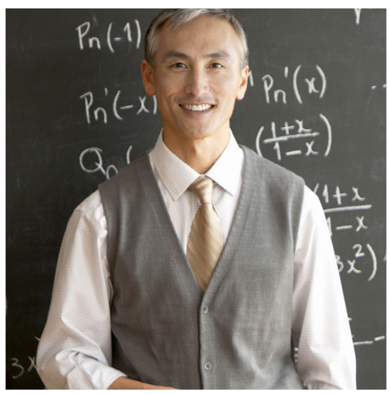
STRS OHIO

STATE TEACHERS RETIREMENT SYSTEM OF OHIO

COMPREHENSIVE
Annual Financial Report **2016**



Fiscal Years Ending June 30, 2016 and 2015

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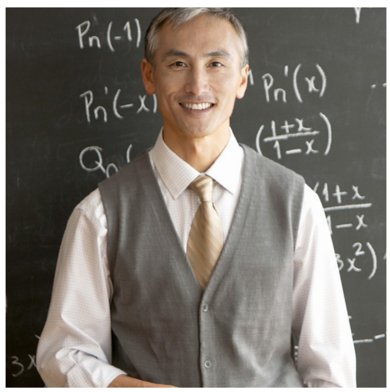
COMPREHENSIVE Annual Financial Report 2016

Fiscal Years Ending June 30, 2016 and 2015

Prepared through the joint efforts of the STRS Ohio staff
275 E. Broad St., Columbus, OH 43215-3771 • 614.227.4090 • www.strsoh.org

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

The State Teachers Retirement System of Ohio

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2015

Executive Director/CEO

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Introduction

Financial

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Statistical

Professional Consultants: Independent Public Accountants, CliftonLarsonAllen LLP, Toledo, Ohio; Investment Consultants, Callan Associates Inc., Chicago, and Cliffwater LLC, Marina del Ray, Calif.; Actuarial Consultants, The Segal Group, Inc., Chicago; and Performance Verification Consultants, ACA Performance Services LLP, New York. See Page 57 for a list of external managers.

2015–2016 State Teachers Retirement Board

Guiding the members of the Retirement Board is their collective belief that Ohio's public educators deserve comprehensive benefits and quality service from their retirement system during their careers and in retirement. The Retirement Board provides the direction, fiduciary oversight and policies that enable STRS Ohio to fulfill its mission of partnering with STRS Ohio members in helping to build retirement security.

The Retirement Board is composed of 11 members as follows: five elected contributing members; two elected retired members; an investment expert appointed by the governor; an investment expert appointed jointly by the speaker of the Ohio House of Representatives and the Ohio Senate president; an investment expert designated by the treasurer of state; and the superintendent of public instruction or his designated investment expert. These individuals devote hundreds of volunteer hours in service to STRS Ohio and are compensated only for necessary expenses.

Tim Myers was reelected to a contributing member seat in the May 2016 election. The term for this seat runs from Sept. 1, 2016, through Aug. 31, 2020.

In June 2016, Mark Hill was elected as vice chair and Robert Stein assumed the responsibility of board chair, effective Sept. 1, 2016.

In August 2016, the governor appointed Wade Steen, an investment expert, to the board. His term on the board will end Sept. 27, 2020.

At the end of October 2016, Sandy Knoesel, Deputy Executive Director — Member Benefits and Chief Benefits Officer, retired after 25 years with STRS Ohio. Gary Russell was selected to replace Knoesel.

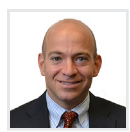
Carol Correthers, Chair
Contributing member since 2009.
Lorain City Schools, Lorain County

Robert Stein, Vice Chair
Retired teacher member since 2009.

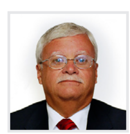
Craig C. Brooks
Appointed jointly by the Speaker of the House of Representatives and the Senate President in 2008.

Taiyia L. Hayden
Contributing member since 2006.
Columbus City Schools, Franklin County

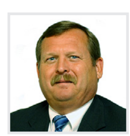
Mark Hill
Contributing member since 2010.
Worthington City Schools, Franklin County



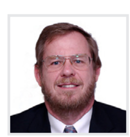
Yoel Mayerfeld
Appointed by the Treasurer of State in 2012.



James McGreevy
Retired teacher member since 2009.



Tim Myers
Contributing member since 2008.
Elida Local Schools, Allen County



Dale Price
Contributing member since 2010.
Toledo Public Schools, Lucas County

Jimmy Sheppard
Representing the Superintendent of Public Instruction. Ex officio member of the board since appointed to office in 2015.

Michael J. Nehf, Executive Director, State Teachers Retirement System of Ohio

STRS Ohio Mission and Vision

The mission of STRS Ohio is to partner with our members in helping to build retirement security.

The vision of STRS Ohio is to be a leading retirement system by providing comprehensive retirement benefits and quality service to our members through exceptional financial performance, ethical business practices and responsible resource management.

STRS Ohio Guiding Principles

1. Make decisions that produce the greatest sustainable benefits for our members.
2. Attract, develop and retain highly competent and motivated associates who have authority commensurate with their responsibilities.
3. Continually improve through research, development, evaluation and risk management.
4. Build an organizational culture that inspires a high level of professionalism and performance.

STRS Ohio Senior Staff Members

Michael J. Nehf, Executive Director

Sandra L. Knoesel, Deputy Executive Director — Member Benefits and Chief Benefits Officer

John Morrow, Deputy Executive Director — Investments and Chief Investments Officer

Paul M. Snyder, Deputy Executive Director — Finance and Chief Financial Officer

Marla E. Bump, Director, Governmental Relations

Rhonda Hare, Retirement Board Liaison

Andrew J. Marfurt, Director, Human Resource Services

William J. Neville, General Counsel

David Tackett, Chief Audit Executive, Internal Audit

Gregory A. Taylor, Chief Information Officer

Nicholas J. Treneff, Director, Communication Services

State Teachers
Retirement System
of Ohio

275 East Broad Street
Columbus, OH 43215-3771
614-227-4090
www.strsoh.org

Dec. 9, 2016

Members of the State Teachers Retirement Board:

We are pleased to present the *Comprehensive Annual Financial Report* of the State Teachers Retirement System of Ohio for the fiscal year ended June 30, 2016. This report is intended to provide financial, investment, actuarial and statistical information in a single publication. STRS Ohio management is responsible for the accuracy of the data, as well as the completeness and fairness of the presentation.

STRS Ohio was created by legislative act on May 8, 1919, as an alternative to separate, often unstable local school district retirement plans. STRS Ohio is a cost-sharing, multiple-employer plan providing service retirement, disability and survivor benefits to teachers and faculty members of public boards of education, state-supported colleges and universities, and the state of Ohio and its political subdivisions. Optional health care coverage is available to eligible benefit recipients and their eligible dependents.

More analysis and information of the financial activities of STRS Ohio can be found in the Management's Discussion and Analysis section that begins on Page 10 of this report.

Major Initiatives

The pension reform legislation passed in 2012 to improve the financial condition of Ohio's pension systems continues to be implemented at STRS Ohio. The law also provides the Retirement Board with authority to make future changes depending on funding improvements. Pension reform changes implemented during fiscal year 2016 include:

- Increase in member contribution rate to 13% on July 1, 2015, and 14% on July 1, 2016. This concludes the additional 4% phase-in that began in 2013.
- Increases in age and service requirements for retirement beginning Aug. 1, 2015. For retirement dates beginning on or after Aug. 1, 2015, increases to any age and 31 years of service; or age 65 and five years of service. The age and service requirements will increase to 35 years of service by Aug. 1, 2023 and a minimum age 60 requirement beginning Aug. 1, 2026. If a member retires before the age and years of service requirements, benefits are reduced to be actuarially neutral.
- Change in FAS years beginning Aug. 1, 2015. The new FAS calculation is based on the average of the five highest years of earnings.
- Change in benefit formula beginning Aug. 1, 2015. The new formula is 2.2% for all years of service. For retirement dates July 1, 2015, and before, the benefit formula is 2.2% for the first 30 years of service and an escalating formula for every year of service over 30 years. Members eligible to retire on July 1, 2015, maintain retirement eligibility if they continue working, and the benefit will be the greater of: the benefit calculated upon retirement under the new benefit formula; or the benefit as of July 1, 2015, under the old formula.

In an effort to put greater focus on improving system funding, the board adopted a 30-year closed funding period beginning July 1, 2015. Closing the funding period effectively targets a date when the unfunded actuarial accrued liability will be paid off and the pension fund will be fully funded, strengthening the pension fund's ability to provide a secure retirement for STRS Ohio members. Further, a closed funding period provides a good benchmark for comparison purposes and will help the pension fund better manage volatility in the future. Following several months of presentations and discussion, the Retirement Board approved changes to its funding policy in March 2016. The updated policy includes the stated goal of "managing the risk of unanticipated benefit changes and to safeguard members' benefits in the long term." As of July 1, 2016, the closed amortization period has 29 years remaining.

The Retirement Board continues to closely monitor the financial condition of the pension and health care funds. The board's investment consultant, Callan Associates, began STRS Ohio's asset-liability study. STRS Ohio conducts an asset-liability study every five years with the primary objective of determining reasonable investment risk and return expectations. In addition to the asset-liability study, STRS Ohio is also working this fall with its actuary, Segal Consulting, on a five-year experience review. This study evaluates the economic and demographic assumptions that are used in the valuation of the Defined Benefit Plan's assets, liabilities and funding requirements.

The annual pension valuation results from STRS Ohio's actuarial consultant, Segal Consulting, showed continued improvement in the system's funding levels. The report provides a "snapshot" of the actuarial position of the retirement fund as of July 1, 2016. Segal's report this year shows the funding period for the pension fund — the amount of time needed to pay off any unfunded liability — decreased to 26.6 years from 28.4 years, and the funded ratio increased to 69.6%. The unfunded actuarial accrued liability increased to $30.6 billion from $30.4 billion — this represents the difference between STRS Ohio's actuarial value of assets and the actuarial accrued liabilities.

For the eighth time in the past 17 years, STRS Ohio was ranked number one in member service, according to the CEM Pension Administration Benchmarking report for fiscal year 2015. STRS Ohio was ranked first out of 56 pension plans worldwide with a top service level score of 93, which was 10 points above the peer average of 83 points and 17 points above the average score of 76 for all participants. STRS Ohio was given top marks based largely on the responsiveness of the Call Center, availability of counseling services, timely pension payments and easily obtainable, comprehensive pension estimates. The last time STRS Ohio held the top position was 2008.

Another report by CEM showed STRS Ohio has the lowest investment costs — due to implementation style and paying less for similar services — compared to its peer group of 17 large U.S. public pension funds in the study. The report compared investment data for the five-year period ending Dec. 31, 2015. The report stated that STRS Ohio saved about $102 million in 2015 by using internal investment managers for about 70% of the system's assets. The savings is based on the peer group's median external management costs.

The report also provided performance data and showed that STRS Ohio's five-year net total return of 8.3% was above the peer median of 7.2% for CEM's U.S. public fund universe. CEM said STRS Ohio's strong performance was due in part to its asset mix, which has a higher weighting in U.S. stocks and a lower weighting in fixed income than the peer group.

Earlier this year, STRS Ohio partnered with the Ohio Treasurer of State's office to make our administrative expenses available on the Ohio Online Checkbook, an initiative to promote transparency in state spending information.

STRS Ohio launched its first electronic newsletters this fiscal year for active members, benefit recipients and reporting employers. The electronic communications will help save the system printing and postage costs. Late this summer, the system launched its social media pages (Facebook, Twitter, LinkedIn and Google+), offering members another way to connect to STRS Ohio news, benefit information and educational opportunities, as well as a way to offer an additional communication medium for delivering key messages to our members.

Management Responsibility

This report consists of management's representations regarding STRS Ohio's finances. Management assumes full responsibility for the completeness and reliability of all information presented in this report. To provide a reasonable basis for making these representations, management has established a comprehensive internal control framework that is designed both to protect the assets from loss, theft or misuse and to compile sufficient, reliable information for the preparation of STRS Ohio's financial statements in conformity with generally accepted accounting principles. The internal control framework has been designed to provide reasonable rather than absolute assurance that the financial statements will be free from material misstatement. The concept of reasonable assurance recognizes that first, the cost of a control should not exceed the benefits likely to be derived, and second, the valuation of the cost and benefits requires estimates and judgments by management. We as management believe that the internal controls currently in place support this purpose, and assert that, to the best of our knowledge and belief, this financial report is complete and reliable in all material respects.

Investments

Total investments (including short-term investments) decreased to $72.1 billion as of June 30, 2016. The Investment Review starting on Page 39 discusses the investment environment during fiscal 2016. The allocation of investment assets is designed to provide high long-term yields at optimal risk consistent with the expected long-term rate of return. Investment risks are diversified over a very broad range of market sectors and securities. This strategy reduces portfolio risk to adverse developments in sectors and issuers experiencing unusual difficulties and offers opportunity to benefit from future markets. A summary of the asset allocation can be found on Page 54.

For the fiscal year ended June 30, 2016, the total fund returned 0.92%. STRS Ohio's annualized rate of return was 7.53% over the last three years and 7.66% for the last five years. Similar benchmark returns over the same one-, three- and five-year periods were 0.67%, 7.53% and 7.69%, respectively.

Plan Contributions

Member and employer contributions, as well as income from investments, provide funds for pension benefits and health care coverage. Effective July 1, 2015, the member contribution rate increased by 1% to 13% of payroll. Effective July 1, 2016, the member contribution rate increased 1% to reach 14%, concluding the increases in member contribution rates. Member contributions were $1.4 billion in 2016 and employer contributions were $1.5 billion. Employer contributions include amounts paid by employers of participants in alternative retirement plans (ARPs). ARP participants are not members of STRS Ohio; however, their employers contribute 4.5% of salaries to STRS Ohio to help pay for unfunded liabilities. In fiscal year 2016, STRS Ohio received $44.0 million in joint retirement revenue. Premiums received from health care recipients totaled $339.9 million in fiscal year 2016. STRS Ohio received $58.8 million in Medicare Part D reimbursements for participant prescription costs. This federal subsidy helps offset the overall cost of the post-employment health care program.

Benefit Payments

The principal purpose for STRS Ohio is to provide retirement, survivor and disability benefits to qualified members and their beneficiaries. Benefit payments, including refunds to terminated members and optional health care coverage, totaled $8.0 billion. Service retirement payouts increased 6.9% from fiscal year 2015. Refunds increased by 1.5% from fiscal year 2015, due largely to an increase in defined contribution participant withdrawals.

Funding

Contribution rates are intended to provide a level basis of funding using the entry age normal cost method, and an actuarial valuation is performed annually by Segal Consulting. The July 1, 2016, valuation shows that the amortization period for the unfunded accrued liability decreased to 26.6 years from 28.4 the prior year, and the ratio of actuarial assets to total accrued liabilities increased to 69.6% from 69.3%.

A detailed discussion of funding is provided in the Actuarial Section of this report beginning on Page 58.

Retiree Health Care Program

Health Care Plan assets decreased 7.7% to $3.2 billion in fiscal 2016 from $3.4 billion in fiscal 2015 primarily as a result of lower investment returns and the lack of employer contributions allocated to the Health Care Fund. The board discontinued the 1% allocation to the health care fund in 2014, to reduce the amortization period for the pension fund. Program changes, designed to build a long-term financial foundation for the health care program, continue to appear in fiscal 2016 results. The changes result in utilization of lower-cost plans, increases in the retiree's portion of premiums and higher generic drug usage.

The results of the annual actuarial calcuation of the fund reflect a decrease in the funded ratio to 63.2% at Jan. 1, 2016, from 73.9% at Jan. 1, 2015. The unfunded actuarial accrued liability is $1.9 billion at Jan. 1, 2016. Costs for the health care program are paid out of the Health Care Fund, which is currently funded through premiums charged to enrollees, government reimbursements and investment earnings on these funds.

Certificate of Achievement and Other Awards

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

To be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report that conforms to program standards. This report must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for one year. STRS Ohio has received a Certificate of Achievement for the last 26 years. We believe our current report continues to meet the Certificate of Achievement program requirements and will be submitted to the GFOA.

In addition, the Public Pension Coordinating Council (PPCC) presented STRS Ohio with the 2016 Public Pension Standards Award for Administration in recognition of meeting professional standards set forth in the Public Pension Standards. PPCC is a coalition made up of the National Association of State Retirement Administrators (NASRA), the National Council on Teacher Retirement (NCTR) and the National Conference on Public Employee Retirement Systems (NCPERS).

Acknowledgments

The preparation of this report is possible only through the combined efforts of the STRS Ohio staff. It is intended to provide complete and reliable information as a basis for making management decisions, complying with legal provisions and determining responsible stewardship of the assets contributed by members and their employers.

Respectfully submitted,

Michael J. Nehf
Executive Director

Paul M. Snyder, CPA
Deputy Executive Director
Chief Financial Officer

CliftonLarsonAllen LLP
CLAconnect.com

INDEPENDENT AUDITORS' REPORT

The Retirement Board
State Teachers Retirement System of Ohio and
The Honorable Dave Yost, Auditor of State

Report on the Financial Statements

We have audited the accompanying financial statements of State Teachers Retirement System of Ohio (STRS Ohio), which comprise the statements of fiduciary net position as of June 30, 2016 and 2015, and the related statements of changes in fiduciary net position for the years then ended, and the related notes to the financial statements, as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits 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 auditors' 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 STRS Ohio as of June 30, 2016 and 2015, and the respective changes in its financial position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and the schedules of changes in the employers' net pension

The Retirement Board
State Teachers Retirement System of Ohio and
The Honorable Dave Yost, Auditor of State
Page 2

liability, employers' net pension liability, employers' contributions, investment returns, health care funding progress and related notes, as listed in the table of contents, be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the 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 financial statements, and other knowledge we obtained during our audits of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audits were conducted for the purpose of forming an opinion on STRS Ohio's financial statements. The additional information, including the administrative expenses, schedules of investment expenses, and external asset managers' fees, as listed in the table of contents, is presented for purposes of additional analysis and is not a required part of the financial statements.

The additional information, as listed in the table of contents, 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. Such information has been subjected to the auditing procedures applied in the audits of the financial statements 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 additional information, including the administrative expenses, schedules of investment expenses, and external asset managers' fees, as listed in the table of contents, is fairly stated, in all material respects, in relation to the financial statements as a whole.

The introduction, investments, actuarial and statistical sections, as listed in the table of contents, have not been subjected to the auditing procedures applied in the audits of the financial statements, 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 6, 2016 on our consideration of STRS Ohio'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 internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering STRS Ohio's internal control over financial reporting and compliance.

CliftonLarsonAllen LLP

CliftonLarsonAllen LLP

Toledo, Ohio
December 6, 2016

Management is pleased to provide this overview and analysis of the financial activities of the State Teachers Retirement System of Ohio (STRS Ohio) for the years ended June 30, 2016 and 2015. This information is intended to supplement the financial statements, which begin on Page 17 of this report. We encourage readers to consider all the information and data in this 2016 *Comprehensive Annual Financial Report*.

As of June 30, 2016, STRS Ohio held $70.5 billion in trust on behalf of about 490,000 active, inactive and retired educators. This represented a $4.4 billion decrease in net position from the previous fiscal year-end. In fiscal 2015, STRS Ohio experienced a $593 million decrease in net position from the previous fiscal year-end.

In 2012, the State Teachers Retirement Board took an important step to strengthen the financial condition of the pension fund by approving a plan that is designed to help fully fund the system. The multifaceted plan became effective in 2013 and will be fully phased-in by 2026. Following are key changes made to the pension plan:

- Increases the eligibility requirements for FULL retirement — with an unreduced benefit — to age 60 with 35 years of service or age 65 with five years of service by Aug. 1, 2026 (phase-in began Aug. 1, 2015).
- Increases the eligibility requirements for EARLY retirement — with an actuarially reduced benefit — to a minimum 30 years of service or age 60 with five years of service by Aug. 1, 2023 (phase-in began Aug. 1, 2015).
- Increases member contributions by 4% of compensation (to 14%), phased in 1% per year from July 1, 2013, through July 1, 2016.
- Change in benefit formula to 2.2% for all years of service (began Aug. 1, 2015). The 35-year enhanced benefit formula was eliminated after July 1, 2015.
- Changes final average salary calculation to the five highest years of earnings (began Aug. 1, 2015).
- Reduces cost-of-living adjustment (COLA) to 2% for all retirees and delays COLA for all new retirees for 60 months.
- New members will have to work longer to be eligible for disability and survivor benefits.

Pension reform also grants the Retirement Board with authority to make future adjustments as the need or opportunity arises, depending on the retirement system's funding progress.

Financial Highlights

Highlights of the fiscal year include:

- The total fund rate of return was 0.92% in fiscal 2016. The total fund rate of return for fiscal 2015 was 5.45%. Five- and 10-year total fund annualized returns are 7.66% and 6.06%, respectively.
- Total net position decreased 5.8% from the prior fiscal year, ending at $70.5 billion as of June 30, 2016. Net position decreased 0.8% during fiscal 2015, ending at $74.8 billion as of June 30, 2015.
- The post-employment health care net position was $3.2 billion as of June 30, 2016, a decrease of 7.7% from the prior fiscal year as a result of the lack of employer contributions allocated to the health care fund and lower than assumed investment returns. Program changes designed to extend the health care program continued to appear in fiscal 2016 results. The changes resulted from utilization of lower-cost plans, increases in the retiree's portion of premiums and higher generic drug use. The post-employment health care balance decreased 3.5% during fiscal 2015, ending at $3.4 billion as of June 30, 2015.
- Defined contribution accounts finished the year with $1.0 billion in net position, an increase of 9.4% from the end of fiscal 2015. The defined contribution accounts ended fiscal 2015, with $945 million in net position, an increase of 10.5% from the end of fiscal 2014.
- Total benefit payments were $7.8 billion during fiscal 2016, an increase of 5.8% from fiscal 2015. STRS Ohio paid members $7.1 billion in service retirement, disability and survivor benefits plus $677 million for health care coverage during fiscal 2016. Total benefit payments were $7.3 billion during fiscal 2015, an increase of 2.8% from fiscal 2014.

- Total additions to fiduciary net position were $3.7 billion during fiscal 2016. Net investment income (including securities lending) during fiscal 2016 totaled $390 million. Total additions to plan net assets were $7.1 billion during fiscal 2015, including $3.9 billion related to net investment income.

Historical Plan Asset Additions and Deductions
(years ended June 30)

Contributions
Years Ended June 30, 2016 and 2015 (dollar amounts in thousands)

	2016	2015	Percentage Change
Employer Contributions	$ 1,501,102	$ 1,481,167	1.3%
Member Contributions	1,372,033	1,259,135	9.0%
Health Care Premiums and Government Reimbursements	398,739	367,696	8.4%
Other	44,001	113,626	–61.3%
Total Additions	**$ 3,315,875**	**$ 3,221,624**	**2.9%**

Benefits and Administration
Years Ended June 30, 2016 and 2015 (dollar amounts in thousands)

	2016	2015	Percentage Change
Benefits (includes optional health care)	$ 7,762,036	$ 7,334,847	5.8%
Refunds	232,070	228,630	1.5%
Administration	69,720	63,752	9.4%
Total Deductions	**$ 8,063,826**	**$ 7,627,229**	**5.7%**

- Member contributions increased by $113 million in fiscal 2016 as a result of increases in plan payroll and the member rate increasing to 13% from 12%, effective July 1, 2015. Employer contributions increased in line with the growth in plan payroll. Total member and employer contributions were $2.9 billion in fiscal 2016 compared to $2.7 billion in fiscal 2015.
- Other retirement systems' contributions decreased to $44 million in fiscal 2016 from $114 million in fiscal 2015.
- Administrative expenses increased 9.4% to $69.7 million for fiscal 2016. Excluding the impact of GASB 68 pension expense, administrative expenses actually decreased 0.4% for fiscal 2016. Investment expenses, which include salaries and benefits for investment personnel, decreased 1.3% to $38.3 million in fiscal 2016. External asset management fees increased to $199.7 million in fiscal 2016 from $182.4 million in fiscal 2015 due primarily to increased allocations to alternative investments. In fiscal 2015, administrative expenses increased 0.4% and investment expenses increased 20.5%, as compared to 2014.

Annual Financial Review

The total fund delivered a 0.92% rate of return in fiscal 2016. Real estate led all investment categories by generating a 13.47% return. Fixed income had a 5.62% return and alternative investments had a 1.60% return. Domestic equities returned 0.41% and international equities had a –7.11% return. The total fund annualized investment return for the past 10 fiscal years was 6.06%.

Historical additions to and deductions from fiduciary net position indicate a pattern of steadily increasing deductions compared to fluctuating additions due to investment volatility, as shown in the chart at the top of the page. Changes in contributions and benefits and administration for fiscal years ended June 30, 2016 and 2015, are shown in the tables to the left. Pension benefit payments and health care costs exceed member and employer contributions. STRS Ohio is dependent upon investment income to compensate for the difference between benefit payments and contributions.

Net position for post-employment health care decreased to $3.2 billion at June 30, 2016, from $3.4 billion at June 30, 2015. Premiums received from health care recipients in fiscal 2016 increased to $339.9 million from $306.6 million in fiscal 2015. Medicare Part D reimbursements of $58.8 million were received in fiscal 2016 to help offset prescription drug costs compared to $61.1 million in fiscal 2015. Health care coverage payments increased 0.7% from fiscal 2015. In fiscal 2015, health care premiums increased to $306.6 million from $277.5 million. Health care coverage payments increased 6.9% from fiscal 2014.

Overview of the Financial Statements of STRS Ohio

The basic financial statements are the *Statements of Fiduciary Net Position* and the *Statements of Changes in Fiduciary Net Position*. Amounts are shown for the most recent and previous fiscal years for comparison and analysis of changes in individual line items. The statements are prepared in conformity with generally accepted accounting principles.

The *Statements of Fiduciary Net Position* are a measure of STRS Ohio's assets and liabilities at the close of the fiscal year. Total assets less current liabilities equals net position held in trust for future benefits.

The *Statements of Changes in Fiduciary Net Position* show additions and deductions for the fiscal year as well as any restatements of prior year net position. The net increase (or decrease) is the change in net position available for benefits since the end of the previous fiscal year as restated.

For financial reporting purposes, STRS Ohio assets are divided into three primary funds: the Defined Benefit (DB) Plan, the Defined Contribution (DC) Plan and Post-employment Health Care.

- The Defined Benefit Plan is the largest fund and includes member contributions, employer contributions and investment earnings for DB participants. The DB Plan pays service retirement benefits using a fixed formula based on age, years of service and salary. In addition to service retirement, DB participants are eligible for disability and survivor benefits.
- The Defined Contribution Plan began on July 1, 2001. It is an optional plan available to new members. DC participants allocate both member and employer contributions in investment choices provided by STRS Ohio. Benefits are based on the member's account value.

  As an alternative to the Defined Benefit or Defined Contribution Plan, new members may elect the Combined Plan. Combined Plan participants allocate their member contributions among the same investment choices as DC members, and employer contributions are used to provide a reduced formula service retirement benefit along with disability and survivor protection. Assets to provide benefits to Combined Plan members are divided between the Defined Benefit Plan and the Defined Contribution Plan.
- Net position for post-employment health care consists of funds set aside to subsidize optional health care coverage for members enrolled in the Defined Benefit and Combined Plans.

The *Notes to Financial Statements* are a fundamental part of the financial statements and provide important information to augment the figures in the financial statements. The notes describe accounting policies along with plan membership and benefits. Supplementary disclosures of selected financial data are included in the notes.

In addition to the basic financial statements and footnotes, a *Schedule of Changes in Employers' Net Pension Liability*, *Schedule of Employers' Net Pension Liability, Schedule of Employers' Contributions* and *Schedule of Investment Returns* are included as "required supplementary information." These schedules emphasize the long-term nature of pension plans and the status of STRS Ohio in accumulating sufficient assets to pay benefits when due. They also provide a history of contributions from employers and actuarial assumptions and methods that assist in understanding the net pension liability of STRS Ohio.

The *Notes to Required Supplementary Information* provide the actuarial method and assumptions used to determine the data in the *Schedule of Changes in Employers' Net Pension Liability,* the *Schedule of Employers' Net Pension Liability* and the *Schedule of Employers' Contributions*.

A separate *Schedule of Health Care Funding Progress*, *Schedule of Employer Contributions Related to Health Care* and *Notes to Health Care Trend Data* are included as required by GASB Statement No. 43, *Financial Reporting for Postemployment Benefit*

Investment Performance
(total returns, annualized on a fiscal-year basis, July 1–June 30)

1-Year Returns (2016)[1]

Asset Category	STRS Ohio Return	Index Name	Index Return
Domestic Equities	0.41%	Russell 3000	2.14%
International Equities	–7.11%	International Blended Benchmark[3]	–9.85%
Fixed Income	5.62%	Barclays U.S. Universal Index	5.82%
Real Estate	13.47%	Real Estate Blended Benchmark[4]	12.59%
Alternative Investments	1.60%	Alternative Investments Blended Relative Return Objective[5]	–
Total Fund	**0.92%**	**Total Fund Blended Benchmark[6]**	**0.67%**

5-Year Returns (2012–2016)[1]

Asset Category	STRS Ohio Return	Index Name	Index Return
Domestic Equities	10.77%	Russell 3000	11.60%
International Equities	3.62%	International Blended Benchmark[3]	2.20%
Fixed Income	4.12%	Barclays U.S. Universal Index	4.01%
Real Estate	13.33%	Real Estate Blended Benchmark[4]	11.84%
Alternative Investments	9.23%	Alternative Investments Blended Relative Return Objective[5]	11.89%
Total Fund	**7.66%**	**Total Fund Blended Benchmark[6]**	**7.69%**

STRS Ohio Long-Term Policy Objective (10 Years)[2]

Total Fund: 7.6%

Investment performance is calculated using a time-weighted rate of return.

[1]The one-year returns for the fiscal years ended June 30, 2008, through 2016, have been examined by ACA Performance Services LLC. A copy of the examination report is available upon request.

[2]The long-term policy objective is a projected annualized policy return based on return forecasts by asset class before any value added. The State Teachers Retirement Board expects the net value added to be 0.40% per year.

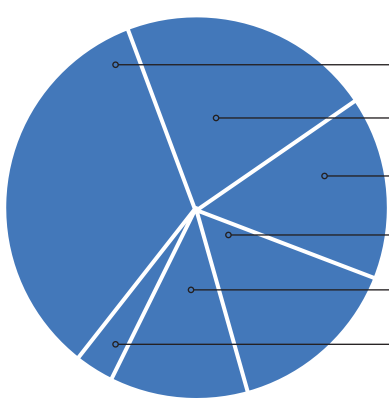
[3]The International Blended Benchmark is calculated monthly using 80% of the MSCI World ex-U.S. 50% Hedged Index-Net and 20% of the MSCI Emerging Markets Index-Net effective Jan. 1, 2014. Prior to Jan. 1, 2014, the MSCI Emerging Markets Index was the Gross return.

[4]The Real Estate Blended Benchmark is calculated quarterly using 85% NCREIF Property Index (NPI) and 15% FTSE NAREIT Equity REITs Index effective July 1, 2012; 85% NPI and 15% Wilshire REIT Index effective Oct. 1, 2007.

[5]Given the long-term nature of the asset class, no relative return objective for Alternative Investments is displayed for the one-year period. For the longer five-year period, the Alternative Investments Blended Relative Return Objective is a blend of two relative return objectives for Private Equity (PE) and Opportunistic/Diversified (OD) and is calculated using: 50.0% of the Russell 3000 Index plus 1% for PE and 50.0% of the Russell 3000 Index minus 1% for OD effective Jan. 1, 2014; 53.8% of the Russell 3000 Index plus 1% for PE and 46.2% of the Russell 3000 Index minus 1% for OD effective July 1, 2013; 54.5% of the Russell 3000 Index plus 1% for PE and 45.5% of the Russell 3000 Index minus 1% for OD effective Jan. 1, 2013; 50.0% of the Russell 3000 Index plus 1% for PE and 50.0% of the Russell 3000 Index minus 1% for OD effective July 1, 2012; 55.6% of the Russell 3000 Index plus 3% for PE and 44.4% of the Russell 3000 Index minus 1% for OD effective July 1, 2011.

