SOUTH DAKOTA RETIREMENT SYSTEM

COMPREHENSIVE ANNUAL FINANCIAL REPORT

A Pension Trust Fund of the State of South Dakota
for the Fiscal Year Ended June 30, 2016

FISCAL YEAR 2016 HIGHLIGHTS

Total membership	**84,048**
Active contributing members	**39,940**
Inactive non-contributing members	**17,554**
Benefit recipients	**26,554**
Net position restricted for pension benefits	**$ 10,513,462,127**
Actuarial value of assets	**$ 10,851,252,302**
Actuarial accrued liability (AAL)	**$ 10,851,252,302**
Net pension liability/(asset)	**$ 337,790,175**
Investment return—Gross of fees	**0.6%**
Investment return—Net of fees	**0.3%**
Benefits and refunds paid	
Benefits paid	**$ 487,053,001**
Refunds paid	**23,443,481**
Total	**$ 510,496,482**
Contributions	
Member	**$ 114,443,295**
Employer	**114,090,075**
Total	**$ 228,533,370**
Funding period	**N/A**
Actuarial value funded ratio (actuarial value of assets/AAL)	**100.0%**
Fair value funded ratio (fair value of assets/AAL)	**96.9%**

SOUTH DAKOTA RETIREMENT SYSTEM

COMPREHENSIVE ANNUAL FINANCIAL REPORT

A Pension Trust Fund of the State of South Dakota
for the Fiscal Year Ended June 30, 2016

Prepared by the SDRS Finance and Audit Departments

South Dakota Retirement System
222 East Capitol, Suite 8, P.O. Box 1098
Pierre, South Dakota 57501-1098

SDRS MISSION STATEMENT

To plan, implement, manage and efficiently administer financially sustainable retirement income programs within the fixed resources available.

SDRS CORE VALUES

Provide members and their families the opportunity to achieve financial security at retirement, death or disability by delivering appropriate and equitable benefits, and promote, encourage and facilitate additional member savings for retirement.

SDRS LONG-TERM INCOME REPLACEMENT GOALS

Provide lifetime income replacement of at least 55 percent of final average compensation for career employees in each membership class.

Promote total lifetime income replacement of at least 85 percent of final average compensation, including income from SDRS, Social Security, and personal retirement savings of at least one time annual compensation at retirement.

The South Dakota Retirement System fully subscribes to the provisions of the Americans with Disabilities Act of 1990.

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Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

South Dakota Retirement System

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

June 30, 2015

Executive Director/CEO

Public Pension Coordinating Council

Public Pension Standards Award
For Funding and Administration
_2016_

Presented to

South Dakota Retirement System

In recognition of meeting professional standards for
plan funding and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

Alan H. Winkle

Alan H. Winkle
Program Administrator

INTRODUCTION

Letter of Transmittal
Board of Trustees
Organizational Chart

South Dakota Retirement System
222 East Capitol Suite 8
PO Box 1098
Pierre, South Dakota 57501-1098
Toll-Free (888) 605-SDRS
Telephone (605) 773-3731
Fax (605) 773-3949
www.sdrs.sd.gov

South Dakota Retirement System

December 23, 2016

Board of Trustees
South Dakota Retirement System
Pierre, SD 57501

To the Members of the SDRS Board of Trustees:

We are pleased to submit the Comprehensive Annual Financial Report of the South Dakota Retirement System (SDRS) for the fiscal year ended June 30, 2016. Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with SDRS. To the best of our knowledge and belief, the enclosed data is accurate in all material respects and is reported in a manner designed to present fairly the financial position and results of SDRS' operations.

Plan History

SDRS was established July 1, 1974, as a multiple employer public employee retirement system. The plan provides retirement, disability, and survivor benefits to over 84,000 members. The system's benefit provisions have been improved numerous times throughout this period to meet the needs of our members as shown on pages 12-14.

Investments

The SDRS trust fund is managed by the South Dakota Investment Council. The most important overall objective of the Investment Council is to prudently manage the SDRS assets to achieve and exceed the returns that the broad capital markets provide over the long term.

The money-weighted investment return for the SDRS trust fund net of investment expenses was 0.21 percent. The Investment Council's benchmark return was 2.9 percent for the same period. The total time-weighted investment return net of investment expenses for the SDRS trust fund was 0.3 percent for fiscal year (FY) 2016.

Funding and Actuarial Measures

In the 2016 actuarial valuation, three important actuarial measures were calculated to evaluate the actuarial soundness and funding progress of SDRS. They are the funded ratio, the funding period when the unfunded actuarial accrued liability is greater than $0, and the risk management contribution when the unfunded actuarial accrued liability is equal to $0.

The actuarial accrued liability (AAL) is the present value of all benefits currently being paid and expected to be paid in the future to all members, less the present value of future normal cost contributions. Each year, an actuarial value funded ratio and a fair value funded ratio are calculated. A ratio in excess of 100 percent indicates that accrued benefits are fully funded.

The funding period measures the length of time the fixed contributions will amortize any unfunded liabilities and meet the on-going benefit costs, interest charges, and expenses of the system. A shorter funding period results in a more favorable actuarial measure.

At June 30, 2016, SDRS has an actuarial value funded ratio of 100.0 percent and a fair value funded ratio of 96.9 percent.

Since its inception, SDRS has been funded by statutorily fixed member and employer contribution rates that historically met the actuarially determined requirements of the system. With no unfunded AAL based on the actuarial value of assets, a portion of contributions can be used to build the cushion to protect the system against future unfavorable experience and enhance the system's sustainability.

The risk management contribution is the amount that statutory contributions exceed the normal cost and amortization payment on the unfunded actuarial accrued liability. When it exists, the risk management contribution will increase the cushion and reserve, thereby better protecting SDRS against future unfavorable experience.

Major Initiatives

SDRS staff continues to focus its efforts on outreach programs to educate members about the important benefit base provided by SDRS, the many challenges retirees face, and ways to extend and enhance financial security throughout retirement. During fiscal year 2016, SDRS retirement planners met with nearly 6,000 members in one-on-one counseling sessions, group events, and requested visits throughout the state.

Communication is also a priority for SDRS. SDRS continues to maintain a Facebook page to engage members through social media. While our newsletter and website continue to be the main sources for the most current SDRS information, these avenues provide additional methods of communication to our membership.

Personal retirement savings is a vital component of each individual's retirement plan. SDRS continues to bring awareness about the importance of personal retirement savings. Building additional resources can help fund retirement goals and provide added financial security during retirement. SDRS members are encouraged to save through the SDRS Supplemental Retirement Plan (SRP) or any choice of other retirement savings programs.

Accounting System and Internal Control

This report has been prepared to conform to the reporting standards of the Governmental Accounting Standards Board and the American Institute of Certified Public Accountants. The accrual basis of accounting is used to record assets, liabilities, revenues, and expenses. Revenues are recognized in the accounting period in which they are earned, without regard to the date of collection, and expenses are recorded when the corresponding liabilities are incurred, regardless of when payment is made. Administrative expenditure authority is granted annually by the South Dakota Legislature.

The system's internal accounting controls, which are reviewed by external auditors on an annual basis, are designed to provide reasonable assurance regarding the safekeeping of assets and the reliability of financial records. The concept of reasonable assurance is based on the assumption that the cost of internal accounting controls should not exceed the benefits expected to be derived from the implementation.

This letter of transmittal is designed to complement the Management's Discussion and Analysis (MD&A) and should be read in conjunction with it. The SDRS MD&A can be found immediately following the Auditor's Opinion.

Professional Services

The Board of Trustees retains independent consultants to perform professional services that are essential to the system's effective and efficient operation. External actuarial services are provided by Buck Consultants. The annual financial audit is conducted by the accounting firm of Eide Bailly with the participation of the South Dakota Department of Legislative Audit. SDRS investments are managed by the South Dakota Investment Council.

Certificate of Achievement/Public Pension Standards Award

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the South Dakota Retirement System 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.

In order to be awarded a Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized comprehensive annual financial report, whose contents conform to program standards. Such financial report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. This is the 21st year that SDRS has received a Certificate of Achievement. We believe our current report continues to conform to the Certificate of Achievement program requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

The Public Pension Coordinating Council awarded the Public Pension Standards Award for Funding and Administration to the South Dakota Retirement System in recognition of meeting the professional standards for plan design and administration. This is the 13th year that SDRS received an award from the Public Pension Coordinating Council.

Acknowledgments and Comments

The preparation of this report reflects the combined efforts of the SDRS staff under the direction of the Board of Trustees. It is intended to provide complete and reliable information to members of SDRS, the Governor, the South Dakota State Legislature, and the citizens of South Dakota.

Respectfully submitted,

Robert A. Wylie
Executive Director

Jane Beer
Chief Financial Officer

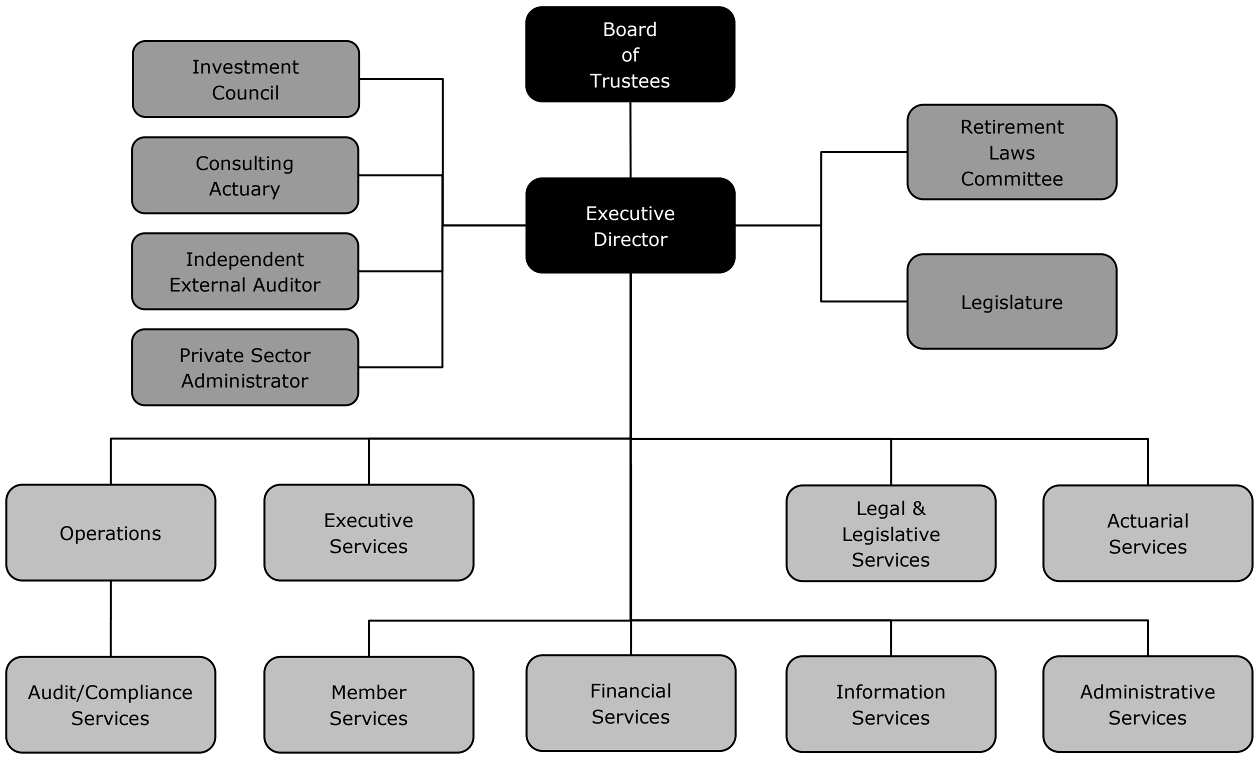
History of Benefit Improvements		
Benefit Category	**Status in 1974**	**Benefit Improvements**
Benefit Formula		
* Class A		
Standard	1.0%	1982 - 1.1% 1986 - 1.2% 1989 - 1.25% 1991 - 1.30% 1994 - 1.30%/1.40% (for applicable years) 1997 - 1.40% prior to 1997/1.30% thereafter 1998 - 1.475% prior to 1998/1.30% thereafter 1999 - 1.55% prior to 2000/1.30% thereafter 2000 - 1.625% prior to 2002/1.30% thereafter 2002 - 1.625% prior to 2002/1.55% thereafter 2008 - 1.7% prior to 2008/1.55% thereafter
Alternate	2.0%	1999 - 2.25% prior to 2000/2.0% thereafter 2000 - 2.325 % prior to 2002/2.0% thereafter 2002 - 2.325 % prior to 2002/2.25% thereafter 2008 - 2.4% prior to 2008/2.25% thereafter, less other public benefits
* Class B Public Safety	2.0%	1994 - 2.0%/2.10% (for applicable years) 1997 - 2.10% prior to 1997/2.0% thereafter 1998 - 2.175% prior to 1998/2.0% thereafter 1999 - 2.25% prior to 2000/2.0% thereafter 2000 - 2.325% prior to 2002/2.0% thereafter 2008 - 2.4% prior to 2008/2.0% thereafter
* Class B Judicial	3.333% / 2.0%	1994 - 3.333%/3.433% (for applicable years) 2.0%/2.10% (for applicable years) 1997 - 3.433% prior to 1997/3.333% thereafter 2.10% prior to 1997/2.0% thereafter 1998 - 3.508% prior to 1998/3.333% thereafter 2.175% prior to 1998/2.0% thereafter 1999 - 3.583% prior to 2000/3.333% thereafter 2.25% prior to 2000/2.0% thereafter 2000 - 3.658% prior to 2002/3.333% thereafter 2.325% prior to 2002/2.0% thereafter 2008 - 3.733% prior to 2008/3.333% thereafter 2.4% prior to 2008/2.0% thereafter
Class A Retiree Benefit Formula	Variable	Standard - Alternate 1982 - 1.0% - 2.0% 1987 - 1.05% - 2.0% 1988 - 1.1% - 2.0% 1989 - 1.25% - 2.0% 1991 - 1.30% - 2.0% 1994 - 1.30%/1.40% (for applicable years) - 2.0% 1997 - 1.40% prior to 1997/1.30% thereafter - 2.0% 1998 - 1.475% prior to 1998/1.30% thereafter - 2.0% 1999 - 1.55% prior to 2000/1.30% thereafter 2.25% prior to 2000/2.0% thereafter 2000 - 1.625% prior to 2002/1.30% thereafter 2.325% prior to 2002/2.0% thereafter 2002 - 1.625% prior to 2002/1.55% thereafter 2.325% prior to 2002/2.25% thereafter 2008 - 1.7% prior to 2008/1.55% thereafter 2.4% prior to 2008/2.25% thereafter, less other public benefits
Improvement Factor	2% Simple	1978 - 2.0% compound (indexed) 1982 - 3.0% compound (indexed) 1988 - 3.0% compound 1993 - 3.1% compound 1998 - 3.1% compound and prorated for partial years 2010 - 2.1% to 3.1% compound, dependent on funded status of System and CPI

History of Benefit Improvements (continued)

Benefit Category	Status in 1974	Benefit Improvements
Early Retirement		
* Class A	Early Retirement: Age 55 with 6% per year reduction	1978 - Reduction decreased to 3% per year 1986 - Rule of 85 (age 60) 1989 - Removed "at work" limitation 1991 - Rule of 85 (age 58) 1993 - Rule of 85 (age 55)
* Class B Public Safety	Early Retirement: Age 45 with 6% per year reduction	1978 - Reduction decreased to 3% per year 1982 - Early retirement age for new members: age 50 1989 - Early retirement: age 45 for all Class B Public Safety members 1991 - Age 50/25 years of service 1998 - Rule of 75 (age 45)
* Class B Judicial	Early retirement: Age 55 with 6% per year reduction	1978 - Reduction decreased to 3% per year 1990 - Rule of 80 (age 55)
Optional Spouse Coverage (no new enrollees after July 1, 2010)	1.0% of compensation	1978 - 0.8% of compensation 2004 - 1.2% of compensation 2010 - 1.5% of compensation
Final Average Compensation Caps	Last quarter cap 125% of any previous quarter; four quarter average cap 115% of any previous quarter	2004 - Last quarter cap = 115% four quarter average cap = 110% 2005 - Last quarter cap = 105% four quarter average cap = 105%
Special Pay Plan	Termination pay made directly to member with SS, SDRS, and income taxes deducted	2004 - Termination pay of $600 or more without SS, SDRS, or income tax deductions for a terminating employee of a participating unit who is 55 or older goes to SPP
Purchasing Uncredited Service		
* Class A	Buy at 10% of compensation	1989 - Buy at 7.5% of compensation 2002 - Buy at 9% of compensation 2004 - Buy at rate dependent on age and varying from 12% to 30% of compensation
* Class B Public Safety	Buy at 12% of compensation	1978 - Buy at 16% of compensation 1982 - Current members maximum of 20% of compensation; new members 16% of compensation 1989 - Buy at 12% of compensation 2004 - Buy at rate dependent on age and varying from 16% to 40% of compensation
* Class B Judicial	Buy at 12% of compensation	1978 - Buy at 16% of compensation 1982 - Buy at maximum 20% of compensation 1989 - Buy at 13.5% of compensation 2004 - Buy at rate dependent on age and varying from 18% to 45% of compensation
Contribution Rate		
* Class A	5%	2002 - 6%
* Class B Public Safety	6%	1978 - 8% 1982 - For current member increasing 1/8 of 1% to maximum of 10%; for new members 8% 1989 - 8% for all members
* Class B Judicial	6%	1978 - 8% 1982 - 1/8 of 1% to maximum of 10% 1989 - capped at 9%
Eligibility Requirements		
* Vested Retirement Benefits	- Five years of credited service that includes purchased service	1998 - Three years of credited service including purchased service 2004 - Three years of contributory service, does not include purchased service
* Disability Benefits	- Five years of credited service unless disabled in an accident at work, then no specific amount of credited service is required	1998 - Three years of credited service including purchased service 2004 - Three years of contributory service since reentry into SDRS unless disabled in an accident at work, then no specific amount of contributory service is required

History of Benefit Improvements (continued)		
Benefit Category	**Status in 1974**	**Benefit Improvements**
Normal Retirement Age for Class B Public Safety	Age 55	1982 - New members age 60 1989 - Age 55 for all members
Refund of Accumulated Contributions	Member contributions only	1986 - Guaranteed refund of the balance of all employer/member contributions if member dies after retirement 1995 - Portable Retirement Option (PRO) - For PRO members withdrawing prior to retirement, a refund of all or a percentage of employer/member contributions based on years of service 1998 - Portable Retirement Option (PRO) - For all members withdrawing prior to retirement, a refund of all or a percentage of employer/member contributions based on years of service 2010 - For members withdrawing prior to retirement, a refund of all member contributions and a percentage of employer contributions based on years of service and final contribution date
Interest on Accumulated Contributions	5% on member contributions only	1986 - No greater than 90% of the 91-day T-bill rate; 5% minimum, 10% maximum 2004 - No greater than 90% of the 91-day T-bill rate; maximum, the actuarially assumed rate of investment return, currently 7.75%; minimum, none 2012 - No greater than 90% of the 91-day T-bill rate; maximum, the actuarially assumed rate of investment return, currently 7.25%; minimum, none
Retire/return to work		
* Normal or Special Early Retirement	- Benefits, including the COLA, paid during reemployment without adjustment - Rehired member treated as continuing member - Add-on benefit paid at re-retirement considers all periods of employment	2004 - Benefits paid during reemployment but COLA eliminated (except for Class B Public Safety member who is rehired as Class A member) - Rehired member treated as new member - Add-on benefit paid at re-retirement considers reemployment period only - Retired/Rehires prior to July 1, 2004 grandfathered under current law 2010 - 3 continuous months minimum termination period - 15% benefit reduction during reemployment - Continued COLA elimination during reemployment - No 2nd SDRS benefit accrual - Member contributions to SRP/Employer contributions to SDRS
* Early Retirement	- Benefits, Including the COLA suspended during reemployment - Rehired member treated as continuing member - Add-on benefit paid at re-retirement considers all periods of employment	2004 - Benefits, including the COLA, suspended during reemployment - Rehired member treated as new member - Add-on benefit paid at re-retirement considers reemployment period only 2010 - Benefits, including the COLA, suspended during reemployment - No 2nd SDRS benefit accrual - Member contributions to SRP/Employer contributions to SDRS
Compensation Basis for Benefit Calculations	- Retirement benefit based on final average compensation (three-year average) - Disability and survivor benefits (for members who die before retirement) based on highest one-year pay	2004 - All SDRS benefits (retirement, disability, and survivor) based on final average compensation

ORGANIZATIONAL CHART



Administration

EXECUTIVE DIRECTOR	Robert A. Wylie
EXECUTIVE ASSISTANT	Dawn M. Smith, CRC®

Management Group

OPERATIONS/COMPLIANCE DIRECTOR	Susan Jahraus, CPA, CRC®
GENERAL COUNSEL	Jacquelyn Storm, JD
CHIEF FINANCIAL OFFICER	Jane Beer, CRC®
MEMBER SERVICES/ COMMUNICATIONS MANAGER	Travis W. Almond, CRC®
SENIOR ACTUARY	Douglas J. Fiddler, ASA, EA, MAAA, FCA
ADMINISTRATIVE SERVICES MANAGER	Lisa A. Vander Maten

Advisors, Auditors, and Administrators

EXTERNAL CONSULTING ACTUARY	Buck Consultants, Inc. Denver, CO
EXTERNAL AUDITOR	Eide Bailly LLP Boise, ID
PRIVATE SECTOR ADMINISTRATOR	Nationwide Retirement Solutions Columbus, OH
RETIREMENT CONSULTANT	R. Paul Schrader Denver, CO
INFORMATION SERVICES/ COMPUTER SUPPORT	Donelle Beynon (BIT) Pierre, SD Rex Fletcher (BIT) Pierre, SD S. Lee Huset (BIT) Pierre, SD Colin Morris (BIT) Pierre, SD

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FINANCIAL SUMMARY

CPAs & BUSINESS ADVISORS

Independent Auditor's Report

To the Board of Trustees
South Dakota Retirement System
Pierre, South Dakota

Report on the Financial Statements
We have audited the accompanying financial statements of the South Dakota Retirement System (SDRS), which comprise the statement of fiduciary net position as of June 30, 2016, and the related statement of changes in fiduciary net position, for the year then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements
Management is responsible for the preparation and fair presentation of 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.

Auditor's Responsibility
Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

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Opinion
In our opinion, the financial statements referred to above present fairly, in all material respects, the respective statement of the fiduciary net position of the South Dakota Retirement System, as of June 30, 2016, and 2015, and the respective statement of changes in fiduciary net position thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Change in Accounting Principle
As discussed in Note 4 to the financial statements, SDRS has adopted the provisions of GASB Statement No. 72, *Fair Valuation Measurement and Application*, which has resulted in additional footnote disclosures. Our opinion is not modified with respect to this matter.

Emphasis of Matter
As described in Note 2 to the financial statements, the financial statements include investments valued at $2,612,356,121 (24.85% of net position) whose carrying values have been estimated by management in the absence of readily determinable fair values. Management's estimates are based on information provided by the fund managers or the general partners. Our opinion is not modified with respect to this matter.

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 required supplementary information on pages 22-25 and 38-43 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information
Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the SDRS's basic financial statements as a whole. The introductory, investment, actuarial, and statistical sections are presented for purposes of additional analysis and are not a required part of the financial statements.

The additional supplementary information accompanying financial information listed as supplemental schedules in the table of contents are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the accompanying financial information listed as supplemental schedules are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The introductory, investment, actuarial, and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by *Government Auditing Standards*
In accordance with *Government Auditing Standards*, we have also issued our report dated October 19, 2016, on our consideration of the SDRS'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 SDRS's internal control over financial reporting and compliance.

Eide Bailly LLP

Boise, Idaho
October 19, 2016

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This section presents management's discussion and analysis of the South Dakota Retirement System's (SDRS or the System) financial position and performance as of and for the year ended June 30, 2016. This section is intended to supplement the SDRS financial statements and should be read in conjunction with the remainder of the SDRS financial statements.

Financial Highlights

- The fiduciary net position of SDRS decreased by $263.1 million during fiscal year 2016. This decrease was primarily due to the investment performance of 0.3 percent, which was significantly below the assumed rate of 7.25 percent.

- SDRS paid $487.1 million to SDRS benefit recipients in fiscal year 2016 compared to $456.3 million in 2015. SDRS received $228.5 million in SDRS member and employer contributions in fiscal year 2016 compared to $219.7 million in 2015.

Overview of the Financial Statements and Accompanying Information

The basic financial statements consist of:

Financial Statements
The System presents the statement of the fiduciary net position as of June 30, 2016, and the statement of changes in fiduciary net position for the year then ended. These statements reflect resources available for the payment of benefits as of the year-end and sources and uses of those funds during the year.

