b>6.33%</b>
<b>SUBTOTAL PIF</b>		<b>\$ 2,769,810,105</b>	<b>100.00%</b>
<b>ALTERNATIVE INVESTMENT FUND (AIF)</b>			
Arclight Energy Partners Fund V	Active	\$ 32,334,181	1.79%
Arclight VI	Active	28,715,195	1.59%
EIG Energy Fund XV Limited Partnership	Active	41,133,382	2.28%
Marathon European Credit Opportunity	Active	15,024,290	0.83%
Prudence Crandall I Permal Limited Partnership	Active	557,826,324	30.92%
Prudence Crandall II Prisma Limited Partnership	Active	298,161,764	16.52%
Prudence Crandall III Rock Creek Limited Partnership	Active	276,654,010	15.33%
Prudence Crandall IV K2 Limited Partnership	Active	280,371,436	15.54%
Thomas Welles Fund I	Active	82,373,979	4.57%
Thomas Welles Fund II	Active	83,998,157	4.66%
<b>Other <sup>(2)</sup></b>		<b>107,747,926</b>	<b>5.97%</b>
<b>SUBTOTAL AIF</b>		<b>\$ 1,804,340,644</b>	<b>100.00%</b>
<b>TOTAL</b>		<b>\$ 30,160,481,153</b>	
<b>Adjustments <sup>(3)</sup></b>		<b>(914,561,392)</b>	
<b>GRAND TOTAL</b>		<b>\$ 29,245,919,761</b>	

- (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 the Financial Statements to account for investment of Combined Investment Funds in the Liquidity Fund.

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**  
**SCHEDULE OF CONSULTING SERVICES IN EXCESS OF \$5,000<sup>(1)</sup> FOR PERIODS ENDED JUNE 30**

Name of Firm	Description of Services	Aggregate Compensation Paid in Fiscal Year:				
		2016	2015	2014	2013	2012
<b>CONSULTING SERVICES</b>						
CRA RogersCasey Consulting Inc.	Pension Funds Consultant	-	-	-	-	123,539
Callan Associates, Inc.	Pension Funds Consultant	-	-	85,000	60,000	-
Cliffwater Associates, LLC	Alternative Inv. Consultant	490,413	529,587	485,000	-	-
Franklin Park Associates LLC	Private Equity Consultant	790,574	1,059,856	1,051,606	1,019,075	989,873
Hewitt EnnisKnupp Inc.	Private Equity Consultant	361,494	479,492	472,000	472,000	298,945
Hudepohl & Associates, Inc.	Pension Funds Consultant	129,807	22,000	102,226	76,709	-
Mercer Investment Consulting	Pension Funds Consultant	30,000	-	-	-	127,625
New England Pension Consultants	Pension Funds Consultant	-	-	86,941	503,956	443,805
Stepstone Group, LP	Private Equity Consultant	447,690	-	-	-	-
The Townsend Group	Pension Funds Consultant	187,500	250,000	250,000	250,000	250,000
<b>TOTAL CONSULTING SERVICES COMPENSATION</b>		<b>\$2,437,478</b>	<b>\$2,340,935</b>	<b>\$2,532,773</b>	<b>\$2,381,740</b>	<b>\$2,233,787</b>

(1) Expenses are presented on a cash basis.

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**TOP TEN HOLDINGS BY FUND AT JUNE 30, 2016\***

**LIQUIDITY FUND**

<b>Security Name</b>	<b>Maturity Date</b>	<b>Market Value</b>	<b>%</b>
HSBC AGCY REPO	7/1/2016	\$50,000,000	2.53%
LLOYDS BK PLC DISC	7/1/2016	29,999,750	1.52%
BANK OF AMERICA NA	8/30/2016	29,999,070	1.52%
KFW DISC	7/15/2016	29,953,250	1.52%
ERSTE ABWICKLUN DISC	8/3/2016	29,934,458	1.52%
U S TREASURY NOTE	2/15/2018	27,723,315	1.40%
NEW ZEALAND GOVERNMENT BO REGS	3/15/2019	25,537,429	1.29%
CITIBANK N A NY BRH INSTL C/D	7/11/2016	25,000,000	1.26%
NRW BANK DISC	7/20/2016	24,994,653	1.26%
PSP CAPITAL INC DISC	7/6/2016	24,964,222	1.26%
<b>Top Ten</b>		<b>\$298,106,147</b>	<b>15.08%</b>

**Fair Value LF**

**\$1,977,256,572**

**ALTERNATIVE INVESTMENT FUND**

<b>Security Name</b>	<b>Partnership Type</b>	<b>Market Value</b>	<b>%</b>
PRUDENCE CRANDALL I PERMAL	Hedge Fund-of-Funds	\$557,826,324	30.92%
PRUDENCE CRANDALL II PRISMA	Hedge Fund-of-Funds	298,161,764	16.52%
PRUDENCE CRANDALL IV K2	Hedge Fund-of-Funds	280,371,436	15.54%
PRUDENCE CRANDALL III RCREEK	Hedge Fund-of-Funds	276,654,010	15.33%
THOMAS WELLES FUND II	Hedge Fund-of-Funds	83,998,157	4.66%
THOMAS WELLES FUND I	Hedge Fund-of-Funds	82,373,979	4.57%
EIG ENERGY FUND XV LP	Real Assets	41,133,382	2.28%
ARCLIGHT ENERGY PARTNERS V	Real Assets	32,334,181	1.79%
ARCLIGHT ENERGY PARTNERS VI	Real Assets	28,715,195	1.59%
MARATHON EUROPEAN CREDIT OPP FUND SPC B	Opportunistic	15,024,290	0.83%
<b>Top Ten</b>		<b>\$1,696,592,718</b>	<b>94.03%</b>

**FAIR VALUE AIF**

**\$1,804,337,067**

**MUTUAL EQUITY FUND**

<b>Security Name</b>	<b>Industry Sector</b>	<b>Market Value</b>	<b>%</b>
APPLE INC	INFORMATION TECHNOLOGY	\$153,405,018	2.31%
MICROSOFT CORP	INFORMATION TECHNOLOGY	129,874,884	1.95%
EXXON MOBIL CORP	ENERGY	122,591,766	1.84%
JOHNSON & JOHNSON	HEALTH CARE	96,737,235	1.46%
AMAZON.COM INC	CONSUMER DISCR	95,057,236	1.43%
FACEBOOK INC	INFORMATION TECHNOLOGY	83,849,064	1.26%
GENERAL ELECTRIC CO	PRODUCER DURABLES	76,863,205	1.16%
PROCTER & GAMBLE CO	CONSUMER STAPLES	73,451,394	1.10%
JPMORGAN CHASE & CO	FINANCIALS	71,857,391	1.08%
AT&T INC	UTILITIES	69,093,913	1.04%
<b>Top Ten</b>		<b>\$972,781,106</b>	<b>14.63%</b>