[6]The Total Fund Blended Benchmark is calculated and rebalanced monthly using a blend of the asset class benchmarks based on the Total Fund's policy weights in effect during the respective period. For alternative investments, however, the actual Alternative Investments return is used in the calculation of the Total Fund Blended Benchmark. Information concerning asset class benchmarks and policy weights is available upon request.

Investment Distribution by Fair Value — as of June 30, 2016
(dollar amounts in thousands)



Domestic Equities:	$ 21,605,090	30.0%
International Equities:	$ 17,374,647	24.1%
Fixed Income:	$ 11,405,844	15.8%
Real Estate:	$ 10,384,350	14.4%
Alternative Investments:	$ 10,019,630	13.9%
Short-Term Investments:	$ 1,286,432	1.8%
Total Investments:	**$72,075,993**	

Plans Other Than Pension Plans. The health care information shows the status of STRS Ohio in accumulating sufficient assets to pay health care coverage costs.

Schedules of Administrative Expenses, *Investment Expenses* and *Fees to External Asset Managers by Asset Class* are included to detail the administrative and investment costs to operate STRS Ohio.

Investment Allocation and Fiscal Year Performance

For fiscal 2016, the total fund rate of return was 0.92%. The relative benchmark for STRS Ohio returned 0.67%. The target allocations for fiscal 2016, were 1% liquidity reserves, 18% fixed income, 31% domestic equities, 26% international equities, 10% real estate and 14% alternative investments. Amounts actually invested in these categories at the end of June 2016 represent an investment over/underweight if different from the target allocation. Over/underweighting occurs as fair values change and as investment managers determine allocation entry and exit timing strategies. See Page 13 for detailed investment performance.

External asset management fees are shown separately in the *Statements of Changes in Fiduciary Net Position* as a reduction of investment income. Coupled with internal investment costs, the cost to manage investments was $238 million in 2016 and $221 million in 2015.

Financial Statement Analysis

The tables on Page 15 show condensed information from the *Statements of Fiduciary Net Position* and the *Statements of Changes in Fiduciary Net Position*.

Total net position decreased 5.8% in fiscal 2016 and 0.8% in fiscal 2015. The fluctuation of total net position for fiscal 2016 and 2015 was primarily due to benefit payments exceeding contributions and net investment income.

The net book value of fixed assets decreased from fiscal 2015 because depreciation expense in fiscal 2016 exceeded the fixed asset additions. The same was true from fiscal 2014 to fiscal 2015.

Total investment income decreased $3.5 billion in fiscal 2016 as compared to fiscal 2015. Total investment income for fiscal 2015 decreased $7.2 billion as compared to fiscal 2014.

Employer contributions increased 1.3% in fiscal 2016, which is consistent with the increase in employer payroll, and increased 2.0% in fiscal 2015. Member contributions increased 9.0% in fiscal 2016 and 5.5% in fiscal 2015. Member contribution rates increased to 13% of earned compensation in fiscal 2016 and employer rates remained at 14%. Member and employer rates were at 12% and 14%, respectively for fiscal 2015 and 11% and 14%, respectively for fiscal 2014.

Health care premiums helped offset some of the increases in health care costs. Of the $677.0 million paid to health care providers in fiscal 2016, health care enrollees paid $339.9 million through premium deductions. Health care enrollees were also responsible for additional health care costs paid through deductibles, coinsurance, copayments and other out-of-pocket expenditures. Government reimbursements of $58.8 million also helped offset health care costs. No employer contributions were allocated to the health care fund in fiscal 2016 and 2015. After investment income less administrative expenses, the remaining health care costs of $263.9 million were paid from accumulated net position held for post-employment health care. For fiscal 2015, benefit recipients contributed $306.6 million.

STRS Ohio was created to provide retirement, disability and survivor benefits to members and eligible beneficiaries. Expenditures include monthly payments to eligible recipients, refunds of contributions to members who terminate employment and administrative costs of operating STRS Ohio.

Total deductions from net position were $8.1 billion in fiscal 2016, a 5.7% increase over fiscal 2015. Total deductions from net position were $7.6 billion in fiscal 2015, a 2.8% increase over fiscal 2014. The largest deductions component is monthly benefit payments for service retirement, disability and survivor benefits. Total pension benefit payments increased 6.6% in fiscal 2016 and 2.2% in fiscal 2015. The fiscal 2016 percentage increase is a result of the large number of June 1, 2015, retirements — the impact of which was not fully recognized until fiscal 2016.

Health care costs increased 0.7% in 2016 and 6.9% in fiscal 2015.

Net Position (dollar amounts in thousands)

	2016	2015	2014	Amount Increase (Decrease) From 2015 to 2016	Amount Increase (Decrease) From 2014 to 2015
Cash and investments	$ 72,095,635	$ 76,238,691	$ 76,563,105	$ (4,143,056)	$ (324,414)
Receivables	847,871	1,436,519	980,084	(588,648)	456,435
Securities lending collateral	1,356,392	1,429,438	1,301,211	(73,046)	128,227
Capital assets	92,118	95,858	101,259	(3,740)	(5,401)
Total assets	74,392,016	79,200,506	78,945,659	(4,808,490)	254,847
Liabilities	3,922,980	4,373,391	3,525,605	(450,411)	847,786
Net position	**$ 70,469,036**	**$ 74,827,115**	**$ 75,420,054**	**$ (4,358,079)**	**$ (592,939)**

Additions to Net Position (dollar amounts in thousands)

	2016	2015	2014	Amount Increase (Decrease) From 2015 to 2016	Amount Increase (Decrease) From 2014 to 2015
Contributions:					
Member contributions	$ 1,372,033	$ 1,259,135	$ 1,193,808	$ 112,898	$ 65,327
Employer contributions	1,501,102	1,481,167	1,452,554	19,935	28,613
Health care premiums	339,927	306,569	277,477	33,358	29,092
Other	102,813	174,753	200,349	(71,940)	(25,596)
Total contributions	3,315,875	3,221,624	3,124,188	94,251	97,436
Net investment income	389,872	3,852,411	11,059,328	(3,462,539)	(7,206,917)
Total additions to net position	**$ 3,705,747**	**$ 7,074,035**	**$ 14,183,516**	**$(3,368,288)**	**$(7,109,481)**

Deductions From Net Position (dollar amounts in thousands)

	2016	2015	2014	Amount Increase (Decrease) From 2015 to 2016	Amount Increase (Decrease) From 2014 to 2015
Deductions:					
Benefit payments	$ 7,051,436	$ 6,613,941	$ 6,468,597	$ 437,495	$ 145,344
Health care coverage	676,993	672,615	629,465	4,378	43,150
Refunds to members	232,070	228,630	220,341	3,440	8,289
Administrative expenses	69,720	63,752	63,485	5,968	267
Other	33,607	48,291	36,079	(14,684)	12,212
Total deductions from net position	**$ 8,063,826**	**$ 7,627,229**	**$ 7,417,967**	**$ 436,597**	**$ 209,262**

Change in Net Position From Plan Additions and Deductions (dollar amounts in thousands)

	2016	2015	2014	Amount Increase (Decrease) From 2015 to 2016	Amount Increase (Decrease) From 2014 to 2015
Change in net position	**$ (4,358,079)**	**$ (553,194)**	**$ 6,765,549**	**$ (3,804,885)**	**$ (7,318,743)**

Funding Analysis

The unfunded actuarial accrued liability (UAAL) for STRS Ohio pension benefits was $30.6 billion as of July 1, 2016, up from $30.4 billion at July 1, 2015, and $29.5 billion at July 1, 2014. Market changes in investment assets are smoothed over a four-year period for valuation purposes, except that the actuarial value of assets shall not be less than 91% nor more than 109% of market value. Valuation assets ended fiscal 2016 at $70.1 billion, up from $68.7 billion at fiscal year end 2015 and $66.7 billion at fiscal year end 2014. The present value of promised benefits to current and future benefit recipients (the actuarial accrued liability) at fiscal 2016, 2015 and 2014 was $100.8 billion, $99.0 billion and $96.2 billion, respectively. The funded ratio, which is valuation assets divided by actuarial accrued liability, was 69.6% at July 1, 2016. At July 1, 2015, the funded ratio was 69.3%, the same as July 1, 2014. At July 1, 2016, the funding period was 26.6 years, down from 28.4 years at July 1, 2015. At July 1, 2014, the funding period was at 29.5 years.

Financial Reporting Valuation

The actuarial valuation for financial reporting emphasizes the obligation an employer incurs to employees through the employment-exchange process. The primary purpose of the valuation for financial reporting is to provide a consistent, standardized methodology that allows comparability of data and increased transparency of the pension liability across plans. To do so, GASB 67 requires a different approach for determining the reported net pension liability (NPL), as compared to the previously disclosed UAAL. Under GASB 67, the funded status is not presented in the notes or required supplementary information, reflecting GASB's conceptual shift in the measurement of the liability.

The UAAL mirrored the unfunded actuarial obligation calculated by STRS Ohio's external actuary for funding purposes and represented the excess of the actuarial accrued liability (AAL) over the actuarial value of assets (AVA). Under GASB 67, the UAAL has been replaced by the NPL, which represents the excess of the total pension liability over fiduciary net position.

A side-by-side comparison of the two calculations is as follows:

GASB 67 Accounting Method	Funding Method
Total Pension Liability	Actuarial Accrued Liability (AAL)
– Fiduciary Net Position	– Actuarial Value of Assets (AVA)
= Net Pension Liability (NPL)	= Unfunded Actuarial Accrued Liability (UAAL)

There are considerable differences between the two numbers. The UAAL is the method selected by the plan and used for funding purposes. The UAAL is determined using asset smoothing. The NPL is determined using fair value and is the method prescribed by GASB for accounting purposes.

Requests for Information

Questions about any information provided in this report should be addressed to:

State Teachers Retirement System of Ohio
ATTN: Chief Financial Officer
275 E. Broad St.
Columbus, OH 43215-3771

Statements of Fiduciary Net Position (in thousands)

	June 30, 2016				June 30, 2015			
	Defined Benefit	Defined Contribution	Post-employment Health Care	Totals	Defined Benefit	Defined Contribution	Post-employment Health Care	Totals
Assets:								
Cash and short-term investments	$ 1,135,000	$ 115,632	$ 55,442	$ 1,306,074	$ 1,641,529	$ 105,490	$ 81,430	$ 1,828,449
Receivables:								
Accrued interest and dividends	138,031		6,742	144,773	166,607		8,265	174,872
Employer contributions	286,684	63		286,747	270,963	75		271,038
Member contributions	186,751	317		187,068	167,171	173		167,344
Securities sold	193,147		9,435	202,582	776,512		38,520	815,032
Miscellaneous receivables	26,701			26,701	8,233			8,233
Total receivables	**831,314**	**380**	**16,177**	**847,871**	**1,389,486**	**248**	**46,785**	**1,436,519**
Investments, at fair value:								
Fixed income	10,676,184	208,151	521,509	11,405,844	13,910,533	170,128	690,050	14,770,711
Domestic equities	20,109,696	513,078	982,316	21,605,090	21,095,182	493,993	1,046,454	22,635,629
International equities	16,475,924	93,909	804,814	17,374,647	17,094,969	96,108	848,018	18,039,095
Real estate	9,803,324	102,155	478,871	10,384,350	8,842,203	78,966	438,629	9,359,798
Alternative investments	9,552,987		466,643	10,019,630	9,151,058		453,951	9,605,009
Total investments	**66,618,115**	**917,293**	**3,254,153**	**70,789,561**	**70,093,945**	**839,195**	**3,477,102**	**74,410,242**
Invested securities lending collateral	1,293,221		63,171	1,356,392	1,361,880		67,558	1,429,438
Fixed assets	244,884			244,884	241,859			241,859
Accumulated depreciation	(152,766)			(152,766)	(146,001)			(146,001)
Net fixed assets	92,118			92,118	95,858			95,858
Total assets	**69,969,768**	**1,033,305**	**3,388,943**	**74,392,016**	**74,582,698**	**944,933**	**3,672,875**	**79,200,506**
Liabilities:								
Securities purchased and other investment liabilities	213,438		10,426	223,864	1,005,505		49,879	1,055,384
Debt on real estate investments	2,116,125		103,368	2,219,493	1,707,560		84,706	1,792,266
Accrued expenses and other liabilities	29,540		1,443	30,983	29,734		1,477	31,211
Medical benefits payable			24,915	24,915			19,719	19,719
Obligations under securities lending program	1,293,061		63,163	1,356,224	1,361,885		67,558	1,429,443
Net pension liability	67,501			67,501	45,368			45,368
Total liabilities	**3,719,665**		**203,315**	**3,922,980**	**4,150,052**		**223,339**	**4,373,391**
Fiduciary net position restricted for defined benefit, defined contribution and post-employment health care coverage:	**$ 66,250,103**	**$ 1,033,305**	**$ 3,185,628**	**$ 70,469,036**	**$ 70,432,646**	**$ 944,933**	**$ 3,449,536**	**$ 74,827,115**

See accompanying Notes to Financial Statements.

Statements of Changes in Fiduciary Net Position (in thousands)

	Year Ended June 30, 2016				Year Ended June 30, 2015			
	Defined Benefit	Defined Contribution	Post-employment Health Care	Totals	Defined Benefit	Defined Contribution	Post-employment Health Care	Totals
Additions:								
Contributions:								
Member	$ 1,289,809	$ 82,224		$ 1,372,033	$ 1,188,062	$ 71,073		$ 1,259,135
Employer	1,466,938	34,164		1,501,102	1,449,165	32,002		1,481,167
Transfers between retirement plans	11,440	(11,440)			9,931	(9,931)		
Government reimbursements			$ 58,812	58,812			$ 61,127	61,127
Benefit recipient health care premiums			339,927	339,927			306,569	306,569
Other retirement systems	44,001			44,001	113,626			113,626
Total contributions	**2,812,188**	**104,948**	**398,739**	**3,315,875**	**2,760,784**	**93,144**	**367,696**	**3,221,624**
Income from investing activities:								
Net appreciation (depreciation) in fair value of investments	(895,212)	11,624	(42,090)	(925,678)	2,397,403	28,114	118,791	2,544,308
Interest	396,614	229	18,648	415,491	449,152	61	22,255	471,468
Dividends	859,331		40,404	899,735	761,726		37,743	799,469
Real estate income	215,604		10,137	225,741	235,574		11,673	247,247
Investment income	576,337	11,853	27,099	615,289	3,843,855	28,175	190,462	4,062,492
Less internal investment expenses	(36,051)	(549)	(1,695)	(38,295)	(36,522)	(481)	(1,810)	(38,813)
Less external asset management fees	(190,741)		(8,968)	(199,709)	(173,756)		(8,610)	(182,366)
Net income from investing activities	349,545	11,304	16,436	377,285	3,633,577	27,694	180,042	3,841,313
Securities lending income	13,357		628	13,985	11,749		582	12,331
Securities lending expenses	(1,335)		(63)	(1,398)	(1,175)		(58)	(1,233)
Net income from securities lending activities	12,022		565	12,587	10,574		524	11,098
Net investment income	361,567	11,304	17,001	389,872	3,644,151	27,694	180,566	3,852,411
Total additions	**3,173,755**	**116,252**	**415,740**	**3,705,747**	**6,404,935**	**120,838**	**548,262**	**7,074,035**
Deductions:								
Benefits:								
Service retirement	6,714,014			6,714,014	6,280,983			6,280,983
Disability benefits	212,614			212,614	211,425			211,425
Survivor benefits	124,808			124,808	121,533			121,533
Health care			676,993	676,993			672,615	672,615
Other	33,607			33,607	48,291			48,291
Total benefit payments	7,085,043		676,993	7,762,036	6,662,232		672,615	7,334,847
Refunds to members who have withdrawn	205,223	26,847		232,070	198,700	29,930		228,630
Administrative expenses	66,032	1,033	2,655	69,720	60,270	913	2,569	63,752
Total deductions	**7,356,298**	**27,880**	**679,648**	**8,063,826**	**6,921,202**	**30,843**	**675,184**	**7,627,229**
Net increase (decrease) in net position	**(4,182,543)**	**88,372**	**(263,908)**	**(4,358,079)**	**(516,267)**	**89,995**	**(126,922)**	**(553,194)**
Fiduciary net position restricted for defined benefit, defined contribution and post-employment health care coverage:								
Beginning of year	70,432,646	944,933	3,449,536	74,827,115	70,988,658	854,938	3,576,458	75,420,054
Prior period adjustment, GASB 68					(39,745)			(39,745)
Beginning of year, restated					70,948,913			75,380,309
End of year	**$ 66,250,103**	**$ 1,033,305**	**$ 3,185,628**	**$ 70,469,036**	**$ 70,432,646**	**$ 944,933**	**$ 3,449,536**	**$ 74,827,115**

See accompanying Notes to Financial Statements.

1. Summary of Significant Accounting Policies

The financial statements of the State Teachers Retirement System of Ohio (STRS Ohio) presented herein have been prepared on the accrual basis of accounting following the accounting policies set forth below.

Organization — STRS Ohio is a cost-sharing, multiple-employer plan that operates under Chapter 3307 of the Ohio Revised Code (Revised Code) and is administered by a board comprised of 11 members as follows: five elected contributing members; two elected retired teacher members; an investment expert appointed by the governor; an investment expert appointed jointly by the speaker of the Ohio House of Representatives and the Ohio Senate President; an investment expert designated by the treasurer of state; and the superintendent of public instruction or his or her designated investment expert.

The accompanying financial statements comply with the provisions of the Governmental Accounting Standards Board (GASB) Statement No. 39, an amendment of GASB Statement No. 14, *The Financial Reporting Entity*. This statement requires that financial statements of the reporting entity include all of the organizations, activities, functions and component units for which the reporting entity is financially accountable. Financial accountability is defined as the appointment of a voting majority of the component unit's board and either (1) the reporting entity's ability to impose its will over the component unit, or (2) the possibility that the component unit will provide a financial benefit to or impose a financial burden on the reporting entity. STRS Ohio does not have financial accountability over any entities.

Investment Accounting — Purchases and sales of investments are recorded as of their trade date. Dividend income is recognized on the ex-dividend date. Interest and rental income is recognized as the income is earned. Investment expenses associated with external asset management are reported if they are separable from investment income and the administrative expenses of the plan.

STRS Ohio has no individual investment that exceeds 5% of net position available for benefits.

Contributions and Benefits — Employer and member contributions are recognized when due based on statutory or contractual requirements. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

Fixed Assets — Fixed assets are recorded at historical cost. Depreciation is provided on a straight-line basis over estimated useful lives of five to 10 years for equipment and 40 years for building and building improvements. Fixed assets include purchases of $5,000 or more with a useful life of at least five years. Intangible assets, such as internally developed software, are capitalized in accordance with GASB Statement No. 51 and STRS Ohio's capital asset policy.

Method Used to Value Investments — Investments are reported at fair value. Short-term investments, with maturities less than one year, are reported at amortized cost, which approximates fair value. Securities traded on a national or international exchange are valued at the last reported sales price at the then current exchange rates. Fixed-income investments are valued based on their coupon rate relative to the coupon rate for similar securities. The fair value of real estate investments is based on independent appraisals and internal valuations. The fair value of alternative investments is determined by the alternative investment partnership based on the valuation methodology outlined in the partnership agreement.

Federal Income Tax Status — Under Section 401(a) of the Internal Revenue Code, STRS Ohio is exempt from federal income taxes.

Use of Estimates — In preparing financial statements in conformity with accounting principles generally accepted in the United States of America, management makes 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, as well as the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates and assumptions.

New Accounting Pronouncements — GASB Statement No. 68, *Accounting and Financial Reporting for Pensions,* requires participating employers in STRS Ohio to record a net pension liability based on their proportionate share of STRS Ohio's total net pension liability. Likewise, STRS Ohio is required to record a proportionate share of the Ohio Public Employees Retirement System's total net pension liability.

STRS Ohio adopted GASB Statement No. 68 effective July 1, 2014, resulting in a restatement of the beginning net position restricted for defined benefits as of July 1, 2014, of $(39,745,000). The purpose of the restatement was to record the beginning net pension liability of $(43,626,000) and the beginning deferred outflows of resources for contributions subsequent to the measurement date of $3,881,000.

GASB Statement No. 72, *Fair Value Measurement and Application*, is effective for periods beginning after June 15, 2015. The statement addresses accounting and financial reporting related to fair value measurements of financial assets and liabilities. The statement establishes a fair value hierarchy based on inputs and valuation techniques and requires disclosures to be made about fair value measurements, valuation techniques, and the level of most investments within the fair value hierarchy. STRS Ohio adopted GASB Statement No. 72 effective July 1, 2015. Since the current practice is to value investments at fair value, the financial statement impact of the adoption was minimal except for the expanded disclosures presented in Note 5.

2. Description of the STRS Ohio Plan

Plan Membership — STRS Ohio is a statewide retirement plan for licensed teachers and other faculty members employed in the public schools of Ohio (the state) or any school, college, university, institution or other agency controlled, managed and supported, in whole or part, by the state or any political subdivision thereof.

See tables below for member and retiree data and participating employers.

Member and Retiree Data at July 1, 2016 and 2015

	2016	2015
Current active members	169,212	164,925
Inactive members eligible for refunds only	135,738	135,215
Terminated members entitled to receive a benefit in the future	17,627	17,453
Retirees and beneficiaries currently receiving a benefit	157,938	158,116
Defined Contribution Plan members	9,182	8,795
Reemployed retirees	26,228	24,806
Total Plan Membership	**515,925**	**509,310**

Participating Employers at June 30, 2016 and 2015

	2016	2015
City school districts	194	194
Local school districts	369	370
County educational service centers	52	53
Exempted village school districts	49	49
Joint vocational schools	49	49
Colleges and universities	36	36
County boards of developmental disabilities	62	64
Community schools	329	337
State of Ohio	1	1
Other	11	11
Total	**1,152**	**1,164**

Active members are defined as participants who earned 0.25 years of service credit or more in the valuation year and those employed on or after Jan. 1, with less than 0.25 years of service credit.

Plan Options — New members have a choice of three retirement plan options. In addition to the Defined Benefit (DB) Plan, new members are offered a Defined Contribution (DC) Plan or a Combined Plan. The DC Plan allows members to allocate all their member contributions and employer contributions equal to 9.5% of earned compensation among various investment choices. The Combined Plan offers features of the DC Plan and the DB Plan. In the Combined Plan, member contributions less 1.5% of earned compensation are allocated among investment choices by the member. Effective July 1, 2016, 2% of earned compensation is applied to the defined benefit portion of the participant's account. Employer contributions and a portion of member contributions in the Combined Plan are used to fund a defined benefit payment at a reduced level from the regular DB Plan. Contributions into the DC Plan and the Combined Plan are credited to member accounts as employers submit their payroll information to STRS Ohio, generally on a biweekly basis.

DB Plan Benefits — Plan benefits are established under Chapter 3307 of the Revised Code. Any member may retire who has (1) five years of service credit and age 60; (2) 26 years of service credit and age 55; or (3) 31 years of service credit regardless of age. Eligibility changes will be phased in until Aug. 1, 2026, when retirement eligibility for unreduced benefits will be five years of service credit and age 65, or 35 years of service credit and at least age 60. Retirement eligibility for reduced benefits will be five years of service credit and age 60, or 30 years of service credit regardless of age.

The annual retirement allowance, payable for life, is based on the average of the member's five highest years of earnings multiplied by 2.2% for each year of credited service. For July 1, 2015 and earlier, the annual allowance is determined by multiplying final average salary (average of three highest years of earnings) by 2.2% for the first 30 years of credited service. Each year over 30 years is incrementally increased by 0.1%, starting at 2.5% for the 31st year of contributing service up to a maximum allowance of 100% of final average salary. Upon reaching 35 years of Ohio service, the first 31 years of Ohio contributing service are multiplied by 2.5%, and each year over 31 years is incrementally increased by .1% starting at 2.6% for the 32nd year. Members retiring before age 65 with less than 30 years of service credit receive a percentage reduction in benefit amounts.

For members who are eligible to retire on July 1, 2015, the annual benefit is the greater of the benefit amount calculated upon retirement under the new benefit formula or the frozen benefit amount as of July 1, 2015.

Since the plan is tax-qualified, benefits are subject to limits established by Section 415 of the Internal Revenue Code.

A retiree of STRS Ohio or another Ohio public retirement system is eligible for reemployment as a teacher following the elapse of two months from the date of retirement. Contributions are made by the reemployed member and employer during the reemployment. Upon termination of reemployment or age 65, whichever comes later, the retiree is eligible for an annuity benefit or equivalent lump-sum payment in addition to the original retirement allowance. A reemployed retiree may alternatively receive a refund of member contributions with interest before age 65, once employment is terminated.

In September 2012, the Ohio General Assembly passed and the Governor signed into law Substitute Senate Bill 342. The legislation improves pension funding of the STRS Ohio defined benefit plan.

The legislative changes that improve funding to STRS Ohio's defined benefit plan are: increasing age and service requirements for retirement; pensions calculated on a lower, fixed formula; increasing the period for determining final average salary, increasing member contributions to the retirement system; reducing the cost-of-living adjustment (COLA); eliminating the COLA for fiscal year 2014; and deferring the COLA for future retirees. The law also provides the Retirement Board with authority to make future adjustments to the member contribution rate, retirement age and service requirements, and the COLA as the need or opportunity arises, depending on the retirement system's funding progress.

DC Plan Benefits — Benefits are established under Chapter 3307.80 to 3307.89 of the Revised Code.

For members who select the DC Plan, all member contributions and employer contributions at a rate of 9.5% are placed in an investment account. The member determines how to allocate the member and employer money among various investment choices offered by STRS Ohio. The member receives a quarterly statement of his or her account activity and balance. The remaining 4.5% of the 14.0% employer rate is allocated to the defined benefit unfunded liability.

A member is eligible to receive a retirement benefit at age 50 and termination of employment. The member may elect to receive a lifetime monthly annuity or a lump-sum withdrawal. Employer contributions into member accounts are vested after the first anniversary of the first day of paid service. Members vest 20% per year in employer contributions and all gains and losses on those contributions.

Members in the DC Plan who become disabled are entitled only to their account balance. If a member dies before retirement benefits begin, the member's designated beneficiary is entitled to receive the member's account balance.

Combined Plan — For members who select the Combined Plan, 11.5% of the 13% member contribution rate in fiscal 2016 and 11% of the 12% member contribution rate in fiscal 2015 was deposited into the member's defined contribution account and the remaining amount applied to the DB Plan. In the Combined Plan, member contributions are allocated among investment choices by the member, and employer contributions are used to fund a defined benefit payment.

A member's defined benefit is determined by multiplying 1% of the member's final average salary by the member's years of service credit. The defined benefit portion of the Combined Plan payment is payable to a member on or after age 60 with five years of service. The DC portion of the account may be taken as a lump sum or converted to a lifetime monthly annuity.

DC and Combined Plan members must actively select the Defined Benefit Plan during their fifth year of membership or their original selection is maintained. During fiscal 2016, $11.4 million was transferred from the DC and Combined Plan accounts to the Defined Benefit Plan. During fiscal 2015, $9.9 million was transferred from the DC and Combined Plan accounts to the Defined Benefit Plan.

Death, Survivor and Disability Benefits — A Defined Benefit Plan or Combined Plan member with five or more years of credited service who is determined to be disabled (illness or injury preventing individual's ability to perform regular job duties for at least 12 months) may receive a disability benefit. Additionally, eligible survivors of members who die before service retirement may qualify for monthly benefits. New members on or after July 1, 2013, must have at least 10 years of qualifying service credit to apply for disability benefits.

A death benefit of $1,000 is payable to the beneficiary of each deceased retired member who participated in the Defined Benefit Plan. Death benefit coverage up to $2,000 can be purchased by participants in the DB, DC or Combined Plans. Various other benefits are available to members' beneficiaries.

Health Care Coverage After Retirement — Ohio law authorizes the State Teachers Retirement Board to offer a cost-sharing, multiple-employer health care plan. STRS Ohio provides access to health care coverage to eligible retirees who participated in the Defined Benefit or Combined Plans and their eligible dependents.

Coverage under the current program includes hospitalization, physicians' fees, prescription drugs and reimbursement of monthly Medicare Part B premiums. Pursuant to the Ohio Revised Code, the Retirement Board has discretionary authority over how much, if any, of the associated health care costs will be absorbed by the plan. All benefit recipients pay a portion of the health care costs in the form of a monthly premium. Benefit recipients contributed $339.9 million or 50% of the total health care costs in fiscal 2016 (excluding deductibles, coinsurance and copayments). For the year ended June 30, 2015, benefit recipients contributed $306.6 million or 46% of the total health care costs.

Under Ohio law, funds to pay health care costs may be deducted from employer contributions, currently 14% of compensation. For fiscal years 2016 and 2015, no employer allocation was made to health care.

Medicare Part D is a federal program to help cover the costs of prescription drugs for Medicare beneficiaries. This program allows STRS Ohio to recover part of the cost for providing prescription coverage since all eligible STRS Ohio health care plans include creditable prescription drug coverage. For the years ended June 30, 2016 and 2015, STRS Ohio received $58.8 million and $61.1 million in Medicare Part D reimbursements, respectively.

Pension and post-employment health care assets are commingled for investment purposes. Consequently, amounts reported for individual asset classes are allocated between pension and post-employment health care based upon ending net position.

Key Methods and Assumptions Used in Health Care Actuarial Valuation

Valuation date	Jan. 1, 2016
Actuarial cost method	Entry age
Amortization method	Level percentage, open
Amortization period	30 years
Asset valuation method	Fair market value
Actuarial assumptions:	
Investment rate of return	6.9%
Projected salary increases	Varies by age from 2.75%–12.25%
Payroll increase	3.50% through 2018; 4.00% thereafter
Inflation assumption	2.75%
Cost-of-living adjustment	N/A
Trend rate	6.4%–11.0% initial; 5% ultimate

Defined Benefit Net Pension Liability of Participating Employers — The components of the net pension liability of the participating employers as of June 30, 2016 and 2015, was as follows:

Net Pension Liability at June 30, 2016 and 2015
(dollar amounts in thousands)

	2016	2015
Total Pension Liability for STRS Ohio	$ 100,756,422	$ 99,014,654
Fiduciary Net Position	(67,283,408)	(71,377,579)
Net Pension Liability	$ 33,473,014	$ 27,637,075
Ratio of Fiduciary Net Position to the Total Pension Liability	66.8%	72.1%

The total pension liability was determined by an actuarial valuation as of July 1, 2016 and 2015, using actuarial assumptions related to inflation (2.75%), investment rate of return (7.75%), and cost-of-living adjustments (2%). Projected salary increases range from 2.75% at age 70 to 12.25% at age 20.

STRS Ohio's investment consultant develops an estimate range for the investment return assumption based on the target allocation adopted by the Retirement Board. The target allocation and long-term expected rate of return for each major asset class are summarized as follows:

Asset Class	Target Allocation	Long-term Expected Rate of Return*
Domestic Equity	31%	8.00%
International Equity	26%	7.85%
Alternatives	14%	8.00%
Fixed Income	18%	3.75%
Real Estate	10%	6.75%
Liquidity Reserves	1%	3.00%
Total Fund	**100%**	**7.61%**

*10-year annualized geometric nominal returns, which include the real rate of return and inflation of 2.50% and does not include investment expenses. The total fund long-term expected return reflects diversification among the asset classes and therefore is not a weighted average return of the individual asset classes.

Discount Rate — The discount rate used to measure the total pension liability was 7.75%. The projection of cash flows used to determine the discount rate assumes that employer and member contributions will be made at statutory contribution rates in accordance with the rate increases as discussed in the Management's Discussion and Analysis section. For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included.

Projected employer contributions that are intended to fund the service costs of future plan members and their beneficiaries, as well as projected contributions of future plan members, are excluded. In each period of the projection, employer contributions are assumed to first be applied to the service cost of all members, with any remaining amount included in projected employer contributions for current members. Based on those assumptions, STRS Ohio's fiduciary net position was projected to be available to make all projected future benefit payments to current plan members as of June 30, 2016 and 2015. Therefore, the long-term expected rate of return on pension plan investments of 7.75% was applied to all periods of projected benefit payments to determine the total pension liability as of June 30, 2016 and 2015.

