2021

SDRS
SOUTH DAKOTA
RETIREMENT SYSTEM

ANNUAL COMPREHENSIVE FINANCIAL REPORT

A Pension Trust Fund of the State of South Dakota
for the Fiscal Year Ended June 30, 2021

FISCAL YEAR 2021 HIGHLIGHTS

Total membership	94,675
Active contributing members	41,305
Inactive non-contributing members	22,047
Benefit recipients	31,323
Actuarial value of assets	$ 14,632,199,039
Actuarial accrued liability (AAL)	$ 13,865,352,058
Total pension liability	$13,866,370,185
Net position restricted for pension benefits	$14,632,199,039
Net pension liability/(asset)	$ (765,828,854)
Investment return—Gross of fees	22.48%
Investment return—Net of fees	22.03%
Benefits and refunds paid	
Benefits paid	$ 635,766,143
Refunds paid	25,441,901
Total	$ 661,208,044
Contributions	
Member	$ 136,159,404
Employer	136,159,432
Total	$ 272,318,836
Funding period	N/A
Actuarial value funded ratio (actuarial value of assets/AAL)	105.5%
Fair value funded ratio (fair value of assets/AAL)	105.5%

ANNUAL COMPREHENSIVE FINANCIAL REPORT

A Pension Trust Fund of the State of South Dakota
for the Fiscal Year Ended June 30, 2021

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 responsibly manage a financially sustainable system within fixed resources and prepare our members for retirement.

SDRS VISION

To be a model retirement system that is fully funded, delivers benefits that meet our long-term benefit goals, and provides members the foundation to achieve financial security during retirement.

SDRS LONG-TERM BENEFIT GOALS

Retirement Income from SDRS

Lifetime income from SDRS of at least 50 percent of Final Average Compensation (FAC) at normal retirement for career members with credited service of at least 30 years for Class A members, 25 years for Class B Public Safety members, and 20 years for Class B Judicial members.

Proportionate lifetime income from SDRS for members who participate in SDRS for less than a career.

Additional Member Savings

SDRS will educate members of the need for additional savings and will encourage members to accumulate personal savings of at least 100 percent of annual pay at retirement to provide retirement benefits in addition to those provided by SDRS and Social Security.

Total Retirement Income

Educate, advise, and encourage members to plan for retirement by establishing a total retirement income goal based on their unique circumstances and considering benefits available from SDRS, Social Security, and personal savings.

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

CONTENTS

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, 2020

Christopher P. Morrill

Executive Director/CEO

PPCC

Public Pension Coordinating Council

Public Pension Standards Award For Funding and Administration 2021

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

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INTRODUCTION

Letter of Transmittal
Board of Trustees
Organizational Chart

SDRS
SOUTH DAKOTA RETIREMENT SYSTEM

222 East Capitol Avenue, Suite 8 ● PO Box 1098 ● Pierre, SD 57501
Toll-Free (888) 605-SDRS ● Phone (605) 773-3731
Fax (605) 773-3949 ● sdrs.sd.gov

December 21, 2021

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 Annual Comprehensive Financial Report of the South Dakota Retirement System (SDRS) for the fiscal year ended June 30, 2021. 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 Basics

SDRS was established July 1, 1974, as a multiple employer public employee retirement system. The system provides retirement, disability, and survivor benefits to over 94,000 members. SDRS is managed within the resources provided by fixed, statutory member and employer contribution rates. This contribution budget has led to the disciplined management of the plan structure that includes variable benefits and minimum statutory funding thresholds requiring corrective action recommendations if not met. This discipline, together with outstanding historical investment performance, has consistently resulted in SDRS being fully funded—a rare achievement among retirement systems. The system's history of changes in basic plan provisions is shown on pages 13-16.

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 and to add value to 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 22.01 percent for fiscal year 2021 while the time-weighted investment return net of investment expenses was 22.03 percent. The Investment Council's benchmark return was 27.97 percent for the same period. The annualized money-weighted investment return for the 10 years ended June 30, 2021, was 9.11 percent. Additional information can be found starting on page 81.

Funding and Actuarial Measures

The most important measures of a retirement system's sustainability are the funded ratio and the adequacy of contributions to pay for the system's future benefits. The funded ratio is the ratio of system assets at fair value to the system's actuarial accrued liability. Contribution adequacy is judged by comparing actual contributions to the contributions required to fund the ongoing benefit cost of the system plus an amortization of any unfunded actuarial accrued liability, the excess of the system's actuarial accrued liability over the actuarial value of assets.

The June 30, 2021 actuarial valuation confirms SDRS' fair value funded ratio is 105.5 percent, SDRS has no unfunded actuarial accrued liability, and the fixed, statutory contribution rates are adequate to fund the ongoing benefit costs. As of June 30, 2021, SDRS meets the Board of

Trustees' funding objectives:

- A fair value funded ratio of at least 100 percent,
- A fully funded system with no unfunded actuarial accrued liabilities, and
- Actuarially determined variable benefits that are adequately funded by the fixed, statutory contributions.

SDRS is managed by the SDRS Board of Trustees within the resources provided by fixed, statutory contributions through benefit features that vary based on investment returns and affordability (primarily the SDRS Cost of Living Allowance (COLA)). This benefit structure, the Board's funding objectives, and supporting initiatives of the Board have resulted in a sustainable and fully-funded system.

The June 30, 2021 actuarial valuation also establishes the COLA payable beginning July 1, 2022. When the actuarial measures indicate the full COLA range is affordable, the SDRS COLA is equal to inflation, no less than 0 percent and no greater than 3.5 percent. When the full COLA range is unaffordable, the maximum COLA is restricted to the percentage increase that if paid in all future years, results in a fair value funded ratio of at least 100 percent. The June 30, 2021 actuarial valuation indicates the full COLA range is affordable. The July 2022 SDRS COLA will therefore be inflation between 0 percent and 3.5 percent. Inflation for the year was 5.92 percent, making the July 2022 SDRS COLA 3.5 percent.

If future experience matches the actuarial assumptions, the affordable SDRS COLA is expected to remain stable at 2.25 percent and SDRS is expected to remain fully funded.

Major Initiatives

Effective July 1, 2020, the South Dakota Department of Labor and Regulation Employee Retirement Plan merged with SDRS. All retiree and any vested members became Class D members of the South Dakota Retirement System. SDRS will continue to provide the same benefits for the class D members as what they previously received. SDRS received $56.6 million to fully fund the benefits to be paid for these class D retirees.

During fiscal year 2021, the SDRS Board of Trustees continued its focus on planning for future periods of economic uncertainty. The planning and implementation identified steps that can be taken now to expand the economic conditions in which SDRS can meet the statutory funding thresholds and steps that could be considered when those thresholds are not met. In addition, the planning considered conditions in which benefit improvements could be prudently considered and recommended.

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 2021, SDRS retirement planners met with over 3,500 members in one-on-one counseling sessions, group events, and requested visits throughout the state. This number is down from previous years because of the continued challenges of COVID, but SDRS remains committed to its efforts on retirement education.

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 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 Cavanaugh MacDonald Consulting, LLC. The annual financial audit is conducted by the accounting firm of Eide Bailly LLP 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 annual comprehensive financial report for the fiscal year ended June 30, 2020. 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 annual comprehensive 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 26th 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 18th 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 with support from South Dakota Investment Council staff. 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,

Travis W. Almond
Executive Director

Michelle Mikkelsen
Chief Financial Officer

Foundation Member History of Changes in Basic Plan Provisions		
Provision	**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 (less other public benefits)	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
* 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 1982 - 1.0% 1987 - 1.05% 1988 - 1.1% 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 (less other public benefits) 1982 - 1.0% 1987 - 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
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 2017 - 0.5% to 3.5% compound, indexed to CPI-W and based on SDRS funded status 2021 - 0% to 3.5% compound, indexed to CPI-W and based on SDRS funded status

Foundation Member History of Changes in Basic Plan Provisions		
Provision	**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% 2017 - For members whose credited service ends after June 30, 2020, the 5% cap applied to each four quarter period considered in calculation of final average compensation
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 actuarially determined rate dependent on age at purchase and actuarial assumptions
* 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 actuarially determined rate dependent on age at purchase and actuarial assumptions
* 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 actuarially determined rate dependent on age at purchase and actuarial assumptions
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 - 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

Foundation Member History of Changes in Basic Plan Provisions		
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 6.5%; 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 2017 - Final average compensation period extended to five years, with a phase-in period for Foundation members: for credited service ending prior through June 30, 2021: three-year average; for credited service ending after June 30, 2021, but before July 1, 2022: four-year average; for credited service ending after June 30, 2022: five-year average

Generational Member History of Basic Plan Provisions		
Provision	**Status since 2017**	**Benefit Improvements**
Benefit Formula		
* Class A	1.80%	
* Class B Public Safety	2.0%	
* Class B Judicial	3.333% / 2.0%	
Improvement Factor	0.5% to 3.5% compound, indexed to CPI-W and based on SDRS funded status	2021 - 0% to 3.5% compound, indexed to CPI-W and based on SDRS funded status
Early Retirement		
* Class A	Early retirement: age 57 with 5% per year reduction	
* Class B Public Safety	Early retirement: age 47 with 5% per year reduction	
* Class B Judicial	Early retirement: age 57 with 5% per year reduction	
Variable Retirement Account	A flexible benefit credited with up to 1.5% of compensation funded by part of the employer contribution. Investment earnings based on net investment return for fiscal year. Payable upon retirement, disability, or death.	
Spouse Benefit	At retirement, married member may elect single-life benefit or a reduced joint and survivor benefit, with 60% or 100% of the member's benefit continuing to a surviving spouse	

James Johns, Chair
Represents public safety members
Board service began in July 2006
Captain
City of Rapid City
Black Hawk

Karl Alberts
Represents municipal employees
Board service began in July 2011
Finance Officer
City of Aberdeen
Aberdeen

James Appl
Represents teachers
Board service began in July 2017
Public School Teacher
Aberdeen School District
Aberdeen

Annette Brant
Represents county employees
Board service began in July 2020
Chief Deputy Treasurer
Pennington County
Rapid City

Penny Brunken
Represents teachers
Board service began in July 2016
Public School Teacher
Career & Technical Education Academy
Sioux Falls

Liza Clark
Governor's appointee
Board service began in July 2018
Commissioner
Bureau of Finance and Management
Pierre

Matt Clark
Represents South Dakota Investment Council
Board service began in January 2005
State Investment Officer
Non-voting ex-officio board member
Sioux Falls

Kathryn Greeneway
Represents school boards
Board service began in July 2016
Member
Yankton School Board
Yankton

Laurie Gustafson
Represents state employees
Board service began in July 2005
Former Labor Law Compliance Officer
Department of Transportation
Pierre

Eric Stroeder, Vice Chair
Represents state employees
Board service began in July 2004
Engineering Supervisor
Department of Transportation
Glenham

James O. Hansen
Represents retirees
Board service began in July 1993
Retired Administrator
Pierre

Myron Johnson
Represents county commissioners
Board service began in April 2016
Commissioner
Codington County
Watertown

Kevin Merrill
Represents classified employees
Board service began in July 2018
Housing Management Officer
South Dakota Housing Development Authority
Pierre

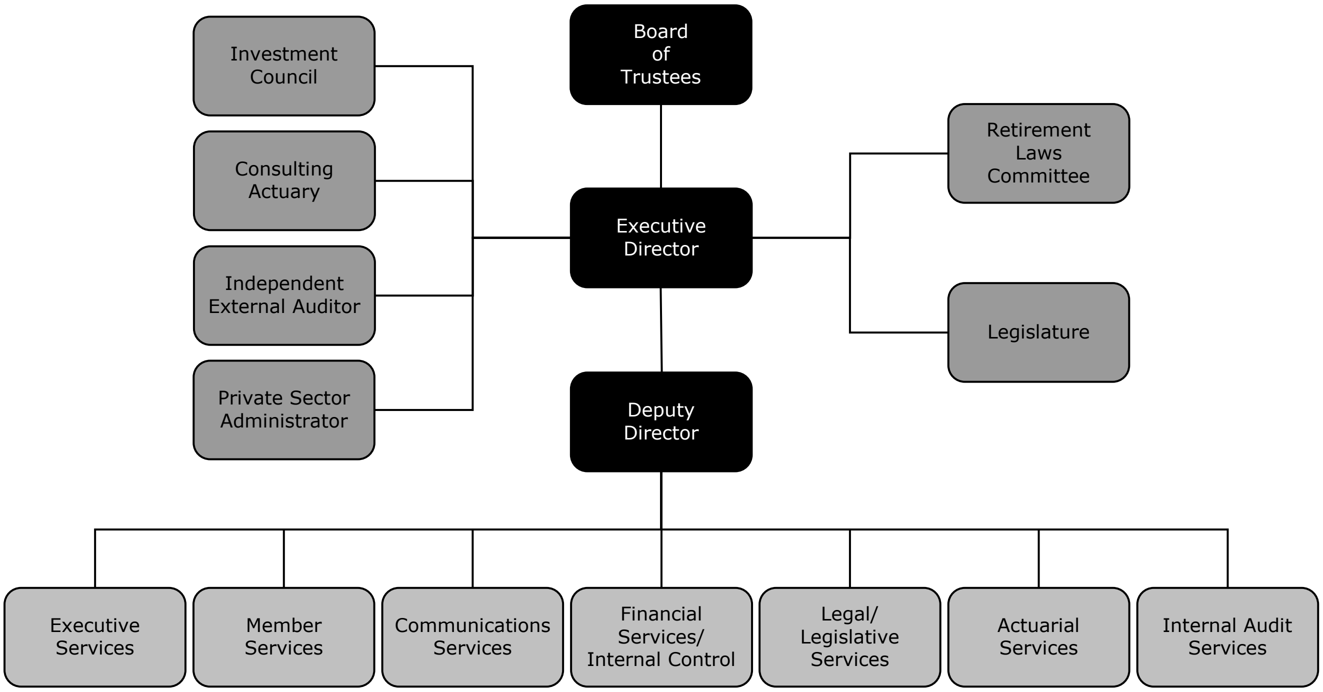
Justice Mark Salter
Represents judicial employees
Board service began in December 2018
Justice
South Dakota Supreme Court
Sioux Falls

Darin Seeley
Governor's appointee
Board service began in December 2019
Commissioner
Bureau of Human Resources
Pierre

Glen Vilhauer
Represents elected municipal officials
Board service began in July 2019
City Council Member
City of Watertown
Watertown

Douglas Wermedal
Represents Board of Regents employees
Board service began in July 2020
Associate Vice President for Student Affairs
South Dakota State University
Volga

ORGANIZATIONAL CHART



Administration

EXECUTIVE DIRECTOR	Travis W. Almond, CRC®
DEPUTY DIRECTOR	Jacquelyn Storm, JD
EXECUTIVE ASSISTANT/ HUMAN RESOURCES MANAGER	Dawn M. Smith, CRC®

Management Group

CHIEF FINANCIAL OFFICER	Michelle Mikkelsen, CRC®
MEMBER SERVICES MANAGER	Michelle Humann, CRC®
SENIOR ACTUARY	Douglas J. Fiddler, ASA, EA, MAAA, FCA
AUDIT MANAGER	Brittnie Adamson, CRC®

Advisors, Auditors, and Administrators

EXTERNAL CONSULTING ACTUARY	Cavanaugh Macdonald Consulting, LLC Naperville, IL
EXTERNAL AUDITOR	Eide Bailly LLP Boise, ID
PRIVATE SECTOR ADMINISTRATOR	Nationwide Retirement Solutions Columbus, OH
RETIREMENT CONSULTANT	R. Paul Schrader Denver, CO
INFORMATION SERVICES	State of South Dakota Bureau of Information and Telecommunications (BIT) Pierre, SD

Schedule of Administrative Expenses is located on page 42. Schedule of Investment Activity Expenses is located on page 85.

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, 2021, 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.

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

Opinion
In our opinion, the financial statements referred to above present fairly, in all material respects, the respective statement of the fiduciary net position of the South Dakota Retirement System, as of June 30, 2021 and 2020, 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.

Emphasis of Matter
As described in Note 2 to the financial statements, the financial statements include investments valued at $3,047,464,485 (20.83 percent 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 23-26 and 39-41 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 22, 2021, on our consideration of 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 solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of SDRS's 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 22, 2021

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, 2021. This section is intended to supplement the SDRS financial statements and should be read in conjunction with the remainder of the SDRS financial statements.

Under SDCL 3-13C, the Department of Labor and Regulation Employee Retirement Plan was approved to be merged in with SDRS. All members of the Department of Labor and Regulation Employee Retirement Plan, including any retiree and any vested member, became Class D members of the South Dakota Retirement System on July 1, 2020. The system will continue to provide the same benefits for the Class D members as what thy previously received.

Financial Highlights

- The fiduciary net position of SDRS increased by $2.3 billion during fiscal year 2021. This increase was primarily due to the investment performance of 22.01 percent, which was above the assumed rate of 6.50 percent.

- SDRS paid $635 million to SDRS benefit recipients in fiscal year 2021 compared to $602 million in 2020.

- SDRS received $272 million in SDRS member and employer contributions in fiscal year 2021 compared to $263 million in 2020.

- SDRS received funds of $56.6 million to fully fund the benefits to be paid for the Department of Labor retirees.

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, 2021, 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 liability (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.

Summary of Fiduciary Net Position

June 30, 2021 and 2020

A summary of the fiduciary net position is shown below:

Assets	**2021**	**2020**
Cash and cash equivalents	$ 8,003,442	$ 5,660,120
Receivables	41,173,887	42,537,740
Investments, at fair value	14,587,723,827	12,262,719,601
Other assets	966,098	1,214,224
Total assets	$14,637,867,254	$12,312,131,685
Liabilities		
Accounts payable and accrued expenses	$ 2,094,518	$ 2,530,060
Unsettled investment purchases	3,573,697	12,263,398
Total liabilities	$ 5,668,215	$ 14,793,458
Net position restricted for pension benefits	$14,632,199,039	$12,297,338,227

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 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.

