ANNUAL REPORT OF THE FUNDED STATUS OF THE SOUTH DAKOTA RETIREMENT SYSTEM
TO THE GOVERNOR AND LEGISLATURE OF THE STATE OF SOUTH DAKOTA

JANUARY 2020
KEY TAKEAWAYS

- SDRS exists to provide adequate and equitable lifetime retirement benefits for public employees in South Dakota

- SDRS is sustainably managed within the resources provided by fixed, shared member and employer contributions that are much less than the national average

- SDRS’ funding has greatly benefited from the superior long-term investment results generated by the South Dakota Investment Council

- SDRS remains 100% funded at June 30, 2019

- The July 2020 SDRS Cost of Living Adjustment (COLA) will equal inflation for the prior year of 1.56 percent

- The State of South Dakota and other SDRS participating employers remain unburdened by the increasing retirement plan contribution requirements and balance sheet debt impacting many employers participating in public sector retirement systems
To the Governor and the Legislature of the State of South Dakota:

We are pleased to present the Annual Report of the Funded Status of the South Dakota Retirement System (SDRS) for the fiscal year ended June 30, 2019. The information in this report focuses on the funded status and financial condition of SDRS – the consolidated retirement system in South Dakota for most public employees.

As of June 30, 2019, SDRS is 100 percent funded and all the Board’s funding objectives have been met. This marks the twenty-fourth time out of the last twenty-nine actuarial valuations that SDRS has been at least 100 percent funded on a fair value of assets basis. On an accounting basis, SDRS and its participating employers will report a small Net Pension Asset and the total impact on employers’ balance sheets will remain an asset.

A fully funded status is a rare accomplishment among statewide retirement plans but is the expected result of SDRS’ design that manages benefits and liabilities within the resources provided by fixed member and employer contributions. The SDRS 100 percent Funded Ratio as of June 30, 2019 compares to a projected average of 71 percent for all statewide plans. This funding difference would be wider if calculated on a comparable basis because SDRS uses a more conservative investment assumption than nearly all other statewide plans.

A Funded Ratio of 100 percent indicates that a retirement system is on schedule to fund members’ benefits by the time they retire. Conversely, a Funded Ratio less than 100 percent indicates a system is behind schedule and must contribute more than the cost of current benefits to narrow the funding gap or even to prevent the funding gap from growing.

The success of SDRS has been achieved through the conservative oversight and disciplined management of the Board of Trustees, the outstanding long-term success of the South Dakota Investment Council, and the ongoing support of all stakeholders, including the Executive and Legislative branches of state government and SDRS members. SDRS continues to be one of the most financially sound public employee retirement systems in the nation and is well-positioned to confront the challenges of the future.

For fiscal year 2019, the SDRS Trust Fund, under the management of the South Dakota Investment Council, produced a money-weighted net investment return of 4.84 percent. This was less than both the Council’s investment return benchmark and the SDRS long-term investment return assumption of 6.50 percent. However, SDRS will still meet its goal of providing a 2020 COLA equal to inflation.
The demographics of the South Dakota workforce are changing as the baby boomer generation transitions into retirement. As of June 30, 2019, 56 percent of the SDRS baby boomer generation has retired. Fiscal year 2019 was a record year for the number of retirements and SDRS expects the elevated number of retirements to continue for the next several years. All public employers in South Dakota should be planning to replace a significant portion of their workforce in the next few years as the rest of the baby boomers retire. SDRS has anticipated this demographic challenge and the SDRS fully funded status reflects a system prepared for the anticipated increase in number of retirements and accompanying increase in retirement benefit payments.

SDRS strives to provide appropriate and equitable lifetime benefits while operating within the resources provided by fixed, statutory member and employer contributions. SDRS’ variable benefit features automatically adjust benefits based on the resources available and will result in SDRS remaining fully funded in most economic conditions. In addition, SDCL 3-12C-228 provides a call to action and recommendations to the Legislature for corrective actions if economic conditions exhaust the automatic adjustments provided by the variable benefit features and acceptable funding conditions are not met. These two mechanisms are designed to work together to sustainably and efficiently provide the maximum benefits that can be afforded within the fixed contribution budget. Legislative corrective actions may be required from time to time to ensure the sustainability of the lifetime benefits to all SDRS members through varying economic cycles. The limits of acceptable funding conditions and examples of the likelihood of reaching them are detailed in this report.