Sensitivity of the Net Pension Liability to the Discount Rate Assumption — The following represents the net pension liability as of June 30, 2016, calculated using the current period discount rate assumption of 7.75%, as well as what the net pension liability would be if it were calculated using a discount rate that is one percentage point lower (6.75%) or one percentage point higher (8.75%) than the current assumption:

Net Pension Liability (in thousands)

	1% Decrease (6.75%)	Current Assumption (7.75%)	1% Increase (8.75%)
June 30, 2016	$44,482,916	$33,473,014	$24,185,513

Mortality Rates — Rates are based on the RP-2000 Combined Mortality Table (Projection 2022–Scale AA) for Males and Females. Males' ages are set back two years through age 89 and no set back for age 90 and above. Females younger than age 80 are set back four years, one year set back from age 80 through 89 and no set back from age 90 and above.

Experience Studies — The actuarial assumptions used in the June 30, 2016 and 2015, valuations are based on the results of an actuarial experience study dated July 1, 2012.

Health Care Plan Funding Progress — The actuarial assumptions and methods used in the health care valuation were selected in compliance with the parameters established under GASB Statement No. 43. As noted previously, health care plan net assets are commingled with pension plan net position for investment purposes.

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality and health care cost trends. Actuarially determined amounts are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

The schedule of employer contributions shown below presents information about the amounts contributed to the plan by employers in comparison to the annual required contribution (ARC), an amount that is actuarially determined in accordance with parameters of GASB Statement No. 43. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost for each year and amortize any unfunded actuarial liabilities over a period not to exceed 30 years.

Health Care Employer Contributions
(dollar amounts in thousands)

Year Ended June 30	Annual Required Contribution	Percent Contributed
2014	$129,796	76%
2015	$127,810	0%
2016	**$165,136**	**0%**

The funded status and funding progress of the health care plan requires an actuarial valuation.

The funded status and funding progress of the health care plan as of Jan. 1, 2016, and the preceding two years is as follows:

Schedule of Health Care Plan Funding Progress
(dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability (UAAL)	Funded Ratio	Covered Payroll	UAAL as Percentage of Covered Payroll
Jan. 1, 2014	$3,471,886	$4,664,445	$1,192,559	74.4%	$9,972,923	12.0%
Jan. 1, 2015	$3,454,371	$4,676,223	$1,221,852	73.9%	$10,004,290	12.2%
Jan. 1, 2016	**$3,258,197**	**$5,154,231**	**$1,896,034**	**63.2%**	**$10,268,859**	**18.5%**

The schedule of funding progress presents multi-year trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the actuarial accrued liabilities for benefits. A more detailed schedule of funding progress for the health care plan is presented on Page 36.

Refunds — Withdrawal cancels a member's rights and benefits in STRS Ohio.

Upon termination of employment, a Defined Benefit Plan member may withdraw accumulated contributions made to STRS Ohio. Refunds of member contributions may include interest and 50% matching payments.

A Combined Plan member is eligible for the present value of future benefits from the defined benefit portion of the account if he or she terminates employment after at least five years of service. For the defined contribution portion of the account, the refund consists of member contributions plus any investment gains or losses on those contributions.

Defined Contribution Plan members receive their contributions plus any investment gains or losses until they have completed one year of membership. After one year of membership, members receive the balance in their accounts, including employer contributions and related gains or losses.

Alternative Retirement Plan — Eligible faculty of Ohio's public colleges and universities may choose to enroll in either STRS Ohio or an alternative retirement plan (ARP) offered by their employer.

Employees have 120 days from their date of hire to select a retirement plan.

For employees who elect an ARP, employers are required to remit employer contributions to STRS Ohio at a rate of 4.5% of payroll. For the years ended June 30, 2016 and 2015, the ARP participant payroll totaled $672.0 million and $631.8 million, respectively.

Administrative Expenses — The costs of administering the Defined Benefit and post-employment health care plans are financed by investment income. The administrative costs of the Defined Contribution Plan are financed by participant fees.

3. Contribution Requirements and Reserves

Employer and member contribution rates are established by the Retirement Board and limited by Chapter 3307 of the Revised Code. Through June 30, 2013, the member rate was 10% and the employer rate was 14% of covered payroll. Effective July 1, 2013, the member contribution rate increased to 11%; effective July 1, 2014, the member contribution rate increased to 12%; effective July 1, 2015, the member contribution rate increased to 13%; and effective July 1, 2016, the member contribution rate increased to 14% of covered payroll.

Various funds are established under the Revised Code to account for contributions, reserves, income and administrative expenses.

The Teachers' Savings Fund (TSF) is used to accumulate member contributions in trust.

The Employers' Trust Fund (ETF) is used to accumulate employer contributions in trust. The ETF includes assets allocated to post-employment health care from which payments for health care coverage are made.

Investment fair value changes for the Defined Benefit Plan and the health care program from year-to-year are recorded in the ETF.

The Annuity and Pension Reserve Fund (APRF) is the fund from which all annuities and pension payments to retired members are made. Reserves are transferred to this fund from the TSF and ETF funds at the time of retirement.

The Survivors' Benefit Fund is the fund from which all survivor benefit payments are made for which reserves have been transferred from the TSF and the ETF.

The Defined Contribution Fund accumulates DC member and employer contributions, Combined Plan member contributions, investment earnings and DC plan expenses.

The Guarantee Fund is used to accumulate income derived from gifts, bequests and investments for the year.

The Expense Fund is the fund from which all expenses for the administration and management of STRS Ohio are paid each year.

After interest is allocated to the various funds, the Guarantee Fund and the Expense Fund are closed into the ETF at year-end.

At June 30, 2016 and 2015, STRS Ohio's net position was included in the various funds as shown in the table below.

Fund Balances (in thousands)

	June 30, 2016	June 30, 2015
Teachers' Savings Fund	$ 12,498,469	$ 11,473,309
Employers' Trust Fund	(17,345,330)	(11,931,826)
Annuity and Pension Reserve Fund	73,126,032	73,191,601
Survivors' Benefit Fund	1,156,560	1,149,098
Defined Contribution Fund	1,033,305	944,933
Total	$ 70,469,036	$ 74,827,115

4. Commitments and Contingencies

STRS Ohio has made commitments to fund various real estate investments totaling $884,733,000 as of June 30, 2016. The commitments as of June 30, 2016, have expected funding dates from August 2016 to September 2020.

STRS Ohio has made commitments to fund various alternative investments totaling $5,088,248,000 as of June 30, 2016. The expected funding dates for the commitments as of June 30, 2016, range from July 2016 to June 2022.

STRS Ohio is a party in various legal actions. While the final outcome cannot be determined at this time, management is of the opinion that the liability, if any, for these legal actions will not have a material adverse effect on fiduciary net position.

5. Fair Value Measurement

STRS Ohio's investments measured and reported at fair value are classified according to the following hierarchy:

Level 1: Level 1 inputs are quoted prices in active markets such as exchange markets.

Level 2: Level 2 inputs are prices that are observable either directly or indirectly. Level 2 inputs may include quoted prices in markets that are not considered active or inputs other than quoted prices that are observable such as interest rates, yield curves, implied volatilities, credit spreads or market-corroborated inputs.

Level 3: Level 3 inputs are prices based on unobservable sources. Level 3 inputs include the best information available under the circumstances, which can include the government's own data and takes into account all information about market participant assumptions.

The assignment of Levels, within the hierarchy, is based on the type or class of investment and the pricing transparency of the investment. Assets classified as Level 1 are valued directly from a primary external pricing vendor. Assets classified as Level 2 are priced using an alternative independent pricing source or a pricing model that uses observable inputs in conjunction with trade information. Assets classified in Level 3 are cases where there is limited activity or a lack of an independent pricing source.

Investments and Short-Term Holdings Measured at Fair Value at June 30, 2016 (in thousands)

		Fair Value Measurements Using:		
	June 30, 2016	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by fair value level:				
Short-term				
U.S. Treasury bills	$ 1,273,432		$ 1,273,432	
Short-term investment funds	13,000		13,000	
Fixed income				
U.S. government agency obligations	234,984		234,984	
Corporate bonds	3,910,519		3,910,519	
High yield and emerging markets	1,712,166		1,712,166	
Mortgages and asset-backed	2,635,719		2,635,719	
U.S. government obligations	2,912,648		2,912,648	
Domestic				
Common and preferred stock	21,606,419	$ 21,606,419		
International				
Foreign stock	15,666,360	15,156,242	510,118	
Foreign equity index funds	1,610,886		1,610,886	
Real estate				
Direct real estate assets	8,028,181			$ 8,028,181
REITs	1,266,135	1,266,135		
Alternative investments				
Foreign stock held in alternative investments	129,533	129,533		
Domestic stock held in alternative investments	17,981	17,981		
Opportunistic diversified	1,304,411	509,707		794,704
Total investments by fair value level	**62,322,374**	**38,686,017**	**14,813,472**	**8,822,885**
Investments measured at net asset value (NAV):				
Real estate				
Commingled real estate fund	108,916			
Real estate funds	981,118			
Alternative investments				
Hedge funds	2,011,093			
Private equity	4,508,002			
Opportunistic diversified	2,050,028			
Total investments measured at NAV	**9,659,157**			
Investment derivatives:				
Options	(3,282)	(1,864)	(1,418)	
Rights and warrants	1,929			1,929
Foreign currency forwards	89,065		89,065	
Credit default swaps	(343)		(343)	
Equity swaps	7,093		7,093	
Total investment derivatives	**94,462**	**(1,864)**	**94,397**	**1,929**
Total investments	**$ 72,075,993**			

Investments Measured at the Net Asset Value (NAV) (in thousands)

	June 30, 2016	Unfunded Commitment	Redemption Frequency (if Currently Eligible)	Redemption Notice Period
Commingled real estate fund total[1]	$ 108,916		Quarterly	60 days
Real estate funds total[2]	981,118	$ 641,529		
Hedge funds				
Credit/Distressed[3]	760,091		Quarterly, semiannually, annually	60–90 days
Equity long/short[4]	112,167		Quarterly	60 days
Event driven[5]	132,116		Quarterly	65 days
Macro[6]	313,792		Quarterly	60 days
Market neutral[7]	112,301		Quarterly	60 days
Multi-strategy[8]	580,626		Quarterly, annually	60–95 days
Hedge funds total	2,011,093			
Private equity total[9]	4,508,002	2,773,243	N/A	N/A
Opportunistic diversified total[10]	2,050,028	2,315,005	N/A	N/A
Total investments measured at NAV	$ 9,659,157			

[1]**Commingled real estate fund total** — Consisting of one domestic real estate investment fund considered to be commingled in nature. The fund is valued at the net asset value, at the end of the period, based upon the fair value of the underlying assets.

[2]**Real estate funds total** — Consisting of 35 opportunistic and international funds which invest in markets throughout the globe. The primary strategy of these funds is to invest in mispriced, mismanaged and distressed assets with the goal of repositioning the asset as a core investment for sale to institutional investors within a 3–5 year holding period. These funds are not eligible for redemption. The fair value of these funds is determined using net assets valued one quarter in arrears plus current cash flows.

[3]**Credit/Distressed** — Consisting of four funds, this strategy invests both long and short in securities of companies that have been, or are expected to be, in potential restructuring situations, as well as US and global credit securities with the goal of generating excess yield relative to traditional credit instruments. These investments are valued at NAV per share. Due to contractual gating restrictions, 70% of the value of these investments is eligible for redemption in the next six months. The remaining 30% of the value of these investments remain restricted up to 14 months.

[4]**Equity long/short** — Consisting of one fund, this strategy invests both long and short in U.S. and global equity securities, with the goal of adding growth and minimizing market exposure. This investment is valued at NAV per share. 100% of this investment is eligible for redemption within the next six months.

[5]**Event driven** — Consisting of one fund, this strategy seeks to gain an advantage from pricing inefficiences that may occur in the onset or aftermath of a corporate action or related event. This investment is valued at NAV per share. 100% of this investment is eligible for redemption within the next six months.

[6]**Macro** — Consisting of one fund, this strategy invests in interest rate, currency, commodity, and equity securities in anticipation of price movements in the global capital markets with the goal of generating returns uncorrelated with the broader markets. This investment is valued at NAV per share. Due to contractual gating restrictions, 50% of the value of this investment is eligible for redemption in the next six months. The remaining 50% of the value of this investment remains restricted up to 14 months.

[7]**Market neutral** — Consisting of one fund, this strategy invests primarily in derivative instruments with the goal of benefitting from changes in the level of volatility across different asset classes and generating returns uncorrelated to the broader markets. This investment is valued at NAV per share. 100% of this investment is eligible for redemption within the next six months.

[8]**Multi-strategy** — Consisting of three funds, this strategy aims to to pursue varying strategies in order to diversify risks and reduce volatility. These investments are valued at NAV per share. Due to contractual gating restrictions, 86% of the value of these investments is eligible for redemption in the next six months. The remaining 14% of the value of these investments remain restricted up to 13 months.

[9]**Private equity total** — Consisting of 174 commingled funds, fund-of-funds and separately managed accounts involving domestic and global buyout and venture capital funds. These are long-term lock up vehicles, typically with 10-year terms plus available extensions. These investments are valued at NAV as reported by the fund/account manager. The unfunded commitments can be called by the managers to make new investments during the investment period, which is roughly the first half of the fund term. Thereafter, the manager can call capital to fund follow-on expenses in support of the existing portfolio investments or to pay fund expenses.

[10]**Opportunistic diversified** — Consisting of 54 commingled funds, co-investments, and direct investments involving domestic and global energy, infrastructure, and specialty finance funds. These are generally long-term lock up vehicles, typically with 10-year terms plus available extensions. These investments are generally valued at NAV as reported by the fund/account manager, with some exceptions for publicly traded securities. The unfunded commitments can be called by the managers to make new investments during the investment period, which is roughly the first half of the fund term. Thereafter, the manager can call capital to fund follow-on expenses in support of the existing portfolio investments or to pay fund expenses.

6. Deposit and Investment Risk Disclosure

Investment Authority — The investment authority of the Retirement Board is governed by Section 3307.15 of the Revised Code that also requires the Retirement Board to publish its investment policies annually and make copies available to interested parties. This section requires that investments be made with care, skill, prudence and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims.

Rates of Return — Rates of return on total fund are calculated in two ways — as time weighted rates and as money-weighted rates. The time-weighted rate of return expresses investment performance without consideration of the timing and amounts invested. For the year ended June 30, 2016, the annual time-weighted rate of return, net of investment expenses was 0.78%. The money-weighted rate of return expresses investment performance after consideration of the impact of the changing amounts actually invested. For the year ended June 30, 2016, the annual money-weighted rate of return, net of investment expenses, was 0.64%.

Investments held at fair value by STRS Ohio at June 30, 2016 and 2015, are summarized in the table below.

Investments Held at Fair Value by STRS Ohio at June 30, 2016 and 2015 (summarized and in thousands)

Category	June 30, 2016	June 30, 2015
Short-term		
Commercial paper	–	$ 1,805,234
Short-term investment funds	$ 13,000	10,000
U.S. Treasury bills	1,273,432	–
Total short-term	**1,286,432**	**1,815,234**
Fixed income		
U.S. government agency obligations	234,984	205,734
Corporate bonds	3,910,519	4,685,134
High yield and emerging market	1,711,974	2,023,218
Mortgages and asset-backed	2,635,719	3,641,091
U.S. government obligations	2,912,648	4,215,534
Total fixed income	**11,405,844**	**14,770,711**
Domestic equities	**21,605,090**	**22,635,629**
International equities (See Note 7)	**17,374,647**	**18,039,095**
Real estate (See Note 8)		
East region	3,258,615	3,013,630
Midwest region	1,268,170	1,088,837
South region	709,216	617,710
West region	2,697,295	2,503,649
REITs	1,266,136	1,090,804
Other	1,184,918	1,045,168
Total real estate	**10,384,350**	**9,359,798**
Alternative investments (See Note 9)	**10,019,630**	**9,605,009**
Invested securities lending collateral	**1,356,392**	**1,429,438**
Total investments and invested securities lending collateral	**$ 73,432,385**	**$ 77,654,914**

Cash and Short-Term Investments — Cash and short-term investments are combined for reporting purposes and include cash balances of $19,642,000 at June 30, 2016, and $13,215,000 at June 30, 2015, in the *Statements of Fiduciary Net Position*.

GASB Statement No. 40 — GASB Statement No. 40, *Deposit and Investment Risk Disclosures*, addresses common deposit and investment risks related to credit risk, concentration of credit risk, interest rate risk and foreign currency risk.

Credit Risk — Credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This risk is measured by ratings assigned by a nationally recognized statistical rating organization. The quality ratings of investments in fixed income as of June 2016 and 2015, are shown in the table on the next page. U.S. government fixed-income securities or obligations explicitly guaranteed by the U.S. government are not considered to have credit risk.

Custodial Credit Risk — Deposits are exposed to custodial credit risk if they are uninsured and uncollateralized. Custodial credit risk is the risk that, in the event of a failure of the counterparty, STRS Ohio will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of STRS Ohio, and are held by either the counterparty or the counterparty's trust department or agent but not in the name of STRS Ohio.

All investments are held in the name of STRS Ohio or its nominee by the Treasurer of the State of Ohio as custodian. At June 30, 2016 and 2015, the bank statement cash balances were approximately $26,945,000 and $22,348,000, respectively. Bank balances are insured up to $250,000 by the Federal Deposit Insurance Corporation. The remaining bank deposits are covered by collateral held in the name of STRS Ohio's pledging financial institution, as required by state statute.

Interest Rate Risk — Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of the investment. Duration is a measure of a debt investment's exposure to fair value changes arising from changing interest rates. It uses the present value of cash flows, weighted for those cash flows as a percentage of the investment's full price. The longer the maturity, the more the value of the fixed-income investment will fluctuate with interest rate changes. The table on the next page shows the maturities by weighted-average duration at June 30, 2016 and 2015.

Concentration of Credit Risk — STRS Ohio is guided by statute and policy in the selection of security investments. No investment in any one organization represents 5% or more of STRS Ohio's net position as of June 30, 2016 and 2015.

Quality Ratings of Fixed-Income Investments Held at June 30, 2016 and 2015 (in thousands)

Investment Type	Quality Rating	June 30, 2016 Fair Value	June 30, 2015 Fair Value
U.S. government agency obligations	Aa	$ 234,984	$ 189,990
	A	–	15,744
Total U.S. government agency obligations		**234,984**	**205,734**
Corporate bonds	Aaa	203,207	256,266
	Aa	483,004	670,392
	A	1,630,897	1,868,857
	Baa	1,549,154	1,878,988
	Ba	4,975	10,631
	NR	39,282	–
Total corporate bonds		**3,910,519**	**4,685,134**
High yield and emerging markets fixed income	Aaa	11,421	17,388
	Aa	4,533	11,972
	A	39,732	45,484
	Baa	156,056	281,007
	Ba	470,481	530,659
	B	570,679	628,279
	Caa and below	318,337	374,593
	NR	140,735	133,836
Total high yield and emerging markets fixed income		**1,711,974**	**2,023,218**
Mortgages and asset-backed	Aaa	2,395,378	1,057,380
	Aa	96,267	2,336,062
	A	129,457	120,946
	Baa	1,379	47,685
	Caa and below	12,278	16,739
	NR	960	62,279
Total mortgages and asset-backed		**2,635,719**	**3,641,091**
Credit risk debt securities		**8,493,196**	**10,555,177**
U.S. government obligations		**2,912,648**	**4,215,534**
Total fixed-income investments		**$ 11,405,844**	**$ 14,770,711**

Duration of Fixed-Income Investments Held at June 30, 2016 and 2015 (in thousands)

	June 30, 2016		June 30, 2015	
Investment Type	Fair Value	Weighted-Average Duration	Fair Value	Weighted-Average Duration
U.S. government agency obligations	$ 234,984	0.234	$ 205,734	0.938
Corporate bonds	3,910,519	5.955	4,685,134	5.409
High yield and emerging markets fixed income	1,711,974	4.467	2,023,218	4.563
Mortgages and asset-backed	2,635,719	2.289	3,641,091	3.490
U.S. government obligations	2,912,648	5.517	4,215,534	4.806
Total fixed income	**$ 11,405,844**		**$ 14,770,711**	

Significant investment guidelines that relate to investment concentration, interest rate risk and foreign currency risk by major asset class are as follows:

Overall Investment Portfolio — The Retirement Board has approved a target risk budget range of 0.60% to 1.20%, with a working range of 0.20% to 1.60%, annualized active management for the total fund. A risk budget is the amount the Retirement Board has approved for returns to vary from an unmanaged passive investment profile. The board's objective is for active management to add net 0.40% of annualized excess return over moving five-year periods to judge its effectiveness.

Fixed Income — The portfolio will seek diversification by market sector, quality and issuer. The risk budget range for fixed income is 0.10% to 1.50% using the Barclays U.S. Universal Index as the benchmark. Derivatives may be used to adjust the exposure to interest rates, individual securities or to various market sectors in the portfolio. Underlying exposure of derivatives for fixed-income investments will not exceed 5% of total fund assets.

Global Equities — Domestic — The risk budget range for domestic equities is 0.20% to 1.50% using the Russell 3000 as the benchmark. Derivatives may be used in management of the equity portfolio. The use of leverage is prohibited. Underlying exposure of equity derivatives will not exceed 10% of total fund assets.

Global Equities — International — International assets will be a diversified portfolio including both developed and emerging countries. The risk budget range for international equity is between 0.70% to 2.50% using a blended benchmark of 80% MSCI World ex US Index (50% hedged) and 20% MSCI Emerging Markets Index. Derivatives may be used in management of the portfolio and underlying exposure of derivatives for international investments will not exceed 10% of total fund assets.

Real Estate — The real estate portfolio shall be diversified between property type, geographic location and investment structure. The risk budget range for real estate investments is 2.00% to 7.00% using a benchmark of 85% NCREIF Property Index and 15% FTSE NAREIT Equity REITs Index. Investments in non-core real estate, which includes domestic and international opportunity funds and real estate development projects, shall not exceed 20% of total real estate assets. Derivatives may be used and will not exceed 1% of total fund assets. STRS Ohio may borrow funds on a secured or unsecured basis and leverage is limited to 50% in aggregate of internally managed real estate assets excluding publicly traded real estate investment trusts (REITs).

Alternative Investments — Alternative investments involve separate allocations to private equity and opportunistic/diversified investments. Private equity investments are being managed with the objective of earning at least 1% net of fees above domestic public equity markets (Russell 3000 Index) over moving 10-year periods. Opportunistic/diversified investments are being managed with the objective of earning domestic public equity-like returns defined as 1% net of fees below domestic public equity markets (Russell 3000 Index) over moving 10-year periods, but with the added objective of downside protection during equity bear markets. Derivatives may be used and will not exceed 5% of total fund assets.

Foreign Currency Risk — Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or deposit. Forward currency contracts may be used to manage the exposure to foreign currencies. The system's foreign currencies and investments at June 30, 2016 and 2015 are shown in the table to the right. The investments figures are comprised of numerous portfolios within international equity, debt securities and real estate investments.

Foreign Currency
Held at June 30, 2016 and 2015 (in thousands)

Foreign Currency Denomination	June 30, 2016 International	June 30, 2016 High Yield & Emerging Markets Fixed Income	June 30, 2015 International	June 30, 2015 High Yield & Emerging Markets Fixed Income
Argentine Peso	–	–	$ 1	–
Australian Dollar	$ 364,542	–	385,381	–
Brazilian Real	219,948	–	220,776	$ 3,264
British Pound Sterling	877,420	$ 4,589	1,109,833	7,813
Canadian Dollar	327,298	(64)	363,109	–
Chilean Peso	68,445	–	89,867	–
Colombian Peso	(739)	3,986	(1,941)	4,318
Czech Republic Koruna	3,848	–	11,312	–
Danish Krone	175,697	–	250,978	–
Egyptian Pound	15,374	–	11,386	–
European Union Euro	1,020,501	7,942	1,093,424	2,663
Hong Kong Dollar	766,647	–	875,150	–
Hungarian Forint	36,386	–	8,520	–
Indian Rupee	234,921	–	263,947	1,248
Indonesian Rupiah	28,816	1,035	22,931	4,505
Israeli Shekel	(28,574)	–	(32,809)	–
Japanese Yen	902,461	–	1,111,665	–
Kenyan Shilling	1,897	–	–	–
Malaysian Ringgit	36,465	–	48,206	–
Mexican Peso	62,999	2,481	48,039	5,932
Morocan Dirham	751	–	316	–
New Taiwan Dollar	419,174	–	420,045	–
New Zealand Dollar	75,479	–	5,474	–
Nigerian Naira	9,358	–	14,684	–
Norwegian Krone	28,356	–	69,115	–
Omani Rial	1,808	–	5,200	–
Philippines Peso	32,168		26,237	–
Polish Zloty	25,415	–	27,191	–
Qatari Rial	–	–	1,685	–
Russian New Ruble	10,361	–	(10,932)	890
Singapore Dollar	95,066	–	69,969	–
South African Rand	219,784	–	200,632	–
South Korean Won	535,267	–	467,256	–
Swedish Krona	116,722	–	176,999	–
Swiss Franc	437,064	–	320,733	–
Thailand Baht	102,041	–	129,958	–
Tunisian Dinar	626	–	–	–
Turkish Lira	71,114	1,042	78,569	–
Vietnamese Dong	529	–	–	–
Held In Foreign Currency	7,295,435	21,011	7,882,906	30,633
Held In U.S. Dollars	10,079,212	1,690,963	10,156,189	1,992,585
Total	$17,374,647	$ 1,711,974	$18,039,095	$ 2,023,218

Securities Lending — STRS Ohio participates in a domestic and international securities lending program whereby securities are loaned to investment brokers/dealers (borrower). Securities loaned are collateralized by the borrower at 102% of the domestic equity and U.S. dollar-denominated fixed-income loaned securities' fair value and 105% of the international loaned securities' fair value.

STRS Ohio lends domestic equities, international, U.S. Treasuries, agencies and corporate bonds. The collateral received is cash, U.S. Treasuries or related agency securities. STRS Ohio cannot sell or pledge collateral received. If a borrower defaults, then the collateral can be liquidated.

A custodial agent bank administers the program and STRS Ohio receives a fee from the borrower for the use of loaned securities. Cash collateral from securities lending is invested in repurchase agreements, commercial paper and U.S. corporate obligations.

The credit quality of the invested cash collateral is the same as the credit quality on STRS Ohio direct holdings. There are slight mismatches between the duration of the cash invested and the length of time the securities are on loan. As of June 30, 2016, the weighted average maturity of the invested cash collateral is 167 days. Because much of the cash collateral is invested in floating rate securities, the weighted average number of days interest rates reset is 19 days as of June 30, 2016. STRS Ohio has minimized its exposure to credit risk due to borrower default by having the custodial agent bank determine daily that the required collateral meets the specified collateral requirements. There are no restrictions on the amount of securities that can be loaned. The fair value of loaned securities was approximately $1,327,607,000 and $1,388,801,000 as of June 30, 2016 and 2015, respectively. The fair value of the associated invested cash collateral as of June 30, 2016 and 2015, was $1,356,392,000 and $1,429,438,000, respectively.

7. International Investments

Externally Managed — STRS Ohio has investments in international equity securities through the use of external money managers. It is the intent of STRS Ohio and the money managers to be fully invested; however, cash and short-term fixed-income investments may be held temporarily. The portfolios are managed in accordance with various mandates based on Morgan Stanley Capital International's (MSCI) indexes. Investments are held in both developed and emerging international markets.

Internally Managed:

Developed Markets, Emerging Stock and Country Funds — STRS Ohio actively invests in developed and emerging markets through individual stock selection, including international publicly traded real estate securities, and traded country funds. Each country fund consists of individual equity securities pooled together in an attempt to match or exceed the local country's index.

Europe, Australia and Far East (EAFE) Index Fund — To increase diversification in international developed markets, STRS Ohio invests in an EAFE Index Fund. The EAFE Index Fund purchases foreign equities, futures and other traded investments to replicate the makeup of the EAFE benchmark.

Equity Swaps — Four EAFE and three Emerging Market Free (EMF) international equity swap agreements were contracted during fiscal 2016 with maturity dates in fiscal 2017. In exchange for LIBOR (London Interbank Offered Rate) minus a negotiated spread, STRS Ohio will receive or pay the difference of the change in the total return of the various market indices included in the swap agreements. Fixed-income securities with a notional amount of $1.06 billion have been set aside at the global subcustodial account as security.

Forward Contracts — Managers have the ability to add value through currency management. Forward currency contracts are used to minimize the impact of foreign currency fluctuations on the asset positions of foreign investments.

The fair values of international investments held at June 30, 2016 and 2015, are shown in the table below.

Fair Values of International Investments Held at June 30, 2016 and 2015 (in thousands)

	June 30, 2016	June 30, 2015
Externally managed		
International stocks	$ 7,180,861	$ 7,713,917
International currency and liquidity reserves	192,786	135,803
Forward contracts	70,061	(35,924)
Total externally managed	**7,443,708**	**7,813,796**
Internally managed		
Developed markets	6,293,614	6,716,277
Emerging stock and country funds	1,921,219	1,674,537
EAFE Index Fund	1,610,886	1,768,693
EAFE equity swaps	19,357	(16,534)
EMF equity swaps	66,859	67,927
Forward contracts	19,004	14,399
Total internally managed	**9,930,939**	**10,225,299**
Total international	**$ 17,374,647**	**$ 18,039,095**

8. Real Estate Investments

Direct — STRS Ohio properties are diversified between property type, geographic location and investment structure. Direct real estate assets include both single and multi-tenant retail, office and warehouse properties, as well as apartments.

Public Real Estate — Public real estate includes publicly traded real estate securities and real estate investment trusts (REITs). REITs are real estate company stocks with a high dividend-income component. REITs divide the ownership of the real estate company and its properties among all the shareholders. REITs are required to distribute 90% of the company's taxable income to their shareholders annually in the form of dividends. Distributions are taxable to shareholders rather than the real estate company. STRS Ohio is exempt from federal and state income taxes.

Other — Other real estate investments include commingled funds that are externally managed. Commingled funds generate income as a result of operations and property sales, which are distributed to the investors.

Debt on Real Estate Investments and Interest Rate Swaps — STRS Ohio uses debt to lower the cash outlay in acquiring real estate assets and to positively impact the performance of the real estate portfolio. Of the debt on real estate investments, $277 million and $257 million was recourse debt as of June 30, 2016 and 2015, respectively. This debt is recourse to STRS Ohio with a covenant not to mortgage a specific pool of real estate assets. The remainder of the debt on real estate investments at June 30, 2016 and 2015, is non-recourse debt, which means that in the event of default, the specific real estate holding is used as collateral for the loan and general assets of STRS Ohio are not pledged as collateral.

At June 30, 2016, the recourse loans of $277 million had maturity dates of May 2018 and June 2018. Interest on the recourse loans is based on LIBOR plus a spread.

Of the non-recourse debt at June 30, 2016, loan maturities range from January 2017 to December 2067. Non-recourse debt at June 30, 2015, had loan maturities ranging from January 2016 to December 2067. The repayment schedule for real estate debt is reflected in the table to the right.

Real Estate Debt Repayment Schedule As of June 30, 2016 (in thousands)

By Fiscal Year	Principal	Interest
2017	$ 44,588	$ 61,400
2018	372,631	57,227
2019	173,245	45,203
2020	4,979	43,615
2021	5,925	43,389
2022–2026	1,020,161	154,079
2027–2031	156,964	23,416
2032–2036	338,950	16,772
2037–2041	–	13,434
2042–thereafter	102,050	17,088
Total	$ 2,219,493	$ 475,623

9. Alternative Investments

Alternative investments are primarily investments in private equities and opportunistic/diversified investments. Private equity is 100% actively managed and includes, but is not limited to, venture and buyout/growth opportunities, mezzanine debt, sector and international funds. STRS Ohio invests as a limited partner in closed-end partnerships along with other pension funds, endowments and high-net-worth individuals. Private equity investments tend to be limited to a particular industry to take advantage of the general partner's knowledge and skill. Opportunistic/diversified investments are typically actively managed and are tactical in nature with a goal of downside protection during equity bear markets. The category can be liquid or illiquid.