Income from investments is the other primary source of revenue for SDRS. The actuarial assumed investment rate was 6.5 percent at June 30, 2021. The net investment returns were 22.0 percent for 2021 and 1.6 percent for 2020.

Deductions from fiduciary net position are primarily benefit payments. During 2021, SDRS paid $635 million to benefit recipients or 5.5 percent more than 2020. The increase is due to the annual cost-of-living adjustment, which was 1.56 percent in July 2020, and additional annuitants. Refunds of accumulated contributions during 2021 increased 8.5 percent. Administrative costs of SDRS decreased 4.3 percent during 2021.

Summary of Changes in Fiduciary Net Position
June 30, 2021 and 2020

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

	2021	2020	% Change
Additions:			
Employee contributions	$ 136,159,404	$ 131,541,783	3.5%
Employer contributions	136,159,432	131,681,949	3.4
Transfer in from a related plan	56,528,426	—	—
Investment income	2,672,026,722	192,238,245	1,290.0
Total additions	3,000,973,984	455,461,977	558.9
Deductions:			
Benefits	635,766,143	602,352,394	5.5
Refunds of contributions	25,441,901	23,443,984	8.5
Administrative expenses	4,905,128	5,127,029	(4.3)
Total deductions	666,113,172	630,923,407	5.6
Net change in net position	2,334,860,812	(175,461,430)	(1,430.7)
Plan net position restricted for pension benefits:			
Beginning of year	12,297,338,227	12,472,799,657	(1.4)
End of year	$14,632,199,039	$12,297,338,227	19.0%

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.

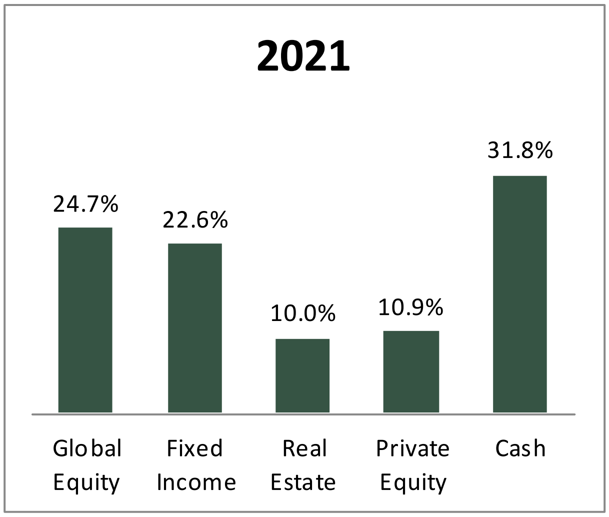
Net investment performance during 2021 and 2020 was 22.0 percent and 1.6 percent, respectively.

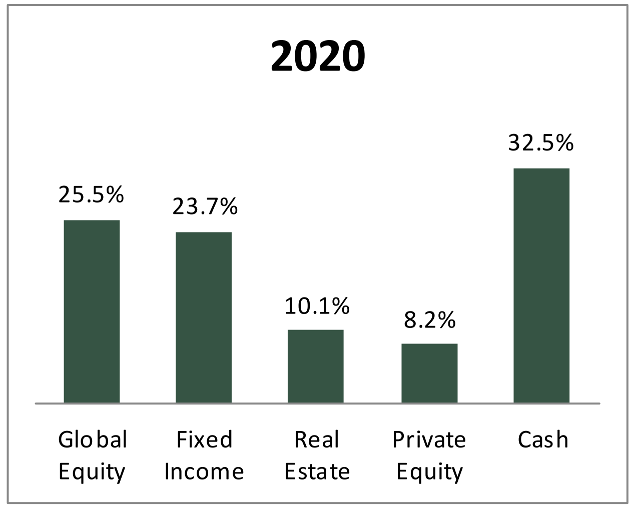
The Investment Council is governed by the prudent-man standard, as defined in South Dakota Codified Law §4-5-27:

> §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, 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.

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 sdrs.sd.gov.

Statement of Fiduciary Net Position
June 30, 2021

Assets	
Cash and cash equivalents	**$8,003,442**
Receivables:	
Employer	2,823,790
Employee	3,014,855
Benefits	177,323
Unsettled investment sales	5,809,943
Accrued interest and dividends	29,347,976
Total receivables	**41,173,887**
Investments, at fair value:	
Equities	6,916,819,291
Fixed income	4,623,440,051
Real estate	1,460,213,362
Private equity	1,587,251,123
Total investments, at fair value	**14,587,723,827**
Assets used in plan operations, at cost (net of accumulated depreciation of $1,122,108)	943,806
Other assets	22,292
Total assets	**14,637,867,254**
Liabilities	
Accounts payable and accrued expenses	2,094,518
Unsettled investment purchases	3,573,697
Total liabilities	**5,668,215**
Net position restricted for pension benefits	**$14,632,199,039**

See accompanying notes to financial statements.

Statement of Changes in Fiduciary Net Position
Year Ended June 30, 2021

Additions	
Contributions:	
Employee	$136,159,404
Employer	136,159,432
Transfer in from a related plan	56,628,426
Total contributions	**$328,947,262**
Investment income	
From investing activities:	
Net appreciation in fair value of investments	2,483,952,779
Net increase in transfer in from a related plan	89,284
Interest	72,950,513
Dividends	131,370,464
Real estate	31,581,348
Investment activity income	2,719,944,388
Less investment activity expenses	(48,347,938)
Net investment activity income	**2,671,596,450**
From security lending activities:	
Security lending income	614,229
Security lending expenses	(183,957)
	430,272
Total additions	**3,000,973,984**
Deductions	
Benefits	635,766,143
Refunds of contributions	25,441,901
Administrative expenses	4,905,128
Total deductions	**666,113,172**
Net change in net position	**2,334,860,812**
Net position restricted for pension benefits	
Beginning of year	**12,297,338,227**
End of year	**$14,632,199,039**

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) 3-12C.

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 four classes of members: Class A general members, Class B public safety and judicial members, Class C Cement Plant Retirement Fund members, and Class D Department of Labor and Regulation 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.

Members that were hired before July 1, 2017, are Foundation members. Class A Foundation members and Class B Foundation judicial members who retire after age 65 with three years of contributory service are entitled to an unreduced annual retirement benefit. An unreduced annual retirement benefit is also available after age 55 for Class A Foundation members where the sum of age and credited service is equal to or greater than 85 or after age 55 for Class B Foundation judicial members where the sum of age and credited service is equal to or greater than 80. Class B Foundation 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 Foundation public safety members where the sum of age and credited service is equal to or greater than 75. All Foundation retirement benefits that do not meet the above criteria may be payable at a reduced level. Class A and B eligible spouses of Foundation members will receive a 60 percent joint survivor benefit when the member dies.

Members that were hired on/after July 1, 2017, are Generational members. Class A Generational members and Class B Generational judicial members who retire after age 67 with three years of contributory service are entitled to an unreduced annual retirement benefit. Class B Generational public safety members can retire with an unreduced annual retirement benefit after age 57 with three years of contributory service. At retirement, married Generational members may elect a single-life benefit, a 60 percent joint and survivor benefit, or a 100 percent joint and survivor benefit. All Generational retirement benefits that do not meet the above criteria may be payable at a reduced level. Generational members will also have a variable retirement account (VRA) established, in which they will receive up to 1.5 percent of compensation funded by part of the employer contribution. VRAs will receive investment earnings based on investment returns.

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 Cement Plant provides for disability payments for those disabled on or before March 16, 2001. All members of the Cement Plant Retirement Plan on March 15, 2001, were 100 percent vested. Class C members may elect a single-life benefit, or joint and survivor benefits as described in their plan documents.

Legislation enacted in 2017 established the current COLA process. At each valuation date:

- Baseline actuarial accrued liabilities will be calculated assuming the COLA is equal to the long-term inflation assumption of 2.25 percent.
- If the fair value of assets is greater or equal to the baseline actuarial accrued liabilities, the COLA will be:
    - The increase in the 3rd quarter CPI-W, no less than 0.5 percent and no greater than 3.5 percent.
- If the fair value of assets is less than the baseline actuarial accrued liabilities, the COLA will be:
    - The increase in the 3rd quarter CPI-W, no less than 0.5 percent and no greater than a restricted maximum such that, that if the restricted maximum is assumed for future COLAs, the fair value of assets will be greater or equal to the accrued liabilities.

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 as of June 30, 2021. 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 Annual Comprehensive Financial Report.

As of June 30, 2021, the number of participating governmental employers is as follows:

School Districts	164
State of South Dakota	1
Board of Regents	1
Municipalities	168
Counties	65
Boards and Commissions	103
Total employers	**502**

At June 30, 2021, SDRS membership consists of the following:

Retirees and beneficiaries currently receiving benefits:	
Class A (general employees)	28,911
Class B (public safety and judicial employees)	2,020
Class C (cement plant employees)	231
Class D (Department of Labor employees)	161
Total retirees and beneficiaries	**31,323**
Terminated members entitled to benefits but not yet receiving them:	
Class A (general employees)	20,723
Class B (public safety and judicial employees)	1,293
Class C (cement plant employees)	30
Class D (Department of Labor employees)	1
Total terminated members	**22,047**
Current active members:	
Vested:	
Class A (general employees)	29,701
Class B (public safety and judicial employees)	2,471
Class C (cement plant employees)	11
Class D (Department of Labor employees)	2
Non-vested:	
Class A (general employees)	8,270
Class B (public safety and judicial employees)	850
Total current active members	**41,305**
Grand total	**94,675**

* There are 74 Class A and 6 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 included 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 Governmental Accounting Standards Board (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 United States Dollars (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 $3,227,162,115 (22.06 percent of net position) at June 30, 2021. The estimated fair value of these investments may differ significantly from values that would have been used had a ready market existed.

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.

The arithmetically calculated money-weighted return net of fees was 22.01 percent in 2021. The 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 during that period. The rate of return equates the sum of weighted external cash flows into and out of pension plan investments to the ending fair value of the pension plan investment.

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.

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	6.0% of salary
Class B public safety members	8.0% of salary
Class B judicial members	9.0% 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 unfunded actuarial accrued liability (UAAL) if the System is not fully funded. The June 30, 2021, actuarial valuation of the plan determined that the System is fully funded and that the statutorily required employer contributions meet the requirements for the annual required contributions of the employers under GASB 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. 68, *Accounting and Financial Reporting for Pensions.*

Contributions during fiscal year 2021 totaling $272,318,836 ($136,159,404 employee, $136,159,432 employer) were made in accordance with statutory rates. The employer contributions exceed the employee contributions due to the effect of SDCL 3-12C-1405, which governs the contributions of retired members who enter covered employment. Contributions for the last 5 fiscal years are as follows:

Year ending June 30	Employer	% Contributed
2021	$136,159,432	100%
2020	131,681,949	100
2019	127,572,348	100
2018	124,734,270	100
2017	121,907,646	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
2022	$57,667
2023	39,935
2024	34,434
2025	26,596
2026	26,544
Later	39,066
Deferred contributions receivable at June 30, 2021	$224,242

4) Net Pension Liability (Asset) of the System

The components of the net pension liability (asset) of the System at June 30, 2021, was as follows:

Total pension liability	$ 13,866,370,185
Plan fiduciary net position	(14,632,199,039)
Net pension liability (asset)	$ (765,828,854)
Fiduciary net position as a percentage of net pension liability	105.5%

Actuarial Assumptions—The total pension liability was determined by an actuarial valuation as of June 30, 2021, using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.25%
Salary increases	6.50% at entry to 3.0% after 25 years of service
Discount rate	6.50%, net of pension plan investment expenses
Future COLAs	2.25%

Mortality rates were based on 97 percent of the RP-2014 Mortality Table, adjusted to 2006 and projected generationally with Scale MP-2016, white collar rates for females and total dataset rates for males. Mortality rates for disabled members were based on the RP-2014 Disabled Retiree Mortality Table, adjusted to 2006 and projected generationally with Scale MP-2016.

The actuarial assumptions used in the June 30, 2021, valuation were based on the results of an actuarial experience study for the period of July 1, 2011, to June 30, 2016.

Discount Rate—The discount rate used to measure the total pension liability was 6.50 percent. 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 6.50 percent, as well as what the System's net pension (asset) liability would be if it were calculated using a discount rate that is 1 percent point lower (5.50 percent) or 1 percent point higher (7.50 percent) than the current rate:

	1% Decrease	Current Discount Rate	1% Increase
System's net pension (asset)/liability	$1,240,067,447	$(765,828,854)	$(2,394,149,716)

5) Cash and Investments

Cash and Cash Equivalents
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 U.S. 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 +5 calendar days basis. All portfolios as of June 30, 2021, meet policy guidelines. These deposits are not collateralized or covered by depository insurance. As a result, $8,175,376 was exposed to custodial credit risk, which is 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 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, 2021, (see the discussion of the pension plan's investment policy) are

summarized in the following table using geometric means:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Global equity	58%	4.3%
Fixed income	30%	1.6%
Real estate	10%	4.6%
Cash	2%	0.9%
	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	$8,202,263,320	$10,337,879,320
Ares	2,310,123	966,973
Blackstone Capital Partners	101,906,536	192,662,616
Blackstone Energy Partners	76,557,792	95,907,167
Blackstone Real Estate	819,294,864	1,018,236,759
Bridgewater	36,742,005	92,737,723
Brookfield	55,904,373	65,604,071
Capital International	34,522,053	37,818,315
Carlyle	66,885,587	144,941,911
Cinven	148,564,625	225,635,170
CVC	100,675,864	129,561,483
CVI	14,178,226	112,143
Cypress Merchant Banking	21,515	21,515
Dimensional Fund Advisors, Inc.	18,604,630	86,922,908
Doughty Hanson Private Equity	147,584	603,768
Encap Energy	18,308,513	18,538,859
KKR Associates	834,840	357,677
Lone Star Real Estate	102,640,464	90,600,463
Pinebridge	3,506,301	4,961,050
Riverstone	191,037,289	140,283,675
Rockpoint Real Estate	106,028,053	129,195,264
Sanders Capital	95,449,755	151,281,086
Silver Lake	285,797,101	595,957,917
Starwood Real Estate	146,813,101	155,609,832
TCW	807,909,789	871,326,162
Total	**$11,436,904,303**	**$14,587,723,827**

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 FTSE 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. Treasury Bills	$710,899,167	0.33
U.S. Treasury STRIPS	407,863,408	8.58
U.S. Agencies	35,105,913	5.76
Investment Grade Corporates	433,149,540	4.93
High-Yield Corporates	447,761,733	2.85
Agency Mortgage-Backed Securities	308,132,849	4.53
Non-Agency Mortgage-Backed Securities	824,055,923	0.59
Term Loans	7,143,405	2.19
Total	**$3,174,111,938**	2.91

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, 2021, 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	$1,528,273,982
Aa	136,392,276
A	151,290,415
Baa	168,855,518
Ba	235,001,255
B	261,063,213
Caa	179,895,417
Ca	190,847,639
C	19,845,465
Unrated	346,793,161
Total	**$3,218,258,341**

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, 2021 (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, 2021, is as follows (in U.S. dollar fair value):

Currency	Equities	Cash	Total
Australian Dollar	$ 17,394,369	$ 879,228	$ 18,273,597
British Pound	265,099,004	896,009	265,995,013
Canadian Dollar	109,892,763	336,035	110,228,798
Danish Krone	6,777,202	47,459	6,824,661
Euro	512,747,076	4,353,590	517,100,666
Hong Kong Dollar	10,931,340	232,425	11,163,765
Japanese Yen	212,551,382	1,410,413	213,962,095
South Korean Won	134,380,879	—	134,380,879
Norwegian Krone	1,504,744	16,954	1,521,698
Singapore Dollar	1,637,118	—	1,637,118
Swedish Krona	2,179,268	2,964	2,182,232
Swiss Franc	206,467,408	—	206,467,408
Thai Baht	1,459,488	—	1,459,488
Total fair value	**$1,483,022,041**	**$8,175,377**	**$1,491,197,418**

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, 2021, was $3,047,464,485. The total fair value of global equity, hedge funds, and high-yield fixed income investments managed by external managers was $86,922,907, $92,737,723, and $112,143, respectively.

e) Return on Investments
During fiscal year 2021, SDRS's investments (including investments bought and sold, as well as held during the year) appreciated in value by $2,483,952,779.

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	$1,851,247,600
Fixed income	117,917,368
Real estate	174,543,457
Private equity	504,031,051
Change in accrued income	3,444,672
Total decrease in fair value	**2,651,184,148**
Realized gain (loss) on investments:	
Equities	611,629,756
Fixed income	4,971,029
Real estate	97,087,139
Private equity	81,078,222
Total net realized gains	**794,766,146**
Futures—change in unrealized gain (loss)	(32,150,006)
Futures—realized gain (loss)	(929,847,509
Net loss on futures	**(961,997,515)**
Net appreciation in investments	**$2,483,952,779**

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. 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, 2021, was $170,358,104 and the collateral held on the same date was $174,601,407. SDRS has no credit risk exposure to borrowers because the amounts the SDRS owes the borrowers exceed the amounts the borrowers owe SDRS. The contract with the lending agent requires the agent to indemnify 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 SDRS or the borrower. 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, 2021, 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	06/30/21	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. Treasury Bills	$ 710,899,167	$ —	$ 710,899,167	$ —
U.S. Treasury STRIPS	407,863,408	—	407,863,408	—
U.S. Agencies	35,105,913	—	35,105,913	
Investment Grade Corporates	433,149,540	—	433,149,540	—
Term Loans	7,143,405	—	—	7,143,405
High Yield Corporates	447,761,733	—	447,761,733	—
Agency Mortgage-Backed Securities	308,132,849	—	308,132,849	—
Non-Agency Mortgage-Backed Securities	824,055,923	—	824,055,923	—
Total fixed income securities	3,174,111,938	—	3,166,968,533	7,143,405
Equity securities				
Domestic Stock	4,524,038,410	4,524,038,410	—	—
Depository Receipts	98,360,924	98,360,924	—	—
ETF-Exchange Traded Funds	828,685,530	828,685,530	—	—
International Stock	1,483,022,043	1,483,022,043	—	—
Preferred Stock	355,850	—	355,850	
Stock Warrants	1,479,544	1,479,544	—	—
Total equity securities	6,935,942,301	6,935,586,451	355,850	—
Total investments by fair value level	**$ 10,110,054,239**	**$ 6,935,586,451**	**$ 3,167,324,383**	**$ 7,143,405**
Investments measured at the net asset value (NAV)				
Short Term Investment Funds	1,241,456,544			
Emerging Markets Small Cap Equity Mutual Funds	86,922,908			
Multi Strategy Hedge Funds	92,737,723			
Alternative Investments				
Real Estate Funds	1,460,213,362			
Private Equity Funds	1,587,251,123			
Other Funds	112,143			
Total Alternative Investments	3,047,576,628			
Investments, measured at NAV	**$ 4,468,693,803**			
Total Investments measured at fair value	$14,578,748,042			
Plus: Cash held by Fund Managers	8,444,448			
Less: GL of FX Transactions	63,823			
Plus: Accrued Interest Purchased	500,550			
Less: Accrued Monthly Interest	(33,036)			
	14,587,723,827			
Investment derivative instruments				
Foreign Exchange Forward Contracts (liability)	63,823	—	63,823	—
Total investment derivative instruments	**$ 63,823**	**$ —**	**$ 63,823**	**$ —**

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. Securities classified in Level 2 of the fair value hierarchy include valuations using quoted prices for a similar security in active markets, and using observable inputs other than quoted prices for identical securities.