**FAIR VALUE MEF**

**\$6,647,482,185**

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**TOP TEN HOLDINGS BY FUND AT JUNE 30, 2016\* (Continued)**

**CORE FIXED INCOME FUND**

Security Name	Coupon	Maturity	Security Type	Market Value	%
U S TREASURY NOTE	0.875	5/31/2018	U.S. Govt/Agency	\$25,623,384	1.03%
U S TREASURY NOTE	1.125	6/30/2021	U.S. Govt/Agency	24,703,927	0.99%
U S TREASURY NOTE	0.625	6/30/2018	U.S. Govt/Agency	24,166,353	0.97%
U S TREASURY NOTE	1.375	4/30/2021	U.S. Govt/Agency	18,839,840	0.76%
FNMA TBA	3.500	7/1/2046	U.S. Govt/Agency	16,349,704	0.66%
U S TREASURY NOTE	0.750	4/30/2018	U.S. Govt/Agency	15,645,084	0.63%
US TREAS-CPI INFLAT	0.125	7/15/2024	U.S. Govt/Agency	14,811,390	0.59%
US TREAS-CPI INFLAT	0.250	1/15/2025	U.S. Govt/Agency	14,324,591	0.57%
U S TREASURY NOTE	1.625	4/30/2023	U.S. Govt/Agency	13,401,997	0.54%
U S TREASURY BOND	4.500	2/15/2036	U.S. Govt/Agency	12,784,902	0.51%
<b>Top Ten</b>				<b>\$180,651,172</b>	<b>7.25%</b>

**FAIR VALUE CFIF**

**\$2,490,655,941**

**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	\$68,821,784	5.21%
US TREAS-CPI INFLAT	0.125%	4/15/2019	U.S. Govt/Agency	62,894,161	4.76%
US TREAS-CPI INFLAT	2.375%	1/15/2027	U.S. Govt/Agency	53,148,530	4.02%
US TREAS-CPI INFLAT	0.750%	2/15/2042	U.S. Govt/Agency	52,343,973	3.96%
US TREAS-CPI INFLAT	0.125%	7/15/2022	U.S. Govt/Agency	51,302,602	3.88%
FRANCE GOVERNMENT BOND	1.800%	7/25/2040	France Govt/Agency	47,699,063	3.61%
NEW ZEALAND GOVERNMENT BOND	3.000%	9/20/2030	New Zealand Govt/Agency	44,123,570	3.34%
UNITED KINGDOM GILT INFLA REGS	0.125%	3/22/2044	U.K. Govt/Agency	42,167,944	3.19%
NEW ZEALAND GOVERNMENT BOND	2.000%	9/20/2025	New Zealand Govt/Agency	32,939,440	2.49%
ITALY GOVERNMENT BOND	2.600%	9/15/2023	Italy Govt/Agency	32,506,990	2.46%
<b>Top Ten</b>				<b>\$487,948,057</b>	<b>36.92%</b>

**FAIR VALUE ILBF**

**\$1,321,779,931**

**EMERGING MARKET DEBT FUND**

Security Name	Coupon	Maturity	Market Value	%
SOUTH AFRICA GOVERNMENT BOND	10.500	12/21/2026	\$19,150,244	1.29%
POLAND GOVERNMENT BOND	3.250	7/25/2025	13,929,700	0.94%
COLOMBIA GOVERNMENT BOND	7.750	4/14/2021	10,713,985	0.72%
MEXICAN BONDS	5.000	12/11/2019	10,618,080	0.71%
BRAZIL NOTAS DO TESOURO	10.000	1/1/2025	10,346,074	0.70%
TURKEY GOVERNMENT BOND	10.500	1/15/2020	9,871,971	0.66%
INDONESIA TREASURY BOND	8.375	3/15/2024	9,583,452	0.65%
INDONESIA TREASURY BOND	9.000	3/15/2029	9,432,616	0.64%
COLOMBIA GOVERNMENT BOND	4.375	3/21/2023	9,369,666	0.63%
MEXICAN BONDS	10.000	12/5/2024	9,291,860	0.63%
<b>Top Ten</b>			<b>\$112,307,648</b>	<b>7.57%</b>

**FAIR VALUE EMDF**

**\$1,483,772,612**

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**TOP TEN HOLDINGS BY FUND AT JUNE 30, 2016\* (Continued)**

**HIGH YIELD DEBT FUND**

<b>Security Name</b>	<b>Coupon</b>	<b>Maturity</b>	<b>Market Value</b>	<b>%</b>
DISH DBS CORP	7.750	07/01/2026	\$10,207,300	0.56%
INDONESIA GOVERNMENT BOND	5.875	01/15/2024	9,945,642	0.55%
CCO HOLDINGS LLC	5.750	01/15/2024	9,503,172	0.53%
SPRINT CAPITAL CORP	6.875	11/15/2028	8,336,700	0.46%
MORGAN STANLEY	4.750	11/16/2018	7,711,934	0.43%
TRIBUNE MEDIA CO 144A	5.875	07/15/2022	7,691,350	0.42%
TENET HEALTHCARE CORP	6.875	11/15/2031	6,981,319	0.39%
HD SUPPLY INC 144A	5.750	04/15/2024	6,479,200	0.36%
GRIFFON CORP	5.250	03/01/2022	6,358,513	0.35%
FIRST DATA CORP 144A	7.000	12/01/2023	6,312,938	0.35%
<b>Top Ten</b>			<b>\$79,528,068</b>	<b>4.40%</b>

**FAIR VALUE HYDF**

**\$ 1,808,188,496**

**DEVELOPED MARKET INTERNATIONAL STOCK FUND**

<b>Security Name</b>	<b>Country</b>	<b>Market Value</b>	<b>%</b>
NESTLE SA REG	SWITZERLAND	\$98,536,523	1.90%
ROCHE HOLDING AG GENUSSSCHEIN	SWITZERLAND	73,338,922	1.41%
NOVARTIS AG REG	SWITZERLAND	53,691,203	1.04%
BAYER AG REG	GERMANY	41,625,163	0.80%
HSBC HOLDINGS PLC	UNITED KINGDOM	40,380,281	0.78%
WPP PLC	UNITED KINGDOM	38,925,922	0.75%
RECKITT BENCKISER GROUP PLC	UNITED KINGDOM	36,402,726	0.70%
TOTAL SA	FRANCE	34,506,292	0.67%
BP PLC	UNITED KINGDOM	34,328,306	0.66%
ASTRAZENECA ORD USD 0.25	UNITED KINGDOM	33,425,749	0.64%
<b>Top Ten</b>		<b>\$485,161,087</b>	<b>9.35%</b>