10. Derivatives

Equity Swap Agreements — As discussed in Note 7, STRS Ohio has entered into international equity swap agreements. No funds are exchanged at the inception of the swap agreements; however, STRS Ohio has purchased fixed-income securities equivalent to the initial notional amount of the agreements, which are located in the global subcustodial account as of June 30, 2016. In addition, collateral is pledged between the parties during the term of the agreements to account for market movements. The notional amount of the contracts was $1.06 billion at June 30, 2016, and $1.21 billion at June 30, 2015. The unrealized gain of the contracts was $7.1 million at June 30, 2016, and the unrealized loss of $18.6 million at June 30, 2015, and are included in net appreciation in fair value of investments in the *Statements of Changes* *in Fiduciary Net Position*. The market risk of the swap is the same as if STRS Ohio owned the underlying stocks that comprise the indexes. The revenues and expenses resulting from these agreements have been recorded in the basic financial statements.

Forward Contracts — Forward contracts in various currencies are used to transact and hedge direct foreign equity and real estate investments that STRS Ohio maintains through the use of outside managers. Additionally, forward contracts are used to hedge currency exposure as a result of the EAFE equity swap agreements. STRS Ohio is obligated to deliver the foreign currency at a certain dollar price sometime in the future. To fulfill this obligation at maturity, STRS Ohio must obtain the currency in the open market. Before the contract matures, STRS Ohio can enter into an offsetting forward contract that nets out the original contract. These events expose STRS Ohio to currency market risk, which can fluctuate. The fair value of the foreign currency forwards is the unrealized gain or loss and is included in net appreciation in fair value of investments in the *Statements of Changes in Fiduciary Net Position*. STRS Ohio is also subject to the risk that the counterparty will fail to fulfill the contract.

Futures — Index futures are designed to offer lower cost and more efficient alternatives to buying individual stocks that comprise the index. The market and credit risk of the futures were the same as if STRS Ohio had owned the underlying stocks that comprise the index. The realized gain or loss on index futures is included in net appreciation in fair value of investments in the *Statements of Changes in Fiduciary Net Position*.

Additionally, futures were used in the EAFE Index Fund and by external money managers. The system's exposure to future and forward contracts at June 30, 2016 and 2015, is shown in the table below.

Exposure to Future and Forward Contracts Held at June 30, 2016 and 2015 (in thousands)

	June 30, 2016	June 30, 2015
Forward contracts		
Externally managed	$ 4,915,529	$ 5,545,606
Internally managed	5,239,475	5,482,433
Total forward contracts	$ 10,155,004	$ 11,028,039
Future contracts		
EAFE Index Fund	$ 20,642	$ 17,930
S&P Index Futures	172,233	–
Externally managed	–	–
Total future contracts	$ 192,875	$ 17,930

Options — STRS Ohio writes option contracts on existing stock positions to enhance the return on the stock portfolio. In exchange for a premium, STRS Ohio gives the option buyer the right to buy or sell the underlying stock. Options are also purchased to "cover" existing written open option positions. The notional value of the options contracts was $91.5 million at June 30, 2016, and $23.7 million at June 30, 2015. The fair value of the options contracts of –$1.8 million at June 30, 2016, and $1.0 million at June 30, 2015, is included in the *Statements of Fiduciary Net Position*. Additionally, options were utilized by external managers with a notional value of $2.7 billion at June 30, 2016, and $1.7 billion at June 30, 2015. The fair value of –$1.4 million at June 30, 2016, and $3.6 million at June 30, 2015, is included in the *Statements of Fiduciary Net Position*.

Warrants — Warrants allow the right to purchase underlying stock shares at a specified price. Warrants are usually added on as an incentive to an issuer's fixed-income securities. STRS Ohio held warrants with a value of $1.9 million as of June 30, 2016, and $3.2 million at June 30, 2015, and is included in the *Statements of Fiduciary Net Position*.

Fixed-Income Credit Default Swaps — STRS Ohio may manage credit exposure through the use of credit default swaps. A credit default swap is a contract whereby the credit risk associated with an investment is transferred by entering into an agreement with another party who, in exchange for periodic fees, agrees to make payments in the event of a default or other predetermined credit event. One of the main advantages of a credit default swap is it allows for exposure to credit risk while limiting exposure to other risks, such as interest rate and currency risk. STRS Ohio held credit default swaps with notional values of $3.4 million as of June 30, 2016, and $26.5 million as of June 30, 2015.

11. Pension Plan

Substantially all STRS Ohio employees are required to participate in a contributory retirement plan administered by the Ohio Public Employees Retirement System of Ohio (OPERS). OPERS is a cost-sharing, multiple-employer public employee retirement system that administers three pension plans that include a defined benefit plan, a defined contribution plan and a hybrid plan. Participation in these plans is a choice members make at the time their employment commences. Members may elect to change plans at intervals during their career.

In 2012, the Ohio Legislature passed Senate Bill 343 to improve the financial condition of OPERS. In the legislation, members were categorized into three groups with varying provisions of the law applicable to each group. Retirement benefits are specific to each group and members must meet the eligibility requirements based on their age and years of service within the group. The key components to OPERS' pension plan changes are:

- Age and service requirements for retirement increased.
- Final average salary calculation increased to five years from three years.
- Calculation used to determine the benefit amount for service retirement was modified.
- COLA is based on the annual percentage change in the Consumer Price Index with a 3% cap.
- Calculation used to determine early retirement benefit is determined by OPERS' actuary.

Details about OPERS' plan changes and when they become effective can be found on its website at www.OPERS.org.

The member and employer contribution rates are 10.0% and 14.0% of covered payroll, respectively. The required employer contributions for the current year and the two preceding years are shown in the table below.

STRS Ohio Required Employer Contributions to OPERS

Year Ended June 30	Annual Required Contribution	Percent Contributed
2014	$7,110,000	100%
2015	$7,669,000	100%
2016	**$7,418,000**	**100%**

As disclosed in Note 1, STRS Ohio adopted GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*, effective July 1, 2014, resulting in a restatement of the beginning of year July 1, 2014, net position of $39,745,000. GASB Statement No. 68 requires STRS Ohio to record a net pension liability based on its proportionate share of OPERS' total net pension liability. Likewise, STRS Ohio's proportionate share of OPERS' deferred outflows and deferred inflows of resources related to pensions and pension expense are recorded in the *Statements of Fiduciary Net Position* and *Statements of Changes in Fiduciary Net Position* for fiscal years ending June 30, 2016 and June 30, 2015.

GASB Statement No. 68 requires STRS Ohio to record its proportionate share of OPERS' total net pension liability as well as OPERS' deferred outflows and deferred inflows of resources related to pensions and pension expense. For the years ending June 30, 2016, and June 30, 2015, deferred outflows of $23,997,000 and $6,858,000 are included in miscellaneous receivables, deferred inflows of $1,354,000 and $822,000 and net pension liability of $66,147,000 and $44,546,000 are recorded in net pension liability in the *Statements of Fiduciary Net Position*. For the years ending June 30, 2016, and June 30, 2015, pension expense of $4,994,000 and credit of –$1,235,000 are included in the administrative expenses of the *Statements of Changes in Fiduciary Net Position*.

Historical trend information showing the progress of OPERS in accumulating sufficient assets to pay benefits when due is presented in the OPERS *Comprehensive Annual Financial Report*. OPERS issues a publicly available financial report for the plans. The report may be obtained by writing to OPERS, 277 E. Town St., Columbus, OH 43215-4642.

OPERS also provides post-employment health care coverage and is considered an Other Post-Employment Benefit (OPEB) as described in GASB Statement No. 43. In addition to the legislation that made changes to the pension plan, the OPERS Board approved changes to the retiree health care plan with phased-in implementation dates over the next several years. Depending on pension funding, OPERS has the discretion to direct a portion of employer contributions to fund retiree health care. The Revised Code provides statutory authority for employer contributions. The employer rate set aside for post-employment health care was 2.0% for calendar years 2015 and 2014.

Schedule of Changes in Employers' Net Pension Liability
Fiscal Years Ending June 30, 2014–2016* (in thousands)

	2016	2015	2014
Fiduciary net position			
Member contributions	$ 1,372,033	$ 1,259,135	$ 1,193,808
Employer contributions, including other retirement systems	1,545,103	1,594,794	1,508,442
Net investment income	372,871	3,671,845	10,534,608
Benefit payments	(7,317,113)	(6,890,863)	(6,725,017)
Administrative expenses	(67,065)	(61,183)	(60,991)
Net change in fiduciary net position	(4,094,171)	(426,272)	6,450,850
Beginning of year fiduciary net position	71,377,579	71,843,596	65,392,746
Restatement of fiduciary net position**	N/A	(39,745)	N/A
Restatement of beginning of year fiduciary net position	N/A	71,803,851	N/A
Fiduciary net position at June 30	**$ 67,283,408**	**$ 71,377,579**	**$ 71,843,596**
Total pension liability			
Service cost	$ 1,058,987	$ 1,111,078	$ 1,094,986
Interest	7,472,169	7,272,034	7,137,686
Benefit changes	0	0	0
Difference between expected and actual experience	527,725	1,355,347	292,708
Changes in assumptions	0	0	0
Benefit payments, including refunds of employee contributions	(7,317,113)	(6,890,862)	(6,725,017)
Net change in total pension liability	1,741,768	2,847,597	1,800,363
Total pension liability at beginning of year	99,014,654	96,167,057	94,366,694
Total pension liability at end of the year	100,756,422	99,014,654	96,167,057
Net pension liability at the end of the year	**$ 33,473,014**	**$ 27,637,075**	**$ 24,323,461**

*This is a 10-year schedule — however, the information is not required to be presented retroactively. Years will be added to this schedule in future fiscal years until 10 years of information is available.

**For purposes of determining net pension liability and related disclosures for 2014, fiduciary net position was not restated to reflect the adoption of GASB 68.

Schedule of Employers' Net Pension Liability
Fiscal Years Ending June 30, 2013–2016* (dollar amounts in thousands)

Fiscal Year Ending	Total Pension Liability	Fiduciary Net Position	Net Pension Liability	Ratio of Fiduciary Net Position to Total Pension Liability	Covered Payroll	Net Pension Liability as a Percentage of Covered Payroll
June 30, 2013	$94,366,694	$65,392,746	$28,973,948	69.3%	$10,765,635	269.1%
June 30, 2014	$96,167,057	$71,843,596	$24,323,461	74.7%	$10,725,329	226.8%
June 30, 2015	$99,014,654	$71,377,579	$27,637,075	72.1%	$10,948,586	252.4%
June 30, 2016	**$100,756,422**	**$67,283,408**	**$33,473,014**	**66.8%**	**$11,099,607**	**301.6%**

*This is a 10-year schedule — however, the information is not required to be presented retroactively. Years will be added to this schedule in future fiscal years until 10 years of information is available.

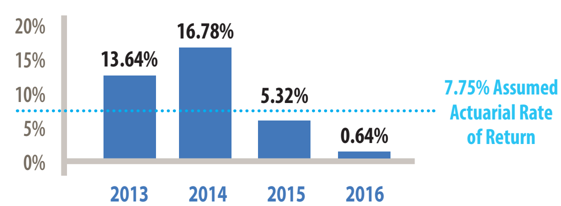
Schedule of Employers' Contributions
Fiscal Years Ending June 30, 2013–2016* (dollar amounts in thousands)

Fiscal Year	Actuarial Determined Contribution	Employer Contributions*	Contribution Deficiency (Excess)	Covered-Employee Payroll**	Contributions as a Percentage of Covered-Payroll
2007	$1,539,805	$1,272,559	$267,246	$9,620,423	13.23%
2008	$1,329,498	$1,305,027	$24,471	$9,834,206	13.27%
2009	$1,502,240	$1,347,741	$154,499	$10,122,141	13.31%
2010	$2,623,624	$1,374,327	$1,249,297	$10,341,512	13.29%
2011	$2,715,523	$1,379,104	$1,336,419	$10,369,367	13.30%
2012	$3,248,651	$1,349,561	$1,899,090	$10,102,509	13.36%
2013	$2,910,537	$1,327,862	$1,582,675	$9,917,911	13.39%
2014	$1,489,734	$1,325,141	$164,593	$9,833,028	13.48%
2015	$1,368,602	$1,449,165	$(80,563)	$9,985,181	14.51%
2016	**$1,178,129**	**$1,466,938**	**$(288,809)**	**$10,069,269**	**14.57%**

*Employer contributions are the same as contractually required contributions.
**Excludes payroll from the Defined Contribution and Alternative Retirement Plans.

Schedule of Investment Returns
Fiscal Years Ending June 30, 2013–2016*

Money-Weighted Rate of Return, Net of Fees



	2013	2014	2015	2016
Time-Weighted Rate of Return, Net of Fees	13.54%	16.71%	5.33%	0.78%

*This is a 10-year schedule — however, the information is not required to be presented retroactively. Years will be added to this schedule in future fiscal years until 10 years of information is available.

Notes to Required Supplementary Information
Fiscal Years Ending June 30, 2016 and 2015

Valuation date	July 1, 2016	July 1, 2015
Actuarial cost method	Entry age normal	Entry age normal
Actuarial assumptions:		
Investment rate of return, net of investment expense, including inflation	7.75%	7.75%
Projected salary increases	12.25% at age 20 to 2.75% at age 70	12.25% at age 20 to 2.75% at age 70
Inflation assumption	2.75%	2.75%
Cost-of-living adjustments	2% simple applied as follows: for members retiring before Aug. 1, 2013, 2% per year; for members retiring Aug. 1, 2013, or later, 2% COLA paid on fifth anniversary of retirement date	2% simple applied as follows: for members retiring before Aug. 1, 2013, 2% per year; for members retiring Aug. 1, 2013, or later, 2% COLA paid on fifth anniversary of retirement date

The information presented in the required supplemental schedules was determined as part of the actuarial valuations for the dates indicated. See accompanying independent auditors' report.

Schedule of Health Care Funding Progress, 2011–2016
(dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability (UAAL)	Funded Ratio	Covered Payroll	UAAL as % of Covered Payroll
Jan. 1, 2011	$3,108,541	$8,631,313	$5,522,772	36.0%	$10,520,932	52.5%
Jan. 1, 2012	$2,968,157	$5,094,407	$2,126,250	58.3%	$10,549,271	20.2%
Jan. 1, 2013	$3,121,576	$4,254,096	$1,132,520	73.4%	$10,277,783	11.0%
Jan. 1, 2014	$3,471,886	$4,664,445	$1,192,559	74.4%	$9,972,923	12.0%
Jan. 1, 2015	$3,454,371	$4,676,223	$1,221,852	73.9%	$10,004,290	12.2%
Jan. 1, 2016	**$3,258,197**	**$5,154,231**	**$1,896,034**	**63.2%**	**$10,268,859**	**18.5%**

Schedule of Employer Contributions Related to Health Care Fiscal Years Ending June 30, 2011–2016 (dollar amounts in thousands)

Year Ended June 30	Annual Required Contributions	Percentage Contributed
2011	$449,136	23.1%
2012	$210,107	48.1%
2013	$143,810	69.0%
2014	$129,796	75.8%
2015	$127,810	0.0%
2016	**$165,136**	**0.0%**

Notes to Health Care Trend Data

Valuation date	Jan. 1, 2016	Jan. 1, 2015
Actuarial cost method	Entry age normal	Entry age normal
Amortization method	Level percentage, open	Level percentage, open
Remaining amortization period	30.0 years	30.0 years
Asset valuation method	Fair market value	Fair market value
Actuarial assumptions:		
Investment rate of return	6.9%	6.9%
Projected salary increases	12.25% at age 20 to 2.75% at age 70	12.25% at age 20 to 2.75% at age 70
Payroll growth	3.50% through 2018; 4.00% thereafter	3.50% for next 5 years; 4.00% thereafter
Inflation rate	2.75%	2.75%
Trend rates	6.4%–11.0% initial; 5.0% ultimate	6.7%–8.6% initial; 5.0% ultimate

The information presented in the required supplemental schedules was determined as part of the actuarial valuations for the dates indicated. See accompanying independent auditors' report.

Schedules of Administrative Expenses
For the Years Ending June 30, 2016 and 2015

	2016	2015
Personnel		
Salaries and wages	$ 33,631,703	$ 33,224,086
Retirement contributions	4,564,963	4,541,595
GASB 68 expense	4,993,897	(1,235,331)
Benefits	6,438,253	5,524,006
Total personnel	**49,628,816**	**42,054,356**
Professional and technical services		
Computer support services	909,323	1,004,082
Health care services	671,761	783,980
Actuary	266,450	246,684
Auditing	304,897	248,400
Defined contribution administrative fees	1,031,244	971,996
Legal	217,908	157,752
Temporary employment services	248	14,511
Total professional and technical services	**3,401,831**	**3,427,405**
Communications		
Postage and courier services	1,128,331	1,179,841
Printing and supplies	1,285,885	1,322,812
Telephone	282,668	283,527
Total communications	**2,696,884**	**2,786,180**
Other expenses		
Equipment repairs and maintenance	4,012,777	5,328,796
Building utilities and maintenance	1,312,988	1,543,133
Transportation and travel	197,655	197,174
Recruitment fees	33,676	25,143
Depreciation	6,796,125	6,823,270
Member and staff education	227,632	233,288
Insurance	624,123	654,405
Memberships and subscriptions	151,850	154,872
Ohio Retirement Study Council	204,103	212,038
Miscellaneous	431,827	312,440
Total other expenses	**13,992,756**	**15,484,559**
Total administrative expenses	**$ 69,720,287**	**$ 63,752,500**

Note: Above amounts do not include investment administrative expenses, which are deducted from investment income and shown in a separate schedule on Page 38.

See accompanying independent auditors' report.

Schedules of Investment Expenses
For the Years Ending June 30, 2016 and 2015

	2016	2015
Personnel		
Salaries and wages	$ 25,029,775	$ 25,024,464
Retirement contributions	2,853,057	3,127,232
Benefits	2,784,523	2,427,160
Total personnel	**30,667,355**	**30,578,856**
Professional and technical services		
Investment research	2,094,171	2,653,284
Financial asset advisors	737,348	740,308
Banking fees	2,089,968	2,149,928
Temporary employment services	16,195	9,483
Total professional and technical services	**4,937,682**	**5,553,003**
Other expenses		
Printing and supplies	4,085	4,529
Building utilities and maintenance	345,412	341,293
Travel	467,784	453,509
Staff education	12,488	15,540
Investment quotation systems	1,679,184	1,651,093
Memberships and subscriptions	93,764	129,366
Miscellaneous	87,341	85,538
Total other expenses	**2,690,058**	**2,680,868**
Total investment expenses	**$ 38,295,095**	**$ 38,812,727**

See accompanying independent auditors' report.

Schedules of Fees to External Asset Managers by Asset Class
For the Years Ending June 30, 2016 and 2015

	2016	2015
Asset class		
Fixed income	$ 7,268,278	$ 8,363,687
Domestic equities	10,551,376	11,207,664
International equities	29,489,760	30,922,960
Real estate	15,879,110	20,256,457
Alternative investments	136,520,633	111,614,881
Total external manager fees	**$ 199,709,157**	**$ 182,365,649**

Note: Investment-related costs associated with external asset management are reported as asset management fees in the *Statement of Changes in Fiduciary Net Position*, if the investment-related costs are reasonably separable from investment income and the administrative expenses of the pension plan.

See accompanying independent auditors' report.

Investment Review

For Fiscal Year July 1, 2015, through June 30, 2016
Prepared by STRS Ohio's Investments Associates

Economic Environment

Following the severe economic contraction of the Great Recession, few would have forecast that the ensuing economic expansion would last through its seventh anniversary at the end of fiscal 2016. This makes it the fourth longest in U.S. economic history and on course for becoming the third longest a year from now. Nonetheless, while the current expansion continues to age into fiscal 2017, average annualized real (inflation-adjusted) economic growth during its first 28 quarters has been a disappointing 2.1% — compared to the 3.6% registered over the first 28 quarters of the 1990s expansion, the 4.5% recorded over the same span in the 1980s expansion and the 5.4% in the 1960s expansion. Roughly a third of the shortfall in growth compared to the three prior long expansions can be attributed to slower jobs growth which, itself, is influenced partially by demographic changes related to the increasing retirement of the massive Baby Boom generation. However, more worrisome than the labor force and employment growth record of the current expansion is the remaining two-thirds of the shortfall that can be attributed to much slower productivity growth that has advanced by only about a third of what it did in the prior — and more robust — long expansions.

Productivity, over the long term, should improve to roughly a 2% pace from this expansion's 0.9% which would match well-established trends from past business cycles. With a labor market input of around 0.5% growth over coming decades, the long-term potential economic growth rate in the United States should average about 2.5% or marginally less. For fiscal 2017, the STRS Ohio economic forecast expects economic activity in the United States will fall marginally short of that long-term trend, even as it improves significantly on the economic growth that occurred in fiscal 2016.

Continued global economic problems are now increasingly weighing upon potential U.S. economic activity in the near-term, causing the previously decoupled domestic economy to slow toward a long-term trend or below-trend growth path. Real private domestic final sales (a series that excludes volatile foreign trade, inventories and government spending from real gross domestic product [GDP]) that had in each of the prior two years averaged between a solid 3.25% to 3.5% against poorer real GDP averages of 2.5% to 3%, decelerated to a moderate 2.3% in fiscal 2016 versus real GDP's weak 1.3%. This points to increasing growth problems in the more stable sectors of the domestic economy.

While the bounce back will not likely be on the scale of recent years, economic growth in the United States should moderately accelerate toward its long-term potential in fiscal 2017. Inflation pressures should remain well-behaved even as the Federal Reserve resumes its intermittent course of marginally raising short-term interest rates. Most risks to the baseline forecast lie to the downside because of ongoing global economic and political problems and the continued adjustment to less stimulative demographic changes in the developed world. Some of the greatest threats to better economic growth include the politically charged general election campaign in the U.S., the threat of a Britain exit from the European Union, an over-indebted China, terrorism threats and continued geopolitical confrontations in the Middle East and former Soviet Union bloc. Unfortunately, in the United States and much of the rest of the developed world, potential monetary and fiscal policy changes in the upcoming fiscal year will not likely be able to prevent even slower economic activity should any of the downside risks occur. As a result, the odds of a recession in the United States during fiscal 2017 will likely fall into the modest-to-moderate range from a modest range in fiscal 2016.

For fiscal 2017, the STRS Ohio economic forecast expects real GDP growth of 2.2% after only 1.3% growth in fiscal 2016 that was restrained by collapsing oil patch investment due to plummeting energy prices and a surging dollar that hammered U.S. trade. Private domestic final sales growth should modestly accelerate to the economy's long-term trend of 2.5% after a slightly below trend 2.3% pace in fiscal 2016 that followed a 3.5% gain in fiscal 2015 and 3.3% increase in fiscal 2014. Consumers should lead the U.S. economy in fiscal 2017 because of continued moderate employment and income gains while business investment improves somewhat even as housing activity moderates after two strong years of activity and trade continues to detract from overall economic growth.

U.S. economic activity will remain dependent upon solid consumer spending and, for that to occur, jobs and income growth must continue to grow at satisfactory rates. In fiscal 2016, monthly employment gains averaged about 200,000. As a result, the unemployment rate moved down from 5.3% at the beginning of fiscal 2016 to 4.9% at fiscal year-end. After the slower economic growth of fiscal 2016, jobs growth will likely decelerate into a range of 150,000 to 200,000 a month — allowing the unemployment rate to end fiscal 2017 at roughly 4.7%. Real income growth will likely remain in the mid-to-high 2% range because of the continuing job gains. That should then support ongoing real consumer spending of about 2.5% in fiscal 2017.

Leading indicators of employment still point to solid job gains in the coming year, but the hiring rate remains well short of the increase in job openings. At the same time, many employees have only been able to get part-time work or continue to be discouraged about getting a job even in the midst of a strong labor market. The underemployment rate (a series that reports the labor force share of those who are unemployed, marginally attached to the labor force or working part time while wanting full-time work) remains historically high at nearly 10% though the unemployment rate continues to hit new cyclical lows. The labor market has improved considerably in the seven years after the Great Recession, but structural problems remain and will continue to put a lid on how much the consumer can drive the economy forward.

Business investment in structures and equipment collapsed during the middle quarters of fiscal 2016, largely due to a pullback in the energy sector as commodity prices descended again. Non-residential investment fell an annualized 3.4% in the middle part of the fiscal year. Excluding the plunges from reduced investment in mines and wells, business fixed investment had small declines in those two quarters. Now that oil and natural gas rig counts have nearly reached the lowest possible level, most of the economic weakness from tumbling business investment should dissipate and allow the business sector to return to moderately positive growth. In fiscal 2017, the STRS Ohio economic forecast expects that non-residential investment will grow 2.1% after a –0.5% decline in fiscal 2016.

The housing sector has had a run of two very good years after having been a primary contributor to both the Great Recession and the slow economic rebound from that recession. Real residential investment grew 5.7% in fiscal 2016 after a 10.7% surge in fiscal 2015. Housing starts, which had fallen to an annual rate below 500,000 units at the end of the recession, grew to 1.15 million units in fiscal 2016 after 1.06 million units in fiscal 2015. Further economic gains from the housing sector should continue through fiscal 2017 as housing affordability for the potential buyer remains relatively high and homebuilders expect solid demand in coming quarters. However, the pace of the housing turnaround has slowed a bit after the previous robust fiscal years and should show up as both smaller gains in housing starts and residential investment in fiscal 2017. The STRS Ohio economic forecast expects that real residential investment will grow 4.6% in the upcoming fiscal year while housing starts will total a little over 1.2 million units.

The United States has led the global economy since the Great Recession. Until the second half of fiscal 2016, the dollar was strengthening rapidly versus other major currencies in the world. For the past two fiscal years, the decline in real net exports due to weak foreign demand for U.S. goods and services and moderate-to-solid demand by Americans for foreign goods and services has detracted significantly from overall economic growth. In fiscal 2016, real GDP growth trailed economic growth excluding trade by about 0.25% while in fiscal 2015 it lagged the activity excluding trade by 0.5%. Near the end of fiscal 2016, the dollar strengthened again in anticipation of U.S. interest rates moving higher relative to the rest of the world, as the Federal Reserve indicated it would soon resume its course of gradually tightening monetary policy. As a result, trade should again slow U.S. economic growth in fiscal 2017 — this time, by about 0.2% according to the STRS Ohio economic forecast.

Leading economic indicators are displaying mixed signs about future economic growth in the United States after having slowed over much of fiscal 2016. The Economic Cycle Research Institute's (ECRI) leading index (a measure that is heavily influenced by weekly financial market series) has soared since mid-March after the stock market began to rebound in mid-February. But, with the recent consolidation of the stock market and then some slippage, the latest ECRI data hooked down slightly — suggesting that moderate growth remains the most likely future direction for the U.S. economy. Meanwhile, the Conference Board's leading index (a measure that is heavily influenced by monthly real economic series) has only marginally bumped up from a flat trend it had been in since the beginning of winter. Other private sector surveys that provide leading economic data are also mixed, indicating economic activity should grow around or slightly below its long-term trend rather than surge ahead or fall into a dangerously slower growth pattern.

Commodity prices bottomed in mid-to-late January, helping to subsequently drive headline inflation measures (like the personal consumption expenditures price index) upward from flat growth in early fiscal 2016. Neither it nor core inflation (a series that excludes volatile food and energy costs from broader inflation measures) has moved into the Federal Reserve's preferred inflation rate range of roughly 2%. However, with increasingly little slack remaining in the labor market, wage pressures should add to the inflation outlook and gradually push actual inflation toward the Federal Reserve's targeted range. STRS Ohio's economic forecast calls for the total consumer price index (CPI) to accelerate to a 1.9% growth rate in fiscal 2017 after advancing 1.1% in fiscal 2016. However, the core measure of CPI is expected to remain relatively steady at a 2.1% rate of growth in fiscal 2017 from fiscal 2016's 2.2% rate. Meanwhile, the personal consumption expenditures price index, like the total CPI index, is expected to accelerate to 1.6% in fiscal 2017 from 1% in fiscal 2016, and the broadest measure of economy-wide inflation, the GDP price index, should move up to 1.8% from 1.2%. In each case, inflation measures are expected to move toward the Federal Reserve's long-term target range but not to significantly exceed it.

The Federal Reserve has maintained a stimulative monetary policy since the beginning of the Great Recession. Policymakers at the Federal Reserve understood that they had to do everything in their power to prevent a deflationary spiral developing out of the recession — an issue stagnant Japan dealt with for more than two decades. Initially, the Federal Reserve drove short-term interest rates significantly lower to roughly 0% by using its main policy tool — the federal funds targeted rate — but it did not stop there. Quantitative easing (QE) led to an expansion of assets on the Federal Reserve's balance sheet from roughly $900 billion prior to the recession to roughly $4.5 trillion today. The Federal Reserve made sure the banking system was flooded with cash for future loans that could eventually spark a credit cycle leading to ever stronger economic growth.

At its December 2013 monetary policy meeting, the Federal Reserve began to taper the purchases of securities from quantitative easing (QE) because the labor market was showing signs of better growth and the overall economy was finally gaining traction. At each subsequent meeting, it reduced the size of further QE purchases until monetary policymakers finished QE in the fall of 2014. In December 2015, the Federal Reserve's main policy tool of controlling short-term interest rates was eased back too when the Federal Reserve raised the federal funds rate 0.25%, making it the first increase in short-term interest rates since mid-2006.

Federal Reserve policymakers would like to raise short-term interest rates further in fiscal 2017, but they will closely watch how the U.S. and foreign economies and financial markets react to less stimulative monetary policy within the United States An intermittent course of gradually raising short-term interest rates is the most likely one from the Federal Reserve. The federal funds targeted rate could end fiscal 2017 around 1% from the 0.25% to 0.5% range at the end of fiscal 2016. The Federal Reserve can afford to be both cautious and patient with its main monetary policy tool because economic and inflation pressures outside the United States are not likely to be robust and add significantly to internal pressures. Furthermore, the Federal Reserve does not want to tighten policy too quickly out of fear that it stalls future domestic economic growth.

Fixed Income

The Federal Reserve has maintained a large balance sheet relative to gross domestic product to sustain downward pressure on long-term interest rates and support asset prices. In December 2015, Federal Reserve officials pulled back modestly on monetary policy for the first time in nine-and-a-half years when they raised the fed funds rate from 0%–0.25% to 0.25%–0.5%.

Fixed-income returns were nearly double the yield of the index, as returns were driven in part by the decline in interest rates and a recovery in credit spreads. The 10-year U.S. Treasury bond yield declined from 2.33% at the beginning of the fiscal year to 1.49% at fiscal year-end. For the first six months of the fiscal year, returns were nearly flat at +0.13%, while the second half of the fiscal year had a return of +5.68%. The highest returning sectors were investment-grade corporate bonds (+7.94%), emerging market debt (+7.83%), U.S. Treasuries (+6.22%) and commercial mortgage-backed securities (+6.22%). While the government-related (+5.23%), agency mortgage-backed securities (+4.34%) and high yield (+1.62%) sectors had modest returns. The net result was a fixed-income benchmark return of 5.82% in fiscal 2016, as recorded by the Bloomberg Barclays U.S. Universal Index.

The STRS Ohio fixed-income portfolio returned 5.62% versus the benchmark's return of 5.82%. Over the three prior fiscal years, the STRS Ohio fixed-income portfolio returned an annual average of 4.06% versus the benchmark's return of 4.20%. The STRS Ohio performance over the prior five fiscal years was 4.12% versus the benchmark's 4.01%. A more complete report of STRS Ohio performance appears on Page 53.

Domestic Equities

The U.S. equity market rose for the seventh consecutive year in fiscal year 2016, reaching a new all-time high as the U.S. and global economies continued to grow — albeit at a slow and uneven pace. During the year, the market experienced two market corrections of more than 10% before recovering by year end. For the year, the S&P 500 gained 4.0% on a total return basis, and closed at 2098.86.

S&P 500 earnings declined approximately 7% during the fiscal year, pressured by lower oil prices and uncertainty in both global economic growth and government policy. Returns for the year were entirely the result of price/earnings (P/E) expansion, driven primarily by continued low interest rates.

The STRS Ohio domestic equities portfolio returned 0.41% versus the Russell 3000 benchmark's return of 2.14%. Over the three prior fiscal years, the STRS Ohio domestic equities portfolio returned an annualized 10.26% versus the benchmark's return of 11.13%. The STRS Ohio performance over the prior five fiscal years was 10.77% versus the benchmark return of 11.60%. A more complete report of STRS Ohio performance appears on Page 53.

