The General Retirement System for Employees of Jefferson County

Actuarial Valuation Report

Prepared as of October 1, 2024

CavMac
Actuarial Consulting Services

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January 21, 2025

Pension Board
The General Retirement System
for Employees of Jefferson County
716 Richard Arrington Jr., Boulevard, N., Suite 430
Birmingham, AL 35203

Ladies and Gentlemen:

Section 2.4(c) of Act No. 2013-415 governing the operation of the General Retirement System for Employees of Jefferson County provides that the actuary shall make valuations of the assets and liabilities of the Retirement System. We submit herewith the report giving the results of the valuation of the System prepared as of October 1, 2024. The report indicates that County contributions at the rate of 6.00% of compensation are sufficient to support the benefits of the System as in effect as of the valuation. In preparing the valuation, the actuary relied on data provided by the System. While not verifying data at the source, the actuary performed tests for consistency and reasonableness. The valuation results depend on the integrity of the data. If any of the information is inaccurate or incomplete, our results may be different and our calculations may need to be revised. Please see the actuarial valuation for additional details on the funding requirements for the System.

The System is funded on an actuarial reserve basis. The actuarial assumptions recommended by the actuary and adopted by the Board are both individually, and in the aggregate reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System. The funding objective of the plan is that contribution rates over time will remain level as a percent of payroll. The valuation method used in the most recent valuation is the entry age normal cost method. The normal contribution rate to cover current cost has been determined as a level percent of payroll. Gains and losses are reflected in the unfunded accrued liability which is being amortized by regular contributions as a level percent of payroll.

The Plan is required to comply with the financial reporting requirements under GASB statement No. 67. In addition, the employer is required to comply with the financial reporting requirements under GASB statement No. 68. The necessary disclosure information has been provided in separate supplemental reports.

In our opinion the System is operating on an actuarially sound basis and the sufficiency of the retirement funds to provide the benefit called for by the System may be safely anticipated. The normal cost rate of the System continues to be in excess of the current total rate of contributions which will require a sufficient surplus (assets greater than liabilities) in order to ensure ongoing actuarial soundness.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

In order to prepare the results in this report, we have utilized actuarial models that were developed to measure liabilities and develop actuarial costs. These models include tools that we have produced and tested, along with commercially available valuation software that we have reviewed to confirm the appropriateness and accuracy of the output. In utilizing these models, we develop and use input parameters and assumptions about future contingent events along with recognized actuarial approaches to develop the needed results.

Sincerely yours,

Edward J. Koebel, EA, FCA, MAAA
Chief Executive Officer and Consulting Actuary

Jennifer Johnson
Managing Director

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SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below:

VALUATION DATE	10/01/2024	10/01/2023
Number of active members	2,478	2,477
Annual compensation	$ 179,299,508	$ 166,838,565
Number of retired members and beneficiaries	2,422	2,442
Annual benefits	$ 74,801,393	$ 74,165,516
Number of former members entitled to deferred vested benefits	137*	129**
Annual deferred vested benefits	$ 3,023,571	$ 2,775,991
Assets:		
Actuarial value	$ 1,376,583,256	$ 1,320,108,045
Market value	1,503,381,489	1,278,555,174
Unfunded accrued liability	$ (111,250,832)	$ (97,497,795)
Amortization period	11 years	10 years
Funded Percent	108.8%	108.0%
CONTRIBUTION RATES		
Actuarially Determined Contribution (ADC) of County:		
Normal***	12.53%	12.71%
Unfunded accrued liability	(6.53)	(6.71)
Total	6.00%	6.00%
Total contribution rates:		
Normal	18.53%	18.71%
Unfunded accrued liability	(6.53)	(6.71)
Total	12.00%	12.00%

* In addition, there are 159 former members who had terminated as of the valuation date and who had not received a refund of their contributions (totaling $1,884,141).

** In addition, there are 157 former members who had terminated as of the valuation date and who had not received a refund of their contributions (totaling $1,779,728).