**FAIR VALUE DMISF**

**\$5,187,629,818**

**EMERGING MARKET INTERNATIONAL STOCK FUND**

<b>Security Name</b>	<b>Country</b>	<b>Market Value</b>	<b>%</b>
TAIWAN SEMICONDUCTOR MANUFACTURE	TAIWAN	\$111,386,220	4.52%
CHINA MOBILE LTD	HONG KONG	86,457,698	3.50%
SAMSUNG ELECTRONICS CO LTD	REPUBLIC OF KOREA	81,877,691	3.32%
TENCENT HLDGS LTD	CHINA	67,317,031	2.73%
CHINA CONSTRUCTION BANK CORP	CHINA	57,841,227	2.35%
AIA GROUP LTD	HONG KONG	55,713,561	2.26%
HDFC BANK LTD	INDIA	46,948,464	1.90%
SAMSUNG ELECTRONIC CO LTD PREFERRED SECURITY	REPUBLIC OF KOREA	37,014,912	1.50%
ASTRA INTERNATIONAL TBK PT	INDONESIA	35,387,195	1.43%
ALIBABA GROUP HOLDING LTD	CAYMAN ISLANDS	34,819,109	1.41%
<b>Top Ten</b>		<b>\$614,763,108</b>	<b>24.92%</b>

**FAIR VALUE EMISF**

**\$2,467,083,187**

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**TOP TEN HOLDINGS BY FUND AT JUNE 30, 2016\* (Continued)**

**REAL ESTATE FUND**

<b>Partnership Name</b>	<b>Partnership Type</b>	<b>Market Value</b>	<b>%</b>
PRIME PROPERTY FUND LLC	Core	\$294,155,843	13.33%
CORNERSTONE PATRIOT FUND LP	Core	282,808,340	12.81%
HART REALTY ADVISORS	Core	205,840,263	9.32%
USAA EAGLE RE FUND	Core	129,558,392	5.87%
PRISA	Core	112,034,324	5.07%
CLARION LION INDUSTRIAL TRUST	Value Added	106,730,379	4.84%
UBS-TRUMBULL PROPERTY FUND LP	Core	85,466,287	3.87%
JP MORGAN STRATEGIC PROPERTY	Core	82,699,608	3.75%
UBS-TRUMBULL PROPERTY G&I (TPG)	Core	63,515,469	2.88%
Starwood Opportunity Fund X	Opportunistic	58,660,456	2.66%
<b>Top Ten</b>		<b>\$1,421,469,361</b>	<b>64.40%</b>

**FAIR VALUE REF**

**\$2,207,396,472**

**PRIVATE INVESTMENT FUND**

<b>Partnership Name</b>	<b>Partnership Type</b>	<b>Market Value</b>	<b>%</b>
Fairview Constitution III	Fund of Funds	\$349,539,238	12.62%
Stepstone Pioneer Capital II LP	Fund of Funds	138,493,487	5.00%
Fairview Constitution IV LP	Fund of Funds	115,818,599	4.18%
Fairview Constitution II LP	Fund of Funds	113,869,327	4.11%
Vista Equity Partners Fund IV	Buyout	95,173,922	3.44%
Wellspring Capital Partners V	Buyout	82,279,022	2.97%
KKR 2006 Fund	Buyout	79,697,136	2.88%
Yucaipa American Alliance Fund II LP	Buyout	78,421,991	2.83%
CT Emerging Pvt Equity	Fund of Funds	77,135,060	2.79%
Thomas H. Lee Equity Fund VI	Buyout	76,011,598	2.74%
<b>Top Ten</b>		<b>\$1,206,439,380</b>	<b>43.56%</b>

**FAIR VALUE PIF**

**\$2,769,435,919**

\* 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..

## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

### 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 (R<sup>2</sup>)** - A measurement of how closely the returns of an investment portfolio and its benchmark match. An R<sup>2</sup> 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.
- 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.

## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

### GLOSSARY OF INVESTMENT TERMS (Continued)

- 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.
- 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.

## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

### GLOSSARY OF INVESTMENT TERMS (Continued)

- 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.
- 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.

## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

### GLOSSARY OF INVESTMENT TERMS (Continued)

- 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 Averages™ 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, 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.
- 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.

## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

### GLOSSARY OF INVESTMENT TERMS (Continued)

**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 represent 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.

**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.

## CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS

### GLOSSARY OF INVESTMENT TERMS (Continued)

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**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-, five- and 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: market risk, the risk of fluctuations in the overall market for securities; company risk, the risk of investing in any single company's stock or bonds; 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; 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: reinvestment risk, the risk that cash flows received from a security will be reinvested at lower rates due to declining interest rates; credit or default risk, the risk that the issuer of a fixed income security may fail to make principal and interest payments on the security; interest rate risk, the risk that the market value of fixed coupon bonds will decline in the event of rising market interest rates; and inflation or purchasing power risk, 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.

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 management, product, market, and operations risk, similar to equity investing, but also assumes liquidity risk, the risk

## UNDERSTANDING INVESTMENT PERFORMANCE

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 standard deviation. 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 relative volatility, 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 beta, (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 coefficient of determination, 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 alpha. 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.

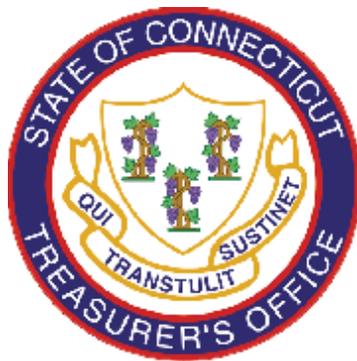
Compounded Annual Total Return - This return measure evaluates performance over the short and long-term. Compounded annual total return measures the implicit annual percentage change in value of an investment, assuming reinvestment of dividends, interest, and realized and unrealized capital gains, including 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.

**Statistical**  

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**Section**



**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**  
**STATISTICAL SECTION**

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This part of the Combined Investment Fund's (CIF's) comprehensive annual financial report presents detailed information as a context for understanding what the information in the financial schedules and other supplementary information say about the overall financial health of CIF. The schedules within this statistical section comply with the requirements of GASB 44.

**Financial Trends**

These schedules contain the ten-year trend information on the financial performance of CIF.

<u>Schedule</u>	<u>Page</u>
o Per share data	146
o Schedule of rates of return	146
o Schedule of financial ratios	146
o Schedule of balances in Combined Investment Funds	148

**Revenue Capacity**

Revenue capacity is not applicable to CIF.

**Borrowing Capacity**

Borrowing capacity is not applicable to CIF.

**Demographic and Economic Information**

These schedules show the breakdown between CIF funds, growth of the fund and rate of return information.

