



SpencerFane®

GREG ASH  
DIRECT DIAL: 913-327-5115  
gash@spencerfane.com

File No. 3382100-45

February 13, 2020

**VIA FEDEX**

Mr. Michael Ruff  
Executive Director  
Missouri Joint Committee on Public Employee Retirement  
State Capitol, Room 219-A  
Jefferson City, MO 65101

**Re: North Kansas City Hospital Retirement Plan**

Dear Mr. Ruff:

Thank you for taking the time to talk with me about recent changes to the North Kansas City Hospital Retirement Plan. On behalf of North Kansas City Hospital, I am enclosing the actuarial cost statement prepared by the Plan's actuary in accordance with Section 105.665 of the Missouri Revised Statutes. If you have any questions about the cost statement or the changes that it covers, please let me know.

Very truly yours,

Greg Ash

GA:arc  
Enclosure

cc: Ms. Lori Coder  
Ms. Dawn Bryant  
Mr. Paul Foley  
Beth Miller, Esq.

OP 1957908.1

TRANSFORM YOUR TOMORROW™



North Kansas City Hospital  
Retirement Plan

ACTUARIAL COST STATEMENT

In Accordance with Missouri Statute 105.665

---

## TABLE OF CONTENTS

<u>SECTION</u>		<u>PAGE</u>
I	ACTUARIAL CERTIFICATION	1
II	CURRENT AND MODIFIED PLAN PROVISIONS	3
III	FINANCIAL PROJECTIONS: CURRENT AND MODIFIED PLAN PROVISIONS	7
IV	COMMENTS AND REQUIRED STATEMENTS	8
V	ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS	9

## **SECTION I**

### **ACTUARIAL CERTIFICATION**

#### **Purpose of Report**

This Cost Statement ("Statement") was prepared for North Kansas City Hospital (the "Plan Sponsor") to document the estimated financial effect of implementing certain changes to the North Kansas City Hospital Retirement Plan (the "Plan"). The information contained in this document was prepared in connection with the requirements of Missouri Statute 105.665 ("Statute"). Use of the information contained in this Statement for any other purposes may not be appropriate.

#### **Methodology**

The employee data and financial information used for this Statement were provided by the Plan Sponsor, the Plan's recordkeeper, Transamerica, and other Plan service providers. The data and information are suitable for purposes of the Statement. The current and modified Plan provisions are summarized in Section II. The required financial projections are summarized in Section III. Section IV contains comments about the financial projections as well as other statements required by the Statute. The liabilities and costs were determined using the Actuarial Cost Method, Actuarial Asset Valuation Method and the Actuarial Assumptions described in Section V.

The results contained in this Statement are based on the same data, methods and assumptions as shown in the January 1, 2018, actuarial valuation report. Future actuarial measurements may differ significantly from the current measurements contained in the Statement as a result of:

- Actual investment return differing from the assumed return
- Plan participant experience differing from those anticipated in the economic and demographic assumptions
- Changes in economic and demographic assumptions
- Changes in plan provisions or applicable law

#### **Actuarial Certification of Assumptions and Methods**

The actuarial assumptions used in this report are reasonable and reflect our best estimate of the anticipated future experience under the Plan. 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 undersigned credentialed actuary meets 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 non-prescribed economic and demographic assumption (with the exception of the investment return shown in Section V of the Statement) 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 reasonable and appropriate for the purpose of the actuarial valuation. Different assumptions may also be reasonable. The investment return assumption was provided by the Plan's investment advisor.

## SECTION I

### ACTUARIAL CERTIFICATION

(continued)

#### 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. 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.



---

Paul W. Foley, A.S.A., E.A., M.A.A.A.  
Senior Consulting Actuary  
Enrollment Number: 17-05775  
Phone: (508) 903-6016  
Email: paul.foley@transamerica.com

February 12, 2020

---

Date

## SECTION II

### CURRENT AND MODIFIED PLAN PROVISIONS

#### **CURRENT PROVISIONS:**

##### Normal Retirement Benefit

For Participants whose first Hour of Service as an Eligible Employee was prior to 01/01/2005:

1.35% of Average Monthly Compensation up to 1/12th of a Participant's Covered Compensation times Benefit Service, plus 2.00% of Average Monthly Compensation in excess of 1/12th of Covered Compensation times Benefit Service.

