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TRANSAMERICA®
Retirement Solutions

Singing River Health System Employees' Retirement Plan

ACTUARIAL VALUATION REPORT

As of October 1, 2016

and

Information in Accordance with
GASB No. 68
as of September 30, 2017

Revised

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SECTION I

ACTUARIAL CERTIFICATION

Purpose of Report

This report presents the results of the actuarial valuation for the Singing River Health System Employees' Retirement Plan as of September 30, 2016. It has been revised from the report sent previously to reflect a change in the expected return on assets, a revision to plan liability to include accrued benefit payments and a slight adjustment to the market value of assets. It was prepared for the plan sponsor for the principal purpose of determining information in accordance with GASB No. 68 for the fiscal year ending September 30, 2017. Use of the information contained in this report for any other purposes may not be appropriate. Section II contains a summary of the results of the valuation, including commentary.

Methodology

The employee data and unaudited financial information used in this valuation was provided by the Plan sponsor, maintained by Transamerica and is suitable for purposes of the valuation. Plan asset information is summarized in Section III. Census data is summarized in Section IV and V. The Plan provisions are summarized in Section VII. Appropriate tests for consistency and reasonableness were completed on the information relied on to produce this valuation. The liabilities and costs were determined using the Actuarial Cost Method, the Actuarial Asset Valuation Method and the Actuarial Assumptions described in Section VI.

Actuarial Certification of Assumptions and Methods

The report was completed in accordance with generally accepted actuarial standards and procedures, and conforms to the Guidelines for Professional Conduct of the American Academy of Actuaries. The accounting calculations in this report are consistent with our understanding of the provisions of GASB No. 68. The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinion contained herein.

In accordance with ASOP Nos. 27 and 35, each economic and demographic assumption, with the exception of the investment return, shown in Section VI of the report reflects the actuary's professional judgment in estimating future experience, takes into account relevant historical and current economic data, has no significant bias and is appropriate for the purposes of this report. Different assumptions may also be reasonable. The investment return assumption was provided by an outside party. Transamerica has not been engaged to evaluate the investment return assumption and, thus, we express no opinion on the appropriateness of that assumption.

Disclaimers

Valuation results contained herein are based on a snapshot of the Plan at one point in time including assumptions as disclosed. They are not a prediction of the Plan's future funding requirements which may be significantly different based on the Plan's actual experience including but not limited to economic and participant demographic experience. Ultimately plan costs will be determined by the actual benefits provided and the applicable laws and regulations in effect at the given particular time. Decisions regarding benefit provisions should be made only after careful consideration of a variety of factors and warrant more extensive in-depth analysis.

We are not aware of any substantive commitments for benefits that exceed the benefits defined by the written plans. We are not aware of any significant liability of the Plan, other than for benefits, such as for legal or accounting fees. We are not aware of any significant events subsequent to the current year's valuation date through the date this report, which could materially affect the amounts shown in the report. We have not been notified of any decision to fully or partially terminate the Plan. To the best of our knowledge, there is no relationship with the Plan, Plan Sponsor or the Plan Sponsor's employees that would impair or appear to impair the objectivity of our work.

Francis P. Carberry

November 1, 2017
Date

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Nicole Devoe

November 1, 2017
Date

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SECTION II

PRINCIPAL RESULTS OF THE VALUATION

A COMPARATIVE SUMMARY	September 30, 2016	September 30, 2015
(1) Normal Cost for the Next Fiscal Year	$ 0	$ 0
(2) Total Pension Liability	463,629,088	441,868,300
(3) Plan Fiduciary Net Position	130,631,000	137,413,000
(4) Recommended Contribution for Plan Year beginning October 1	N/A	N/A
(5) Actual Contribution for Next Fiscal Year	0	0
(6) GASB 68 Pension Expense for the next fiscal year	16,352,139	22,169,395
(7) Information on Plan Participants		
(a) Number of plan participants*		
(i) active	1,020	1,154
(ii) retired	724	688
(iii) terminated vested	162	156
(iv) total	1,906	1,998
(b) Active Participant Data		
(i) total valuation compensation for participants under MRA**	N/A	N/A
(ii) average valuation compensation for participants under MRA**	N/A	N/A
(iii) average attained age	47.8 years	47.1 years
(iv) average past service	14.5 years	13.6 years

* *919 and 947 terminated non-vested participants due a refund of employee contributions as of October 1, 2016 and 2015, respectively.*