Notes to Financial Statements
The notes to financial statements are an integral part of the financial statements and provide additional detailed information and schedules. Information in the notes provides disclosures concerning SDRS's organization, contributions and reserves, investments, the use of derivatives and securities lending, and other information.

Supplemental Information
In addition to this discussion and analysis, the required supplemental information consists of four schedules of trend data and related notes concerning the funded status of SDRS, changes in net pension asset, investment returns, actuarial assumptions, and employer contributions.

Other supplementary schedules include detailed information on administrative expenses incurred by SDRS and a breakout of investment manager fees.

Financial Analysis

SDRS is a cost-sharing, multiple-employer public employee retirement system. SDRS provides retirement, disability, and survivor benefits for employees of the state of South Dakota and its political subdivisions. The benefits are funded through member and employer contributions and investment income.

SDRS benefits are based on the members' final average compensation, their years of credited service, and a benefit multiplier and are payable for life with a 60 percent survivor benefit.

A summary of the fiduciary net position is shown below:

Summary of Fiduciary Net Position
June 30, 2016 and 2015

Assets	**2016**	**2015**
Cash and cash equivalents	$ 6,915,822	$ 6,807,072
Receivables	56,291,108	28,322,333
Investments, at fair value	10,494,761,258	10,757,834,674
Other assets	1,801,903	1,064,953
Total assets	$10,559,770,091	$10,794,029,032
Liabilities		
Accounts payable and accrued expenses	$ 2,123,716	$ 2,730,400
Unsettled investment purchases	26,685,838	11,263,148
Due to brokers—futures transactions	17,498,410	3,501,869
Total liabilities	$ 46,307,964	$ 17,495,417
Net position restricted for pension benefits	$10,513,462,127	$10,776,533,615

Change in Fiduciary Net Position

Additions to the fiduciary net position include member and employer contributions and net investment income. The fixed member and employer contribution rates are established by law. On an annual basis, an independent actuarial valuation of SDRS is made to determine the adequacy of the fixed contribution rates to pay the normal cost of benefits, expenses, and amortize the unfunded actuarial accrued liability. In addition to the fixed contributions, members and employers may make additional contributions to purchase uncredited prior service. These purchase or acquisition payments are also included as contributions. As the SDRS membership ages, the number and amount of purchases have grown.

Income from investments is the other primary source of revenue for SDRS. The actuarial assumed investment rate is 7.25 percent at June 30, 2016. The net investment returns were 0.3 percent for 2016 and 4.18 percent for 2015.

Deductions from fiduciary net position are primarily benefit payments. During 2016, SDRS paid $487.1 million to benefit recipients or 6.7 percent more than 2015. The increase is due to the annual 3.1 percent cost-of-living adjustment and additional annuitants. Refunds of accumulated contributions during 2016 decreased 10.5 percent. Administrative costs of SDRS increased 0.9 percent during 2016.

A summary of the changes in fiduciary net position is shown below:

	2016	2015	% Change
Additions:			
Employee contributions	$ 114,443,295	$ 110,152,580	3.9%
Employer contributions	114,090,075	109,549,977	4.1
Investment income	22,836,265	435,682,659	(94.8)
Total additions	251,369,635	655,385,216	(61.6)
Deductions:			
Benefits	487,053,001	456,297,424	6.7
Refunds of contributions	23,443,481	26,197,447	(10.5)
Administrative expenses	3,944,641	3,911,222	0.9
Total deductions	514,441,123	486,406,093	5.8
Net change in plan net position	(263,071,488)	168,979,123	(255.7)
Plan net position restricted for pension benefits:			
Beginning of year	10,776,533,615	10,607,554,492	1.6
End of year	$10,513,462,127	$10,776,533,615	(2.4)%

Investments

SDRS investment portfolio management is the statutory responsibility of the South Dakota Investment Council. The South Dakota Investment Office is the primary investment manager, but the Investment Council may utilize the services of external money managers.

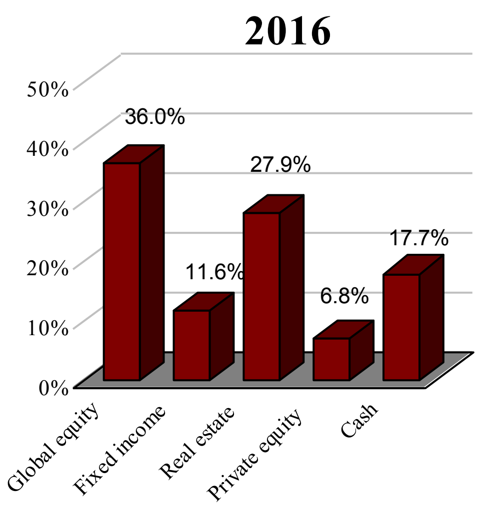
Net investment performance during 2016 and 2015 was 0.3 percent and 4.18 percent, respectively.

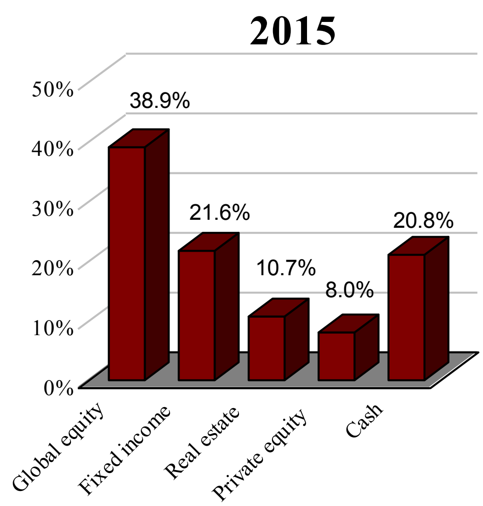
The Investment Council is governed by the prudent-man standard, as defined in South Dakota Codified Law §4-5-27:

> §4-5-27. Prudent-man standard required in investments. Any investments under the provisions of §4-5-12 to §4-5-39, inclusive, shall be made with the exercise of that degree of judgment and care, under circumstances then prevailing, which persons of prudence, discretion, and intelligence exercise in the management of their own affairs, not for speculation but for investment, considering the probable safety of their capital as well as the probable income to be derived.

Though monthly benefit payments exceed monthly contributions, the SDRS is not subject to sudden, substantial, and unexpected withdrawals. As a result, it is not necessary to maintain a high percentage of assets in short-term investments unless that is deemed to be the best investment strategy. This allows the SDRS trust fund to be fully invested in a diversified portfolio of securities.

Investment Summary





Plan Status

While the markets have not always made it possible to achieve the long-term assumptions, the System's funding remains solid. The reserve for long-term benefit goals has provided a process for both improving benefits and protecting the System in down markets.

Requests for Information

Requests for information about SDRS may be directed to the South Dakota Retirement System at P.O. Box 1098, Pierre, SD 57501. You may also contact SDRS online at www.sdrs.sd.gov.

Statement of Fiduciary Net Position
June 30, 2016

Assets	
Cash and cash equivalents	$6,915,822
Receivables:	
Employer	2,485,101
Employee	2,642,853
Benefits	35,208
Unsettled investment sales	19,611,040
Accrued interest and dividends	31,516,906
Total receivables	56,291,108
Investments, at fair value:	
Fixed income	3,248,164,814
Equities	5,311,369,234
Real estate	1,225,616,938
Private equity	709,610,272
Total investments, at fair value	10,494,761,258
Property, at cost (net of accumulated depreciation of $13,728)	8,202
Computer software development in progress	1,779,220
Other assets	14,481
Total assets	10,559,770,091
Liabilities	
Accounts payable and accrued expenses	2,123,716
Unsettled investment purchases	26,685,838
Due to brokers—futures transactions	17,498,410
Total liabilities	46,307,964
Net position restricted for pension benefits	$10,513,462,127

See accompanying notes to financial statements.

Statement of Changes in Fiduciary Net Position

Year Ended June 30, 2016

Additions	
Contributions:	
Employee	$114,443,295
Employer	114,090,075
Total contributions	$228,533,370
Investment income (loss):	
From investing activities:	
Net appreciation in fair value of investments	(209,983,510)
Interest	108,298,330
Dividends	100,482,773
Real estate	54,191,535
Investment activity income	52,989,128
Less investment activity expenses	(32,818,365)
Net investment activity income	20,170,763
From security lending activities:	
Security lending income	3,510,674
Security lending expenses	(845,172)
	2,665,502
Total additions	251,369,635
Deductions	
Benefits	487,053,001
Refunds of contributions	23,443,481
Administrative expenses	3,944,641
Total deductions	514,441,123
Net change in net position	(263,071,488)
Net position restricted for pension benefits	
Beginning of year	10,776,533,615
End of year	$10,513,462,127

See accompanying notes to financial statements.

Notes to Financial Statements

1. General Description of the System

The South Dakota Retirement System (SDRS or the System) is a cost-sharing, multiple-employer public employee retirement system (PERS) established to provide retirement benefits for employees of the state of South Dakota (the State) and its political subdivisions. Members of SDRS include full-time employees of public schools, the State, the Board of Regents, city and county governments, and other public entities. Public schools, cities, and counties may choose not to include certain full-time employees in the System.

SDRS is considered a part of the State financial reporting entity and is included in the State's financial report as a pension trust fund. Authority for establishing, administering, and amending plan provisions is found in South Dakota Codified Law (SDCL) 3-12.

The South Dakota Retirement System Board of Trustees (the Board) is the governing authority of SDRS. The Board consists of 14 elected representatives from participating groups, two appointees of the governor, and an ex-officio nonvoting representative of the South Dakota Investment Council. The elected representatives of the Board are two teacher members; two State employee members; a participating municipality member; a participating county member; a participating classified employee member; a current contributing Class B member other than a justice, judge, or magistrate judge; a county commissioner of a participating county; a school district board member; a justice, judge, or magistrate judge; an elected municipal official of a participating municipality; a retiree; and a faculty or administrative member employed by the Board of Regents. The two Governor's appointees consist of one head of a principal department established pursuant to SDCL 1-32-2, or one head of a bureau under the office of executive management and one individual from the private or public sector.

SDRS is a hybrid defined benefit plan designed with several defined contribution plan type provisions. The system includes three classes of members: Class A general members, Class B public safety and judicial members, and Class C Cement Plant Retirement Fund members. Members and their employers make matching contributions, which are defined in State statute. SDRS may expend up to 3 percent of the annual contributions for administrative expenses subject to approval by the executive and legislative branches of the State.

SDRS provides retirement, disability, and survivor benefits. The right to receive retirement benefits vests after three years of contributory service. Class A members and Class B judicial members who retire after age 65 with three years of service are entitled to an unreduced annual retirement benefit. An unreduced annual retirement benefit is also available after age 55 for Class A members where the sum of age and credited service is equal to or greater than 85 or after age 55 for Class B judicial members where the sum of age and credited service is equal to or greater than 80. Class B public safety members can retire with an unreduced annual retirement benefit after age 55 with three years of contributory service. An unreduced annual retirement benefit is also available after age 45 for Class B public safety members where the sum of age and credited service is equal to or greater than 75. All retirement benefits that do not meet the above criteria may be payable at a reduced level. Class C Cement Plant Retirement Fund members have a normal retirement age of 65 and early retirement is age 55 with the required credited service. Class C provides for disability payments for those disabled on or before March 16, 2001. All participants of the Plan on March 15, 2001, were 100 percent vested.

The annual increase in the amount of the SDRS benefits payable on each July 1st is indexed to consumer price index (CPI) and based on the SDRS funded status:

- If the SDRS fair value funded ratio is 100 percent or more—3.1 percent COLA
- If the SDRS fair value funded ratio is 80.0 percent to 99.9 percent, index with the CPI
    - 90.0 to 99.9 percent funded—2.1 percent minimum and 2.8 percent maximum COLA
    - 80.0 to 90.0 percent funded—2.1 percent minimum and 2.4 percent maximum COLA
- If the SDRS fair value funded ratio is less than 80 percent—2.1 percent COLA

All benefits except those depending on the Member's Accumulated Contributions are annually increased by the Cost-of-Living Adjustment.

SDRS is a qualified defined benefit retirement plan under Section 401(a) of the Internal Revenue Code and is exempt from federal income taxes. SDRS last received a favorable determination letter dated October 3, 2016, in which the Internal Revenue Service stated that the System, as then designated, was in compliance with the applicable requirements of the Internal Revenue Code. SDRS believes that the system currently is designed and being operated in compliance with the applicable requirements of the Internal Revenue Code, and therefore, SDRS continues to be tax-exempt. Therefore, no provision for income taxes has been included in SDRS's financial statements.

SDRS is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. SDRS participates in the various programs administered by the State. These risk management programs are funded through assessments charged to participating entities. The risk management programs include (1) coverage for risks associated with automobile liability and general tort liability (including public officials' errors and omissions liability, medical malpractice liability, law enforcement liability, and products liability) through the State's Public Entity Pool for Liability Fund, (2) coverage of employee medical claims through the State's health insurance program, (3) coverage for unemployment benefits through the State's Unemployment Insurance Fund, and, (4) coverage for workers' compensation benefits through the State's Workers'

Compensation Fund. Financial information relative to the self-insurance funds administered by the State is presented in the State of South Dakota Comprehensive Annual Financial Report.

As of June 30, 2016, the number of participating governmental employers is as follows:

School districts	165
State of South Dakota	1
Board of Regents	1
Municipalities	158
Counties	64
Boards and commissions	96
Total employers	**485**

At June 30, 2016, SDRS membership consists of the following:

Retirees and beneficiaries currently receiving benefits:	
Class A (general employees)	24,722
Class B (public safety and judicial employees)	1,590
Class C (cement plant employees)	242
Total retirees and beneficiaries	26,554
Terminated members entitled to benefits but not yet receiving them:	
Class A (general employees)	16,663
Class B (public safety and judicial employees)	847
Class C (cement plant employees)	44
Total terminated members	17,554
Current active members:	
Vested:	
Class A (general employees)	28,461
Class B (public safety and judicial employees)	2,187
Class C (cement plant employees	17
Non-vested:	
Class A (general employees)	8,523
Class B (public safety and judicial employees)	752
Total current active members	39,940
Grand total	84,048

* There are 123 Class A and 11 Class B public safety and judicial members or beneficiaries whose benefits are currently suspended but are entitled to future benefits. These members or beneficiaries are includes as retirees and beneficiaries in their respective classes as listed.

2. Summary of Significant Accounting Policies

(a) Basis of Accounting and Presentation

The accompanying financial statements are prepared using the accrual basis of accounting in accordance with U.S. generally accepted accounting principles applicable to governmental accounting for a pension trust fund. Employee and employer contributions are recognized when due pursuant to formal commitment, as well as statutory requirements. Pension benefit payments are due the first day of the month following the retirement of a member, and the first of each month thereafter. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

(b) Method Used to Value Investments

Investments are reported at fair value, in accordance with GASB Statement No. 72. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. GASB 72 sets forth the framework for measuring value. The framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three levels. The three levels of the fair value hierarchy under GASB 72 are described as follows:

Level 1—Valuation inputs are quoted prices in active markets for identical asset or liability as of the measurement date.

Level 2—Valuation inputs other than quoted prices included within Level 1 that are observable for an asset or liability, either directly or indirectly.

Level 3—Valuation inputs are based on significant unobservable inputs for an asset or liability.

As a practical expedient, GASB 72 allows the net asset value (NAV) or its equivalent to be used when a readily determinable fair value is not available. The NAV valuations are based on valuations of the underlying companies as determined and reported by the fund manager or general partner and are excluded from the fair value hierarchy.

Additional required disclosures can be found in Note 5: Cash and Investments.

Investments denominated in foreign currencies are translated into USD using the year-end spot foreign currency exchange rates. Foreign exchange rate gains and losses are included with the net appreciation in fair value of investments.

Alternative investments consist of investments in a variety of markets and industries through partnerships, corporate entities, co-investments, and other investment vehicles. For alternative investments where no readily ascertainable market value exists, management, in consultation with their investment advisors, values these investments in good faith based upon the investment's current financial statements or other information provided by the underlying investment advisor. For all of these alternative investments, SDRS has determined that net asset value reported by the underlying fund approximates the fair value of the investment. These fair value estimates are, by their nature, subjective and based on judgment. These alternative investments were valued at $2,612,356,121 (24.85 percent of net position) at June 30, 2016. The estimated fair value of these investments may differ significantly from values that would have been used had a ready market existed.

Foreign exchange rate gains and losses are included with the net appreciation in fair value in investments. Futures contracts are marked to market based on quoted futures prices with changes in fair value reflected in the current period.

Interest is accrued in the period in which it is earned and dividend income is recorded on the ex-dividend date.

(c) Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires the plan administrator to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements, and changes therein. Actual results could differ from those estimates.

(d) New GASB Implementation

In fiscal year 2016, SDRS implemented Government Accounting Standards Board Statement No. 72, *Fair Value Measurement and Application*. GASB 72 addresses accounting and financial reporting issues related to fair value measurements and guidance for financial reporting purposes. There was no material impact on valuation inputs used to measure fair value as a result of the implementation of GASB 72.

3. Contributions and Reserves

(a) Contributions

Covered employees are required by statute to contribute a percentage of their salary to SDRS as follows:

Class A members	6 percent of salary
Class B public safety members	8 percent of salary
Class B judicial members	9 percent of salary

All participating employers are required to contribute an amount equal to the members' contributions. Members may make an additional contribution of 1.5 percent of compensation for optional spouse coverage (closed to new enrollees after July 1, 2010).

SDRS is funded by fixed member and employer contributions at a rate established by South Dakota law. On an annual basis, an actuarial valuation of SDRS is performed to determine the adequacy of the fixed contributions to pay the normal costs and expenses if the System is fully funded or pay the normal costs, expenses, and amortize the frozen unfunded actuarial accrued liability (UAAL) if the System is not fully funded. The June 30, 2016, actuarial valuation of the plan determined that the System is fully funded based on the actuarial value of assets and that the statutorily required employer contributions meet the requirements for the annual required contributions of the employers under Governmental Accounting Standards Board (GASB) Statement No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans* along with amendments included in Statement No. 67, *Financial Reporting for Pension Plans*; and the statutorily required employer contributions are sufficient to pay the employer normal cost and expenses. Annual required contributions of the employers equal to the statutorily required contributions have been listed below pursuant to GASB Statement No. 27, *Accounting for Pensions by State and Local Governmental Employers,* with revisions in Statement No. 68, *Accounting and Financial Reporting for Pensions.*

Contributions during fiscal year 2016 totaling $228,533,370 ($114,443,295 employee, $114,090,075 employer) were made in accordance with statutory rates. The employee contributions exceed the employer contributions because of optional spouse coverage contributions and employee service purchase payments. Contributions for the last 5 fiscal years are as follows:

Year ending June 30	Employer	% Contributed
2016	$114,090,075	100%
2015	109,549,977	100
2014	104,952,985	100
2013	100,376,481	100
2012	98,866,649	100

SDRS allows participating entities to pay their deferred contributions for funding of accrued benefits over periods of up to 20 years and members to pay for the purchase of certain prior service over periods of up to 10 years. Interest is charged at rates of 5 percent to 8 percent.

Future payments will be received as follows:

Year ending June 30	Employees
2017	$53,773
2018	32,254
2019	24,389
2020	25,180
2021	22,067
Later	35,756
Deferred contributions receivable at June 30, 2016	$193,419

(b) Reserves

The reserve for funding of long-term benefit goals is designed to fund benefit improvements and provide the plan with protection against adverse experience. The reserve for funding of long-term benefit goals is equal to the cumulative amounts credited or debited annually based on the immediate recognition of actuarial investment losses, the five-year recognition of actuarial investment gains, and the five-year recognition of SDRS liability gains or losses, less reductions described below. If benefit improvements are enacted into law and funded from the reserve for funding of long-term benefit goals, the reserve for funding of long-term benefit goals is reduced by the present value of all benefits for those improvements. The reserve for funding of long-term benefit goals may also be reduced to offset unfavorable experience or to meet the funding objectives of SDRS as established by the

Board of Trustees. As of June 30, 2016, the balance in the reserve for funding of long-term benefit goals is ($908,851,561). The reserve will increase by net gains of $486 million that will be recognized in the reserve for funding of long-term benefit goals over the next four years. The current negative balance in the reserve does not indicate any additional funding requirements.

4. Net Pension Liability of the System

The components of the net pension liability of the System at June 30, 2016, was as follows:

Total pension liability	$ 10,851,252,302
Plan fiduciary net position	(10,513,462,127)
Net pension liability	$ 337,790,175
Fiduciary net position as a percentage of net pension liability	96.9%

Actuarial Assumptions—The total pension liability was determined by an actuarial valuation as of June 30, 2016, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.25%
Salary increases	5.83% at entry to 3.75% after 30 years of service
Discount rate	7.25% through 2017 and 7.50% thereafter, net of pension plan investment expense

Mortality rates were based on the RP-2000 Mortality Table, projected generationally with Scale BB and adjusted for males and females, as appropriate.

The actuarial assumptions used in the June 30, 2016, valuation were based on the results of an actuarial experience study for the period of July 1, 2005, to June 30, 2011. The mortality assumptions were revised based on an extension of the experience study including mortality experience through June 30, 2013.

Discount Rate—The discount rate used to measure the total pension liability was 7.25 percent though 2017 and 7.50 percent thereafter. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that matching employer contributions will be made at rates equal to the member rate. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of (asset)/liability to changes in the discount rate—The following presents the net pension (asset)/liability of the System, calculated using the discount rate of 7.25 percent through 2017 and 7.50 percent thereafter, as well as what the System's net pension asset would be if it were calculated using a discount rate that is 1 percent point lower (6.25/6.50 percent) or 1 percent point higher (8.25/8.50 percent) than the current rate:

	1% Decrease	Current Discount Rate	1% Increase
System's net pension (asset)/liability	$1,890,269,326	$337,790,175	$(928,423,300)

5. Cash and Investments

Cash and Deposits

Cash and cash equivalents are held by the State Treasurer and were invested in the State's pooled investment fund. Investments in the State's pooled investment fund consist primarily of short-term U.S. Treasury and Agency obligations, short-term US Corporate securities, bank certificates of deposit, and money market funds.

The custodial credit risk for deposits is the risk that, in the event of the failure of a depository institution, a government will not be able to recover deposits or will not be able to recover collateral securities that are held in the possession of an outside party. SDRS has a formal deposit policy specific to custodial credit risk and foreign currencies. Policy states that the USD equivalent of any non-USD currency cannot exceed 2.0 percent of any portfolio on a trade date +7 days basis. All portfolios as of June 30, 2016, meet policy guidelines. These deposits are not collateralized or covered by depository insurance. As a result, $3,173,427 was exposed to custodial credit risk, which are recorded in investments in the statement of fiduciary net position.

Investments

Investment portfolio management is the statutory responsibility of the South Dakota Investment Council (SDIC), which may utilize the services of external money managers for management of a portion of the portfolio. SDIC is governed by the Prudent Man Rule (i.e., the council should use the same degree of care as a prudent man). Current SDIC investment policies dictate limits on the percentage of assets invested in various types of vehicles (equities, fixed income securities, real estate, cash, private equity, etc.). The long-term expected rate of return on pension plan investments was determined using a method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined by geometric means to produce the long-term expected rate of return by weighing the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2016 (see the discussion of the pension plan's investment policy) are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Global equity	58%	4.8%
Fixed income	30%	1.8%
Real estate	10%	4.6%
Cash	2%	0.7%
	100%	

Below is a detail of the investment balances and amounts managed by the respective fund managers:

	Cost	Fair Value
State of South Dakota Investment Council	$6,787,130,150	$7,611,316,131
Apollo	8,767,102	5,595,961
Blackstone Credit Liquidity	1,539,353	80,159
Blackstone Private Equity	124,005,272	185,137,531
Blackstone Real Estate Partners	598,470,803	794,750,606
Brandes Global Mid-Cap	61,844,637	58,140,551
Bridgewater Pure Alpha Fund II	36,742,005	73,490,885
Capital International	39,785,052	32,367,908
Cargill North American Real Estate Partners	11,269,024	10,754,569
Carlyle	65,803,528	80,613,111
CINVIN	95,603,531	68,878,864
Crossroads Investment Advisors LP	1,219,686	1,065,438
CVC	46,886,184	45,482,367
CVI Global Value Fund	56,815,984	33,721,114
Cypress Merchant Banking Partners LP	170,972	170,972
Dimensional Fund Advisors, Inc.	8,977,461	49,312,252
Doughty Hanson & Co European Real Estate	9,333,729	5,058,183
Doughty Hanson PE IV	32,901,529	27,212,225
Elevation Partners	1,013,769	822,130
KKR Associates	8,814,039	11,314,081
Lone Star Real Estate	195,173,811	203,453,076
Pinebridge	5,910,842	3,102,290
Riverstone	82,228,117	76,093,482
Rockport RE IV	50,383,060	61,971,165
Sanders All Asset Value	21,397,766	23,886,798
Sanders Capital	40,790,550	40,362,590
Silver Lake Partners LP	123,267,871	177,349,872
Starwood RE IX	114,931,879	144,033,378
TCW Opp MBS Strategy	618,590,813	669,223,569
Total	**$9,249,768,519**	**$10,494,761,258**

(a) Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The investment grade fixed income portfolios of SDRS are benchmarked to the duration of the Citigroup Broad Investment Grade (BIG) Index and must fall between 70 percent and 130 percent of the BIGs duration.