For Participants who's first Hour of Service as an Eligible Employee was on or after 01/01/2005:

0.90% of Average Monthly Compensation up to 1/12th of a Participant's Covered Compensation times Benefit Service, plus

1.40% of Average Monthly Compensation in excess of 1/12th of Covered Compensation times Benefit Service.

##### Vesting

A Participant who terminates employment after completing 5 or more Years of Service is 100% vested in his Normal Retirement Benefit.

##### Disability Benefit

Equal to Normal Retirement Benefit based on salary and service at date of disability with no reduction for commencement prior to his or her Normal Retirement Date.

##### Plan Actuarial Equivalence for Non-Lump Sum Forms of Payment

The 1971 Group Annuity Table, with a four-year setback for participants and a six-year setback for beneficiaries and 8.25% interest.



## SECTION II

### CURRENT AND MODIFIED PLAN PROVISIONS

#### **MODIFIED PROVISIONS:**

##### Normal Retirement Benefit

A Grandfathered Participant is defined as an Active Participant as of May 1, 2019 who's first Hour of Service as an Eligible Employee was prior to January 1, 2005, and who, as of May 1, 2019, either:

- Is at least age 50 and has completed at least 10 Years of Service, or
- Has completed at least 15 Years of Service, regardless of age.

A Transition Participant is defined as an Active Participant as of May 1, 2019 who is not a Grandfathered Participant.

A Cash Balance Participant is defined as any Eligible Employee who becomes an Active Participant on or after May 1, 2019.

Grandfathered Participants:

Grandfathered Participants will continue to earn benefits under the current benefit formula.

Transition Participants:

Transition Participants will earn a benefit under the Traditional Annuity Benefit formula based on Compensation and Years of Service as of May 1, 2019, plus a Cash Balance Account based on Compensation and Years of Service on or after May 1, 2019.

## SECTION II

### CURRENT AND MODIFIED PLAN PROVISIONS

#### **MODIFIED PROVISIONS (cont'd):**

##### Normal Retirement Benefit (cont'd)

##### Cash Balance Participants:

Cash Balance Participants will earn a benefit under the Cash Balance Account based on Compensation and Years of Service on and after May 1, 2019.

A Participant's Cash Balance Account equals the following:

Cash Balance and Transition Participants will have an opening balance of \$0 as of May 1, 2019.

##### Core Contribution Credits:

At the end of each Plan Year (or earlier termination of employment) ending after May 1, 2019, in which a Participant is credited with 1,000 Hours of Service, they will receive a Core Contribution Credit equal to a percentage of their Compensation as shown below.

Core Contributions Credits	
Years of Service	Core Contribution Percentage
0-4	3.00%
5-9	4.00%
10-14	5.00%
15-19	6.00%
20-24	7.00%
25+	8.00%

##### Transition Contribution Credits:

At the end of each Plan Year ending after May 1, 2019, for the years 2019 through 2028 (or earlier termination of employment) in which a Transition Participant is credited with 1,000 Hours of Service, they will also receive a Transition Contribution Credit equal to a percentage of their Compensation.

Transition Credits range from 0.00% to 13.50% of Compensation depending on date of hire, age and Years of Service.



## SECTION II

### CURRENT AND MODIFIED PLAN PROVISIONS

#### **MODIFIED PROVISIONS (cont'd):**

##### Normal Retirement Benefit (cont'd)

##### Interest Credits:

As of the last day of each Plan Year (or earlier benefit commencement date), but before any Contribution Credit is added to a Participant's Cash Balance Account, an Interest Credit will be credited on the beginning of Plan Year Cash Balance Account based on an interest rate of 4.00% per annum. Interest Credits are credited until a Participant's benefit commencement date.

##### Vesting

A Participant who terminates employment on or after May 1, 2019, completing 3 or more Years of Service will be 100% vested in his Normal Retirement Benefit.

##### Disability Benefit

The disability benefit provision will be eliminated. Participants in pay status with a disability benefit as of May 1, 2019, will continue to receive their benefits.