** *Prior year's pay increased with salary scale, limited according to section 401(a)(17).*

SECTION III – EXHIBIT A

CHANGES IN NET PENSION LIABILITY

	Increase (Decrease)		
	Total pension liability (a)	Plan fiduciary net position (b)	Net pension liability (a) – (b)
Balances at 9/30/2016	$ 463,629,088	$ 130,631,000	$ 332,998,088
Service cost	0		0
Interest	14,893,889		14,893,889
Changes of benefit terms	0		0
Differences between expected and actual experience	4,496,222		4,496,222
Changes of assumptions	(15,273,971)		(15,273,971)
Contributions - employer		0	0
Contributions - employee		0	0
Net investment income		11,369,590	(11,369,590)
Benefit payments, including refunds of member contributions	(16,304,500)	(16,304,500)	0
Administrative expenses		(685,109)	685,109
Other changes	0	0	0
Net change	(12,188,360)	(5,620,019)	(6,568,341)
Balances at 9/30/2017	$ 451,440,728*	$ 125,010,981	$ 326,429,747

** Includes $59,979 in accrued benefit payments made October 2, 2017.*

SECTION III – EXHIBIT B

STATEMENT OF FIDUCIARY NET POSITION

	September 30, 2017	September 30, 2016
Assets		
Cash		
Cash and deposits	$	$
Securities lending cash collateral		
Total Cash	$	$
Receivables		
Contributions		
Investment income		
Receivables from brokers for unsettled trades		
Other		
Total Receivables		
Investments		
Debt securities (including cash)	$ 32,952,374	
Domestic equity securities	43,755,775	
International equity securities	9,016,093	
Alternatives	39,286,739	
Total Investments	125,010,981	
Total Assets	$ 125,010,981	
Liabilities		
Accrued expenses and benefits payable		
Securities lending cash collateral		
Payable to brokers for unsettled trades		
Total Liabilities		
Net position restricted for pensions	$ 125,010,981	$ 130,631,000*

** Information was provided in aggregate and not by asset class.*

SECTION III – EXHIBIT C

NET PENSION LIABILITY AND DISCOUNT RATE SENSITIVITY

	September 30, 2017	September 30, 2016
Total pension liability	$ 451,440,728	$ 463,629,088
Plan fiduciary net position	(125,010,981)	(130,631,000)
Net pension liability	$ 326,429,747	$ 332,998,088
Plan fiduciary net position as a percentage of the total pension liability	27.69%	28.18%
Sensitivity to Changes in Discount Rate		
Current discount rate	3.49%	3.27%
Net pension liability – 1% decrease in discount rate	$ 403,010,896	$ 416,171,043
Net pension liability – 1% increase in discount rate	$ 266,152,784	$ 268,149,542
Date at which municipal bond rate applies	2024	2024

SECTION III – EXHIBIT D

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

	Year Ending September 30, 2017
Total pension liability	
Service cost	$ 0
Contributions – Member	0
Interest	14,893,889
Changes of benefit terms	0
Differences between expected and actual experience	4,496,222
Changes of assumptions	(15,273,971)
Benefit payments, including refunds of member contributions	(16,304,500)
Disability benefits	0
Net change in total pension liability	$ (12,188,360)
Total pension liability – October 1, 2016	463,629,088
Total pension liability – September 30, 2017	$ 451,440,728
Plan fiduciary net position	
Contributions – Employer	$ 0
Contributions – Member	0
Net investment income	11,369,590
Benefit payments, including refunds of member contributions	(16,304,500)
Administrative expenses	(685,109)
Other	0
Net change in plan fiduciary net position	$ (5,620,019)
Plan fiduciary net position – October 1, 2016	130,631,000
Plan fiduciary net position – September 30, 2017	$ 125,010,981
Net pension liability – September 30, 2017	$ 326,429,747
Plan fiduciary net position as a percentage of the total pension liability	27.69%
Covered-employee payroll	N/A
Net pension liability as a percentage of the covered-employee payroll	N/A

SECTION III – EXHIBIT E

PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS

For the year ended September 30, 2017, the Plan has final pension expense of $15,693,586. At September 30, 2017, the Plan reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

At year end recognized deferred outflows and inflows:

	Outflows	Inflows
Experience	3,073,367	4,252,469
Assumptions	17,586,379	10,440,436
Investment	3,017,355	3,094,195
Total	23,677,101	17,787,100

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

	Net Outflow
FY 2018	8,150,154
FY 2019	(226,117)
FY 2020	(1,348,641)
FY 2021	(685,395)
Thereafter	0

Calculation of Pension Expense:

	FY2017	FY2016
Service cost (non employee contributions)	0	0
Service cost (employee contributions)	0	0
Interest on total pension liability	14,893,889	17,011,106
Differences between expected and actual experience	(1,550,900)	(2,973,755)
Changes of assumptions	9,560,907	14,394,442
Employee contributions	0	0
Projected earnings on pension plan investments	(7,942,611)	(8,331,172)
Differences between projected and actual earnings on plan investments	705,745	1,391,141
Pension plan administrative expense	685,109	677,633
Change of benefit terms	0	0
Other changes in fiduciary net position	0	0
Pension Expense	$16,352,139	$22,169,395