The SDRS Board of Trustees will continue to analyze risks and evaluate SDRS sustainability under all economic conditions. SDRS remains fully committed to the SDRS hybrid defined benefit plan model with variable benefits that is fiscally responsible, efficient, and provides appropriate retirement income to our members within our resources.

Finally, we would be remiss if we did not mention the retirement of our long-time Executive Director, Rob Wylie. Rob served the System and the State of South Dakota with distinction for over 37 years. His contributions and dedication to SDRS will be missed.

We welcome your comments and questions after your review of this report.

Sincerely,

Travis W. Almond
Executive Director
PENSION FUNDING BASICS

State retirement systems typically provide a lifetime benefit at retirement based on a formula considering service and compensation during a member’s career. Most plans are pre-funded, that is, member and employer contributions are made throughout a career to fund lifetime benefits after retirement. Over time, Contributions plus Investment returns must equal Benefits plus Expenses:

\[ C + I = B + E \]

System expenses are typically minor compared to benefits and contributions. Assumptions are required to estimate unknown future investment returns. That leaves contributions and benefits to balance the equation considering the minor impact of expenses and the unknown impact of future investment returns.

Traditionally, state retirement systems have fixed the benefits and varied the contributions. That is, benefits are determined by a fixed formula and terms, frequently with the formula and benefit features guaranteed, and sometimes even constitutionally guaranteed for future service. The implication of an absolutely guaranteed benefit is that contributions will adjust to whatever level necessary to keep the above equation in balance. In some states, required contribution changes are shared between members and employers, but in most states, only employer contributions are adjusted if experience is different than assumed.

Since consolidation in 1974, SDRS has operated with fixed, statutory member and employer contributions. Class A members and their employers each contribute 6 percent of compensation to fund their retirement benefits. Two aspects of SDRS ensure the funding equation stays in balance. First, recent legislative changes have added variable benefit features that have made the SDRS COLA more responsive to inflation and affordability and added a Variable Retirement Account for Generational members. Additionally, SDCL 3-12C-228 sets forth funding thresholds that if not met, require the SDRS Board of Trustees to recommend corrective action legislation to keep the equation in balance.

To oversimplify, most state retirement systems fix the benefits and vary the contributions based on experience. SDRS has fixed contributions and variable benefits and explicit statutory funding thresholds that require corrections if not met.

Two following charts illustrate the effectiveness of the two approaches.

The first chart shows historical median member and employer contribution rates for large, public sector pension plans and for SDRS. This considers only plans covering general employees (not public safety or judicial) who are also covered by Social Security. Since 2003, the median member contribution rate has increased from 5 percent to 6 percent of pay. The median employer contribution rate, however, has more than doubled from 6.5 percent in 2003 to almost 14 percent of pay in 2018. During that same time, SDRS member and employer contribution have remained at 6 percent of pay.

While median public sector contribution rates have escalated, it has not translated to improved funding. The second chart shows the Fair Value Funded Ratio for SDRS has exceed the ratio for the median public sector plan by an average of 26.7 percent over the same time period.
Daily media reports detail the struggles many public sector retirement plans face in addressing pension funding issues. Many plans have no pre-determined maximum level of required employer contribution or minimum funded ratios that would serve as a call for reform. Each successive year, stakeholders must determine if the situation is dire enough to begin what is often a painful public fight over pension reform. In many instances, delay in making reforms has resulted in continuing deterioration of the plan’s funded status and a need for even greater reforms.
Without question, the outstanding long-term investment performance of the South Dakota Investment Council has been the primary factor in the funding success of SDRS. In addition, the basic SDRS approach of fixed contributions, variable benefits, and defined funding thresholds requiring corrective actions has imposed an important funding discipline on SDRS that could be considered to address the unsatisfactory public retirement system funding conditions elsewhere.