The durations of the various investment types are listed in the following table:

Investment type	Fair value	Duration (in years)
U.S. Treasuries	$77,937,480	5.80
U.S. Treasury Bills	88,393,401	0.21
U.S. Treasury strips	152,998,425	8.76
U.S. agencies	54,032,141	3.80
U.S. agencies discount notes	31,151,461	0.08
Investment grade corporates	388,068,688	4.78
High-yield corporates	758,588,244	3.83
Agency mortgage-backed securities	353,424,782	3.75
Non-agency mortgage-backed securities	610,162,086	0.54
Total	**$2,514,756,708**	3.36

The SDRS fixed income portfolios invest in mortgage-backed securities. These securities are sensitive to prepayments by mortgagees, which is likely in declining interest rate environments, thereby reducing the value of these securities.

(b) Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations to SDRS. SDIC sets the investment policy annually for the SDRS. This policy establishes the average percentage invested in each asset category and the fund allocation range that each asset category can vary during the fiscal year. As of June 30, 2016, the portfolios held the following investments, excluding those issued by or explicitly guaranteed by the U. S. government, which are not considered to have credit risk. The investments are grouped as rated by Moody's Investors Service.

Moody's rating	Fair value
Aaa	$981,564,975
Aa	91,160,699
A	145,800,096
Baa	215,772,906
Ba	224,724,831
B	251,404,755
Caa	471,210,615
Ca	175,793,150
P-1	31,151,462
Unrated	164,220,031
Total	**$2,752,803,520**

(c) Concentration of Credit Risk

Concentration of credit risk is the risk of loss that may be attributed to the magnitude of SDRS's investment in a single issuer. SDRS does not have guidelines to limit its investments in any particular investment. SDRS does not have investments in any one issuer that represent 5 percent or more of the total fair value of investments as of June 30, 2016 (excluding those issued by or explicitly guaranteed by the U.S. government).

(d) Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely impact the fair value of an investment. SDRS's exposure to foreign currency risk derives from its positions in foreign currency and foreign-currency-denominated equity and fixed income investments. SDRS does not hedge foreign currency back to U.S. dollars (to match the unhedged benchmark), but does allow hedging under certain circumstances, when deemed appropriate. The portfolio's exposure to foreign currency risk at June 30, 2016, is as follows (in U.S. dollar fair value):

Currency	Equities	Fixed income	Cash	Total
Australian Dollar	$ 7,176,790	—	$ 42,353	$ 7,219,143
Brazilian Real	2,525,783	—	53,246	2,579,029
British Pound	251,113,815	—	1,527,492	252,641,307
Canadian Dollar	83,589,193	—	211,590	83,800,783
Danish Krone	3,145,592	—	44,618	3,190,210
Euro	234,706,732	—	356,210	235,062,942
Hong Kong Dollar	4,362,427	—	27,170	4,389,597
Hungarian Forint	569,869	—	19,166	589,035
Japanese Yen	110,498,801	—	888,641	111,387,442
Korean Won	56,284,913	—	2,936	56,287,849
Norwegian Krone	600,195	—	—	600,195
Singapore Dollar	391,420	—	—	391,420
Swedish Krona	1,132,909	—	—	1,132,909
Swiss Franc	217,355,158	—	4	217,355,162
Thai Baht	920,319	—	—	920,319
Total fair value	**$974,373,916**	**—**	**$3,173,426**	**$977,547,342**

Investments with limited partnerships and certain global equity investments with external managers, which are not included in the table above, may expose SDRS's portfolio to additional foreign currency risk. The total fair value of investments in real estate and private equity limited partnerships as of June 30, 2016, was $1,935,227,210. The total fair value of global equity and high-yield fixed income investments managed by external managers was $146,689,934 and $33,801,273, respectively.

(e) Return on Investments

During fiscal year 2016, SDRS's investments (including investments bought and sold, as well as held during the year) depreciated in value by $209,983,510.

The calculation of realized gains and losses is independent of a calculation of the net change in the fair value of investments. Realized gains and losses on investments that had been held in more than one fiscal year and sold in the current year were included as a change in the fair value of investments reported in the prior years and current year.

Change in Fair Value of Investments	
Appreciation (Depreciation) in fair value of investments:	
Equities	$ (545,219,691)
Fixed income	39,076,076
Real estate	(86,793,174)
Private equity	(106,178,621)
Change in accrued income	8,235,164
Total decrease in fair value	(690,880,246)
Realized gain (loss) on investments:	
Equities	260,800,394
Fixed income	65,731,698
Real estate	78,263,535
Private equity	124,615,366
Total net realized gains	529,410,993
Futures—change in unrealized gain (loss)	(20,110,920)
Futures—realized gain (loss)	(28,403,337)
Net loss on futures	(48,514,257)
Net appreciation in investments	**$ (209,983,510)**

(f) Securities Lending

State statutes and the SDRS policies permit the use of investments for securities lending transactions. These transactions involve the lending of corporate debt, foreign equity securities, and domestic equity securities to broker-dealers for collateral in the form of securities, with the simultaneous agreement to return the collateral for the same securities in the future. The SDRS's securities custodian is an agent in lending securities and shall accept only U.S. government securities or its agencies as collateral for any loan or loaned securities. The collateral required must equal 102 percent of fair value plus accrued interest for corporate debt securities, 102 percent of fair value for U.S. equity securities, and 105 percent of fair value for foreign securities except in the case of loans of foreign securities, which are denominated and payable in U.S. dollars, in which event the collateral required is 102 percent of fair value. The earnings generated from the collateral investments result in the gross earnings from lending activities, which is then split on a percentage basis with the lending agent.

The fair value of securities on loan as of June 30, 2016, was $175,272,679 and the collateral held on the same date was $179,413,589. The SDRS has no credit risk exposure to borrowers because the amounts the SDRS owes the borrowers exceed the amounts the borrowers owe the SDRS. The contract with the lending agent requires the agent to indemnify the SDRS if the borrowers fail to return the loaned securities and the collateral is inadequate to replace the securities lent.

All securities loans can be terminated on demand by either the SDRS or the borrower. The SDRS does not have the ability to pledge or sell collateral securities unless the borrower defaults; therefore, no asset and corresponding liability for the collateral value of securities received has been established on the statement of fiduciary net position. Regarding restrictions on loans, the securities lending agreement does limit the total value of securities that can be out on loan on any given day.

(g) Custodial Credit Risk

The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, a government will not be able to recover the value of investment or collateral securities that are in the possession of an outside party. SDRS securities lending policies are detailed in the preceding Securities Lending section. As of June 30, 2016, the SDRS does not have custodial credit risk with regard to the security lending collateral.

(h) Fair Value Measurements and Applications

The following table shows the fair value in accordance with the GASB hierarchy:

Investments by fair value level	06/30/16	Fair Value Measurements Using: Quoted Prices in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3
Fixed Income securities				
U.S. Treasuries	$ 77,937,480	$ —	$ 77,937,480	$ —
U.S. Treasury Bills	88,393,401	—	88,393,401	—
U.S. Treasury STRIPS	152,998,425	—	152,998,425	—
U.S. Agencies	54,032,141	—	54,032,141	—
U.S. Agency Discount Notes	31,151,461	—	31,151,461	—
Investment Grade Corporates	388,068,688	—	396,702,202	—
High Yield Corporates	758,588,244	—	749,954,731	—
Agency Mortgage-Backed Securities	353,424,781	—	353,424,781	—
Non-Agency Mortgage-Backed Securities	610,162,086	—	610,162,086	—
Total fixed income securities	2,514,756,708	—	2,514,756,708	—
Equity securities				
Domestic Stock	4,017,313,955	4,016,858,525	455,430	—
Depository Receipts	85,697,094	85,697,094	—	—
ETF-Exchange Traded Funds	117,139,750	117,139,750	—	—
International Stock	974,373,913	974,373,913	—	—
Stock Warrants	7,802,933	7,802,933	—	—
Total equity securities	5,202,327,645	5,201,872,215	455,430	—
Alternative investments				
Real Estate Funds	5,058,183	—	—	5,058,183
Total alternative investments	5,058,183	—	—	5,058,183
Total investments by fair value level	$ 7,722,142,536	$ 5,201,872,215	$ 2,515,212,138	$ 5,058,183
Investments measured at the net asset value (NAV)				
Short Term Investment Funds	659,553,084			
Emerging Markets Small Cap Equity Mutual Funds	49,312,252			
Multi Strategy Hedge Funds	97,377,683			
Alternative investments				
Real Estate Funds	1,220,558,755			
Private Equity Funds	709,610,272			
Other Funds	33,801,273			
Total alternative investments	1,963,970,301			
Total Investments measured at the NAV	$ 2,770,212,319			
Total Investments measured at the fair value	$10,492,354,855			
Plus: Cash held by Fund Managers	3,174,787			
Less: G/L on FX Transactions	(611,056)			
Less: Accrued Monthly Interest	(157,328)			
	10,494,761,258			
Investment derivative instruments				
Futures Contracts (liability)	(17,498,410)	(17,498,410)	—	
Foreign Exchange Forward Contracts	(611,056)	—	(611,056)	
Total investment derivative instruments	$ (18,109,466)	$ (17,498,410)	$ (611,056)	

Equity securities classified in Level 1 of the fair value hierarchy are valued using quoted prices in active markets for identical securities as of the measurement date as issued by pricing vendors. The security classified in Level 2 of the fair value hierarchy is valued using a quoted price for an identical security in an inactive market.

Fixed income securities classified in Level 2 of the fair value hierarchy are valued using observable inputs other than quoted prices for identical securities. The prices are determined by the use of matrix pricing techniques maintained by the various pricing vendors for these securities. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices.

Real estate funds classified in Level 3 of the fair value hierarchy are real estate alternative investments that invest primarily in overseas commercial real estate. These are investments which quoted prices are not readily available and are valued at estimated values as determined by the General Partner (GP). Investments are valued by the GP using one or more valuation methodologies with reference to the International Private Equity and Venture Capital Valuation Guidelines. The estimated fair values are subjective and based on judgment.

The Other Fund classified in Level 3 of the fair value hierarchy is valued at zero. It is an investment in an alternative investment fund that invested in distressed and defaulted debt securities and equities of financially troubled companies. All positions in the fund have been liquidated and only cash remains. The fund holds contingent liabilities that offset cash. Due to the highly questionable outcome of the contingent liabilities it has been determined that a value of zero best reflects the fair value considering the information available as of June 30, 2016.

SDRS holds shares or interest in investments where the fair value of the investments are measured on a recurring basis using net asset value per share (or its equivalent) of the investment as a practical expedient. The NAV valuations are based on valuations of the underlying companies as determined and reported by the fund manager or general partner.

Derivative instruments classified in Level 1 of the fair value hierarchy represents the pending variance margin on futures contracts which is calculated using quoted prices in active markets for identical securities. Derivative instruments classified in Level 2 of the fair values hierarchy are valued using observable inputs other than quoted prices for identical securities. The foreign currency forward contract valuations are determined by interpolating FX rates for various settlement dates as of June 30, 2016.

The valuation method for investments measured at the net asset value (NAV) per share (or its equivalent) is presented in the following table:

Investments Measured at the NAV	Fair Value	Unfunded Commitments	Redemption Frequency (if currently eligible)	Redemption Notice Period
Short-Term Investment Funds (a)	$ 659,552,084		Daily	0 days
Emerging Markets Small Cap Equity Mutual Funds (b)	49,312,252		Daily	1 day
Multi Strategy Hedge Funds (c)	97,377,683		Monthly	5-30 days
Alternative investments				
Real Estate Funds (d)	1,220,558,755	$667,369,243		
Private Equity Funds (e)	709,610,272	575,174,180		
Other Funds (f)	33,801,273			
Total alternative investments	1,963,970,301			
Investments measured at the net asset value (NAV)	$2,770,212,319			
Real Estate Funds (Level 3)	$ 5,058,183	$ 13,193,411		

(a) Short-Term Investment Funds. This type includes investments in four open-end mutual funds that invest exclusively or primarily in high-quality, short-term securities that are issued or guaranteed by the U.S. government or by U.S. government agencies and instrumentalities. The fair values of the investments in this type have been determined using the NAV per share of the investments.

(b) Emerging Markets Small Cap Equity Mutual Funds. This type includes one investment in an open-end mutual fund that emphasizes broad diversification and consistent exposure to emerging market small company stocks. The fair value of the investment in this type has been determined using the NAV per share of the investment.

(c) Multi-Strategy Hedge Funds. This type includes two investments in funds that may invest in a wide range of asset classes in order to meet fund objectives. The fair values of the investments in this type have been determined using the NAV per share of the investments.

(d) Real Estate Funds. This type includes 23 real estate funds that invest primarily in commercial real estate. The fair values of the investments in this type have been determined using the NAV per share (or its equivalent) of the portfolio's ownership interest in partners' capital. These investments can never be redeemed from the funds. Distributions from each fund will be received as the underlying investments of the funds are liquidated. It is expected that the underlying assets of the funds will be liquidated over the next 20 years. Because it is not probable that any individual investment will be sold, the fair value of each individual investment has been determined using the NAV per share (or its equivalent) of the portfolio's ownership interest in partners' capital.

(e) Private Equity Funds. This type includes 37 private equity funds that invest primarily in leveraged buyouts. The fair values of the investments in this type have been determined using the NAV per share (or its equivalent) of the portfolio's ownership interest in partners' capital. These investments can never be redeemed from the funds. Distributions from each fund will be received as the underlying investments of the funds are liquidated. It is expected that the underlying assets of the funds will be liquidated over the next 20 years. Because it is not probable that any individual investment will be sold, the fair value of each individual investment has been determined using the NAV per share (or its equivalent) of the portfolio's ownership interest in partners' capital.

(f) Other Funds. This type includes two other alternative investments that invest primarily in the broad range of debt, debt-related, and/or real estate-related investments. The fair value of the investment has been determined using the NAV per share (or its equivalent) of the portfolio's ownership interest in partners' capital. This investment can never be redeemed from the funds. Distributions from the fund will be received as the underlying investments of the funds are liquidated. It is expected that the underlying assets of the fund will be liquidated over the next 5 years. Because it is not probable that any individual investment will be sold, the fair value of each individual investment has been determined using the NAV per share (or its equivalent) of the portfolio's ownership interest in partners' capital.

6. Derivatives

Derivatives are generally defined as contracts whose values depend on, or derive from, the value of an underlying asset, reference rate, or index. SDRS is exposed to various derivative products through the investment management of the SDIC and its external managers. All of the SDRS's derivatives are classified as investment derivatives.

Futures Contracts

A futures contract is a contract to buy or sell units of an index or financial instrument at a specified future date at a price agreed upon when the contract is originated. The SDIC purchases and sells futures contracts as a means of adjusting the SDRS portfolio mix at a lower transaction cost than the transactions, which would otherwise occur in the underlying portfolios. During fiscal year ended June 30, 2016, S&P 500 futures and 10-year U.S. Treasury note futures were utilized. Upon entering into such a contract, the SDRS pledges to the broker cash or U.S. government securities equal to the minimum initial margin requirement of the futures exchange. Additionally, SDRS receives or pays a daily variation margin, which is an amount of cash equal to the daily fluctuation in value of the contract. The pending variation margin at June 30, 2016, of ($17,498,410) is presented in the statement of fiduciary net position as "Due to broker—futures transactions." The change in fair value of the futures contracts is presented in the statement of changes in fiduciary net position as "Net depreciation in fair value of investments." The net change in fair value from futures contracts for fiscal year ended June 30, 2016, was ($48,514,258).

Futures contract positions at June 30, 2016, were as follows:

Description	Expiration Date	Open position	Number of contracts	Notional contract size	Fair value
U.S. Treasury note	Sept 2016	Long	2,335	100,000 par value 6%, 10-year U.S. Treasury note	$310,518,527
S&P 500 Index	Sept 2016	Short	14,800		$(1,546,748,000)

Foreign Currency Forward Contracts

The SDIC enters into foreign exchange forward contracts for SDRS to manage foreign currency exposure, as permitted by portfolio policies. The fair values of the contracts are presented in the statement of fiduciary net position as Investments, at fair value—Equities. The change in fair value of the forward contracts is presented in the statement of changes in fiduciary net position as "Net appreciation in fair value of investments." The net change in fair value from foreign currency forward contracts for fiscal year ended June 30, 2015, was $5,219,791. At June 30, 2015, the foreign currency forward contracts outstanding were as follows:

Description	Notional amount	Currency	Maturity date	Fair value (US dollars)
Forward sale	(20,770,519)	CHF	08/10/2016	$ 211,770
Forward sale	(158,375,000)	CNY	11/03/2016	110,191
Forward purchase	158,375,000	CNY	11/30/2016	(933,016)

(a) Credit Risk

SDRS is exposed to credit risk on derivative instruments that are in asset positions. The SDIC attempts to minimize credit risk by entering into derivatives contracts with major financial institutions. At June 30, 2016, the net fair value of foreign currency forward contracts was $211,770. This represents the maximum loss that would be recognized at the reporting date if all counterparties failed to perform as contracted. The credit ratings of the counterparties are as follows:

Moody's credit rating	Number of counterparties	Fair value
A1	1	$211,770

(b) Foreign Currency Risk

SDRS is exposed to foreign currency risk on its foreign currency forward contracts because they are denominated in foreign currencies. The net fair value of the foreign currency forward contracts in U.S. dollars is $(611,056).

7. Compensated Absences

Annual leave is earned by all SDRS employees. Upon termination, SDRS employees are eligible to receive compensation for their accrued annual leave balances. At June 30, 2016, a liability existed for accumulated annual leave calculated at the employees' June 30, 2016, pay rate in the amount of $153,003. Employees who have been continuously employed by SDRS and the State for at least seven years prior to the date of their retirement, voluntary resignation, or death will receive payment for one-fourth of their accumulated sick leave balance with such payment not to exceed the sum of 12 weeks of the employee's annual compensation. For employees who have not been employed for seven continuous years, an accrued liability is calculated assuming the likelihood that they will meet the seven-year threshold in the future. At June 30, 2016, a liability existed for accumulated and accrued sick leave, calculated at the employees' June 30, 2016, pay rate in the amount of $169,282.

	2016	2015	% change
Total compensated absences	$322,285	$298,291	8.04%

The total leave liability for the current year is on the statement of fiduciary net position available for benefits in accounts payable and accrued expenses.

8. Operating Leases

The SDRS has entered into an agreement to lease office space effective September 2012 and has a term of ten years. A schedule of minimum office rental payments as of June 30, 2016, is as follows for the fiscal year ending June 30:

2017	$ 104,471
2018	104,471
2019	104,471
2020	104,471
2021	104,471
Thereafter	208,942
Total remaining minimum payments	$ 626,826

Lease expense for the year ending June 30, 2016, was $104,471.

9. Supplemental Retirement Plan

SDRS offers a deferred compensation plan known as the Supplemental Retirement Plan (SRP), created in accordance with Internal Revenue Code Section 457. SRP is available to all public employees and permits them to defer a portion of their salary until future years. The deferred compensation is not available to employees until termination, retirement, death, or unforeseen emergency.

All amounts of compensation deferred under the SRP, all property and rights purchased with those amounts, and all income attributable to those amounts, property, or rights are at all times held in trust for the exclusive benefit of the participants until made available to a participant or the participant's beneficiary.

Of the $288,381,719 net position restricted for plan benefits at June 30, 2016, $174,975,562 was held in trust for employees of the State, while the remaining $113,406,157 represents the assets held in trust for employees of other jurisdictions. In order to avoid duplication in reporting, the SDRS total of $1,681,629 is included in the State total and the State's comprehensive annual financial report for the year ended June 30, 2016.

10.Special Pay Plan

The Special Pay Plan (SPP) was established in July 2004 as a qualified plan pursuant to Internal Revenue Code Section 401(a) under the administrative responsibility of the SDRS Board of Trustees. South Dakota state government and the South Dakota Board of Regents are participating units and every state political subdivision may become a participating unit in the plan. The SPP mandates that qualifying employees (over age 55 and $600 or more in special pay) of participating units defer 100 percent of their special lump-sum termination pay to the plan. The participating unit transfers the deferred pay to the fund. This deferred pay is available to a participant immediately after termination, upon later retirement, or to beneficiaries or an estate upon the participant's death.

Of the $46,602,150 net position restricted for plan benefits at June 30, 2016, $26,011,589 was held in trust for employees of the State, while the remaining $20,590,561 represents the assets held in trust for employees of other jurisdictions. In order to avoid duplication in reporting, the SDRS total of $22,563 is included in the State total and the State's comprehensive annual financial report for the year ended June 30, 2016.

11. Plan Termination

SDRS is administered in accordance with South Dakota statutes. The statues provide for full vesting in accrued benefits upon termination of the plan (SDCL 3-12-72.2).

12. Commitments

At June 30, 2016, SDRS had uncalled capital commitments to private equity limited partnerships totaling approximately $684,735,292 and to real estate limited partnerships totaling approximately $1,095,521,684. The commitments may be called at the discretion of the general partner or may never be called.

13. Litigation

Deutsche Bank and Wilmington Trust Company have filed a number of actions around the country against selling shareholders, and those actions are all now consolidated in a Multi District Panel proceeding in the Southern District of New York (In re: Tribune Company Fraudulent Conveyance Litigation, Case No. 11-MD-2296). A separate adversary proceeding which was pending in Delaware has been consolidated into this action as well (The Official Committee of Unsecured Creditors of Tribune Company, on behalf of Tribune Company v. Dennis J. Fitzsimmons, et al., Case No. 1:12-cv-02652). SDRS is a defendant as a result of selling Tribune Stock in connection with a leveraged buyout of the Tribune Company in 2007. Through this lawsuit the creditors of Tribune Company are attempting to claw-back funds received in connection with the sale of the stock, which, in the case of SDRS, is approximately four million dollars. SDRS contends that it has persuasive arguments favoring dismissal and its counsel is vigorously working on this. The pending legal action does not represent an immediate negative contingency.

14. Assets Used in Plan Operations

These assets represent computer software development costs used by the System and are recorded at cost. Depreciation and amortization are calculated on the straight-line method over the estimated useful lives of the assets. The estimated useful life of computer software development costs is 10-15 years.

	2016
Computer software development in progress	$1,779,220

In March 2014, development began on the South Dakota Retirement System (RETAPP) system. Costs of the RETAPP system will begin to be capitalized and amortized once the application development phase is completed. The balance on contracts pertaining to the completion of the RETAPP project at June 30, 2016, was $700,000.

Schedule of Changes in the System's Net Pension Liability
Last Fiscal Year

	2016	2015	2014
Total pension liability			
Service cost	$ 184,923,317	$ 179,349,820	$ 161,697,696
Interest	745,774,586	712,632,857	633,951,211
Changes in benefit terms	—	—	(5,082,771)
Differences between expected and actual experience	78,645,840	55,821,847	78,328,269
Changes of assumptions	—	—	604,281,184
Cement Plant consolidation	—	—	60,649,185
Benefit payments, including refunds	(510,496,482)	(482,494,871)	(450,490,712)
Net change in total pension liability	$ 498,847,261	$ 465,309,653	1,083,334,062
Total pension liability—beginning	10,352,405,041	9,887,095,388	8,803,761,326
Total pension liability—ending	$ 10,851,252,302	$10,352,405,041	9,887,095,388
Plan fiduciary net position			
Contributions—employer	114,090,075	109,549,977	104,952,985
Contributions—member	114,443,295	110,152,580	106,175,381
Net investment income	22,836,265	435,682,659	1,695,543,796
Benefit payments, including refunds	(510,496,482)	(482,494,871)	(450,490,712)
Administrative expense	(3,944,641)	(3,911,222)	(3,853,073)
Cement Plant consolidation	—	—	69,519,407
Net change in plan fiduciary net position	(263,071,488)	168,979,123	1,521,847,784
Plan fiduciary net position—beginning	10,776,533,615	10,607,554,492	9,085,706,708
Plan fiduciary net position—ending	$10,513,462,127	$10,776,533,615	$10,607,554,492
System's net pension liability (asset) - ending	**$ 337,790,175**	**$ (424,128,574)**	**$ (720,459,104)**

This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, pension plans should present information for those years in which information is available.