Debt 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 various pricing vendors/brokers for these securities. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Securities classified in Level 3 of the fair value hierarchy include valuations determined by management based on unobservable inputs.

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, 2021.

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 2 of the fair value 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, 2021.

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		Unfunded Commitments	Redemption Frequency (if currently eligible)	Redemption Notice Period
Short-Term Investment Funds (a)	$1,241,456,544		Daily	0 days
Emerging Markets Small Cap Equity Mutual Funds (b)	86,922,908		Daily	1 day
Multi Strategy Hedge Funds (c)	92,737,723		Monthly	5-30 days
Alternative Investments				
Real Estate Funds (d)	1,460,213,362	$1,069,684,890		
Private Equity Funds (e)	1,587,251,123	689,584,252		
Other Funds (f)	112,143			
Investments measured at net asset value (NAV)	$4,468,693,803			

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 27 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 35 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 one other alternative investment that is a hybrid private equity hedge fund that invests primarily in a broad range of debt, debt-related, and/or real estate-related investments. The fair values 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 year. 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 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 South Dakota Investment Council 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, 2021, S&P 500 futures and 10-year U.S. Treasury note futures were utilized. Upon entering into such a contract, 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 change in fair value of the futures 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 futures contracts for fiscal year ended June 30, 2021, was $(961,997,515).

Futures contract positions at June 30, 2021, were as follows:

Description	Expiration Date	Open position	Number of contracts	Notional contract size	Fair value
U.S. Treasury note	Sept 2021	Long	4,800	100,000 par value 6%, 10-year U.S. Treasury note	$636,000,000
S&P 500 Index	Sept 2021	Short	15,840	$50 x S&P 500 Index	$(3,396,571,200)

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, 2021, was $(59,565). At June 30, 2021, the foreign currency forward contracts outstanding were as follows:

Description	Notional amount	Currency	Maturity date	Fair value (US dollars)
Forward sale	$ (4,597,043)	CHF	8/5/2021	$ 63,823

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, 2021, the net fair value of foreign currency forward contracts was $63,823. This represents the maximum loss that would be recognized at the reporting date if all counterparties failed to perform as contracted.

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 $0.

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, 2021, a liability existed for accumulated annual leave calculated at the employees' June 30, 2021, pay rate in the amount of $200,946. 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, 2021, a liability existed for accumulated and accrued sick leave, calculated at the employees' June 30, 2021, pay rate in the amount of $182,351.

	2021	2020	% change
Total compensated absences	$383,297	$392,298	(2.29)%

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

SDRS has entered into an agreement to lease office space effective June 2021 and has a term of ten years. A schedule of minimum office rental payments as of June 30, 2021, is as follows for the fiscal years ending June 30:

2022	$ 148,728
2023	156,128
2024	156,128
2025	156,128
2026	156,128
Thereafter	624,512
Total remaining minimum payments	$ 1,397,752

Lease expense for the year ending June 30, 2021, was $149,624.

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 $585,994,366 net position restricted for plan benefits at June 30, 2021, $352,452,913 was held in trust for employees of the State, while the remaining $233,541,453 represents the assets held in trust for employees of other jurisdictions.

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 $73,663,216 net position restricted for plan benefits at June 30, 2021, $40,256,903 was held in trust for employees of the State, while the remaining $33,406,313 represents the assets held in trust for employees of other jurisdictions.

11) Plan Termination

SDRS is administered in accordance with South Dakota statutes. The statutes provide for full vesting in accrued benefits upon termination of the plan (SDCL 3-12C-221).

12) Commitments

At June 30, 2021, SDRS had uncalled capital commitments to private equity limited partnerships totaling approximately $689,584,251 and to real estate limited partnerships totaling approximately $1,069,684,890. 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 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. 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. All claims against the former Tribune shareholders (defendants) have been dismissed. The FitzSimmons litigation was dismissed in January 2017; however, there is an ongoing appeal in the Second Circuit. The Noteholder litigation was dismissed in 2013 and affirmed by the Second Circuit. The Noteholders sought review by the U.S. Supreme Court and the shareholders opposed the Noteholders' petition for writ of certiorari. The U.S. Supreme Court denied the Noteholder's certiorari petition challenging the Second Circuit's 2019 decision affirming dismissal of the constructive fraudulent conveyance claims brought by the Noteholders against former Tribune Shareholders. The Second Circuit issued an opinion affirming the District Court's dismissal of the intentional fraudulent conveyance claims against the Tribune shareholders and its refusal to allow the Trustee leave to amend the complaint to include a constructive fraudulent conveyance claim. It is expected that the Trustee will file another certiorari petition with the U.S. Supreme Court, but given that the last certiorari petition was denied it is unlikely the U.S. Supreme Court will accept this case. The pending legal action does not represent an immediate negative contingency.

14) New Accounting Pronouncements

During the year ended June 30, 2021, SDRS implemented GASB Statement No. 84, *Fiduciary Activities*, as amended by GASB Statement No. 97, *Certain Component Unit Criteria and Accounting and Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans*. The effective date of GASB No. 97 for these provisions is for periods beginning after June 15, 2021. However, SDRS has chosen to implement the provisions early because it will enhance relevancy.

SDRS is a cost-sharing multiple employer defined benefit pension plan of the State. Because the State approves the SDRS budget and there is a financial benefit/burden relationship, the SDRS pension plan is a fiduciary component unit of the State. The Supplemental Retirement Plan (SRP) and the Special Pay Plan (SPP) are separate irrevocable trusts from SDRS, as further explained by GASB's Implementation Guide Update (IGU) 2021-1, question 4.3, it is the view that neither the State or SDRS have control of the funds of SRP and SPP and therefore, they are not considered fiduciary component units. Should participants and other interested parties to SRP and SPP desire further information on SRP and SPP, SDRS will continue to produce separate audit reports of SRP and SPP, subject to the SDRS Board of Trustees discretion.

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

	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability								
Service cost	$ 228,793,696	$ 237,264,711	$ 233,802,396	$ 222,709,592	$ 192,682,191	$ 184,923,317	$ 179,349,820	$ 161,697,696
Interest	795,666,742	805,447,155	791,288,656	752,702,794	781,413,919	745,774,586	712,632,857	633,951,211
Changes in benefit terms	—	2,246,202	—	—	(567,079,980)	—	—	(5,082,771)
Differences between expected and actual experience	30,918,486	6,447,338	(6,190,846)	5,220,615	97,593,700	78,645,840	55,821,847	78,328,269
Changes of assumptions	1,134,566,674	(594,816,177)	(193,660,111)	181,931,669	820,191,401	—	—	604,281,184
Cement Plant consolidation	—	—	—	—	—	—	—	60,649,185
Department of Labor and Regulation Plan Merger	44,637,384	—	—	—	—	—	—	—
Benefit payments, including refunds	(661,208,044)	(625,796,378)	(596,424,723)	(564,141,147)	(541,090,032)	(510,496,482)	(482,494,871)	(450,490,712)
Net change in total pension liability	**$ 1,573,374,938**	**$ (169,207,149)**	**$ 228,815,372**	**$ 598,423,523**	**$ 783,711,199**	**$ 498,847,261**	**$ 465,309,653**	**$ 1,083,334,062**
Total pension liability—beginning	**12,292,995,247**	**12,462,202,396**	**12,233,387,024**	**11,634,963,501**	**10,851,252,302**	**10,352,405,041**	**9,887,095,388**	**8,803,761,326**
Total pension liability—ending	**$ 13,866,370,185**	**$ 12,292,995,247**	**$ 12,462,202,396**	**$ 12,233,387,024**	**$ 11,634,963,501**	**$ 10,851,252,302**	**$ 10,352,405,041**	**$ 9,887,095,388**
Plan fiduciary net position								
Contributions—employer	136,159,432	131,681,949	127,572,348	124,734,270	121,907,646	114,090,075	109,549,977	104,952,985
Contributions—member	136,159,404	131,541,783	127,454,956	124,262,387	122,144,961	114,443,295	110,152,580	106,175,381
Net investment income	2,672,026,722	192,238,245	583,573,718	911,695,475	1,431,977,414	22,836,265	435,682,659	1,695,543,796
Benefit payments, including refunds	(661,208,044)	(625,796,378)	(596,424,723)	(564,141,147)	(541,090,032)	(510,496,482)	(482,494,871)	(450,490,712)
Administrative expense	(4,905,128)	(5,127,029)	(5,095,897)	(4,870,334)	(4,363,512)	(3,944,641)	(3,911,222)	(3,853,073)
Cement Plant consolidation	—	—	—	—	—	—	—	69,519,407
Department of Labor and Regulation Plan Merger	56,628,426	—	—	—	—	—	—	—
Net change in plan fiduciary net position	**2,334,860,812**	**(175,461,430)**	**237,080,402**	**591,680,651**	**1,130,576,477**	**(263,071,488)**	**168,979,123**	**1,521,847,784**
Plan fiduciary net position—beginning	**12,297,338,227**	**12,472,799,657**	**12,235,719,255**	**11,644,038,604**	**10,513,462,127**	**10,776,533,615**	**10,607,554,492**	**9,085,706,708**
Plan fiduciary net position—ending	**$ 14,632,199,039**	**$ 12,297,338,227**	**$ 12,472,799,657**	**$ 12,235,719,255**	**$ 11,644,038,604**	**$ 10,513,462,127**	**$ 10,776,533,615**	**$ 10,607,554,492**
System's net pension liability (asset)—ending	**$ (765,828,854)**	**$ (4,342,980)**	**$ (10,597,261)**	**$ (2,332,231)**	**$ (9,075,103)**	**$ 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

	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability	$13,866,370,185	$12,292,995,247	$12,462,202,396	$12,233,387,024	$11,634,963,501	$ 10,851,252,302	$ 10,352,405,041	$ 9,887,095,388
Plan fiduciary net position	14,632,199,039	12,297,338,227	12,472,799,657	12,235,719,255	11,644,038,604	10,513,462,127	10,776,533,615	10,607,554,492
System's net pension liability (asset)	$ (765,828,854)	$ (4,342,980)	$ (10,597,261)	$ (2,332,231)	$ (9,075,103)	$ 337,790,175	$ (424,128,574)	$ (720,459,104)
Plan fiduciary net position as a percentage of the total pension liability	105.52%	100.04%	100.09%	100.02%	100.08%	96.89%	104.10%	107.29%
Actuarial projected covered payroll	$2,186,209,401	$2,115,630,733	$2,048,204,895	$2,001,885,527	$1,954,735,217	$1,829,641,009	$1,758,315,755	$1,685,627,785
System's net pension liability (asset) as a percentage of covered payroll	-35.030%	-0.205%	-0.517%	-0.117%	-0.464%	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

	2021	2020	2019	2018	2017	2016	2015	2014
Actuarially determined contribution	$ 136,159,432	$ 131,681,949	$ 127,572,348	$ 124,734,270	$ 121,907,646	$ 114,090,075	$ 109,549,977	$ 103,483,647
Contributions in relation to the actuarially determined contribution	136,159,432	131,681,949	127,572,348	124,734,270	121,907,646	114,090,075	109,549,977	104,952,985
Contribution deficiency (excess)	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ (1,469,338)
Reported covered payroll	$2,186,209,401	$2,115,630,733	$2,048,204,895	$2,001,885,527	$1,954,735,217	$1,829,641,099	$1,758,315,755	$1,685,627,785
Contributions as a percentage of covered payroll	6.228%	6.224%	6.228%	6.231%	6.237%	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

	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Annual money-weighted rate or return, net of investment expenses	22.01%	1.56%	4.84%	7.95%	13.84%	0.21%	4.17%	18.91%	19.01%	1.37%
Annual time-weighted rate or return, net of investment expenses	22.03%	1.59%	4.88%	7.94%	13.81%	0.30%	4.18%	18.90%	19.02%	1.45%

See Notes to Required Supplementary Information.

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, 2021
Amortization method	Level percentage of pay
Actuarial cost method	Entry age normal
Remaining amortization period	0 years
Asset valuation method	Effective with the June 30, 2017 valuation, the actuarial value of assets is equal to the fair value of assets
Actuarial assumptions:	
Investment rate of return	6.50%
Projected salary increases	6.50% at entry to 3.00% after 25 years of service
Future COLAs	2.25%
Post-retirement mortality table:	
Active members	97% of RP-2014, adjusted to 2006 and projected generationally with Scale MP-2016, white collar rates for females and total dataset rates for males
Healthy inactive members, retired members and beneficiaries	97% of RP-2014, adjusted to 2006 and projected generationally with Scale MP-2016, white collar rates for females and total dataset rates for males
Disabled inactive and retired members	RP-2014 Disabled Mortality Table, adjusted to 2006 and projected generationally with Scale MP-2016

Schedule of Administrative Expenses
Year Ended June 30, 2021

Personal services	Accrual Basis
Salary and per diem	$2,116,071
Employee benefits	619,110
Total personal services	2,735,181
Operating expenses	
Travel	10,193
Contractual services:	
Audit	115,415
Valuations	14,000
Consulting	77,729
Legal	25,971
Communications	560
Operations	1,034,367
Total contractual services	1,268,042
Supplies and materials	430,830
Capital assets	460,882
Total operating expenses	2,169,947
Total administrative expenses	**$4,905,128**

Schedule of Investment Activity Expenses
Year Ended June 30, 2021

Investment category	
Fixed Income	$13,273,758
Equity	589,944
Real Estate	18,386,916
Private Equity	16,097,320
Total investment activity expenses	**$48,347,938**

CPAs & BUSINESS ADVISORS

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, 2021, and the related notes to the financial statements, and have issued our report thereon dated October 22, 2021.

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) as a basis for designing 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 financial statements. 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*.

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 22, 2021

Actuarial Summary

222 East Capitol Avenue, Suite 8 ● PO Box 1098 ● Pierre, SD 57501
Toll-Free (888) 605-SDRS ● Phone (605) 773-3731
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October 14, 2021

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, 2021.

The purposes of this report are to:

- Determine if the funded status of SDRS is at least 100% assuming future COLAs are equal to the baseline COLA assumption of 2.25% and if not, to determine the restricted maximum COLA that results in a funded status of 100%
- Determine the 2022 SDRS COLA as defined in South Dakota Codified Law (SDCL)
- Determine the funded status of SDRS as of June 30, 2021
- Confirm that the fixed, statutory Member and Employer contributions are the Actuarially Determined Contributions (ADC)
- Determine if corrective action recommendations are required to be made to the Retirement Laws Committee in accordance with SDCL 3-12C-228
- Provide accounting information under Governmental Accounting Standards Board Statements No. 67 and 68 (GASB 67 and 68)
- Identify, assess, and disclose risks to future SDRS funding.

This Actuarial Valuation is based on financial and Member data provided by SDRS staff and summarized in this report. I did not audit 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, 2021 have been considered in this Actuarial Valuation. SDRS benefit provisions, Member data, and trust information are summarized in the sections that follow. June 30, 2021 assets, liabilities, and member counts include those of the Department of Labor and Regulation Plan which was merged into SDRS in accordance with Senate Bill 9 enacted during the 2020 Legislative Session and effective July 1, 2020. No adjustments for events after the June 30, 2021 measurement date have been included.

The actuarial assumptions and methods used in this valuation meet the parameters set by the Actuarial Standards of Practice maintained by the Actuarial Standards Board for assessing the funded status of SDRS. 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 Entry Age actuarial cost method. The Actuarial Value of Assets is equal to the Fair Value of Assets. The undersigned believes the assumptions are, individually and in the aggregate, reasonably related to experience and to expectations of future experience.

SDRS's Funding Policy establishes funding objectives necessary for the management of SDRS based on fixed, statutory Member and Employer contributions. The Funding Policy objectives include:

- Fair Value Funded Ratio (FVFR) of at least 100%
- A fully funded System based on the Fair Value of Assets and the Entry Age Normal Cost method
- Actuarially determined benefits that are supported by the fixed, statutory Member and Employer contributions

The results of this valuation indicate that as of June 30, 2021, SDRS continues to be a very well-funded system with a Fair Value Funded Ratio of 105.5%. The actuarially determined benefits are supported by the fixed, statutory Member and Employer contributions.

The SDRS Board of Trustees' Funding and System Management Policies are attached in Section 12 of the actuarial valuation report.

