

Singing River Health System Employees' Retirement Plan and Trust

Actuarial Valuation as of October 1, 2019



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November 11, 2019

IN THE CHANCERY COURT OF JACKSON COUNTY, MISSISSIPPI

**IN RE: Singing River Health System Employees' Retirement Plan and Trust
Almond, et al. v. Singing River Health System, et al.; Cause No. 2014-2653
Thompson, et al. v. Singing River Health System, et al.; Cause No. 2014-2695
Bosarge, et al. v. Singing River Health System, et al.; Cause No. 2014-2729
Aguillar, et al. v. Singing River Health System, et al.; Cause No. 2014-2753
Drury, et al. v. Singing River Health System, et al.; Cause No. 2015-0001
Broun, et al. v. Singing River Health System, et al.; Cause No. 2015-0027
Eiland, et al. v. Singing River Health System, et al.; Cause No. 2015-0030
Lay, et al. v. Singing River Health System, et al.; Cause No. 2015-0060**

This is a report on the actuarial valuation for the Singing River Health System Employees' Retirement Plan and Trust (The Plan), which was performed as of October 1, 2019. The purpose of the valuation is to:

- Compare the current value of Trust assets with accrued liabilities to assess the funded condition of the Plan,
- Compare the projected value of Trust assets with accrued liabilities to assess the long-term funded condition of the Plan,
- Provide a summary of projected cash flows for use in assessing the long-term health and sustainability of the Plan.

This valuation has been conducted in accordance with generally accepted actuarial principles and practices. The participant data is maintained by McCloud Consulting Group and the Plan asset data was provided by the Plan's investment advisor, Fiduciary Vest. This data has been reviewed for reasonableness, but no attempt has been made to audit this information. Participant data is snapshot data as of the valuation date.

The valuation was based on the provisions of the Plan as amended through the beginning of the Plan Year. Each actuarial assumption used in this valuation is reasonably related to the past experience of the Plan and represents reasonable expectations of future experience under the Plan. The Special Fiduciary with advice and approval of the actuary sets the assumptions and methods for the valuation.

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Continued ...

The firm of McCloud Consulting Group is owned by the Special Fiduciary, Traci M. Christian. This relationship has been disclosed to the Chancery Court overseeing the administration of the Plan and has been deemed acceptable by court order. The signing actuary has no other conflict of interest that would impair the objectivity of the work reflected in this report.

This report is intended for use by the Special Fiduciary and the Court and should not be used for any purpose other than as stated herein. This report is only valid when presented in its entirety. It must not be reproduced without permission.

The undersigned meets the Qualification Standards for Prescribed Statements of Actuarial Opinion promulgated by the American Academy of Actuaries.

Respectfully submitted,

John J. Naylor IV, ASA, MAAA



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Section One:

Valuation Results

Valuation Results

	<u>October 1, 2018</u>	<u>October 1, 2019</u>
Number of Participants		
Still Actively Employed at SRHS	646	450
In Pay Status	774	786
Vested Terminated	181	182
Non-Vested Terminated	902	560
Total	2,503	1,978
 Actuarial Liability Associated with Each Participant Group		
Still Actively Employed at SRHS	\$ 40,415,000	\$ 30,201,000
In Pay Status	134,353,000	135,154,000
Vested Terminated	12,475,000	14,123,000
Non-Vested Terminated	2,324,000	1,600,000
Total	\$189,567,000	\$181,078,000
 Plan Assets		
Funds Currently Invested	\$ 115,889,000	\$ 107,233,000
Funds in Escrow	8,892,000	0
Total Value of Current Assets	\$124,781,000	\$107,233,000
Percentage of Liability Currently Funded	66%	59%
Present Value of Future Settlement Payments	63,113,000	64,435,000
Total Value of Projected Assets	\$187,894,000	\$171,668,000
 Percentage of Liability Projected to be Funded	 99%	 95%

Pension Plan Experience

The Plan experience is evaluated by comparing the current year's results with the prior year's results. If the actuarial assumptions are accurate, there should be predictable changes from one year to the next. Gains and losses measure deviations from the stated actuarial assumptions.

The assets of the Plan earned a rate of return of approximately 1.4%. This resulted in investment returns of \$5,067,000 less than anticipated by the 6.0% assumed rate of return. This return is net of all plan expenses – investment management and administrative.