Schedule of System's Net Pension Liability (Asset)
Last Fiscal Year

	2016	2015	2014
Total pension liability	$ 10,851,252,302	$ 10,352,405,041	$ 9,887,095388
Plan fiduciary net position	10,513,462,127	10,776,533,615	10,607,554,492
System's net pension liability (asset)	$ 337,790,175	$ (424,128,574)	$ (720,459,104)
Plan fiduciary net position as a percentage of the total pension liability	96.89%	104.10%	107.29%
Actuarial projected covered-employee payroll	$1,829,641,009	$1,758,315,755	$1,685,627,785
System's net pension liability (asset) as a percentage of covered-employee payroll	18.462%	-24.121%	-42.741%

This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, pension plans should present information for those years in which information is available.

See Notes to Required Supplementary Information.

Schedule of System's Contributions
Last Fiscal Year

	2016	2015	2014
Actuarially determined contribution	$ 82,747,112	$ 80,846,313	$ 67,276,362
Contributions in relation to the actuarially determined contribution	114,090,075	109,549,977	104,952,985
Contribution deficiency (excess)	$ (31,342,963)	$ (28,703,664	$ (37,676,623)
Reported covered-employee payroll	$1,829,641,099	$1,758,315,755	$1,685,627,785
Contributions as a percentage of covered-employee payroll	6.236%	6.230%	6.226%

This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, pension plans should present information for those years in which information is available.

Schedule of Investment Returns
Last Fiscal Year

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Annual money-weighted rate or return, net of investment expenses	0.21%	4.17%	18.91%	19.01%	1.37%	25.27%	18.20%	-21.05%	-8.93%	21.07%
Annual time-weighted rate or return, net of investment expenses	0.30%	4.18%	18.90%	19.02%	1.45%	25.18%	17.99%	-20.89%	-9.00%	21.06%

See Notes to Required Supplementary Information.

Notes to Trend Data

Methods and assumptions used in calculations of actuarially determined contributions. The actuarially determined contribution rates in the schedule of System's contributions are calculated as of July 1, two years prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine contribution rates reported in that schedule:

Valuation date	June 30, 2016
Actuarial cost method	Entry age normal
Amortization method	Level percentage of pay
Remaining amortization period	0 years
Asset valuation method	The prior year's Actuarial Value of Assets is credited each year with the assumed rate of investment return plus non-investment cash flow and SDRS liability gains or losses for the year, constrained to a range of 80% to 120% of the Fair Value of Assets
Actuarial assumptions:	
Investment rate of return	7.25% through FY 2017 and 7.50% thereafter
Projected salary increases	5.83% at entry to 3.75% after 30 years of service
Post-retirement mortality table:	
Active members	RP-2000 Employee Mortality Table projected generationally with Scale BB, with males adjusted by 85% and females by 48%.
Healthy inactive members, retired members and beneficiaries	RP-2000 Combined Healthy Mortality Table projected generationally with Scale BB, with males adjusted by 91% and females by 90%.
Disabled inactive and retired members	RP-2000 Disabled Retiree Mortality Table projected generationally with Scale BB.

Schedule of Administrative Expenses
Year Ended June 30, 2016

Personal services	Accrual Basis
Salary and per diem	$1,868,874
Employee benefits	456,432
Total personal services	2,325,306
Operating expenses	
Travel	93,593
Contractual services:	
Audit	127,150
Finance	6,435
Valuations	15,000
Consulting	4,951
Studies	26,571
Special studies	83,443
Legal	37,867
Communications	45,000
Medical	6,588
Operations	696,702
Total contractual services	1,049,707
Supplies and materials	284,300
Capital assets	191,735
Total operating expenses	1,619,335
Total administrative expenses	**$3,944,641**

Schedule of Investment Activity Expenses
Year Ended June 30, 2016

Investment managers	Management expenses
State of South Dakota Investment Council	$9,108,401
Blackstone Private Equity	(801,609)
Blackstone Real Estate Partners	(3,008,589)
Brandes Global Mid-Cap	520,129
Capital International	882,794
Cargill North American Real Estate Partners	55,588
Carlyle	2,178,699
CINVIN	981,964
Crossroads Investment Advisors LP	49,211
CVC	153,120
CVI	509,131
Dimensional Fund Advisors, Inc.	212,320
DLJ Merchant Banking Partners LP	14
Doughty Hanson & Co. European Real Estate	441,405
Doughty Hanson PE IV	93,900
Elevation Partners	25,058
KKR Associates	(14,406)
Lone Star Real Estate	6,269,693
Riverstone	4,341,849
Rockpoint Real Estate	2,802,399
Sanders All Asset Value	290,889
Sanders Capital	264,132
Silver Lake Partners LP	2,676,822
Starwood Real Estate	1,650,252
TCW Opp MBS Strategy	3,135,199
Total investment activity expenses	**$32,818,365**

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Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

To the Board of Trustees
South Dakota Retirement System
Pierre, South Dakota

We have audited, in accordance with the 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, the financial statements of the South Dakota Retirement System (SDRS), as of and for the year ended June 30, 2016, and the related notes to the financial statements, and have issued our report thereon dated October 19, 2016.

Internal Control Over Financial Reporting
In planning and performing our audit of the financial statements, we considered SDRS's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of SDRS's internal control. Accordingly, we do not express an opinion on the effectiveness of the SDRS's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters
As part of obtaining reasonable assurance about whether SDRS's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

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Purpose of this Report
The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Eide Bailly LLP

Boise, Idaho
October 19, 2016

ACTUARIAL SUMMARY

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South Dakota Retirement System

October 12, 2016

Board of Trustees
South Dakota Retirement system
Post Office Box 1098
Pierre, SD 57501-1098

Dear Trustees:

I am pleased to submit the results of the annual Actuarial Valuation of the South Dakota Retirement System (SDRS), prepared as of June 30, 2016.

The purposes of this report are to provide a summary of the funded status of SDRS as of June 30, 2016, to compare the fixed, statutory member and employer contributions to the Actuarially Determined Contribution (ADC) under the SDRS Funding Policy and to provide accounting information under Governmental Accounting Standards Board Statements No. 67 and 68 (GASB 67 and 68). This Actuarial Valuation is based on financial and member data provided by SDRS and summarized in this report. I did not verify the data submitted, but did perform tests for consistency and reasonableness.

All members of participating employer units of SDRS and all benefits in effect on June 30, 2016 have been considered in this Actuarial Valuation. SDRS benefit provisions, Member data, and trust information are summarized in the sections that follow. No adjustments for events after the June 30, 2016 measurement date have been included.

The actuarial assumptions and methods used in this valuation for funding purposes meet the parameters set by the Actuarial Standards of Practice maintained by the Actuarial Standards Board. The assumptions and methods used to determine the ADC as outlined in this report and all supporting schedules meet the parameters and requirements for disclosure of GASB 67. All SDRS benefits are included in the determination of the ADC that is developed using the Frozen Entry Age actuarial cost method. The Actuarial Value of Assets is based on expected investment returns, limited to a 20% corridor around Fair Value of Assets and adjusted for liability gains or losses during the year. The undersigned believes the assumptions are, individually and in the aggregate, reasonably related to experience and to expectations of future experience.

SDRS's funding objectives under its Funding Policy include:

- Actuarial Value Funded Ratio of 100%
- Fair (Market) Value Funded Ratio of at least 100%

- Fair (Market) Value of Assets that exceeds the Actuarial Value of Assets, resulting in a Cushion
- A fully funded System based on the Actuarial Value of Assets and the Entry Age Normal Cost method
- Fixed, statutory member and employer contribution rates sufficient to pay the Normal Cost and expenses and amortize the Unfunded Actuarial Accrued Liability over a period of 20 years or less when the System is not fully funded (ADC)

The results of this valuation indicate that as of June 30, 2016, SDRS continues to be a very well-funded system with a Fair Value Funded Ratio of 96.9%. The fixed, statutory member and employer contributions are sufficient to meet the ADC. However, SDRS is not currently meeting all of the funding objectives of the Board of Trustees' Funding Policy. Specifically, the Fair Value Funded Ratio is less than 100% and the Fair Value of Assets is less than the Actuarial Value of Assets, resulting in a Deficit, rather than a Cushion as of June 30, 2016.

The SDRS Board of Trustees' Funding Policy is attached in Section 6.

Future actuarial results may differ significantly from current measurements presented in this report due to such factors as plan experience differing from that anticipated by the economic and demographic assumptions, changes in economic or demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. Due to the limited scope of this report, an analysis of the potential range of such future measurements has not been performed.

Where presented, "Actuarial Value Funded Ratio" and "Frozen Unfunded Actuarial Accrued Liability" are measured on an Actuarial Value of Assets basis, while "Fair Value Funded Ratio" is measured on a Fair Value of Assets basis. Determining the unfunded liability using the Fair Value of Assets would lead to a different result. Moreover, the results herein are appropriate for evaluating the ability of accumulated assets and future contributions to fund SDRS benefits, but make no assessment regarding the funded status of the System if the System were to settle (i.e. purchase annuities for) a portion or all of its liabilities. In various place in this report, funded ratios and unfunded liabilities are shown based upon varying sets of assumptions as well as Fair Value of Assets as is required for certain disclosure information per accounting rules or statutes. Where this has been done it has been clearly indicated.

The undersigned is an Enrolled Actuary, an Associate of the Society of Actuaries, a Member of the American Academy and a Fellow of Actuaries of the Conference of Consulting Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. He is an employee of SDRS and is available to answer any questions on the material contained in the report or to provide explanations or further details as may be appropriate.

This report has been prepared in accordance with all applicable Actuarial Standards of Practice.

The undersigned actuary prepared the following schedules included in the Actuarial Section of the CAFR:

- Measures of Actuarial Soundness
- Actuarial Liability Gains and Losses
- Reserve for Funding of Long-term Benefit Goals
- Actuarial Assumption Tables
- Summary of Key Actuarial Measures
- SDRS 2016 Funding Requirements
- Development of SDRS Actuarial Value of Assets
- Summary of Funded Ratios and Funding Periods
- Summary of Actuarial Accrued Liability and Unfunded Actuarial Accrued Liability
- Solvency Test
- Schedule of Active Member Valuation Data
- Schedule of Retirees and Beneficiaries Added to and Removed from Benefit Payroll
- Comparison of Actuarial Valuation Results

Respectfully submitted,

Douglas J. Fiddler

Douglas J. Fiddler, ASA, EA, MAAA, FCA
Senior Actuary
South Dakota Retirement System

Note: Use of this report for any other purposes or by anyone other than the Board of Trustees and SDRS staff may not be appropriate and may result in mistaken conclusions because of failure to understand applicable assumptions or methods or the inapplicability of this report for other purposes. The attached pages should not be provided without a copy of this cover letter. Because of the risk of misinterpretation of actuarial results, you should ask the report's author to review any statement you wish to make on the results contained in this report.

An actuarial valuation of SDRS is performed as of June 30 each year. Prior to 1996, in odd-numbered years, an update was made which considered expected changes in the actuarial measures due to the assumed experience of the system as well as the effect of any changes in value of assets, actuarial valuation methods, or benefit provisions.

In the 2016 actuarial valuation, three important actuarial measures have been calculated in evaluating the actuarial soundness and funding progress of SDRS. They are:

- funded ratio
- funding period when an unfunded actuarial accrued liability (UAAL) exists
- risk management contribution amount when no UAAL exists

Actuarial Accrued Liability

The actuarial accrued liability (AAL) is the present value of all benefits currently being paid and expected to be paid in the future, to all members, less the present value of future normal cost contributions.

Funded Ratio

Two measurements of the funded ratio are calculated each year. The actuarial value funded ratio is equal to the actuarial value of assets divided by the AAL. The fair value funded ratio is equal to the fair value of assets divided by the AAL. A ratio in excess of 100 percent indicates that accrued benefits are fully funded. Prior reports identified fair value of assets and fair value funded ratio as market value of assets and market value funded ratio, respectively.

Funding Period

The funding period measures the length of time required to amortize unfunded actuarial accrued liabilities as well as pay the on-going normal costs, interest charges and expenses with the current contributions. The shorter the funding period, the more favorable the actuarial measure. In accordance with the Board of Trustees' funding policy objectives, the unfunded actuarial accrued liability has been $0 since June 30, 2013, and no funding period is applicable.

Risk Management Contribution

The risk management contribution is equal to statutory contributions in excess of contributions required to fund normal costs, expenses and amortize any unfunded actuarial accrued liabilities. When the risk management contribution exists, it will increase the cushion and reserve for funding long-term benefit goals. During the year ending June 30, 2016, the cushion and reserve for funding long-term benefit goals were increased by a risk management contribution of $31 million.

Measures of Actuarial Soundness

	2016 actuarial valuation	2015 actuarial valuation
Actuarial value funded ratio (actuarial value of assets/AAL)	100.0%	100.0%
Fair value funded ratio (fair value of assets/AAL)	96.9%	104.1%
Funding period	N/A	N/A
Risk management contribution	$31M	$29M

Actuarial Investment Return Gains/Losses

For the year ended June 30, 2016

The time-weighted annualized investment performance based on the fair value of assets of the system for the most recent year was 0.30 percent after consideration of investment expenses. The money-weighted annualized investment performance based on the fair value of assets for the period was 0.21 percent after deducting investment expenses, less than the assumed rate of 7.25 percent for fiscal year 2016. This resulted in an actuarial investment loss of $716 million. The actuarial value of assets was credited with the assumed rate of return of 7.25 percent for the one-year period ending June 30, 2016 and increased by the total liability loss of $77 million. The reserve for funding of long-term benefits goals decreased from a balance of negative $588 million as of June 30, 2015, to a balance of negative $909 million as of June 30, 2016, as a result of recognition of investment returns below expectation for the current year, offset by investment returns above expectations for prior years. Net gains to be allocated to the reserve in the next four fiscal years total $486 million as of June 30, 2016. The reserve for funding of long-term benefit goals is used exclusively for the determination of assets available to be considered for benefit improvements and a negative balance does not represent additional required funding.

Actuarial Liability Gains/Losses

For the year ended June 30, 2016

	Amount of liability gain (loss)	Percentage of present value of all benefits
(Loss) due to compensation increases	$(11M)	(0.09)%
(Loss) due to decrements	(11M)	(0.09)%
(Loss) due to rehired and new members	(7M)	(0.06)%
(Loss) due to July 1, 2015 retirements	(18M)	(0.14)%
(Loss) due to COLA for continuing inactives	(24M)	(0.19)%
Miscellaneous (Loss)	(6M)	(0.05)%
Total system (Loss)	$(77M)	(0.62)%

Actuarial Cost Method

Liabilities and contributions for funding purposes are computed using the frozen entry age actuarial cost method. Effective June 30, 2013, the frozen unfunded actuarial accrued liability was eliminated through an adjustment to the actuarial value of assets, cushion and reserve for funding of long-term benefit goals and will remain at $0 unless and until it is increased to recognize a change in plan provisions or actuarial assumptions or to recognize a decrease in actuarial value of assets required to remain in the 20 percent corridor around fair value of assets. Under this method, experience gains or losses related to past service adjust the actuarial value of assets and gains and losses related to future service adjust the normal cost. This cost method was selected because it produces a consistent normal cost, as a percentage of payroll from year to year.

When an unfunded actuarial accrued liability exists, the contribution requirement will include an amortization payment over a period not to exceed 20 years. No unfunded actuarial accrued liability currently exists.

The actuarial cost method used for financial reporting purposes is the entry age actuarial cost method. As of June 30, 2016, the liabilities are identical under the two methods. The normal cost in the financial reporting will reflect small differences based on the GASB 67 requirement to use the individual entry age cost method.

Actuarial Assumptions

Significant actuarial assumptions used include: a) a rate of return on the present and future assets of 7.25 percent a year for 5 years beginning July 1, 2012, increasing to 7.50 percent thereafter, compounded annually plus prefunding of improvement factor (COLA); b) projected Social Security cost-of-living increases of 3.25 percent and wage inflation of 3.75 percent per year compounded annually; c) pre-retirement and post-retirement COLA increases of 2.7 percent per year compounded annually; d) active member salary increases that average 4.9 percent per year compounded annually; e) 80 percent of active members and 75 percent of retired and terminated members are assumed to be married; f) the male spouse is assumed to be three years older than the female spouse; g) mortality rates for active members are based upon the RP-2000 Employee Mortality Table, projected generationally with Scale BB with male rates multiplied by 85% and female rates multiplied by 48%; h) mortality rates for non-disabled pensioners are based upon the RP-2000 Combined Mortality Table, projected generationally with Scale BB with male rates multiplied by 91% and female rates multiplied by 90%; and i) at termination of employment, members will elect the more valuable of the accumulated contributions or the deferred vested benefit payable at retirement.

A detailed experience analysis was conducted in 2011 and 2012, and appropriate modifications in the demographic assumptions regarding assumed rates of member termination, retirement, and disability were made effective with the June 30, 2012 actuarial valuation. Also as a result of the experience analysis in 2012 and further study and debate of the SDRS Board of Trustees, changes were made to the economic actuarial assumptions effective for the June 30, 2012 actuarial valuation.

As a result of an extension of the experience analysis specific to mortality, changes were made to the mortality assumptions effective for the June 30, 2014 actuarial valuation.

The actuarial assumptions were recommended by the actuary and adopted by the SDRS Board of Trustees. Please see pages 52 and 53 for tables of actuarial assumption rates.

The actuarial assumptions for funding purposes are identical to the assumptions used for financial reporting purposes

The actuarial value of assets is credited each year with the assumed rate of investment return plus non-investment cash flow and reduced by liability gains and increased by liability losses for the year. It is restricted to a corridor of 80 percent to 120 percent of fair value of assets.

Summary of Actuarial Assumption and Method Changes

No changes were made to the actuarial assumptions or methods from those used for the June 30, 2015 actuarial valuation.

Cushion

The cushion is the excess of the fair value of assets over the actuarial value of assets. The cushion represents funds not currently required to maintain the actuarial soundness of SDRS and available to protect the system against future unfavorable experience.

Reserve for Funding of Long-term Benefit Goals

The reserve for funding of long-term benefit goals was first implemented as of the year ended June 30, 1995, to fund benefit improvements and provide the system with protection against adverse experience. When implemented, actuarial investment gains (returns above the assumed investment return assumption) and actuarial investment losses (returns below the assumed investment return assumption) were recognized at the rate of 20 percent per year over a five-year period. Effective June 30, 1998, liability gains and losses were reflected in the same manner as investment gains and losses. The reserve was modified again as of June 30, 2001, to immediately recognize actuarial investment losses while still spreading the recognition of actuarial investment gains over five-year periods.

The reserve for funding of long-term benefit goals (if positive), was included in the actuarial value of assets, the actuarial accrued liability and the present value of all benefits from June 30, 1995, through June 30, 2003. Effective June 30, 2004, the reserve was no longer added to the actuarial assets or liabilities. This change was made to more accurately reflect the funded status of the system.

SDRS gains and losses are allocated to the reserve for funding of long-term benefit goals. The amounts currently in the reserve and remaining to be allocated in the next four years are an important indicator of the system's recent cumulative experience. The reserve for funding of long-term benefit goals is also a source of funds to provide future benefit improvements or to protect the system against future unfavorable experience.

Balance as of June 30, 2015	$(587,944,576)
Fiscal year 2016 experience	(731,783,522)
Amortization of prior gains and (losses)	379,533,574
Risk management contribution	31,342,963
Balance as of June 30, 2016	$(908,851,561)
Net gains to be allocated to reserve in next four years	$486,167,795

Actuarial Assumption Tables

Sample Separation Rates

Annual Rate per 100 Members

	Active Mortality		Inactive Mortality		Disabled Mortality		Disablement: Class A-Teachers		Disablement: Class A-Non-Teachers		Disablement: Class B-Public Safety	
Age	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
25	0.03	0.01	0.03	0.02	2.15	0.71	0.02	0.02	0.04	0.04	0.08	0.10
30	0.04	0.01	0.04	0.02	2.15	0.71	0.02	0.02	0.05	0.04	0.08	0.11
35	0.06	0.02	0.07	0.04	2.15	0.71	0.02	0.02	0.05	0.04	0.10	0.12
40	0.09	0.03	0.09	0.06	2.15	0.71	0.03	0.03	0.06	0.05	0.12	0.15
45	0.12	0.05	0.13	0.10	2.15	0.71	0.04	0.04	0.09	0.08	0.16	0.22
50	0.17	0.08	0.19	0.14	2.76	1.10	0.06	0.05	0.13	0.08	0.24	0.23
55	0.25	0.11	0.31	0.23	3.38	1.53	0.10	0.08	0.22	0.13	0.40	0.38
60	0.37	0.16	0.54	0.39	3.76	1.86	0.21	0.16	0.46	0.28	0.84	0.80
65	0.53	0.23	0.96	0.72	4.14	2.31	0.43	0.31	0.94	0.54	1.71	1.55

Annual Turnover Rate per 100 Members
Select Rates During First 5 Years of Employment

	Class A-Teachers		Class A-Non-Teachers		Class B-Public Safety
Service	Male	Female	Male	Female	
1	22.50	25.00	17.50	21.00	18.00
2	17.50	17.50	14.00	18.00	12.50
3	15.00	15.00	11.00	15.00	11.00
4	12.50	12.50	9.00	12.50	10.00
5	10.00	10.00	7.00	9.50	10.00

Annual Turnover Rate per 100 Members
Ultimate Rates After First 5 Years of Employment

	Class A-Teachers		Class A-Non-Teachers		Class B-Public Safety
Age	Male	Female	Male	Female	
25	16.80	15.80	9.90	10.80	11.00
30	11.20	11.20	8.20	9.10	9.50
35	8.50	8.50	7.10	7.60	7.30
40	6.47	6.60	5.90	6.70	5.30
45	4.75	4.55	5.20	5.90	4.50
50	4.25	4.25	4.70	5.20	4.50
55	4.25	4.25	4.50	5.00	4.50

Retirement Age

Class A

Annual rate per 100 members eligible to retire

	Class A-Teachers				Class A-Non-Teachers			
	Reduced Retirement		Unreduced Retirement		Reduced Retirement		Unreduced Retirement	
Age	Male	Female	Male	Female	Male	Female	Male	Female
55	7.0	6.5	17.5	13.5	5.0	4.0	17.5	12.5
56	7.0	6.5	12.5	12.5	5.0	4.0	8.0	8.0
57	7.0	6.5	12.5	12.5	5.0	4.0	8.0	8.0
58	7.0	6.5	12.5	12.5	5.0	4.0	8.0	8.0
59	7.0	7.5	12.5	17.5	5.0	6.0	12.0	11.0
60	9.0	8.5	12.5	17.5	6.0	8.0	12.0	11.0
61	12.5	12.0	25.0	22.5	10.0	9.5	17.5	11.0
62	12.5	12.5	25.0	25.0	13.5	12.0	30.0	22.5
63	12.5	12.5	17.5	22.5	13.5	12.0	25.0	17.5
64	17.5	20.0	20.0	22.5	17.5	20.0	25.0	17.5
65			30.0	35.0			40.0	32.5
66			25.0	25.0			25.0	20.0
67			25.0	25.0			25.0	20.0
68			25.0	25.0			25.0	20.0
69			25.0	25.0			25.0	20.0
70			30.0	30.0			30.0	30.0
71			30.0	30.0			30.0	30.0
72			30.0	30.0			30.0	30.0
73			30.0	30.0			30.0	30.0
74			30.0	30.0			30.0	30.0
75			30.0	30.0			30.0	30.0
76			30.0	30.0			30.0	30.0
77			30.0	30.0			30.0	30.0
78			50.0	50.0			30.0	30.0
79			50.0	50.0			30.0	30.0
80			100	100			100	100

Retirement Age

Class B

Annual rate per 100 members eligible to retire

	Class B-Public Safety		Class B-Judicial	
Age	Reduced Retirement	Unreduced Retirement	Reduced Retirement	Unreduced Retirement
45	6.0	5.0		
46	6.0	5.0		
47	6.0	5.0		
48	6.0	10.0		
49	6.0	10.0		
50	9.0	10.0		
51	9.0	10.0		
52	9.0	10.0		
53	9.0	10.0		
54	11.0	15.0		
55		15.0	8.0	15.0
56		7.5	8.0	5.0
57		7.5	2.0	5.0
58		11.0	2.0	5.0
59		12.5	2.0	5.0
60		12.5	2.0	10.0
61		25.0	2.0	10.0
62		25.0	2.0	15.0
63		25.0	2.0	12.7
64		25.0	2.0	20.0
65		100		20.0
66				15.0
67				15.0
68				25.0
69				30.0
70				100

Compensation Progression Sample Rates

Service	Percentage increase in year following indicated year of service
0	5.83%
5	5.32
10	4.89
15	4.50
20	4.19
25	4.03
30	3.87
31+	3.75

Benefit Changes

No changes in benefit provisions were made from those recognized in the June 30, 2015 actuarial valuation. The June 30, 2016 actuarial valuation completely reflects all the provisions of the system in effect on June 30, 2016, as outlined in the plan summary section of the report.