The SDRS Board of Trustees has adopted numerous policy positions and objectives to guide its management of SDRS, including:

**SDRS MISSION STATEMENT**

To plan, implement, manage, and efficiently administer financially sustainable retirement income programs within the fixed resources available in accordance with fiduciary responsibilities and sound public policies.

**SDRS VISION**

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

**SDRS LONG-TERM INCOME REPLACEMENT GOALS**

Provide lifetime retirement income replacement of at least 55 percent of final average compensation for career employees with a cost of living adjustment during retirement that provides partial inflation protection.

Encourage members to establish an individualized lifetime retirement income goal that will enable them to maintain their standard of living in retirement. This will typically require lifetime income replacement of at least 85 percent of final average compensation (with at least partial inflation protection during retirement), including income from SDRS, Social Security, and personal retirement savings of at least one year’s compensation at retirement.

**FUNDING POLICY OBJECTIVES**

The SDRS Board’s Funding Policy includes the following Funding Objectives:

- Fair Value Funded Ratio\(^1\) of 100 percent or greater.
- A fully funded System with no Unfunded Liabilities.
- Actuarially determined benefits that are variable and can be supported by fixed, statutory contributions that are equal to or greater than the minimum actuarial requirement to support benefits.

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\(^1\) The Fair Value Funded Ratio compares the System assets at fair value to the liabilities of the System for all benefits earned to date. A value of 100 percent or greater means all liabilities have been funded to date and no Unfunded Liabilities exist.
CURRENT SDRS FUNDED STATUS

MEETING THE BOARD'S FUNDING OBJECTIVES

The 2019 actuarial valuation of SDRS confirms that all three of the Board’s funding objectives have been met based on the current restricted maximum COLA as follows:

✓ Fair Value Funded Ratio of at least 100 percent
✓ Fully funded System with no Unfunded Liabilities
✓ Statutory contributions exceed the minimum actuarial requirement to support benefits

FISCAL YEAR 2019 SDRS EXPERIENCE

The SDRS money-weighted investment return based on the Fair Value of Assets was 4.84 percent after investment expense. This return was less than the assumed annual rate of return of 6.50 percent, resulting in an actuarial investment loss of $201M.

<table>
<thead>
<tr>
<th>Actual Investment Return</th>
<th>$ 583M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less Expected Return</td>
<td>(784M)</td>
</tr>
<tr>
<td>Actuarial Investment Gain/(Loss)</td>
<td>($ 201M)</td>
</tr>
</tbody>
</table>

SDRS liabilities were 0.05 percent lower ($6M) than expected as of June 30, 2019, resulting in a small experience gain. The decrease from expected liabilities was the net effect of several factors including gains due to aggregate salaries increasing less than assumed and losses from termination experience and newly hired or rehired members.

FUNDED RATIO COMPARISONS

The long-term experience of SDRS has been very favorable, resulting in a funded status that exceeds virtually all other statewide public retirement systems.

<table>
<thead>
<tr>
<th>Funded Ratio (Fair Value of Assets)</th>
<th>June 30, 2019</th>
<th>June 30, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDRS</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Average(1)</td>
<td>71%</td>
<td>72%</td>
</tr>
</tbody>
</table>


SDRS currently has no Unfunded Liability. To put this into perspective, if SDRS was 71 percent funded like the national average, the System would have an Unfunded Liability of approximately $3.6 billion.
HISTORY OF SDRS FUNDED RATIOS

The SDRS Fair Value Funded Ratio began at 40 percent in 1973 and first reached 100 percent in 1986. The Fair Value Funded Ratio has now been 100 percent or greater in 24 of the last 29 actuarial valuations, including the June 30, 2019 actuarial valuation.

This is the result of the favorable long-term returns produced by the South Dakota Investment Council working in tandem with the disciplined management of plan benefits and liabilities by the South Dakota Retirement System Board of Trustees.

Because of the variable benefit features incorporated in SDRS, it is anticipated that the SDRS Funded Ratio will remain at 100 percent or better in the future under most economic conditions. The limits of those economic conditions are outlined in the Risk Measures section of this report.