##### Plan Actuarial Equivalence for Non-Lump Sum Forms of Payment

For benefit commencements on or after May 1, 2019, the 417(e) mortality table for the Plan Year that contains the benefit commencement date and the 417(e) interest rates in effect for the month of August prior to the beginning of the Plan Year that contains the benefit commencement date.

### SECTION III

#### FINANCIAL PROJECTIONS: CURRENT AND MODIFIED PLAN PROVISIONS MODIFIED PLAN PROVISIONS FIRST EFFECTIVE MAY 1, 2019

<b>Current Plan Provisions</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>
Present Value of Future Benefits	\$ 320.3	\$ 316.1	\$ 323.1	\$ 328.9	\$ 336.5	\$ 338.7	\$ 345.8	\$ 352.9	\$ 356.2	\$ 359.2	\$ 361.3
Assets	(277.4)	(269.6)	(277.0)	(283.2)	(291.1)	(293.5)	(300.5)	(307.5)	(310.6)	(313.2)	(315.0)
Present Value of Future Normal Costs	\$ 42.9	\$ 46.5	\$ 46.1	\$ 45.7	\$ 45.4	\$ 45.2	\$ 45.3	\$ 45.4	\$ 45.6	\$ 46.0	\$ 46.3
Present Value of Future Salaries	\$ 1,265.0	\$ 1,283.4	\$ 1,290.5	\$ 1,296.4	\$ 1,307.6	\$ 1,321.2	\$ 1,340.4	\$ 1,358.5	\$ 1,380.7	\$ 1,405.8	\$ 1,431.5
Normal Cost Percentage	3.39%	3.62%	3.57%	3.53%	3.47%	3.42%	3.38%	3.34%	3.30%	3.27%	3.23%
Valuation Salary <sup>1</sup>	\$ 160.8	\$ 165.5	\$ 168.2	\$ 170.2	\$ 172.4	\$ 174.6	\$ 178.0	\$ 180.2	\$ 183.0	\$ 186.0	\$ 189.9
Normal Cost (NC)	\$ 5.5	\$ 6.0	\$ 6.0	\$ 6.0	\$ 6.0	\$ 6.0	\$ 6.0	\$ 6.0	\$ 6.0	\$ 6.1	\$ 6.1
Expense Load	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
Contribution (BOY)	\$ 5.6	\$ 6.1	\$ 6.1	\$ 6.1	\$ 6.1	\$ 6.1	\$ 6.1	\$ 6.1	\$ 6.2	\$ 6.3	\$ 6.3
Contribution (EOY)	\$ 6.0	\$ 6.5	\$ 6.5	\$ 6.5	\$ 6.5	\$ 6.5	\$ 6.5	\$ 6.5	\$ 6.6	\$ 6.8	\$ 6.8
Payroll	\$ 170.8	\$ 169.6	\$ 171.7	\$ 173.7	\$ 176.5	\$ 178.8	\$ 181.7	\$ 184.7	\$ 187.6	\$ 190.6	\$ 193.6
NC % Payroll	3.22%	3.54%	3.49%	3.45%	3.40%	3.36%	3.30%	3.25%	3.20%	3.20%	3.15%
Contribution (EOY) % Payroll	3.51%	3.83%	3.79%	3.74%	3.68%	3.64%	3.58%	3.52%	3.52%	3.57%	3.51%
Actuarial Accrued Liability (EAN)	\$ 273.1	\$ 268.5	\$ 276.4	\$ 282.9	\$ 291.1	\$ 293.5	\$ 300.6	\$ 307.8	\$ 311.0	\$ 313.6	\$ 315.3