Summary of Key Actuarial Measures

	2015 actuarial valuation results	System investment and liability experience for year[1]	Membership changes and maturity of system[2]	Changes in benefit provisions, actuarial methods or actuarial assumptions effective July 1, 2015	2015 actuarial valuation results
Normal cost rate with expense provision	10.735%	—	(0.009)%	—	10.744%
Funding period	N/A	—	—	—	N/A
Frozen unfunded actuarial accrued liability	$0	—	—	—	$0
Actuarial value funded ratio	100.0%	—	—	—	100.0%
Fair value funded ratio	104.1%	(7.2)%	—	—	96.9%

[1] SDRS actuarial investment gains and liability gains and losses impact the cushion and the fair value funded ratio immediately and are smoothed and allocated to the reserve for funding of long-term benefit goals over five years. All SDRS actuarial investment losses are recognized immediately in the cushion, fair value funded ratio and reserve. The actuarial value of assets is increased by the SDRS liability loss or decreased by the SDRS liability gain each year.

[2] Changes to the membership from year to year will cause minor changes in the normal cost rate.

Actuarial Soundness

This section analyzes the ability of the statutorily required, fixed member and employer contributions to fund the obligations of the system. These obligations include both past and future liabilities.

An important measure of actuarial soundness is the adequacy of combined statutorily required member and employer contribution rates[1] to pay the normal cost of the system, system expenses, and amortize the unfunded actuarial accrued liability[2] (if one exists) over a limited time, including interest on the liability.

This measure of actuarial soundness is currently met. The funding requirements for SDRS for 2016, expressed as a percentage of payroll and total contributions, are based on the 2016 actuarial valuation and are summarized in the chart below.

SDRS 2016 Funding Requirements

	As a percentage of payroll	As a percentage of contributions
Total statutorily required employer and member contribution rate	12.489[1]	100.0
Normal cost rate at mid-period	10.494	84.0
Expense allowance	0.250	2.0
Total funding requirement before amortization of frozen unfunded actuarial accrued liability	10.744	86.0
Contribution rate available to amortize frozen unfunded actuarial accrued liability (if one exists) (12.489%-10.744%)	1.745[2]	14.0

The 2016 actuarial valuation indicates that the frozen unfunded actuarial accrued liability remains at $0 and the total statutorily required employer and member contribution rate of 12.489 percent is sufficient to pay the normal cost and expenses of the system and provides an additional amount that will contribute to the cushion and reserve in future years and be available to amortize the frozen unfunded actuarial accrued liability when one exists.

[1] Class A employers and members each statutorily contribute 6 percent of compensation. Class B employers and members each statutorily contribute 8 percent or 9 percent of compensation. Participating members also contribute for the optional spouse coverage and Class A employers contribute 6.2 percent of member's compensation in excess of the Social Security maximum taxable compensation. The total statutory contributions to SDRS as of July 1, 2016, are 12.489 percent of considered compensation.

[2] The frozen unfunded actuarial accrued liability is $0 as of July 1, 2016.

The 2016 actuarial valuation confirms that:

a. Funding of current benefit levels for active members and expenses requires 86 percent of the total contributions under the current actuarial assumptions and methods.
b. No unfunded actuarial accrued liability exists and the portion of the statutorily fixed contributions available to amortize the unfunded actuarial accrued liability is available to increase the cushion and reserve for funding of long-term benefit goals.
c. Excess investment income has been the most significant element of favorable experience in the past, even considering the actuarial investment losses in fiscal years 2001 through 2003 and 2008 through 2009.
d. SDRS currently has a deficit (Fair Value of Assets less than Actuarial Value of Assets) of $338 million.
e. SDRS currently has a balance of negative $909 million in the reserve for funding of long-tern benefit goals and net gains of $489 million to be allocated to the reserve in the next four years.

The actuarial valuation methodology results in the reduction of volatility in the actuarial measures because:

a. The expected investment return of 7.25 percent of the actuarial value of assets and liability gains and losses are allocated to the actuarial value of assets.
b. During periods when the frozen unfunded actuarial accrued liability is $0, contributions over the normal cost and expenses of the system contribute to the cushion and reserve, providing additional resources to offset potential future unfavorable experience.

The 2016 actuarial valuation indicates that the statutorily required employer-member contribution rates are sufficient to pay the current costs of the system (normal cost plus expenses). As of June 30, 2016, the frozen unfunded actuarial accrued liability is $0.

The most important indicators of the long-term actuarial soundness of the system are determined by the annual actuarial valuation of the system. The soundness is measured by the relationship of the normal cost to the total contributions available, the amount (if any) of the unfunded actuarial accrued liability, by the length of the funding period when an unfunded actuarial accrued liability exists, and by the amount of the cushion or deficit.

The current SDRS benefits combined with the present financing and the $0 frozen unfunded actuarial accrued liability result in a well-funded system that is providing benefits essentially equal to the resources available.

SDRS is a consolidated, multiple-employer, cost-sharing retirement system that does not attempt to determine separate or unique funding requirements for entities or classes within SDRS. However, periodic studies are performed to analyze the balance of benefits and contributions provided to the two major member groups within SDRS with different funding and benefit provisions (Class A and Class B). Prior studies had found that the two classes were generally self-supporting. Further analysis during 2015 based on the current actuarial assumptions and current member demographics has suggested that the current provisions provide proportionately higher benefits to Class B members. While the dollar impact of the imbalance is not significant to SDRS overall, the SDRS Board of Trustees enacted design changes for Generational Members entering the System after June 30, 2017, to address this imbalance (as well as other subsidies) while also accomplishing other equitable design objectives.

Development of the SDRS Actuarial Value of Assets
As of June 30, 2016

Actuarial value of assets as of June 30, 2015	$10,352,405,041
Contributions and disbursements	
Actuarially determined contribution	196,411,972
Purchase of service contributions	778,435
Benefit payments and refunds	(510,496,482)
Administrative expenses	(3,944,641)
Total	$(317,250,716)
Expected investment return	$739,250,240
SDRS liability gain/(loss)	$(76,847,737)
Preliminary actuarial value of assets as of June 30, 2016	$10,851,252,302
Fair value of assets as of June 30, 2016	$10,513,462,127
Constraining values	
80% of fair value of assets	$8,410,769,702
120% of fair value of assets	$12,616,154,552
Actuarial value of assets as of June 30, 2016	**$10,851,252,302**

Funding Policy

The SDRS Board of Trustees is responsible for maintaining the system's funding policy. The current funding policy includes the funding objectives, the establishment of the cushion and reserve for funding long-term benefit goals, the policy regarding consideration of benefit improvements and the conditions requiring recommendation for corrective actions.

Benefit and Funding Objectives and Historical Summary

The benefit objectives of SDRS are to meet the needs of short- and long-term members by providing:

- Lifetime income replacement from SDRS resources of at least 55 percent of final average compensation for Class A members with 30 years of credited service
- Lifetime income replacement of at least 85 percent of final average compensation, including income from SDRS, Social Security, and personal retirement savings of at least one times annual compensation at retirement
- Provide limited inflation protection based on the SDRS funded status and annual cost-of-living adjustments
- Early retirement opportunities
- Vesting after three years of contributory service
- Disability and survivor income protection
- A portable retirement option that allows members to elect a refund of both member and employer contributions, plus interest
- Risk-free market interest rate credited on member and employer contributions

The funded ratio and funding period are the primary measures of SDRS' soundness. However, when no frozen unfunded actuarial accrued liability exists, as is the case at June 30, 2016, the funding period is not applicable.

The SDRS funding objectives are to maintain:

- An actuarial value funded ratio of 100 percent
- A fair value funded ratio of at least 100 percent
- A ratio of fair value of assets to actuarial value of assets that exceeds 100 percent, resulting in a cushion
- A fully funded system, with no unfunded liabilities under the entry age normal cost method
- A funding period not to exceed 20 years when un funded liabilities exist
- Statutory fixed contributions that meet or exceed the actuarially required contribution each year.

The schedule below presents the actuarial accrued liability funded ratio, the fair value funded ratio, and the funding period, where applicable, as of each actuarial valuation since 1988.

Valuation date	Actuarial accrued liability	Actuarial value of assets	Fair value of assets	Actuarial value funded ratio	Fair value funded ratio	Funding period
1988	$1,078,235,569	$1,050,836,113	$1,192,526,624	97.5%	110.6%	6 years
1990	1,404,616,511	1,275,091,534	1,417,163,483	90.8	100.8	46 years
1992	1,714,482,245	1,605,481,514	1,783,732,116	93.6	104.0	16 years
1994	2,108,309,129	1,945,856,251	2,179,759,081	92.3	103.4	38 years
1996	2,539,008,893	2,390,236,436	2,909,982,912	94.1	114.6	30 years
1997	2,956,497,152	2,813,304,611	3,516,630,764	95.2	118.9	23 years
1998	3,471,898,003	3,337,293,439	4,171,616,799	96.1	120.2	22 years
1999	3,997,927,795	3,875,171,467	4,717,115,757	96.9	118.0	21 years
2000	4,611,913,087	4,427,102,390	5,156,294,800	96.0	111.8	20 years
2001	4,688,408,562	4,521,403,578	4,939,705,889	96.4	105.4	20 years
2002	4,576,948,810	4,425,392,396	4,624,866,872	96.7	101.0	20 years
2003	4,818,943,695	4,685,890,770	4,784,187,048	97.2	99.3	20 years
2004	5,051,728,157	4,937,493,861	5,518,225,955	97.7	109.2	20 years
2005	5,571,842,384	5,380,999,357	6,159,934,879	96.6	110.6	20 years
2006	5,859,994,198	5,668,535,060	6,844,629,634	96.7	116.8	20 years
2007	6,718,761,091	6,526,534,941	8,158,168,676	97.1	121.4	20 years
2008	6,976,811,927	6,784,291,685	7,312,107,461	97.2	104.8	20 years
2009	7,387,406,340	6,778,520,575	5,648,767,146	91.8	76.5	N/A[1]
2010	7,393,250,948	7,119,874,593	6,496,634,989	96.3	87.9	30 years
2011	7,712,556,672	7,433,776,511	7,936,269,496	96.4	102.9	30 years
2012	8,452,840,068	7,827,601,564	7,842,524,241	92.6	92.8	29 years
2013	8,803,761,326	8,803,761,326	9,085,706,708	100.0	103.2	N/A[2]
2014	9,887,095,388	9,887,095,388	10,607,554,492	100.0	107.3	N/A[2]
2015	10,352,405,041	10,352,405,041	10,776,533,615	100.0	104.1	N/A[2]
2016	10,851,252,302	10,851,252,302	10,513,462,127	100.0	96.9	N/A[2]

[1]Member and employer contributions were not sufficient to amortize the frozen unfunded actuarial accrued liability.
[2]Frozen unfunded actuarial accrued liability is $0 as of June 30, 2013, June 30, 2014, June 30, 2015, and June 30, 2016.

Summary of Actuarial Accrued Liability and Unfunded Actuarial Accrued Liability

The schedule below compares total actuarial accrued liabilities to smoothed assets at actuarial value and unfunded actuarial accrued liabilities to payroll over time.

The smoothed assets to total liabilities ratios show the growth of assets compared to the growth of liabilities. The unfunded liabilities to covered payroll ratios are a measure of the ability of SDRS to meet its long-term obligations.

Level or increasing values for the first ratio and level or declining values for the second ratio are an indication of stable or improving funding.

Fiscal year	Actuarial accrued liability	Actuarial value of assets	Actuarial as a % of accrued actuarial liability	Unfunded actuarial accrued liability	Total covered payroll (000,000)	Unfunded liability as a % of payroll
1987-88	$1,078,235,569	$1,050,836,113	97.5	$27,399,456	$530.0	5.2
1989-90	1,404,616,511	1,275,091,534	90.8	129,524,977	582.7	22.2
1991-92	1,714,482,245	1,605,481,514	93.6	109,000,731	694.3	15.7
1993-94	2,108,309,129	1,945,856,251	92.3	162,452,878	788.6	20.6
1995-96	2,539,008,893	2,390,236,436	94.1	148,772,457	820.1	18.1
1997	2,956,497,152	2,813,304,611	95.2	143,192,541	835.1	17.1
1998	3,471,898,003	3,337,293,439	96.1	134,604,564	875.9	15.4
1999	3,997,927,795	3,875,171,467	96.9	122,756,328	902.5	13.6
2000	4,611,913,087	4,427,102,390	96.0	184,810,697	944.6	19.6
2001	4,688,408,562	4,521,403,578	96.4	167,004,984	1,029.7	16.2
2002	4,576,948,810	4,425,392,396	96.7	151,556,414	1,080.1	14.0
2003	4,818,943,695	4,685,890,770	97.2	133,052,925	1,117.2	11.9
2004	5,051,728,157	4,937,493,861	97.7	114,234,296	1,164.0	9.8
2005	5,571,842,384	5,380,999,357	96.6	190,843,027	1,206.1	15.8
2006	5,859,994,198	5,668,535,060	96.7	191,459,138	1,229.9	15.6
2007	6,718,761,091	6,526,534,941	97.1	192,226,150	1,297.2	14.8
2008	6,976,811,927	6,784,291,685	97.2	192,520,242	1,363.9	14.1
2009	7,387,406,340	6,778,520,575	91.8	608,885,765	1,450.7	42.0
2010	7,393,250,948	7,119,874,593	96.3	273,376,355	1,491.1	18.3
2011	7,712,556,672	7,433,776,511	96.4	278,780,161	1,490.5	18.7
2012	8,452,840,068	7,827,601,564	92.6	625,238,504	1,502.7	41.6
2013	8,803,761,326	8,803,761,326	100.0	0	1,519.7	0.0
2014	9,887,095,388	9,887,095,388	100.0	0	1,587.1	0.0
2015	10,352,405,041	10,352,405,041	100.0	0	1,654.8	0.0
2016	10,851,252,302	10,851,252,302	100.0	0	1,724.4	0.0

Solvency Test

The solvency test is a comparison of the adequacy of SDRS smoothed assets to the AAL for: 1) active member contributions; 2) benefits for present benefit recipients; and 3) employer-financed active member benefits.

	Actuarial accrued liability for				Portion of actuarial accrued liability covered by actuarial value of assets for		
Fiscal year	(1) Member contributions	(2) Current retirees and beneficiaries and terminated employees	(3) Current employees: employer financed	Actuarial value of assets	(1)	(2)	(3)[1]
1987-88	$231,163,590	$397,780,471	$449,291,508	$1,050,836,113	100.0	100.0	93.9
1989-90	283,584,495	524,168,024	596,863,992	1,275,091,534	100.0	100.0	78.3
1991-92	350,130,362	685,091,034	679,260,849	1,605,481,514	100.0	100.0	84.0
1993-94	421,403,799	834,896,391	852,008,939	1,945,856,251	100.0	100.0	80.9
1995-96	484,228,278	1,017,938,827	1,036,841,788	2,390,236,436	100.0	100.0	85.7
1997	517,164,580	1,158,342,002	1,280,990,570	2,813,304,611	100.0	100.0	88.8
1998	553,386,759	1,375,461,393	1,543,049,851	3,337,293,439	100.0	100.0	91.3
1999	560,276,444	1,595,941,304	1,841,710,047	3,875,171,467	100.0	100.0	93.3
2000	618,625,484	1,889,571,734	2,103,715,869	4,427,102,390	100.0	100.0	91.2
2001	624,310,539	2,045,346,869	2,018,751,154	4,521,403,578	100.0	100.0	91.7
2002	691,820,949	2,236,330,911	1,648,796,950	4,425,392,396	100.0	100.0	90.8
2003	741,729,358	2,435,411,371	1,641,802,966	4,685,890,770	100.0	100.0	91.9
2004	807,055,387	2,637,073,090	1,607,599,680	4,937,493,861	100.0	100.0	92.9
2005	831,968,303	2,987,636,584	1,752,237,497	5,380,999,357	100.0	100.0	89.1
2006	854,928,129	3,174,042,596	1,831,023,473	5,668,535,060	100.0	100.0	89.5
2007	894,141,271	3,405,374,537	2,419,245,283	6,526,534,941	100.0	100.0	92.1
2008	946,604,328	3,811,968,488	2,218,239,111	6,784,291,685	100.0	100.0	91.3
2009	1,008,833,732	4,041,735,745	2,336,836,863	6,778,520,575	100.0	100.0	73.9
2010	1,042,639,270	4,125,804,303	2,224,807,375	7,119,874,593	100.0	100.0	87.7
2011	1,041,479,674	4,436,638,326	2,234,438,672	7,433,776,511	100.0	100.0	87.5
2012	1,046,798,327	4,909,919,285	2,496,122,456	7,827,601,564	100.0	100.0	75.0
2013	1,053,144,685	5,199,059,332	2,551,557,309	8,803,761,326	100.0	100.0	100.0
2014	1,057,991,944	5,902,266,864	2,926,836,580	9,887,095,388	100.0	100.0	100.0
2015	1,064,011,490	6,250,881,939	3,037,511,612	10,352,405,041	100.0	100.0	100.0
2016	1,078,941,286	6,627,703,346	3,144,607,670	10,851,252,302	100.0	100.0	100.0

[1] Indicates the percentage of liabilities in this category currently funded after fully funding categories (1) and (2).

Schedule of Active Member Valuation Data

Valuation date	# of active members	Covered payroll (000,000)	Average annual pay	% increase in average pay
1987	27,906	500.2	17,924	1.9
1988	28,411	530.0	18,655	4.1
1989	28,749	554.9	19,302	3.5
1990	29,378	582.7	19,835	2.8
1991	30,524	616.8	20,207	1.9
1992	31,717	694.3	21,890	8.3
1993	32,512	731.1	22,487	2.7
1994	33,301	788.6	23,681	5.3
1995	33,390	811.1	24,292	2.6
1996	32,624	820.1	25,139	3.5
1997	32,397	835.1	25,776	2.5
1998	32,903	875.9	26,620	3.3
1999	33,664	902.5	26,810	0.7
2000	34,180	944.6	27,637	3.1
2001	34,887	1,029.7	29,515	6.8
2002	35,130	1,080.1	30,745	4.2
2003	35,114	1,117.2	31,818	3.5
2004	35,408	1,164.0	32,875	3.3
2005	35,774	1,206.1	33,715	2.6
2006	36,074	1,229.9	34,094	1.1
2007	37,311	1,297.2	34,769	2.0
2008	37,707	1,363.9	36,170	4.0
2009	38,596	1,450.7	37,586	3.9
2010	39,014	1,491.1	38,220	1.7
2011	38,490	1,490.5	38,725	1.3
2012	38,207	1,502.7	39,329	1.6
2013	38,594	1,519.7	39,377	0.1
2014	38,951	1,587.1	40,745	3.5
2015	39,383	1,654.8	42,037[1]	3.1
2016	39,940	1,724.4	43,194	2.8

[1] Correction to 2015 figure.

The schedule below identifies retirees' and beneficiaries' benefits considered in the current and previous actuarial valuations.

Schedule of Retirees and Beneficiaries Added to and Removed from Benefit Payroll

Valuation date	Beginning of year balance	Number added to payroll	Number removed from payroll	End of year balance	Annual pension added to payroll	Annual pension removed from payroll	Annual pension benefit amount	Average annual benefit	% increase in average benefit
2002	15,390	1,051	548	15,893	$14,781,382	$4,286,698	$175,339,813	$11,033	5.4
2003	15,893	1,112	564	16,441	16,904,111	4,612,777	191,738,495	11,662	5.7
2004	16,441	1,207	619	17,029	19,647,803	4,991,607	211,424,721	12,416	6.5
2005	17,029	1,121	602	17,458	16,955,458	4,970,672	228,469,621	13,020	4.9
2006	17,458	1,130	602	18,076	17,273,416	5,866,751	245,707,324	13,593	4.4
2007	18,076	1,306	663	18,719	20,128,796	5,699,854	265,922,928	14,206	4.5
2008	18,719	1,279	677	19,321	20,931,066	6,957,387	297,672,788	15,407	8.5
2009	19,321	1,295	667	19,949	21,285,086	7,429,345	318,556,151	15,969	3.6
2010	19,949	1,318	706	20,561	20,287,505	8,415,997	335,034,177	16,295	2.0
2011	20,561	1,575	679	21,457	27,164,131	8,006,912	359,385,525	16,749	2.8
2012	21,457	1,663	712	22,408	26,727,462	8,827,261	386,478,319	17,247	3.0
2013	22,408	1,683	764	23,327	27,259,699	9,535,172	410,679,002	17,605	2.1
2014	23,327	1,975	740	24,562	33,048,542	10,296,988	444,472,655	18,096	2.8
2015	24,562	1,766	839	25,489	29,958,087	12,083,416	474,690,226	18,623	2.9
2016	25,489	1,773	842	26,420	28,875,202	11,641,932	505,019,297	19,115	2.6

Comparison of Actuarial Valuation Results

Active members	2015 actuarial valuation	2016 actuarial valuation	% change
Number	39,383	39,940	1.4
Average age	45.1	45.0	(0.2)
Average credited service	11.1	11.0	(0.9)
Annual prior year's compensation of members	$1,654,782,806	$1,724,418,364	4.2
Average annual compensation[1]	$42,037	$43,194	2.8
Benefit recipients			
RETIRED MEMBERS			
Number[2]	22,016	22,850	3.8
Average age	71.7	71.8	0.1
Total annualized benefits	$433,469,574	$461,542,681	6.5
Average annualized benefits	$19,689	$20,199	2.6
BENEFICIARIES			
Number[2]	3,180	3,278	3.1
Total annualized benefits	$37,118,649	$39,556,086	6.6
Average annualized benefits	$11,673	$12,067	3.4
DISABILITIES			
Number	293	292	(0.3)
Total annualized benefits	$4,102,003	$3,920,530	(4.4)
Average annualized benefits	$14,000	$13,426	(4.1)
Total benefit recipients			
Number	25,489	26,420	3.7
Total annual benefits	$474,690,226	$505,019,297	6.4
Average annual benefits	$18,623	$19,115	2.6
Suspended benefit recipients[1]			
Number of suspended retirees	42	45	7.1
Number of suspended beneficiaries	125	89	(28.8)
Total suspended benefit recipients	167	134	(19.8)
Terminated members			
Number—vested	8,993	9,382	4.3
Number—non-vested (entitled to accumulated contributions only)	7,601	8,172	7.5
Total terminated members	16,594	17,554	5.8
Total system members	**81,633**	**84,048**	**3.0**
Results of actuarial valuation			
Normal cost (without expenses)	10.485%	10.494%	0.1
(with expenses)	10.735%	10.744%	0.1
Frozen unfunded actuarial accrued liability	$0	$0	
Fair value of assets	$10,776,533,615	$10,513,462,127	(2.4)
Actuarial value of assets	$10,352,405,041	$10,851,252,302	4.8
Actuarial accrued liability (AAL)	$10,352,405,041	$10,851,252,302	4.8
Actuarial value funded ratio	100.0%	100.0%	0.0
Fair value funded ratio	104.1%	96.9%	(6.9)
Funding period	N/A	N/A	

[1] Excludes active, former Cement Plant Retirement Plan members for whom no compensation is reported. 2015 average revised for exclusion.
[2] Suspended members and beneficiaries were excluded from the reported 2014 totals, but footnoted. Total system members reported here for 2014 and 2015 include suspended members and beneficiaries.

South Dakota Retirement System (SDRS)

Effective Date

SDRS was established effective July 1, 1974. The Supreme and Circuit Court Judicial Retirement System, District County Court and Municipal Court Judges' Retirement Program, South Dakota Teachers' Retirement System, South Dakota Municipal Retirement System, South Dakota Law Enforcement Retirement System, South Dakota Public Employees' Retirement System and South Dakota Board of Regents Retirement System (effective July 1, 1975) were consolidated into SDRS. Effective April 1, 2014, the South Dakota Cement Plant Retirement Plan was merged into SDRS.

Type of System

SDRS is a governmental retirement system created by Act of the State of South Dakota.

System Administration

The Retirement System is administered by the Board of Trustees consisting of two state government members; two teacher members; a participating municipality member; a participating county member; a currently contributing Class B member other than a justice, judge or magistrate judge; a justice, judge, or magistrate judge; a participating classified employee member; one head of a principal department or one head of a bureau under the office of executive management; an individual appointed by the governor; a county commissioner of a participating county; a school district board member; an elected municipal official of a participating municipality; a faculty or administrative member employed by the Board of Regents; a retiree; and an investment council representative, ex-officio non-voting.

The board of trustees appoints an administrator as the system's executive director and chief executive officer.

Employers Included

Employers include the State of South Dakota and its departments, bureaus, boards, or commissions, and any of its governmental or political subdivisions or any public corporation of the State of South Dakota that elects to become a participating unit.