*** Includes 1.00% for administrative expenses.

2. Comments on the valuation results as of October 1, 2024 are given in Section V and further discussion of the contribution levels is set out in Section VI.
3. Schedules B and C show the development of the market value of assets and actuarial value of assets, respectively.
4. Schedule E of this report outlines the full set of actuarial assumptions and methods employed. There have been no changes since the previous valuation. Note that actuarial gains and losses are measured under the assumptions in effect at the beginning of the year.
5. Schedule F of this report outlines the main System provisions employed. There have been no changes since the previous valuation.

1. The following table shows the number of active members and their annual compensation as of October 1, 2024 on the basis of which the valuation was prepared.

THE NUMBER AND ANNUAL COMPENSATION OF ACTIVE MEMBERS
AS OF OCTOBER 1, 2024

NUMBER	ANNUAL COMPENSATION
2,478	$179,299,508

2. The following table shows the number and annual retirement allowances payable to retired members and beneficiaries as of the valuation date.

THE NUMBER AND ANNUAL RETIREMENT BENEFITS OF
RETIRED MEMBERS AND BENEFICIARIES
AS OF OCTOBER 1, 2024

GROUP	NUMBER	ANNUAL RETIREMENT BENEFITS
Service Retirements	2,074	$ 68,538,852
Beneficiaries of Deceased Members	292	5,315,855
Disability Retirements	56	946,686
Total	2,422	$ 74,801,393

In addition, there are 137 former members entitled to deferred vested retirement benefits totaling $3,023,571 and 159 former members who had terminated as of the valuation date but who had not received a refund of their contributions.

3. Table 1 of Schedule G gives a distribution by age and service groups of the number and average pay of active members included in the valuation. Tables 2, 3, 4 and 5 give the number and annual benefits of retired members and beneficiaries included in the valuation, distributed by age.

SECTION III - ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently 6.50%), of each member's expected benefit payable at retirement or death is determined, based on the member's age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the probability of the member terminating with a service, disability or survivor's benefit. Future salary increases are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.
2. The contributions required to support the benefits of the System are determined following a level funding approach and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the "entry age normal" method. Using this method, a calculation is made to determine the uniform and constant percentage rate of County contribution which, if applied to the compensation of each member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.
4. The present value of future unfunded accrued liability contributions is determined by subtracting the present value of prospective County normal contributions and member contributions (currently 6.00%), together with the current assets held, from the present value of expected benefits to be paid from the System.

SECTION IV - ASSETS

The amount of assets taken into account in this valuation was based on information provided by the auditors. As of October 1, 2024, the market value of assets amounted to $1,503,381,489. Schedule B shows a reconciliation of market value of assets for the two years prior to the valuation date. As of October 1, 2024, the market related actuarial value of assets used for valuation purposes was $1,376,583,256, as developed in Schedule C.

SECTION V - COMMENTS ON VALUATION

1. Schedule D of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the System as of October 1, 2024.

2. The valuation balance sheet shows that the System has total prospective liabilities of $1,551,378,513. Of this amount, $768,832,063 is for the prospective benefits payable on account of present retired members, beneficiaries of deceased members and former members entitled to deferred vested benefits or a refund of contributions, and $782,546,450 is for the prospective benefits payable on account of present active members. Against these liabilities, the System has total present assets of $1,376,583,256 as of October 1, 2024. The difference of $174,795,257 between the total liabilities and the total present assets represents the present value of future contributions.

3. The contributions to the System consist of normal contributions and accrued liability contributions. The valuation indicates that normal contributions at the rate of 17.53% of payroll are sufficient to pay the normal costs of the System. An additional 1.00% is required for administrative expenses, making the total normal rate 18.53%. Of this amount, 6.00% is paid by the members and the remaining 12.53% is required by the County.

4. Prospective normal contributions at the rate of 17.53% have a present value of $286,046,089. When this amount is subtracted from $174,795,257, which is the present value of total future contributions, there remains $(111,250,832) as the amount of unfunded accrued liability (UAL) contributions. The surplus UAL is expected to be fully amortized within 11 years at a rate of (6.53)% of payroll. The development of the unfunded accrued liability is shown in Schedule A. The funded ratio of the System is the ratio of assets to the actuarial accrued liability. This ratio as of October 1, 2024, based on actuarial value of assets which recognizes gains and losses over a five-year period, is 108.8%.