International Equities

The international markets recorded a negative return in fiscal 2016 with the emerging markets again lagging the developed markets. The MSCI World ex-US Index (50% hedged) for developed markets decreased 9.5%, and the MSCI EM Index for emerging markets decreased 12.1%. The overall international returns were negatively impacted by continued concerns about the magnitude of China's economic slowdown, the effectiveness of central banks' policies and political uncertainty in several important countries.

Only three countries among the developed markets were able to record positive returns in U.S. dollar terms. The best performing countries were New Zealand (+30.9%), Belgium (+5.3%) and Denmark (+3.1%). The three weakest markets were Italy (–25.4%), Spain (–22.9%) and Norway (–15.3%). The developed market returns were only slightly impacted in a negative manner by currency movements as the U.S. dollar was barely stronger overall against developed market currencies during the fiscal year.

The three best markets in emerging markets were Hungary (+20.5%), Peru (+8.3%) and Indonesia (+6.5%). The weakest markets were Greece (–60.7%), Poland (–26.6%) and Egypt

(–23.7%). The emerging markets were harmed in the first half of the fiscal year by continued concerns about the impact from possible U.S. interest rate hikes and by negative market events emanating from China. However, the emerging markets recorded better performance in the second half of the fiscal year as investors lowered their expectations on the probability of a second U.S. interest rate hike in the near term and became attracted to the cheaper valuations available compared to the developed markets.

The STRS Ohio international portfolio returned –7.11% versus the benchmark's return of –9.85%. Over the past three fiscal years, the STRS Ohio international portfolio returned an annualized 4.60% versus the benchmark's return of 2.88%. The STRS Ohio performance over the prior five years was 3.62% versus the benchmark's return of 2.20%. A more complete report of STRS Ohio performance appears on Page 53.

Real Estate

The commercial real estate market is in the expansion phase of the real estate cycle. The operating fundamentals of real estate — rents and occupancy — continue to grow, leading to gains in operating income across the board. Going forward, this increased operating income will help soften the impact of interest rate increases on prices. With continued low interest rates this past year, price appreciation in the private market was 5.6%, down from fiscal 2015 at 7.5% and slightly below the three-year average of 6.2%. We expect fiscal 2017 to see further moderation. Despite the potential price declines resulting from higher interest rates, significant capital is still attracted to the asset class — particularly in top tier markets and properties with significant foreign capital being deployed in the United States.

Private market real estate has turned in six consecutive years of double-digit total returns, the longest on record. Rising interest rates will slow future price appreciation across the asset class. However, relative to other asset classes, real estate provides a strong income return with private market real estate enjoying an income return of approximately 4.9% in fiscal 2016. The income and stability real estate provides to overall asset class returns will continue to drive strong capital flows to the asset class which should provide pricing support as long as increases in interest rates occur at a modest pace.

Over the last three years, the real estate public market (REITs) has turned in a total return averaging almost 13.6% annually. However, REITs experienced a much higher return in fiscal 2016, at 24.0% versus the fiscal 2015 return at 4.3%. Fiscal 2016's very strong return was coupled with significant volatility over the course of the year. Fiscal 2016 is also above the 10-year annual average of 7%.

The STRS Ohio total real estate portfolio returned 13.47% versus the benchmark's return of 12.59% in fiscal 2016. Over the three prior fiscal years, the STRS Ohio real estate total portfolio returned an annual average return of 13.76% versus the benchmark's return of 12.01%. The STRS Ohio performance over the prior five fiscal years was 13.33% versus the benchmark's 11.84%. A more complete report of STRS Ohio performance appears on Page 53.

Alternative Investments

Returns for the alternative investments asset class exceeded the relative return objective for the 10-year period and fell below the relative return objectives for the shorter periods. With respect to the absolute return objectives, the alternative investment returns missed the 10- and one-year absolute return objectives and exceeded the absolute return objective for the five- and three-year periods. Alternative investments finished fiscal 2016 with a return of 1.60% as compared to a 2.14% return for the Russell 3000 public equity index. Alternative investment managers continued to take advantage of the capital markets in order to exit their investments through strategic sales and IPOs and to recapitalize the companies they held. In the private equity portfolio during the fiscal year, this activity generated distributions that were 1.24 times the capital that was called. That is trending downward compared to the 1.92 times experience in the previous fiscal year.

There are two portfolios within alternative investments: private equity and opportunistic/diversified. The target allocation for each portfolio is 7%. At the end of fiscal 2016, the actual market value of the private equity portfolio was 6.5% of total fund — slightly above where it ended the previous fiscal year. The market value of the opportunistic/diversified portfolio grew from $4.8 billion to $5.4 billion during fiscal 2016, increasing it from 6.2% to 7.4% of total fund. Combined, the weight for the alternative investments asset class increased from 12.6% to 13.9%, just below its targeted 14% neutral weight.

Over the long term, the relative return objective for the private equity portfolio is the annualized return of the Russell 3000 index plus 1% and the relative return objective for the opportunistic/diversified portfolio is the Russell 3000 index minus 1%. At the end of fiscal 2016, the alternative investment 10-year return for the combined portfolios was 8.93% compared to the blended 10-year relative return objective of 8.87%. The blended benchmark return is based on the relative return objectives for private equity and opportunistic/diversified and weighted according to the targeted allocations during that 10-year period. A more complete report of STRS Ohio performance appears on Page 53.

Total Fund

During fiscal year 2016, the STRS Ohio fund returned 0.92% versus the benchmark's return of 0.67%. Over the three prior fiscal years, the STRS Ohio fund returned an annual average of 7.53% versus the benchmark's return of 7.53% while the fund performance over the prior five fiscal years was 7.66% versus the benchmark's 7.69%. During the 10 prior fiscal years, the STRS Ohio fund returned an annual average of 6.06% versus the benchmark's return of 6.05%. A more complete report of STRS Ohio fund performance appears on Page 53.

Statement of Investment Objectives and Policy

Effective Dec. 17, 2015

1.0 Purpose

1.1 The State Teachers Retirement System of Ohio ("STRS Ohio") was established for the benefit of the teachers of the public schools of the State of Ohio. STRS Ohio is dedicated to partnering with STRS Ohio members to provide financial performance and member service to help build financial security for current and future retirees.

1.2 The State Teachers Retirement Board of Ohio (the "Board") is vested with the operation and management of the State Teachers Retirement System of Ohio ("STRS Ohio") (ORC Section 3307.04). The Board has the full power to invest the assets (the "Fund") of STRS Ohio (ORC Section 3307.15). The Board is required to ". . . adopt in a regular meeting, policies, objectives or criteria for the operation of the investment program . . ." (ORC Section 3307.15).

1.3 To fulfill the statutory requirement of ORC Section 3307.15, the Board has adopted this Statement of Investment Objectives and Policies (the "Statement") to govern the investment of the Fund. This Statement summarizes the objectives and policies for the investment of the Fund.

1.4 The Board has approved these objectives and policies after careful consideration of STRS Ohio benefit provisions, and the implications of alternative objectives and policies.

1.5 The Statement has been prepared with five audiences in mind: incumbent, new and prospective Board members; STRS Ohio investment staff; STRS Ohio active and retired members; the Ohio General Assembly and Governor; and agents engaged by the Board to manage and administer the Fund.

1.6 The Board regularly, but in no event less than annually, will assess the continued suitability of this Statement, initiate change as necessary and update this Statement accordingly.

1.7 The Board may authorize its administrative officers and committees to act for it in accord with its policies (ORC Sections 3307.04 and 3307.15). The Board, no less frequently than annually, adopts a resolution delegating to the Executive Director and the Deputy Executive Director — Investments the authority to acquire, dispose, operate and manage the assets of the Fund, subject to the Board's policies and to subsequent approval by the Board. Consequently, the Executive Director, the Deputy Executive Director — Investments and the investment staff are responsible for preparing and maintaining numerous supporting management documents that govern the implementation of Board policies, including, but not limited to, individual investment manager mandates and guidelines, agent agreements and limited partnership documents.

1.8 In carrying out the operation and management of STRS Ohio, the Board, the Executive Director, his/her investment staff and others that are considered fiduciaries as defined in ORC Section 3307.01(K) are subject to various fiduciary responsibilities in ORC Chapter 3307, including those found in ORC Sections 3307.15, 3307.151, 3307.181 and 3307.18. This Statement incorporates, and is subject to, all of the provisions of ORC Chapter 3307.

1.9 The Board acknowledges its responsibilities under ORC Chapter 3307 and to the extent that this Statement is inconsistent with ORC Chapter 3307, Chapter 3307 shall control.

1.95 The Board approved this Statement on Dec. 17, 2015.

2.0 Investment Objective

2.1 Subject to the Ohio Revised Code, the investment objectives for the total fund are:

(a) to earn, over moving 30-year periods, an annualized return that equals or exceeds the actuarial rate of return (ARR) approved by the Board to value STRS Ohio liabilities. The current actuarial rate of return is 7.75%;

(b) to earn a rate of return that equals or exceeds the System's long-term policy index with an acceptable level of risk; and

(c) maintain sufficient liquidity to satisfy cash flow needs.

2.2 The Board believes, based on the assumptions in this Statement, that the investment policies summarized in this Statement will achieve this long-term actuarial objective at an acceptable level of risk. The Board evaluates risk in terms of the probability of not achieving the ARR over a 30-year time horizon.

3.0 Key Document Policy

To assist the Board and the investment staff, the following key documents will be produced or reviewed according to the schedule in Exhibit 1.

Exhibit 1: Key Document Schedule

Key Document	Document Source	Review Schedule
Quarterly Performance Review	Board Consultant	Quarterly
Statement of Investment Objectives and Policy/ Fund Governance	STRS Ohio Investment Staff/Reviewed by Board Consultant	Annually
Annual Plan (Includes Risk Budget)	STRS Ohio Investment Staff/Reviewed by Board Consultant	Annually
Actuarial Study	Actuary/STRS Ohio Finance Department	Annually
Asset/Liability Study	STRS Ohio Investment Staff/ STRS Ohio Senior Staff/ Board Consultant/Board	At least once in every quinquennial period

4.0 Asset Mix Policy, Risk Diversification and Return Expectations

4.1 After careful consideration of the investment objectives, liability structure, funded status and liquidity needs of STRS Ohio, and the return, risk and risk-diversifying characteristics of different asset classes, the Board approved the asset mix policy presented in Exhibit 2 (below). The exhibit also summarizes the Board's return expectations for the asset mix policy and active management.

4.2 Seventy-one percent of the Fund is targeted for investment in equities, inclusive of alternative investments. Equity investments have provided the highest returns over long time periods, but can produce low and even negative returns over shorter periods.

4.3 The risk of low returns over shorter time periods makes 100% equity policies unsuitable for most pension funds, including STRS Ohio. By investing across multiple equity asset classes, and in lower return but less risky fixed-income and real estate, the Board is managing and diversifying total fund risk.

4.4 Forecasts of capital market and active management returns undertaken by the Board's investment consultant indicate that the Board's asset allocation summarized in Exhibit 2 has an expected 10-year annualized return of 7.61% (without net value added). Over a 30-year period, the Board's investment consultant indicates that this asset mix should generate a return in excess of 8%, without net value added by management.

4.5 From the 2012 Asset-Liability Study, the 7.61% expected asset mix 10-year policy return was developed with reference to the observed long-term relationships among major asset classes. The Board believes this return expectation is reasonable, but recognizes that the actual 10-year asset mix policy return can deviate significantly from this expectation — both positively and negatively. The volatility level associated with this asset mix is approximately 14.60%.

Exhibit 2: Asset Mix Policy and Return Expectations for STRS Ohio Total Fund

Asset Class	Target Allocation[1]	Rebalancing Range	Expected 10-Year Policy Returns[2]	Expected Management Net Returns[3]	Expected Total Return
Equity					
Domestic	**31%**	**26–36%**	**8.00%**	**0.25%**	**8.25%**
International	**26%**	**21–31%**	**7.85%**	**1.00%**	**8.85%**
Alternatives	**14%[5]**	**7–18%[5]**	**8.00%**		**8.00%**
Private Equity	7%[5]	4–9%[5]	9.00%		9.00%
Opportunistic/Diversified	7%[5]	3–9%[5]	7.00%		7.00%
Fixed Income	**18%**	**13–25%**	**3.75%**	**0.35%**	**4.10%**
Real Estate	**10%**	**6–13%**	**6.75%**	**1.00%**	**7.75%**
Liquidity Reserve	**1%**	**0–5%**	**3.00%**		**3.00%**
Total Fund[5]	**100%**		**7.61%**	**0.40%**	**8.01%[4]**

[1]The target allocation percentage became effective as of Jan. 1, 2014.

[2]The expected 10-year policy returns are based on the investment consultant's capital market assumptions in the 2012 asset-liability study for each asset class and total fund using the eventual new target weights. Over a 30-year period, the Board's investment consultant indicates that this asset mix should generate a return in excess of 8%, before net value added by management.

[3]Individual asset class returns (except real estate and alternative investments) are gross value added. The total fund is net of all investment management costs, and real estate and alternative investments is net of external management fees.

[4]The 10-year total fund return forecast is 8.01% per year, which includes the expected net value added by management and is based on the target weights.

[5]The Private Equity and Opportunistic Diversified target weights and rebalancing ranges are only meant to be general guidelines; the official target weight and rebalancing range is at the total alternative investment asset class level.

4.6 Fund assets are invested using a combination of passive and active management strategies. Passive management reduces both the risk for underperformance and the opportunities of outperformance. Active management is expected to earn net 0.40% per annum of additional returns over moving five-year periods. The Board recognizes that unsuccessful active management can reduce total fund returns.

4.7 Investment objectives and guidelines for individual asset classes have been approved by the Board and are summarized in the following sections.

4.8 Liquidity reserves are kept at a minimum level, but sufficient to cover the short-term cash flow needs. STRS Ohio investment staff may utilize a derivative overlay to maintain the level at 1%.

4.9 The Board reviews at least annually its expectations for asset class and active management performance, and assesses how the updated expectations affect the probability that the Fund will achieve the established investment objectives.

5.0 Rebalancing

5.1 Exposures to selected asset classes are actively managed within the rebalancing ranges specified in Exhibit 2. Rebalancing ensures that the Fund's actual asset allocation remains close to the target asset mix policy.

5.2 The Fund's actual asset allocation is monitored at least monthly relative to established asset allocation policy targets and ranges. The timing and magnitude of rebalancing are decided with due consideration to the liquidity of the investments and the associated transaction costs.

5.3 In its Annual Investment Plan prepared for the Board, staff explains how it is managing asset class exposures based on short- and intermediate-term capital market forecasts.

5.4 The impact of rebalancing decisions on total fund returns is included in investment performance reports to the Board.

6.0 Passive and Active Management Within Risk Budgets

6.1 STRS Ohio investment staff has been delegated the responsibility for managing the Fund's exposure to passive and active investment strategies, subject to the constraint that active risk does not exceed Board-approved target risk budgets for the total fund and individual asset classes.

6.2 The Board has approved a target risk budget of .60% to 1.20%, with a working range of .20% to 1.60%, annualized active management for the total fund. In exchange for assuming this level of active risk, the Board expects active management to add net 0.40% of annualized excess return over moving five-year periods to judge its effectiveness.

6.3 The Board realizes that actual active management returns will likely be above or below the net 0.40% target over any five-year moving period, and therefore will evaluate the success of STRS Ohio active management program within this context. The Board recognizes that any amount of management return in excess of the associated investment costs improves the security of STRS Ohio plan members.

6.4 Passive management uses low cost index funds to access the return streams available from the world's capital markets. Indexed funds control costs, are useful tools for evaluating active management strategies, capture exposure to the more efficient markets and facilitate rebalancing to the policy asset mix.

6.5 Active management is expected to earn higher returns than those available from index funds by making value-added security selection and asset mix timing decisions. Unsuccessful active management results in below index fund returns.

6.6 Because there are no index fund products for private real estate and alternative investments, these assets must be actively managed. Active versus passive decisions in all asset classes are based upon using the best available information.

7.0 Global Equities — Domestic

7.1 Domestic equity is being managed relative to a Board-approved risk budget range of .20% to 1.50%, and is expected to earn at least 0.25% of annualized excess return above the Russell 3000 Index over moving five-year periods.

7.2 Key elements of the strategy:

(a) The portfolio's active management adds value primarily through security selection. Sector tilts by style, economic sectors or market capitalization are managed in accordance with the risk budget for domestic equities.

(b) The portfolio utilizes a variety of portfolio management approaches including quantitative and fundamental techniques to diversify the source of excess return.

(c) The portfolio utilizes a combination of internal and external management, utilizing multiple internal portfolio managers and multiple external manager firms to improve the likelihood of achieving excess returns, to diversify risk and to control costs.

7.3 Short sales may be used in the management of STRS Ohio domestic equity portfolios, but may not exceed 10% of the value of the asset class.

8.0 Global Equities — International

8.1 International equity is being managed relative to a Board-approved risk budget range of 0.70% to 2.50%, and is expected to earn at least 1.0% of annualized excess return above a blended benchmark of 80% MSCI World ex US Index-Net (50% hedged) and 20% MSCI Emerging Markets Index-Net over moving five-year periods.

8.2 Key elements of the strategy:

(a) The portfolio's active management adds value primarily through security selection and country allocation decisions. These decisions have been shown to be the principal sources of the excess return in international equity portfolios. Managers also have the ability to add value through currency management.

(b) The portfolio uses a variety of portfolio management approaches including quantitative and fundamental techniques to diversify the source of excess return.

(c) Aggregate exposures to countries, currencies, equity styles and market capitalization are monitored and managed relative to their benchmark exposures.

(d) The portfolio utilizes a combination of internal and external management, with multiple internal portfolio managers and multiple external manager firms to improve the likelihood of achieving excess returns, to diversify risk and to control costs.

(e) STRS Ohio utilizes a 50% hedged benchmark on the developed markets portfolios in order to reduce the overall exposure to currency risk. With a 50% hedged benchmark, all developed market portfolios are generally hedged around the 50% benchmark level. Active currency positions are taken from time to time in some portfolios at the managers' discretion. This is generally limited to 10 percentage points under or over hedged around the benchmark for the total internal developed portfolios. Three-month currency forwards are the investment instrument generally used for hedges.

8.3 Short sales may be used in the management of STRS Ohio international equity portfolios, but may not exceed 10% of the value of the asset class.

9.0 Fixed Income

9.1 Fixed income is being managed relative to a Board-approved risk budget range of 0.10% to 1.50%, and is expected to earn at least 0.35% of annualized excess returns above the Barclays U.S. Universal Bond Index over moving five-year periods.

9.2 All of fixed income is actively managed because active management is generally low cost and market opportunities exist for skilled managers to generate excess returns.

9.3 Key elements of the strategy:

(a) The portfolio will primarily be managed internally, with multiple external managers utilized in specialized segments of the market such as high yield and emerging market debt.

(b) The portfolio will emphasize issue selection, credit analysis, sector allocations and duration management.

(c) Aggregate exposures to duration, credit and sectors are monitored and managed relative to corresponding exposures in the asset class benchmark.

9.4 Short sales may be used in the management of STRS Ohio fixed-income portfolios, but may not exceed 10% of the value of the asset class.

10.0 Real Estate

10.1 Real estate investments are being managed relative to a Board-approved risk budget range of 2.00% to 7.00%, and are expected to earn at least 1.00% of annualized excess returns above a blended benchmark over moving five-year periods. The Real Estate Blended Benchmark is 85% NCREIF Property Index and 15% FTSE NAREIT Equity REITs Index.

10.2 Key elements of the strategy:

(a) Eighty-five percent of Real Estate is actively managed. The portfolio is primarily managed internally, with direct property investments representing most of the portfolio. External Managers are used primarily for specialized segments of the market. Risk is diversified by investing across major property types and geographic areas.

(b) Leverage of up to and including 50%, in aggregate, is permitted for internally managed assets (excluding REITs).

(c) Publicly traded REITs are passively managed and targeted at 15% of the real estate portfolio to enhance liquidity and diversification.

(d) Non-core real estate investments are limited to 20% of the real estate portfolio. Investment strategies will be characterized as "opportunistic" based on the market conditions prevailing at the time of investment.

10.3 Short sales may be used in the management of REITs, but may not exceed 10% of the value of the asset class.

11.0 Alternative Investments (Private Equity and Opportunistic/Diversified)

11.1 Alternative investments involve separate allocations to private equity and opportunistic/diversified investments.

11.2 Private equity investments are being managed with the objective of earning at least 1% net of fees above domestic public equity markets (Russell 3000 Index) over moving 10-year periods. Private equity investments are traded infrequently and, therefore, risk budget concepts are not applicable.

11.3 Key elements of the private equity strategy:

(a) Private equity investments are 100% actively managed.

(b) Private equity risk is diversified by investing across different types of investments including, but not limited to, venture capital, leverage buyouts, mezzanine debt, sector and international funds.

(c) Private equity risk is also diversified by investing across vintage years, industry sectors, investment size, development stage and geography.

(d) Private equity investments are managed by general partners with good deal flow, specialized areas of expertise, established or promising net of fees track records and fully disclosed and verifiable management procedures.

11.4 Opportunistic/diversified investments are being managed with the objective of earning domestic public equity-like returns defined as 1% net of fees below domestic public equity markets (Russell 3000 Index) over moving 10-year periods, but with the added objective of downside protection during equity bear markets. Investments in this category can be liquid or illiquid and, therefore, risk budget concepts are not applicable.

11.5 Key elements of the opportunistic/diversified strategy:

(a) Opportunistic/diversified investments are tactical in nature and typically are actively managed.

(b) Downside protection during equity bear markets can be achieved and asset class risk is diversified by investing across different types of opportunistic/diversified investments.

(c) Opportunistic/diversified investments may be made directly, through specialist managers or through fund-of-funds.

12.0 Derivatives

12.1 Derivatives may be used in the management of STRS Ohio total fund, including all asset classes. Derivatives are typically, but not exclusively, futures contracts, equity swaps, credit default swaps, option contracts and option contracts on futures for market indexes. Options on individual securities, baskets of securities and equity-linked notes, and shorting for positioning purposes are further examples. Derivatives are both exchange traded and traded over the counter.

12.2 Derivative exposures must be of a hedging or positioning nature. As a percentage of Total Fund assets, the underlying exposure of all positioning derivatives will not exceed:

(a) 5% for fixed-income investments;

(b) 10% for domestic equity investments;

(c) 10% for international equity investments; and

(d) 1% for real estate investments.

(e) 5% for alternative investments

Hedging derivatives will not be included in the limits above, but must be disclosed in the semi-annual derivative exposure report.

12.3 Any use of leverage will adhere to asset allocation restrictions and asset class active management risk range constraints.

13.0 Proxy Voting

13.1 Common stock proxies are valuable and should be voted in the best interest of STRS Ohio active and retired members.

13.2 The Board shall maintain stock proxy voting policies and has directed STRS Ohio investment staff and the proxy voting agents to use these policies as guidelines for voting common stock proxies held by the Fund.

14.0 Ohio Investments

14.1 The Board will give due consideration to investments that enhance the general welfare of the State of Ohio and its citizens provided that assets are invested in the best interest of STRS Ohio active and retired members. Preference will be given to Ohio investments offering competitive returns at risk levels comparable to similar investments currently available to the Board.

14.2 STRS Ohio investment staff shall maintain and implement an Ohio Investment Plan. The plan shall set forth procedures to assure that a special effort will be made by the investment staff to examine and evaluate all legal investment opportunities in the state and, where policy criteria are satisfied, to acquire such investments.

15.0 Broker-Dealers

15.1 Purchases and sales of publicly traded securities shall be executed with broker-dealers from a list reviewed by the Board. In those rare situations where best execution cannot be achieved through a broker-dealer on the list, the Deputy Executive Director — Investments may approve the use of a broker-dealer not on the list.

15.2 Selection shall be based on an evaluation by the STRS Ohio investment staff as to financial soundness, underwriting capabilities, research services, execution capabilities and other factors required by the staff to fulfill its assigned investment responsibilities.

15.3 Specific transactions will be directed to the broker on that list most capable of providing brokerage services necessary to obtain both the best available price and the most favorable execution.

15.4 The Board shall give equal consideration to smaller Ohio-headquartered broker-dealers or smaller broker-dealers with at least one Ohio office and broker-dealers owned and controlled by minorities and/or women, provided the assets are transacted in the best interest of STRS Ohio members.

15.5 The Board has a goal to increase the use of Ohio-qualified broker-dealers for the execution of domestic equity and fixed-income securities transactions, when the services that Ohio-qualified broker-dealers provide are equal in quality, cost, scope and execution capabilities to all broker-dealers approved to transact securities transactions on behalf of the Board.

15.6 Each firm listed shall file with the Board on an annual basis such evidence of financial responsibility as required by the Board. This information shall include, but not be limited to, an audited financial statement.

15.7 When stocks are purchased during underwriting, allocations may be made to dealers not on the approved list provided the managing underwriter is so listed.

15.8 When entering into real estate transactions, the Board shall give equal consideration to Ohio firms providing associated professional services, minority-owned and controlled firms, and firms owned and controlled by women.

16.0 Securities Lending

The Board may operate a securities lending program to enhance the income of the Fund. The program must be operated by a bank trustee who follows the custodial requirements of the Treasurer of the State of Ohio and each security lent must be fully collateralized. Results of the program must be reported to the Board annually.

17.0 Securities Litigation

Involvement in securities litigation is an important responsibility for institutional investors with major public market exposure. The Board shall maintain a policy to determine the appropriate action to be taken when class action litigation is initiated against a company that generates a significant loss for the Board during the class period.

18.0 Security Valuation

Valuation of investments shall be the total of:

(a) The primary closing price on the principal registered stock exchange for all common and preferred stocks so listed.

(b) The official closing price as reflected by either the OTCBB (Over the Counter Bulletin Board) or the Pink Sheets for common and preferred stocks not listed on a registered stock exchange.

(c) The current value as determined by a qualified independent service for all bonds, notes and certificates of indebtedness, including accrued income.

(d) Amortized cost for commercial paper, certificates of deposit, repurchase agreements and other short-term investments with a maturity of 270 or fewer days.

(e) Each internally managed real estate property initially valued at acquisitional price. Subsequent valuations completed internally or externally as outlined in the Real Estate Valuation Policy Manual. Full, self-contained appraisals completed by an independent external appraiser no less than every third year.

(f) The most recent external manager valuations for alternative investments and externally managed real estate updated to include current capital activity.

(g) International equity and external fixed income investments are valued by the subcustodian using relevant closing market prices and exchange rates and including accrued income for fixed income investments.

(h) Each internally managed alternative investment initially valued at acquisition price. Subsequent valuations completed internally as outlined in the Alternative Investments Valuation Policy Manual.

19.0 Performance Monitoring and Evaluation

19.1 The Board and its agents use a variety of compliance, verification and performance measurement tools to monitor, measure and evaluate how well STRS Ohio assets are being managed. Monitoring, reporting and evaluation frequencies range from live real time performance, to daily, weekly, monthly, quarterly and annualized performance for periods up to 20 years.

19.2 The Board has developed a performance monitoring and evaluation system that answers two fundamental fiduciary questions:

(a) Are the assets being prudently managed? More specifically, are assets being managed in accordance with established laws, policies and procedures, and are individual investment managers in compliance with their mandates?

(b) Are the assets being profitably managed? More specifically, has performance affected benefit security, has capital market risk been rewarded and has active management risk been rewarded?

19.3 If there is a deviation from Board policies, STRS Ohio investment staff is required to provide the Board with a report explaining how the deviation was discovered, the reasons for the deviation, the impact on Fund performance, if any, and steps taken to mitigate future occurrences.

19.4 Exhibit 3 is an example of one of many reports used by the Board to monitor and evaluate performance of the total fund. Panel one indicates whether the total fund return exceeded the actuarial rate of return. Panel two indicates whether the Fund was rewarded for investing in higher return but more risky equity investments. Panel three indicates whether active management added or detracted from returns.

19.5 Additional reports provide the Board with a multi-level view of investment activities at different levels and over different time horizons. These include:

(a) Performance of the total fund;

(b) Performance of individual asset class strategies;

(c) Performance of internally and externally managed portfolios; and

(d) Performance of individual external managers.

Exhibit 3: EXAMPLE Total Fund Trustee Summary Report, as of June 30, 2015

Experienced Returns	Annualized Rates of Return				
	1 Year	3 Years	5 Years	10 Years	20 Years
Have returns affected funded ratio?					
1. Total fund return	5.45%	11.88%	11.93%	7.33%	7.76%
2. Actuarial discount rate	7.75%	7.75%	7.85%	7.93%	7.80%
3. Relative performance (1–2)	–2.30%	4.13%	4.08%	–0.59%	–0.04%
Has plan been rewarded for capital market risk?					
4. Total fund blended benchmark return*	5.08%	12.13%	11.95%	7.21%	7.88%
5. Minimum risk/high opportunity cost policy of 91-day T-Bills	0.02%	0.06%	0.08%	1.30%	2.52%
6. Impact of asset mix policy (4–5)	5.06%	12.07%	11.90%	5.91%	5.36%
Has plan been rewarded for active management risk?					
7. Active management return (1–4)**	0.37%	–0.25%	–0.05%	0.12%	–0.12%
8. Net active management return estimated***	0.25%	–0.37%	–0.17%	0.00%	–0.23%

* The total fund blended benchmark is a blend of the asset class benchmarks based on the total fund's target allocation for the respective asset classes. Effective Jan. 1, 2014, the total fund blended benchmark is 18% Barclays U.S. Universal Index 31% Russell 3000, 26% International Blended Benchmark, 10% Real Estate Blended Benchmark, 14% Alternative Investment actual return and 1% BofA Merrill Lynch three-month U.S. Treasury Bill Index.

** Mix of net and gross as per industry conventions (external managers fees for alternative and real estate investment have been deducted, but no fees deducted for internal assets, external equity or external fixed income).

*** After all investment management costs deducted.

Statement of Fund Governance

Effective Dec. 17, 2015

1.0 Purpose

1.1 This Statement of Fund Governance (the "Statement") summarizes the governance structure established by the Board of the State Teachers Retirement Board of Ohio (the "Board") to ensure the prudent, effective and efficient management of the assets of the State Teachers Retirement System of Ohio ("STRS Ohio").

1.2 The fund governance structure was approved by the Board after careful consideration of alternative approaches to governing a very large and growing pension fund within an increasingly complex financial and investment environment.

1.3 The Statement has been prepared with five audiences in mind: incumbent, new and prospective Board members; STRS Ohio investment staff; STRS Ohio active and retired members; the Ohio General Assembly and Governor; and agents engaged by the Board to manage, administer or advise on STRS Ohio's assets ("Fund").

1.4 The Statement summarizes more detailed policy and procedure documents prepared and maintained by STRS Ohio investment staff, and numerous other documents that govern the day-to-day management of STRS Ohio assets.

1.5 The Board regularly assesses the continued suitability of the STRS Ohio fund governance structure, initiates change as necessary and updates this Statement accordingly.

1.6 The Board may authorize its administrative officers and committees to act for it in accord with its policies (Ohio Revised Code [ORC] Sections 3307.04 and 3307.15). The Board, no less frequently than annually, adopts a resolution delegating to the Executive Director and the Deputy Executive Director — Investments the authority to acquire, dispose, operate and manage the assets of the Fund, subject to the Board's policies and to subsequent approval by the Board.

1.7 In carrying out the operation and management of STRS Ohio, the Board, the Executive Director, the investment staff and others that are considered fiduciaries as defined in ORC Section 3307.01(K) are subject to various fiduciary responsibilities in ORC Chapter 3307, including those found in ORC Sections 3307.15, 3307.151, 3307.18 and 3307.181. This Statement incorporates, and is subject to, all of the provisions of ORC Chapter 3307.

1.8 The Board acknowledges its responsibilities under ORC Chapter 3307 and to the extent that this Statement is inconsistent with ORC Chapter 3307, Chapter 3307 shall control.

1.9 The Board approved this Statement on Dec. 17, 2015.

2.0 Governance Principles

2.1 Three principles guided the Board's development of the STRS Ohio fund governance structure:

(a) As STRS Ohio governing fiduciary, the Board is ultimately accountable for all investment decisions. Section 3307.15 of the Ohio Revised Code (the "Code") vests the investment function in the Board and requires the Board to ". . . adopt, in regular meetings, policies, objectives, or criteria for the operation of the investment program . . ." Section 3307.15 of the Code sets forth the fiduciary responsibility of the Board in discharging its duties with respect to the fund.