The following chart shows the SDRS Fair Value Funded Ratio for the last 20 years, with SDRS achieving a fully funded status in 15 of the 20 years.
Actuarial Accrued Liability
Fair Value of Assets
SDRS COLA

SDRS provides an annual COLA that increases benefits for retirees. The Board’s objective is to provide a COLA that protects retirees from a loss of purchasing power due to inflation during retirement periods of low to moderate inflation.

Legislation enacted in 2017 tied the COLA directly to the annual inflation rate and the available resources to pay for it.

- Baseline liabilities are calculated assuming future COLAs are equal to the assumed long-term rate of inflation of 2.25 percent
- If SDRS assets meet or exceed the baseline liabilities (baseline FVFR is at least 100 percent), the COLA will equal inflation (CPI-W) within:
  - Minimum: 0.5 percent
  - Maximum: 3.5 percent
- If SDRS assets are less than the baseline liabilities (baseline FVFR is less than 100 percent), the COLA will equal inflation (CPI-W) within:
  - Minimum: 0.5 percent
  - Restricted Maximum: the actuarially calculated percentage that, if assumed for future COLAs, brings SDRS’ FVFR back to 100 percent

The COLA will be less than inflation only when it is not affordable, or inflation is extraordinarily high. However, it is anticipated that the SDRS COLA will meet the Board’s objective and approximate the rate of inflation over time.

Based on the result of the June 30, 2018 actuarial valuation, the restricted maximum COLA for the July 2019 increase was 2.03 percent. Inflation for the prior year was 2.79 percent, which exceeded the maximum, resulting in a July 2019 SDRS COLA of 2.03 percent.

Based on the result of the June 30, 2019 actuarial valuation, the restricted maximum COLA for the July 2020 increase is 1.88 percent. Inflation for the prior year was 1.56 percent, less than the restricted maximum COLA, resulting in a July 2020 SDRS COLA of 1.56 percent.

2019 ACTUARIAL ASSUMPTION CHANGES

The only change to the actuarial assumptions for the 2019 actuarial valuation was a decrease in assumed future COLAs. Investment losses during fiscal year 2019 decreased the restricted maximum COLA from 2.03 percent to 1.88 percent. When a restricted maximum COLA applies, all future COLAs are assumed to equal the restricted maximum COLA.

The Board of Trustees manages SDRS benefits based on fixed, statutory member and employer contributions, actual past experience of the System, and anticipated future experience. This requires long-term cost projections using actuarial assumptions about future unknown events, including:

- The rate of investment return earned on SDRS assets,
- Inflation,
- Wage growth, and
- Retirements, terminations, and mortality.
Based on an experience analysis and the recommendations of the Actuary, the Board adopted significant changes to the actuarial assumptions, first effective for the 2017 actuarial valuation.

**2019 LEGISLATIVE CHANGES**

Legislation enacted in 2019 made only minor changes to SDRS provisions and no significant benefit changes. No substantial benefit changes were included in the June 30, 2019 actuarial valuation.

**2019 ACTUARIAL METHOD CHANGES**

No changes were made to actuarial methods for the funding calculations in the June 30, 2019 valuation. Two minor changes were made to the actuarial methods used for GASB 67 and 68 calculations. Changes were made to the calculations of the liability for the Variable Retirement Contribution for Generational Members and for former Cement Plant Retirement Plan members. The total change results in a Total Pension Liability for GASB purposes that is approximately $0.4 million higher (0.003 percent) than the Actuarial Accrued Liability for funding purposes.

The changes to the actuarial methods used for GASB 67 and 68 calculations were the result of a replication of the actuarial valuation results prepared by SDRS’ external consulting actuary, Cavanaugh MacDonald Consulting, LLC. The June 30, 2019 actuarial valuation was the fifth prepared by SDRS’ Senior Actuary. Each annual actuarial valuation is subject to a high-level review by the external consulting actuary and each fifth actuarial valuation is subject to a full replication audit. Cavanaugh MacDonald Consulting replicated the June 30, 2019 actuarial valuation, matching liabilities within 0.1 percent and recommended the GASB 67 and 68 actuarial method changes.