A valuation model was used to develop the liabilities for this actuarial valuation. The model relies on ProVal actuarial valuation software, which was leased from Winklevoss Technologies, LLC, to calculate liabilities and projected benefits. The undersigned actuary coded and reviewed the software for the SDRS provisions, assumptions, methods, and data and has relied on the ProVal programming. In my professional judgement, the ProVal programming has the capability to provide results that are consistent with the purposes of the actuarial valuation and has no material limitations or known weaknesses. Detailed sample life calculations are analyzed to ensure that the ProVal reasonably models the intended liability calculations.

In addition, the projections included in Section 5 of the actuarial valuation report were developed using a spreadsheet-based projection model to determine the impact of a range of potential investment returns on SDRS funding and assessing progress towards SDRS' funding objectives. To determine the likelihoods of meeting specific funding thresholds reported in Section 5 of the actuarial valuation report, I have relied on estimated investment portfolio statistics determined by staff of the South Dakota Investment Council. The projection model excludes the effect of future demographic gains and losses.

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. Assessment of certain risks to future funding measurements is included in Section 5 of the actuarial valuation report.

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 places in this report, Funded Ratios and liabilities are shown based upon varying sets of assumptions as is required for certain disclosure information per accounting rules or South Dakota Law. 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 of Actuaries and a Fellow 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 believes all actuarial assumptions and methods used to develop the following results were reasonable and appropriate.

The undersigned actuary prepared the following schedules included in the Actuarial Section of the Annual Comprehensive Financial Report:

- Measures of Actuarial Soundness
- Summary of Key Actuarial Measures
- Actuarial Liability Gains and Losses
- Actuarial Assumption Tables
- 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, 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.

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

November 10, 2021

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

Dear Board of Trustees:

We have performed a limited scope review of the June 30, 2021, actuarial valuation for the South Dakota Retirement System ("SDRS"). This review is limited to an examination of the internal staff actuary's actuarial assumptions, funding methods, and procedures for reasonableness, internal consistency, and consistency with the previous year's actuarial valuation and a review of the internal staff actuary's valuation report for compliance with actuarial standards. The limited scope review does not include any actuarial calculations.

A full replication audit of the valuation report is performed every five years and limited scope reviews are done in the intervening years. The replication audit was completed for the June 30, 2019 valuation so this year a limited scope review has been performed. This review is intended to meet the Board of Trustees' requirements for an independent review of the reasonableness of the results of the annual Actuarial Valuation performed by the SDRS internal actuary, but it is not intended to be a validation of the internal actuary's valuation calculations or numerical results.

Our analysis of the actuarial assumptions and methods was based largely on the most recent experience study covering the time period from July 1, 2011 through June 30, 2016 and implemented effective with the June 30, 2017 actuarial valuation. We would like to thank Doug Fiddler, the SDRS Senior Actuary, for his cooperation and assistance in providing the required information to us in a timely manner.

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Board of Trustees
November 10, 2021
Page 2

We find the actuarial assumptions, methods and procedures in the June 30, 2021 actuarial valuation to be reasonable and developed in accordance with applicable Actuarial Standards of Practice. They are consistent with those used in the prior valuation. The valuation report also complies with applicable Actuarial Standards Board.

If you need anything else, please do not hesitate to give us a call. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Sincerely,

Patrice Beckham

Larry Langer, ASA, FCA, MAAA, EA
Principal and Consulting Actuary

Patrice A. Beckham, FSA, FCA, MAAA, EA
Principal and Consulting Actuary

Purpose of the Actuarial Valuation

The Actuarial Valuation is a snapshot of the funded position of SDRS, performed each June 30 for the following purposes:

- To determine:
  - if the funded status is at least 100 percent assuming future COLAs are equal to the baseline COLA assumption of 2.25 percent, and
  - if it is less than 100 percent, the restricted maximum COLA that results in a funded status of 100 percent assuming future COLAs are equal to the restricted maximum;
- To set the COLA paid at the beginning of the following fiscal year based on the rate of inflation for the prior year and the funded status determinations;
- To review the current funded status of SDRS;
- To disclose the System assets and liability measures as of the valuation date;
- To confirm the fixed, statutory Member and Employer contributions are the Actuarially Determined Contributions
- To determine if a recommendation for Corrective Actions is required to be made to the Retirement Laws Committee, in accordance with statutory requirements;
- To compare actual and expected experience under SDRS during the most recent fiscal year;
- To disclose the accounting measures as required by GASB Statement Nos. 67 and 68 as of the end of the fiscal year;
- To report trends in contributions, assets, liabilities and funded status;
- To identify, assess, and disclose risks to future SDRS funding.

This June 30, 2021 Actuarial Valuation is the thirty-sixth Actuarial Valuation of SDRS since consolidation in 1974. It is based on the statutory plan provisions, membership, assets and actuarial assumptions as of the valuation date.

Actuarial Accrued Liability

The actuarial accrued liability (AAL) is the Present Value of All Benefits less the Present Value of Future Normal Cost Contributions required for future benefits for SDRS Members and paid from future Member and Employer Contributions. It is the portion of the Present Value of All Benefits assigned to prior periods by the Entry Age Normal Cost Method.

Funded Ratio

Two measurements of the funded ratio are calculated each year. The actuarial value funded ratio (AVFR) is equal to the actuarial value of assets divided by the AAL. The fair value funded ratio (FVFR) is equal to the fair value of assets divided by the AAL. A ratio in excess of 100 percent indicates that the AAL is fully funded. Effective June 30, 2017, the actuarial value of assets is equal to the fair value of assets. As a result, the AVFR will be equal to the FVFR.

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.

Changes from Prior Valuation

The June 30, 2021 Actuarial Valuation reflects no changes in actuarial methods from the June 30, 2020 Actuarial Valuation. One change in actuarial assumptions and one plan provision change are reflected and described below.

The details of the changes since the last valuation are as follows:

SDRS Benefit Provision Changes

Legislation enacted in 2021 reduced the minimum SDRS COLA from 0.5% to 0%. This change will impact the SDRS COLA only when inflation is very low or when a restricted maximum COLA of 0.5% is not affordable. The change had no impact on the current assets or liabilities of SDRS.

SDRS Actuarial Assumption Changes

The SDRS COLA equals the percentage increase in the most recent third calendar quarter CPI-W over the prior year, no less than 0% (0.5% prior to 2021) and no greater than 3.5%. However, if the FVFR assuming the long-term COLA is equal to the baseline COLA assumption (currently 2.25%) is less than 100%, the maximum COLA payable will be limited to the increase that if assumed on a long-term basis, results in a FVFR equal to or exceeding 100%. That condition existed as of June 30, 2020 and the July 2021 SDRS COLA was limited to a restricted maximum of 1.41%. As of June 30, 2021, the FVFR assuming the COLA is equal to the baseline COLA assumption is greater than 100%. The July 2022 SDRS COLA will equal inflation, between 0% and 3.5%. For the June 30, 2020 Actuarial Valuation, future COLAs were assumed to equal the restricted maximum COLA of 1.41%. For this June 30, 2021 Actuarial Valuation, future COLAs are assumed to equal the baseline COLA assumption of 2.25%.

The changes in actuarial assumptions due change in the COLA assumption increased the Actuarial Accrued Liability by $1,135 million, or 8.9% of the Actuarial Accrued Liability based on the 1.41% restricted maximum COLA.

Actuarial assumptions are reviewed in depth periodically, with the next experience analysis anticipated before the June 30, 2022 Actuarial Valuation and any recommended changes approved by the Board of Trustees are anticipated to be first implemented in the June 30, 2022 Actuarial Valuation.

SDRS Actuarial Method Changes

No changes in actuarial methods were made since the prior valuation.

SDRS Actuarial Valuation Results and Implications of SDRS' Funding Policy

The Board of Trustees' Funding Policy objectives are designed to manage SDRS based on the fixed, statutory Member and Employer contributions. The objectives include a Fair Value Funded Ratio of at least 100%, a fully funded System, and actuarially determined benefits that are variable and are supported by the fixed, statutory contributions. These objectives are currently met as no Unfunded Actuarial Accrued Liability currently exists and the Fair Value Funded Ratio is 105.5% as of June 30, 2021.

Based on the current Funded Ratios, the SDRS Funding Policy, fixed statutory contribution rates, and future experience matching the actuarial assumptions detailed in this report, the Fair Value Funded Ratio is expected to remain 100% or greater.

The full COLA range of 0% to 3.5% is currently affordable and is expected to remain affordable in the absence of unexpected future gains or losses or significant changes in assumptions.

Adherence to the SDRS Funding Policy has effectively funded SDRS benefits as is evidenced by the Fair Value Funded Ratio history.

Statutory Determinations: COLA

The SDRS COLA equals the percentage increase in the third calendar quarter average CPI-W for the prior year, no less than 0 percent and no greater than 3.5 percent. However, if the Fair Value Funded Ratio (FVFR) assuming the long-term COLA is equal to the baseline COLA assumption (currently 2.25 percent) is less than 100 percent, the maximum COLA payable will be limited to the increase that if assumed on a long-term basis, results in a FVFR equal to or exceeding 100 percent.

The 2020 maximum COLA of 1.41 percent was greater than the 2020 increase in the CPI-W and therefore July 2021 monthly benefits were increased by the CPI-W increase of 1.28 percent. The 2021 maximum COLA of 3.50 percent is less than the 2021 increase in the CPI-W of 5.92 percent and therefore July 2022 monthly benefits will be increased by the maximum COLA of 3.50 percent.

Statutory Determinations: Satisfying Conditions of SDCL 3-12C-228

SDCL 3-12C-228 requires the SDRS Board of Trustees to recommend corrective actions to the Retirement Laws Committee if either of two conditions are not satisfied. The two conditions are a fair value funded ratio (FVFR) of at least 100 percent and fixed, statutory contributions sufficient to fund the minimum SDCL 3-12C-228 requirements. As of June 30, 2021, the FVFR, based on the baseline COLA assumption of 2.25 percent, is 105.5 percent. Also as of June 30, 2021, the statutory contribution rate is 12.404 percent and the SDCL 3-12C-228 minimum requirement is 12.245 percent. Because both conditions are satisfied as of June 30, 2021, no corrective action recommendation is required.

Actuarial Soundness

The determination of the affordable COLA, the funded status and the adequacy of the statutory contributions to SDRS are the most important indicators of the long-term actuarial soundness of SDRS. The soundness is measured by:

- The maximum SDRS COLA payable the following July 1 and assumed for future years
- The Fair Value Funded Ratio
- The adequacy of the total fixed, statutory contributions available

As of the June 30, 2021 valuation date, the full COLA range of 0 percent to 3.50 percent is affordable, the Fair Value Funded Status is 105.5 percent, and the Unfunded Actuarial Accrued Liability remains at $0.

If future experience meets expectations, the Fair Value Funded Ratio is expected to remain at or above 100 percent and the full COLA range is expected to remain affordable.

Future events such as adverse investment returns, increases in life expectancies greater than assumed, or other demographic losses may result in the restricted maximum COLA again applying and, if severe enough, may adversely impact the future funded status of SDRS and require corrective action recommendations.

Corrective action recommendations are required if the Fair Value Funded Ratio is less than 100 percent. That condition does not exist currently. If it exists in the future, SDRS is expected to have Unfunded Actuarial Accrued Liabilities unless future System experience is more favorable than assumed or until legislation is enacted to meet the requirements of SDCL 3-12C-228.

The combination of actuarial assumptions and methods used in the Actuarial Valuation, the actual experience of the System, and the actuarial measures determined in this report all indicate a continuing sound System.

Measures of Actuarial Soundness

	2021 actuarial valuation	2020 actuarial valuation
Assumed Future COLAs	**2.25%**	**1.41%**
Actuarial value funded ratio (actuarial value of assets/AAL)	**105.5%**	**100.1%**
Fair value funded ratio (fair value of assets/AAL)	**105.5%**	**100.1%**
Funding period	**N/A**	**N/A**

Summary of Key Actuarial Measures

	2020 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, 2021	2021 actuarial valuation results
Normal cost rate with expense provision	**11.074%**	**—**	**(0.015%)**	**1.186%[3]**	**12.245%**
Funding period	**N/A**	**—**	**—**	**—**	**N/A**
Unfunded actuarial accrued liability	**$0**	**—**	**—**	**—**	**$0**
Actuarial value funded ratio	**100.1%**	**14.8%**	**—**	**(9.4%)[3]**	**105.5%**
Fair value funded ratio	**100.1%**	**14.8%**	**—**	**(9.4%)[3]**	**105.5%**

[1] SDRS actuarial investment and liability gains and losses impact the actuarial and fair value funded ratios immediately.
[2] Changes to the membership from year to year will cause minor changes in the normal cost rate.
[3] In years when a restricted maximum COLA applies, changes to the assumed future SDRS COLA that correspond to actuarial investment and liability experience will drive changes in the funded ratios and the normal cost rate.

Actuarial Investment Return Gains/Losses
For the year ended June 30, 2021

The time-weighted annualized investment performance based on the fair value of assets of the system for the most recent year was 22.03 percent after consideration of investment expenses. The money-weighted annualized investment performance based on the fair value of assets for the period was 22.01 percent after deducting investment expenses, greater than the assumed rate of 6.50 percent for fiscal year 2021. This resulted in an actuarial investment gain of $1,882 million.

Actuarial Liability Gains/Losses
For the year ended June 30, 2021

	Amount of liability gain (loss)	Percentage of actuarial accrued liability
(Loss) due to compensation increases	$(14M)	(0.10%)
Gain due to mortality	15M	0.11%
(Loss) due to terminations	(5M)	(0.04%)
(Loss) due to retirements	(9M)	(0.06%)
(Loss) due to rehired and new members	(24M)	(0.17%)
Gain due to COLA different than assumed	9M	0.06%
(Loss) due to VRA investment return	(2M)	(0.01%)
Miscellaneous (Loss)	(1M)	(0.01%)
Total system (Loss)	$(31M)	(0.22%)

Actuarially Determined Contributions

SDRS member and employer contribution rates are fixed in statute and do not change based on experience. The SDRS COLA will vary between 0 percent and 3.5 percent based on inflation and the long-term affordability of the COLA, as indicated by a fair value funded ratio equal to or greater than 100 percent. Prior to 2017, the SDRS COLA varied from 2.1 percent to 3.1 percent based on funded status and inflation.

To test the adequacy of the fixed contribution rates, an actuarially determined requirement is calculated based on the minimum annual statutory COLA payable (0 percent) and the maximum annual statutory COLA payable (3.5 percent) as of June 30, 2021. If the SDRS fixed contributions are within that range of actuarially determined requirements, they will support the SDRS benefit structure and reflect the minimum and maximum long-term costs of the system.

The June 30, 2021 actuarial valuation confirms that the actuarially determined contribution rate will be 100 percent of the statutory contribution rate for fiscal years 2020 and 2021.

Actuarial Cost Method

Liabilities and contributions shown in this report are computed using the Entry Age Actuarial Cost Method.

Sometimes called a “funding method,” this is a particular technique used by actuaries for establishing the amount and incidence of the annual actuarial cost of pension plan benefits, or Normal Cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan is comprised of (1) the Normal Cost and (2) an amortization payment on the Unfunded Actuarial Accrued Liability.

Under the Entry Age Actuarial Cost Method, the Normal Cost is computed as the percentage of pay which, if paid from the date of the Member's entry into the System to each Member's assumed retirement or termination, would accumulate with interest at the assumed rate of investment return to a fund sufficient to pay all benefits under the plan.

For inactive Members, the Actuarial Accrued Liability is the Present Value of All Benefits. For active Members, the Actuarial Accrued Liability is the Present Value of All Benefits less the Present Value of Future Normal Costs. Normal Cost and Present Value of Future Normal cost for active Members is determined considering only the ongoing benefit formula, disregarding the historical benefit improvements for periods of past service which are thereby included in the Actuarial Accrued Liability.

The aggregate Normal Cost Rate for SDRS is determined by taking aggregate present value of future Normal Costs for the membership group and dividing this result by the aggregate Present Value of Total Projected Payroll of Members before assumed retirement age. The Normal Cost Rate is then adjusted by a half-year's interest and multiplied by the total payroll for active members before assumed retirement to determine the Normal Cost. This procedure is performed for the group as a whole, not as the sum of individual Normal Cost calculations.

For the determination of the Actuarial Accrued Liability, Normal Cost, Actuarially Determined Contributions, and the statutory determination of the COLA and SDCL 3-12C-228 requirements, the liability for Variable Retirement Accounts is determined as the total account balance for active and terminated vested Generational Members at the valuation date and the Normal Cost is determined as 1.5% of projected Generational Member payroll. For the same determinations, the Actuarial Accrued Liability for former Cement Plant Retirement Plan Members is calculated as the Present Value of their frozen accrued benefits and Normal Cost is calculated for the remaining active Members.

For purposes of GASB 67 and 68, the Normal Cost for SDRS is the sum of individual Normal Cost calculations and will therefore vary minimally from the Normal Cost calculated for other purposes. In addition, the Total Pension Liability and Service Cost for the Variable Retirement Account and for former Cement Plant Retirement Plan Members are calculated using the Individual Entry Age Actuarial Cost Method.

The Unfunded Actuarial Accrued Liability is the excess, if any, of the Actuarial Accrued Liability over the Actuarial Value of Assets as of the valuation date.

Asset Valuation Method

The Actuarial Value of Assets is equal to the Fair Value of Assets.

Valuation Procedures

No actuarial liability is included for Non-Vested Members who terminated prior to the valuation date, except those due a refund of Accumulated Contributions.

The Compensation amounts used in the projection of benefits and liabilities were annualized, prior-year Compensation amounts projected with assumed salary increases to the valuation year.

In computing accrued retirement benefits, Final Average Compensation was determined using actual Compensation histories supplied by SDRS staff.

For active and vested terminated Members, the spouse age difference assumption was used to populate beneficiaries' dates of birth.

Termination and retirement benefits were limited to the dollar limitation required by the Internal Revenue Code Section 415 limits for governmental plans.

Compensation was limited to the dollar amount defined under Internal Revenue Code Section 401(a)(17) for affected Members.

Decrements are assumed to occur mid-year.