(b) To ensure STRS Ohio assets are prudently, profitably and efficiently managed on a day-to-day basis, the Board needs to delegate the management and implementation of Board investment policies to qualified managing and operating fiduciaries. Sections 3307.04 and 3307.15 of the Code empower the Board to authorize its committees and administrative officers to act for it in accord with Board policies. The fiduciary responsibility of Board delegates in discharging their duties with respect to the fund is specified in Section 3307.15.

(c) To ensure effective oversight of delegates, the Board requires informative and timely performance reports that reveal if managing and operating fiduciaries have complied with established policies, and indicate how assets under their care have performed relative to Board-approved investment objectives.

3.0 Investment Decisions Retained by the Board

3.1 The Board approves the following investment policies:

(a) Statement of Investment Objectives and Policy, which includes the following:

(i) Total fund risk and return objectives;

(ii) Total fund target asset mix policy;

(iii) Total fund asset mix policy rebalancing ranges;

(iv) Active management risk and return objectives at the total fund and asset class levels; and

(v) Performance measurement criteria and evaluation standards.

(b) Proxy voting;

(c) Ohio investments;

(d) Securities lending;

(e) Broker-dealer selection criteria and procedures;

(f) Ohio-qualified investment managers and brokers; and

(g) Securities litigation.

3.2 Before approving or amending policy decisions, the Board seeks advice, guidance and recommendations from STRS Ohio investment staff, Board-retained investment consultants, and other experts or sources as considered prudent by the Board.

4.0 Investment Decisions Delegated to Investment Staff

4.1 The Board, through the Executive Director, has delegated to qualified STRS Ohio investment staff the following investment management and implementation decisions:

(a) Buying, selling, managing and monitoring individual securities, real assets and/or other investment transactions to achieve the total fund and asset class investment objectives approved by the Board;

(b) Retaining, managing and terminating external investment managers within each asset class as required to achieve the total fund and asset class investment objectives approved by the Board;

(c) Ensuring total fund, asset class and individual manager portfolios comply with established parameters and risk levels; and

(d) Preparing, negotiating and executing external investment manager mandates, guidelines and fee agreements.

4.2 In making these decisions, STRS Ohio investment staff seeks the advice, guidance and recommendations of Board-retained investment consultants, external investment managers, and other experts and sources as considered prudent by STRS Ohio staff.

5.0 Board Oversight

5.1 The Board requires investment staff to prepare and deliver an Annual Investment Plan that explains how STRS Ohio assets will be managed in order to achieve the Board-established investment objectives. This provides the Board a focused opportunity to:

(a) Question and comment on staff's investment management plans;

(b) Request additional information and support about staff's investment intentions; and

(c) Express its confidence in the Annual Investment Plan.

5.2 The Board meets at least quarterly to assess how assets are being managed relative to the Annual Investment Plan, to monitor and evaluate investment performance relative to objectives and to address other investments issues as are warranted.

5.3 The Board approves the criteria and standards for monitoring and evaluating the impact different investment decisions have on total fund, asset class and manager-level performance. Performance is monitored and evaluated with respect to risk and return objectives established by the Board.

(a) Investment risks are monitored and evaluated quarterly by comparing total fund and asset class risk characteristics relative to suitable benchmarks.

(b) Investment returns are monitored monthly and evaluated quarterly by comparing total fund and asset class returns relative to suitable benchmarks.

5.4 Before approving or amending the criteria for monitoring and evaluating investment decisions, the Board seeks advice, guidance and recommendations from STRS Ohio investment staff, Board-retained investment consultants, and other experts and sources as considered prudent by the Board.

ACA COMPLIANCE GROUP
PERFORMANCE SERVICES

Verification Report

State Teachers Retirement System of Ohio
275 E. Broad Street
Columbus, OH 43215-3771

We have verified whether State Teachers Retirement System of Ohio ("the Firm") (1) complied with all the composite construction requirements of the Global Investment Performance Standards (GIPS®) on a firm-wide basis for the periods from July 1, 2006 through June 30, 2016, and (2) designed its policies and procedures to calculate and present performance in compliance with the GIPS standards as of June 30, 2016. The Firm's management is responsible for compliance with the GIPS standards and the design of its policies and procedures. Our responsibility is to express an opinion based on our verification. We conducted this verification in accordance with the required verification procedures of the GIPS standards. We also conducted such other procedures as we considered necessary in the circumstances.

In our opinion, the Firm has, in all material respects:

- Complied with all the composite construction requirements of the GIPS standards on a firm-wide basis for the periods from July 1, 2006 through June 30, 2016, and
- Designed its policies and procedures to calculate and present performance in compliance with the GIPS standards as of June 30, 2016.

Since our verification was designed to form an opinion on a firm-wide basis this report does not relate to any composite compliant presentation of the Firm and does not ensure the accuracy of any specific composite compliant presentation, including what is reflected in this Comprehensive Annual Financial Report.

ACA Performance Services, LLC

ACA Performance Services, LLC
August 19, 2016

ACA Performance Services, LLC 1370 Broadway, 12th Floor New York, NY 10018
Phone: (212) 951-1030 www.acacompliancegroup.com/gips

Investment Performance

(total returns, annualized on a fiscal-year basis, July 1–June 30)

1-Year Returns (2016)[1]

Asset Category	STRS Ohio Return	Index Name	Index Return
Domestic Equities[7]	0.41%	Russell 3000	2.14%
International Equities[7]	–7.11%	International Blended Benchmark[3]	–9.85%
Fixed Income[7]	5.62%	Barclays U.S. Universal Index	5.82%
Real Estate[7]	13.47%	Real Estate Blended Benchmark[4]	12.59%
Alternative Investments[7]	1.60%	Alternative Investments Blended Relative Return Objective[5]	–
Total Fund	**0.92%**	**Total Fund Blended Benchmark[6]**	**0.67%**

3-Year Returns (2014–2016)[1]

Asset Category	STRS Ohio Return	Index Name	Index Return
Domestic Equities[7]	10.26%	Russell 3000	11.13%
International Equities[7]	4.60%	International Blended Benchmark[3]	2.88%
Fixed Income[7]	4.06%	Barclays U.S. Universal Index	4.20%
Real Estate[7]	13.76%	Real Estate Blended Benchmark[4]	12.01%
Alternative Investments[7]	8.59%	Alternative Investments Blended Relative Return Objective[5]	–
Total Fund	**7.53%**	**Total Fund Blended Benchmark[6]**	**7.53%**

5-Year Returns (2012–2016)[1]

Asset Category	STRS Ohio Return	Index Name	Index Return
Domestic Equities[7]	10.77%	Russell 3000	11.60%
International Equities[7]	3.62%	International Blended Benchmark[3]	2.20%
Fixed Income[7]	4.12%	Barclays U.S. Universal Index	4.01%
Real Estate[7]	13.33%	Real Estate Blended Benchmark[4]	11.84%
Alternative Investments[7]	9.23%	Alternative Investments Blended Relative Return Objective[5]	11.89%
Total Fund	**7.66%**	**Total Fund Blended Benchmark[6]**	**7.69%**

STRS Ohio Long-Term Policy Objective (10 Years)[2]

Total Fund: 7.6%

State Teachers Retirement System of Ohio claims compliance with the Global Investment Performance Standards (GIPS®). To receive a compliant presentation and/or a description of the firm's composite, please contact the STRS Ohio Communication Services Department at 614-227-2825.

State Teachers Retirement System of Ohio is defined and created by the Ohio Revised Code, Chapter 3307.15. The STRS Ohio Total Fund performance returns consist of all assets of the fund, including both internally and externally managed accounts. All returns are calculated in U.S. dollars using a time-weighted rate of return. All returns are net of brokerage commissions, expenses related to trading, and applicable foreign withholding taxes on dividends, interest and capital gains. Performance is net of fees for external managed real estate and alternative investments and gross of fees on all other investments. Net of fees returns are available upon request and investment management fees vary among asset classes. All measurements and comparisons have been made using standard performance evaluation methods, and results are presented in a manner consistent with the investment industry in general and public pension funds in particular.

The Total Fund reflects an actual asset allocation to the following asset classes as of June 30, 2016: Liquidity Reserves 1.7%, Fixed Income 15.0%, Domestic Equities 31.2%, International Equities 26.3%, Real Estate 11.7% and Alternative Investments 14.1%. The investment objective for the Total Fund is to earn, over moving 30-year periods, an annualized return that equals or exceeds the actuarial rate of return, approved by the State Teachers Retirement Board ("Board") to value STRS Ohio liabilities. Effective July 1, 2012 the actuarial rate of return is 7.75%.

As part of the Total Fund strategy, certain asset classes may use derivatives and/or leverage. The following asset classes may use derivatives and/or leverage to gain exposure to certain sectors of the market:

- Fixed Income: Exposure to derivatives may not exceed 5% of Total Fund assets. A variety of derivatives may be used to adjust the exposure to interest rates, individual securities or to market sectors in the fixed income asset class.
- Domestic Equities: Exposure to derivatives, including, but not limited to, futures, stock options and index options may not exceed 10% of Total Fund assets.
- International Equities: Exposure to derivatives, including swap agreements, may not exceed 10% of Total Fund assets.
- Real Estate: Activities may include borrowing funds on a secured or unsecured basis with leverage limited to 50% of the internally managed direct real estate assets. At June 30, 2016 and 2015, debt as a percentage of these assets was 25.0% and 22.1%, respectively. Derivatives may also be used and cannot exceed 1% of Total Fund assets.
- Alternative Investments: Exposure to derivatives may not exceed 5% of Total Fund assets. Alternative investment managers may use derivatives as components of the funds' investment strategy and to achieve the investment objectives of the fund.

[1]The one-year returns for the fiscal years ended June 30, 2008, through 2016, have been examined by ACA Performance Services LLC. A copy of the examination report is available upon request.

[2]The long-term policy objective is a projected annualized policy return based on return forecasts by asset class before any value added. The State Teachers Retirement Board expects the net value added to be 0.40% per year.

[3]The International Blended Benchmark is calculated monthly using 80% of the MSCI World ex-U.S. 50% Hedged Index-Net and 20% of the MSCI Emerging Markets Index-Net effective Jan. 1, 2014. Prior to Jan. 1, 2014, the MSCI Emerging Markets Index was the Gross return.

[4]The Real Estate Blended Benchmark is calculated quarterly using 85% NCREIF Property Index (NPI) and 15% FTSE NAREIT Equity REITs Index effective July 1, 2012; and 85% NPI and 15% Wilshire REIT Index effective Oct. 1, 2007.

[5]Given the long-term nature of the asset class, no relative return objective for Alternative Investments is displayed for the one- and three-year periods. For the longer five-year period, the Alternative Investments Blended Relative Return Objective is a blend of two relative return objectives for Private Equity (PE)and Opportunistic/Diversified (OD) and is calculated using: 50.0% of the Russell 3000 Index plus 1% for PE and 50.0% of the Russell 3000 Index minus 1% for OD effective Jan. 1, 2014; 53.8% of the Russell 3000 Index plus 1% for PE and 46.2% of the Russell 3000 Index minus 1% for OD effective July 1, 2013; 54.5% of the Russell 3000 Index plus 1% for PE and 45.5% of the Russell 3000 Index minus 1% for OD effective Jan. 1, 2013; 50.0% of the Russell 3000 Index plus 1% for PE and 50.0% of the Russell 3000 Index minus 1% for OD effective July 1, 2012; 55.6% of the Russell 3000 Index plus 3% for PE and 44.4% of the Russell 3000 Index minus 1% for OD effective July 1, 2011.

[6]The Total Fund Blended Benchmark is calculated and rebalanced monthly using a blend of the asset class benchmarks based on the Total Fund's policy weights in effect during the respective period. For alternative investments, however, the actual Alternative Investments return is used in the calculation of the Total Fund Blended Benchmark. Information concerning asset class benchmarks and policy weights is available upon request.

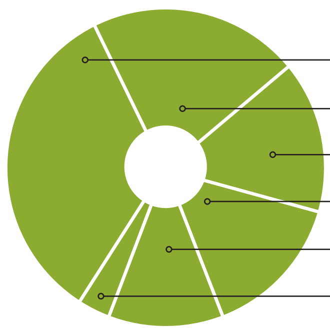
[7]Returns are supplemental to the Total Fund composite returns.

Summary of Investment Assets
As of June 30, 2016 and 2015 (dollar amounts in thousands)

	June 30, 2016	Percentage of Assets	June 30, 2015	Percentage of Assets
Short term				
Commercial paper	–	0.0%	$1,805,234	2.4%
Short-term investment funds	$ 13,000	0.0%	10,000	0.0%
U.S. Treasury bills	1,273,432	1.8%	–	0.0%
Total short term	**1,286,432**	**1.8%**	**1,815,234**	**2.4%**
Fixed income				
U.S. government agency obligations and U.S. government obligations	3,147,632	4.4%	4,421,268	5.8%
Corporate bonds	3,910,519	5.4%	4,685,134	6.2%
High yield and emerging market	1,711,974	2.4%	2,023,218	2.6%
Mortgages and asset-backed	2,635,719	3.6%	3,641,091	4.8%
Total fixed income	**11,405,844**	**15.8%**	**14,770,711**	**19.4%**
Domestic equities	**21,605,090**	**30.0%**	**22,635,629**	**29.7%**
International equities	**17,374,647**	**24.1%**	**18,039,095**	**23.7%**
Real estate				
East region	3,258,615	4.5%	3,013,630	3.9%
Midwest region	1,268,170	1.8%	1,088,837	1.4%
South region	709,216	1.0%	617,710	0.8%
West region	2,697,295	3.7%	2,503,649	3.3%
REITs	1,266,136	1.8%	1,090,804	1.4%
Other	1,184,918	1.6%	1,045,168	1.4%
Total real estate	**10,384,350**	**14.4%**	**9,359,798**	**12.2%**
Alternative investments	**10,019,630**	**13.9%**	**9,605,009**	**12.6%**
Total fund	**$72,075,993**	**100.0%**	**$76,225,476**	**100.0%**

Investment asset schedule excludes invested securities lending collateral.

Investment Distribution by Fair Value — as of June 30, 2016



Ohio Investment Profile — as of June 30, 2016
(in thousands)

STRS Ohio continues to engage in quality Ohio investments. As of June 30, 2016, STRS Ohio investments in companies with headquarters in Ohio are valued at more than $1.2 billion.

Fixed income	$ 149,627
Domestic equities	667,148
Real estate	150,804
Alternative investments	283,921
Total Ohio-headquartered investments	**$ 1,251,500**

Schedule of U.S. Stock Brokerage Commissions Paid
(for the year ended June 30, 2016)

Brokerage Firm	Shares Traded*	Commissions Paid	Average Cents Per Share
Nomura (Instinet LLC)	55,961,846	$ 2,798,092	5.0
ITG, Inc.	25,710,759	928,290	3.6
JP Morgan Securities LLC	31,984,925	662,237	2.1
Cantor Fitzgerald & Company	10,478,451	523,923	5.0
Deutsche Bank Securities Inc.	8,616,501	426,696	5.0
Citi Capital Markets Inc.	7,807,089	390,354	5.0
O'Neil Securities Inc.	7,577,582	378,879	5.0
Barclays Capital Inc.	11,024,007	378,826	3.4
Susquehanna Financial Group LLP	17,971,509	373,863	2.1
UBS Securities LLC	7,560,924	358,985	4.7
Weeden & Company	6,779,966	338,998	5.0
Baird (Robert W.) & Company Inc.	6,881,075	334,656	4.9
Rbc Capital Markets Llc	6,207,720	306,924	4.9
Bernstein (Sanford C.) & Company LLC	12,005,996	256,102	2.1
Merrill Lynch, Pierce, Fenner & Smith Inc.	7,583,021	255,313	3.4
Jefferies & Company Inc.	7,124,740	250,621	3.5
Morgan Stanley & Company LLC	7,619,365	246,696	3.2
Credit Suisse Securities (USA) LLC	4,905,218	201,085	4.1
Keybanc Capital Markets	4,214,799	191,859	4.6
Liquidnet Inc.	3,705,500	185,275	5.0
BMO Capital Markets Corporation	5,659,262	176,963	3.1
Evercore ISI Institutional Equities	3,471,228	173,561	5.0
Goldman, Sachs & Company	3,351,270	156,102	4.7
State Street Global Markets LLC	2,635,307	131,765	5.0
Piper Jaffray & Company	2,553,247	127,662	5.0
Others (includes 43 brokerage firms and external managers)	107,277,307	2,783,936	2.6
Totals	**376,668,614**	**$13,337,663**	**3.5**

*Includes option equivalent shares.
Excludes commissions on futures trading.

Schedule of Largest Investment Holdings* (as of June 30, 2016)

Domestic Equities — Top 20 Holdings

	Shares	Fair Value
Apple Computer Inc.	5,424,797	$518,610,593
Microsoft Corp.	7,150,461	$365,889,089
Exxon Mobil Corp.	3,473,712	$325,625,763
Amazon.com, Inc.	392,915	$281,177,832
Facebook Inc.-A	2,363,215	$270,068,210
General Electric Co.	8,033,626	$252,898,546
Procter & Gamble Co.	2,853,735	$241,625,743
AT&T Inc.	5,481,560	$236,858,207
Johnson & Johnson	1,935,251	$234,745,946
Allergan plc	960,963	$222,068,939
Chevron Corp.	2,027,865	$212,581,088
Alphabet Inc. Class C	303,742	$210,219,823
JPMorgan Chase & Co.	3,340,080	$207,552,572
Alphabet Inc.	288,975	$203,302,582
Wells Fargo Co.	4,192,226	$198,418,057
Visa Inc. Class A	2,671,658	$198,156,874
Berkshire Hathaway Inc. Class B	1,350,753	$195,575,527
Verizon Communications	3,413,303	$190,598,840
Coca Cola Co.	4,095,404	$185,644,663
Comcast Corp. Class A	2,704,977	$176,337,450

International Equities — Top 20 Holdings

	Shares	Fair Value
Nestlé (Switzerland)	2,842,536	$218,757,379
Roche Holdings AG (Switzerland)	819,357	$214,887,176
Samsung Electronics (South Korea)	149,872	$185,412,684
Novartis AG (Switzerland)	2,231,206	$183,134,829
British American Tobacco PLC (United Kingdom)	2,414,822	$155,690,229
SAP SE (Germany)	1,751,620	$130,550,216
Taiwan Semiconductor Manufacturing Co. LTD (Taiwan)	24,629,742	$124,068,727
Danone SA (France)	1,746,360	$122,890,564
Nippon Telegraph & Telephone Corp. (Japan)	2,407,042	$111,884,972
SoftBank Group Corp. (Japan)	1,813,100	$101,641,756
Mitsubishi UFJ Financial Group Inc. (Japan)	22,764,611	$100,502,456
Unilever NV (Netherlands)	2,086,176	$97,027,673
AIA Group LTD (China)	16,212,638	$96,860,800
TOTAL SA (France)	1,992,826	$95,936,957
ING Groep NV (Netherlands)	9,130,171	$93,003,928
Vodafone Group PLC (United Kingdom)	29,739,354	$90,128,252
Compass Group PLC (United Kingdom)	4,662,345	$88,260,375
GlaxoSmithKline (United Kingdom)	3,689,497	$78,807,699
Anheuser-Busch InBev NV (Belgium)	601,823	$78,542,209
Canadian National Railway Co. (Canada)	1,321,446	$78,031,747

Fixed Income — Top 20 Holdings

	Par Value	Fair Value
TSY INFL IX N/B, 0.125%, 7/15/2024, Aaa	$154,550,000	$157,409,540
U.S. Treasury N/B, 1.125%, 12/31/2019, Aaa	$122,450,000	$123,787,154
U.S. Treasury FRN, 0.440%, 4/30/2018, Aaa	$121,600,000	$121,631,616
U.S. Treasury N/B, 0.750%, 6/30/2017, Aaa	$115,200,000	$115,493,760
FHLMC Gold #Q15849, 3.500%, 2/1/2043, Aaa	$75,917,560	$80,151,482
U.S. Treasury FRN, 0.607%, 1/31/2018, Aaa	$78,400,000	$78,559,936
U.S. Treasury N/B, 0.625%, 5/31/2017, Aaa	$76,650,000	$76,730,482
Bank of America Credit Card Trust 2014-A2 VRN, 11/15/2019, Aaa	$75,728,000	$75,610,606
TSY INFL IX N/B , 0.375% , 7/15/2025 , Aaa	$71,400,000	$74,210,256
U.S. Treasury N/B , 1.000% , 8/31/2016 , Aaa	$72,550,000	$72,630,530
Bank of America Credit Card Trust VRN 11/15/2019 , Aaa	$70,000,000	$70,000,000
U.S. Treasury N/B, 0.750%, 2/28/2018, Aaa	$69,620,000	$69,819,809
U.S. Treasury N/B, 0.875%, 4/30/2017, Aaa	$67,350,000	$67,568,214
U.S. Treasury N/B, 0.625%, 8/15/2016, Aaa	$66,900,000	$66,923,415
U.S. Treasury N/B, 0.500%, 7/31/2017, Aaa	$63,630,000	$63,621,728
CHAIT 2014-A8 VRN 11/15/18, 11/7/2018, Aaa	$60,000,000	$60,014,076
GN2 Pool #MA1157, 3.500%, 7/20/2043, Aaa	$51,315,406	$54,569,315
U.S. Treasury N/B, 1.625%, 2/15/2026, Aaa	$53,070,000	$53,650,055
U.S. Treasury N/B, 2.500%, 2/15/2046, Aaa	$51,160,000	$53,180,308
LBUBS 2007-C2 A1A, 5.387%, 2/15/2040, NR	$51,802,923	$52,937,407

*A complete list of investment holdings is available from STRS Ohio.

Schedule of External Managers (as of June 30, 2016)

Domestic Equities

Intech
Chartwell Investment Partners
Fuller & Thaler Asset Management
M.A. Weatherbie & Company
Neuberger Berman
Next Century Growth Investors

International Equities

Alliance Bernstein
Arrowstreet Capital
Genesis Asset Managers
Lazard Asset Management
MFS Investment Management
Stewart Investors
Wellington Management

Fixed Income

Fidelity Institutional Asset Management
Oaktree Capital Management
Pacific Investment Management Company
Stone Harbor Investment Partners

Real Estate

BCMR-GP LLC
Benson Elliot Capital Management LLP
BlackRock Realty Advisors, Inc.
Blackstone Real Estate Advisors Europe, LP
Blackstone Real Estate Advisors L.P.
Carlyle Investment Management L.L.C.
CBRE Global Investment Partners Asia, Pte. Ltd.
CIM Global L.L.C.
CLSA Capital Partners Singapore PTE Ltd
DDR Corporation
Fortress Japan Opportunity Management LLC
Fortress Real Estate Opportunities Advisors LLC
Invesco Avisers Inc.
JP Morgan Funds Limited
KSL Advisors, LLC
LaSalle Investment Management (Asia) Pte. Ltd.
LNR CPI Fund GP, LLC
Normandy Real Estate Partners
Patria Brazil Real Estate Fund General Partner II, Ltd.
Patria Brazil Retail Property Fund General Partner, Ltd.
Pramerica Investment Management Limited
SCREP V Management , LLC
Straqtegic Partners Fund Solutions Advisors L.P.
Westbrook Realty Management IX, LP
Westbrook Realty Management V, LP
Westbrook Realty Management VI, LP
Westbrook Realty Management VII, LP
Westbrook Realty Management VIII, LP

Alternative Investments

Adams Capital Management, Inc.
Advanced Technology Ventures
Advent International Corporation
Angelo, Gordon & Co.
Apax Partners Worldwide
Apollo Aviation Group, LLC
Apollo Management
ArcLight Capital Partners, LLC
Ares Management, LLC
Athenian Venture Partners
Avenue Capital Group
Avenue Capital Management II, L.P.
Axiom Asia Private Capital
Bain Capital, LLC
Baker Capital Corp.
Beacon Capital Partners, L.L.C
Berkshire Partners, LLC
Blue Chip Venture Company, Ltd.
Bridgepoint Capital, Ltd.
Brookside Capital, LLC
C B Health Ventures, LLC
Cantor Fitzgerald
Cardinal Partners
CID Capital, Inc.
Claren Road Asset Management, LLC
Clayton, Dubilier & Rice, LLC
Commonfund Capital, Inc
Commonwealth Capital Ventures
Community Bancorp LLC
CQS
CVC Capital Partners Limited
Davidson Kempner Advisors, Inc.
Duff Ackerman & Goodrich
Dyal Capital Partners
Essex Woodlands Health Ventures
EXCO Resources
Fairview Management Group, LLC
Fortress Investment Group, LLC
Foundation Medical Partners
Fox Paine & Company, LLC
Francisco Partners
Freeman Spogli & Co.
Friedman, Fleischer & Lowe, LLC
General Catalyst Partners
Gilbert Global Equity Capital, L.L.C.
Globespan Capital Management, LLC
Golub Capital
Grosvenor Capital Management, LLC
H.I.G. Capital Management
Hamilton Bancorp Incorporated
HarbourVest Partners, LLC
Heartland Industrial Partners
Hellman & Friedman LLC
Hermes GPE LLP
HSBC Group
Ionic Capital Advisors, LLC
King Street Advisors, LLC
Leonard Green & Partners, L.P.
Lighthouse Capital Partners
Lime Rock Partners, LLC
Linsalata Capital Partners
Meritage Holdings, LLC
MHR Fund Management LLC
MKP Capital Management
Monitor Clipper Partners, Inc.
Moore Capital Advisors, LLC
Morgenthaler Ventures
New Enterprise Associates (NEA)
Oak Hill Capital Management, Inc.
Oaktree Capital Management, LLC
Och-Ziff Capital Management Group
Ohio Innovation Fund
Paine & Partners, LLC
Pamplona Capital Management
Panda Energy International, Inc.
Park Street Capital, LLC
PineBridge Investments
Primus Venture Partners, Inc.
Providence Equity Partners, Inc.
Quad Partners LLC
Redshift Ventures
Resolution Life
Reverence Capital Partners LLC
Ross, Jeffrey & Antle LLC
SciBeta
Semaphore
Silver Lake Partners
SKBHC Holdings LLC
Summit Partners
TA Associates, Inc.
TCW Group
Texas Pacific Group
The Blackstone Group
The Carlyle Group
Thoma Bravo, LLC
TowerBrook Capital Partners, L.P.
Triton Partners
Warburg Pincus LLC
WL Ross & Co, LLC (Invesco)

Segal Consulting
101 NORTH WACKER DRIVE, SUITE 500 CHICAGO, IL 60606
T 312.984.8500 F 312.984.8590 www.segalco.com

November 7, 2016

Board of Trustees
State Teachers Retirement System of Ohio
275 East Broad Street
Columbus, Ohio 43215

Ladies and Gentlemen:

This report presents the results of the annual valuation of the assets and liabilities of the State Teachers Retirement System of Ohio (STRS Ohio or System) as of July 1, 2016, prepared in accordance with Section 3307.51 of Chapter 3307 of the Ohio Revised Code. This valuation takes into account all of the pension and survivor benefits to which members are entitled. A separate valuation of the retiree health care benefits provided by the System is performed as of January 1 of each year.

Actuarial Assumptions and Methods

With the exception of the retirement rates, the valuation was based on the actuarial assumptions and methods as adopted by the Board of Trustees, reflecting the three-year experience review covering the period July 1, 2008 through June 30, 2011. The retirement rates, adopted effective July 1, 2013, were modified to reflect the plan changes that were adopted with the pension reform legislation.

Assets and Membership Data

STRS Ohio reported to the actuary the individual data for members of the System as of the valuation date. The amount of assets in the trust fund taken into account in the valuation was based on statements prepared by STRS Ohio.

Funding Adequacy

The member and employer contribution rates are established by statute. The member contribution rate increased from 13% of salary to 14% of salary effective July 1, 2016. The member contribution rate is not scheduled to increase beyond 14% of salary. The employer contribution rate is 14% of payroll. For members participating in the Combined Plan, 2% of the 14% member contribution rate is allocated to the Defined Benefit portion effective July 1, 2016. This amount is not scheduled to increase beyond 2% of the member contribution rate. For fiscal 2017, the total contribution rate is 28% of payroll for the Defined Benefit Plan and 16% for the Combined Plan. In the past, the Board typically allocated the total contribution rate between pension and survivor benefits and health care. Beginning in fiscal 2016, the Board allocated the total contribution rate toward pension and survivor benefits and made no allocation to health care.

The valuation indicates that the pension and survivor benefits contribution rate of 28% for the Defined Benefit Plan and 16% for Combined Plan for fiscal 2017 and beyond is sufficient to provide for the payment of the pension and survivor benefits. This is because the funding period is 26.6 years and, if all assumptions are realized, the funding period is expected to decrease by one year in each future year. The quinquennial experience study is in process and it is expected that assumptions will be modified effective with the July 1, 2017, actuarial valuation.

The valuation indicates that for the fiscal year ending June 30, 2016, the actuarial experience of STRS Ohio was favorable generating a net actuarial gain of $290 million. This gain is the net result of a $774 million gain due to favorable investment return experience in prior years and a $485 million loss due to net unfavorable demographic experience in fiscal 2016.

Financial Results

This report shows detailed summaries of the financial results of the valuation used in preparing this valuation. The actuary prepared the following supporting schedules included in the Financial, Actuarial and Statistical Sections of the STRS Ohio *Comprehensive Annual Financial Report*:

- **Financial/Required Supplementary Information**
  - Schedule of Changes in Employers' Net Pension Liability
  - Schedule of the Employers' Net Pension Liability
  - Schedule of Employers' Contributions
- **Actuarial**
  - Schedule of Valuation Data — Active Members
  - Schedule of Valuation Data — Retirees/ Beneficiaries
  - Solvency Test
  - Analysis of Financial Experience
- **Statistical**
  - Actuarial Funded Ratio and Funding Period
  - Selected Funding Information — Defined Benefit Plan
  - Number of Benefit Recipients by Type
  - Summary of Active Membership Data
  - Benefit Payments by Type

Actuarial Certification

In preparing the results presented in this report, we have relied upon information STRS Ohio provided to us regarding the benefit provisions, System members, benefit payments and unaudited plan assets. While the scope of our engagement did not call for us to perform an audit or independent verification of this information, we have reviewed this information for reasonableness. The accuracy of the results presented in this report is dependent upon the accuracy and completeness of the underlying information.

All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, the results presented also comply with Chapter 3307 of the Ohio Revised Code, and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board. The undersigned are independent actuaries. Both are Fellows of the Society of Actuaries, Enrolled Actuaries, and Members of the American Academy of Actuaries, and both are experienced in performing valuations for large public retirement systems. They both meet the Qualification Standards of the American Academy of Actuaries.

Respectfully submitted,

Segal Consulting, a Member of the Segal Group

By:

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Senior Vice President and Actuary

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Vice President and Consulting Actuary

This section presents the results of the annual valuation of the assets and liabilities of the State Teachers Retirement System of Ohio (STRS Ohio) as of July 1, 2016, prepared by its actuary, Segal Consulting, in accordance with Section 3307.51 of Chapter 3307 of the Ohio Revised Code.

Statement of Actuarial Assumptions and Methods

The assumptions below have been adopted by the State Teachers Retirement Board after consulting with the actuary. The board has adopted a funding policy that establishes the framework and specific objectives to monitor the system's funding status.

Investment Return Rate: 7.75% per annum, compounded annually and net of investment expenses.

Mortality Rates — Post-Retirement: RP-2000 Combined Mortality Table (Projection 2022 – Scale AA). Males are set back two years through age 89 and no set back for age 90 and above. Females are set back four years through age 79, one year set back from age 80 through 89, and no set back from age 90 and above. (Adopted effective July 1, 2012.)

Mortality Rates — Pre-Retirement: Mortality rates for males are the same as the male post-retirement mortality rates with the exception that pre-retirement mortality rates for male age 45 and older are 25% less than the male post-retirement mortality rates. Mortality rates for females are the same as the female post-retirement rates with the exception that the pre-retirement mortality rates for females between age 50 and 57 are 25% less than the female post-retirement mortality rates, and the pre-retirement mortality rates for females age 58 and older are 50% less than the female post-retirement mortality rates. (Adopted effective July 1, 2012.)