**NET IMPACT OF 2019 CHANGES**

The revised COLA assumptions decreased the Actuarial Accrued Liability by $194 million.

The resulting June 30, 2019 SDRS Fair Value Funded Ratio is 100.1 percent.

**SDRS COLA HISTORY**

The SDRS COLA was initially a 2 percent simple increase and has been modified numerous times in the past. The three most recent legislative changes to the COLA were:

- 1993: COLA fixed at 3.1 percent per year.
- 2010: COLA fixed at 2.1 percent for 2010 and linked to inflation and funded status for future years.
- 2017: COLA linked to inflation and affordability – COLA is limited to restricted maximum that can be paid in all future years while remaining 100 percent funded.

COLAs have exceeded inflation during most recent years as shown below.
Since the 2010 COLA legislation, the average annual SDRS COLA has been 2.4 percent while the average annual rate of inflation has been 1.5 percent.

As noted above, the 2020 SDRS COLA will be 1.56 percent, equal to the increase in the rate of inflation for the prior year.

The above increases apply to retirees eligible for the COLA at each July. Members who retired after June 30, 2010 have received increases beginning at least a year after retirement. To evaluate the impact of the SDRS COLA and inflation, the following chart presents cumulative increases for different cohorts of retirements.
Since 2010, the benefits paid to members who retired prior to July 1, 2010 (roughly half of SDRS retirees) have increased by an aggregate 27.0 percent while the cost-of-living has increased 16.1 percent. Likewise, the benefits of each successive cohort of retirees including those that retired in fiscal year 2016 have increased more than the rate of inflation. Fiscal year 2017 and fiscal year 2018 retirees have received cumulative SDRS COLA increases slightly less than inflation. The July 2020 COLA increase will be the first for those that retired in fiscal year 2019 and will match inflation.

Paying a COLA significantly greater than the rate of inflation exceeds the Board’s COLA objective, is very costly, and not sustainable. The 2017 legislative changes provided a COLA much more closely linked to inflation and also limited to the amount supported by SDRS resources.

**SDRS MATURITY**

As retirement systems mature, a larger portion of the liability is for the benefits of retired members. This impact has been magnified in recent years by the aging of the baby boomer portion of the membership. Since 2003, the portion of the total Actuarial Accrued Liability (AAL) due to retired or terminated members has increased from 51 percent to 62 percent.
Billions

Retired and Terminated Accrued Liability as a Percentage of Total

Accrued Liability - Retired and Terminated
Accrued Liability - Active


$12 $8 $4 $0

51% 52% 54% 55% 55% 55% 56% 58% 59% 60% 60% 61% 61% 61% 62%
The movement of the baby boomer generation through SDRS has had an impact on the plan maturity and retirement trends. In 2007 the baby boomer generation comprised 44 percent of SDRS membership and only 11 percent of SDRS baby boomers had retired.

By 2019, the baby boomer generation comprised 38 percent of SDRS membership and 56 percent of SDRS baby boomers had retired.
More SDRS members retired in fiscal year 2019 than in any other year in SDRS history. SDRS expects the high number of retirements to continue in the next few years before finally leveling off. The following chart illustrates historical and projected retirements.

South Dakota public employers will continue to be faced with replacing a significant portion of the workforce as baby boomers retire.
The net negative cashflow of a retirement system, benefit payments offset by contributions, is an additional measure of plan maturity. In fiscal year 2019, contributions to SDRS were 2.1 percent and benefit payments and expenses were 4.9 percent of beginning assets resulting in a net cashflow of negative 2.7 percent of beginning assets. While the net cashflow is similar to the median of large public sector plans, the underlying components reflect both substantially lower contributions and lower benefits as a percent of assets.