<u>Schedule</u>	<u>Page</u>
o Investment summary	149 - 151
o Annual money-weighted rates of return	152

**Operating Information**

The summary of operations schedule outlines the expenses, additions and deductions associated with the management of CIF.

<u>Schedule</u>	<u>Page</u>
o Schedule of Net Position	153

*Sources: Unless otherwise noted, the information in these schedules is derived from the comprehensive annual financial reports for the relevant year. CIF implemented Statement 34 in fiscal year 2005.*

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**SUPPLEMENTAL SCHEDULE OF FINANCIAL HIGHLIGHTS**

FISCAL YEAR ENDED JUNE 30, PER SHARE DATA	LIQUIDITY FUND					ALTERNATIVE INVESTMENT FUND				
	2016	2015	2014	2013	2012	2016	2015	2014	2013	2012
Net Position- Beginning of Period	\$0.98	\$1.00	\$1.00	\$1.00	\$1.01	\$1.19	\$1.13	\$1.06	\$1.00	\$1.01
<b>INCOME FROM INVESTMENT OPERATIONS</b>										
Net Investment Income (Loss)	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$-	\$-	\$-	\$-	\$-
Net Gains or (Losses) on Securities (Both Realized and Unrealized)	\$-	\$(0.02)	\$-	\$-	\$(0.01)	\$(0.07)	\$0.06	\$0.07	\$0.06	\$(0.01)
Total from Investment Operations	\$0.01	\$(0.01)	\$0.01	\$0.01	\$-	\$(0.07)	\$0.06	\$0.07	\$0.06	\$(0.01)
<b>LESS DISTRIBUTIONS</b>										
Dividends from Net Investment Income	\$(0.01)	\$(0.01)	\$(0.01)	\$(0.01)	\$(0.01)	\$-	\$-	\$-	\$-	\$-
Net Position - End of Period	\$0.98	\$0.98	\$1.00	\$1.00	\$1.00	\$1.12	\$1.19	\$1.13	\$1.06	\$1.00
TOTAL RETURN	0.68%	-1.07%	0.54%	0.66%	-0.14%	-5.32%	3.98%	6.63%	6.39%	-1.62%
<b>RATIOS</b>										
Net Position - End of Period (\$000,000 Omitted)	\$1,980	\$2,194	\$2,188	\$2,464	\$1,531	\$1,804	\$1,821	\$1,350	\$1,248	\$549
Ratio of Expenses to Average Net Position (excl. sec. lending fees & rebates)	0.09%	0.25%	0.24%	0.30%	0.35%	0.06%	0.08%	0.08%	0.13%	0.17%
Ratio of Expenses to Average Net Position	0.09%	0.25%	0.24%	0.30%	0.35%	0.06%	0.08%	0.08%	0.13%	0.17%
Ratio of Net Investment Income ( Loss) to Average Net Position	1.18%	0.83%	0.57%	0.65%	1.04%	0.24%	0.19%	0.14%	0.31%	0.07%
FISCAL YEAR ENDED JUNE 30, PER SHARE DATA	MUTUAL EQUITY					CORE FIXED INCOME				
	2016	2015	2014	2013	2012	2016	2015	2014	2013	2012
Net Position- Beginning of Period	\$1,524.55	\$1,420.60	\$1,138.66	\$957.67	\$941.76	\$125.17	\$122.59	\$118.20	\$122.75	\$118.32
<b>INCOME FROM INVESTMENT OPERATIONS</b>										
Net Investment Income (Loss)	\$28.23	\$24.23	\$21.53	\$19.49	\$15.58	\$2.86	\$2.63	\$2.91	\$3.45	\$4.07
Net Gains or (Losses) on Securities (Both Realized and Unrealized)	\$(1.54)	\$79.72	\$265.34	\$180.89	\$15.38	\$1.49	\$(0.05)	\$2.02	\$(3.83)	\$4.88
Total from Investment Operations	\$26.69	\$103.95	\$286.87	\$200.38	\$30.96	\$4.35	\$2.58	\$4.93	\$(0.38)	\$8.95
<b>LESS DISTRIBUTIONS</b>										
Dividends from Net Investment Income	\$-	\$-	\$(4.93)	\$(19.39)	\$(15.05)	\$-	\$-	\$(0.54)	\$(4.17)	\$(4.52)
Net Position - End of Period	\$1,551.24	\$1,524.55	\$1,420.60	\$1,138.66	\$957.67	\$129.52	\$125.17	\$122.59	\$118.20	\$122.75
TOTAL RETURN	1.75%	7.32%	25.28%	21.15%	3.38%	3.46%	1.85%	4.28%	-0.24%	7.63%
<b>RATIOS</b>										
Net Position - End of Period (\$000,000 Omitted)	\$6,642	\$6,771	\$7,058	\$6,237	\$6,425	\$2,407	\$2,437	\$2,415	\$1,905	\$2,617
Ratio of Expenses to Average Net Position (excl. sec. lending fees & rebates)	0.23%	0.22%	0.22%	0.23%	0.21%	0.14%	0.15%	0.17%	0.18%	0.15%
Ratio of Expenses to Average Net Position	0.29%	0.23%	0.23%	0.26%	0.23%	0.16%	0.16%	0.18%	0.21%	0.19%
Ratio of Net Investment Income ( Loss) to Average Net Position	1.84%	1.65%	1.73%	1.86%	1.65%	2.25%	2.12%	2.56%	3.00%	3.36%
FISCAL YEAR ENDED JUNE 30, PER SHARE DATA	INFLATION LINKED BOND					EMERGING MARKET DEBT				
	2016	2015	2014	2013	2012	2016	2015	2014	2013	2012
Net Position- Beginning of Period	\$151.53	\$155.97	\$150.54	\$159.40	\$144.75	\$150.63	\$162.98	\$152.34	\$150.57	\$145.02
<b>INCOME FROM INVESTMENT OPERATIONS</b>										
Net Investment Income (Loss)	\$(0.11)	\$(0.76)	\$4.65	\$1.62	\$3.72	\$15.30	\$10.11	\$8.68	\$5.21	\$11.94
Net Gains or (Losses) on Securities (Both Realized and Unrealized)	\$3.58	\$(3.68)	\$1.50	\$(8.32)	\$13.72	\$(6.25)	\$(22.46)	\$1.96	\$(2.60)	\$(5.03)
Total from Investment Operations	\$3.47	\$(4.44)	\$6.15	\$(6.70)	\$17.44	\$9.05	\$(12.35)	\$10.64	\$2.61	\$6.91
<b>LESS DISTRIBUTIONS</b>										
Dividends from Net Investment Income	\$-	\$-	\$(0.72)	\$(2.16)	\$(2.79)	\$-	\$-	\$-	\$(0.84)	\$(1.36)
Net Position - End of Period	\$155.00	\$151.53	\$155.97	\$150.54	\$159.40	\$159.68	\$150.63	\$162.98	\$152.34	\$150.57
TOTAL RETURN	2.29%	-2.85%	4.17%	-4.33%	11.91%	6.01%	-7.57%	6.99%	1.69%	4.78%
<b>RATIOS</b>										
Net Position - End of Period (\$000,000 Omitted)	\$1,322	\$1,131	\$1,079	\$888	\$938	\$1,498	\$1,415	\$1,514	\$1,410	\$1,202
Ratio of Expenses to Average Net Position (excl. sec. lending fees & rebates)	0.27%	0.23%	0.22%	0.13%	0.11%	0.30%	0.33%	0.27%	0.45%	0.40%
Ratio of Expenses to Average Net Position	0.36%	0.27%	0.18%	0.20%	0.18%	0.30%	0.33%	0.27%	0.45%	0.40%
Ratio of Net Investment Income ( Loss) to Average Net Position	-0.07%	-0.50%	2.97%	1.05%	2.26%	9.86%	6.45%	5.50%	3.44%	8.08%