5. It is important to note that since the normal cost contribution rate of 18.53% for the annual benefits earned and administrative expenses, is greater than the total rate of contributions of 12.00% to the System, an objective of the System should be to maintain a surplus UAL that would be expected to never be fully amortized (infinite amortization period). Maintaining this objective would ensure the actuarial soundness of the System's funding for both current and future retirees.

6. The UAL based on the current market value of assets, assuming the immediate recognition of all deferred asset gains and losses, is $(238,049,065). On this basis, the funded ratio is 118.8%.

SECTION VI - CONTRIBUTIONS PAYABLE BY COUNTY

It is recommended on the basis of the present valuation that the County make contributions to the System according to the rates shown in the following table:

CONTRIBUTION	PERCENTAGE OF MEMBERS' COMPENSATION
Normal (Includes 1.00% for Expenses)	12.53%
Unfunded accrued liability	(6.53)
Total	6.00%

The information required under the Governmental Accounting Standards Board (GASB) Statements No. 67 and 68 for the Plan and the County will be issued in separate reports. The following is provided for informational purposes only.

1. The following is a distribution of the number of employees by type of membership.

NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF OCTOBER 1, 2024

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	2,422
Terminated members entitled to benefits but not yet receiving them	296
Active members	2,478
Total	5,196

2. The schedule of funding progress is shown below.

SCHEDULE OF FUNDING PROGRESS
Dollar Amounts in Thousands

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b – a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b – a) / c)
10/01/2019	$1,204,591,468	$1,065,974,464	$(138,617,004)	113.0%	$148,941,376	(93.1)%
10/01/2020	1,244,959,689	1,115,549,228	(129,410,461)	111.6	150,285,517	(86.1)
10/01/2021	1,312,548,211	1,169,178,654	(143,369,557)	112.3	150,855,014	(95.0)
10/01/2022	1,320,880,083	1,196,551,372	(124,328,711)	110.4	161,416,223	(77.0)
10/01/2023	1,320,108,045	1,222,610,250	(97,497,795)	108.0	166,838,565	(58.4)
10/01/2024	1,376,583,256	1,265,332,424	(111,250,832)	108.8	179,299,508	(62.0)

3. The information presented above was determined as part of the actuarial valuation at October 1, 2024. Additional information as of the latest actuarial valuation follows.

Valuation date	10/01/2024
Actuarial cost method	Entry age
Amortization method	Level percent open
Remaining amortization period	11 years
Asset valuation method	5-year market related value
Actuarial assumptions:	
Investment rate of return*	6.50%
Projected salary increases*	4.25 – 6.75%
Cost-of-living adjustments	None
*Includes inflation at	2.75%

1. The last experience investigation was prepared for the five-year period ending September 30, 2018, and based on the results of the investigation, various assumptions and methods were adopted by the Board on October 24, 2019. Valuation investment return assumption was adopted by the Board January 27, 2022.
2. The following table shows the estimated gain or loss from various factors that resulted in a decrease of $13,753,037 in the unfunded accrued liability from $(97,497,795) to $(111,250,832) during the fiscal year ending September 30, 2024.

ANALYSIS OF THE INCREASE IN UNFUNDED ACCRUED LIABILITY
(in thousands of dollars)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (6.50%) added to previous unfunded accrued liability	$ (6,337.4)
Accrued liability contribution	11,308.5
Experience:	
Valuation asset growth	(30,906.9)
Pensioners' mortality	(4,782.4)
Turnover and retirements	(2,601.9)
New Entrants	701.9
Salary increases	17,514.3
Method changes	0.0
Amendments (COLAs)	0.0
Assumption changes	0.0
Miscellaneous changes	1,350.9
Total	(13,753.0)

SECTION IX - RISK ASSESSMENT

The primary objective of this section is to provide an assessment of risk, as required under Actuarial Standard of Practice Number 51, Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions. There are other risks that the System faces, including issues such as cyber security, a catastrophe to the physical location, and many others. These are outside the scope of our analysis, which focuses only on those risks relating to the variance in the measurement of the benefit obligations as well as the contribution rates. There is no specific action by the Board either required or expected in response to this assessment, although it is possible that a deeper understanding of the risks faced by the System may prompt some additional discussion.

