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December 5, 2024

Laura Taylor
St. Louis County Library District
Employees Pension Plan
1640 S. Lindbergh Blvd.
St. Louis, MO 63131

RE: St. Louis County Library District Employees' Pension Plan– Section 105.665 Cost Statement

Dear Ms. Taylor:

The purpose of this letter is to provide St. Louis County Library District with a cost statement that is required under the Missouri Revised Statute Section 105.665 in connection with the proposed plan changes.

A summary of the proposed "changes in plan benefits" that are subject to this statement are as follows:

> The proposed change is to the 3 year Final Average Earnings (FAE) from the current 5 year average. This change effects all years of service for active employees and does not impact former employees.

This cost statement is based upon the January 1, 2024 valuation results using the actuarial methods and assumptions employed in that report as required by 105.665.2 except as specifically noted above. For the purpose of this cost statement, we have assumed that the benefit provision changes were effective as of the 1/1/2024 valuation date.

Our cost statement, numbered to correspond with Section 105.665, follows below:

1. The level percent of pay normal cost of plan benefits currently in effect is $2,030,498 or 8.7% of active payroll.

2. Amortization of Unfunded Actuarial Accrued Liability is $902,236 or 3.8% of active payroll.

3. The total employer contribution rate from items one and two above, with interest to expected time of payment is $3,162,287 or 13.5% of active payroll.

4. The District is paying the total contribution rate.

5. As of the January 1, 2024 Actuarial Valuation, the plan's actuarial value of assets is $65,818,104; the market value of assets is $62,383,364; the actuarial accrued liability is $71,182,652; the funded ratio is 92.5%.

6. The estimated actuarially determined employer post-change contribution rate is $3,354,752 or 14.3% of active payroll.

7. A ten-year projection of annual plan costs and funded ratios for both: i) the current plan and ii) the current plan as modified by the proposed legislation is presented in Exhibit 2. The funded ratio under the proposed plan decreased initially, and by the end of the projection period the proposed plan is projected to have a lower funded percentage than the current plan.

8. The proposed change does not directly mandate such additional contributions. However, the District has shown a history of contributing the actuarially determined contribution.

9. The proposed change is not projected to impair the ability of the plan to meet the obligations.

10. The actuarial assumptions used in the January 1, 2024 actuarial valuation are contained in the attached pages from the January 1, 2024 Actuarial Valuation Report.

11. Section 105.665 requires that:

    a. all assumptions used in this cost study be those used in the most recent actuarial valuation, and
    b. the actuary certify that the assumptions used in the cost study produce results which in aggregate, are reasonable

    Modifications to the assumptions are allowed to be modified if the nature of the proposed plan changes warrant alternate assumptions.

12. The actuarial funding method used in preparing the valuation is described in the attached pages from the January 1, 2024 Actuarial Valuation Report.

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the District. This information includes, but is not limited to, Plan documents and provisions, employee data, and financial information. Since the results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the principles prescribed by the Actuarial Standards Board and the Code of Professional Conduct and Qualification Standards for Public Statements of Actuarial Opinion of the American Academy of Actuaries. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Actuarial computations included in this report are for the exclusive purposes cited in this report. Determinations for purposes other than those specifically referenced in this report may be significantly different. Accordingly, additional determinations may be needed for other purposes, such as judging benefit security on a settlement basis.

These cost estimates are subject to the uncertainties of a regular actuarial valuation; the costs are inexact because they are based on assumptions that are themselves necessarily inexact, even though we consider them reasonable. Thus, the emerging costs may vary from those presented in this letter to the extent actual experience differs from that projected by the actuarial assumptions.

We have not explored any legal issues with respect to the proposed plan changes. We are not attorneys and cannot give legal advice on such issues.

This report has been prepared for the internal use of and is only to be relied upon by the District; it is not for the use or benefit of any third party for any purpose. No portion of this report may be disclosed to any other party (other than Missouri State legislative and regulatory personnel) without Milliman’s prior written consent. In the event such consent is given, the report must be provided in its entirety, unless prior written consent is obtained from Milliman. We recommend that any such party have its own actuary or other qualified professional review this report to ensure that the party understands the assumptions and uncertainties inherent in our estimates. We respectfully submit the following exhibits, and we look forward to discussing them with you.

We are available to address any questions that you may have.