Source: Amounts were derived from custodial records.

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

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

FISCAL YEAR ENDED JUNE 30, PER SHARE DATA	HIGH YIELD DEBT					DEVELOPED MARKET INTERNATIONAL				
	2016	2015	2014	2013	2012	2016	2015	2014	2013	2012
Net Position- Beginning of Period	\$138.05	\$139.80	\$125.63	\$121.79	\$122.95	\$463.22	\$460.14	\$378.32	\$314.31	\$366.79
<b>INCOME FROM INVESTMENT OPERATIONS</b>										
Net Investment Income (Loss)	\$8.72	\$8.06	\$7.86	\$8.37	\$9.22	\$11.50	\$11.36	\$13.40	\$10.35	\$9.49
Net Gains or (Losses) on Securities (Both Realized and Unrealized)	\$(8.96)	\$(9.81)	\$7.30	\$2.22	\$(1.87)	\$(44.37)	\$(8.28)	\$70.75	\$60.42	\$(54.79)
Total from Investment Operations	\$(0.24)	\$(1.75)	\$15.16	\$10.59	\$7.35	\$(32.87)	\$3.08	\$84.15	\$70.77	\$(45.30)
<b>LESS DISTRIBUTIONS</b>										
Dividends from Net Investment Income	\$-	\$-	\$(0.99)	\$(6.75)	\$(8.51)	\$-	\$-	\$(2.33)	\$(6.76)	\$(7.18)
Net Position - End of Period	\$137.81	\$138.05	\$139.80	\$125.63	\$121.79	\$430.35	\$463.22	\$460.14	\$378.32	\$314.31
<b>TOTAL RETURN</b>	<b>-0.31%</b>	<b>-1.31%</b>	<b>12.24%</b>	<b>8.46%</b>	<b>6.23%</b>	<b>-7.09%</b>	<b>0.67%</b>	<b>22.31%</b>	<b>22.56%</b>	<b>-12.48%</b>

RATIOS										
Net Position - End of Period (\$000,000 Omitted)	\$1,823	\$1,774	\$1,588	\$1,248	\$711	\$5,224	\$5,909	\$6,135	\$5,447	\$4,626
Ratio of Expenses to Average Net Position (excl. sec. lending fees & rebates)	0.35%	0.33%	0.35%	0.36%	0.38%	0.43%	0.40%	0.40%	0.43%	0.45%
Ratio of Expenses to Average Net Position	0.39%	0.34%	0.36%	0.39%	0.41%	0.43%	0.41%	0.40%	0.45%	0.47%
Ratio of Net Investment Income (Loss) to Average Net Position	6.32%	5.80%	5.91%	6.07%	7.54%	2.57%	2.46%	3.17%	3.02%	2.79%

FISCAL YEAR ENDED JUNE 30, PER SHARE DATA	EMERGING MARKET INTERNATIONAL STOCK					REAL ESTATE				
	2016	2015	2014	2013	2012	2016	2015	2014	2013	2012
Net Position- Beginning of Period	\$369.61	\$397.12	\$358.76	\$351.61	\$416.41	\$46.27	\$39.48	\$36.46	\$35.21	\$33.72
<b>INCOME FROM INVESTMENT OPERATIONS</b>										
Net Investment Income (Loss)	\$6.59	\$8.22	\$6.81	\$6.36	\$9.28	\$1.66	\$1.59	\$(0.97)	\$2.04	\$0.89
Net Gains or (Losses) on Securities (Both Realized and Unrealized)	\$(33.01)	\$(35.73)	\$34.08	\$5.57	\$(67.82)	\$2.69	\$5.20	\$4.84	\$1.55	\$1.51
Total from Investment Operations	\$(26.42)	\$(27.51)	\$40.89	\$11.93	\$(58.54)	\$4.35	\$6.79	\$3.87	\$3.59	\$2.40
<b>LESS DISTRIBUTIONS</b>										
Dividends from Net Investment Income	\$-	\$-	\$(2.53)	\$(4.78)	\$(6.26)	\$-	\$-	\$(0.85)	\$(2.34)	\$(0.91)
Net Position - End of Period	\$343.19	\$369.61	\$397.12	\$358.76	\$351.61	\$50.62	\$46.27	\$39.48	\$36.46	\$35.21
<b>TOTAL RETURN</b>	<b>-7.15%</b>	<b>-6.93%</b>	<b>11.50%</b>	<b>3.29%</b>	<b>-14.16%</b>	<b>11.51%</b>	<b>12.93%</b>	<b>10.66%</b>	<b>10.26%</b>	<b>7.19%</b>

RATIOS										
Net Position - End of Period (\$000,000 Omitted)	\$2,483	\$2,473	\$2,655	\$2,369	\$2,227	\$2,207	\$1,918	\$1,510	\$1,482	\$1,328
Ratio of Expenses to Average Net Position (excl. sec. lending fees & rebates)	0.64%	0.70%	0.69%	0.84%	0.72%	0.42%	0.39%	0.55%	0.35%	0.33%
Ratio of Expenses to Average Net Position	0.66%	0.71%	0.70%	0.85%	0.73%	0.42%	0.39%	0.55%	0.35%	0.33%
Ratio of Net Investment Income (Loss) to Average Net Position	1.85%	2.15%	1.81%	1.78%	2.42%	3.42%	3.77%	-2.50%	5.56%	2.59%