**RISK MEASURES**

Retirement systems determine contribution requirements based on actuarial assumptions regarding future events. The typical retirement system is not fully funded, has a fixed benefit structure, and requires an actuarially determined contribution to meet the plan’s costs, including paying off unfunded liabilities (typically over 20 to 30 years). The actuarial determined contribution rate is typically based on the median expectation of potential outcomes with as much likelihood that future years’ requirements will increase as decrease. However, if the full actuarially determined contribution is not made (not uncommon) or if the assumptions (most importantly the investment return assumption) are more optimistic than experience, the likelihood is greater that contributions will need to be increased in the following years.

The following chart shows unfavorable outcomes are as likely as favorable ones when benefits are fixed and assumptions accurately reflect median expectations.
A flexible benefit design like that adopted by SDRS, which automatically adjusts certain benefits, will result in a plan that is better positioned to sustain volatile markets and negative experience. The objective is to decrease the risk of unfavorable results and their consequences. However, even plans with the most flexible benefit structure may have to take corrective action in the most severe economic situations.

With the 2017 legislative changes, SDRS liabilities will automatically adjust to most (but not all) economic circumstances as shown below.
The above chart illustrates the potential range of investment returns for fiscal year 2020, their likelihoods, and the possibility that statutory funding thresholds will require additional corrective actions. All calculations are as of June 30, 2019 and do not reflect any interim investment returns since that date. For example, a one-year net investment loss of more than approximately 7 percent would require a corrective action and had an approximately 19 percent likelihood of happening at the beginning of the fiscal year. (Likelihoods are based on South Dakota Investment Council’s June 2019 investment portfolio statistics for the benchmark asset allocation, including a mean expected return of 6.29 percent and a one-year standard deviation of 15.4 percent.)

If final investment results are better than the loss of 7 percent, but less than the assumed investment return of 6.5 percent, the 2021 SDRS COLA will be restricted to a figure less than the 1.88 percent restricted maximum COLA for the July 2020 increase (because inflation for the year was less than 1.88 percent, the actual SDRS COLA will equal inflation for the prior year of 1.56 percent). Conversely, if fiscal year 2020 investment returns are greater than the 6.5 percent assumed investment return, the restricted maximum COLA will increase. Fiscal year 2020 investment returns greater than approximately 10 percent would allow the full COLA range (0.5 percent to 3.5 percent) for the July 2021 SDRS COLA.

The SDRS Board of Trustees will continue to diligently monitor future risks, minimize the risks when possible, and plan for necessary adjustments during adverse economic conditions.
SDRS Funded Status Report

SDRS 2020 LEGISLATION

The SDRS Board of Trustees will submit the following bills for consideration during the 2020 Legislative Session:

- SB 31: An Act to update, to clarify, and to repeal certain provisions related to the South Dakota Retirement System.
- SB 32: An Act to clarify and to provide consistency to the administration of certain surviving spouse benefits of the South Dakota Retirement System.
- SB 34: An Act to establish a qualified benefit preservation arrangement for eligible members of the South Dakota Retirement System.

Neither SB 31 nor SB 32 will have a material impact on the benefits and liabilities of SDRS.

If enacted, SB 34 will have a minor, non-material impact on SDRS liabilities and costs. Under SB 34, SDRS liabilities would increase by approximately $3.2 million or 0.03% of SDRS liabilities and SDRS ongoing costs would increase approximately $0.05 million or 0.02% of SDRS ongoing costs. No increase in contributions rates would be required and SB 34 would not have any significant impact on the overall benefits and liabilities of SDRS.

Note that the SDRS members whose benefits will be impacted by SB 34 are highly paid members with significant credited service who are prohibited from receiving the same SDRS formula benefits as other members by the Internal Revenue Code (IRC) Section 415(b) laws and regulations. The affected members make member contributions at the same statutory rate as other members; their employers make contributions at the same statutory employer rate; and their employers make an additional 6.2 percent of pay contribution rate for the portion of their compensation above the Social Security taxable wage base.