Actuarial Assumptions

Significant actuarial assumptions used include: a) a discount rate equal to the expected rate of return on the present and future assets of 6.5 percent a year, compounded; b) projected Social Security cost-of-living increases of 2.25 percent and wage inflation of 3.00 percent per year compounded annually; c) pre-retirement and post-retirement cost of living adjustment (COLA) increases of 2.25 percent per year compounded annually; d) active member salary increases that are graded by years of service, from 6.5 percent per year at entry to 3.0 percent per year after 25 years of service, compounded annually; e) 80 percent of non-retired members are assumed to be married; f) male members are assumed to be three years older than their spouses and female members are assumed to be two years younger than their spouses; g) mortality rates for non-disabled members are based upon 97 percent of the RP-2014 Mortality Table, adjusted to 2006 and projected generationally with MP-2016 with male rates based on the total dataset table and female rates based on the white collar table; h) mortality rates for disabled pensioners are based upon the RP-2014 Disabled Mortality Table, adjusted to 2006 and projected generationally with MP-2016; i) at termination of employment, members will elect either a refund of accumulated contributions or the deferred vested benefit payable at retirement according to a percent in an experience based table that decreases as service increases; and j) terminated vested members are assumed to start receipt of benefits three years prior to normal retirement, except for Class A members with twenty or more years of service who are assumed to start receipt of benefits at age 58.

The SDRS COLA is based on the percentage increase in the third calendar quarter CPI-W for the prior year, not less than 0 percent and not greater than 3.5 percent. In addition, the COLA will be limited to a restricted maximum COLA under certain circumstances. The SDRS COLA effective July 1, 2021, was 1.28 percent.

The baseline COLA assumption is 2.25 percent. If the fair value funded ratio (FVFR) assuming future COLAs are equal to the baseline COLA assumption is less than 100 percent, a restricted maximum COLA is calculated such that, if future COLAs are equal to the restricted maximum COLA, the FVFR is equal to 100 percent.

For each actuarial valuation, future COLAs are assumed to equal the baseline COLA assumption if the FVFR assuming future COLAs are equal to the baseline COLA is at least 100 percent and future COLAs are assumed to equal the restricted maximum COLA otherwise. Based on the results of this June 30, 2021 Actuarial Valuation, the 2022 COLA will be equal to the maximum SDRS COLA of 3.5 percent since the increase in the third calendar quarter CPI-W for the 2021 of 5.92 percent is greater than the maximum SDRS COLA of 3.5 percent. The Actuarial Accrued Liabilities and Normal Costs reported in this Actuarial Valuation are calculated assuming future COLAs are equal to the baseline COLA assumption of 2.25 percent.

A detailed experience analysis covering the period from June 30, 2011, to June 30, 2016, was conducted and appropriate modifications in the economic and demographic assumptions were made effective with the June 30, 2017 actuarial valuation.

The actuarial assumptions were recommended by the actuary and adopted by the SDRS Board of Trustees. Please see pages 56-58 for tables of actuarial assumption rates.

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

Effective with the June 30, 2017 actuarial valuation, the actuarial value of assets is equal to the fair value of assets.

Sample Separation Rates

Annual Rate per 100 Members

	Mortality[1]						Disablement[2]				
	Active/Inactive Members		Benefit Recipients		Disabled Members		Class A Low Incidence		Class A Higher Incidence		Class B Public Safety
Age	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Male & Female**
25	0.042	0.014	0.042	0.014	0.753	0.232	0.010	0.010	0.015	0.015	0.041
30	0.043	0.018	0.043	0.018	0.776	0.294	0.011	0.013	0.015	0.017	0.045
35	0.052	0.025	0.052	0.025	0.946	0.418	0.012	0.015	0.015	0.031	0.051
40	0.062	0.035	0.062	0.035	1.119	0.589	0.015	0.018	0.015	0.052	0.118
45	0.091	0.053	0.091	0.053	1.638	0.890	0.025	0.034	0.027	0.090	0.232
50	0.154	0.085	0.372	0.190	1.923	1.123	0.038	0.062	0.119	0.152	0.322
55	0.259	0.138	0.533	0.265	2.239	1.457	0.079	0.096	0.250	0.222	0.398
60	0.454	0.212	0.753	0.400	2.658	1.801	0.167	0.134	0.390	0.298	0.772
65	0.821	0.310	1.093	0.651	3.241	2.138	0.274	0.174	0.540	0.378	1.342

(1) Five percent of deaths within the first three years of employment are assumed to be job-related.
(2) No disability is assumed for Class B Judicial members. No disability is assumed for the two remaining active former members of the South Dakota Department of Labor and Regulation Plan. Five percent of disabilities within the first three years of employment are assumed to be job-related disabilities. Class A low incidence includes teachers, certified regents, female non-certified school employees, and female county employees. Class A higher incidence includes non-certified regents, state employees, city employees, male non-certified school employees, and male county employees.

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

	Teachers		Regents, Non-Certified Schools		State, City, County		Class B Public Safety
Service	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	
1	20.00	20.00	25.00	27.50	17.25	23.00	22.75
2	16.50	15.50	21.00	22.00	15.00	18.75	15.25
3	14.00	13.00	18.00	18.50	13.00	15.75	12.75
4	12.00	11.00	15.00	15.25	12.00	13.00	12.00
5	10.00	9.00	13.00	13.00	10.50	11.50	10.75

Annual Turnover Rate per 100 Members[3]
Ultimate Rates After First 5 Years of Employment

	Teachers		Regents, Non-Certified Schools		State, City, County		Class B Public Safety	Class C Cement Plant
Age	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**		
25	8.50	7.25	10.75	11.50	9.00	9.75	7.75	5.27
30	7.60	6.35	10.00	10.60	7.95	8.55	6.85	4.83
35	5.80	4.55	8.90	9.10	6.05	6.70	5.35	4.47
40	4.40	3.60	7.60	7.60	4.65	5.25	4.60	3.84
45	3.70	3.50	6.40	6.70	3.95	4.30	4.50	3.21
50	3.50	3.50	5.40	6.20	3.60	4.00	4.50	1.52
55	3.50	3.50	5.00	6.00	3.50	4.00	4.50	0.33

(3) No pre-retirement termination is assumed for Class B Judicial members. No pre-retirement termination is assumed for the two remaining active former members of the South Dakota Department of Labor and Regulation Plan.

Retirement Age[1]

Class A

Annual rate per 100 members eligible to retire

	Class A Teachers—Foundation				Other Class A Members—Foundation				Class A Teachers—Generational				Other Class A Members—Generational			
	Reduced Retirement		Unreduced Retirement		Reduced Retirement		Unreduced Retirement		Reduced Retirement		Unreduced Retirement		Reduced Retirement		Unreduced Retirement	
Age	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
55	10.0	8.0	15.0	18.0	6.0	7.0	15.0	15.0								
56	10.0	8.0	15.0	15.0	6.0	7.0	10.0	9.0								
57	11.0	10.0	15.0	12.5	6.0	7.0	10.0	9.0	11.0	10.0			6.0	7.0		
58	13.5	9.0	15.0	16.0	6.0	7.0	10.0	9.0	13.5	9.0			6.0	7.0		
59	17.0	10.0	15.0	15.0	6.0	7.0	10.0	9.0	17.0	10.0			6.0	7.0		
60	20.0	10.5	20.0	27.5	6.0	7.0	10.0	9.0	20.0	10.5			6.0	7.0		
61	25.0	17.5	30.0	27.5	9.0	11.5	20.0	17.5	25.0	17.5			9.0	11.5		
62	25.0	19.0	35.0	27.5	12.5	12.5	20.0	17.5	25.0	19.0			12.5	12.5		
63	25.0	17.5	35.0	22.5	13.0	12.5	20.0	17.5	25.0	20.0			13.0	12.5		
64	25.0	22.5	35.0	35.0	18.0	20.0	30.0	30.0	25.0	20.0			18.0	20.0		
65			35.0	50.0			30.0	30.0	30.0	20.0			20.0	20.0		
66			35.0	35.0			30.0	30.0	30.0	22.5			20.0	20.0		
67			30.0	35.0			25.0	25.0			35.0	50.0			30.0	30.0
68			25.0	35.0			25.0	25.0			35.0	35.0			30.0	30.0
69			25.0	35.0			25.0	25.0			30.0	35.0			25.0	25.0
70			100.0	100.0			25.0	25.0			100.0	100.0			25.0	25.0
71							25.0	25.0							25.0	25.0
72							25.0	25.0							25.0	25.0
73							25.0	25.0							25.0	25.0
74							25.0	25.0							25.0	25.0
75							25.0	25.0							25.0	25.0
76							25.0	25.0							25.0	25.0
77							35.0	25.0							35.0	25.0
78							35.0	25.0							35.0	25.0
79							35.0	25.0							35.0	25.0
80							100.0	100.0							100.0	100.0

(1) The two remaining active former members of the South Dakota Department of Labor and Regulation Plan are assumed to retire at age 65. Former members of the Cement Plant Retirement Plan are assumed to retire at their earliest eligible retirement age.

Retirement Age

Class B

Annual rate per 100 members eligible to retire

	Class B Public Safety—Foundation		Class B Judicial—Foundation		Class B Public Safety—Generational		Class B Judicial—Generational	
Age	Reduced Retirement	Unreduced Retirement	Reduced Retirement	Unreduced Retirement	Reduced Retirement	Unreduced Retirement	Reduced Retirement	Unreduced Retirement
45	5.0	5.0						
46	6.5	5.0						
47	6.5	5.0			6.5			
48	6.5	10.0			6.5			
49	6.5	10.0			6.5			
50	6.5	10.0			6.5			
51	6.5	10.0			6.5			
52	6.5	18.0			6.5			
53	6.5	18.0			6.5			
54	12.0	18.0			12.0			
55		13.0	5.0	15.0	13.0			
56		13.0	5.0	15.0	13.0			
57		13.0	5.0	15.0		13.0	5.0	
58		13.0	5.0	10.0		13.0	5.0	
59		13.0	5.0	10.0		13.0	5.0	
60		13.0	5.0	10.0		13.0	5.0	
61		22.5	5.0	10.0		22.5	5.0	
62		22.5	5.0	10.0		22.5	5.0	
63		22.5	5.0	10.0		22.5	5.0	
64		32.5	5.0	10.0		32.5	5.0	
65		40.0		20.0		40.0	10.0	
66		32.5		20.0		32.5	15.0	
67		100.0		12.0		100.0		20.0
68				12.0				20.0
69				12.0				20.0
70				100.0				100.0

Compensation Progression Sample Rates

Service	Percentage increase in year following indicated year of service
0	6.50%
5	5.03
10	4.25
15	3.76
20	3.36
25	3.05
26+	3.00

Percent of Terminated Members Assumed to Elect the Portable Retirement Option

Credited Service at Termination	Percent Electing Portable Retirement Option	Percent Electing Vested Benefit at Retirement	Credited Service at Termination	Percent Electing Portable Retirement Option	Percent Electing Vested Benefit at Retirement
0	100	0	16	20	80
1	100	0	17	20	80
2	100	0	18	20	80
3	40	60	19	20	80
4	40	60	20	10	90
5	40	60	21	10	90
6	33	67	22	10	90
7	33	67	23	10	90
8	33	67	24	10	90
9	30	70	25	5	95
10	30	70	26	5	95
11	30	70	27	5	95
12	30	70	28	5	95
13	20	80	29	5	95
14	20	80	30 or more	0	100
15	20	80			

SDRS Actuarial Value of Assets
As of June 30, 2021

Effective with the June 30, 2017 actuarial valuation, the actuarial value of assets is equal to the fair value of assets.

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 policy regarding consideration of benefit improvements and the conditions requiring recommendation for corrective actions.

Benefit and Funding Objectives and Historical Summary

The SDRS long-term benefit goals include:

- Lifetime income from SDRS of at least 50 percent of final average compensation for career members with credited service of at least:
    - 30 years for Class A
    - 25 years for Public Safety
    - 20 years for Judicial
- SDRS will educate members of the need for additional savings and will encourage members to accumulate personal savings of at least 100% of annual pay at retirement to provide retirement benefits in addition to those provided by SDRS and Social Security
- Educate, advise, and encourage members to plan for retirement by establishing a total retirement income goal based on their unique circumstances and considering benefits available from SDRS, Social Security, and personal savings
- Provide unreduced benefit at appropriate age considering physical demands of Public Safety employment and increasing life expectancy
- Provide appropriate early retirement opportunities
- Inflation protection after retirement and after termination of employment before benefits begin
- Disability and survivor income protection
- Equitable benefits for short-service members who terminate employment before retirement

The maximum SDRS COLA payable, funded ratio and the adequacy of the fixed, statutory contributions are the primary measures of SDRS' soundness.

The SDRS funding objectives are to maintain:

- A fair value funded ratio of at least 100 percent
- A fully funded system, with no unfunded liabilities under the entry age normal cost method
- Actuarially determined benefits that are variable and can be supported by the fixed, statutory contributions

Summary of Funded Ratios and Funding Periods

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]
2017	11,634,963,501	11,644,038,604	11,644,038,604	100.1	100.1	N/A[2]
2018	12,233,387,024	12,235,719,255	12,235,719,255	100.0	100.0	N/A[2]
2019	12,461,820,956	12,472,799,657	12,472,799,657	100.1	100.1	N/A[2]
2020	12,336,269,952	12,353,966,653	12,353,966,653	100.1	100.1	N/A[2]
2021	13,865,352,058	14,632,199,039	14,632,199,039	105.5	105.5	N/A[2]

[1]Member and employer contributions were not sufficient to amortize the frozen unfunded actuarial accrued liability.
[2]Unfunded actuarial accrued liability is $0 as of June 30, 2013 through June 30, 2021.

Summary of Actuarial Accrued Liability and Unfunded Actuarial Accrued Liability

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

The 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
2017	11,634,963,501	11,644,038,604	100.1	0	1,849.4	0.0
2018	12,233,387,024	12,235,719,255	100.0	0	1,902.7	0.0
2019	12,461,820,956	12,472,799,657	100.1	0	1,946.7	0.0
2020	12,336,269,952	12,353,966,653	100.1	0	1,994.0	0.0
2021	13,865,352,058	14,632,199,039	105.5	0	2,043.1	0.0

Solvency Test

The solvency test is a comparison of the adequacy of SDRS actuarial value of 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
2017	1,106,977,216	7,016,162,273	3,511,824,012	11,644,038,604	100.0	100.0	100.0
2018	1,139,798,233	7,436,513,800	3,657,074,991	12,235,719,255	100.0	100.0	100.0
2019	1,166,852,994	7,697,593,396	3,597,374,566	12,472,799,657	100.0	100.0	100.0
2020	1,201,851,866	7,756,098,263	3,378,319,823	12,336,269,952	100.0	100.0	100.0
2021	1,231,438,624	8,767,545,092	3,866,368,342	14,632,199,039	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	# of participating employers
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	474
2009	38,596	1,450.7	37,586	3.9	468
2010	39,014	1,491.1	38,220	1.7	470
2011	38,490	1,490.5	38,725	1.3	471
2012	38,207	1,502.7	39,329	1.6	473
2013	38,594	1,519.7	39,377	0.1	474
2014	38,951	1,587.1	40,745	3.5	476
2015	39,383	1,654.8	42,037[1]	3.1	481
2016	39,940	1,724.4	43,194	2.8	485
2017	40,452	1,849.4	45,734	5.9	491
2018	41,180	1,902.7	46,220	1.1	495
2019	41,500	1,946.7	46,924	1.5	497
2020	41,327	1,994.0	48,265	2.9	500
2021	41,305	2,043.1	49,480	2.5	502

[1] Correction to 2015 figure.

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

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

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
2017	26,420	1,689	891	27,218	29,833,466	13,829,331	530,508,306	19,491	2.0
2018	27,218	1,719	856	28,081	30,153,607	13,099,610	556,533,473	19,819	1.7
2019	28,081	1,917	929	29,069	36,042,932	14,900,910	587,929,811	20,225	2.0
2020	29,069	2,094	951	30,212	40,396,713	15,582,345	621,517,155	20,572	1.7
2021	30,212	2,094	1,063	31,243	37,990,554	18,405,552	648,373,800	20,753	0.9

Comparison of Actuarial Valuation Results

Active members	2021 actuarial valuation	2020 actuarial valuation	% change
Number	41,305	41,327	(0.1)
Average age	44.5	44.7	(0.4)
Average credited service	10.8	10.9	(0.9)
Annual prior year's compensation of members	$2,043,113,617	$1,993,971,340	2.5
Average annual compensation[1]	$49,480	$48,265	2.5
Benefit recipients			
RETIRED MEMBERS			
Number	27,182	26,264	3.5
Average age	72.4	72.3	0.1
Total annualized benefits	$592,731,161	$568,263,005	4.3
Average annualized benefits	$21,806	$21,637	0.8
BENEFICIARIES			
Number	3,797	3,679	3.2
Total annualized benefits	$52,304,564	$50,048,104	5.3
Average annualized benefits	$13,775	$13,604	1.3
DISABILITIES			
Number	264	269	(1.9)
Total annualized benefits	$3,338,075	$3,206,046	4.1
Average annualized benefits	$12,644	$11,918	6.1
Total benefit recipients			
Number	31,243	30,212	3.4
Total annual benefits	$648,373,800	$621,517,155	4.3
Average annual benefits	$20,753	$20,572	0.9
Suspended benefit recipients			
Number of suspended retirees	10	54	(81.5)
Number of suspended beneficiaries	70	76	(7.9)
Total suspended benefit recipients	80	130	(38.5)
Terminated members			
Number—vested	11,309	10,733	5.4
Number—non-vested (entitled to accumulated contributions only)	10,738	9,923	8.2
Total terminated members	22,047	20,656	6.7
Total system members	**94,675**	**92,325**	**2.5**
Results of actuarial valuation			
Normal cost[2] (without expenses)	11.997%	10,826%	10.8
(with expenses)	12.245%	11.074%	10.6
Frozen unfunded actuarial accrued liability	$0	$0	
Fair value of assets	$14,632,199,039	$12,353,966,653	18.4
Actuarial value of assets	$14,632,199,039	$12,353,966,653	18.4
Actuarial accrued liability (AAL)	$13,864,958,054	$12,336,269,952	12.4
Actuarial value funded ratio	**105.5%**	**100.1%**	**5.4**
Fair value funded ratio	**105.5%**	**100.1%**	**5.4**

[1] Excludes active, former Cement Plant Retirement Plan members for whom no compensation is reported.
[2] Includes variable retirement contribution for generational members..