ASOP 51 provides that the assessment of risk does not necessarily have to be quantitative but may be qualitative. This section will provide the overall assessment of risk for the System from a qualitative perspective.

Measuring pension obligations and actuarially determined contributions requires the use of assumptions regarding future economic and demographic experience. Whenever assumptions are made about future events, there is risk that actual experience will differ from that which is expected.

The primary areas of risk in this actuarial valuation are:

Investment Risk

Investment Risk is the potential that investment returns will be different than expected. The greatest single source for future contribution volatility is expected to be attributable to the actual investment rate of returns. Although the System is well-funded, the significant degree of market volatility that can be expected by diversely invested pension plans today can result in severe changes to actuarial condition. The System has historically maintained an assumption for rates of investment returns below the median of large public plans. This provides a margin in the plan's measures of liabilities for adverse experience and reduces the investment risk inherent to a funded plan.

The impact of potential market return volatility is also lessened through the asset smoothing method utilized in determining the funding requirements. The delayed recognition of the asset losses would allow for the System to experience gains due to a market recovery before the full impact of losses are reflected in the System's funded status and determined contributions.

Longevity and Other Demographic Risks

This risk is the potential that mortality or other demographic experience will be different than expected. Generally, these demographic risks emerge slowly over time. The impact of variances in actual and expected demographic experience are measured in each annual valuation by the source of the System's actuarial liability gains and losses. Over several valuations, the emerging trends in demographic experience can be identified and initiate consideration of changes to certain assumptions. A process of annual actuarial valuations and periodic experience studies are practical ways to monitor and reassess risk.

Contribution Risk

Contribution Risk is the potential that the actuarially determined contributions of the System will exceed the current fixed contribution rates. Although the System currently has a surplus of assets over liabilities, future negative experience could reduce the surplus position. The cost of benefit accruals for the active members annually exceeds the total contributions received and requires the maintenance of a sufficient surplus position for the System to continue in actuarial balance. Currently, the System is expected to remain in a sufficient surplus position for 11 years. We expect that if an event were to occur that would dramatically impact the surplus position, the Board would have a number of years to consider and implement potential solutions to maintain the System's actuarial balance.

SECTION IX - RISK ASSESSMENT

Risk is not necessarily a negative concept. As humans, we regularly take risks such as driving in an automobile because we believe that the gain to be received outweighs the possible negative consequences. We do, however, take steps to mitigate the risk by looking both ways at an intersection before proceeding, wearing seatbelts, etc. We do these things because we have some understanding of the sources of risk. The goal of this report is to help the Board understand the major risks facing the System's actuarial condition.

Liquidation Risk

Under the revised Actuarial Standards of Practice (ASOP) No. 4 effective for valuations after February 15, 2023, we must now include a low-default-risk obligation measure of the Fund's liability in our funding valuation report. This is an informational disclosure as described below and would not be appropriate for assessing the funding progress or health of this plan.

This measure uses the unit credit cost method and reflects all the assumptions and provisions of the funding valuation except that the discount rate is derived from considering low-default-risk fixed income securities. We considered the FTSE Pension Discount Curve based on market bond rates published by the Society of Actuaries as of September 30, 2024 and with the 30-year spot rate used for all durations beyond 30. Using these assumptions, we calculate a low-default-risk obligation measure liability of approximately $1,324,521,000.

This amount approximates the termination liability if the plan (or all covered employment) ended on the valuation date and all of the accrued benefits had to be paid with cash-flow matched bonds. This assurance of funded status and benefit security is typically more relevant for corporate plans than for governmental plans since governments rarely have the need or option to completely terminate a plan.