Mortality Rates — Post-Retirement Disabled: Shown to the right for selected ages. (Adopted effective July 1, 2012.)

Salary Increase Rates: Shown to the right for selected ages. (Adopted effective July 1, 2012.)

Mortality Rates
Post-Retirement Disabled

Age	Male	Female
20	3.08%	2.95%
25	3.08%	2.95%
30	3.08%	2.95%
35	3.08%	2.95%
40	3.08%	2.95%
45	2.16%	2.07%
50	2.16%	2.07%
55	2.16%	2.07%
60	2.16%	2.07%
65	3.08%	2.95%
70	4.62%	2.95%

Annual Rates of Separation and Salary Increase

Age	Vested Withdrawal	Disability	Salary Increase
MEN			
20	11.25%	.008%	12.25%
25	11.25%	.008%	12.25%
30	2.40%	.014%	8.25%
35	1.96%	.030%	7.45%
40	1.62%	.071%	6.05%
45	2.00%	.131%	5.50%
50	2.00%	.180%	4.75%
55	4.00%	.225%	4.25%
60	4.00%	.263%	3.75%
65	0.00%	.300%	3.25%
70	—	—	2.75%
WOMEN			
20	13.20%	.010%	12.25%
25	12.54%	.010%	12.25%
30	4.22%	.011%	8.25%
35	2.38%	.033%	7.45%
40	1.69%	.060%	6.05%
45	1.35%	.083%	5.50%
50	2.00%	.120%	4.75%
55	3.00%	.150%	4.25%
60	3.00%	.175%	3.75%
65	0.00%	.200%	3.25%
70	—	—	2.75%

Payroll Growth Rate: 3.50% per annum compounded annually for the next two years, 4.00% thereafter.

Percent Married: For valuation purposes, 80% of male members and 60% of female members are assumed to be married. Male members are assumed to be three years older than their spouses, and female members are assumed to be one year younger than their spouses. (The assumed age difference adopted effective July 1, 2012.)

Retirement Rates: Rates are assumed for members eligible to retire. (Retirement rates for the Defined Benefit Plan adopted effective July 1, 2013.)

Retirement Rates
Aug. 1, 2014 and After — Grandfathered Members

Age	Under 25 Years of Service	25–29 Years of Service	30–34 Years of Service	35+ Years of Service
MEN				
52	0%	0%	20%	40%
55	0%	6%	20%	60%
60	10%	7%	20%	55%
65	20%	20%	12%	40%
70	15%	20%	12%	30%
75	100%	100%	100%	100%
WOMEN				
52	0%	0%	20%	50%
55	0%	9%	20%	60%
60	10%	10%	30%	55%
65	25%	30%	35%	55%
70	20%	20%	35%	40%
75	100%	100%	100%	100%

Retirement Rates
Aug. 1, 2014 and After — Non-Grandfathered Members

Age	Under 25 Years of Service	25–29 Years of Service	30–34 Years of Service	35+ Years of Service
MEN				
52			20%	20%
55		3%	20%	20%
60	5%	5%	20%	25%
65	20%	20%	12%	25%
70	15%	20%	12%	20%
75	100%	100%	100%	100%
WOMEN				
52			20%	20%
55		5%	20%	20%
60	5%	10%	30%	30%
65	25%	30%	35%	35%
70	20%	20%	35%	30%
75	100%	100%	100%	100%

Asset Valuation Method: The actuarial value of assets is based on the market value of assets with a four-year phase-in of actual investment return in excess of (or less than) expected investment income. Expected investment income is determined using the assumed investment return rate and the actuarial value of assets (adjusted for receipts and disbursements during the year). The actual investment return for this purpose is determined net of all investment and administrative expenses. The actuarial value is further adjusted, if necessary, to be within 9% of the market value.

Actuarial Cost Method: Normal cost and actuarial accrued liability are calculated on an individual basis and are allocated by salary. Entry age is determined as the age at member's enrollment in STRS Ohio. The actuarial accrued liability is the difference between the total present value of future benefits and the actuarial present value of future normal costs. The unfunded actuarial accrued liability (UAAL) is the excess of the actuarial accrued liability over the actuarial value of assets.

Amortization Period and Method: The Actuarially Determined Contribution (ADC) is determined as the sum of (a) the employer normal cost rate, and (b) a level percentage of payroll required to amortize the unfunded actuarial accrued liability over the 30-year closed period that began July 1, 2015.

Census and Assets: The valuation was based on members of the system as of July 1, 2016, and does not take into account future members. All census and asset data was supplied by the system.

Benefit Recipients Added to and Removed From the Rolls, 2007–2016

Fiscal Year Ended	Beginning Number of Benefit Recipients	Beginning Annual Allowances (in thousands)	Benefit Recipients Added	Payments Added (in thousands)	Benefit Recipients Removed	Payments Removed (in thousands)	Ending Number of Benefit Recipients	Ending Annual Allowance (in thousands)
2007	119,184	$3,828,395	7,289	$370,503	3,539	$74,241	122,934	$4,124,657
2008	122,934	$4,124,657	7,182	$373,385	3,610	$79,243	126,506	$4,418,799
2009	126,506	$4,418,799	6,675	$366,645	3,522	$78,480	129,659	$4,706,964
2010	129,659	$4,706,964	7,089	$334,654	3,645	$83,658	133,103	$4,957,960
2011	133,103	$4,957,960	7,744	$501,900	2,759	$66,488	138,088	$5,393,372
2012	138,088	$5,393,372	8,761	$512,952	3,593	$90,917	143,256	$5,815,407
2013	143,256	$5,815,407	8,493	$441,942	2,528	$67,167	149,221	$6,190,182
2014	149,221	$6,190,182	5,550	$283,768	2,563	$76,415	152,208	$6,397,535
2015	152,208	$6,397,535	9,027	$490,598	3,119	$86,952	158,116	$6,801,181
2016	**158,116**	**$6,801,181**	**2,675**	**$177,665**	**2,853**	**$82,684**	**157,938**	**$6,896,162**

Schedule of Valuation Data — Active Members, 2007–2016

Valuation Date*	Number of Active Members	Annualized Salaries (in thousands)	Annual Average Pay	% Increase in Average Pay
2007	174,110	$9,051,842	$51,989	2.3%
2008	173,327	$9,187,562	$53,007	2.0%
2009	174,807	$9,502,701	$54,361	2.6%
2010	175,842	$9,633,355	$54,784	0.8%
2011	177,897	$9,609,723	$54,018	–1.4%
2012	173,044	$9,330,845	$53,922	–0.2%
2013	169,945	$9,118,035	$53,653	–0.5%
2014	169,295	$9,148,438	$54,038	0.7%
2015	164,925	$9,057,095	$54,916	1.6%
2016	**169,212**	**$9,562,237**	**$56,510**	**2.9%**

*For valuations prior to July 1, 2010, active members are defined as participants who earned 0.25 years of service credit or more, in the valuation year. Starting with the July 1, 2010, figures, active members are defined as participants who earned 0.25 years of service credit or more in the valuation year and those employed on or after Jan. 1, with less than 0.25 years of service.

Schedule of Valuation Data — Retirees/Beneiciaries, 2007–2016

Valuation Date	Number of Retirees/Beneficiaries	Annual Allowances (in thousands)	% Increase in Annual Allowances	Average Annual Allowances
2007	122,934	$4,124,657	7.7%	$33,552
2008	126,506	$4,418,800	7.1%	$34,930
2009	129,659	$4,706,964	6.5%	$36,303
2010	133,103	$4,957,960	5.3%	$37,249
2011	138,088	$5,393,372	8.8%	$39,057
2012	143,256	$5,815,407	7.8%	$40,594
2013	149,221	$6,190,182	6.4%	$41,483
2014	152,208	$6,397,535	3.3%	$42,032
2015	158,116	$6,801,181	6.3%	$43,014
2016	**157,938**	**$6,896,162**	**1.4%**	**$43,664**

Solvency Test, 2007–2016 (dollar amounts in thousands)

Valuation Date	Accrued Liability For: (1) Active Member Contributions	(2) Retirees and Beneficiaries	(3) Active Members (Employer-Financed Portion)	Valuation Assets*	Portion of Accrued Liabilities Covered by Valuation Assets: (1)	(2)	(3)
2007	$9,563,124	$47,526,142	$24,037,375	$66,671,511	100%	100%	40%
2008	$9,737,926	$51,874,103	$25,820,319	$69,198,008	100%	100%	29%
2009	$10,295,816	$54,909,046	$26,236,093	$54,902,859	100%	81%	0%
2010	$10,641,167	$57,754,654	$26,324,848	$55,946,259	100%	78%	0%
2011	$10,907,611	$62,441,601	$25,416,993	$58,110,495	100%	76%	0%
2012	$10,985,246	$68,111,175	$27,205,420	$59,489,508	100%	71%	0%
2013	$10,962,886	$68,075,440	$15,328,367	$62,590,786	100%	76%	0%
2014	$11,477,457	$69,776,259	$14,913,341	$66,657,175	100%	79%	0%
2015	$11,473,309	$74,340,699	$13,200,646	$68,655,999	100%	77%	0%
2016	**$12,498,469**	**$74,282,592**	**$13,975,362**	**$70,114,637**	**100%**	**78%**	**0%**

*Excludes health care assets.

Analysis of Financial Experience

Gains and Losses in Accrued Liabilities Resulting From Differences Between Assumed Experience and Actual Experience (in thousands)

Type of Activity	Gain (loss) for year ended June 30: 2016	2015	2014	2013	2012
Investment income. If there is greater investment income than assumed, there is a gain. If less, there is a loss.	$ 774,260	$ 1,068,184	$ 3,333,931	$ 2,483,140	$ 324,840
Payroll growth. If more contributions from payroll growth are received than expected, there is a gain. If less, there is a loss.	(40,874)	(26,173)	(51,750)	(36,193)	(69,993)
Salary increases. If there are smaller salary increases than assumed, there is a gain. If greater increases, there is a loss.	236,054	21,385	413,619	816,457	1,030,921
Retirement and other separation experience. If members retire from service at an older age or with a lower final average salary than assumed, there is a gain. If separation claims are less than expected, there is a gain. If new members don't enter the system as expected, there is a loss.	(333,342)	(1,064,240)	(327,782)	(1,199,362)	(995,369)
Death after retirement. If retirees live shorter than expected, there is a gain. If retirees live longer than assumed, there is a loss.	(336,967)	(223,251)	(185,841)	39,580	(80,989)
Final plan reselection. If the account value from defined contribution accounts is greater than the reestablished defined benefit account balance, there is a gain.	(9,569)	(8,240)	(3,807)	(11,124)	(12,658)
Gain (or loss) during year from financial experience	289,562	(232,335)	3,178,370	2,092,498	196,752
Actuarial gain (or loss) due to assumption changes/plan amendments	0	0	0	15,662,266	(4,178,741)
Composite gain (or loss) during the year	**$ 289,562**	**$ (232,335)**	**$ 3,178,370**	**$17,754,764**	**$ (3,981,989)**

Summary of Benefit and Contribution Provisions — Defined Benefit Plan

Eligibility for Membership

Immediate upon commencement of employment.

Service Retirement

Eligibility

Age 60 with five years of qualifying service credit, or age 55 with 26 years of service, or 31 years of service regardless of age. Age and service requirements for retirement increase until Aug. 1, 2026, as follows.

Unreduced Benefit for Retirement Between:	Minimum Age and Years of Service
Through 7/1/2015	Any age and 30 years; or age 65 and 5 years
8/1/2015–7/1/2017	Any age and 31 years; or age 65 and 5 years
8/1/2017–7/1/2019	Any age and 32 years; or age 65 and 5 years
8/1/2019–7/1/2021	Any age and 33 years; or age 65 and 5 years
8/1/2021–7/1/2023	Any age and 34 years; or age 65 and 5 years
8/1/2023–7/1/2026	Any age and 35 years; or age 65 and 5 years
8/1/2026	Age 60 and 35 years; or age 65 and 5 years

Amounts

On or before July 1, 2015, annual amount equal to the greater of (a) 2.2% of final average salary for the three highest years of earnings, multiplied by years of total Ohio service credit, or 2.5% of final average salary for the three highest paid years if the member has 35 or more years of contributing service credit multiplied by years of total contributing service credit, except that for years of contributing service credit in excess of 30, the following percentages will apply:

Year	Percentage
31	2.5%
32	2.6%
33	2.7%
34	2.8%
35	2.9%
36	3.0%
37	3.1%
38	3.2%
39	3.3%

or (b) $86 multiplied by years of service credit.

Effective Aug. 1, 2015, annual amount equal to 2.2% of final average salary for the five highest years of earnings, multiplied by all years of service.

For members who were eligible to retire on Aug. 1, 2015, or later, annual amount will be greater of (a) the benefit amount calculated upon retirement under the current benefit formula, or (b) the benefit amount as of July 1, 2015 under the previous formula.

Annual salary is subject to the limit under Section 401(a)(17) of the Internal Revenue Code.

Prior to July 1, 2015, if the member has less than 30 years of service at retirement and is younger than age 65, the following reduction factors apply:

Attained Age	Years of Ohio Service Credit	Percentage of Base Amount
58	25	75%
59	26	80%
60	27	85%
61		88%
	28	90%
62		91%
63		94%
	29	95%
64		97%
65	30 or more	100%

Effective Aug. 1, 2015, the service credit requirements for an actuarially reduced benefit are as follows:

Actuarially Reduced Benefit for Retirement Between:	Minimum Age and Years of Service
Through 7/1/2015	Age 55 and 25 years; or age 60 and 5 years
8/1/2015–7/1/2017	Any age and 30 years; or age 55 and 26 years; or age 60 and 5 years
8/1/2017–7/1/2019	Any age and 30 years; or age 55 and 27 years; or age 60 and 5 years
8/1/2019–7/1/2021	Any age and 30 years; or age 55 and 28 years; or age 60 and 5 years
8/1/2021–7/1/2023	Any age and 30 years; or age 55 and 29 years; or age 60 and 5 years
8/1/2023	Any age and 30 years; or age 60 and 5 years

The actuarially reduced benefit reflects a reduction for each year that the member retires before meeting eligibility for an unreduced benefit.

Disability Retirement

Eligibility

Membership before July 30, 1992, and election of this benefit, completion of five or more years of qualifying service credit, under age 60 and permanently incapacitated for the performance of duty.

Amount

(1) Annuity with a reserve equal to the member's accumulated contributions, plus

(2) The difference between (1) and 2% of the average salary during the three highest paid years times total service plus years and months from date of disability to age 60. Maximum allowance is 75% of final average salary. Minimum allowance is 30% of final average salary. Disability benefits commencing Aug. 1, 2015, or later will be based on a five-year final average salary.

Disability Allowance

Eligibility

Membership after July 29, 1992, or membership before July 30, 1992, and election of this benefit, completion of five or more years of qualifying service credit and permanently incapacitated for the performance of duty. For membership on or after July 1, 2013, completion of 10 years of qualifying service credit and permanently incapacitated for the performance of duty.

Amount

2.2% of the average salary during the three highest paid years times total service. Maximum allowance is 60% of final average salary. Minimum allowance is 45% of final average salary. The disability allowance payment terminates at age 65 (or later if payment begins after age 60). After termination of the disability allowance, the member may apply for service retirement. Disability benefits commencing Aug. 1, 2015, or later will be based on a five-year final average salary.

Death After Retirement

Lump-sum payment of $1,000 upon death after service or disability retirement.

Survivor Benefits

Eligibility

Upon death after at least 1-1/2 years of credit with at least 1/4 year of such service in the 2-1/2 years preceding death or upon death of a disability benefit recipient. For membership on or after July 1, 2013, upon death after at least five years of qualifying service credit and died not later than one year after the date service terminated or upon the death of a disability benefit recipient.

Qualified survivors will receive the highest benefit from among the following for which they are eligible: dependent-based benefit, service-based benefit, and retirement-based benefit.

Qualified survivors are the spouse, dependent children, and/or dependent parents over age 65.

Dependent-based benefit

Monthly survivor benefits are determined according to the number of qualified survivors. These benefits are payable as a percentage of final average salary. The percentages are as follows:

Number of Qualified Dependents	% of Average Annual Salary for Three Highest Paid Years	Minimum Annual Benefit
1	25%	$1,152
2	40%	$2,232
3	50%	$2,832
4	55%	$2,832
5 or more	60%	$2,832

Service-based benefit

If a member has 20 or more years of service before death, monthly survivor benefits are determined according to the number of years of service credit. These benefits are payable as a percentage of final average salary. The percentages are as follows:

Years of Service	% of Final Average Salary
20	29%
21	33%
22	37%
23	41%
24	45%
25	48%
26	51%
27	54%
28	57%
29 or more	60%

Retirement-based benefit

If a member dies after meeting service retirement eligibility, the monthly survivor benefit is determined as if the member had actually retired and provided the maximum joint and survivor benefit to the qualified survivor (Option 1). Early retirement reduction applies if the member is not eligible for unreduced benefit.

The primary beneficiary may withdraw the deceased member's account in lieu of receiving monthly benefits if there are no children who are qualified survivors.

Lump-Sum Withdrawal Option

In lieu of any other pension or survivor benefits, a member who leaves the system can receive his or her member contributions with interest in a lump sum payment according to the following schedule:

Credited Service	Lump-Sum Amount
Less than three years	Member contributions with 2% interest
Three or more years but less than five years	Member contributions with 3% interest
Five or more years	150% of member contributions with 3% interest

The board has the authority to modify the interest credited to member contributions.

Plans of Payment

There are four basic plans of payment:

Plan I — Single Life Annuity: if a member chooses this plan at retirement and later marries, he/she may change the plan to a Joint and Survivor Annuity with his/her spouse as beneficiary within the first year of the marriage.

Plan II — Joint and Survivor Annuity: there are four options under this plan of payment:

- Options 1, 2 and 3 apply to a single primary beneficiary
- Option 4 applies to multiple primary beneficiaries

Plan III — Annuity Certain: if a death occurs before the guaranteed period ends, a beneficiary receives the same monthly benefit until the guaranteed period expires. If a member names more than one beneficiary, a lump-sum payment, representing the present value of the remaining payments, is divided equally and paid to the beneficiaries. If all beneficiaries die before the expiration of the certain period, the present value of all remaining payments is paid to the estate of the beneficiary last receiving payments.

Plan IV — Partial Lump-Sum Option Plan: allows a member to take an amount from six to 36 times the monthly Single Life Annuity benefit in a lump sum at retirement. The remainder of a member's lifetime benefits will be paid based on member's selected plan of payment: Single Life Annuity, Joint and Survivor Annuity or Annuity Certain.

Optional Forms of Benefit

Option 1 — 100% joint and survivorship. Reduced retirement allowance payable to the member, continuing after the member's death, for life to the member's sole beneficiary named at retirement.

Option 2 — A joint and survivorship annuity payable during the lifetime of the member, with the member's sole beneficiary named at retirement to receive some other portion of the member's annuity after the member's death.

Option 3 — The sole member's reduced retirement allowance provided under Option 1 or Option 2 is to be paid after the member's death for life to the member's sole beneficiary named at retirement, except that in the event of the death of the sole beneficiary or termination of marriage between the retiree and the sole beneficiary, the retiree may elect to return to his single lifetime benefit equivalent. In the case of termination of marriage, the election may be made with the written consent of the beneficiary or by court order.

Option 4 — Members may elect a reduced benefit to provide continuing lifetime benefits for up to four primary beneficiaries under a Joint and Survivor Annuity. A member may specify percentages of his/her benefit or a flat dollar amount for each beneficiary; however, the total benefit amount payable to all beneficiaries cannot exceed the amount payable to the member.

Cost-of-Living Adjustment (COLA)

The basic benefit is increased each year by 2% of the original base benefit. For members retiring Aug. 1, 2013, or later, the 2% COLA is paid on the fifth anniversary of the retirement benefit. Future annual increases are calculated on the original benefit and are not compounded.

Members who retired before July 1, 2013, did not receive a COLA during the 2014 fiscal year. Members who retired effective July 1, 2013, did not receive a COLA on July 1, 2014. After missing one COLA, retirees resume COLA at 2% per year.

Health Care

Retirees, their spouses and dependents are eligible for a comprehensive medical expense health care plan as may be offered by the Retirement Board, subject to changes in terms and conditions from time to time.

Contribution

By Members: 14% of salary.

By Employers: 14% of salaries of their employees who are members.

Summary of Benefit and Contribution Provisions — Combined Plan

Eligibility for Membership

New members hired on or after July 1, 2001, may elect in writing to participate in the Combined Plan.

Service Retirement

Eligibility

Age 60 with five years of service.

Amount

The balance in the member's defined contribution account plus an annual amount equal to 1% of final average salary for the three highest paid years multiplied by years of total Ohio service credit.

Effective Aug. 1, 2015, final average salary will be average of the member's five highest salary years.

Annual salary is subject to the limit under Section 401(a)(17) of the Internal Revenue Code.

Vesting

Eligibility

Completion of five years of service for the defined benefit portion. Member contributions and earnings are 100% vested at all times.

Amount

A member who terminates with five or more years of service credit can receive the actuarial equivalent present value of the defined benefit formula. Before age 50, a withdrawal must include both the defined benefit and defined contribution portions of the account.

Early Retirement

Eligibility

Before age 60 with five years of service.

Amount

The normal retirement benefit commencing at age 60. At age 50 or after, a member may elect to withdraw the full value of his or her defined contribution account and receive the withdrawal value of the defined benefit in a single sum, or leave the defined benefit on account for a benefit payable at age 60. The member may withdraw the defined benefit portion of the account only if he or she is also withdrawing the defined contribution account.

Disability Benefits

Eligibility

Completion of five or more years of qualifying service credit and permanently incapacitated from the performance of duty. For membership on or after July 1, 2013, completion of 10 years of qualifying service credit with STRS Ohio.

Amount

2.2% of the average salary during the five highest paid years times total service. Maximum allowance is 60% of final average salary and the minimum is 45%. All contributions and investment gains in the member's defined contribution account are used to fund the benefit. At age 65, the disability allowance converts to a service retirement benefit with a 2.2% formula. Alternatively, the member's defined contribution account is available.

Survivor Benefits

Eligibility

Upon death after at least 1-1/2 years of qualifying service credit with at least 1/4 year of such service in the 2-1/2 years preceding death or upon death of a disability benefit recipient. For membership on or after July 1, 2013, upon death at least five years of qualifying service credit and died no later than one year after service terminated or upon death of a disability benefit recipient.

Amount

Qualified survivors have the option of receiving dependent-based, service-based or retirement-based benefits described under the Defined Benefit Plan. Both employer contributions and the member's contributions and any investment gains in the member's defined contribution account are used to fund the benefit. Survivors also have the option to withdraw the defined contribution and defined benefit portions of the Combined Plan account.

Optional Forms of Payment of Defined Benefit Portion

The greater of a lump sum of the actuarial equivalent of the defined benefit formula benefit or member contributions to the defined benefit portion. If a member withdraws the defined contribution account before age 50, the defined benefit portion is paid in a lump sum.

Joint and Survivorship Options — Options 1 through 4 described in the Defined Benefit Plan provisions are available, as well as the PLOP. All alternative forms of payment are the actuarial equivalent of the Single Life Annuity benefit payable at age 60.

Optional Forms of Payment of Member's Defined Contribution Account

The actuarial equivalent of the member's defined contribution account can be paid on or after age 50 as a lifetime annuity. Options 1 through 4, described in the Defined Benefit Plan provisions, are also available. The monthly annuity must be $100 or more to receive the member's defined contribution account in the form of an annuity.

The vested amount of the member's defined contribution account upon termination of employment can be paid as a single lump sum. If a member takes a lump sum of the defined benefit formula benefit, the member must simultaneously withdraw the lump-sum value of the member's defined contribution account in a single lump sum.

Cost-of-Living Adjustment (COLA)

Not available on the service retirement benefit. For disability and survivor benefits, the basic benefit is increased each year by 2% of the original base benefit.

Changes to the COLA are described under the Defined Benefit Plan section.

Health Care

Retirees, their spouses and dependents are eligible for a comprehensive medical expense health care plan as may be offered by the Retirement Board, subject to changes in terms and conditions from time to time.

Contribution

By Members: 14% of salary.

Effective July 1, 2016, 12% of salary is deposited into the member's defined contribution account and 2% is applied to the defined benefit portion of the Combined Plan.

By Employers: 14% of salaries, of their employees who are members, is used to fund the defined benefit formula.

Summary of Benefit and Contribution Provisions — Defined Contribution Plan

Eligibility for Membership

New members hired on or after July 1, 2001, may elect in writing to participate in the Defined Contribution Plan.

Service Retirement

Eligibility

Termination after age 50.

Amount

The balance in the member's defined contribution account.

Vesting

Eligibility

Employer contributions and earnings on the member's account are vested after the first anniversary of membership. Effective July 1, 2013, members vest 20% per year in employer contributions and all gains and losses on those contributions. Member contributions and earnings are 100% vested immediately.

Amount

The balance in the member's defined contribution account.

Early Retirement

Eligibility

Termination before age 50.

Amount

The balance in the member's defined contribution account.

Disability Benefits

Eligibility

Permanently incapacitated for the performance of duty and termination of employment.

Amount

The balance in the member's defined contribution account. At age 50, other payment options are available, but employment must first be terminated.

Survivor Benefits

Eligibility

Upon death.

Amount

The balance in the member's defined contribution account. A spouse may either continue to manage the member's defined contribution account or withdraw the account.

Optional Forms of Payment

The actuarial equivalent of the member's defined contribution account can be paid on or after age 50 as a lifetime annuity. Options 1 through 4, described in the Defined Benefit Plan provisions, are also available. The monthly annuity must be $100 or more to receive the member's defined contribution account in the form of an annuity.

Cost-of-Living Benefits

Not available.

Health Care

Not available.

Contribution

By Members: 14% of salary is deposited into the member's defined contribution account.

By Employers: 9.5% of salary is deposited into the member's defined contribution account. 4.5% of salaries, of their employees who are members, is used to amortize the unfunded actuarial accrued liability of the defined benefit plan.

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March 10, 2016

ACTUARIAL CERTIFICATION

This is to certify that Segal Consulting, a Member of The Segal Group, Inc. has conducted an actuarial valuation of certain benefit obligations of the State Teachers Retirement System of Ohio's other postemployment benefit programs as of January 1, 2016, in accordance with generally accepted actuarial principles and practices. The actuarial calculations presented in this report have been made on a basis consistent with our understanding of GASB Statement 43 for the determination of the liability for postemployment benefits other than pensions.

The actuary prepared the following supporting schedules included in the Financial and Actuarial Sections of the System's *Comprehensive Annual Financial Report:*

- Financial/Required Supplementary Information
  - Schedule of Health Care Funding Progress
  - Schedule of Employer Contributions Related to Health Care
  - Notes to Health Care Trend Data
- Actuarial
  - Health Care Solvency Test
  - Key Methods and Assumptions Used in Health Care Actuarial Valuation
  - Summary of Membership Data

The actuarial valuation is completed on an annual basis and is based on the plan of benefits and participant, premium, claims and expense data provided by the System or from vendors employed by the System. Segal Consulting does not audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. Segal, however, does review the data for reasonableness and consistency.

With the exception of the retirement rates, the valuation was based on demographic assumptions adopted by the Board of Trustees, reflecting the three-year experience review covering the period July 1, 2008 through June 30, 2011. The retirement rates were modified with the January 1, 2014, valuation to reflect plan changes that were adopted with the pension reform legislation. The actuary reviewed all health-specific assumptions and updated them as appropriate.

The actuarial computations made are for purposes of fulfilling plan accounting requirements. Determinations for purposes other than meeting financial accounting requirements may be significantly different from the results reported here. Accordingly, additional determinations may be needed for other purposes, such as judging benefit security at termination of the plan, or determining short-term cash flow requirements.

To the best of our knowledge, this report is complete and accurate and in our opinion presents the information necessary to comply with GASB Statements 43 with respect to the benefit obligations addressed. The signing actuaries are members of the Society of Actuaries, the American Academy of Actuaries, and other professional actuarial organizations and collectively meet their "General Qualification Standards for Statements of Actuarial Opinions" to render the actuarial opinion contained herein.

Yori Rubinson
Yori Rubinson, FSA, MAAA
Retiree Health Actuary

Barbara Zaveduk
Barbara Zaveduk, EA, MAAA
Vice President and Actuary

A separate annual valuation of the retiree health care coverage provided by STRS Ohio was performed as of Jan. 1, 2016, by Segal Consulting. The results are in accordance with the Governmental Accounting Standards Board (GASB), which prescribe an accrual methodology for accumulating the value of other postemployment benefits (OPEB) over participants' active working lifetimes.

Statement of Actuarial Assumptions and Methods — Health Care Plan

The assumptions below have been adopted by the State Teachers Retirement Board after consulting with the actuary.

GASB Statement No. 43: Provides STRS Ohio's responsibility for accounting and financial reporting for all post-employment benefits other than pension. Such benefits are commonly referred to as "other post-employment benefits" (OPEB).

Valuation Basis: Covers the retiree health care coverage that STRS Ohio provides to its members and their dependents. Plan coverage includes:

- Medical and prescription drug coverage
- Reimbursement of a portion of Medicare Part B premiums

The valuation includes the following membership groups:

- Active members
- Inactive nonretired members
- Retired members
- Survivors of active and retired members
- Dependents
- Disabled retirees

With the exception of the retirement rates, the valuation was based on demographic assumptions adopted by the State Teachers Retirement Board, reflecting the three-year experience review covering the period July 1, 2008 through June 30, 2011. The retirement rates were modified in the Jan. 1, 2014, valuation to reflect plan changes that were adopted with the pension reform legislation. Segal reviewed all health-specific assumptions and updated them as appropriate.

The GASB Statement No. 43 discount rate is the expected rate of return on the assets used to pay the benefits. If the retiree health care coverage is not prefunded, GASB Statement No. 43 specifies the use of a discount rate that reflects the expected return on the general assets of the plan sponsor. If the coverage is fully prefunded, the discount rate is based on the expected return on the assets that supports the benefits. If the coverage is partially prefunded, the discount rate is a blend of the expected return on the sponsor's general assets and the plan assets. The discount rate is updated each year based on the plan's funded ratio.

Plan Changes — The following changes were effective Jan. 1, 2016:

- The Medical Mutual Plus PPO plan was eliminated. The effect of this change was included in last year's valuation.
- Medical Mutual Basic PPO plan: Deductibles and out-of-pocket limits were increased. The effect of these changes were included in last year's valuation.
- Aetna Medicare Advantage plan: Deductibles, out-of-pocket limits, and coinsurance percentages were changed. The effect of these changes were included in last year's valuation.
- AultCare PPO, Paramount HMOs, and HealthSpan HMOs: Various deductibles, out-of-pocket limits, coinsurance percentages, and copayments were changed.
- Express Scripts Prescription Drug program: Various deductibles and out-of-pocket limits were changed.

Assumption Changes — The following assumptions were updated since the prior valuation:

- The discount rate is updated each year based on the prior year's funded ratio. For this valuation, the weighted average of the 3.5% short-term rate and the 7.75% long-term rate resulted in a 6.90% discount rate.
- Valuation-year per capita health costs were updated.
- The percentage of future retirees electing each option was updated based on current data.
- The assumed future trend rates on prescription drug and Medicare HMO health costs were modified.
- The assumed increase on the Excise Tax limit was decreased to 2.5% from 3.5% each year after 2018.

Other:

- In 2016, retiree contribution rates were reduced by a portion of the prescription drug rebates and subsidies expected to be received during the year.
- For the year ended December 31, 2015, the return on the Health Care Fund assets was approximately 2.4%, which is less than the 6.90% blended and 7.75% long-term assumptions.
- The Consolidated Appropriations Act of 2016 delayed the implementation of the excise tax by two years, from 2018 to 2020, and imposed a moratorium on the Health Insurance Providers Fee for 2017.

Results: The Annual Required Contribution (ARC) as of Jan. 1, 2016, is 1.64% of projected payroll, compared to 1.28% of projected payroll as of Jan. 1, 2015.