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 and effective July 1, 2020, the Department of Labor and Regulation 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 executive director as the system's 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 were excluded from SDRS membership prior to July 1, 2020. Sioux Falls municipal employees hired prior to July 1, 2013, are also excluded from SDRS membership.

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

- Class A members: all members other than Class B members or Class C members
- Class B members: members who are justices, judges and magistrate judges *(Class B Judicial Members)* and state law enforcement officers, municipal police officers, county sheriffs, deputy county sheriffs, correctional security staff, parole agents, air rescue firefighters, campus security officers, court services officers, juvenile corrections agents, conservation officers, and park rangers *(Class B Public Safety Members)*.
- Class C members: former members of the Cement Plant Retirement Plan.
- Class D members: former members of the Department of Labor and Regulation Plan

Class A members constitute 92 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.

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 or a trustee-to-trustee transfer.

Compensation

Compensation is gross wages paid to a member for credited service rendered during the period for which payment was earned. It includes W-2 wages, plus any amount contributed to a member's individual retirement plan, plus a member's contribution to SDRS made on a before-tax basis, plus any amount contributed by a member to a plan that meets the requirements of Section 125, 401, 403, 308, or 457 of the Internal Revenue Code. Compensation does not include any allowance, payment or reimbursement for travel, meals, lodging, moving, uniforms or any other expense incidental to employment, any lump sum payment for sick or annual leave, any payments for or in lieu of insurance coverage, or any other benefit paid by an employer, any allowance or payment for housing or vehicles, any temporary payment not due to additional duties, any payment paid as a lump sum or over a period of time and based on or attributable to retirement or an agreement to retire in the future or results in an incentive to retire, any payment upon dismissal or severance, any worker's compensation payments and any payment contingent on a member terminating employment at a specified time in the future, even if included in W-2 wages.

Compensation for members hired after June 30, 1996, is limited as prescribed in Section 401(a)(17) of the Internal Revenue Code. For members hired on or before June 30, 1996, compensation is unlimited for credited service before January 1, 2018, and limited as prescribed in Section 401(a)(17) of the Internal Revenue Code for credited service on or after January 1, 2018.

Final Average Compensation

Foundation Members

Final average compensation is the highest average annual compensation earned by a member during 12 consecutive calendar quarters of the last 40 such quarters of credited service. The final average compensation is limited by statutory provisions that prevent increases greater than 5 percent in the final quarter and year prior to termination.

For Foundation members whose credited service ends after June 30, 2021, but before July 1, 2022, final average compensation is the highest average annual compensation earned by a member during 16 consecutive calendar quarters of the last 40 such quarters of credited service.

For Foundation members whose credited service ends after June 30, 2022, final average compensation is the highest average annual compensation earned by a member during 20 consecutive calendar quarters of the last 40 such quarters of credited service.

For members whose credited service ends after June 30, 2020, the 5 percent limit on compensation increases will be applied to each of the four-consecutive-calendar-quarter periods considered in the calculation of final average compensation. At the commencement of retirement, disability or death benefits, member and employer contributions on compensation excluded from the calculation of final average compensation due to the application of the limits will be returned to the member with credited investment return based on the actual investment earnings of the SDRS trust fund.

Generational Members

For Generational members, final average compensation is the highest average annual compensation earned by a member during 20 consecutive calendar quarters of the last 40 such quarters of credited service.

The 5 percent limit on compensation increases will be applied to each of the four-consecutive-calendar-quarter periods considered in the calculation of final average compensation. At the commencement of retirement, disability or death benefits, member and employer contributions on compensation excluded from the calculation of final average compensation due to the application of the limits will be returned to the member with credited investment return based on the actual investment earnings of the SDRS trust fund.

Fixed Statutory Employer Contributions

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

Fixed Statutory 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

For members with less than three years of contributory service, accumulated contributions are equal to member contributions and 50 percent of employer contributions. For members with three or more years of contributory service, accumulated contributions are equal to member contributions and 85 percent of employer contributions. Interest is credited annually at a rate established by the Board of Trustees that is no greater than 90 percent of the average 91-day U.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 6.5 percent.

Accumulated contributions for members who terminated prior to July 1, 2010, include 75 percent of employer contributions with less than three years of contributory service or 100 percent of employer contributions with three or more years of contributory service.

Additional Contributions

Effective July 1, 2002, employers contribute 6.2 percent of Class A Foundation 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.

Cost-of-Living Adjustment (COLA)

All benefits except those depending on the member's accumulated contributions are annually increased by the COLA.

Prior to the COLA payable July 1, 2018, the annual increase in the amount of the SDRS benefits payable on each July 1st was indexed to CPI and based on the SDRS fair value funded ratio as of the prior July 1. The amount of the increase was:

- 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

Effective with the COLA payable July 1, 2018, the annual increase in the amount of the SDRS benefits payable on each July 1 is the percentage increase in the third calendar quarter consumer price index (CPI-W) for the prior year and further limited as follows:

- If the SDRS FVFR calculated assuming the COLA is equal to the baseline COLA assumption (2.25 percent) is at least 100 percent: CPI-W increase with a 0.5 percent minimum and a 3.5 percent maximum
- If the SDRS FVFR calculated assuming the COLA is equal to the baseline COLA assumption (2.25 percent) is less than 100 percent: CPI-W increase with a 0.5 percent minimum and a restricted maximum such that, if future COLAs are assumed to equal the restricted maximum, the SDRS FVFR is at least 100 percent.

History of SDRS COLA

Benefit Increase in July	SDRS Minimum COLA	SDRS Maximum COLA	Prior Year Inflation[1]	SDRS COLA
1983 to 2009	COLA Fixed by Statute			3.10%
2010	COLA Fixed by Statute			2.10%
2011	2.10%	2.40%	1.49%	2.10%
2012	3.10%	3.10%	4.25%	3.10%
2013	2.10%	2.80%	1.66%	2.10%
2014	3.10%	3.10%	1.49%	3.10%
2015	3.10%	3.10%	1.70%	3.10%
2016	3.10%	3.10%	(0.41%)	3.10%
2017	2.10%	2.80%	0.76%	2.10%
2018	0.50%	1.89%	1.96%	1.89%
2019	0.50%	2.03%	2.79%	2.03%
2020	0.50%	1.88%	1.56%	1.56%
2021	0.50%	1.41%	1.28%	1.28%
2022	0.00%	3.50%	5.92%	3.50%

Normal Retirement Age

Foundation Members

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

Generational Members

The normal retirement age is age 67 with three years of contributory service for Class A and Class B Judicial members of the system and the normal retirement age is age 57 with three years of contributory service for Class B Public Safety members.

Normal Retirement Benefit

Foundation Members

Members are entitled to retire with a benefit commencing in 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:

<u>Standard Formula</u>

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

<u>Alternate Formula</u>

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:

<u>First 15 Years of Credited Service</u>

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

<u>Years of Credited Service in Excess of 15 Years</u>

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.

Generational Members

Members are entitled to retire with a benefit commencing in the month in which they reach normal retirement age and are payable for life. Optional reduced benefits are available, with a 60 percent or 100 percent surviving spouse benefit paid for the spouse's lifetime.

Class A Benefit

The Class A benefit is 1.8 percent times final average compensation times Class A credited service.

Class B Public Safety Benefit

The Class B Public Safety benefit is 2.0 percent times final average compensation times Class B Public Safety credited service.

Class B Judicial Benefit

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

First 15 Years of Credited Service
3.333 percent times final average compensation times Class B Judicial credited service with a maximum of 15 years, plus

Years of Credited Service in Excess of 15 Years
2.0 Percent times final average compensation times Class B Judicial credited service in excess of 15 years.

In addition to the formula benefits, a notional variable retirement account will be funded with annual variable retirement contributions and credited with the actual investment return of the SDRS trust fund. The variable retirement contributions will be a portion of the employer contributions, initially set at 1.5 percent of compensation. At retirement, disability or death, generational members will receive the contributions and credited investment return as a lump sum, rolled over to an eligible retirement account or the SDRS Supplemental Retirement Plan, or used to purchase a Supplemental Pension Benefit.

All SDRS 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)

Foundation Members

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

Generational Members

No special early retirement benefits are available.

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, with a reduction for early commencement. Benefits commence in 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.

Foundation Members

Benefits will be reduced by 1/4 of 1 percent for each full month by which the commencement of payments precedes the earlier of the normal retirement age or the special early retirement date.

Generational Members

Benefits will be reduced by 5/12 of 1 percent for each full month by which the commencement of payments precedes the normal retirement age.

Qualified Benefit Preservation Arrangement (QBPA)

SDRS benefits are restricted by IRC Section 415(b). The QBPA pays a portion of the SDRS benefits that are restricted. The total benefits paid from SDRS and the QBPA will be no greater than the applicable limit but unreduced for early commencement if the member retires before age 62 and actuarially increased for late retirement up to age 70 if the member retires after age 65. Benefits payable from both SDRS and the QBPA are considered in the Actuarial Valuation.

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 or her accumulated contributions under the portable retirement option.

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.

For disability applications received on or before June 30, 2015, 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.

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, and credited service as if employment had continued uninterrupted to normal retirement age.

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

A surviving spouse of a disabled member who dies while receiving a benefit will receive 60 percent of the member's benefit for the spouse's lifetime, commencing at the spouse's age 65 (or age 67 for spouses of Generational members).

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.

<u>For deaths after June 30, 2015:</u>
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 (or age 67 for spouses of Generational members) 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 (age 57 for spouses of Generational members) and the spouse's benefit is reduced by five percent for each year commencement precedes the spouse's age 65 (age 67 for spouses of Generational members).

Post-Normal Retirement Age and Post-Retirement Deaths

Foundation Members

Upon the death of a Foundation retiree or Foundation 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.

Generational Members

Upon the death of a Generational member at or beyond normal retirement age but not yet receiving benefits, the surviving spouse is entitled to receive a lifetime benefit equal to 60 percent of the benefit the member would have received if the member retired on the date of death and elected the 60 percent joint and survivor benefit.

Upon the death of a Generational member receiving retirement benefits, the surviving spouse is entitled to receive a lifetime benefit equal to 60 percent or 100 percent of the monthly retirement benefit the member was receiving if the member had elected a joint and survivor benefit at retirement.

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 or termination of coverage.

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.

Foundation Members

A Social Security level income payment option is available for members who retire before age 62.

Generational Members

A joint and survivor benefit with 60 percent or 100 percent of the member's benefit continuing to a surviving spouse is available with a reduced member's benefit.

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 2021 investment performance and discusses the investment objectives, long-term approach, and future return expectations for South Dakota Retirement System (SDRS) assets. Additional information about SDRS investments may be found in the South Dakota Investment Council annual report available at www.sdic.sd.gov.

FISCAL YEAR 2021 PERFORMANCE

The fiscal year 2021 time-weighted investment return was 22% net of investment management cost. This was less than the Investment Council's capital markets benchmark return of 28%. Having approximately 20% lower allocation to equities was the largest detractor, magnified by the large increase in the stock market. The real estate category also underperformed the real estate benchmark. The public equities and high yield debt portfolios significantly outperformed their benchmarks.

INVESTMENT OBJECTIVES

The primary investment objective for SDRS assets is to achieve and exceed over the long term the return of the Council's capital markets benchmark. This benchmark reflects the Council's benchmark asset allocation applied to index returns for each category. Accomplishment of this objective provides the best opportunity to earn returns sufficient to maintain the financial strength of SDRS. The secondary objective is to achieve and exceed over the long term the median return earned by peer funds.

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 capital markets benchmark and the median return of other state retirement systems 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 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 and that actions taken in one year may impact performance several years down the road. 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, 2021, long-term expected returns were 1.5% for bonds and 6.7% for stocks. Low interest rates foreshadow low future bond returns. The expected return for stocks is lower than earned on average historically. The expected long-term return for the overall SDRS fund, which is diversified across several asset categories, is 5.85%. 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 1.0% to 10.7% per annum for a ten-year horizon and 2.4% to 9.3% for a 20-year horizon.

History has shown that following large market increases, 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, 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 LLP, prepared the investment section of this report.

Investment Objectives and Policy

The South Dakota Investment Council's overall objective for SDRS assets is to achieve and exceed over the long term the return of the Council's capital markets benchmark. Accomplishment of this objective provides the best opportunity to earn returns sufficient to maintain the financial strength of SDRS. An estimate of the long-term return of the benchmark is used by the SDRS actuary to assess the funding status of SDRS. If investment markets prove disappointing or the Council underperforms, benefit reductions may be statutorily required.

The capital markets benchmark reflects the Council's benchmark asset allocation applied to index returns for each asset category. The key investment policy decision relates to asset allocation as discussed in the SDRS Asset Allocation Focus in the Council's annual report, which may be found on their website, sdic.sd.gov. The index-based capital markets benchmark is believed to represent a challenging comparison as the average investor tends to underperform market indexes over time due to management fees and transactions costs.

This objective has been achieved for the majority of rolling 5 and 10-year periods and all 20-year and 30-year periods. The table on page 84 summarizes SDRS total fund performance versus the Council's capital markets benchmark.

A secondary objective is to achieve and exceed over the long term the median return earned by peer funds. Comparison to peer funds can help in assessing performance as most peer funds have similar long-term return objectives.

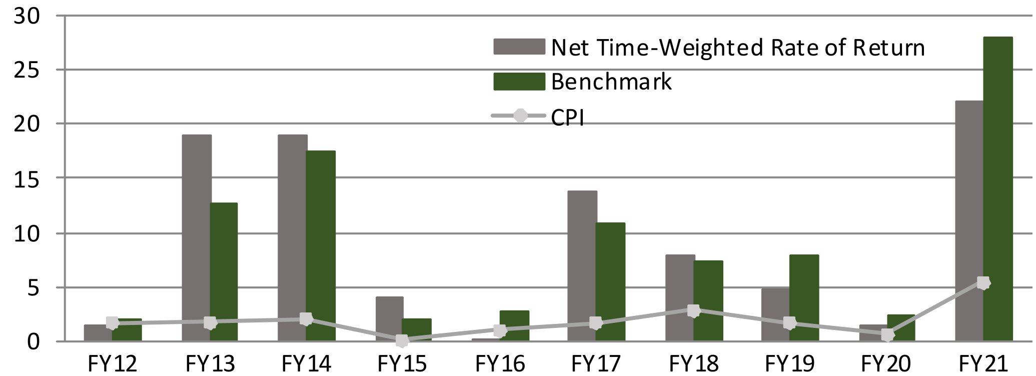
Prudent Man Standard

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 investments under the provisions of SDCL 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.

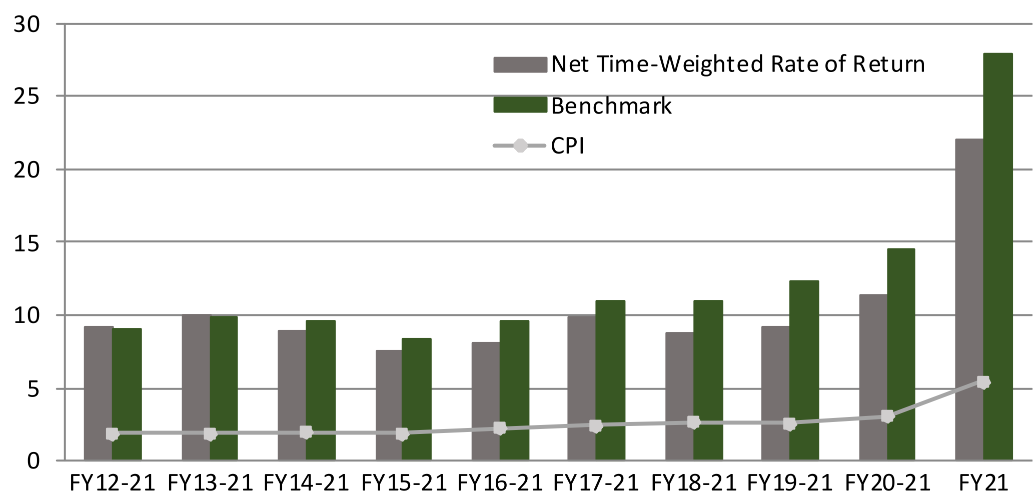
Though monthly benefit payments exceed monthly contributions, the South Dakota Retirement System is not subject to sudden, substantial, and unexpected withdrawals. As a result, it is not necessary to have a high percentage of assets in short-term investments unless this is deemed to be the best investment 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



	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21
Net Time-Weighted Rate of Return	1.45	19.02	18.90	4.18	0.30	13.81	7.94	4.88	1.59	22.03
Benchmark	2.02	12.73	17.49	2.09	2.88	10.96	7.33	7.91	2.52	27.97
CPI	1.66	1.75	2.07	0.12	1.00	1.63	2.87	1.65	0.65	5.39

Cumulative Investment Performance Compared to Capital Market Benchmark and Inflation



	FY12-21	FY13-21	FY14-21	FY15-21	FY16-21	FY17-21	FY18-21	FY19-21	FY20-21	FY21
Net Time-Weighted Rate of Return	9.13	10.02	8.94	7.59	8.17	9.82	8.84	9.14	11.34	22.03
Benchmark	9.12	9.94	9.59	8.41	9.62	11.01	11.03	12.29	14.54	27.97
CPI	1.87	1.89	1.91	1.89	2.19	2.43	2.62	2.54	2.99	5.39

Schedule of Investment Management Fees and Expenses

Year Ended June 30, 2021

Investment category	
Fixed Income	$13,273,758
Equity	589,944
Real Estate	18,386,916
Private Equity	16,097,320
Total investment activity expenses	**$48,347,938**