SECTION III – EXHIBIT E

PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS
(continued)

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Difference Between Expected and Actual Experience

Year	Differences Between Expected and Actual Experience	Period	2015	2016	2017	2018	2019	2020	2021
2015	0	3.90	0	0	0	0	0	0	0
2016	(10,199,979)	3.43		(2,973,755)	(2,973,755)	(2,973,755)	(1,278,714)	0	0
2017	4,496,222	3.16			1,422,855	1,422,855	1,422,855	227,657	
Net increase (decrease) in pension expense			0	(2,973,755)	(1,550,900)	(1,550,900)	144,141	227,657	0

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Changes in Assumptions

Year	Changes of Assumptions	Period	2015	2016	2017	2018	2019	2020	2021
2015	22,058,366	3.90	5,655,991	5,655,991	5,655,991	5,090,393	0	0	0
2016	29,972,888	3.43		8,738,451	8,738,451	8,738,451	3,757,535	0	0
2017	(15,273,971)	3.16			(4,833,535)	(4,833,535)	(4,833,535)	(773,366)	
Net increase (decrease) in pension expense			5,655,991	14,394,442	9,560,907	8,995,309	(1,076,000)	(773,366)	0

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences Between Projected and Actual Earnings on Pension Plan Investments

Year	Differences Between Projected and Actual Earnings on Pension Plan Investments	Period	2015	2016	2017	2018	2019	2020	2021
2015	7,543,392	5.00	1,508,679	1,508,679	1,508,679	1,508,679	1,508,676	0	0
2016	(587,688)	5.00		(117,538)	(117,538)	(117,538)	(117,538)	(117,536)	0
2017	(3,426,979)	5.00			(685,396)	(685,396)	(685,396)	(685,396)	(685,395)
Net increase (decrease) in pension expense			1,508,679	1,391,141	705,745	705,745	705,742	(802,932)	(685,395)

SECTION III – EXHIBIT F

CALCULATION OF MONEY- WEIGHTED RATE OF RETURN

	(a) Plan Investments Net External Cash Flows	(b) Months to End of Period	(c) = (b)/12	(d) = (a) x $(1+r_{MW})^{(c)}$
Beginning Value - October 1	130,631,000	12	1.00	142,713,870
October	(1,222,413)	11	0.92	(1,326,063)
November	(1,298,209)	10	0.83	(1,397,118)
December	(2,262,728)	9	0.75	(2,417,950)
January	(1,230,846)	8	0.67	(1,306,006)
February	(1,458,152)	7	0.58	(1,534,922)
March	(1,307,404)	6	0.50	(1,366,532)
April	(1,290,904)	5	0.42	(1,339,770)
May	(1,259,410)	4	0.33	(1,296,719)
June	(1,244,576)	3	0.25	(1,272,408)
July	(1,282,133)	2	0.17	(1,301,561)
August	(1,549,597)	1	0.08	(1,560,603)
September	(1,583,237)	0	0.00	(1,583,237)
Ending Value - September 30	125,010,981			125,010,981
			r_{MW}=	9.25%

SECTION IV

RECONCILIATION OF PLAN PARTICIPANTS

	Active Plan Members	Plan Members with Deferred Benefits	Plan Members Receiving Benefits	Total Number of Plan Members
As of October 1, 2015	**1,154**	**156**	**688**	**1,998***
New entrants	0	N/A	N/A	0
Rehires	0	0	0	0
Terminations with vesting	(23)	23	N/A	0
Terminations without vesting	(34)	0	N/A	(34)
Retirements	(34)	(10)	44	0
Disability retirements	0	0	0	0
Lump sums paid	(48)	(9)	0	(57)
Deaths	0	0	(13)	(13)
Survivors (with benefits)	N/A	0	5	5
Expiration of benefits	N/A	N/A	0	0
Transfers in	0	N/A	N/A	0
Transfers out	0	0	N/A	0
Adjustments	5	2	0	7
Net change	(134)	6	36	(92)
As of October 1, 2016	**1,020**	**162**	**724**	**1,906****

** In addition, there were 947 terminated non-vested participants due a refund of their employee contributions as of October 1, 2015*

*** In addition, there were 919 terminated non-vested participants due a refund of their employee contributions as of October 1, 2016.*

SECTION V

AGE/SERVICE DISTRIBUTION
OF ACTIVE PLAN PARTICIPANTS
(as of October 1, 2016)