Sincerely,

William D. Winningham, EA, MAAA, FCA
Consulting Actuary

Michael A. Sudduth, FSA
Consulting Actuary

WDW\MAS

Enclosures: Exhibit 1
Exhibit 2
Assumptions and Methods

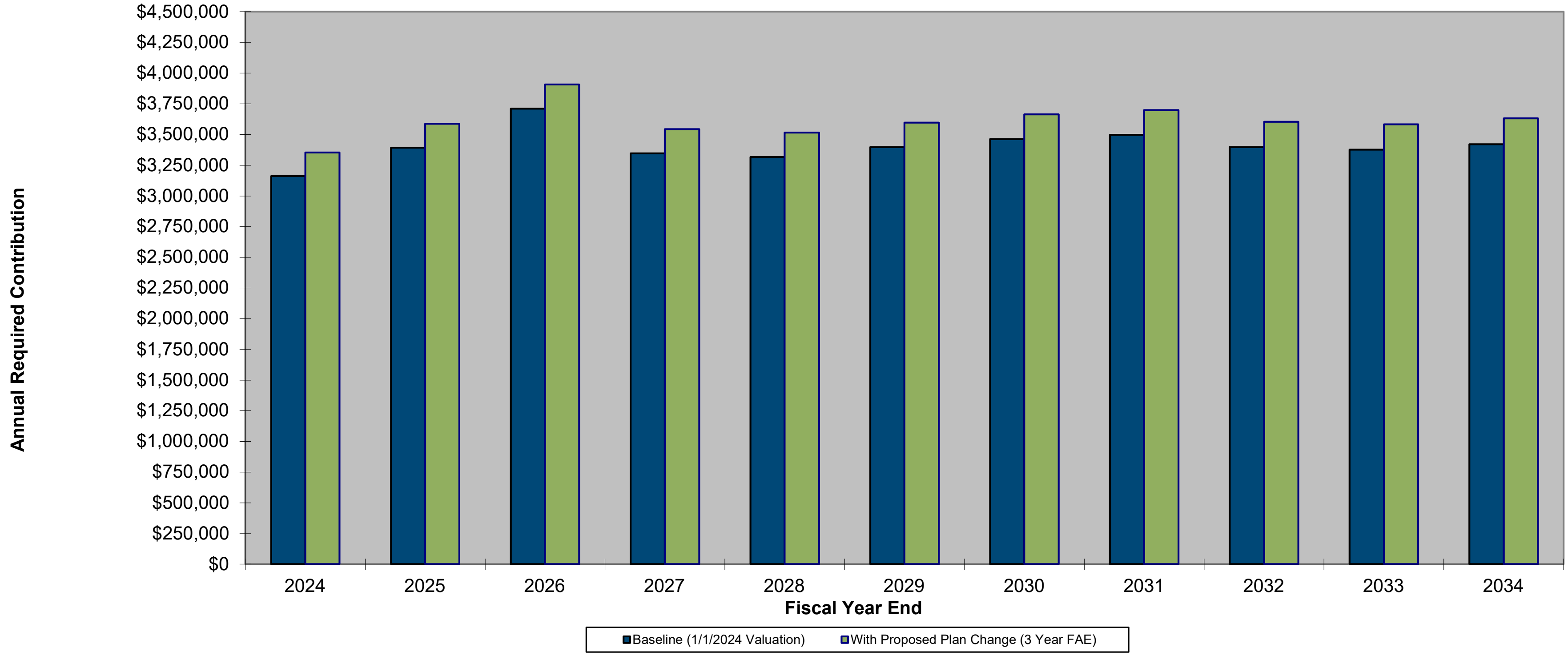
St. Louis County Library District
Employees' Pension Plan

Proposed Plan Change Analysis

Determination of Funding Policy Contribution

	January 1, 2024 Valuation	January 1, 2024 3 Year FAE
1. Entry Age Accrued Liability	71,182,652	72,509,788
2. Actuarial Value of Assets	65,818,104	65,818,104
3. Funded Ratio: (2) / (1)	92.5%	90.8%
4. Entry Age Unfunded Accrued Liability: (1) - (2)	5,364,548	6,691,684
5. Entry Age Normal Cost	2,030,498	2,104,765
6. Assumed Expenses at Beginning of Year	178,333	178,333
7. Normal Cost Including Expenses: (5) + (6)	2,208,831	2,283,098
8. Amortization of Unfunded Actuarial Accrued Liability	902,236	1,017,317
9. Recommended Contribution at Beginning of Year: (7) + (8)	3,111,067	3,300,415
10. Recommended Contribution, with Interest through March	3,162,287	3,354,752
11. Covered Payroll	23,447,154	23,447,154
12. Recommended Contribution as a Percentage of Payroll	13.5%	14.3%