Summary of Investment Portfolios

As of June 30, 2021

	Fair Value Excluding Futures	Futures Exposure	Fair Value with Futures	Percent of Fund with Futures	Capital Markets Benchmark Percent
Public Equity					
Internal Global Equity	$4,600,779,457				
Internal Global Emerging Markets	821,962,783				
Internal Flex	264,218,543				
Internal Small/Mid Equity	1,008,148,812				
Dimensional Fund Advisors	86,922,908				
Sanders Capital	151,622,771				
Equity Index Futures		$(3,403,620,000)	$3,530,035,274	24.1	58.0
Private Equity					
Blackstone Capital Partners	192,662,616				
Blackstone Energy Partners	95,907,167				
Capital International	37,818,315				
Carlyle	144,941,911				
Cinven	225,635,170				
CVC	129,561,483				
Cypress	21,515				
Doughty Hanson	603,768				
EnCap Energy Capital	18,538,859				
KKR	357,677				
PineBridge	4,961,050				
Riverstone	140,283,675				
Silver Lake	595,957,917		1,587,251,123	10.9	0.0
Aggressive Absolute Return					
Bridgewater	92,737,723		92,737,723	0.6	0.0
Real Estate					
Ares Management	966,973				
Blackstone Real Estate Partners	1,018,236,759				
Brookfield Strategic Partners	65,604,071				
Doughty Hanson	0				
Lone Star	90,600,462				
Rockpoint	129,195,264				
Starwood	155,609,832		1,460,213,361	10.0	10.0
Investment Grade Fixed Income					
Internal Investment Grade	1,199,000,095				
Treasury Financial Futures		609,657,600	1,808,657,695	12.4	23.0
High Yield Debt (Corporate & Real Estate)					
Internal High Yield	618,569,582				
CarVal	112,143				
TCW	872,776,362		1,491,458,087	10.2	7.0
Cash & Cash Equivalents					
Internal Shift Account	1,854,966,813				
Cash from Futures		2,793,962,400	4,648,929,213	31.8	2.0
Total	**$14,619,282,476**	**$0**	**$14,619,282,476**	**100%**	**100%**

Asset Allocation

Allocation of assets to categories may be the most impactful investment decision. The Council establishes a benchmark asset allocation which considers expected long-term returns and risk. Categories included in the benchmark are those that are significant in size and can be passively implemented. These include public equity, real estate, high yield debt, investment grade debt, and cash. The Council's capital markets benchmark is based on the benchmark asset allocation and is intended to represent what is achievable through index funds without requiring exceptional skill. The capital markets benchmark is used to compare against actual results to assess whether value has been added. The benchmark is viewed as a challenging hurdle as it is difficult for most investors to exceed index returns. The Council also establishes a minimum and maximum for each category. Niche or skill-based categories are not included in the benchmark but can have a permitted range for when it is believed that valuation of a category is depressed or if superior managers have been identified.

Use of multiple asset categories can complicate understanding of total fund risk as categories may have varying sensitivities to changing economic and market conditions. When the Council began managing assets in the early 1970's, most institutional portfolios consisted of bonds, some stocks, and cash. Investors back then could understand the level of risk by simply looking at the percentage invested in stocks. To help in understanding the risk of today's more complicated portfolios, the Council focuses on 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 percent with a permitted range of 40 percent to 85 percent. The benchmark bond-like risk is 27 percent with a permitted range of 15 percent to 50 percent. There are also ranges around the benchmark allocation to individual asset categories.

The valuation process which drives allocations within the ranges is based on the present value of estimated future cash flows. Internal research efforts focus on estimating cash flows and risk-based discount rates. Conventional statistical measures of risk are calculated. These include standard deviation as a measure of volatility and correlation as a measure of the degree that categories provide diversification. Conventional measures are helpful for understanding risk in normal times but can understate real-world frequency and magnitude of severe declines. The Council adjusts statistical measures to better reflect risk during severe declines. Liquidity is monitored to minimize risk of forced liquidations.

The target equity-like risk of the SDRS fund was near 50.0 percent for fiscal year 2021 compared the capital markets benchmark level of 70.0 percent. The actual level can fluctuate within a small rebalance band around the target.

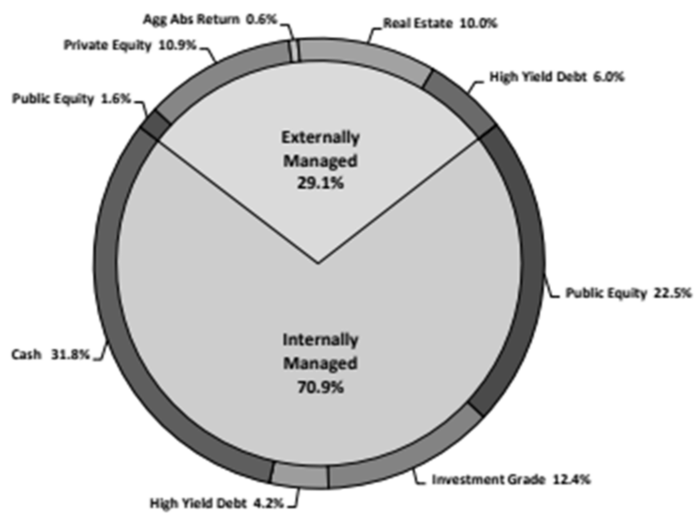
The expected long-term return for the benchmark allocation as of June 30, 2021, was 5.85 percent. The actual portfolio can be significantly different than the benchmark at any point in time, but the long-term average level of equity-like risk is expected to be close to the 70.0 percent benchmark level. The expected return for the benchmark excludes any potential value added or detracted relative to index returns resulting from actively managing the fund. The estimated rate of inflation embedded in the expected return was 2.4 percent. Standard deviation was estimated to be 15.4 percent after adjustments to capture real-world frequency of adverse events. These statistics indicate a 66 percent chance the return for any year would be between (9.5 percent) and 21.2 percent and a 95 percent chance the return would be between (24.9 percent) and 36.7 percent.

The greatest risk to markets may be unsustainable buildup of global debt. The consequence is likely muted growth and heightened risk down the road of either 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

	6/30/19	6/30/20	6/30/21
Public equities	35.2%	24.9%	24.1%
Fixed income	24.4%	23.7%	22.6%
Cash	22.9%	32.4%	31.8%
Arbitrage/AAR	1.0%	0.7%	0.6%
Real estate	8.7%	10.1%	10.0%
Private equity	7.8%	8.2%	10.9%

6/30/21



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
2021	22.48%	22.03%	27.97%	22.01%
2020	2.01%	1.59%	2.52%	1.56%
2019	5.32%	4.88%	7.91%	4.84%
2018	8.35%	7.94%	7.33%	7.95%
2017	14.16%	13.81%	10.96%	13.8%
2016	0.61%	0.30%	2.88%	0.2%
2015	4.39%	4.18%	2.09%	4.2%
2014	19.32%	18.90%	17.49%	18.9%
2013	19.53%	19.02%	12.73%	19.0%
2012	1.91%	1.45%	2.02%	1.4%

Annualized Returns

	Time Weighted Net of Fees	Capital Markets Benchmark
FY21	22.03%	27.97%
FY20-21	11.34%	14.54%
FY19-21	9.14%	12.29%
FY18-21	8.84%	11.03%
FY17-21	9.81%	11.01%
FY16-21	8.17%	9.62%
FY15-21	7.59%	8.51%
FY14-21	8.94%	9.59%
FY13-21	10.02%	9.94%
FY12-21	9.13%	9.12%

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.

FY 2021 Asset Class Returns and Benchmarks

Fiscal Year 2021	Public Equity Internal	Public Equity Composite	Investment Grade FI Internal	High Yield Internal	Opportunistic Real Estate Partnerships	Private Equity Partnerships	Total Fund
SDRS	49.66%	50..58%	-1.50%	29.59%	23.86%	55.33%	22.03%
Benchmark	39.21%	41.65%	-0.21%	15.51%	38.05%	41.65%	27.97%
Difference	10.45%	8.93%	-1.29%	14.08%	-14.19%	13.68%	-5.94%

3 Years Ended 6/30/21	Public Equity Internal	Public Equity Composite	Investment Grade FI Internal	High Yield Internal	Opportunistic Real Estate Partnerships	Private Equity Partnerships	Total Fund
SDRS	14.48%	13.91%	5.36%	0.76%	8.03%	15.76%	9.14%
Benchmark	15.80%	15.79%	5.47%	6.38%	8.61%	15.83%	12.29%
Difference	-1.32%	-1.88%	-0.11%	-5.62%	-0.58/%	-0.07%	-3.14%

5 Years Ended 6/30/21	Public Equity Internal	Public Equity Composite	Investment Grade FI Internal	High Yield Internal	Opportunistic Real Estate Partnerships	Private Equity Partnerships	Total Fund
SDRS	15.69%	15.33%	3.00%	6.72%	10.93%	18.25%	9.82%
Benchmark	15.76%	15.47%	3.10%	6.82%	7.03%	16.67%	11.01%
Difference	-0.07%	-0.14%	-0.09%	-0.10%	3.91%	1.57%	-1.20%

Asset Class Benchmarks:
Public Equity composite—MSCI All Country IMI Index weighted 3/4 plus MSCI IMI USA Index weighted 1/4
Investment Grade Fixed Income—FTSE US Broad Investment-Grade Bond Index (USBIG)
High Yield Corporate Debt—FTSE High Yield Index
Opportunistic Real Estate Partnerships—MSCI US REIT Index multiplied by 120% less 20% of the FTSE US Three-Month Treasury-Bill Index
Private Equity Partnerships—MSCI All Country IMI Index weighted 3/4 plus MSCI IMI USA Index weighted 1/4 all multiplied by 120% less 20% of the FTSE US Three-Month Treasury-Bill Index (2020-2021); MSCI All Country World Index weighted 2/3 and MSCI USA Index weighted 1/3 all multiplied by 120% less 20% of the FTSE US Three-Month Treasury-Bill Index (2017-2019)

Total Fund Benchmark

	Public Equity	Investment Grade Fixed Income	Real Estate	High Yield Debt	Cash
2021	58%	23%	10%	7%	2%
2020	58%	23%	10%	7%	2%
2019	58%	23%	10%	7%	2%
2018	58%	23%	10%	7%	2%
2017	58%	23%	10%	7%	2%

Public Equity—MSCI All Country IMI Index weighted 3/4 plus MSCI USA IMI Index weighted 1/4 (2020-2021), MSCI All Country World Index weighted 2/3 plus MSCI USA Index weighted 1/3 (2017-2019)
Investment Grade Fixed Income—FTSE US Broad Investment –Grade Bond Index (USBIG) (2017-2021)
Real Estate—MSCI US REIT Index (2017-2021)
High Yield Debt—FTSE High-Yield Market Index (2017-2021)
Cash—FTSE US Three-Month Treasury-Bill Index (2017-2021)

Private Equity and Real Estate Limited Partnership Investments

The Council has invested in real estate (RE) and private equity (PE) limited partnerships since the mid-1990s. 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 equates 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 1995 through June 2021, the net-of-fees SI-IRR for the composite PE limited partnership investments was 10.1 percent. This can be compared to the S&P 500 Index PME of 7.1 percent for the same period. RE limited partnerships net-of-fees SI-IRR composite from December 1994 through June 2021 was 20.5 percent. 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 10.3 percent 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 Council will continue its ongoing evaluation of RE and PE limited partnerships.

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

SDRS
SOUTH DAKOTA
RETIREMENT SYSTEM

STATISTICAL SUMMARY

MEMBERSHIP PROFILE

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 41,305 total active members as of June 30, 2021.

School Districts

Membership: 19,188

Percentage of total active members: 46.5%
Units: 164

- 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
- Core Education Coop
- 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
- 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
- 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: 7,983

Percentage of total active members: 19.3%
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: 4,346

Percentage of total active members: 10.5%
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: 4,979

Percentage of total active members: 12.1%
Units: 168

- Aberdeen
- Alcester
- Alexandria
- Arlington
- Armour
- Aurora
- Avon
- Baltic
- Belle Fourche
- Beresford
- Big Stone City
- Bison
- Bonesteel
- Bowdle
- Box Elder
- Brandon
- Bridgewater
- Britton
- Brookings
- Bruce
- Bryant
- Buffalo
- Burke
- Canistota
- Canton
- Carthage
- Castlewood
- Centerville
- Chamberlain
- Chancellor
- Clark
- Clear Lake
- Colman
- Colome
- Colton
- Conde
- Corsica
- Crooks
- Custer
- Dallas
- Deadwood
- Dell Rapids
- Delmont
- DeSmet
- Doland
- 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
- McIntosh
- McLaughlin
- Menno
- Midland
- Milbank
- Miller
- Mission
- Mitchell
- Mobridge
- Montrose
- 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
- Reliance
- Roscoe
- Rosholt
- 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
- Willow Lake
- Wilmot
- Winner
- Woonsocket
- Worthing
- Yankton

Counties
Membership: 4,168

Percentage of total active members: 10.1%
Units: 65

- 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
- Todd
- Turner
- Union
- Walworth
- Yankton
- Ziebach

Other Public Entities
Membership: 641

Percentage of total active members: 1.5%
Units: 103

- Aberdeen Housing Auth
- Angostura Irrigation Dist
- Assoc School Boards of SD
- B-Y Water Dist
- Battle Creek Fire Protection Dist
- Beadle County Cons Dist
- Belle Fourche Irrigation
- Black Hawk Water Users Dist
- Black Hills Council of Local Govt
- Box Elder Rural Fire Protection Dist
- Brookings County Cons Dist
- Brown –Marshall Cons Dist
- Brule-Buffalo Cons Dist
- Burke Housing & Redev
- Butte County Ambulance
- 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
- Hand County Cons Dist
- Harding County Cons Dist
- Heartland Consumer Power Dist
- Hill City Ambulance Dist
- Hill City Fire Protection Dist
- Hot Springs Housing & Redev
- Hughes County Cons
- 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
- Powder House Pass Comm Imp 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

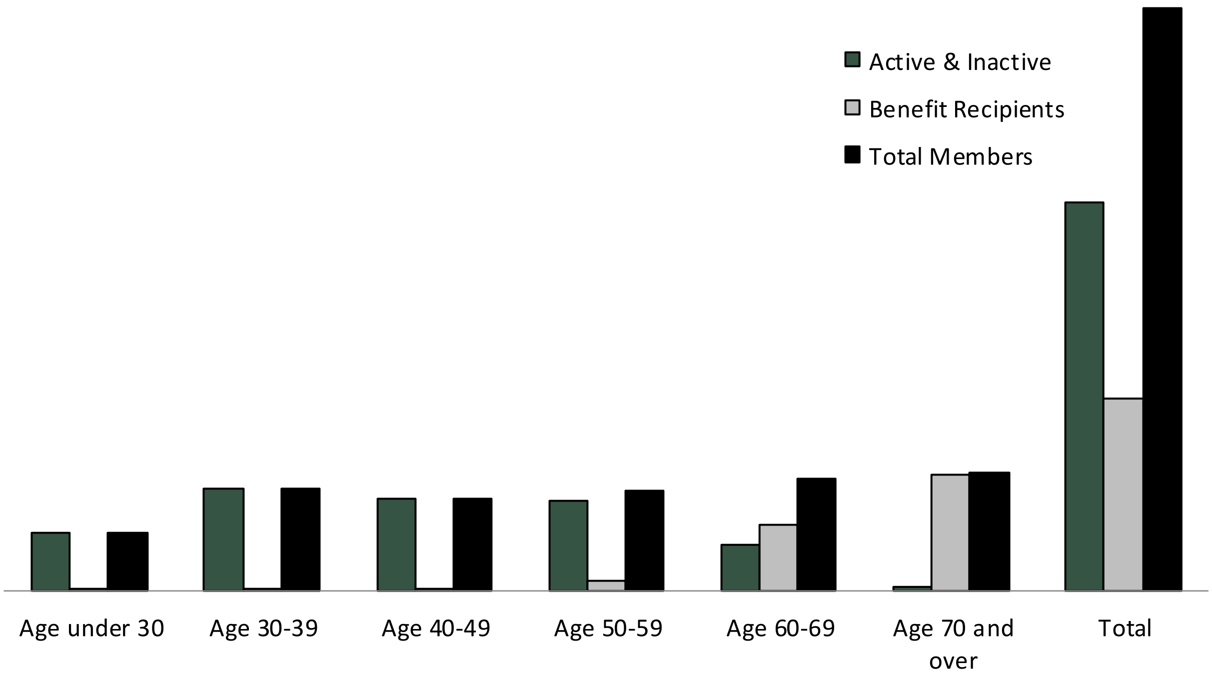
SDRS Benefits Paid by County of Residence

County	FY 2021 members receiving benefits	Annualized benefits	County	FY 2021 members receiving benefits	Annualized benefits
Aurora	136	2,231,224	Jackson	51	955,155
Beadle	529	10,293,977	Jerauld	78	1,246,732
Bennett	53	906,732	Jones	37	839,083
Bon Homme	329	5,422,321	Kingsbury	238	4,108,552
Brookings	1,627	42,311,137	Lake	470	10,009,142
Brown	1,342	28,861,374	Lawrence	1,027	22,449,392
Brule	149	3,127,844	Lincoln	457	8,033,407
Buffalo	3	52,152	Lyman	104	1,780,752
Butte	341	5,657,255	Marshall	201	3,382,834
Campbell	68	1,036,942	McCook	159	3,083,053
Charles Mix	244	4,693,599	McPherson	83	1,283,174
Clark	131	1,979,083	Meade	748	14,652,945
Clay	670	17,844,805	Mellette	55	690,569
Codington	846	19,993,931	Miner	80	1,613,349
Corson	57	944,512	Minnehaha	4,272	100,720,754
Custer	412	7,397,051	Moody	201	3,220,043
Davison	596	13,493,971	Oglala		
Day	222	3,817,288	Lakota	20	368,471
Deuel	133	2,129,509	Pennington	3,653	82,894,166
Dewey	111	1,893,234	Perkins	91	1,344,939
Douglas	92	1,578,393	Potter	111	1,934,909
Edmunds	113	2,049,434	Roberts	287	4,970,094
Fall River	333	5,018,952	Sanborn	92	1,611,073
Faulk	117	1,651,829	Spink	439	7,225,904
Grant	204	3,557,660	Stanley	251	6,176,434
Gregory	168	2,724,009	Sully	63	924,176
Haakon	67	1,054,253	Todd	63	1,130,047
Hamlin	199	3,304,946	Tripp	207	3,612,874
Hand	118	1,951,818	Turner	252	3,965,621
Hanson	55	954,064	Union	347	6,628,644
Harding	38	530,284	Walworth	234	4,240,420
Hughes	1,479	39,685,118	Yankton	937	19,060,665
Hutchinson	266	4,725,634	Ziebach	25	443,331
Hyde	67	883,648			
Total benefits payable by county				**26,648**	**$568,358,687**