Assets	(277.4)	(269.6)	(277.0)	(283.2)	(291.1)	(293.5)	(300.5)	(307.5)	(310.6)	(313.2)	(315.0)
Unfunded Actuarial Accrued Liability (EAN)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 0.1	\$ 0.3	\$ 0.4	\$ 0.4	\$ 0.3
Funded Percentage	102%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
<b>Proposed Plan Provisions</b>											
Present Value of Future Benefits	\$ 320.3	\$ 302.6	\$ 307.1	\$ 310.3	\$ 315.0	\$ 313.9	\$ 317.5	\$ 320.9	\$ 320.2	\$ 319.0	\$ 316.6
Assets	(277.4)	(269.6)	(270.5)	(273.3)	(279.2)	(279.3)	(283.8)	(288.0)	(288.1)	(287.6)	(285.8)
Present Value of Future Normal Costs	\$ 42.9	\$ 33.0	\$ 36.6	\$ 37.0	\$ 35.8	\$ 34.6	\$ 33.7	\$ 32.9	\$ 32.1	\$ 31.4	\$ 30.8
Present Value of Future Salaries	\$ 1,265.0	\$ 1,283.4	\$ 1,290.5	\$ 1,296.4	\$ 1,307.6	\$ 1,321.2	\$ 1,340.4	\$ 1,358.5	\$ 1,380.7	\$ 1,405.8	\$ 1,431.5
Normal Cost Percentage	3.39%	2.57%	2.84%	2.85%	2.74%	2.62%	2.51%	2.42%	2.32%	2.23%	2.15%
Valuation Salary <sup>1</sup>	\$ 160.8	\$ 165.5	\$ 168.2	\$ 170.2	\$ 172.4	\$ 174.6	\$ 178.0	\$ 180.2	\$ 183.0	\$ 186.0	\$ 189.9
Normal Cost (NC)	\$ 5.5	\$ 4.3	\$ 4.8	\$ 4.9	\$ 4.7	\$ 4.6	\$ 4.5	\$ 4.4	\$ 4.3	\$ 4.2	\$ 4.1
Expense Load	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
Contribution (BOY)	\$ 5.6	\$ 4.4	\$ 4.9	\$ 5.0	\$ 4.8	\$ 4.7	\$ 4.6	\$ 4.5	\$ 4.5	\$ 4.4	\$ 4.3
Contribution (EOY)	\$ 6.0	\$ 4.7	\$ 5.3	\$ 5.4	\$ 5.1	\$ 5.0	\$ 4.9	\$ 4.8	\$ 4.8	\$ 4.7	\$ 4.6
Payroll	\$ 170.8	\$ 169.6	\$ 171.7	\$ 173.7	\$ 176.5	\$ 178.8	\$ 181.7	\$ 184.7	\$ 187.6	\$ 190.6	\$ 193.6
NC % Payroll	3.22%	2.54%	2.80%	2.82%	2.66%	2.57%	2.48%	2.38%	2.29%	2.20%	2.12%
Contribution (EOY) % Payroll	3.51%	2.77%	3.09%	3.11%	2.89%	2.80%	2.70%	2.60%	2.56%	2.47%	2.38%
Actuarial Accrued Liability (EAN)	\$ 273.1	\$ 261.3	\$ 267.8	\$ 272.7	\$ 278.8	\$ 278.9	\$ 283.5	\$ 287.8	\$ 287.8	\$ 287.2	\$ 285.1
Assets	(277.4)	(269.6)	(270.5)	(273.3)	(279.2)	(279.3)	(283.8)	(288.0)	(288.1)	(287.6)	(285.8)
Unfunded Actuarial Accrued Liability (EAN)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Funded Percentage	102%	103%	101%	100%	100%	100%	100%	100%	100%	100%	100%