During the first quarter of the Plan Year, the Plan – per an order of the court – offered a return of employee contributions in lieu of a retirement benefit to participants still employed at Singing River Health System. For most of these participants, employee contributions with interest were less than the value of their earned retirement benefit. By electing to forgo retirement benefits and instead take a return of contributions, most of these participants chose to receive less from the Plan than that which they would otherwise be entitled. The window for these elections closed on December 31, 2018. A new window was offered beginning in May 2019 which is expected to continue for the foreseeable future. During the plan year ended September 30, 2019, this program paid out \$1,956,215 in employee contributions. In exchange for these payouts, participants elected to forgo \$3.765 million in benefits. **This resulted in a savings to the Plan of over \$1.8 million.**

Singing River Health System Employees' Retirement Plan and Trust

Cash Flow Projection

Year Beginning Oct. 1	Expected Contribution	Number of Participants	Benefit Payments	Assets	Liability	Unfunded Liability
2019	4,200,000	1,418	12,199,000	107,233,000	182,475,000	75,242,000
2020	4,200,000	1,399	12,372,000	105,300,000	178,866,000	73,566,000
2021	4,200,000	1,381	12,549,000	103,100,000	176,340,000	73,240,000
2022	4,200,000	1,363	12,724,000	100,600,000	173,478,000	72,878,000
2023	5,700,000	1,346	12,826,000	97,700,000	170,262,000	72,562,000
2024	5,700,000	1,327	12,987,000	96,100,000	166,749,000	70,649,000
2025	4,500,000	1,307	13,112,000	94,200,000	162,856,000	68,656,000
2026	4,500,000	1,286	13,147,000	90,800,000	158,601,000	67,801,000
2027	4,500,000	1,264	13,198,000	87,200,000	154,056,000	66,856,000
2028	4,500,000	1,241	13,160,000	83,300,000	149,188,000	65,888,000
2029	4,500,000	1,217	13,087,000	79,200,000	144,070,000	64,870,000
2030	4,500,000	1,192	13,003,000	75,000,000	138,727,000	63,727,000
2031	4,500,000	1,165	12,851,000	70,600,000	133,155,000	62,555,000
2032	4,500,000	1,137	12,703,000	66,100,000	127,412,000	61,312,000
2033	4,500,000	1,108	12,500,000	61,500,000	121,484,000	59,984,000
2034	4,500,000	1,078	12,210,000	56,800,000	115,420,000	58,620,000
2035	4,500,000	1,047	11,903,000	52,100,000	109,301,000	57,201,000
2036	4,500,000	1,014	11,559,000	47,500,000	103,144,000	55,644,000
2037	4,500,000	980	11,151,000	42,900,000	96,984,000	54,084,000
2038	4,500,000	946	10,758,000	38,500,000	90,892,000	52,392,000
2039	4,500,000	912	10,320,000	34,200,000	84,853,000	50,653,000
2040	4,500,000	876	9,854,000	30,100,000	78,919,000	48,819,000
2041	4,500,000	840	9,369,000	26,300,000	73,126,000	46,826,000
2042	4,500,000	803	8,869,000	22,700,000	67,502,000	44,802,000
2043	4,500,000	766	8,361,000	19,400,000	62,074,000	42,674,000
2044	4,500,000	729	7,854,000	16,500,000	56,863,000	40,363,000
2045	4,500,000	692	7,344,000	13,900,000	51,878,000	37,978,000
2046	4,500,000	654	6,831,000	11,700,000	47,137,000	35,437,000
2047	4,500,000	617	6,328,000	9,900,000	42,660,000	32,760,000
2048	4,500,000	581	5,832,000	8,500,000	38,450,000	29,950,000
2049	4,500,000	545	5,350,000	7,500,000	34,516,000	27,016,000
2050	4,500,000	510	4,885,000	6,900,000	30,861,000	23,961,000
2051		476	4,440,000	6,800,000	27,481,000	20,681,000

The results presented here are ESTIMATES.

These results are for **discussion purposes only** and should not be relied upon for any other purpose.

History of Assets and Liabilities

Valuation Date October 1:	Plan Assets and Future Contributions*	Present Value of Benefits	Projected Funded Ratio
2018	187,894,000	189,567,000	99%
2019	171,668,000	181,078,000	95%

*Includes the present value of contributions included in the settlement, discounted at the same 6% rate as are the plan benefits.