The small increase in SDRS liabilities and cost for SB 34 slightly reduces the savings SDRS realizes by applying the IRC 415(b) limits. SDRS liabilities are currently $23.4 million lower (0.18 percent lower) than statutory provisions would provide because of the IRC 415(b) restrictions. SB 34 would increase SDRS liabilities by reducing that savings by $3.2 million (0.03 percent liability increase) and would bring the benefits of a few SDRS members closer to the statutory provisions.
### Appendix A: Key SDRS Metrics

#### Membership

<table>
<thead>
<tr>
<th>Valuation Date</th>
<th>June 30, 2019</th>
<th>June 30, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Members</td>
<td>41,500</td>
<td>41,180</td>
</tr>
<tr>
<td>Benefit Recipients</td>
<td>29,196</td>
<td>28,194</td>
</tr>
<tr>
<td>Vested Terminated Members</td>
<td>10,118</td>
<td>9,790</td>
</tr>
<tr>
<td>Non-Vested Terminated Members</td>
<td>8,871</td>
<td>8,942</td>
</tr>
<tr>
<td>Total System Members</td>
<td>89,685</td>
<td>88,106</td>
</tr>
</tbody>
</table>

#### Cash Flow

<table>
<thead>
<tr>
<th>Year Ended</th>
<th>June 30, 2019</th>
<th>June 30, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contributions</td>
<td>$ 255M</td>
<td>$ 249M</td>
</tr>
<tr>
<td>Benefit Payments and Expenses</td>
<td>$ (602M)</td>
<td>$(569M)</td>
</tr>
<tr>
<td>Net Investment Income</td>
<td>$ 584M</td>
<td>$ 912M</td>
</tr>
</tbody>
</table>

#### Funded Status

<table>
<thead>
<tr>
<th>Valuation Date</th>
<th>June 30, 2019</th>
<th>June 30, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair Value of Assets</td>
<td>$ 12.5B</td>
<td>$ 12.2B</td>
</tr>
<tr>
<td>Actuarial Value of Assets</td>
<td>$ 12.5B</td>
<td>$ 12.2B</td>
</tr>
<tr>
<td>Actuarial Accrued Liability</td>
<td>$ 12.5B</td>
<td>$ 12.2B</td>
</tr>
<tr>
<td>Actuarial Value Funded Ratio</td>
<td>100.1%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Fair Value Funded Ratio</td>
<td>100.1%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

#### Statutory Determinations

<table>
<thead>
<tr>
<th>Valuation Date</th>
<th>June 30, 2019</th>
<th>June 30, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDRS COLA Minimum Statutory COLA</td>
<td>0.50%</td>
<td>0.50%</td>
</tr>
<tr>
<td>Maximum Statutory COLA</td>
<td>3.50%</td>
<td>3.50%</td>
</tr>
<tr>
<td>Restricted Maximum COLA</td>
<td>1.88%</td>
<td>2.03%</td>
</tr>
<tr>
<td>Increase in 3rd Calendar Quarter CPI-W</td>
<td>1.56%</td>
<td>2.79%</td>
</tr>
<tr>
<td>SDRS COLA Next July</td>
<td>1.56%</td>
<td>2.03%</td>
</tr>
</tbody>
</table>

**SDRS COLA**

- Minimum Statutory COLA: 0.50%
- Maximum Statutory COLA: 3.50%
- Restricted Maximum COLA: 1.88%
- Increase in 3rd Calendar Quarter CPI-W: 1.56%
- SDRS COLA Next July: 1.56%

**SDCL 3-12C-228 Conditions**

<table>
<thead>
<tr>
<th>Condition</th>
<th>June 30, 2019</th>
<th>June 30, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair Value Funded Ratio</td>
<td>100.1%</td>
<td>100.0%</td>
</tr>
<tr>
<td>SDC 3-12C-228 (1) Condition Satisfied?</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Minimum SDCL 3-12C-228 (2) Contribution Rate</td>
<td>11.710%</td>
<td>11.835%</td>
</tr>
<tr>
<td>Statutory Contribution Rate</td>
<td>12.416%</td>
<td>12.419%</td>
</tr>
<tr>
<td>SDCL 3-12C-228 (2) Condition Satisfied?</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Corrective Action Recommendation Required</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

*SDCL 3-12C-228, as amended in 2017, requires the SDRS Board of Trustees to recommend Corrective Actions to the Retirement Laws Committee if either of two conditions is not satisfied. The two conditions are a Fair Value Funded Ratio of at least 100 percent and fixed, statutory contributions sufficient to fund the minimum SDCL 3-12C-228 requirements. Both of these conditions are satisfied as of June 30, 2018 and June 30, 2019 and no Corrective Action recommendation is required.*
Appendix B: SDRS Benefits Payable by County

The following exhibit presents a schedule of the annualized benefits payable as of July 1, 2019, by SDRS on a county-by-county basis.