Health Care Solvency Test, 2014–2016 (dollar amounts in thousands)

Actuarial Valuation Date	Accrued Liability For: (1) Active Members	(2) Inactive Members	(3) Retirees, Survivors & Dependents	Fair Market Value of Assets	Portion of Accrued Liability Covered by Fair Value of Assets: (1)	(2)	(3)
Jan. 1, 2014	$1,748,798	$47,144	$2,868,503	$3,471,886	100%	100%	58%
Jan. 1, 2015	$1,742,597	$15,459	$2,918,167	$3,454,371	100%	100%	58%
Jan. 1, 2016	**$1,830,799**	**$19,435**	**$3,303,997**	**$3,258,197**	**100%**	**100%**	**43%**

Key Methods and Assumptions Used in Health Care Actuarial Valuation

Valuation date	Jan. 1, 2016
Actuarial cost method	Entry age normal, level percent of pay
Amortization method	30 years, open, level percent of pay
Asset valuation method	Fair market value
Actuarial Assumptions:	
Investment rate of return	6.9%
Projected salary increases	Varies by age from 2.75%–12.25%
Payroll increase	3.50% through 2018; 4.00% thereafter

Health Care Cost Trend Rates

	Initial Rate	Ultimate Rate	Ultimate Year
Medical: Medicare Advantage	7.1%	5.0%	2021
Medical: Basic and AultCare Pre-65	7.7%	5.0%	2021
Medical: Basic and AultCare Post-65	6.4%	5.0%	2021
Prescription drug: Medicare Advantage, Basic and AultCare	11.0%	5.0%	2021
Medical and prescription drug: HMO Pre-65	7.7%	5.0%	2021
Medical and prescription drug: HMO Post-65	8.8%	5.0%	2021

Summary of Membership Data

Valuation date	Jan. 1, 2014	Jan. 1, 2015	Jan. 1, 2016
Active members	169,945	169,295	164,925
Inactive members	16,468	16,823	17,275
Receiving Medicare Part B premium reimbursement only	12,745	0	0
Average per participant annual benefit	$1,478	$2,218	$2,115

STRS Ohio Health Care Program Enrollees

	Jan. 1, 2014	Jan. 1, 2015	Added	Terminated	Jan. 1, 2016
Retirees	96,147	98,087	7,123	3,671	**101,539**
Disabled retirees	4,503	4,378	171	249	**4,300**
Survivors	4,466	4,006	1,696	822	**4,880**
Spouses and dependents (excluding children)	19,452	18,667	1,176	2,121	**17,722**
Total	**124,568**	**125,138**	**10,166**	**6,863**	**128,441**
Annual allowance (in thousands)	$393,482	$399,801	$47,176	$20,247	**$426,730**

The objective of the statistical section is to provide financial statement users with historical perspective, context and detail to assist in using the information in the financial statements and the notes to the financial statements to better understand and assess STRS Ohio's economic condition.

The schedules on Pages 71–72 show financial trend information that assists users in understanding and assessing how STRS Ohio's financial position has changed over time. The financial trend schedules presented are:

- Changes in Fiduciary Net Position
- Net Position by Plan
- Benefit Expenses by Type

Demographic and economic information begins on Page 73. This information is intended to assist users in understanding the environment in which STRS Ohio operates and to provide information that facilitates comparisons of financial statement information over time and among governments. The demographic and economic information presented are:

- Actuarial Funded Ratio and Funding Period
- Selected Funding Information — Defined Benefit Plan
- Number of Benefit Recipients by Type
- Summary of Active Membership Data

Operating information, which begins on Page 75, is intended to provide contextual information about STRS Ohio's operation to assist in using financial statement information. The operating information presented is:

- Benefit Payments by Type
- Average Benefit Payments for Service Retirees
- Average Benefit Subsidy Payments for Retirees Enrolled in Health Care Plan
- Number of Reporting Employers by Type
- Principal Participating Employers

Changes in Fiduciary Net Position
Years Ending June 30, 2007–2016 (in thousands)

Defined Benefit Plan

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Additions:										
Member contributions	$ 1,002,876	$ 1,017,720	$ 1,041,248	$ 1,066,483	$ 1,081,958	$ 1,049,709	$ 1,042,959	$ 1,134,899	$ 1,188,062	$ 1,289,809
Employer contributions	1,272,559	1,305,027	1,347,741	1,374,327	1,379,104	1,349,561	1,327,862	1,325,141	1,449,165	1,466,938
Investment income (loss)	12,693,905	(3,926,797)	(14,371,713)	6,641,516	11,924,753	1,094,829	7,984,266	10,418,170	3,644,151	361,567
Other	36,313	37,945	35,324	39,857	45,910	50,804	54,681	168,250	123,557	55,441
Total additions	15,005,653	(1,566,105)	(11,947,400)	9,122,183	14,431,725	3,544,903	10,409,768	13,046,460	6,404,935	3,173,755
Deductions:										
Benefit payments	4,007,705	4,338,617	4,613,751	4,900,418	5,244,407	5,741,042	6,152,335	6,504,676	6,662,232	7,085,043
Refunds	128,587	133,832	121,863	117,751	153,243	169,071	186,459	198,972	198,700	205,222
Administrative expenses	60,002	59,467	58,679	59,320	57,778	57,879	58,613	60,136	60,270	66,033
Total deductions	4,196,294	4,531,916	4,794,293	5,077,489	5,455,428	5,967,992	6,397,407	6,763,784	6,921,202	7,356,298
Net increase (decrease)	10,809,359	(6,098,021)	(16,741,693)	4,044,694	8,976,297	(2,423,089)	4,012,361	6,282,676	(516,267)	(4,182,543)
Net position held in trust, beginning of year	62,126,074	72,935,433	66,837,412	50,095,719	54,140,413	63,116,710	60,693,621	64,705,982	70,988,658	70,432,646
Prior period adjustment, GASB 68	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	(39,745)	N/A
Beginning of year restated	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	70,948,913	N/A
Net position held in trust, end of year	**$72,935,433**	**$66,837,412**	**$50,095,719**	**$54,140,413**	**$63,116,710**	**$60,693,621**	**$64,705,982**	**$70,988,658**	**$70,432,646**	**$66,250,103**

Post-Employment Health Care Plan

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Additions:										
Employer contributions	$ 96,287	$ 98,342	$ 101,221	$ 103,415	$ 103,694	$ 101,025	$ 99,179	$ 98,330	$ 0	$ 0
Health care premiums	201,537	214,700	225,627	222,316	222,130	246,264	261,903	277,477	306,569	339,927
Investment income (loss)	713,400	(217,501)	(778,556)	348,311	608,969	54,990	402,110	524,484	180,566	17,001
Government reimbursements	36,312	36,915	37,956	38,156	70,556	92,213	41,200	46,132	61,127	58,812
Total additions	1,047,536	132,456	(413,752)	712,198	1,005,349	494,492	804,392	946,423	548,262	415,740
Deductions:										
Health care provider payments	503,407	540,493	558,344	592,416	604,456	627,890	599,818	629,465	672,615	676,993
Administrative expenses	3,027	2,913	3,349	2,523	2,502	2,568	2,555	2,495	2,569	2,655
Total deductions	506,434	543,406	561,693	594,939	606,958	630,458	602,373	631,960	675,184	679,648
Net increase (decrease)	541,102	(410,950)	(975,445)	117,259	398,391	(135,966)	202,019	314,463	(126,922)	(263,908)
Net position held in trust, beginning of year	3,525,585	4,066,687	3,655,737	2,680,292	2,797,551	3,195,942	3,059,976	3,261,995	3,576,458	3,449,536
Net position held in trust, end of year	**$ 4,066,687**	**$ 3,655,737**	**$ 2,680,292**	**$ 2,797,551**	**$ 3,195,942**	**$ 3,059,976**	**$ 3,261,995**	**$ 3,576,458**	**$ 3,449,536**	**$ 3,185,628**

Defined Contribution Plan

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Additions:										
Member contributions	$ 36,709	$ 40,829	$ 44,490	$ 46,059	$ 47,935	$ 49,764	$ 52,331	$ 58,909	$ 71,073	$ 82,224
Employer contributions	21,645	24,471	26,873	27,359	28,205	28,890	30,027	29,083	32,002	34,164
Investment income (loss)	37,023	(31,120)	(59,251)	39,157	89,213	2,670	74,076	116,674	27,694	11,304
Transfers between retirement plans	(15,845)	(14,399)	(14,644)	(16,580)	(16,264)	(17,246)	(16,738)	(14,033)	(9,931)	(11,440)
Total additions	79,532	19,781	(2,532)	95,995	149,089	64,078	139,696	190,633	120,838	116,252
Deductions:										
Refunds	6,407	9,086	7,427	9,230	12,777	14,697	20,033	21,369	29,930	26,847
Administrative expenses	358	240	256	(35)	922	881	837	854	913	1,033
Total deductions	6,765	9,326	7,683	9,195	13,699	15,578	20,870	22,223	30,843	27,880
Net increase (decrease)	72,767	10,455	(10,215)	86,800	135,390	48,500	118,826	168,410	89,995	88,372
Net position held in trust, beginning of year	224,005	296,772	307,227	297,012	383,812	519,202	567,702	686,528	854,938	944,933
Net position held in trust, end of year	**$ 296,772**	**$ 307,227**	**$ 297,012**	**$ 383,812**	**$ 519,202**	**$ 567,702**	**$ 686,528**	**$ 854,938**	**$ 944,933**	**$ 1,033,305**

Net Position by Plan
Years Ending June 30, 2007–2016 (in thousands)

Fiscal Year	Defined Benefit Plan	Post-Employment Health Care Plan	Defined Contribution Plan	Total Net Position
2007	$72,935,433	$4,066,687	$296,772	$77,298,892
2008	$66,837,412	$3,655,737	$307,227	$70,800,376
2009	$50,095,719	$2,680,292	$297,012	$53,073,023
2010	$54,140,413	$2,797,551	$383,812	$57,321,776
2011	$63,116,710	$3,195,942	$519,202	$66,831,854
2012	$60,693,621	$3,059,976	$567,702	$64,321,299
2013	$64,705,982	$3,261,995	$686,528	$68,654,505
2014	$70,988,658	$3,576,458	$854,938	$75,420,054
2015	$70,432,646	$3,449,536	$944,933	$74,827,115
2016	**$66,250,103**	**$3,185,628**	**$1,033,305**	**$70,469,036**

Benefit Expenses by Type
Years Ending June 30, 2007–2016 (in thousands)

Fiscal Year	Service Retirement	Disability	Survivor	Other	Total
2007	$3,708,919	$198,581	$90,092	$10,113	$4,007,705
2008	$4,029,937	$201,949	$94,167	$12,564	$4,338,617
2009	$4,299,310	$204,939	$99,139	$10,363	$4,613,751
2010	$4,579,805	$205,989	$103,114	$11,510	$4,900,418
2011	$4,908,718	$207,245	$113,531	$14,913	$5,244,407
2012	$5,401,457	$208,929	$115,473	$15,183	$5,741,042
2013	$5,792,657	$211,755	$124,656	$23,267	$6,152,335
2014	$6,135,563	$211,945	$121,089	$36,079	$6,504,676
2015	$6,280,983	$211,425	$121,533	$48,291	$6,662,232
2016	**$6,714,014**	**$212,614**	**$124,808**	**$33,607**	**$7,085,043**

Actuarial Funded Ratio and Funding Period, 2007–2016 (dollar amounts in thousands)

As of July 1	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Funded Ratio	Funding Period
2007	$66,671,511	$81,126,642	$14,455,131	82.2%	26.1 years
2008	$69,198,008	$87,432,348	$18,234,340	79.1%	41.2 years
2009	$54,902,859	$91,440,955	$36,538,096	60.0%	Infinite years
2010	$55,946,259	$94,720,669	$38,774,410	59.1%	Infinite years
2011	$58,110,495	$98,766,204	$40,655,709	58.8%	Infinite years
2012	$59,489,508	$106,301,841	$46,812,333	56.0%	Infinite years
2013	$62,590,786	$94,366,694	$31,775,908	66.3%	40.2 years
2014	$66,657,175	$96,167,057	$29,509,882	69.3%	29.5 years
2015	$68,655,999	$99,014,654	$30,358,655	69.3%	28.4 years
2016	**$70,114,637**	**$100,756,422**	**$30,641,785**	**69.6%**	**26.6 years**

Selected Funding Information — Defined Benefit Plan, 2007–2016

		Employer Contribution Rate					
As of July 1	Member Contribution Rate	Employer Normal Cost	Health Care	Unfunded Actuarial Accrued Liability	Total Employer Rate	Interest Rate Assumption	Payroll Growth Assumption
2007	10.00%	4.81%	1.00%	8.19%	14.00%	8.00%	4.50%
2008	10.00%	4.24%	1.00%	8.76%	14.00%	8.00%	3.50%
2009	10.00%	4.34%	1.00%	8.66%	14.00%	8.00%	3.50%
2010	10.00%	4.30%	1.00%	8.70%	14.00%	8.00%	3.50%
2011	10.00%	3.98%	1.00%	9.02%	14.00%	8.00%	3.50%
2012	10.00%	5.94%	1.00%	7.06%	14.00%	7.75%	3.50%
2013	11.00%	1.03%	1.00%	11.97%	14.00%	7.75%	3.50%
2014	12.00%	–0.17%	0.00%	14.17%	14.00%	7.75%	3.50%
2015	13.00%	–1.54%	0.00%	15.54%	14.00%	7.75%	3.50%
2016	**14.00%**	**–3.05%**	**0.00%**	**17.05%**	**14.00%**	**7.75%**	**3.50%**

Number of Benefit Recipients by Type, 2007–2016

As of July 1	Service Retirement	Disability	Beneficiaries Receiving Optional Allowances	Survivor	Total
2007	102,771	6,480	7,859	5,824	122,934
2008	106,099	6,417	8,151	5,839	126,506
2009	109,031	6,340	8,387	5,901	129,659
2010	112,483	6,104	8,619	5,897	133,103
2011	117,138	6,028	9,012	5,910	138,088
2012	122,136	5,951	9,300	5,869	143,256
2013	127,797	5,890	9,621	5,913	149,221
2014	130,521	5,825	9,945	5,917	152,208
2015	136,019	5,736	10,437	5,924	158,116
2016	**135,638**	**5,640**	**10,767**	**5,893**	**157,938**

Summary of Active Membership Data, 2007–2016 (dollars in thousands)

Defined Benefit Plan

As of July 1	Females				Males				Total			
	Active Members	Annual Salaries	Average Age	Average Service	Active Members	Annual Salaries	Average Age	Average Service	Active Members	Annual Salaries	Average Age	Average Service
2007	120,641	$6,058,709	43.50	12.84	49,201	$2,829,219	44.41	13.21	169,842	$8,887,928	43.76	12.95
2008	120,514	$6,176,798	44.05	13.12	48,500	$2,837,340	44.95	13.37	169,014	$9,014,138	44.31	13.19
2009	121,544	$6,402,337	43.98	13.09	48,763	$2,909,210	44.90	13.18	170,307	$9,311,547	44.24	13.12
2010	122,730	$6,509,962	43.97	12.89	48,609	$2,921,391	44.81	13.01	171,339	$9,431,353	44.21	12.92
2011	123,721	$6,481,816	43.67	12.38	49,562	$2,914,809	44.59	12.42	173,283	$9,396,625	43.94	12.39
2012	119,931	$6,269,684	43.61	12.42	48,442	$2,839,622	44.58	12.39	168,373	$9,109,306	43.89	12.41
2013	117,359	$6,116,458	43.27	12.17	47,698	$2,765,389	44.24	11.97	165,057	$8,881,847	43.55	12.11
2014	116,748	$6,128,826	43.18	12.19	47,280	$2,762,322	44.23	12.07	164,028	$8,891,148	43.49	12.15
2015	113,852	$6,059,671	42.75	11.81	45,474	$2,715,670	43.91	11.84	159,326	$8,775,341	43.08	11.82
2016	**116,728**	**$6,404,312**	**42.96**	**12.01**	**46,532**	**$2,849,489**	**44.11**	**12.02**	**163,260**	**$9,253,801**	**43.29**	**12.02**

Combined Plan

As of July 1	Females				Males				Total			
	Active Members	Annual Salaries	Average Age	Average Service	Active Members	Annual Salaries	Average Age	Average Service	Active Members	Annual Salaries	Average Age	Average Service
2007	3,342	$124,417	36.90	4.16	926	$39,497	40.12	4.04	4,268	$163,914	37.60	4.13
2008	3,387	$132,008	37.91	4.91	926	$41,416	40.86	4.79	4,313	$173,424	38.54	4.88
2009	3,528	$145,617	38.46	5.39	972	$45,537	41.24	5.22	4,500	$191,154	39.06	5.35
2010	3,518	$154,180	38.98	6.08	985	$47,821	42.11	5.80	4,503	$202,001	39.67	6.02
2011	3,611	$163,273	39.51	6.59	1,003	$49,825	42.30	6.29	4,614	$213,098	40.11	6.53
2012	3,642	$168,991	39.94	7.15	1,029	$52,548	42.55	6.67	4,671	$221,539	40.52	7.04
2013	3,819	$180,102	40.30	7.51	1,069	$56,086	42.72	6.97	4,888	$236,188	40.83	7.39
2014	4,126	$196,090	40.22	7.61	1,141	$61,201	42.56	7.13	5,267	$257,291	40.73	7.51
2015	4,367	$213,263	40.41	7.78	1,232	$68,491	42.85	7.25	5,599	$281,754	40.95	7.66
2016	**4,657**	**$234,432**	**40.48**	**7.95**	**1,295**	**$74,004**	**42.82**	**7.55**	**5,952**	**$308,436**	**40.99**	**7.86**

Total Active Membership

As of July 1	Females				Males				Total			
	Active Members	Annual Salaries	Average Age	Average Service	Active Members	Annual Salaries	Average Age	Average Service	Active Members	Annual Salaries	Average Age	Average Service
2007	123,983	$6,183,126	43.32	12.60	50,127	$2,868,716	44.33	13.04	174,110	$9,051,842	43.61	12.73
2008	123,901	$6,308,806	43.88	12.90	49,426	$2,878,756	44.87	13.21	173,327	$9,187,562	44.16	12.99
2009	125,072	$6,547,954	43.82	12.87	49,735	$2,954,747	44.83	13.02	174,807	$9,502,701	44.11	12.92
2010	126,248	$6,664,142	43.83	12.70	49,594	$2,969,212	44.75	12.86	175,842	$9,633,354	44.09	12.74
2011	127,332	$6,645,089	43.55	12.22	50,565	$2,964,634	44.54	12.29	177,897	$9,609,723	43.84	12.24
2012	123,573	$6,438,675	43.50	12.26	49,471	$2,892,170	44.54	12.27	173,044	$9,330,845	43.80	12.26
2013	121,178	$6,296,561	43.17	12.02	48,767	$2,821,475	44.20	11.86	169,945	$9,118,036	43.47	11.98
2014	120,874	$6,324,915	43.08	12.03	48,421	$2,823,523	44.19	11.95	169,295	$9,148,438	43.40	12.01
2015	118,219	$6,272,934	42.66	11.66	46,706	$2,784,161	43.89	11.72	164,925	$9,057,095	43.01	11.68
2016	**121,385**	**$6,638,743**	**42.86**	**11.86**	**47,827**	**$2,923,493**	**44.08**	**11.90**	**169,212**	**$9,562,236**	**43.21**	**11.87**

Note: Members enrolled in STRS Ohio's Defined Contribution Plan and reemployed retirees are not reflected in the above figures.

Benefit Payments by Type
As of July 1, 2016

Age Last Birthday	Number	Annual Allowance (in thousands)	Average Annual Allowance
Service Retirees			
Under 60	9,347	$ 478,840	$ 51,229
60–64	22,848	1,156,928	50,636
65–69	37,512	1,868,111	49,800
70–74	25,420	1,196,761	47,080
75–79	17,218	738,337	42,882
Over 79	23,293	799,977	34,344
Total	**135,638**	**$ 6,238,954**	**$ 45,997**
Beneficiaries Receiving Optional Allowances			
Under 60	495	$ 12,632	$ 25,519
60–64	485	17,768	36,636
65–69	1,058	40,119	37,919
70–74	1,398	50,801	36,338
75–79	1,783	58,089	32,579
Over 79	5,548	141,705	25,542
Total	**10,767**	**$ 321,114**	**$ 29,824**
Survivor Benefit Recipients			
Under 60	1,532	$ 22,622	$ 14,766
60–64	641	15,924	24,842
65–69	941	24,553	26,092
70–74	821	20,089	24,469
75–79	687	15,495	22,554
Over 79	1,271	25,051	19,710
Total	**5,893**	**$ 123,734**	**$ 20,997**
Disability Benefit Recipients			
Under 60	1,308	$ 49,937	$ 38,178
60–64	998	38,582	38,659
65–69	1,219	50,583	41,496
70–74	891	34,581	38,811
75–79	533	18,693	35,071
Over 79	691	19,987	28,925
Total	**5,640**	**$ 212,363**	**$ 37,653**
Grand Total	**157,938**	**$ 6,896,165**	**$ 43,664**

Average Benefit Payments for Service Retirees
July 1–June 30, 2007–2016

		Years of Service Credit						
		5–9	10–14	15–19	20–24	25–29	30+	Average/Total
2007	Average monthly benefit	$425	$830	$1,279	$1,978	$2,578	$4,235	$3,592
	Average final average salary	$31,415	$39,215	$47,769	$57,835	$64,025	$69,713	$65,417
	Number of recipients	196	177	277	360	622	4,605	6,237
2008	Average monthly benefit	$406	$831	$1,352	$2,024	$2,600	$4,309	$3,611
	Average final average salary	$30,224	$40,804	$49,447	$60,033	$64,959	$71,113	$66,378
	Number of recipients	200	182	314	366	551	4,288	5,901
2009	Average monthly benefit	$431	$822	$1,382	$2,193	$2,697	$4,497	$3,754
	Average final average salary	$28,623	$38,507	$51,590	$64,199	$67,168	$73,260	$68,136
	Number of recipients	199	158	288	310	429	3,698	5,082
2010	Average monthly benefit	$455	$934	$1,349	$2,030	$2,780	$4,680	$3,887
	Average final average salary	$30,030	$46,509	$50,407	$59,781	$67,794	$74,810	$69,522
	Number of recipients	174	155	282	359	543	3,833	5,346
2011	Average monthly benefit	$480	$992	$1,540	$2,377	$2,890	$4,689	$3,937
	Average final average salary	$33,330	$46,727	$55,904	$68,932	$70,775	$75,724	$71,591
	Number of recipients	171	201	365	438	685	4,595	6,455
2012	Average monthly benefit	$496	$946	$1,625	$2,385	$2,965	$4,727	$3,921
	Average final average salary	$31,235	$45,473	$58,519	$68,884	$72,224	$77,181	$72,706
	Number of recipients	204	241	450	674	960	5,463	7,992
2013	Average monthly benefit	$482	$945	$1,714	$2,407	$3,144	$4,796	$3,886
	Average final average salary	$33,742	$47,370	$62,954	$68,669	$75,864	$79,557	$74,643
	Number of recipients	203	280	541	724	1,198	5,113	8,059
2014	Average monthly benefit	$488	$951	$1,681	$2,419	$3,268	$4,808	$3,885
	Average final average salary	$36,506	$48,294	$61,904	$70,372	$78,726	$81,516	$76,213
	Number of recipients	157	225	417	549	817	3,703	5,868
2015	Average monthly benefit	$524	$960	$1,729	$2,410	$3,132	$4,722	$3,795
	Average final average salary	$42,757	$49,494	$64,257	$69,568	$75,754	$80,543	$75,610
	Number of recipients	149	269	514	683	1,246	4,400	7,261
2016	**Average monthly benefit**	**$488**	**$1,039**	**$1,653**	**$2,457**	**$3,257**	**$4,791**	**$3,857**
	Average final average salary	**$40,639**	**$53,695**	**$62,245**	**$71,286**	**$78,628**	**$82,052**	**$77,240**
	Number of recipients	**158**	**256**	**590**	**850**	**1,439**	**4,930**	**8,223**

Average Benefit Subsidy Payments for Retirees Enrolled in Health Care Plan, 2012–2016

		Years of Service Credit						
		5–9*	10–14*	15–19	20–24	25–29	30+	Average/Total
Jan. 1, 2012	Average monthly subsidy	$34	$39	$155	$208	$271	$365	$325
	Number of recipients	1,536	1,665	4,347	6,256	11,253	74,274	99,331
Jan. 1, 2013	Average monthly subsidy	$33	$39	$148	$197	$253	$329	$296
	Number of recipients	1,427	1,553	4,359	6,386	11,554	76,616	101,895
Jan. 1, 2014	Average monthly subsidy	$34	$40	$157	$209	$266	$341	$308
	Number of recipients	1,325	1,447	4,497	6,532	11,948	79,367	105,116
Jan. 1, 2015	Average monthly subsidy	$33	$38	$163	$211	$264	$333	$303
	Number of recipients	1,198	1,288	4,409	6,564	12,141	80,871	106,471
Jan. 1, 2016	**Average monthly subsidy**	**$39**	**$55**	**$167**	**$216**	**$273**	**$324**	**$300**
	Number of recipients	**1,167**	**1,301**	**4,172**	**6,746**	**12,700**	**84,633**	**110,719**

*A minimum of 15 years of service credit is currently required for enrollment into the STRS Ohio Health Care Program. The subsidy amounts listed for years of service credit less than 15 years are reflective of the Medicare Part B premium reimbursements, which currently require a minimum of five years of service credit, and some other subsidy situations.

Number of Reporting Employers by Type, 2007–2016

Fiscal Year Ended	City School Districts	Local School Districts	County Educational Service Centers	Exempted Village School Districts	Joint Vocational Schools	Colleges and Universities	County Boards of Developmental Disabilities	Community Schools	Other	Total
2007	194	369	60	49	49	36	73	255	9	1,094
2008	194	370	59	49	49	36	73	272	9	1,111
2009	194	370	58	49	49	36	71	280	10	1,117
2010	194	370	57	49	49	36	69	273	10	1,107
2011	194	370	56	49	49	36	69	291	10	1,124
2012	194	370	56	49	49	36	69	312	10	1,145
2013	194	369	55	49	49	36	67	322	12	1,153
2014	194	371	55	49	49	36	65	352	12	1,183
2015	194	370	53	49	49	36	64	337	12	1,164
2016	**194**	**369**	**52**	**49**	**49**	**36**	**62**	**329**	**12**	**1,152**

Principal Participating Employers For the Year Ended June 30, 2016

Employer	Covered Members	Prior Year Rank	Percentage of Membership
Columbus City Schools	5,329	1	2.17%
The Ohio State University	5,268	2	2.15%
Cleveland Metropolitan Schools	4,403	3	1.79%
University of Cincinnati	3,412	4	1.39%
Kent State University	3,277	6	1.33%
Cincinnati Public Schools	3,153	5	1.28%
ESC Council of Governments	2,761	7	1.12%
Akron Public Schools	2,663	8	1.08%
Toledo Public Schools	2,616	9	1.06%
Cuyahoga Community College	2,335	10	0.96%
All Others	210,464		85.67%
Total Covered Members	**245,681***		**100.00%**

*Covered members include any participant in STRS Ohio who made contributions through a reporting employer during the fiscal year. Part-time teachers working in multiple school districts are included within each school's payroll data and, consequently, are reported more than once. Participating employers include every publicly funded school in Ohio employing a licensed teacher. A complete listing of participating employers is available upon request. Years prior to the current year are not reflected since the participating employers do not change substantially from year to year.

STRS Ohio Plays a Critical Role in Supporting and Sustaining the State of Ohio

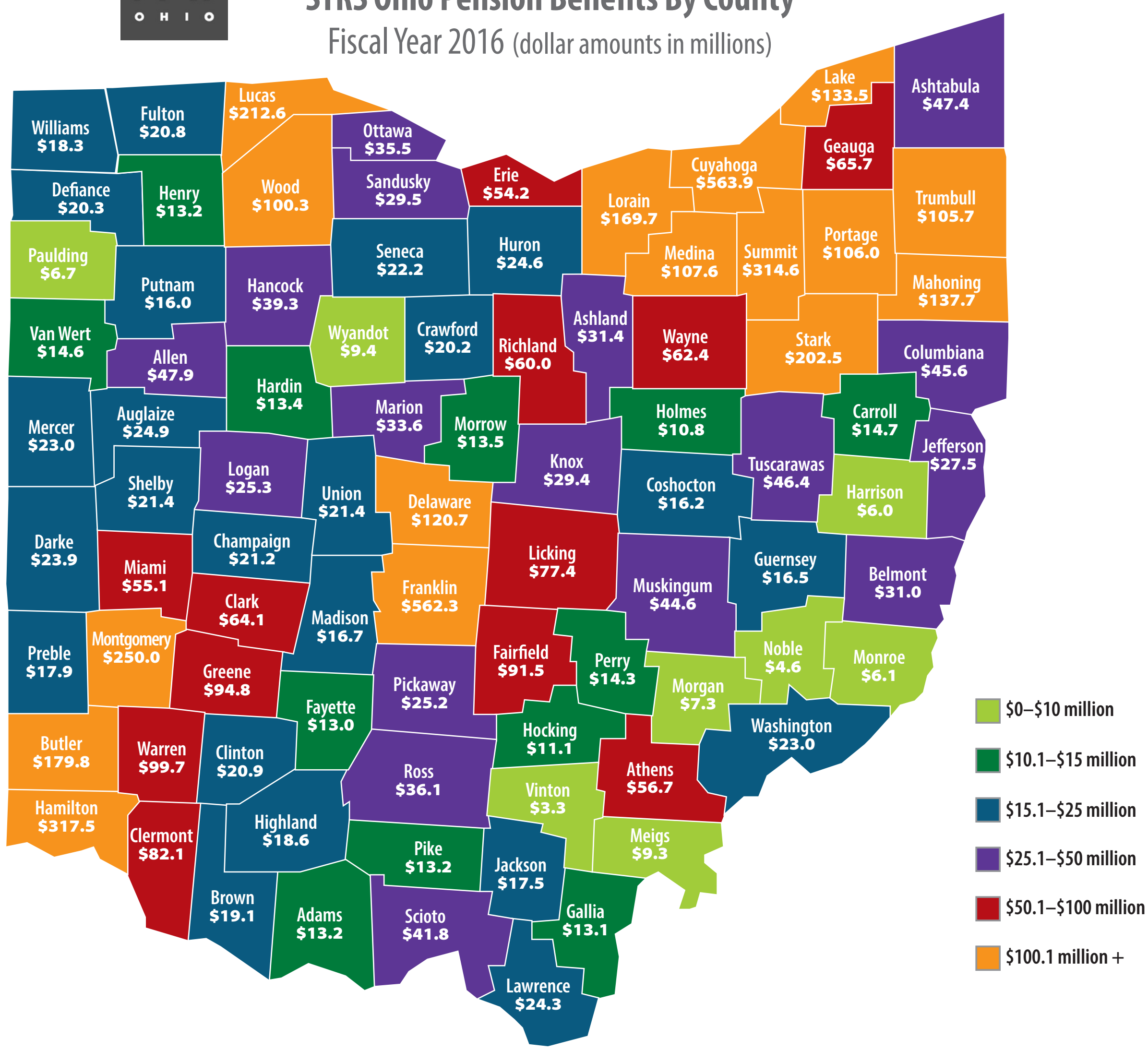
STRS Ohio is one of Ohio's five public pension systems and plays a critical role in supporting and sustaining the State of Ohio. Together, Ohio's statewide public retirement systems serve over a million of the state's citizens, both working and retired. The five systems provide a stable source of revenue for local economies, paying more than $15 billion annually in pension and health care benefits and invest in Ohio, too — holding more than $3 billion in investments in companies with a major presence in the state.

*Ohio's pension systems share one common goal: **to provide retirement security for the thousands of public servants who have made a career out of serving others.** These pension systems are major economic drivers for the state; are administratively efficient and economical; and provide a stable retirement income for public workers in Ohio, thereby reducing the burden on taxpayers and Social Security. In fact, these earned pensions represent good public policy for helping to maintain financial security for Ohio's older citizens.*

Economic Impact on the State of Ohio

STRS Ohio Pension Benefits By County

Fiscal Year 2016 (dollar amounts in millions)



$5.7 BILLION
STRS Ohio benefits distributed among Ohio's **88** counties

80% STRS Ohio benefit recipients **live in Ohio**

$1.2 BILLION
STRS Ohio **investments** with companies headquartered in **Ohio**

State Teachers Retirement System of Ohio
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