SCHEDULE A - DEVELOPMENT OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

AS OF OCTOBER 1, 2024

(1)	Present Value of Future Benefits:		
	(a)	Present Active Members	$ 782,546,450
	(b)	Present Retired Members, Beneficiaries and Former Members Entitled to Deferred Vested Benefits or Refunds of Contributions	768,832,063
	(c)	Total	$ 1,551,378,513
(2)	Present Value of Future County and Member Normal Contributions		286,046,089
(3)	Actuarial Accrued Liability [1(c) – (2)]		$ 1,265,332,424
(4)	Actuarial Value of Assets		1,376,583,256
(5)	Unfunded Actuarial Accrued Liability (UAAL) [(3) – (4)]		$ (111,250,832)
(6)	Amortization of UAAL		$ (11,708,258)
(7)	Contribution Rate as a % of Payroll		
	(a)	Normal Cost (Includes 1.00% for Expenses)	18.53%
	(b)	UAAL	(6.53)
	(c)	Total	12.00%

SCHEDULE B - RECONCILIATION OF MARKET VALUE OF ASSETS

	October 1, 2024	October 1, 2023
Market Value of Assets as of October 1 of Previous Year	$ 1,278,555,174	$ 1,184,933,905
Expenditures		
- Benefit Payments	$ (75,657,661)	$ (74,405,495)
- Refunds of Employee Contributions	(1,752,968)	(1,864,350)
- Administrative Expenses	(2,071,156)	(2,241,299)
- Total	$ (79,481,785)	$ (78,511,144)
Contributions		
- Employer	$ 10,361,230	$ 9,724,158
- Employee	10,361,230	9,710,908
- Other	490,765	540,602
- Total	$ 21,213,225	$ 19,975,668
Investment Income	$ 283,168,875	$ 152,211,845
Transfer to 415 Account	$ (74,000)	$ (55,100)
Market Value of Assets as of October 1 of Current Year	$ 1,503,381,489	$ 1,278,555,174
Estimated Investment Rate of Return	22.66%	13.17%

AS OF OCTOBER 1, 2024

(1)	Actuarial Value Beginning of Year		$ 1,320,108,045
(2)	Market Value End of Year		$ 1,503,381,489
(3)	Market Value Beginning of Year		$ 1,278,555,174
(4)	Cash Flow		
	a.	Contributions	$ 21,213,225
	b.	Benefit Payments and Administrative Expense	(79,481,785)
	c.	Transfer to 415 Account	(74,000)
	d.	Investment Expenses	(4,756,046)
	e.	Net	$ (63,098,606)
(5)	Investment Income		
	a.	Market total [(2) – (3) – (4)e]	$ 287,924,921
	b.	Assumed Rate for the Plan Year	6.50%
	c.	Amount for Immediate Recognition [(3) x (5)b] + [((4)a + (4)b + (4)c) * (5)b * 0.5] – (4)d	$ 85,965,999
	d.	Amount for Phased-In Recognition [(5)a – (5)c]	$ 201,958,922
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year [0.20 * (5)d]	$ 40,391,784
	b.	First Prior Year	15,419,067
	c.	Second Prior Year	(58,402,667)
	d.	Third Prior Year	35,779,219
	e.	Fourth Prior Year	420,415
	f.	Total Recognized Investment Gain	$ 33,607,818
(7)	Actuarial Value End of Year [(1) + (4)e + (5)c + (6)f]		$ 1,376,583,256
(8)	Difference Between Market & Actuarial Values [(2) – (7)]		$ 126,798,233
(9)	Estimated Rate of Return		9.28%

SCHEDULE D - VALUATION BALANCE SHEET

SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF THE GENERAL RETIREMENT SYSTEM FOR EMPLOYEES OF JEFFERSON COUNTY PREPARED AS OF OCTOBER 1, 2024

ASSETS		
Present Assets of the System		$1,376,583,256
Present Value of Prospective Contributions:		
County and Members Normal Contributions	$ 286,046,089	
Unfunded Accrued Liability Contributions	(111,250,832)	
Total Prospective Contributions		174,795,257
Total Assets		$1,551,378,513
LIABILITIES		
Present Value of Benefits Payable on Account of Retired Members, Beneficiaries and Former Members Entitled to Deferred Vested Benefits or Refunds of Contributions		$ 768,832,063
Present Value of Prospective Benefits payable on Account of Present Active Members		782,546,450
Total Liabilities		$1,551,378,513

SCHEDULE E - ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation are effective beginning October 1, 2019, and were selected based on the experience investigation for the five-year period ending September 30, 2018 adopted by the Board on October 24, 2019. The valuation investment return assumption was adopted by the Board January 27, 2022. The combined effect of the assumptions is expected to have no significant bias.