St. Louis County Library District Employee's Pension Plan
Section 105.665 Plan Change Projection



	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Baseline (1/1/2024 Valuation)											
District DB Contribution Requirement	$3,162,000	$3,393,000	$3,712,000	$3,347,000	$3,317,000	$3,397,000	$3,462,000	$3,497,000	$3,399,000	$3,378,000	$3,422,000
Accrued Liability	$71,183,000	$74,264,000	$77,377,000	$80,542,000	$83,806,000	$87,228,000	$90,837,000	$94,587,000	$98,424,000	$102,423,000	$106,585,000
Actuarial Value of Assets	$65,818,000	$67,761,000	$68,646,000	$73,667,000	$77,354,000	$81,180,000	$85,267,000	$89,510,000	$93,874,000	$98,274,000	$102,782,000
Unfunded Accrued Liability	$5,365,000	$6,503,000	$8,731,000	$6,876,000	$6,453,000	$6,048,000	$5,570,000	$5,077,000	$4,550,000	$4,148,000	$3,803,000
Funded Percentage	92.5%	91.2%	88.7%	91.5%	92.3%	93.1%	93.9%	94.6%	95.4%	95.9%	96.4%
Actual Asset Return	6.75%	6.75%	6.75%	6.75%	6.75%	6.75%	6.75%	6.75%	6.75%	6.75%	6.75%
With Proposed Plan Change (3 Year FAE)											
District DB Contribution Requirement	$3,355,000	$3,587,000	$3,907,000	$3,544,000	$3,515,000	$3,597,000	$3,665,000	$3,700,000	$3,604,000	$3,584,000	$3,631,000
Accrued Liability	$72,510,000	$75,750,000	$79,019,000	$82,340,000	$85,761,000	$89,345,000	$93,122,000	$97,046,000	$101,060,000	$105,243,000	$109,593,000
Actuarial Value of Assets	$65,818,000	$67,952,000	$69,030,000	$74,243,000	$78,128,000	$82,160,000	$86,462,000	$90,928,000	$95,522,000	$100,162,000	$104,919,000
Unfunded Accrued Liability	$6,692,000	$7,797,000	$9,989,000	$8,096,000	$7,633,000	$7,185,000	$6,660,000	$6,118,000	$5,538,000	$5,080,000	$4,674,000
Funded Percentage	90.8%	89.7%	87.4%	90.2%	91.1%	92.0%	92.8%	93.7%	94.5%	95.2%	95.7%
Actual Asset Return	6.75%	6.75%	6.75%	6.75%	6.75%	6.75%	6.75%	6.75%	6.75%	6.75%	6.75%

This work product was prepared solely for the St. Louis County Library District for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

St. Louis County Library District
Employees' Pension Plan

January 1, 2024 Actuarial Valuation

Actuarial Methods

Following are brief descriptions of the actuarial cost and asset valuation methods used in the valuation.

Actuarial Cost Method (adopted 01/01/2013)

The Entry Age Normal Cost Method on a closed group basis was used. Normal costs are computed as a level percent of pay. Changes in the Entry Age Normal Unfunded Accrued Liability (UAL) are amortized on a level dollar basis over a closed 20 year period.

Asset Valuation Method

The Actuarial Value of Assets is equal to the average of the Adjusted Market Values for the current and three previous valuation dates. The Adjusted Market Value for the current valuation date is equal to the Market Value of Assets. The Adjusted Market Value for the three previous valuation dates are equal to the Market Values as of the respective valuation dates increased for contributions and expected return on Actuarial Assets and decreased for benefit payments and expenses.

St. Louis County Library District
Employees' Pension Plan

January 1, 2024 Actuarial Valuation

Actuarial Assumptions

Following are the primary actuarial assumptions used in performing the study.

Interest Rate (adopted 01/01/2022): 6.75% per annum, net of investment expenses

Annual Pay Increases (adopted 01/01/2015): Select and ultimate rates based on years of service:

Years of Service	Rate
0	6.00%
1	5.50%
2	5.25%
3	5.00%
4	4.50%
5	4.00%
6	3.75%
7+	3.50%

Mortality (adopted 01/01/2022): Pub-2010 General Amount-Weighted Mortality Tables for Employees, Healthy Retirees, Disabled Retirees, and Contingent Survivors, male and female rates, with generational projection from 2010 using Scale MP-2021.