FISCAL YEAR ENDED JUNE 30, PER SHARE DATA	COMMERCIAL MORTGAGE					PRIVATE INVESTMENT				
	2016	2015	2014	2013	2012	2016	2015	2014	2013	2012
Net Position- Beginning of Period	\$33.54	\$33.45	\$30.36	\$40.34	\$46.54	\$65.13	\$54.72	\$48.06	\$49.83	\$51.00
<b>INCOME FROM INVESTMENT OPERATIONS</b>										
Net Investment Income (Loss)	\$(5.53)	\$0.71	\$5.47	\$5.59	\$2.47	\$0.46	\$1.31	\$4.72	\$5.51	\$4.09
Net Gains or (Losses) on Securities (Both Realized and Unrealized)	\$(13.02)	\$(0.62)	\$(2.38)	\$(7.62)	\$(5.34)	\$4.21	\$9.10	\$2.79	\$(1.23)	\$(1.24)
Total from Investment Operations	\$(18.55)	\$0.09	\$3.09	\$(2.03)	\$(2.87)	\$4.67	\$10.41	\$7.51	\$4.28	\$2.85
<b>LESS DISTRIBUTIONS</b>										
Dividends from Net Investment Income	\$-	\$-	\$-	\$(7.95)	\$(3.33)	\$-	\$-	\$(0.85)	\$(6.05)	\$(4.02)
Net Position - End of Period	\$14.99	\$33.54	\$33.45	\$30.36	\$40.34	\$69.80	\$65.13	\$54.72	\$48.06	\$49.83
<b>TOTAL RETURN</b>	<b>N/A(1)</b>	<b>0.25%</b>	<b>10.17%</b>	<b>0.88%</b>	<b>-6.48%</b>	<b>8.87%</b>	<b>14.04%</b>	<b>16.06%</b>	<b>9.50%</b>	<b>5.92%</b>

RATIOS										
Net Position - End of Period (\$000,000 Omitted)	\$-	\$-	\$-	\$-	\$1	\$2,770	\$2,895	\$2,919	\$2,550	\$2,572
Ratio of Expenses to Average Net Position (excl. sec. lending fees & rebates)	N/A(1)	0.01%	0.00%	6.26%	1.65%	0.19%	0.17%	0.22%	0.29%	0.36%
Ratio of Expenses to Average Net Position	N/A(1)	0.01%	0.00%	6.26%	1.65%	0.19%	0.17%	0.22%	0.29%	0.36%
Ratio of Net Investment Income (Loss) to Average Net Position	N/A(1)	2.12%	16.41%	7.11%	5.64%	0.68%	2.25%	9.21%	11.23%	8.09%

(1) 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.

Source: Amounts were derived from custodial records.

**PENSION AND TRUST FUNDS  
BALANCES IN COMBINED INVESTMENT FUNDS (Dollars in Thousands)**

**2016**

Pension Plans	Fund Name													
	LF	AIF	MEF	FIF	CFIF	ILBF	EMDF	HYDF	ISF	DMISF	EMISF	REF	CMF	PIF
<b>Total System Assets</b>	\$15,584.6	\$941.3	\$3,721.8	\$-	\$1,150.2	\$585.1	\$840.7	\$867.2	\$-	\$2,882.0	\$1,365.9	\$1,186.8	\$-	\$1,413.9
Teachers' Retirement Fund	53.3%	\$629.7	\$941.3	\$3,721.8	\$-	\$585.1	\$840.7	\$867.2	\$-	\$2,882.0	\$1,365.9	\$1,186.8	\$-	\$1,413.9
State Employees' Retirement Fund	36.4%	345.9	626.4	2,429.0	-	604.5	442.7	569.9	-	1,940.9	920.9	804.7	-	1,062.6
Municipal Employees' Retirement Fund	7.6%	2,212.0	60.7	179.5	356.1	109.9	178.5	311.9	-	296.2	155.1	158.7	-	226.7
State Judges' Retirement Fund	0.6%	189.7	5.4	15.4	30.5	9.4	15.3	26.7	-	25.4	13.3	13.6	-	19.4
The Probate Court Retirement Fund	0.3%	87.3	2.2	4.4	14.1	4.3	7.1	13.2	-	12.6	6.1	6.3	-	9.0
State's Attorneys Retirement Fund	0.0%	1.5	-	-	0.5	-	0.1	0.1	-	0.3	0.1	-	-	-
Trust Funds	1.8%	534.1	21.6	37.3	90.1	8.7	13.5	34.0	-	66.5	22.0	37.1	-	38.2
<b>Total System Assets</b>	<b>100.00%</b>	<b>\$29,245.9</b>	<b>\$1,804.3</b>	<b>\$6,642.1</b>	<b>\$-</b>	<b>\$2,406.9</b>	<b>\$1,497.9</b>	<b>\$1,823.0</b>	<b>\$-</b>	<b>\$5,223.9</b>	<b>\$2,483.4</b>	<b>\$2,207.2</b>	<b>\$-</b>	<b>\$2,769.8</b>

**2007**

Pension Plans	Fund Name													
	LF	AIF	MEF	FIF	CFIF	ILBF	EMDF	HYDF	ISF	DMISF	EMISF	REF	CMF	PIF
<b>Total System Assets</b>	\$13,782.1	\$160.9	\$5,233.2	\$3,958.3	\$-	\$-	\$-	\$-	\$3,223.6	\$-	\$-	\$366.5	\$4.4	\$835.2
Teachers' Retirement Fund	53.2%	\$13,782.1	\$160.9	\$5,233.2	\$3,958.3	\$-	\$-	\$-	\$3,223.6	\$-	\$-	\$366.5	\$4.4	\$835.2
State Employees' Retirement Fund	38.7%	10,037.7	52.4	3,810.2	2,958.5	-	-	-	2,339.7	-	-	266.0	3.0	607.9
Municipal Employees' Retirement Fund	6.6%	1,717.3	19.3	648.2	504.4	-	-	-	395.8	-	-	45.3	0.4	103.9
State Judges' Retirement Fund	0.7%	187.3	3.0	71.3	54.8	-	-	-	41.9	-	-	5.0	-	11.3
The Probate Court Retirement Fund	0.3%	87.7	1.0	33.3	25.9	-	-	-	19.8	-	-	2.4	-	5.3
State's Attorneys Retirement Fund	0.0%	0.9	0.1	0.3	0.5	-	-	-	-	-	-	-	-	-
Trust Funds	0.5%	115.3	2.1	21.6	91.1	-	-	-	-	-	-	0.5	-	-
<b>Total System Assets</b>	<b>100.0%</b>	<b>\$25,928.3</b>	<b>\$238.8</b>	<b>\$9,818.1</b>	<b>\$7,593.5</b>	<b>\$-</b>	<b>\$-</b>	<b>\$6,020.8</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$685.7</b>	<b>\$7.8</b>	<b>\$1,563.6</b>

LF Liquidity Fund (formerly Cash Reserve Account)  
 AIF Alternative Investment Fund  
 MEF Mutual Equity Fund  
 FIF Fixed Income Fund  
 CFIF Core Fixed Income Fund  
 ILBF Inflation Linked Bond Fund  
 EMDF Emerging Market Debt Fund  
 HYDF High Yield Debt Fund  
 ISF International Stock Fund  
 DMISF Developed Market International Stock Fund  
 EMISF Emerging Market International Stock Fund  
 REF Real Estate Fund  
 CMF Commercial Mortgage Fund  
 PIF Private Investment Fund (formerly Venture Capital Fund)

Source: Amounts were derived from custodial records.