INVESTMENT RATE OF RETURN: 6.50% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 2.75% per annum:

Annual Rate of Salary Increase	
Years of Service	Rate
0	6.75%
2	6.50
4	6.25
6	6.25
8	6.00
10+	4.25

SEPARATIONS FROM ACTIVE SERVICE: Mortality rates are according to the Pub-2010 Headcount-Weighted Below Median Mortality Table adjusted by 105% for males and 110% for females projected generationally with scale MP-2018. Representative values of the assumed annual base rates of death, disability, withdrawal and service retirement are as follows:

	Annual Base Rate of Mortality		Annual Rate of
Age	Male	Female	Disability*
20	0.04%	0.02%	0.04%
25	0.04	0.01	0.04
30	0.05	0.02	0.04
35	0.06	0.03	0.08
40	0.09	0.05	0.08
45	0.12	0.07	0.12
50	0.19	0.11	0.20
55	0.27	0.16	0.24
60	0.39	0.23	0.28
65	0.57	0.36	
69	0.79	0.53	

*10% of disabilities are assumed to be due to service related causes and 90% to non-service related causes.

Annual Rate of Service Withdrawal	
Years of Service	Rate
0	9.75%
2	8.25
4	6.00
6	4.50
8	2.63
10+	2.25

Annual Rate of Service Retirement			
Age	<30 Years of Service	30 Years of Service	>=31 Years of Service
50	5.0%	60.0%	50.0%
55	15.0	60.0	50.0
60	20.0	60.0	50.0
62	30.0	80.0	50.0
65	40.0	80.0	50.0
70	50.0	80.0	50.0

DEATHS AFTER RETIREMENT: According to the Pub-2010 Headcount-Weighted Below Median Mortality Table adjusted by 105% for males and 110% for females projected generationally with scale MP-2018. Representative values of the assumed annual base rates of death after retirement are as follows:

Annual Base Rate of Death After				
	Service Retirement		Disability Retirement	
Age	Male	Female	Male	Female
45	0.12%	0.07%	1.15%	1.08%
50	0.97	0.67	1.79	1.63
55	1.07	0.61	2.34	1.92
60	1.19	0.62	2.86	2.24
65	1.40	0.79	3.56	2.70
70	2.22	1.33	4.55	3.47
75	3.69	2.30	6.01	4.79
80	6.26	4.05	8.47	7.07
85	10.63	7.37	12.36	10.90
90	17.41	13.76	17.80	15.94
95	25.74	22.14	25.74	22.41

LOADING: The average monthly compensation was increased 4.50% to allow for the practice of including a portion of unused vacation pay in the benefit calculations.

PERCENT MARRIED: 95% of active members are assumed to be married, with husbands three years older than their wives.

ACTUARIAL COST METHOD: Entry age normal. Gains and losses are reflected in the unfunded accrued liability.

ASSET VALUATION METHOD: Actuarial value as developed in Schedule C. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

SCHEDULE F - MAIN PROVISIONS OF THE SYSTEM

The following summary gives the main membership, benefit and contribution provisions of the System as interpreted in preparing the actuarial valuation. "Average monthly compensation" means the average earnable compensation of a member during the highest thirty-six consecutive months of service. "Paid membership service" is service during which the member made contributions to either this System or the previous systems.

MEMBERSHIP

All regular employees and officers of Jefferson County who were members of the previous retirement systems became members of this System as of September 1, 1965. All other employees and officers of the County as of September 1, 1965 could elect to join the System. Any person becoming an employee after September 1, 1965 whose employment is subject to the Civil Service System is required to join. Employees whose employment is not subject to the Civil Service System or those who are officers may elect to join.

BENEFITS

Superannuation Retirement

Condition for Retirement	Age 60 and completion of 10 years of paid membership service, or 30 years of paid membership service, or age 55 with 30 years of service of which 20 years must be paid membership service.
Amount of Benefit	(a) The monthly pension is equal to 2-1/2% of the member's average monthly compensation multiplied by the number of years of his paid membership service, not in excess of 30 years; plus
	(b) 5/8% of average monthly compensation, multiplied by the number of years of his unpaid service.
	No member shall receive a benefit in excess of 75% of average monthly compensation.