History of Market Value Asset Returns

Year Ended Sept. 30	Rate of Investment Return
2018	7.7%
2019	1.4%

Valuation History

2019

The assets of the Plan earned a rate of return of approximately 1.4%. This resulted in investment returns of approximately \$5.1 million less than anticipated by the 6.0% assumed rate of return. This return is net of all plan expenses – investment management and administrative.

Based on the results of a study of retirement rates experienced by the plan, the actuarial assumption regarding the incidence of retirement was adjusted to better conform with observed experience. This change produced an actuarial gain of \$635 thousand.

During the first quarter of the Plan Year, the Plan – per an order of the court – offered a return of employee contributions in lieu of a retirement benefit to participants still employed at Singing River Health System. For most of these participants, employee contributions with interest was less than the value of their earned retirement benefit. By electing to forgo retirement benefits and instead take a return of contributions, most of these participants chose to receive less from the Plan than they would otherwise be entitled. During the 2018-2019 plan year, this program paid out \$1,956,215 in employee contributions. In exchange for these payouts, participants elected to forgo \$3.766 million in benefits. This resulted in a savings to the Plan of over 1.8 million. The window for these elections remains open for the foreseeable future.

2018

The assets of the Plan earned a rate of return of approximately 7.7%. This resulted in investment returns of approximately \$2.0 million more than anticipated by the 6.0% assumed rate of return. This return is net of all plan expenses – investment management and administrative.

On April 12, 2018, the Chancery Court of Jackson County, Mississippi ordered benefits in this Plan to be reduced in an effort to secure benefits for all Plan participants.

During the final quarter of the Plan Year, the Plan – per an order of the court – began to offer a return of employee contributions in lieu of a retirement benefit to participants still employed at Singing River Health System. For most of these participants, employee contributions with interest was less than the value of their earned retirement benefit. By electing to forgo retirement benefits and instead take a return of contributions, most of these participants chose to receive less from the Plan than they would have otherwise be entitled. As of September 30, 2018, this program paid out \$1,924,351 in employee contributions. In exchange for these payouts, participants elected to forgo \$4.377 million in benefits. This resulted in a savings to the Plan of almost \$2.5 million. Additional requests for return of contributions may be made until December 31, 2018. The effects of contributions returned after the valuation date will be measured in the next valuation. Similar windows may be offered in the future.

Section Two:

***Retirement Plan
Benefit Provisions***

Benefit Provision Summary

Effective Date

February 17, 1983. The Plan was amended in 2014 to freeze accruals and employee contributions. The Plan was further amended in 2018 per Court order to decrease all Plan benefits.

Eligibility

All employees are eligible to participate on the first day of the month coincident with or next following three months of employment and authorization of payroll deduction for required contributions. No employees hired or rehired on or after October 1, 2011 will be eligible to participate in the Plan.

Credited Service

A participant will receive Credited Service for the whole number of years and quarter years worked excluding any period of unpaid leave or period when he or she did not contribute to the Plan. No Credited Service will accrue for purposes of determination of the accrued benefit after the conclusion of the pay period which corresponds to paychecks distributed to employees on December 4, 2014. Credited Service will continue to accrue for eligibility for Early Retirement and Thirty Year Service Early Retirement.

Vesting Service

A participant will receive Vesting Service for any period worked adjusted for any period greater than 12 months excluded from Credited Service or period when he or she did not contribute to the Plan.

Compensation

Total compensation, including overtime, bonus, commissions, incentive compensation, employee contributions to the Plan, elective contributions under the cafeteria plan, and elective contributions to any plan qualified under Section 132(f), 401(k), 403(b) and 457 of the Code. Compensation excludes contributions to the Plan by the Employer not related to "pick-up". No compensation shall be recognized after the conclusion of the pay period which corresponds to paychecks distributed to employees on December 4, 2014.

Average Compensation

The highest average during any nineteen consecutive quarters of compensation during the forty consecutive quarters of employment immediately preceding date of termination, plus the last quarter of employment compensation.

Employee Contributions

Participants are required to contribute 3% of compensation each pay period. No employee contributions will be made after the conclusion of the pay period which corresponds to paychecks distributed to employees on December 4, 2014. Employee contributions accumulate at a rate of return based on the 3-month U.S. Treasury Rate for September, credited once annually for active participants at September 30th. The rate is applied to the average balance in the account during the preceding 12 months.

Normal Retirement Date

The first day of the month coinciding with or next following the later of the Participant's 65th birthday and the attainment of 10 years of Vesting Service.