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**INVESTMENT SUMMARY AT JUNE 30, 2016 <sup>(1)</sup>**

**Liquidity Fund <sup>(2)</sup>**

	Book Value	Fair Value	% of Total Fund FV	Rate of Return
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%
2008	1,140,821,830	1,140,821,830	4.36%	4.59%
2007	236,297,695	236,297,695	0.88%	5.61%

**Mutual Equity Fund**

	Book Value	Fair Value	% of Total Fund FV	Rate of Return
\$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%	
7,563,373,750	8,017,007,807	30.68%	-12.99%	
7,628,304,018	9,810,773,724	36.64%	18.24%	

**Mutual Fixed Income Fund <sup>(6)</sup>**

	Book Value	Fair Value	% of Total Fund FV	Rate of Return
2016	\$ -	\$ -	-	-
2015	-	-	-	-
2014	-	-	-	-
2013	-	-	-	-
2012	-	-	-	-
2011	-	-	-	-
2010	-	-	-	-
2009	-	-	-	-
2008	-	-	-	-
2007	8,604,509,537	8,537,943,917	31.89%	6.92%

**Core Fixed Income Fund <sup>(6)</sup>**

	Book Value	Fair Value	% of Total Fund FV	Rate of Return
\$2,442,024,334	\$2,490,655,941	8.53%	3.46%	
2,603,408,489	2,627,250,626	8.83%	1.85%	
2,528,639,885	2,573,846,130	8.73%	4.28%	
2,042,090,874	2,056,321,868	7.94%	-0.24%	
2,726,575,207	2,859,134,784	11.88%	7.63%	
2,911,577,713	3,001,125,667	11.89%	4.49%	
2,682,943,303	2,789,605,943	12.81%	11.81%	
3,400,625,343	3,215,718,047	15.74%	2.84%	
4,979,684,914	4,851,300,830	18.57%	5.65%	
-	-	-	-	

**Inflation Linked Bond Fund <sup>(6)</sup>**

	Book Value	Fair Value	% of Total Fund FV	Rate of Return
2016	\$1,338,629,405	\$1,321,779,931	4.52%	2.29%
2015	1,189,323,643	1,120,365,183	3.77%	-2.85%
2014	1,057,661,503	1,075,489,795	3.65%	4.17%
2013	886,052,044	879,482,495	3.39%	-4.33%
2012	864,059,933	932,982,728	3.88%	11.91%
2011	1,075,894,193	1,115,148,171	4.42%	7.23%
2010	1,033,720,440	1,070,660,872	4.91%	9.48%
2009	813,926,651	829,543,021	4.06%	-0.20%
2008	1,152,973,047	1,162,545,028	4.45%	16.81%
2007	-	-	-	-

**Emerging Market Debt Fund <sup>(6)</sup>**

	Book Value	Fair Value	% of Total Fund FV	Rate of Return
\$1,577,124,552	\$1,483,772,612	5.08%	6.01%	
1,523,207,614	1,399,864,819	4.70%	-7.57%	
1,470,166,119	1,500,069,627	5.09%	6.99%	
1,415,363,738	1,388,070,525	5.36%	1.69%	
1,098,205,685	1,176,095,315	4.88%	4.78%	
1,012,164,604	1,141,817,330	4.52%	16.06%	
1,082,027,071	1,155,351,613	5.30%	23.02%	
1,153,012,696	1,125,226,197	5.51%	-3.62%	
1,006,342,436	1,040,295,964	3.98%	5.59%	
-	-	-	-	



**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**

**INVESTMENT SUMMARY AT JUNE 30, 2016 (Continued)**

	<b>Private Investment Fund <sup>(3)</sup></b>				<b>Alternative Investment Fund <sup>(7)</sup></b>			
	Book Value	Fair Value	% of Total Fund FV	Rate of Return	Book Value	Fair Value	% of Total Fund FV	Rate of Return
2016	\$2,306,644,120	\$2,769,435,919	9.48%	8.87%	\$1,705,961,044	\$1,804,337,067	6.18%	-5.32%
2015	2,286,868,807	2,773,374,435	9.32%	14.04%	1,611,126,633	1,804,487,746	6.06%	3.98%
2014	2,449,109,360	2,918,978,182	9.90%	16.06%	1,210,080,164	1,349,977,450	4.58%	6.63%
2013	2,246,698,441	2,564,877,605	9.90%	9.50%	1,190,675,281	1,247,574,910	4.81%	6.39%
2012	2,221,945,727	2,569,809,038	10.67%	5.92%	550,080,365	549,205,302	2.28%	-1.62%
2011	1,909,670,699	2,229,679,980	8.83%	19.89%	511,873,555	519,007,742	2.06%	0.00%
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%	-	-	-	-
2008	1,809,775,995	1,789,139,253	6.85%	13.66%	-	-	-	-
2007	1,657,888,536	1,556,795,484	5.81%	19.56%	-	-	-	-

	<b>Total Fund <sup>(4)</sup></b>			
	Book Value	Fair Value	% of Total Fund FV	Rate of Return
2016	\$26,183,028,965	\$29,206,055,001	100.00%	0.35%
2015	26,111,332,380	29,755,256,851	100.00%	2.79%
2014	24,570,121,041	29,482,334,377	100.00%	15.43%
2013	23,483,171,029	25,912,503,786	100.00%	11.64%
2012	22,270,077,625	24,077,340,469	100.00%	-0.90%
2011	22,343,270,597	25,247,594,232	100.00%	20.75%
2010	21,710,645,358	21,784,939,405	100.00%	12.88%
2009	21,945,913,372	20,431,180,148	100.00%	-17.37%
2008	25,388,309,339	26,129,160,510	100.00%	-4.71%
2007	23,066,365,615	26,774,529,258	100.00%	17.34%

- (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) On November 1, 2007 the International Stock Fund (ISF) was reallocated into two sub portfolios of international equity securities. The reallocation was a result of the modifications to the Investment Policy Statement (IPS) as approved by the Investment Advisory Council (IAC) and adopted by the Treasurer in October 2007. The reallocation of assets, outlined in the IPS, was based on an asset liability study that identified the need to reallocate the international stock fund into two components: developed markets international stocks and emerging markets international stocks to allow for greater flexibility in managing risk and return in the various Connecticut Retirement Plans and Trust Funds.
- (6) On November 1, 2007 the Mutual Fixed Income Fund was reallocated into four sub portfolios of fixed income securities. The reallocation was a result of the modifications to the Investment Policy Statement (IPS) as approved by the Investment Advisory Council (IAC) and adopted by the Treasurer in October 2007. The reallocation of assets, outlined in the IPS, was based on an asset liability study that identified the need to reallocate the mutual fixed income fund into four components: core fixed income, emerging market debt, high yield debt and inflation-linked bonds to allow for greater flexibility in managing risk and return in the various Connecticut Retirement Plans and Trust Funds.
- (7) Inception of the Alternative Investment Fund during Fiscal 2011.
- (8) 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.