Members

All of the following permanent full-time employees are included as Members in the System:

- All state employees;
- All teachers;
- All justices, judges, and magistrate judges;
- All law enforcement employees of counties and municipalities that are participating with their Class B employees;
- All general employees of counties and municipalities that are participating with their Class A employees;
- All classified employees of school districts that are participating with their classified employees;
- All employees of the Board of Regents;
- All state law enforcement officers.

Employees of the Department of Labor hired before July 1, 1980, who elected to remain covered under a former retirement plan, and members of the governing body of any participating county, municipality, or other public subdivision are excluded from SDRS membership.

Membership is immediate upon hire and is subdivided into three classes as follow:

- Class A members: all members other than Class B members.
- Class B members: members who are justices, judges and magistrate judges *(Class B Judicial Members)* and state law enforcement officers, municipal police, municipal firefighters, penitentiary correctional staff, county sheriffs, deputy county sheriffs, conservation officers, parole agents, air rescue firefighters, campus security officers, court services officers, certain park rangers and certain jailers *(Class B Public Safety Members)*.
- Class C members: former members of the Cement Plant Retirement Plan which was merged into SDRS effective April 1, 2014.

Class A members constitute 93 percent of SDRS membership.

During the 2016 South Dakota Legislative Session, a new benefit structure was enacted for members joining SDRS after June 30, 2017. Members joining after that date will be called generational members and will have a different benefit structure than foundation members—members who joined on or before June 30, 2017. Details of the generational benefit structure are omitted from this report because no current members will receive benefits under the new structure.

Credited Service

Credited Service is the period of employment for an SDRS member which is considered in determining the amount of benefits. It includes the following:

- Years and fractional years for which member contributions were made (contributory service).
- The period of non-contributory service credited prior to July 1, 1974, under the prior retirement systems consolidated under this system.
- For employees of the Board of Regents, the period of service between April 1, 1964, and June 30, 1975, for which purchase was made to Bankers Life and the period of service prior to April 1, 1964, up to a maximum of 20 years, for which purchase was made.
- Periods of non-contributory service credited due to specific legislation since 1974.

Credited service may be purchased for public employment for which members are not entitled to retirement benefits, at an actuarial cost based on age and subject to a minimum of 100 percent of combined member and employer contributions. Credited service purchased after July 1, 2004, shall not be considered contributory service for eligibility purposes. Credited service is purchased with an after-tax payment unless the member's employer elects to permit purchase on a pre-tax basis under Section 414(h) of the Internal Revenue Code.

Compensation

Compensation is W-2 wages, plus any amount used to purchase a member's individual retirement plan, plus a member's contribution to SDRS made on a before-tax basis, plus any amount contributed to a Section 125 cafeteria plan, paid during the period of credited service. Compensation does not include lump sum termination pay. Compensation for members hired after June 30, 1996, is limited as prescribed in Section 401(a)(17) of the Internal Revenue Code.

Final Average Compensation

Final average compensation is the highest average annual compensation earned by a member during 12 consecutive calendar quarters of the last 40 such quarters during periods of credited service. The final average compensation is limited by statutory provisions that prevent extraordinary increases in compensation immediately before retirement.

Employer Contributions

Employer contributions equal those amounts contributed by members except for the additional contributions noted below.

Member Contributions

Class A members: 6 percent of compensation
Class B Public Safety members: 8 percent of compensation
Class B Judicial members: 9 percent of compensation

Member contributions are made on a pre-tax basis as permitted under Section 414(h) of the Internal Revenue Code.

Accumulated Contributions

Accumulated contributions are equal to member contributions and 85 percent of employer contributions (or 50 percent of employer contributions for members with less than three years of contributory service) credited with interest on an annual basis at a rate annually established by the Board of Trustees, that is no greater than 90 percent of the average 91-day I.S. Treasury Bill rate for the immediately preceding calendar year. Such rate shall have no minimum limitation and shall not be greater than the assumed rate of investment return, which is currently 7.25 percent.

For members who terminated prior to July 1, 2010, the percentage of employer contributions is 100 percent with three or more years of contributory service or 75 percent with less than three years of contributory service.

Additional Contributions

Effective July 1, 2002, employers contribute 6.2 percent of Class A member's calendar year compensation in excess of the maximum taxable amount for Social Security for the calendar year. These additional contributions are not included in accumulated contributions.

Other Public Benefits

Eighty percent of the benefits provided as "primary insurance amount or primary Social Security" under the Federal Social Security Act.

Cost-of-Living Adjustment (COLA)

The annual increase in the amount of the SDRS benefits payable on each July 1st is indexed to CPI and based on the SDRS fair value funded ratio as of the prior July 1. The amount of the increase is:

- If the SDRS fair value funded ratio is 100 percent or more—3.1 percent COLA
- If the SDRS fair value funded ratio is at least 90 percent, but less than 100 percent, CPI with a 2.1 percent minimum and a 2.8 percent maximum
- If the SDRS fair value funded ratio is at least 80 percent, but less than 90 percent, CPI with a 2.1 percent minimum and a 2.4 percent maximum
- If the SDRS fair value funded ratio is less than 80 percent—2.1 percent COLA

All benefits except those depending on the member's accumulated contributions are annually increased by the cost-of-living adjustment.

Normal Retirement Age

The normal retirement age is age 65 with three years of contributory service for Class A and Class B Judicial members of the system. Normal retirement age is age 55 with three years of contributory service for Class B Public Safety members.

Normal Retirement Benefit

Members are entitled to retire with a benefit commencing the first of the month in which they reach normal retirement age and are payable for life, with an automatic 60 percent surviving spouse's benefit paid for the spouse's lifetime.

Class A Benefit

The Class A benefit is the larger of that provided by the following standard formula or alternate formula:

Standard Formula
Enhanced Benefit
1.7 percent times final average compensation times Class A credited service prior to July 1, 2008, plus

Base Benefit
1.55 percent times final average compensation times Class A credited service after July 1, 2008.

OR

Alternate Formula
Enhanced Benefit
2.4 percent times final average compensation times Class A credited service prior to July 1, 2008, plus

Base Benefit
2.25 percent times final average compensation times Class A credited service after July 1, 2008, less

80 percent of primary Social Security benefit.

Class B Public Safety Benefit

The Class B Public Safety benefit is:

Enhanced Benefit
2.4 percent times final average compensation times Class B Public Safety credited service prior to July 1, 2008, plus

Base Benefit
2.0 percent times final average compensation times Class B Public Safety credited service after July 1, 2008.

Class B Judicial Benefit

The Class B Judicial benefit is the sum of the following:

First 15 Years of Credited Service

Enhanced Benefit

3.733 percent times final average compensation times Class B Judicial service credited prior to July 1, 2008, with a maximum of 15 years, plus

Base Benefit

3.333 percent times final average compensation times Class B Judicial credited service after July 1, 2008, with a maximum of 15 years less Class B Judicial credited service prior to July 1, 2008

PLUS

Years of Credited Service in Excess of 15 Years

Enhanced Benefit

2.4 percent times final average compensation times Class B Judicial credited service in excess of 15 years and prior to July 1, 2008, plus

Base Benefit

2.0 percent times final average compensation times Class B Judicial credited service in excess of 15 years and after July 1, 2008.

All of the above benefits are paid monthly and limited to the maximum benefit under Section 415 of the Internal Revenue Code.

Delayed Retirement Benefit

The monthly benefit payable upon retirement after normal retirement date is based on credited service and final average compensation to the member's actual retirement date.

Special Early Retirement Date (Rule of 85, Rule of 80, and Rule of 75)

Members are entitled to retire at the member's special early retirement date with a benefit equal to the normal retirement benefit based on credited service and final average compensation to date of retirement, with no reduction for early payment.

The special early retirement date is the date at which age plus credited service equal:

- 85 for Class A members, but not prior to age 55
- 80 for Class B Judicial members, but not prior to age 55
- 75 for Class B Public Safety members, but not prior to age 45

Early Retirement Benefit

Any member with at least three years of contributory service can retire in the ten years preceding their normal retirement age. The member will be entitled to receive the normal retirement benefit based on credited service and final average compensation to date of retirement, reduced by 1/4 of 1 percent for each full month by which commencement of payments precedes the earlier of the normal retirement date or the special early retirement date. Benefits commence on the first of the month following retirement (or the date chosen for payment to commence) and 30 days after the application for retirement benefits has been received by SDRS.

Vested Benefit and Portable Retirement Option

A terminated member with at least three years of contributory service will be entitled to receive the normal or early retirement based on the member's credited service at the time of termination of employment and increased by the cost-of-living adjustment from the date of termination to the date benefits commence.

In lieu of any monthly lifetime retirement benefits under the system, a terminating member may receive a lump-sum of his accumulated contributions under the portable retirement option. Members who are rehired may redeposit their accumulated contributions plus interest within two years of rehire to reinstate their credited service.

Disability Benefit

A contributing member, who becomes disabled with at least three years of contributory service, or was disabled by accidental means while performing the usual duties of his job, is entitled to an immediate monthly disability benefit.

<u>For disability applications received on or before June 30, 2015</u>, the disability benefit is equal to:

- For the first 36 months, 50 percent of the member's final average compensation, increased 10 percent for each eligible child to a maximum of four children.

- Starting with the 37th month,
  - if the member is receiving disability benefits from Social Security, the greater of:
    - 50 percent of final average compensation plus 10 percent for each eligible child to a maximum of 90 percent less the amount of primary Social Security.
    - 20 percent of final average compensation increased by the COLA
    - the unreduced accrued retirement benefit at date of disability
  - if the member is not receiving disability benefits from Social Security, the greater of:
    - 20 percent of final average compensation increased by the COLA
    - the unreduced accrued retirement benefit at date of disability

The maximum benefit is 100 percent of final average compensation (increased by the COLA) reduced by earned income and primary Social Security.

The above benefits are payable monthly.

At age 65 (or when there are no eligible children, if later), but not before five years of disability, the benefit payable is converted to the normal retirement benefits based on compensation increased by the COLA for the period between the date of disability and normal retirement age (projected compensation), and credited service as if employment had continued uninterrupted to normal retirement age (projected credited service).

For disability applications received after June 30, 2015, the disability benefit is equal to the greater of:

- 25 percent of the member's final average compensation at the date of disability
- the unreduced accrued retirement benefit at the date of disability

The above benefits are payable monthly.

A surviving spouse of a disabled member who dies while receiving a retirement benefit after age 65 will receive 60 percent of the member's benefit for the spouse's lifetime.

Survivor Benefits

Pre-Normal Retirement Age and Post-Disability Deaths

For deaths on or before June 30, 2015:

If an active member with at least one year of contributory service, or a member receiving a disability benefit commencing after July 1, 1974, dies, the surviving spouse having the care of eligible dependent children will receive an immediate benefit equal to 40 percent of the member's final average compensation, increased 10 percent for each child to a maximum of six children. If the surviving eligible dependent children are under the care of a guardian, the benefit payable will be 20 percent of the member's final average compensation for each child (to a maximum of five children).

The above survivor benefits are all payable monthly without improvements and reduced by 75 percent of primary Social Security benefit.

If no benefit is payable as defined above or payment has ceased, and the member's accumulated contributions have not been withdrawn, the spouse is entitled to receive at the spouse's age 65 a benefit equal to 60 percent of the normal retirement benefit that would have been payable to the deceased member at normal retirement age based on projected credited service and projected compensation, and further increased by the COLA for any time between normal retirement date and payment commencement date.

The benefit is payable to the spouse when the spouse reaches age 65. Effective July 1, 2015, a member's spouse may elect to commence survivor benefits as early as age 55 and the spouse's benefit is reduced by five percent for each year commencement precedes the spouse's age 65.

For deaths after June 30, 2015:

If an active member with at least three years of contributory service, or a member receiving a disability benefit approved after June 30, 2015, dies, the eligible dependent children will receive an immediate benefit equal to the greater of:

- 25 percent of the member's final average compensation at the date of disability
- the unreduced accrued retirement benefit at the date of disability

The benefit will be split equally among any eligible children of the member. The benefit ceases if there are no eligible children. If no benefit is payable as defined above, the spouse is entitled to receive at the spouse's age 65 a benefit equal to 60 percent of the benefit payable above increased by the COLA for any time between the date of the member's death and payment commencement date. If the benefit ceases due to no eligible children, the benefit is increased by the COLA for any time between the date benefit ceased and payment commencement date.

The spouse may elect to commence survivor benefits as early as age 55 and the spouse's benefit is reduced by five percent for each year commencement precedes the spouse's age 65.

Post-Normal Retirement Age and Post-Retirement Deaths

Upon the death of a retiree or any member at or beyond normal retirement age, the surviving spouse is entitled to receive 60 percent of the monthly retirement benefit the member was receiving or was eligible to receive.

Terminated Member

If a member dies prior to benefit commencement, the accumulated contributions are refunded to the designated beneficiary, children, or estate in a lump sum.

Optional Spouse Coverage

Prior to June 30, 2010, a member could have elected to provide an additional benefit payable to the surviving spouse within 365 days after becoming a member, within 90 days following attainment of age 35, or within 90 days after the first anniversary of marriage. This optional coverage may continue until the member's spouse attains age 65, the death or disability of the member, the death of the member's spouse, termination of the member's marriage to his spouse, or the member's termination of employment.

The elected additional monthly benefit is equal to 40 percent of the member's final average compensation multiplied by the COLA for each full year between the date of death or disability of the member to payment commencement. Such benefit is paid upon the member's death from the time there are no eligible children until the spouse dies or attains age 65.

The cost of this protection is paid by the member through an additional contribution of 1.5 percent of compensation, which will not be matched by the employer and is not refundable.

Accumulated Contributions as Minimum Benefits

If the aggregate benefit payments received by a member and the member's beneficiary (excluding benefits received under the optional spouse coverage benefit provisions) do not equal the sum of the accumulated contributions, then the difference will be paid to the member's designated beneficiary, children, or estate in a lump sum.

Optional Forms of Retirement Payments

The monthly retirement benefits may be modified to an optional form of payment which is the actuarial equivalent of the benefit due under the system. A Social Security level income payment option is available for members who retire before age 62.

Administrative Expenses

Administrative expenses are paid from the system's assets in an amount not to exceed 3 percent of the annual member and employer contributions received by the system.

Retired Members

Retired members' and terminated vested members' benefits have been increased to reflect the benefit formula currently in effect for active members.

INVESTMENT SUMMARY

TO THE SOUTH DAKOTA RETIREMENT SYSTEM BOARD OF TRUSTEES:
This letter summarizes fiscal year 2016 investment performance for South Dakota Retirement System (SDRS) assets and discusses investment objectives, investing for the long term, and future return expectations. Additional information about the investments may be found in the South Dakota Investment Council annual report available at www.sdic.sd.gov.

FISCAL YEAR 2016 PERFORMANCE
The fiscal year 2016 investment return was 0.3% net of investment management cost. This was less than the Investment Council's market index-based benchmark return of 2.9% and the median state fund net return of 1.0%. The real estate category contributed most significantly to the underperformance.

INVESTMENT OBJECTIVES
The Council's overall objective is to prudently manage SDRS assets to achieve and exceed the returns available over the long term from the investment markets. The Council has two specific objectives. The first is to achieve and exceed the actuarial estimated return over the long term to help assure the financial health of SDRS. The other is to add value over the long term versus the Council's market index-based benchmark.

INVESTING FOR THE LONG TERM
The Council has managed SDRS assets since consolidation in 1974. Since inception, investment returns have meaningfully exceeded the Council's market index-based benchmark and other state retirement systems' returns across the nation.

The Council invests in assets believed to be undervalued from a long-term perspective. The investment valuation process is based on the view that the worth of an asset is the present value of its future cash flows. Internal research efforts focus on estimating future cash flows and assessing risk which impacts the rate used to discount cash flows to present value.

Results can vary significantly from year to year with many interim periods of underperformance in the Council's history. Whether an individual year is good, bad, or average, it is important to be mindful that the Council invests for the long term. Actions taken in one year may impact performance several years down the road. The long-term success has resulted primarily from adhering to the long-term strategies during underperforming periods.

RETURN EXPECTATIONS
The Council believes market return expectations should be based on forward-looking long-term cash flows rather than extrapolation of past returns which tend to relate inversely to future results.

As of June 30, 2016, long-term expected returns were 3.7% for bonds and 7.1% for stocks. Low interest rates foreshadow low future bond returns. The expected return for stocks is also lower than earned on average historically. The expected long-term return for the overall SDRS portfolio, which is diversified across a number of asset categories, is 6.1%. This excludes any impact of withdrawals from the fund and any value added or detracted relative to index returns. The expected return is the mid-point of a range of possible outcomes. The one standard deviation range, which statistically encompasses the central two-thirds of potential outcomes, is 1.2% to 11.0% per annum for a ten-year horizon and 2.7% to 9.5% for a 20-year horizon.

History has shown that following large out-performances, like experienced in recent years, opportunities may be sparse for a time. Chasing lesser opportunities has tended to backfire when those assets became much cheaper later. The lesson learned is to wait for worthwhile opportunities, and when absent, to be satisfied with modest results until better opportunities come along.

The Council values the excellent cooperative relationship with the SDRS Board of Trustees and staff. The Council believes this teamwork and a disciplined focus on long-term investment value will serve us well in the decades to come.

Submitted by:

Matthew L. Clark

Matthew L. Clark, CFA
State Investment Officer

The Investment Council

The SDRS trust fund is invested under the direction of the South Dakota Investment Council. The Council is composed of five members at large with financial backgrounds and three ex-officio members, the State Treasurer, the Commissioner of School and Public Lands, and the SDRS Executive Director. The Council is a policy-making board and attends to matters such as asset allocation, portfolio strategy, and the selection or dismissal of outside investment managers.

The data in the investment section of this report was prepared by the South Dakota Investment Council. The South Dakota Retirement System in conjunction with the South Dakota Investment Council and external auditors, Eide Bailly, prepared the investment section of this report.

Investment Objectives and Policy

The South Dakota Investment Council's overall objective is to prudently manage SDRS assets to achieve and exceed the returns available over the long term from the broad capital markets (stocks, bonds, real estate, etc.). The Council has three specific objectives. The first relates to achieving and exceeding the actuarial estimated rate of return over the long term to assure the financial health of SDRS. The other two objectives relate to adding value over the long term versus the index returns of the Council's capital markets benchmark and versus peer funds.

- Achieve and exceed the actuarial rate of return over the long term

The actuarial rate of return is an estimate of the investment return achievable over the long term through investing in the capital markets. The return estimate, along with other actuarial estimates such as member longevity, salary changes, and turnover, are used by the actuary to assess the funding status and overall health of a retirement system. Achievement of the actuarial return estimate is important to continued financial strength of SDRS. Any additional return can strengthen the financial condition and/or provide resources to address SDRS benefit goals.

If investment markets do not allow the Council or the Council simply fails to achieve the estimated return over the long term, South Dakota law may require benefit reductions. It is important that the actuarial estimated return be a reasonable expectation of what the capital markets can deliver or it may not be realistic to expect to achieve this objective.

- Achieve favorable total fund performance over the long term relative to a capital markets benchmark reflective of the Council's normal asset allocation policy

This is the most important specific investment objective in judging the Council's delivery of a competitive rate of return. The objective is to achieve and exceed the indexed returns that would be earned if SDRS was invested in the Council's selected capital markets benchmark. The key investment policy decision made by the Council relates to asset allocation.

This is difficult to accomplish as most investment managers do not outperform the capital markets over time. The zero sum nature of markets, with each investment transaction having a winner and a loser, means investors collectively merely match the overall market return before expenses. After taking into account investment manager fees and transactions costs, most managers underperform.

- Achieve favorable total fund performance over the long term relative to peer pension funds

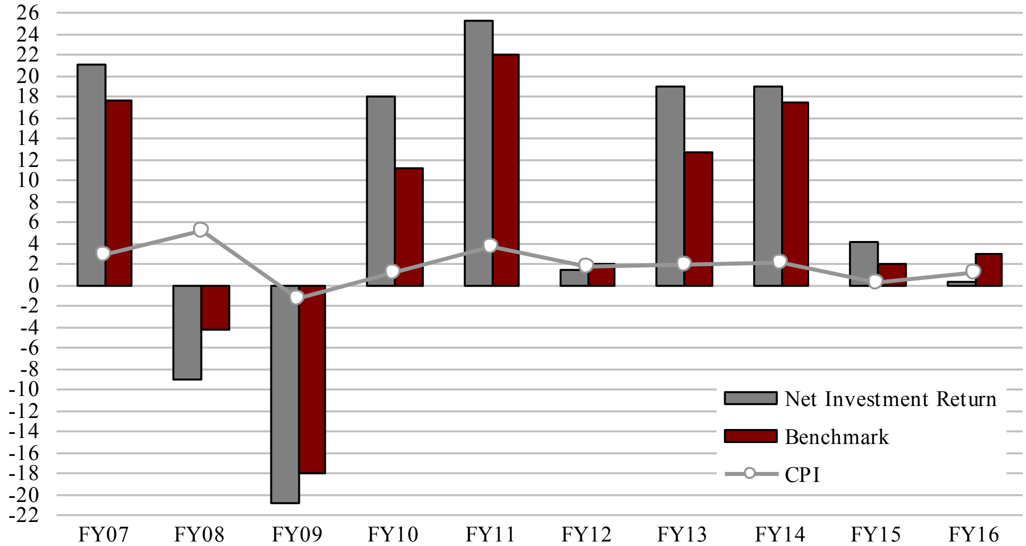
Prudent Man Standard

South Dakota Codified Law 4-5-27 requires that the South Dakota Retirement System trust fund be invested according to the Prudent Man Standard. South Dakota Codified Law defines the Prudent Man Standard as follows:

> Any investment under the provisions of SD Codified Law Sections 4-5-12 to 4-5-39, inclusive, shall be made with the exercise of the degree of judgment and care, under circumstances then prevailing, which persons of prudence, discretion, and intelligence exercised in the management of their own affairs, not for speculation but for investment, considering the probable safety of their capital as well as the probable income to be derived.

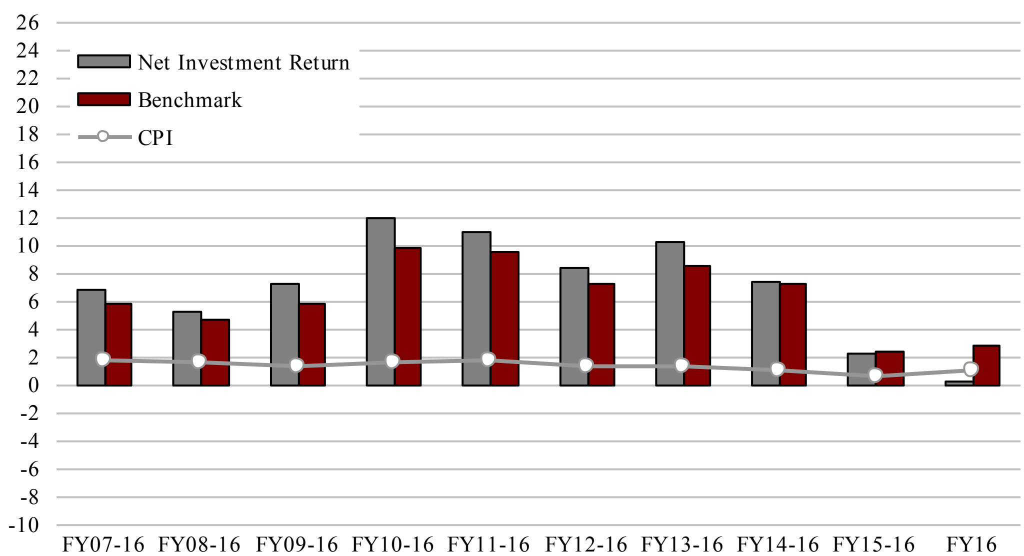
Though monthly benefit payments exceed monthly contributions, the South Dakota Retirement System is not subject to sudden, substantial, and unexpected withdrawals. As a result, it is not necessary to have a high percentage of assets in short-term investments unless this is deemed to be the best investment strategy. This allows the trust fund to be as fully invested in stocks, bonds, and other alternatives as investment strategy dictates.