Normal Retirement Benefit

The sum of (a), (b) and (c), not less than (d):

- (a) 1.625% of the Average Monthly Compensation multiplied by Credited Service, up to 20 years,
- (b) 1.75% of the Average Monthly Compensation multiplied by Credited Service in excess of 20 years up to 30 years,
- (c) 2% of the Average Monthly Compensation multiplied by Credited Service in excess of 30 years
- (d) Credited Service multiplied by \$5

Effective October 1, 2011, the benefit for those participants with less than 20 years of Credited Service as of September 30, 2011 will be limited to 50% of Average Monthly Compensation.

Effective April 12, 2018 all benefits calculated in accordance with the above formula will be reduced by 25%.

Early Retirement Date

The first day of the month coinciding with or next following the Participant's 60th birthday and the attainment of 10 years of Credited Service.

Early Retirement Benefit

Equal to the Normal Retirement Benefit reduced 3% for each year commencement precedes Normal Retirement Date.

Thirty Year Service Early Retirement

A Participant with 30 or more years of Credited Service may commence benefit without Early Retirement reduction.

Late Retirement

A Participant may retire at any time after his Normal Retirement Date with a benefit equal to the benefit earned through the Participant's actual retirement date.

Disability Retirement

A Participant must have at least 10 years of Credited Service and be eligible for Social Security Disability to be eligible for the disability benefit. The disability benefit is equal to the accrued benefit using final average earnings at date of disability and the amount of service that would have been accrued if the Participant worked to the later of age 60 or the date of disability, reduced 3% for each year commencement precedes Normal Retirement Date, up to 15%.

Vested Termination

A Participant is 100% vested after completing 10 or more Years of Vesting Service and is entitled to receive their accrued benefit at the time of termination payable at their normal retirement date or earlier in accordance with early retirement provisions above.

A Participant is always 100% vested in their employee contributions.

Normal Form of Payment

Life Annuity.

Pre-Retirement Death Benefit

The surviving spouse will receive a benefit equal to the amount that would have been paid had the participant separated from service on his date of death and retired with a 100% qualified joint and survivor annuity, reduced 3% for each year date of death precedes Normal Retirement Date.

Cost of Living Adjustment

Cost of Living increases are suspended until further order of the Court.



Section Three:

***Actuarial Assumptions
And Methods***

Actuarial Assumptions

Economic Assumptions

Interest Rate 6.0% (net of all expenses)

Demographic Assumptions

Mortality RP-2014 Employee and Healthy Annuitant tables adjusted back to 2006 and then projected with generational improvements using the most recently available scale – MP-2018 for this valuation.

Termination of Employment None

Retirement Age A participant is assumed to retire in accordance with annual rates as illustrated below:

<u>Age</u>	<u>Annual Rates of Retirement</u>	<u>Rates from Former Valuation</u>
60-63	15%	25%
64	20%	25%
65	25%	100%
66-67	30%	100%
68+	100%	100%

For participants with 30 years of service (regardless of age), rates are increased to 30%.

Disability

Sample Rates of Disability are as follows:

<u>Age</u>	<u>Annual Rates of Disability</u>
20	0.08%
30	0.11%
40	0.21%
50	0.29%
60	0.59%

Marital Assumption

100% of active participants are assumed to be married. Husbands are assumed to be three years older than their wives.

Assumption Changes

The experience of the plan with regard to the incidence of retirement since benefit accruals were frozen in November 2014 was studied, and consequently the rates of retirement assumed in the valuation were changed as outlined in the following table.

Annual Probability of Retirement (Commencing Retirement Benefits)

Ages	Previous Valuations	New assumption
60-63	25%	15%
64	25%	20%
65	100%	25%
66-67	100%	30%
68 and above	100%	100%

A participant with 30 years of service is eligible for unreduced retirement benefits, and the probability for such participants beginning retirement is assumed to be 30%, if less than that on the table above. This assumption did not change.

Actuarial Funding Method – Traditional Unit Credit

The actuarial present values of all benefits allocated to all valuation years preceding the actuarial valuation date is the actuarial accrued liability.

The actuarial gain (loss) is a measure of the difference between actual experience and that expected based upon the actuarial assumptions between two actuarial valuation dates. Under this actuarial cost method, the actuarial gains (losses) are directly calculated and reduce (increase) the unfunded actuarial accrued liability.

The expected rate of return and the corresponding discount rate is expected to be net of all Plan expenses.