<table>
<thead>
<tr>
<th>County</th>
<th>Annual Benefits</th>
<th>County</th>
<th>Annual Benefits</th>
<th>County</th>
<th>Annual Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aurora</td>
<td>$2,110,938</td>
<td>Fall River</td>
<td>$4,480,550</td>
<td>McPherson</td>
<td>$1,017,622</td>
</tr>
<tr>
<td>Beadle</td>
<td>$9,582,614</td>
<td>Faulk</td>
<td>$1,687,150</td>
<td>Meade</td>
<td>$12,581,582</td>
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<tr>
<td>Bennett</td>
<td>$775,778</td>
<td>Grant</td>
<td>$3,385,751</td>
<td>Mellette</td>
<td>$671,545</td>
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<td>Bon Homme</td>
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<td>Gregory</td>
<td>$2,546,374</td>
<td>Miner</td>
<td>$1,283,278</td>
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<tr>
<td>Brookings</td>
<td>$38,572,877</td>
<td>Haakon</td>
<td>$889,606</td>
<td>Minnehaha</td>
<td>$90,175,078</td>
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<tr>
<td>Brown</td>
<td>$25,012,956</td>
<td>Hamlin</td>
<td>$3,089,657</td>
<td>Moody</td>
<td>$3,094,265</td>
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<tr>
<td>Brule</td>
<td>$2,946,462</td>
<td>Hand</td>
<td>$1,465,578</td>
<td>Oglala Lakota</td>
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</tr>
<tr>
<td>Buffalo</td>
<td>$50,702</td>
<td>Hanson</td>
<td>$970,668</td>
<td>Pennington</td>
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<tr>
<td>Butte</td>
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<td>Harding</td>
<td>$428,123</td>
<td>Perkins</td>
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<td>Hughes</td>
<td>$37,156,504</td>
<td>Potter</td>
<td>$1,809,846</td>
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<td>Hutchinson</td>
<td>$4,514,431</td>
<td>Roberts</td>
<td>$4,635,331</td>
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<td>Hyde</td>
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<td>Sanborn</td>
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<td>Jerauld</td>
<td>$1,128,259</td>
<td>Stanley</td>
<td>$5,368,321</td>
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<tr>
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<td>$806,517</td>
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<tr>
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<tr>
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<td>Tripp</td>
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<tr>
<td>Day</td>
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<td>Lawrence</td>
<td>$20,093,445</td>
<td>Turner</td>
<td>$3,610,729</td>
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<tr>
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<td>Lincoln</td>
<td>$7,020,607</td>
<td>Union</td>
<td>$6,197,059</td>
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<td>Lyman</td>
<td>$1,668,039</td>
<td>Walworth</td>
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<tr>
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<td>Marshall</td>
<td>$3,027,519</td>
<td>Yankton</td>
<td>$17,326,648</td>
</tr>
<tr>
<td>Edmunds</td>
<td>$1,933,180</td>
<td>McCook</td>
<td>$2,730,003</td>
<td>Ziebach</td>
<td>$384,590</td>
</tr>
</tbody>
</table>

Total SDRS Benefits Payable in South Dakota $512,061,451
Total SDRS Benefits Payable Outside of South Dakota $71,231,074
Total SDRS Benefits Payable $583,292,525

Total Cement Plant Benefits Payable in South Dakota $4,136,998
Total Cement Plant Benefits Payable Outside of South Dakota $374,234
Total Cement Plant Benefits Payable $4,511,232

Total SDRS and Cement Plant Benefits Payable $587,803,757