	Completed Years of Service										
Age	0 To 1	1 to 4	5 to 9	10 to 14	15 to 19	20 To 24	25 to 29	30 to 34	35 to 39	40 +	Total
0 – 24	0	0	0	0	0	0	0	0	0	0	0
25 – 29	0	22	6	0	0	0	0	0	0	0	28
30 – 34	0	18	60	6	0	0	0	0	0	0	84
35 – 39	0	28	63	33	3	0	0	0	0	0	127
40 – 44	0	16	72	54	25	4	0	0	0	0	171
45 – 49	0	12	57	43	41	22	2	0	0	0	177
50 – 54	0	21	27	34	34	29	12	0	0	0	157
55 – 59	0	12	41	41	30	32	15	0	0	0	171
60 – 64	0	7	18	21	10	12	7	2	1	0	78
65 – 69	0	0	5	6	3	2	2	1	0	0	19
70 & Up	0	1	1	2	2	1	1	0	0	0	8
Totals	0	137	350	240	148	102	39	3	1	0	1,020

SECTION VI

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS

A. ACTUARIAL COST METHOD

The actuarial cost method used to determine the normal cost and actuarial accrued liabilities of the plan is the Entry Age Normal Cost Method. Under this method, benefits are projected to retirement (or earlier termination) for each plan participant based upon the assumptions as to future compensation increases. The annual normal cost is determined as a level percentage of pay necessary to fund a participant's benefits over the entire period of active participation in the plan. However, as the plan is frozen, participants are assumed to have no future period of active participation. The actuarial accrued liability is the excess of the present value of future benefits over the present value of future normal costs.

The normal cost and actuarial accrued liability of the plan is the sum of the corresponding amounts for each participant. Under GASB 68 the actuarial accrued liability is called the Total Pension Liability.

Deviations in actual experience from the experience anticipated by the actuarial assumptions result in actuarial gains or losses which reduce or increase, respectively, the Total Pension Liability. Each year's deviation will be amortized over the average future working lifetime of all participants for purposes of calculating the Authority's pension cost.

All employees who are plan participants on the valuation date are included in the actuarial valuation.

B. ASSET VALUATION METHOD

The Actuarial value of assets is called the Plan Fiduciary Net Position under GASB 68. The Plan Fiduciary Net Position is the market value of assets at the measurement date.

Deviations in actual experience from the experience anticipated by the actuarial assumptions result in asset gains or losses which increase or reduce, respectively, the Plan Fiduciary Net Position. Each year's deviation will be amortized over five years for purposes of calculating the Authority's pension cost.

C. ACTUARIAL ASSUMPTIONS

Investment Return	6.0% per year, net of administrative expenses (previously, 6.5% per year).
Post-Retirement Cost of Living Adjustment	1.25% per year.
Compensation Increases	N/A
Maximum Benefit and Compensation Limitations	Assumed to increase at the rate of 2.5% per year.
Employee Contributions	N/A
IRC Maximum Benefit and Compensation Limits	
Benefit Limit	$210,000 for 2016.
Compensation Limit	N/A
Mortality	RP-2014 Employee and Healthy Annuitant Tables adjusted back to 2006 and then projected forward with Scale MP-2016 for all years.
Withdrawal	The active participants are assumed to terminate their employment for causes other than death, disability or retirement in accordance with annual rates as illustrated sample rates below:

Service	Rate (%)
5	11.68
10	6.87
15	5.12
20	3.93
25	2.97

C ACTUARIAL ASSUMPTIONS *(cont'd)*

Retirement Age

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

Age	Rate (%)
60 - 64	25
65	100

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

Disability

Active participants are expected to become disabled, as defined under the plan, in accordance with sample annual rates as illustrated below:

Age	Rate (%)
20	0.08
25	0.10
30	0.11
40	0.16
50	0.29
60	0.59

Form of Payment

Life Annuity.

Marital Assumption

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

Municipal Bond Index

3.35%. S&P Municipal Bond 20 Year High Grade Rate Index as of September 29, 2017 (the last measurement before the end of the fiscal year). Previously, 3.06% based on the Federal Reserve Bond Buyer Index (general obligation, 20 years to maturity) as of September 29, 2016.

Administrative Expenses

Prior year's actual administrative expenses increased by CPI.

Future Employer Contributions

None.

SECTION VII

SUMMARY OF PLAN PROVISIONS

Effective Date	February 17, 1983. The plan was most recently amended via a November 20, 2014 Board Resolution to freeze accruals and employee contributions.
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.

SUMMARY OF PLAN PROVISIONS
(continued)

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.

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 reduction.

SUMMARY OF PLAN PROVISIONS
(continued)

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 or the actuarially equivalent value of the Normal Retirement Benefit.
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 100% of 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	Retired participants receive an additional payment each year equal to one-half the CPI (COLA capped at 2.50%) multiplied by the annual retirement benefit, multiplied by the number of full years retired.