<sup>1</sup> For participants under Normal Retirement Age

## **SECTION IV**

### **COMMENTS AND REQUIRED STATEMENTS**

The financial projections contained in this Statement are based on the January 1, 2018, actuarial valuation results.

#### **Current Contributions**

The Plan has made and continues to make contributions equal to or exceeding the recommended contribution level.

#### **Proposed Contributions**

To our knowledge, contributions to the Plan are not mandated but we fully anticipate the (lower) contributions described as part of the benefit changes will be met or exceeded based on recent contribution levels.

It is our understanding the benefit changes would not in any way impair the ability of the Plan to meet the obligations thereof as made.

#### **Actuarial Cost Method**

For cash contributions, the Plan uses the Aggregate Cost Method. This method does not directly calculate an actuarial accrued liability.

To fulfill the Statement requirements, also shown in the financial projections is the actuarial accrued liability, unfunded accrued liability and funded percentage based on the Entry Age Normal Cost Method (EAN). Both cost methods are summarized in Section V.

## SECTION V

### ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS

#### A. ACTUARIAL COST METHOD

The actuarial cost method used for determining the Plan's contribution requirements is the Aggregate Cost Method. Under this method, a normal cost rate is developed by calculating the difference between the actuarial present value of future benefits for all participants less the actuarial value of assets, and dividing the results by the actuarial present value of future salaries of active members below the assumed normal retirement age. The normal cost is equal to the normal cost rate multiplied by the salaries of current members below the assumed retirement age. The normal cost is increased by expected administration costs to determine the annual normal cost for the year. Under this method, an actuarial accrued liability is not determined.

The financial projections also show the actuarial accrued liability, unfunded accrued liability and funded percentage based on the Entry Age Normal Cost Method. Under this method, a present value of future benefits is determined for each participant. The annual normal cost is determined as the level percentage of pay necessary to fund a participant's benefits over the entire period of active participation in the Plan. 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.

#### B. ASSET VALUATION METHOD

The actuarial value of assets is equal to the market value of assets on the valuation date.

#### C. ACTUARIAL ASSUMPTIONS

<u>Investment Return</u> <u>(Valuation Interest Rate)</u>	7.25%.
<u>Pre- and Post-Retirement Mortality</u>	RP-2000 Combined Mortality Table projected with Scale BB.
<u>Disability Mortality</u>	RP-2000 Disabled Mortality Table projected with Scale BB.
<u>Salary Increases</u>	2.50% per year.
<u>Inflation</u>	2.30% per year.
<u>Financial Projection Population:</u>	Stable population in future years.

## SECTION V

### ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS (continued)

#### C. ACTUARIAL ASSUMPTIONS (cont'd)

Social Security Taxable Wage Base                      3.00% per year.

IRC Maximum Benefit and  
Compensation Limitations

*Benefit Limit*    \$220,000 for 2018 (previously, \$215,000).

*Compensation Limit*                                      \$275,000 for 2018 (previously, \$270,000).

Withdrawal Rates                                      Based on Crocker-Sarason Table T-5.

Sample rates are as follows:

<u>Years of Service</u>						
<u>Age</u>	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5+</u>
25	.250	.200	.150	.100	.080	.077
30	.250	.200	.150	.100	.080	.072
35	.250	.200	.150	.100	.080	.063
40	.250	.200	.150	.100	.080	.052
45	.250	.200	.150	.100	.080	.040
50	.250	.200	.150	.100	.080	.026
55	.250	.200	.150	.100	.080	.009
60	.250	.200	.150	.100	.080	.001
65	.250	.200	.150	.100	.080	.000

Retirement Age

Sample rates are as follows:

<u>Age</u>	<u>Rates</u>
55	8.0%
56	4.0%
57	3.0%
58	2.5%
59	2.0%
60	5.0%
61	2.0%
62	14.0%
63-64	5.0%
65+	100.0%

## SECTION V

### ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS (continued)

#### C. ACTUARIAL ASSUMPTIONS (cont'd)

##### Retirement Age (cont'd)

Special Management Group employees added prior to January 1, 2007 are assumed to retire at age 60. Special Management Group employees added on or after January 1, 2007 are assumed to retire at age 65.

Terminated Vested employees are assumed to retire at age 65.

##### Disability

Sample rates are as follows:

<u>Age</u>	<u>Male</u>	<u>Female</u>
25	.00030	.00050
30	.00040	.00060
35	.00050	.00080
40	.00070	.00100
45	.00100	.00150
50	.00180	.00260
55	.00360	.00490
60	.00900	.01210
65	.00000	.00000

##### Lump-Sum Conversion Basis

4.50% Interest and 417(e) mortality table per IRS Notice 2017-60 (previously the 417(e) mortality table in effect prior to IRS Notice 2017-60).

##### Form of Payment

It is assumed that benefits are paid out 80% as a lump sum and 20% as a life annuity. Special Management Group benefits are assumed to be paid as a lump sum.

##### Marital Assumption

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

##### Expense Load

Initially \$125,000 with 2.5% per annum growth in future years.