Assessment and Disclosure of Risk

The Actuarial Standards of Practice require the plan’s actuary to assess certain risks to the plan. Specifically, the impact of future events that may differ significantly from the assumptions used to produce the current actuarial valuation. The purpose of this information is to make the plan sponsor aware of such risks. For a more detailed analysis of any of these items, please contact our office.

Assumptions: Actuarial assumptions such as interest rates, rates of retirement as well as mortality tables used for calculating the actuarially recommended contribution are important factors. Each actuarial assumption used in this valuation is reasonably related to the past experience of the Plan and represents reasonable expectations of future experience under the Plan. With advice from the actuary, the Special Fiduciary approves the assumptions for the valuation. If there is a decrease in the assumed future return on plan investments, the overall funding requirement, barring other mitigating circumstances, will increase. Updates to mortality tables often extend life expectancies, which also results in an increase to plan liabilities.

Contribution Risk: Funding of less than the contributions agreed upon by the settlement with the Singing River Health System will not fully fund the Plan on a long term basis. If the Plan is underfunded, additional benefit reductions may be required.

Investment Risk: Plan assets include contributions and asset earnings. The Plan's investment portfolio should take into consideration the funded status of the Plan, anticipated future contribution levels, and the expected future years of the Plan. Investment performance may have a significant impact on future required contributions to fully fund the Plan on a long-term basis.

Demographic Risk: Demographic changes from year to year can have a significant impact on valuation results.



Section Four:
Valuation Data

Summary of Asset Information

As of October 1, 2019, the market value of the Plan Trust Fund was reported to be \$107,233,303.

Market Value as of October 1, 2018	\$115,889,000
a. Revenues	
Contributions	4,828,000
Investment Income (Net of all plan expenses)	1,536,000
b. Disbursement to Members	
Benefits Paid	(15,020,000)
c. Market Value of Assets as of October 1, 2019	107,233,000
d. Present Value of Future Settlement Payments	\$64,435,000
e. Projected Value of Assets as of October 1, 2019	\$171,668,000

Rate of Return

On an actuarial value basis, the fund earned a rate of return of approximately 1.4%. This approximation reflects the timing of contributions and withdrawals.

Participant Summary

Retirees and Beneficiaries Included in the Valuation

There were 786 retirees and beneficiaries included in the valuation, with annual pensions totaling \$11,961,039. The breakdown by age division is as follows:

Attained Ages	Number	Average Annual Pensions
40-44	1	\$6,752
45-49		
50-54	7	13,749
55-59	50	20,527
60-64	148	19,213
65-69	198	17,058
70-74	184	15,216
75-79	104	10,314
Over 80	94	7,854
Total	786	\$15,218

Vested Terminated Members Included in the Valuation

There were 182 vested terminated members included in the valuation, with annual pensions totaling \$2,127,372. The breakdown is as follows:

Attained Ages	Number	Average Annual Pensions
30-34	3	\$4,032
35-39	6	3,773
40-44	23	9,556
45-49	31	15,077
50-54	46	10,282
55-59	52	13,374
60-64	16	12,281
65-69	3	10,832
70-74	2	4,019
Total	182	\$11,689

Active Members – Age and Service Distribution

Age	Service							Total
	5-9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	Over 35	
20 - 24								
25 - 29	1							1
30 - 34	5	9	1					15
35 - 39	3	18	6					27
40 - 44	6	15	22	7				50
45 - 49	3	21	23	24	9			80
50 - 54	9	17	13	32	25	3		99
55 - 59	1	12	20	29	19	6		87
60 - 64	3	15	18	14	13	3	3	69
65+	<u>1</u>	<u>5</u>	<u>5</u>	<u>6</u>	<u>4</u>	<u>1</u>	<u> </u>	<u>22</u>
Total	32	112	108	112	70	13	3	450

Total Active Participant Information

	2019	2018	2017
Active Members	450	646	910
Average Age (yrs.)	52.2	50.3	48.6
Average Service (yrs.)	18.8	17.0	15.5

Reconciliation with Prior Year

	Actives	Retirees & Beneficiaries	Vested Terminations	Non -Vested Terminations
October 1, 2018 Participants	646	774	181	902
Corrections				
New Participants				7
Returned to Active				
Retirements	(23)	29	(6)	
Deaths		(21)		
New Beneficiaries		4	(1)	
Benefits Expire				
Terminations				
- Vested	(24)		24	
- Non-vested	(7)			
- Lump Sums	(142)		(16)	(349)
October 1, 2019 Participants	450	786	182	560