SDRS Benefits Paid Outside of South Dakota

State	Members receiving benefits	Annualized benefits	State	Members receiving benefits	Annualized benefits
Arizona	406	8,538,396	North Dakota	248	3,869,742
California	117	2,018,213	Texas	233	4,392,080
Colorado	245	4,330,890	Wisconsin	142	2,384,693
Florida	207	4,521,310	Wyoming	165	1,890,434
Iowa	322	5,220,306			
Minnesota	704	11,391,159	Other states		
Montana	126	2,230,506	and foreign	1,338	22,905,963
Nebraska	422	6,321,421	countries		
Total benefits payable outside South Dakota				**4,675**	**$80,015,113**
Total benefit recipients and benefits payable				**31,323**	**$648,373,800**

Membership by Age



	Age under 30	Age 30-39	Age 40-49	Age 50-59	Age 60-69	Age 70 and over	Total
Active & Inactive	9,421	16,499	14,904	14,521	7,449	558	63,352
Benefit Recipients	26	15	134	1,638	10,746	18,764	31,323
Total Members	9,447	16,514	15,038	16,159	18,195	19,322	94,675

Membership by County of Residence

Active, Inactive, and Retired Members

County	Total members	County	Total members	County	Total members
Aurora	329	Faulk	353	Mellette	229
Beadle	1,508	Grant	544	Miner	231
Bennett	248	Gregory	454	Minnehaha	14,395
Bon Homme	903	Haakon	197	Moody	528
Brookings	4,994	Hamlin	631	Oglala Lakota	142
Brown	3,759	Hand	294	Pennington	10,021
Brule	500	Hanson	261	Perkins	266
Buffalo	10	Harding	128	Potter	300
Butte	1,020	Hughes	4,832	Roberts	777
Campbell	156	Hutchinson	700	Sanborn	254
Charles Mix	765	Hyde	155	Spink	1,198
Clark	352	Jackson	183	Stanley	708
Clay	2,209	Jerauld	202	Sully	195
Codington	2,581	Jones	132	Todd	461
Corson	247	Kingsbury	664	Tripp	620
Custer	931	Lake	1,417	Turner	759
Davison	1,685	Lawrence	2,771	Union	1,122
Day	566	Lincoln	2,093	Walworth	718
Deuel	431	Lyman	306	Yankton	2,619
Dewey	475	Marshall	516	Ziebach	138
Douglas	257	McCook	492		
Edmunds	377	McPherson	241		
Fall River	965	Meade	2,377	Out of state/ Other	13,783
				Total membership	**94,675**

Membership by Group

	Active members			Inactive members			
Board of Regents	**Vested**	**Non-vested**	**Total active**	**Vested**	**Non-vested**	**Total inactive**	**Total members**
Female	1,239	273	1,512	720	352	1,072	2,584
Male	1,176	285	1,461	688	367	1,055	2,516
Total	2,415	558	2,973	1,408	719	2,127	5,100
County General							
Female	1,287	418	1,705	450	387	837	2,542
Male	1,027	391	1,418	293	341	634	2,052
Total	2,314	809	3,123	743	728	1,471	4,594
County Public Safety							
Female	156	76	232	37	88	125	357
Male	580	233	813	108	214	322	1,135
Total	736	309	1,045	145	302	447	1,492
Judicial							
Female	22	5	27	1	0	1	28
Male	33	3	36	2	0	2	38
Total	55	8	63	3	0	3	66
Municipal General							
Female	1,200	483	1,683	466	709	1,175	2,858
Male	1,610	566	2,176	408	456	864	3,040
Total	2,810	1,049	3,859	874	1,165	2,039	5,898
Municipal Public Safety							
Female	73	40	113	13	24	37	150
Male	776	231	1,007	129	139	268	1,275
Total	849	271	1,120	142	163	305	1,425
Public School & Board of Regents Classified							
Female	4,902	2,025	6,927	2,281	3,183	5,464	12,391
Male	1,775	814	2,589	616	1,236	1,852	4,441
Total	6,677	2,839	9,516	2,897	4,419	7,316	16,832
State General							
Female	3,028	951	3,979	1,085	1,235	2,320	6,299
Male	2,226	628	2,854	687	615	1,302	4,156
Total	5,254	1,579	6,833	1,772	1,850	3,622	10,455
State Public Safety and Penitentiary							
Female	196	80	276	42	116	158	434
Male	635	182	817	127	253	380	1,197
Total	831	262	1,093	169	369	538	1,631
Teachers							
Female	7,714	1,083	8,797	2,331	764	3,095	11,892
Male	2,519	353	2,872	795	259	1,054	3,926
Total	10,233	1,436	11,669	3,126	1,023	4,149	15,818
Cement Plant							
Female	0	0	0	4	0	4	4
Male	11	0	11	26	0	26	37
Total	11	0	11	30	0	30	41
Grand Total							
Female	19,817	5,434	25,251	7,430	6,858	14,288	39,539
Male	12,368	3,683	16,054	3,879	3,880	7,759	23,813
Total	**32,185**	**9,120**	**41,305**	**11,309**	**10,738**	**22,047**	**63,352**

Benefit Recipients by Group

	Retirement benefits		Disability benefits		Survivor benefits		Total benefits	
Board of Regents	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**	**2021**	**2020**
Male	1,183	1,161	3	3	36	37	1,222	1,201
Female	774	727	3	3	303	297	1,080	1,027
Total	1,957	1,888	6	6	339	334	2,302	2,228
County General								
Male	921	891	9	13	65	62	995	966
Female	1,080	1,042	15	12	315	301	1,410	1,355
Total	2,001	1,933	24	25	380	363	2,405	2,321
County Public Safety								
Male	343	315	7	8	7	5	357	328
Female	59	55	4	1	42	40	105	96
Total	402	370	11	9	49	45	462	424
Judicial								
Male	59	60	0	0	0	0	59	60
Female	10	9	0	0	22	23	32	32
Total	69	69	0	0	22	23	91	92
Municipal General								
Male	1,062	1,020	14	17	44	45	1,120	1,082
Female	852	813	12	15	299	293	1,163	1,121
Total	1,914	1,833	26	32	343	338	2,283	2,203
Municipal Public Safety								
Male	572	539	14	14	0	0	586	553
Female	14	12	2	2	105	105	121	119
Total	586	551	16	16	105	105	707	672
Public School & Board of Regents Classified								
Male	1,406	1,339	33	28	254	237	1,693	1,604
Female	4,237	4,018	38	40	385	370	4,660	4,428
Total	5,643	5,357	71	68	639	607	6,353	6,032
State General								
Male	2,239	2,212	23	23	180	169	2,442	2,404
Female	2,413	2,309	47	49	637	630	3,097	2,988
Total	4,652	4,521	70	72	817	799	5,539	5,392
State Public Safety and Penitentiary								
Male	564	542	6	5	5	5	575	552
Female	89	83	1	1	89	86	179	170
Total	653	625	7	6	94	91	754	722
Teachers								
Male	2,666	2,639	5	6	364	357	3,035	3,002
Female	6,292	6,129	23	23	591	563	6,906	6,715
Total	8,958	8,768	28	29	955	920	9,941	9,717
Cement Plant								
Male	171	174	5	6	0	0	176	180
Female	21	20	0	0	34	34	55	54
Total	192	194	5	6	34	34	231	234
Department of Labor								
Male	72	—	0	—	3	—	75	—
Female	83	—	0	—	17	—	100	—
Total	155	—	0	—	20	—	175	—
Grand Total								
Male	11,258	10,892	119	123	958	917	12,335	11,932
Female	15,924	15,217	145	146	2,839	2,742	18,908	18,105
Total	**27,182**	**26,109**	**264**	**269**	**3,797**	**3,659**	**31,243[1]**	**30,037[2]**

[1] In addition, there are 80 members or beneficiaries as of July 1, 2021, whose benefits are currently suspended but who are entitled to future benefits.
[2] In addition, there are 130 members or beneficiaries as of July 1, 2020, whose benefits are currently suspended but who are entitled to future benefits.

Average Benefits Payments*
Last 10 Fiscal Years

Retirement effective dates	Years of credited service 0-4	5-9	10-14	15-19	20-24	25-29	30+	Average
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
Period 7/1/2016—6/30/2017								
Average monthly benefit	345	547	813	1,146	1,555	2,173	2,980	1,595
Average final average salary	37,727	42,105	46,370	45,787	47,832	53,824	58,227	49,249
Number of retired members	88	209	215	206	146	221	338	1,423
Period 7/1/2017—6/30/2018								
Average monthly benefit	362	521	810	1,185	1,592	2,318	3,083	1,620
Average final average salary	37,558	41,416	43,287	47,260	50,336	57,132	60,047	49,789
Number of retired members	93	208	239	181	167	180	339	1,407
Period 7/1/2018—6/30/2019								
Average monthly benefit	250	425	678	1,020	1,621	2,103	3,078	1,636
Average final average salary	46,523	44,326	42,151	47,136	51,984	53,639	63,383	51,910
Number of retired members	98	221	258	209	216	260	458	1,720
Period 7/1/2019—6/30/2020								
Average monthly benefit	210	407	702	1,407	1,657	2,342	3,077	1,644
Average final average salary	38,189	43,703	43,635	47,142	54,879	60,553	63,698	52,774
Number of retired members	99	242	231	200	204	218	435	1,629
Period 7/1/2020—6/30/2021								
Average monthly benefit	197	410	750	1,078	1,614	2,339	3,086	1,630
Average final average salary	39,892	42,233	47,095	48,959	53,911	61,108	62,756	52,935
Number of retired members	90	257	249	220	241	210	438	1,705

* Note: Not all tables include Class C membership

Historical Views

Benefit Recipients and Benefits Paid

Group	2015	2016	2017	2018	2019	2020	2021
Board of Regents	1,879	1,962	2,038	2,106	2,159	2,228	2,302
County general	1,985	2,061	2,120	2,176	2,242	2,321	2,405
County public safety	308	325	347	360	398	424	462
Judicial	73	75	80	87	92	92	91
Municipal general	1,709	1,792	1,865	1,966	2,099	2,203	2,283
Municipal public safety	583	602	618	630	653	672	707
Public school & Board of Regents classified	4,808	5,074	5,312	5,541	5,777	6,032	6,353
State general	4,771	4,905	4,995	5,139	5,251	5,392	5,539
State public safety & penitentiary	545	571	603	636	688	722	754
Teachers	8,583	8,811	8,997	9,200	9,471	9,717	9,941
Cement Plant	245	242	243	240	239	234	231
Department of Labor	—	—	—	—	—	—	175
Total benefit recipients	**25,489**	**26,420**	**27,218**	**28,081**	**29,069**	**30,037**	**31,243**
Suspended members or beneficiaries[1]	167	134	123	113	127	130	80
Total benefits paid during period	**$456,297,424**	**$487,053,001**	**$517,012,353**	**$542,300,333**	**$572,351,398**	**$602,352,394**	**$635,766,143**
Average benefits paid during period	**$17,902**	**$18,435**	**$18,995**	**$19,312**	**$19,689**	**$20,054**	**$20,349**

Active and Inactive Members

Group	2015	2016	2017	2018	2019	2020	2021
Board of Regents	4,480	4,640	4,796	4,966	5,065	5,119	5,100
County general	4,093	4,213	4,245	4,317	4,395	4,456	4,594
County public safety	1,081	1,137	1,202	1,278	1,302	1,412	1,492
Judicial	60	65	64	63	65	66	66
Municipal general	4,760	5,045	5,231	5,380	5,476	5,672	5,898
Municipal public safety	1,104	1,152	1,208	1,281	1,333	1,368	1,425
Public school & Board of Regents classified	14,095	14,656	15,126	15,418	15,600	16,182	16,832
State general	9,799	9,848	10,080	10,154	10,169	10,306	10,455
State public safety & penitentiary	1,378	1,397	1,436	1,470	1,516	1,600	1,631
Teachers	15,061	15,280	15,467	15,534	15,521	15,755	15,818
Cement Plant	66	61	55	51	47	44	41
Total active and inactive members	**55,977**	**57,494**	**58,910**	**59,912**	**60,489**	**61,980**	**63,352**

[1] This line represents the additional number of members or beneficiaries as of July 1 of the given year 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**	**Variable Ret. Acct. benefits**	**Member refund benefits**	**Survivor refund benefits**	**Total benefits & refunds**	**Admin. expenses**
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	387,535,490	4,292,862	33,967,464	28,112	—	22,085,301	2,581,484	450,490,713	3,857,226
FY 2015	415,583,635	4,216,593	36,453,062	44,134	—	23,800,904	2,396,543	482,494,871	3,911,222
FY 2016	443,826,905	4,005,759	39,173,616	46,721	—	21,435,281	2,008,200	510,496,482	3,944,641
FY 2017	471,526,048	3,745,753	41,692,383	48,169	—	21,396,651	2,681,028	541,090,032	4,363,512
FY 2018	495,529,956	3,418,152	43,302,968	49,257	—	19,242,181	2,598,633	564,141,147	4,870,334
FY 2019	523,657,166	3,125,654	45,518,294	50,284	—	19,598,170	4,475,155	596,424,723	5,095,897
FY 2020	551,378,462	3,162,829	47,759,710	51,393	2,181	21,095,721	2,346,081	625,796,377	5,127,029
FY 2021	581,960,638	3,418,517	50,334,664	52,324	33,202	21,207,143	4,201,556	661,208,044	4,905,128

Changes in Net Position*

Last 10 Fiscal Years

	2012	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Additions										
Member contributions	100,484,113	101,678,721	106,175,381	110,152,580	114,443,295	122,144,961	124,262,387	127,454,956	131,541,783	136,159,404
Employer contributions	98,866,649	100,376,481	112,551,482	109,549,977	114,090,075	121,907,646	124,734,270	127,572,348	131,681,949	136,159,432
Transfer in from related plan	—	—	—	—	—	—	—	—	—	56,628,426
Investment income (loss) (net of expenses)	107,541,250	1,467,497,091	1,703,240,824	435,682,659	22,836,265	1,431,977,414	911,695,475	583,573,718	192,238,245	2,672,026,722
Total additions (deductions) to plan net position	306,892,012	1,669,552,293	1,921,967,687	655,385,216	251,369,635	1,676,030,021	1,160,692,132	838,601,022	455,461,977	3,000,973,984
Deductions										
Benefit payments	371,417,148	397,620,115	425,823,928	456,297,424	487,053,001	517,012,353	542,300,333	572,351,398	602,352,394	635,766,143
Refunds	25,942,146	25,160,994	24,666,785	26,197,447	23,443,481	24,077,679	21,840,814	24,073,325	23,443,984	25,441,901
Administrative expenses	3,277,973	3,588,717	3,857,226	3,911,222	3,944,641	4,363,512	4,870,334	5,095,897	5,127,029	4,905,128
Total deductions from plan net position	400,637,267	426,369,826	454,347,939	486,406,093	514,441,123	545,453,544	569,011,481	601,520,620	630,923,407	666,113,172
Change in net position	(93,745,255)	1,243,182,467	1,467,619,748	168,979,123	(263,071,488)	1,130,576,477	591,680,651	237,080,402	(175,461,430)	2,334,860,812

* Note: Not all tables include Class C membership

Principal Participating Employers

2021

Participating government	Covered employees	Rank	Percentage of total system
State of South Dakota	7,983	1	19%
Board of Regents	4,346	2	11%
Sioux Falls Schools	3,168	3	8%
Rapid City Schools	1,635	4	4%
City of Rapid City	802	5	2%
Harrisburg Schools	716	6	2%
Pennington County	715	7	2%
Watertown Schools	690	8	2%
City of Brookings and Hospital	608	9	1%
City of Sioux Falls	580	10	1%
All Other	20,062		48%
Total (502 governments)	**41,305**		**100%**

2011

Participating government	Covered employees	Rank	Percentage of total system
State of South Dakota	8,064	1	21%
Board of Regents	4,387	2	11%
Sioux Falls Schools	2,823	3	7%
Rapid City Schools	1,887	4	5%
City of Rapid City	728	5	2%
Watertown Schools	643	6	2%
City of Brookings and Hospital	602	7	2%
Pennington County	588	8	2%
Minnehaha County	515	9	1%
Aberdeen Schools	510	10	1%
All Other	17,743		46%
Total (471 governments)	**38,490**		**100%**

Retired Members By Type and Amount of Benefit*

As of June 30, 2021

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	772	143	1,293	6	36	0	409	2	40
$251—$500	946	198	1,797	22	118	0	514	5	97
$501—$750	768	281	1,471	65	89	1	404	15	87
$751—$1,000	652	231	1,157	58	81	1	350	24	86
$1,001—$1,250	570	358	776	40	64	5	288	53	73
$1,251—$1,500	457	519	578	30	56	10	268	91	56
$1,501—$1,750	366	581	385	8	40	9	221	137	61
$1,751—$2,000	318	693	321	6	27	4	170	207	65
Over $2,000	1,617	6,605	636	26	88	18	457	1,312	123
	6,466	9,609	8,414	261	599	48	3,081	1,846	688

* Note: Not all tables include Class C membership

NOTES

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

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