Investment Performance Compared to Capital Market Benchmark and Inflation



	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16
Net Investment Return	21.06	-9.00	-20.89	17.99	25.18	1.45	19.02	18.90	4.18	0.29
Benchmark	17.57	-4.20	-18.00	11.12	22.06	2.02	12.73	17.49	2.09	2.88
CPI	2.69	5.02	-1.43	1.05	3.56	1.66	1.75	2.07	0.12	1.01

Cumulative Investment Performance Compared to Capital Market Benchmark and Inflation



	FY07-16	FY08-16	FY09-16	FY10-16	FY11-16	FY12-16	FY13-16	FY14-16	FY15-16	FY16
Net Investment Return	6.80	5.32	7.27	12.04	11.07	8.45	10.27	7.50	2.22	0.29
Benchmark	5.92	4.70	5.87	9.81	9.59	7.25	8.61	7.26	2.49	2.88
CPI	1.74	1.63	1.22	1.60	1.69	1.32	1.24	1.06	0.56	1.01

Schedule of Investment Management Expenses
Year Ended June 30, 2016

Investment managers	Management expenses
State of South Dakota Investment Council	$9,108,401
Blackstone Private Equity	(801,609)
Blackstone Real Estate Partners	(3,008,589)
Brandes Global Mid-Cap	520,129
Capital International	882,794
Cargill North American Real Estate Partners	55,588
Carlyle	2,178,699
CINVIN	981,964
Crossroads Investment Advisors LP	49,211
CVC	153,120
CVI	509,131
Dimensional Fund Advisors, Inc.	212,320
DLJ Merchant Banking Partners LP	14
Doughty Hanson & Co. European Real Estate	441,405
Doughty Hanson PE IV	93,900
Elevation Partners	25,058
KKR Associates	(14,406)
Lone Star Real Estate	6,269,693
Riverstone	4,341,849
Rockpoint Real Estate	2,802,399
Sanders All Asset Value	290,889
Sanders Capital	264,132
Silver Lake Partners LP	2,676,822
Starwood Real Estate	1,650,252
TCW Opp MBS Strategy	3,135,199
Total investment activity expenses	**$32,818,365**

Summary of Investment Portfolios
As of June 30, 2016

	Fair Value	Futures Exposure	Fair Value with Futures	Percent of Fund with Futures	Capital Markets Benchmark Percent
Global Equity					
Internal Global Equity	$4,266,891,570				
Internal High Quality Equity	233,711,657				
Internal Global Emerging Markets	117,139,750				
Internal Small/Mid Equity	565,029,474				
Brandes Non-US Mid Cap	57,465,534				
Dimensional Fund Advisors	40,236,939				
Sanders Capital	49,312,252				
Equity Index Futures		$(1,553,156,400)	$3,776,630,776	36.0	58.0
Private Equity Limited Partnerships					
Blackstone Capital Partners	184,581,006				
Blackstone Energy Partners	556,525				
Capital International	32,367,908				
Carlyle	80,613,111				
Cinven	68,878,864				
CVC	45,482,367				
Cypress	170,972				
Doughty Hanson	27,212,225				
Elevation	822,130				
KKR	11,314,081				
Neuberger Berman—Crossroads	1,065,438				
PineBridge	3,102,291				
Riverstone	76,093,482				
Silver Lake	177,349,872		709,610,272	6.8	0.0
Aggressive Absolute Return (AAR)					
Bridgewater—Pure Alpha Fund	73,490,885				
Sanders Capital—All Asset Fund	23,886,798		97,377,683	0.9	0.0
Real Estate Limited Partnerships					
Ares Management—Apollos	5,595,961				
Blackstone Real Estate Partners	794,750,606				
Cargill N.A. Real Estate Partners	10,754,569				
Doughty Hanson	5,058,183				
Lone Star	203,453,076				
Rockpoint	61,971,165				
Starwood	144,033,378		1,225,616,938	11.6	10.0
Fixed Income—Investment Grade/TIPS					
Internal Investment Grade	1,034,098,257				
Treasury Financial Futures		357,558,550	1,391,656,807	13.2	23.0
Fixed Income—High Yield/Distressed Debt					
Internal High Yield	740,901,757				
Blackstone—Distressed & Credit Liquidity	80,159				
CarVal—CVI Global Value	33,721,114				
TCW	670,405,116		1,445,108,146	13.8	7.0
Cash and Cash Equivalents					
Internal Shift Account	660,082,392				
Cash from Futures		1,195,597,850	1,855,680,242	17.7	2.0
Total	$10,501,680,864	$0	$10,501,680,864	100%	

Asset Allocation

The decision most impactful to investment outcomes is the allocation of assets to categories such as stocks, bonds, real estate, and others. The Council establishes a benchmark asset allocation which considers expected long-term returns and risk to achieve SDRS investment objectives over the long term. This capital markets benchmark includes categories that are significant in size and can be passively implemented. The benchmark is intended to represent what is achievable through index funds without requiring exceptional skill. The benchmark is used to compare against actual results to assess whether value has been added. The benchmark itself is viewed as a challenging hurdle as most investors fail to keep up with index returns. The Council also establishes a minimum and maximum for each category. Niche or skill-based categories do not have weight in the benchmark but can have a permitted range for when the category valuation is depressed or superior managers are believed to have been identified.

It can be difficult to understand overall fund risk given multiple asset categories that can each behave uniquely. When the Council first began managing assets, most institutional portfolios consisted solely of stocks, investment grade bonds, and cash. Investors back then could quickly understand the level of risk by looking at the percentage of their fund invested in stocks. The Council's focus today in on measurement and management of equity-like and bond-like risk. Equity-like risk is the percentage invested in stocks plus any embedded equity exposure of other categories, particularly during times of market stress. Bond-like risk is the percentage invested in investment grade bonds plus any embedded bond exposure of other categories. The benchmark equity-like risk is 70% with a permitted range of 50% to 85%. The benchmark bond-like risk is 30%, including a small amount of cash exposure, with a permitted range of 15% to 50%.

Allocations to equity-like and bond-like risk, as well as individual asset categories, vary within permitted ranges. The valuation process which drives the allocations within the ranges is based on the present value of estimated future cash flows. Research efforts focus on estimating cash flows and risk based discount rates.

Conventional statistics measures of risk are also calculated. Standard deviation is a measure of volatility and correlation is a measure of the degree that categories provide diversification. Conventional measures are helpful for understanding risk in normal times but understate real-world frequency and magnitude of sever declines. The Council adjusts statistical measures to better reflect risk when it matters most, which is during severe declines. Liquidity is monitored to minimize risk of forced liquidations.

On June 30, 2016, the equity-like risk of the SDRS fund was 63.4% compared to the fiscal year 2016 capital markets benchmark level of 70.0%. This difference is due to a reduction in equity-like risk based on stock market valuations having become somewhat expensive.

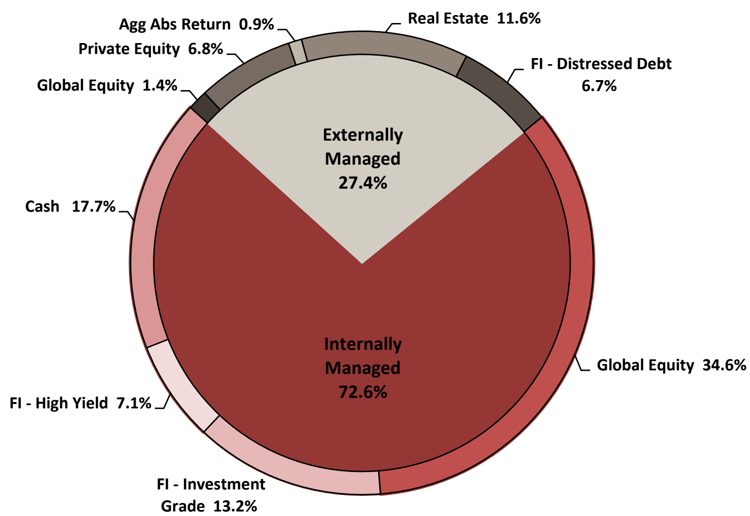
The expected long-term return for the benchmark allocation as of June 30, 2016, was 6.1%. This excludes any potential value added or detracted relative to index returns resulting from managing the fund. The estimated rate of inflation embedded in the expected return was 2.3%. Standard deviation was estimated to be 15.4% after adjustments to capture real-world frequency of adverse events. These statistics indicate a 66% chance the return for any year would be between (9.3%) and 21.5% and a 95% chance the return would be between (24.7%) and 36.9%.

The greatest risk to markets may be unsustainable buildup of global debt. The consequence is likely muted growth and heightened risk of eventual inflation to inflate away the debt or deflationary debt liquidation. The Council is mindful of these risks as it continues to invest for the long term.

Asset Allocation

	6/30/14	6/30/15	6/30/16
Global equities	43.6%	38.9%	36.0%
Fixed income	19.3%	20.6%	27.0%
Cash	12.8%	20.8%	17.7%
Arbitrage/AAR	1.0%	1.0%	0.9%
Real estate	14.3%	10.7%	11.6%
Private equity	9.0%	8.0%	6.8%
Commodities	—	—	—

6/30/16



SDRS Rates of Return

Annual Returns

Fiscal Year	Time Weighted Gross of Fees	Time Weighted Net of Fees	Capital Markets Benchmark	Money Weighted Net of Fees
2016	0.6%	0.3%	2.9%	0.2%
2015	4.4%	4.2%	2.1%	4.2%
2014	19.3%	18.9%	17.5%	18.9%
2013	19.5%	19.0%	12.7%	19.0%
2012	1.9%	1.5%	2.0%	1.4%
2011	25.8%	25.2%	22.1%	25.3%
2010	18.7%	18.0%	11.1%	18.2%
2009	(20.4)%	(20.9)%	(18.0)%	(21.1)%
2008	(8.7)%	(9.0)%	(4.2)%	(8.9)%
2007	21.4%	21.1%	17.6%	21.1%

Annualized Returns

	Time Weighted Net of Fees	Capital Markets Benchmark
FY16	0.3%	2.9%
FY15-16	2.2%	2.5%
FY14-16	7.5%	7.3%
FY13-16	10.3%	8.6%
FY12-16	8.5%	7.3%
FY11-16	11.1%	9.6%
FY10-16	12.0%	9.8%
FY09-16	7.3%	8.9%
FY08-16	5.3%	4.7%
FY07-16	6.8%	5.9%

Time-Weighted Rate of Return is the rate of investment growth earned on a unit of assets held continuously for the entire period measured and is used to compare returns against other investment managers and indexes.

Money-Weighted Rate of Return considers the changing amounts actually invested during a period and weights the amount of pension plan investment by the proportion of time they are available to earn a return during that period. The rate of return is then calculated by solving, through an iterative process, for the rate that equates (1) the sum of the weighted external cash flows into and out of pension plan investments to (2) the ending fair value of the pension plan investment.

Capital Markets Benchmark is the asset allocation policy approved by the Investment Council applied to the appropriate index returns.

Major Asset Class Returns

Fiscal Year 2016	Global Equity	Investment Grade Fixed Income	Real Estate Partnerships	Private Equity Partnerships	Total Fund
SDRS	(2.51)%	6.12%	3.16%	2.57%	0.30%
Benchmark	(1.68)%	5.98%	24.10%	(1.68)%	2.88%
Difference	(0.83)%	0.14%	(20.94)%	4.25%	(2.59)%

Annualized Major Asset Class Returns

3 Year Ended 6/30/16	Global Equity	Investment Grade Fixed Income	Real Estate* Partnerships	Private Equity* Partnerships	Total Fund
SDRS	7.59%	4.22%	15.11%	11.34%	7.50%
Benchmark	7.63%	4.05%	13.51%	7.99%	7.26%
Difference	(0.04)%	0.17%	1.60%	3.35%	0.24%

5 Year Ended 6/30/16	Global Equity	Investment Grade Fixed Income	Real Estate* Partnerships	Private Equity* Partnerships	Total Fund
SDRS	9.22%	3.86%	12.79%	9.25%	8.64%
Benchmark	7.32%	3.77%	13.44%	10.62%	7.25%
Difference	1.90%	0.09%	(0.66)%	(1.38)%	1.39%

*IRRs linked for annualized periods

Real Estate and Private Equity Limited Partnership Investments

The Council has invested in real estate (RE) and private equity (PE) limited partnerships since the mid-1990's. Although these investments are illiquid and have higher fees, the Council believes that they offer diversification and the opportunity for added value net-of-fees over public market investments. The funding of these investments is made over several years as the partnerships call money from investors to buy assets and later return it when assets are sold. According to industry standards, the return analysis for these investments requires the use of a since inception internal rate of return (SI-IRR).

SI-IRR is the calculation that equate the present value of all cash flows (capital calls and distributions) with the period-end value. The public market equivalent (PME) is a method where a public market index is expressed in terms of a SI-IRR, using the same cash flows and timing as those of the partnership investment over the same time period. The partnership SI-IRR is calculated net-of-fees (management fees, performance based fees and general partner carried interest). Also, a composite SI-IRR that combines the partnerships in each category is calculated.

From November of 1995 through June of 2016, the net-of-fees SI-IRR for the composite PE limited partnership investments was 8.7%. This can be compared to the S&P 500 Index PME of 5.7% for the same period. RE limited partnerships net-of-fees SI-IRR composite from December of 1994 through June of 2016 was 21.0%. A PME using the MSCI US REIT Index could not be calculated using the same cash flows because the return of the RE limited partnerships was significantly higher than the index. The annualized time-weighted rate of return for the MSCI US REIT Index was 11.3% for the same period of time.

The composite return of the RE limited partnerships has significantly exceeded and the PE limited partnerships has slightly exceeded Council expectations. The SDIC will continue its ongoing evaluation of RE and PE limited partnerships.

See the South Dakota Investment Council Annual Report on the SDIC website, www.sdic.sd.gov, for more details on this topic.

STATISTICAL SUMMARY

Membership Profile

Public Entities Participating in SDRS
SDRS Benefits Paid: Class A & B
Membership by Age: Class A & B
Membership by County of Residence: Class A & B
SDRS Benefits Paid: Class C
Membership by Age: Class C
Membership by County of Residence: Class C
Membership by Group
Benefit Recipients by Group
Average Benefit Payments
Historical Views

Public Entities Participating in SDRS

All teachers, higher education personnel, and legislative, executive, and judicial employees are required to participate in SDRS. Counties, municipalities, and other public entities, however, have the option of participating, and school districts may choose whether or not to include their classified employees.

The following schedules list SDRS participating entities by group, the number of active members in each group, and each group's percentage of the 39,940 total active members as of June 30, 2016.

School Districts

Membership: 18,031

Percentage of total active members: 45.2%
Units: 165

- Aberdeen
- Agar-Blunt-Onida
- Alcester-Hudson
- Andes Central
- Arlington
- Armour
- Avon
- Baltic
- Belle Fourche
- Bennett County
- Beresford
- Big Stone City
- Bison
- Black Hills Special Serv Coop
- Bon Homme
- Bowdle
- Brandon Valley
- Bridgewater-Emery
- Britton-Hecla
- Brookings
- Burke
- Canistota
- Canton
- Castlewood
- Centerville
- Chamberlain
- Chester Area
- Children's Hospital/ Lifescape
- Clark
- Colman-Egan
- Colome
- Cornbelt Coop
- Corsica-Stickney
- Custer
- Dakota Valley
- Dell Rapids
- DeSmet
- Deubrook Area
- Deuel
- Doland
- Douglas
- Dupree
- Eagle Butte
- East Dakota Ed
- Edgemont
- Edmunds Central
- Elk Mountain
- Elk Point-Jefferson
- Elkton
- Estelline
- Ethan
- Eureka
- Faith
- Faulkton
- Flandreau
- Florence
- Frederick Area
- Freeman
- Garretson
- Gayville-Volin
- Gettysburg
- Grant-Deuel
- Gregory
- Groton Area
- Haakon County
- Hamlin
- Hanson
- Harding County
- Harrisburg
- Henry
- Herreid
- Highmore-Harrold
- Hill City
- Hitchcock-Tulare
- Hot Springs
- Hoven
- Howard
- Huron
- Ipswich
- Irene-Wakonda
- Iroquois
- James Valley Ed Coop
- Jones County
- Kadoka Area
- Kimball
- Lake Preston
- Langford Area
- Lead-Deadwood
- Lemmon
- Lennox
- Leola
- Lyman
- Madison Central
- Marion
- McCook Central
- McIntosh
- McLaughlin
- Meade County
- Menno
- Mid-Central Coop
- Milbank
- Miller
- Mitchell
- Mobridge-Pollock
- Montrose
- Mt. Vernon
- New Underwood
- Newell
- North Central Coop
- Northeast Tech
- Northeast Ed Serv
- Northwest Area
- Northwestern
- Oahe Special Ed
- Oelrichs
- Oglala Lakota County
- Oldham-Ramona
- Parker
- Parkston
- Pierre
- Plankinton
- Platte-Geddes
- Prairie Lakes Ed Coop
- Rapid City
- Redfield
- Rosholt
- Rutland
- Sanborn Central
- Scotland
- Selby Area
- Sioux Falls
- Sioux Valley
- Sisseton
- Smee
- South Central Coop
- South Central
- South East Area
- Spearfish
- Stanley County
- Summit
- Tea Area
- Three Rivers
- Timber Lake
- Todd County
- Tripp-Delmont
- Tri-Valley
- Vermillion
- Viborg-Hurley
- Wagner
- Wall
- Warner
- Watertown
- Waubay
- Waverly
- Webster Area
- Wessington Springs
- West Central
- White Lake
- White River
- Willow Lake
- Wilmot
- Winner
- Wolsey-Wessington
- Woonsocket
- Yankton

Legislative, Executive, and Judicial Agencies

Membership: 8,007

Percentage of total active members: 20.1%
Units: 1

- Executive Management
- Agriculture
- Corrections
- Education
- Environment & Natural Resources
- Game, Fish & Parks
- Governor's Office of Economic Dev
- Health
- Human Services
- Labor & Regulation
- Lottery
- Military
- Public Safety
- Revenue
- Social Services
- Tourism
- Transportation
- Tribal Relations
- Veterans Affairs
- Secretary of State
- Attorney General
- State Auditor
- State Treasurer
- School & Public Lands
- Public Utilities Commission
- Legislative Audit
- Legislative Research Council
- Unified Judicial System
- SD Investment Council
- SD Retirement System

Institutions of Higher Education

Membership: 4,566

Percentage of total active members: 11.4%
Units: 1

- Board of Regents Central Office
- University of South Dakota
- South Dakota State University
- South Dakota School of Mines and Technology
- Northern State University
- Black Hills State University
- Dakota State University
- South Dakota School for the Visually Impaired
- South Dakota School for the Deaf

Municipalities

Membership: 4,533

Percentage of total active members: 11.3%
Units: 158

- Aberdeen
- Alcester
- Alexandria
- Arlington
- Armour
- Aurora
- Avon
- Baltic
- Belle Fourche
- Beresford
- Big Stone City
- Bison
- Bowdle
- Box Elder
- Brandon
- Bridgewater
- Britton
- Brookings
- Bruce
- Bryant
- Buffalo
- Burke
- Canistota
- Canton
- Carthage
- Castlewood
- Centerville
- Chamberlain
- Chancellor
- Clark
- Clear Lake
- Colman
- Colton
- Conde
- Corsica
- Crooks
- Custer
- Dallas
- Deadwood
- Dell Rapids
- DeSmet
- Dupree
- Eagle Butte
- Edgemont
- Elk Point
- Elkton
- Emery
- Estelline
- Ethan
- Eureka
- Faith
- Faulkton
- Flandreau
- Ft. Pierre
- Freeman
- Garretson
- Gary
- Gettysburg
- Gregory
- Groton
- Harrisburg
- Hartford
- Hayti
- Hecla
- Hermosa
- Herreid
- Highmore
- Hill City
- Hot Springs
- Hoven
- Howard
- Hudson
- Humboldt
- Hurley
- Huron
- Ipswich
- Irene
- Jefferson
- Kadoka
- Kennebec
- Keystone
- Kimball
- Lake Andes
- Lake Norden
- Lake Preston
- Langford
- Lead
- Lemmon
- Lennox
- Leola
- Madison
- Marion
- Martin
- McLaughlin
- Menno
- Midland
- Milbank
- Miller
- Mitchell
- Mobridge
- Mt. Vernon
- Murdo
- New Effington
- New Underwood
- Newell
- North Sioux City
- Oacoma
- Onida
- Parker
- Parkston
- Philip
- Pickstown
- Pierre
- Plankinton
- Platte
- Pollock
- Presho
- Pukwana
- Rapid City
- Redfield
- Roscoe
- Salem
- Scotland
- Selby
- Sioux Falls
- Sisseton
- Spearfish
- Springfield
- Stickney
- Sturgis
- Summerset
- Tabor
- Tea
- Timber Lake
- Tripp
- Tyndall
- Valley Springs
- Veblen
- Vermillion
- Viborg
- Volga
- Wagner
- Wakonda
- Wall
- Warner
- Watertown
- Waubay
- Webster
- Wessington Springs
- White
- White Lake
- White River
- Whitewood
- Wilmot
- Winner
- Woonsocket
- Worthing
- Yankton

Counties

Membership: 3,970

Percentage of total active members: 9.9%
Units: 64

- Aurora
- Beadle
- Bennett
- Bon Homme
- Brookings
- Brown
- Brule
- Butte
- Campbell
- Charles Mix
- Clark
- Clay
- Codington
- Corson
- Custer
- Davison
- Day
- Deuel
- Dewey
- Douglas
- Edmunds
- Fall River-Oglala Lakota
- Faulk
- Grant
- Gregory
- Haakon
- Hamlin
- Hand
- Hanson
- Harding
- Hughes
- Hutchinson
- Hyde
- Jackson
- Jerauld
- Jones
- Kingsbury
- Lake
- Lawrence
- Lincoln
- Lyman
- Marshall
- McCook
- McPherson
- Meade
- Mellette
- Miner
- Minnehaha
- Moody
- Pennington
- Perkins
- Potter
- Roberts
- Sanborn
- Spink
- Springdale Township
- Stanley
- Sully
- Tripp
- Turner
- Union
- Walworth
- Yankton
- Ziebach

Other Public Entities

Membership: 833

Percentage of total active members: 2.1%
Units: 96

- Aberdeen Housing Auth
- Assoc School Boards of SD
- B-Y Water Dist
- Beadle County Cons Dist
- Belle Fourche Irrigation
- Black Hawk Water Users Dist
- Black Hills Council of Local Govt
- Brookings County Cons Dist
- Brown –Marshall Cons Dist
- Brule-Buffalo Cons Dist
- Burke Housing & Redev
- Butte County Cons Dist
- Butte-Meade Water Dist
- Campbell County Cons Dist
- Canton Housing and Redev Com
- Cement Plant
- Central Plains Water
- Central SD Enhancement Dist
- Charles Mix Cons Dist
- Clark County Cons
- Codington County Cons
- Dakota Dunes Improvement Dist
- Dakota Valley Fire
- Davison Cons Dist
- Day County Cons
- Deuel County Cons
- East Dakota Water Dev
- Edmunds County Cons Dist
- Fall River Water Users Dist
- Faulk Cons Dist
- Faulkton Area Med Center
- First District Assoc of Local Gov
- Grant County Cons
- Gregory County Cons
- Haakon County Cons Dist
- Hamlin County Cons
- Harding County Cons Dist
- Heartland Consumer Power Dist
- Hill City Ambulance Dist
- Hill City Fire Protection Dist
- Hot Springs Housing & Redev
- Hutchinson County Cons
- Hyde County Cons Dist
- James River Water Dev Dist
- Jerauld Cty Cons Dist
- Keystone Fire Protection
- Kingsbury Cons Dist
- Lake Madison Sanitary Dist
- Lake Poinsett Sanitary Dist
- Lead-Deadwood Sanitary Dist
- Lemmon Housing Authority
- Lennox Housing & Redev
- Lincoln County Cons
- Madison Housing & Redev
- Marshall County Cons
- Marshall County Hospital
- McCook Lake Sanitary Dist
- McPherson County Cons Dist
- Meade County Housing & Redev
- Mellette County Cons Dist
- Metro Communications
- Milbank Housing & Redev
- Miller Housing & Redev
- Mina Lake Sani & Water Dist
- Miner County Cons Dist
- Minnehaha County Cons Dist
- Mitchell Housing & Redev
- N.E. Council of Govt
- Pennington County Housing Dev
- Perkins County Cons Dist
- Piedmont Fire Protection Dist
- Pierre Housing & Redev
- Planning & Dev Dist III
- Potter County Cons Dist
- Randall Community Water
- Rapid Valley Sanitary Dist
- Redfield Housing
- Roberts Cons Board
- School Admin. Of SD
- Sioux Falls Airport Authority
- Sisseton Housing & Redev
- South Brown County Cons Dist
- SD Assoc of County Commissioners
- SD High School Activities Assoc
- SD Housing Dev Authority
- SD Municipal League
- SD Pharmacists Assoc.
- SD Science & Technology Auth
- Southeastern Council of Gov.
- Southern Missouri Recycle & Waste
- Spink County Cons Dist
- State Bar of SD
- Tri-County Conservation
- Walworth County Cons
- War Hawk Emergency Mgmt Dist
- Watertown Housing Auth