Turnover Rates at selected ages:

Age	Percentage Terminating In the Next Year
25	16.25%
30	11.25%
35	8.25%
40	5.75%
45	3.95%
50	2.50%
55	1.25%

St. Louis County Library District
Employees' Pension Plan

January 1, 2024 Actuarial Valuation

Actuarial Assumptions

During the first year of employment the rates above are multiplied by 200%. During the second and third year of employment the rates above are multiplied by 175% and 150%, respectively.

Rates of Disability Rates at selected ages:

Age	Male	Female
35	0.00%	0.00%
40	0.05%	0.10%
45	0.10%	0.20%
50	0.20%	0.30%
55	0.31%	0.45%
60	0.45%	0.63%
65	0.50%	0.75%

Rates of Retirement
(adopted 1/1/2019)

Retirement Age	**Not Eligible for Rule of 80** Percent Retiring in The Next Year	**Eligible for Rule of 80** Percent Retiring in The Next Year
55-59	0%	10%
60	10%	20%
61	8%	18%
62	15%	25%
63	8%	15%
64	8%	15%
65	60%	60%
66	40%	40%
67	45%	45%
68	50%	50%
69	50%	50%
70	100%	100%

Expenses Average of the past three years' administrative expenses.

St. Louis County Library District
Employees' Pension Plan

January 1, 2024 Actuarial Valuation

Actuarial Assumptions

Marriage	For retired members, actual marital status and spouse birth date is used. For active members, 100% are assumed married with males assumed three years older than their spouses.
Sick Leave Conversion	Retiring employees and employees who die with a death benefit are assumed to have accrued sick leave converted into three additional months of Credited Service.
Increases to 415 Dollar Limit and 401(a)(17) Compensation Limit	3% annually

St. Louis County Library District
Employees' Pension Plan

January 1, 2024 Actuarial Valuation

Summary of Plan Provisions

A summary of the current primary provisions of the Plan are described below. A complete description of the provisions can be found in the local statutes.

Effective Date

October 15, 1967. Most recent restatement adopted January 2007. The most recent amendment was effective January 1, 2023.

Eligibility

Eligible after six months of employment as a regular, full-time employee.

Credited Service

The number of full calendar months of continuous service.

Unused Sick Leave

For participants who retire from active status, one month of additional Credited Service will be awarded for each 168 hours of unused sick leave, up to a maximum of four months.

Final Average Salary

Highest average 60 consecutive months of compensation out of the last 120 months prior to termination of employment.

Accrued Benefit

1.60% of Final Average Salary multiplied by years of Credited Service until December 31, 2022.
1.80% of Final Average Salary multiplied by years of Credited Service for all service after December 31, 2022.

Normal Retirement Age

Later of age 65 and 5 years of Credited Service and a combined age and service of 80 (in full years).

St. Louis County Library District
Employees' Pension Plan

January 1, 2024 Actuarial Valuation

Summary of Plan Provisions

Normal Retirement Benefit

A benefit equal to the Accrued Benefit.

Normal Form of Payment

Life annuity.

Early Retirement Age

Earlier of:

1. Age 55 and 20 years of Credited Service.
2. Age 60 and 10 years of Credited Service.

Early Retirement Benefit

Accrued Benefit, reduced by 0.25% per each month by which the Early Retirement Age precedes Normal Retirement Age.

Rule of 80

A pensioner who retires according to the early retirement requirements above and who's age in full years plus years of service in full years equals or exceeds 80 shall not have their pension reduced by the early retirement factor above. A pensioner who retires under this "Rule of 80" shall receive the monthly Normal Retirement Benefit.

Pre-Retirement Death Benefit

A death benefit is payable to the named beneficiary of an employee or vested former employee who dies with at least five years of Credited Service. If there is no named beneficiary and the employee was married for at least one year prior to the employee's death, then a death benefit is payable to the employee's surviving spouse. The death benefit is equal to the amount the employee would have received if he or she had retired at their earliest retirement age and elected the 100% Joint and

St. Louis County Library District
Employees' Pension Plan

January 1, 2024 Actuarial Valuation

Summary of Plan Provisions

Survivor Annuity, based on the employee's Credited Service and Final Average salary at the time of death.

Vested Termination

Employees who terminate employment with at least five years of Credited Service are eligible for a monthly benefit calculated in the same manner as the Normal Retirement Benefit.

Retirement Window

There was an early retirement window allowing for unreduced early retirement to employees who retired between December 1, 2010 and May 31, 2011 with age plus years of Credited Service greater than or equal to 80.