**CONNECTICUT STATE TREASURER'S COMBINED INVESTMENT FUNDS**  
**SCHEDULE OF INVESTMENT RETURNS**  
**ANNUAL MONEY-WEIGHTED RATES OF RETURN NET OF INVESTMENT EXPENSES**

	6/30/2016*	6/30/2015	6/30/2014
Teachers' Retirement Fund	0.17%	2.82%	15.67%
State Employees' Retirement Fund	0.23%	2.83%	15.62%
Municipal Employees' Retirement Fund	1.15%	2.57%	13.56%
State Judges' Retirement Fund	1.11%	2.57%	13.66%
The Probate Court Retirement Fund	1.17%	2.48%	13.87%
State's Attorneys' Retirement Fund	-0.21%	1.59%	13.66%
Soldiers' Sailors' & Marines' Fund	1.63%	2.19%	9.19%
Police & Fireman's Survivors' Benefit Fund	0.98%	2.85%	14.17%
Connecticut Arts Endowment Fund	1.58%	2.19%	9.40%
School Fund	1.66%	2.20%	9.54%
Ida Eaton Cotton Fund	1.66%	2.19%	9.47%
Hopemead State Park Fund	1.66%	2.15%	9.41%
Andrew C. Clark Fund	1.66%	2.19%	9.47%
Agricultural College Fund	3.47%	1.86%	4.28%
OPEB Fund	2.44%	3.44%	11.80%

*\*This schedule is to be built prospectively until it contains ten years of data.*

**CONDENSED SCHEDULE OF NET POSITION  
FISCAL YEAR ENDED JUNE 30 (dollars in millions)**

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
<b>Assets</b>										
Investments at Fair Value	\$29,206.1	\$29,970.3	\$29,608.5	\$25,912.5	\$24,077.3	\$25,247.6	\$21,784.9	\$20,431.2	\$26,129.2	\$26,774.5
Cash, Receivables and Other	14,897.9	10,608.8	6,096.3	9,430.8	6,964.2	7,959.9	7,494.7	11,520.3	15,884.6	14,440.5
Total Assets	44,104.0	40,579.4	35,704.8	35,388.3	31,041.5	33,207.5	29,279.6	31,951.5	42,013.8	41,215.0
Liabilities	14,858.1	10,712.1	6,150.7	9,447.5	7,064.7	8,023.8	7,410.0	11,569.3	16,142.0	15,286.7
Net Position	\$29,245.9	\$29,867.0	\$29,554.1	\$25,940.8	\$23,976.8	\$25,183.7	\$21,869.6	\$20,382.2	\$25,871.8	\$25,928.3

**CONDENSED SCHEDULE OF CHANGES IN NET POSITION  
FISCAL YEAR ENDED JUNE 30 (dollars in millions)**

**Fiscal Year Ended June 30,**

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
<b>Additions</b>										
Dividends	460.0	502.9	474.6	747.9	622.9	703.3	\$417.4	\$399.9	\$650.1	\$558.9
Interest	337.3	262.0	270.5	181.8	241.2	283.8	324.0	358.9	460.0	396.0
Securities Lending & Other Income	28.7	22.8	16.5	29.1	28.4	30.0	29.1	74.9	162.4	176.7
Total Investment Income	826.0	787.7	761.7	958.8	892.5	1,017.1	770.5	833.7	1,272.5	1,131.6
Total Investment Expenses	90.7	87.5	84.3	86.9	83.5	89.6	83.8	89.9	201.8	212.3
Net Investment Income	735.3	700.2	677.4	871.9	809.0	927.5	686.7	743.8	1,070.7	919.3
Net Realized Gain/(Loss)	167.1	1,332.7	884.6	1,280.0	(11.8)	825.7	214.4	(2,942.4)	675.7	1,524.1
Net Change in Unrealized Gains on Investments	(887.2)	(1,119.8)	2,571.2	625.8	(1,012.0)	2,699.9	1,737.7	(2,333.6)	(3,004.3)	1,472.3
Purchase of Units by Participants	2,464.4	3,010.4	2,955.3	4,981.5	2,716.0	3,118.5	3,647.0	6,599.3	8,184.5	3,643.8
Total Additions	2,479.6	3,923.5	7,088.4	7,759.2	2,501.2	7,571.6	6,285.8	2,067.1	6,926.6	7,559.5
<b>Deductions</b>										
Administrative Expense	(4.6)	(4.6)	(4.9)	(4.3)	(4.1)	(4.1)	(3.8)	(3.4)	(3.2)	(3.2)
Distributions to Unit Holders	(13.5)	(9.5)	(190.4)	(813.2)	(660.6)	(813.3)	(579.3)	(707.6)	(972.4)	(911.9)
Redemption of Units by Participants	(3,082.6)	(3,596.6)	(3,279.8)	(4,977.7)	(3,043.4)	(3,440.1)	(4,215.3)	(6,845.7)	(6,007.4)	(3,532.9)
Total Deductions	(3,100.7)	(3,610.7)	(3,475.1)	(5,795.2)	(3,708.1)	(4,257.5)	(4,798.4)	(7,556.7)	(6,983.0)	(4,448.0)
Net Change in Position	(621.1)	312.9	3,613.3	1,964.0	(1,206.9)	3,314.1	1,487.4	(5,489.6)	(56.5)	3,111.5
Beginning Net Position	29,887.0	29,554.1	25,940.8	\$23,976.8	25,183.7	21,869.6	20,382.2	25,871.8	25,928.3	22,816.8
Ending Net Position	\$29,245.9	\$29,867.0	\$29,554.1	\$25,940.8	\$23,976.8	\$25,183.7	\$21,869.6	\$20,382.2	\$25,871.8	\$25,928.3



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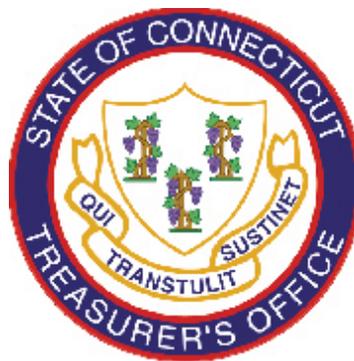
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