SDRS Benefits Paid

SDRS Benefits Paid by County of Residence

Class A, Class B Public Safety and Judicial

County	FY 2016 members receiving benefits	Annualized benefits	County	FY 2016 members receiving benefits	Annualized benefits
Aurora	129	1,814,506	Jackson	54	936,261
Beadle	497	8,605,671	Jerauld	61	816,594
Bennett	41	660,162	Jones	37	649,486
Bon Homme	295	4,574,104	Kingsbury	175	2,792,300
Brookings	1,386	32,849,352	Lake	394	7,684,416
Brown	1,115	21,964,891	Lawrence	853	17,217,586
Brule	138	2,418,477	Lincoln	374	6,236,415
Buffalo	2	31,509	Lyman	85	1,444,445
Butte	285	4,219,415	Marshall	170	2,722,712
Campbell	57	866,531	McCook	144	2,438,027
Charles Mix	245	3,968,879	McPherson	66	825,356
Clark	121	1,562,936	Meade	585	10,640,292
Clay	617	14,813,379	Mellette	53	607,940
Codington	746	16,021,212	Miner	73	1,281,949
Corson	46	723,868	Minnehaha	3,312	73,720,923
Custer	338	5,589,657	Moody	173	2,612,314
Davison	534	10,643,611	Oglala		
Day	206	3,040,977	Lakota	17	311,416
Deuel	111	1,593,596	Pennington	2,980	63,469,284
Dewey	75	1,162,306	Perkins	81	1,216,117
Douglas	91	1,405,067	Potter	101	1,636,298
Edmunds	113	1,815,271	Roberts	257	3,986,540
Fall River	289	3,661,388	Sanborn	66	990,119
Faulk	107	1,338,632	Spink	407	5,865,401
Grant	193	3,205,878	Stanley	199	4,440,183
Gregory	166	2,473,606	Sully	59	770,969
Haakon	53	767,586	Todd	67	1,106,279
Hamlin	168	2,498,020	Tripp	189	2,900,236
Hand	97	1,465,311	Turner	230	3,305,469
Hanson	53	784,131	Union	312	5,614,194
Harding	24	260,553	Walworth	212	3,593,019
Hughes	1,328	31,991,456	Yankton	817	14,813,188
Hutchinson	239	3,969,147	Ziebach	20	353,245
Hyde	62	723,211			
			Total benefits payable by county	**22,590**	**$440,483,269**

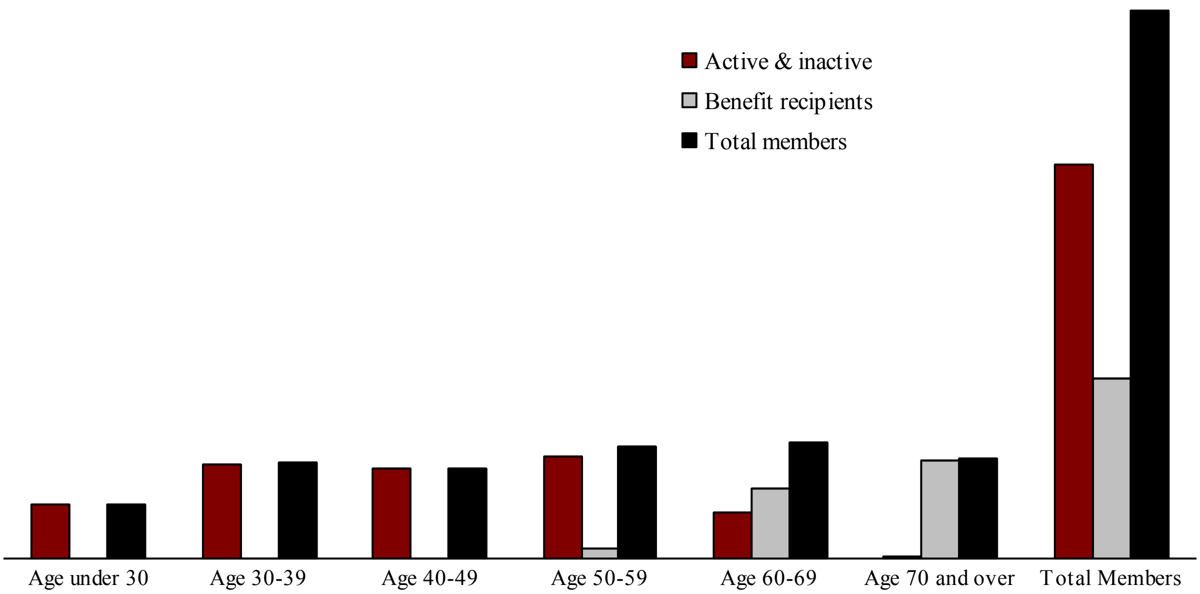
SDRS Benefits Paid Outside of South Dakota

Class A, Class B Public Safety and Judicial

State	Members receiving benefits	Annualized benefits	State	Members receiving benefits	Annualized benefits
Arizona	344	6,580,132	North Dakota	184	2,639,389
California	100	1,619,835	Texas	185	3,145,157
Colorado	210	3,133,123	Washington	83	1,399,819
Florida	160	3,487,706	Wisconsin	117	1,674,593
Iowa	240	3,915,433			
Minnesota	542	8,509,077	Other states and foreign countries	1,126	17,859,441
Montana	93	1,547,519			
Nebraska	338	4,754,619			
			Total benefits payable outside South Dakota	**3,722**	**$60,265,843**
			Total benefit recipients and benefits payable	**26,312**	**$500,749,112**

Membership by Age

Class A, Class B Public Safety and Judicial



	Age under 30	Age 30-39	Age 40-49	Age 50-59	Age 60-69	Age 70 and over	Total Members
Active & inactive	8,055	13,961	13,219	14,947	6,811	440	57,433
Benefit recipients	9	17	111	1,536	10,349	14,290	26,312
Total members	8,064	13,978	13,330	16,483	17,160	14,730	83,745

Membership by County of Residence

Active, Inactive, and Retired Members

Class A, Class B Public Safety and Judicial

County	Total members	County	Total members	County	Total members
Aurora	313	Faulk	354	Mellette	233
Beadle	1,413	Grant	513	Miner	223
Bennett	209	Gregory	438	Minnehaha	12,045
Bon Homme	834	Haakon	192	Moody	490
Brookings	4,719	Hamlin	576	Oglala Lakota	128
Brown	3,468	Hand	246	Pennington	8,852
Brule	451	Hanson	222	Perkins	246
Buffalo	5	Harding	122	Potter	273
Butte	898	Hughes	4,701	Roberts	722
Campbell	143	Hutchinson	657	Sanborn	223
Charles Mix	770	Hyde	154	Spink	1,219
Clark	325	Jackson	184	Stanley	652
Clay	2,057	Jerauld	195	Sully	184
Codington	2,353	Jones	125	Todd	446
Corson	209	Kingsbury	599	Tripp	600
Custer	883	Lake	1,248	Turner	715
Davison	1,451	Lawrence	2,551	Union	1,056
Day	519	Lincoln	1,714	Walworth	668
Deuel	366	Lyman	303	Yankton	2,494
Dewey	442	Marshall	470	Ziebach	123
Douglas	244	McCook	457	Out of state/ Other	10,587
Edmunds	346	McPherson	209		
Fall River	862	Meade	2,056		
				Total membership	**83,745**

SDRS Benefits Paid

SDRS Benefits Paid by County of Residence

Class C Cement Plant

County	FY 2016 members receiving benefits	Annualized benefits	County	FY 2016 members receiving benefits	Annualized benefits
Brookings	1	9,754	Lawrence	6	54,696
Brown	1	4,992	Meade	33	613,925
Butte	1	28,557	Minnehaha	5	115,339
Custer	4	55,118	Pennington	153	3,024,585
Davison	1	25,894	Walworth	1	2,098
Fall River	1	11,271			
			Total benefits payable by county	**207**	**$3,946,229**

SDRS Benefits Paid Outside of South Dakota

Class C Cement Plant

State	Members receiving benefits	Annualized benefits	State	Members receiving benefits	Annualized benefits
Arizona	3	51,107	Oklahoma	1	24,011
Colorado	4	47,005	Oregon	1	5,417
Florida	1	18,700	S. Carolina	1	6,984
Idaho	2	20,056	Wyoming	3	50,664
Kansas	1	9,542			
North Dakota	2	31,027	Other states	16	76,620
			Total benefits payable outside South Dakota	**35**	**$341,133**
			Total benefit recipients and benefit payable	**242**	**$4,287,362**

Membership by County of Residence

Active, Inactive, and Retired Members

Class C Cement Plant

County	Total members	County	Total members	County	Total members
Bennett	1	Dewey	1	Minnehaha	7
Brown	1	Fall River	1	Pennington	173
Butte	1	Kingsbury	1	Walworth	1
Charles Mix	1	Lawrence	8		
Custer	4	Lincoln	2	Out of State	60
Davison	1	Meade	40		
				Total membership	**303**

Membership by Group

	Active members			Inactive members			
Board of Regents	**Vested**	**Non-vested**	**Total active**	**Vested**	**Non-vested**	**Total inactive**	**Total members**
Female	1,123	349	1,472	537	261	798	2,270
Male	1,132	395	1,527	550	293	843	2,370
Total	2,255	744	2,999	1,087	554	1,641	4,640
County General							
Female	1,237	412	1,649	328	312	640	2,289
Male	1,074	373	1,447	240	237	477	1,924
Total	2,311	785	3,096	568	549	1,117	4,213
County Public Safety							
Female	115	64	179	21	45	66	245
Male	500	195	695	87	110	197	892
Total	615	259	874	108	155	263	1,137
Judicial							
Female	17	1	18	2	0	2	20
Male	40	4	44	1	0	1	45
Total	57	5	62	3	0	3	65
Municipal General							
Female	1,062	519	1,581	342	503	845	2,426
Male	1,467	540	2,007	313	299	612	2,619
Total	2,529	1,059	3,588	655	802	1,457	5,045
Municipal Public Safety							
Female	42	27	69	7	9	16	85
Male	653	223	876	99	92	191	1,067
Total	695	250	945	106	101	207	1,152
Public School & Board of Regents Classified							
Female	4,587	1,938	6,525	1,867	2,398	4,265	10,790
Male	1,700	784	2,484	479	903	1,382	3,866
Total	6,287	2,722	9,009	2,346	3,301	5,647	14,656
State General							
Female	3,040	950	3,990	886	1,003	1,889	5,879
Male	2,343	579	2,922	577	470	1,047	3,969
Total	5,383	1,529	6,912	1,463	1,473	2,936	9,848
State Public Safety and Penitentiary							
Female	179	62	241	20	73	93	334
Male	621	171	792	82	189	271	1,063
Total	800	233	1,033	102	262	364	1,397
Teachers							
Female	7,295	1,239	8,534	2,129	714	2,843	11,377
Male	2,421	450	2,871	771	261	1,032	3,903
Total	9,716	1,689	11,405	2,900	975	3,875	15,280
Cement Plant							
Female	0	—	0	7	—	7	7
Male	17	—	17	37	—	37	54
Total	17	—	17	44	—	44	61
Grand Total							
Female	18,697	5,561	24,258	6,146	5,318	11,464	35,722
Male	11,968	3,714	15,682	3,236	2,854	6,090	21,772
Total	**30,665**	**9,275**	**39,940**	**9,382**	**8,172**	**17,554**	**57,494**

Benefit Recipients by Group

	Retirement benefits		Disability benefits		Survivor benefits		Total benefits	
Board of Regents	**2016**	**2015**	**2016**	**2015**	**2016**	**2015**	**2016**	**2015**
Male	1,094	1,064	1	4	27	24	1,122	1,092
Female	572	529	8	8	260	250	840	787
Total	1,666	1,593	9	12	287	274	1,962	1,879
County General								
Male	765	739	18	19	66	56	849	814
Female	922	879	10	11	280	281	1,212	1,171
Total	1,687	1,618	28	30	346	337	2,061	1,985
County Public Safety								
Male	241	233	5	4	4	1	250	238
Female	42	37	1	2	32	31	75	70
Total	283	270	6	6	36	32	325	308
Judicial								
Male	51	49	0	0	0	0	51	49
Female	6	6	0	0	18	18	24	24
Total	57	54	0	0	18	18	75	73
Municipal General								
Male	826	802	26	26	37	35	889	863
Female	611	568	17	15	275	263	903	846
Total	1,437	1,370	43	41	312	298	1,792	1,709
Municipal Public Safety								
Male	487	471	12	12	0	0	499	483
Female	11	10	1	1	91	89	103	100
Total	498	481	13	13	91	89	602	583
Public School & Board of Regents Classified								
Male	1,138	1,084	27	27	186	175	1,351	1,286
Female	3,341	3,153	44	41	338	328	3,723	3,522
Total	4,479	4,237	71	68	524	503	5,074	4,808
State General								
Male	1,998	1,958	25	27	142	134	2,165	2,119
Female	2,039	1,964	48	42	653	646	2,740	2,652
Total	4,037	3,922	73	69	795	780	4,905	4,771
State Public Safety and Penitentiary								
Male	449	428	6	6	2	2	457	436
Female	56	50	3	3	55	56	114	109
Total	505	478	9	9	57	58	571	545
Teachers								
Male	2,513	2,475	12	12	275	270	2,800	2,757
Female	5,483	5,309	22	26	506	491	6,011	5,826
Total	7,996	7,784	34	38	781	761	8,811	8,583
Cement Plant								
Male	187	186	6	7	1	1	194	194
Female	18	18	—	—	30	33	48	51
Total	205	204	6	7	31	34	242	245
Grand Total								
Male	9,749	9,489	138	144	740	698	10,627	10,331
Female	13,101	12,523	154	149	2,538	2,486	15,793	15,158
Total	**22,850**	**22,012**	**292**	**293**	**3,278**	**3,184**	**26,420**[1]	**25,489**[2]

[1] In addition, there are 134 members or beneficiaries as of July 1, 2016, whose benefits are currently suspended, but who are entitled to future benefits.
[2] In addition, there are 167 members or beneficiaries as of July 1, 2015, whose benefits are currently suspended, but who are entitled to future benefits.

Average Benefits Payments
Last 10 Fiscal Years

	Years of credited service							
Retirement effective dates	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30+**	**Average**
Period 7/1/2006—6/30/2007								
Average monthly benefit	1,256	473	620	976	1,516	1,946	2,725	1,582
Average final average salary	35,644	30,282	32,042	34,194	40,863	41,666	48,330	39,401
Number of retired members	55	160	137	151	147	175	319	1,144
Period 7/1/2007—6/30/2008								
Average monthly benefit	812	640	622	905	1,335	1,968	2,741	1,588
Average final average salary	34,087	31,758	31,048	35,318	37,144	43,770	49,329	39,919
Number of retired members	56	137	123	134	164	184	308	1,106
Period 7/1/2008—6/30/2009								
Average monthly benefit	556	696	746	1,019	1,492	1,994	2,637	1,550
Average final average salary	33,520	35,083	35,457	38,381	41,543	46,246	48,688	41,638
Number of retired members	50	180	136	143	175	186	291	1,161
Period 7/1/2009—6/30/2010								
Average monthly benefit	563	558	682	1,010	1,476	1,994	2,683	1,447
Average final average salary	31,782	31,647	33,854	39,245	44,464	46,812	50,377	41,082
Number of retired members	83	227	141	150	170	183	278	1,232
Period 7/1/2010—6/30/2011								
Average monthly benefit	460	761	726	1,051	1,490	1,960	2,278	1,634
Average final average salary	34,708	39,038	37,032	41,887	44,039	46,463	52,846	44,667
Number of retired members	63	155	159	152	194	188	357	1,268
Period 7/1/2011—6/30/2012								
Average monthly benefit	531	521	663	1,092	1,456	1,797	2,805	1,472
Average final average salary	34,604	35,033	35,652	40,892	43,466	44,076	53,602	42,723
Number of retired members	101	241	211	163	213	207	370	1,506
Period 7/1/2012—6/30/2013								
Average monthly benefit	570	531	791	1,014	1,510	1,929	2,592	1,447
Average final average salary	37,141	36,802	40,340	40,122	44,113	47,834	50,276	43,489
Number of retired members	89	237	199	172	204	229	329	1,459
Period 7/1/2013—6/30/2014								
Average monthly benefit	618	565	723	1,021	1,407	1,948	2,746	1,409
Average final average salary	34,927	38,589	38,756	43,057	43,358	46,517	52,059	43,495
Number of retired members	75	229	195	152	159	174	263	1,247
Period 7/1/2014—6/30/2015								
Average monthly benefit	389	533	831	1,138	1,517	1,942	2,807	1,493
Average final average salary	41,146	39,288	41,706	41,238	44,422	48,450	53,088	45,140
Number of retired members	79	240	215	168	188	218	318	1,426
Period 7/1/2015—6/30/2016								
Average monthly benefit	323	392	772	1,025	1,489	2,198	2,802	1,441
Average final average salary	45,322	33,944	41,635	41,269	45,914	53,496	54,154	44,818
Number of retired members	80	211	209	173	167	178	279	1,297

Historical Views

Benefit Recipients and Benefits Paid

Group	2011	2012	2013	2014	2015	2016
Board of Regents	1,539	1,627	1,698	1,792	1,879	1,962
County general	1,697	1,759	1,824	1,890	1,985	2,061
County public safety	227	243	265	283	308	325
Judicial	57	59	66	67	73	75
Municipal general	1,434	1,495	1,556	1,645	1,709	1,792
Municipal public safety	516	528	545	566	583	602
Public school & Board of Regents classified	3,815	4,094	4,299	4,548	4,808	5,074
State general	4,293	4,392	4,547	4,654	4,771	4,905
State public safety & penitentiary	442	463	499	528	545	571
Teachers	7,437	7,748	8,028	8,344	8,583	8,811
Cement Plant	—	—	—	245	245	242
Total benefit recipients	**21,457**	**22,408**	**23,327**	**24,562**	**25,489**[1]	**26,420**[2]
Total benefits paid during period	**$345,942,871**	**$371,417,148**	**$397,620,115**	**$425,823,928**	**$456,297,424**	**$487,053,001**
Average benefits paid during period	**$16,123**	**$16,575**	**$17,045**	**$17,337**	**$17,902**	**$18,435**

Active and Inactive Members

Group	2011	2012	2013	2014	2015	2016
Board of Regents	4,055	4,150	4,308	4,378	4,480	4,640
County general	3,934	3,971	4,004	4,019	4,093	4,213
County public safety	990	1,012	1,058	1,060	1,081	1,137
Judicial	60	61	60	63	60	65
Municipal general	4,328	4,426	4,445	4,549	4,760	5,045
Municipal public safety	949	983	994	1,032	1,104	1,152
Public school & Board of Regents classified	13,181	13,200	13,430	13,802	14,095	14,656
State general	9,415	9,468	9,616	9,678	9,799	9,848
State public safety & penitentiary	1,157	1,221	1,270	1,338	1,378	1,397
Teachers	14,622	14,468	14,591	14,754	15,061	15,280
Cement Plant	—	—	—	91	66	61
Total active and inactive members	**52,691**	**52,960**	**53,776**	**54,764**[3]	**55,977**	**57,494**

[1] In addition, there are 167 members or beneficiaries as of July 1, 2015, whose benefits are currently suspended, but who are entitled to future benefits.
[2] In addition, there are 134 members or beneficiaries as of July 1, 2016, whose benefits are currently suspended, but who are entitled to future benefits.
[3] In addition, there are 179 members or beneficiaries as of July 1, 2014, whose benefits are currently suspended, but who are entitled to future benefits.

Benefit and Expenses by Type

	Benefits					Refunds				
	Retirement benefits	Disability benefits	Survivor benefits	Supp. Pension benefits	Cement Plant benefits	Member refund benefits	Survivor refund benefits	Cement Plant roll-overs	Total benefits & refunds	Admin. expenses
FY 2006	210,773,603	4,269,897	19,782,375	—	—	25,069,548	—	—	259,895,423	2,697,571
FY 2007	228,311,937	4,070,439	21,162,743	—	—	28,777,398	—	—	282,322,518	3,033,519
FY 2008	246,422,506	4,133,578	22,680,683	—	—	28,203,655	—	—	301,440,421	3,352,380
FY 2009	277,258,613	4,116,984	25,393,440	—	—	24,225,249	—	—	330,994,286	3,428,853
FY 2010	294,880,495	4,182,082	26,888,634	—	—	29,148,085	—	—	355,099,296	3,402,075
FY 2011	313,157,736	4,383,174	28,401,961	—	—	25,824,829	—	—	371,767,700	3,575,854
FY 2012	337,290,588	4,084,918	30,041,642	—	—	25,942,146	—	—	397,359,294	3,277,973
FY 2013	360,995,817	4,351,009	32,273,289	—	—	22,407,180	2,753,814	—	422,781,109	3,588,717
FY 2014	383,566,692	4,292,862	33,967,464	28,112	3,968,798	22,085,301	2,581,484	—	450,490,713	3,857,226
FY 2015	411,451,742	4,216,593	36,453,062	44,134	4,131,893	23,267,133	2,396,543	533,771	482,494,871	3,911,222
FY 2016	439,632,445	4,005,759	39,173,616	46,721	4,194,460	21,337,048	2,008,200	98,233	510,496,482	3,944,641

Changes in Net Position

Last 10 Fiscal Years

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Additions										
Member contributions	86,932,782	91,978,502	95,457,518	98,347,135	100,179,938	100,484,113	101,678,721	106,175,381	110,152,580	114,443,295
Employer contributions	85,361,762	89,766,090	94,244,915	96,914,192	98,624,738	98,866,649	100,376,481	112,551,482	109,549,977	114,090,075
Investment income (loss) (net of expenses)	1,426,600,535	(723,013,005)	(1,518,619,609)	1,011,107,887	1,616,173,385	107,541,250	1,466,616,435	1,703,240,824	435,682,659	22,836,265
Total additions (deductions) to plan net position	1,598,895,079	(541,268,413)	(1,328,917,176)	1,206,369,214	1,814,978,061	306,892,012	1,669,552,293	1,921,967,687	655,385,216	251,369,635
Deductions										
Benefit payments	253,545,120	273,236,767	306,769,037	325,951,211	345,942,871	371,417,148	397,620,115	425,823,928	456,297,424	487,053,001
Refunds	28,777,398	28,203,655	24,225,249	29,148,085	25,824,829	25,942,146	25,160,994	24,666,785	26,197,447	23,443,481
Administrative expenses	3,033,519	3,352,380	3,428,853	3,402,075	3,575,854	3,277,973	3,588,717	3,857,226	3,911,222	3,944,641
Total deductions from plan net position	285,356,037	304,792,802	334,423,139	358,501,371	375,343,554	400,637,267	426,369,826	454,347,939	486,406,093	514,441,123
Change in net position	1,313,539,042	(846,061,215)	(1,663,340,315)	847,867,843	1,439,634,507	(93,745,255)	1,243,182,467	1,467,619,748	168,979,123	(263,071,488)

Principal Participating Employers

2016

Participating government	Covered employees	Rank	Percentage of total system
State of South Dakota	8,007	1	20%
Board of Regents	4,566	2	11%
Sioux Falls Schools*	3,146	3	8%
Rapid City Schools	1,822	4	5%
City of Rapid City	760	5	2%
Watertown Schools	701	6	2%
City of Brookings and Hospital	650	7	2%
Pennington County	646	8	2%
Harrisburg Schools	521	9	1%
Minnehaha County	519	10	1%
All Other	18,602		46%
Total (485 governments)	**39,940**		**100%**

* Sioux Falls schools enrolled their classified employees in SDRS in 2006.

2006

Participating government	Covered employees	Rank	Percentage of total system
State of South Dakota	8,023	1	22%
Board of Regents	4,166	2	12%
Rapid City Schools	1,819	3	5%
Sioux Falls Schools	1,628	4	5%
City of Rapid City	674	5	2%
Watertown Schools	599	6	2%
City of Brookings and Hospital	564	7	2%
Pennington County	552	8	1%
Minnehaha County	502	9	1%
Aberdeen Schools	471	10	1%
All Other	17,076		47%
Total (463 governments)	**36,074**		**100%**

Retired Members By Type and Amount of Benefit

As of June 30, 2016

Class A, Class B Public Safety and Judicial

Amount of monthly benefit	Normal	Early Unreduced	Early Reduced	Disability	Survivor of Active Member	Spouse Option	Survivor of Retired Member	Level Income Unreduced	Level Income Reduced
$1—$250	653	126	1,220	9	32	0	462	1	60
$251—$500	758	157	1,619	43	81	0	513	4	132
$501—$750	649	201	1,283	70	73	2	383	15	105
$751—$1,000	476	224	994	28	71	7	301	28	107
$1,001—$1,250	433	395	688	29	43	12	267	61	81
$1,251—$1,500	326	512	461	28	46	20	207	120	76
$1,501—$1,750	268	607	332	31	33	14	167	194	91
$1,751—$2,000	233	707	208	19	20	8	133	246	61
Over $2,000	1,012	4,921	450	29	65	17	270	1,223	127
	4,808	**7,850**	**7,255**	**286**	**464**	**80**	**2,703**	**1,892**	**840**

NOTES

For more information on the South Dakota Retirement System, please contact:

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A comprehensive brochure explaining the system's provisions is available online or upon request.

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