Early Retirement

Regular Early Retirement Benefit

Any member who has completed 30 years of service, including 10 years of paid membership service, may elect to receive a Regular Early Retirement Benefit.

The Regular Early Retirement Benefit is determined by multiplying the pension based on service and average monthly salary at the date of early retirement, by the percentage shown in the following table, according to the member's age on the birthday preceding retirement.

Age	Percentage
59	93%
58	87%
57	82%
56	77%
55	72%
54	68%
53	64%
52	60%
51	57%
50	54%
49	51%
48	48%

25-Year Early Retirement Benefit

Any member who has completed at least 25 years of paid membership service may elect to receive a 25-Year Early Retirement Benefit.

The 25-Year Early Retirement Benefit is determined by multiplying the pension based on service and average monthly salary at the date of early retirement by 7% per year for each year less than 30 years of paid membership.

Non-Service Connected Disability

Condition for Retirement

Any member who becomes disabled for reasons not connected with service after 10 or more years of paid membership service is entitled to receive a disability pension (full or partial).

Amount of Benefit

The monthly disability pension is computed in the same manner as the superannuation retirement benefit, reduced for early commencement by the percentage shown in the following table. The early retirement factor is based on the number of years until the member would have been eligible for unreduced retirement benefits assuming continued employment.

Years Early	Percentage	Years Early	Percentage
1	93%	7	64%
2	87	8	60
3	82	9	57
4	77	10	54
5	72	11 or more	50
6	68		

Service Connected Disability

Condition for Retirement

Any member who becomes incapacitated for further performance of duty by reason of personal injury received as the result of an accident arising out of and in the course of employment is entitled to receive monthly disability benefits.

Amount of Benefit

The monthly disability pension is equal to 60% of the part of the member's monthly salary subject to deductions for pension purposes at the commencement of disability, reduced by workers compensation benefits.

Deferred Retirement

Condition for Retirement

(a) Any member whose service is involuntarily terminated before eligibility for voluntary retirement who has 18 years of service, including 10 years of paid membership service, is eligible to receive a deferred pension payable either at age 60 or on the date the member would have completed 30 years of service if the member had remained employed by the County, provided the member makes contributions to the system between the termination date and retirement date equal to those both the member and the County would have made during that time on the basis of the member's salary subject to deductions for pension purposes at termination date.

(b) Any member whose service is involuntarily terminated before eligibility for voluntary retirement who has 20 years of service, including at least 10 years of paid membership service, is eligible to receive a pension, commencing immediately, if the member has attained age 55 at retirement or a deferred pension commencing at age 55 if the member is less than age 55 at retirement. No contributions are required of the member after involuntary retirement.

(c) Any member who has completed 10 years of paid membership service and who upon separation from service, whether voluntary or involuntary, is not eligible to receive a superannuation retirement benefit, is eligible to receive a deferred pension payable at age 60.

Amount of Benefit

The monthly pension described under (a) above is payable upon the earlier of (1) the date the member reaches age 60, or (2) the date on which the member would have completed 30 years of service had the member continued employment, and is calculated using the Superannuation Retirement Benefit formula, which is reduced in the same manner as an Early Retirement Benefit if the member has not reached age 60 at the time payment commences.

The monthly pension described under (b) above is payable upon retirement if the member has reached age 55, or, if the member has not reached age 55, payment is delayed until the member attains age 55, and is calculated in accordance with the formula used for a Superannuation Retirement Benefit.

The monthly pension described under (c) above Is payable when the member reaches age 60, and is calculated by multiplying the Superannuation Retirement Benefit that the member would have been entitled to receive had the member been age 60 when service terminated by the applicable percentage below:

Years of Paid Membership Time	Percentage
10	50%
11	60
12	70
13	80
14	90
15	100

Instead of receiving a deferred pension, the member may elect to receive a refund of the member's contributions with interest.

Return of Contributions

Upon Termination of Service

Upon termination of service for reasons other than death, before meeting the eligibility requirements for a deferred retirement benefit, a member is entitled to the return of the member's contributions less any disability benefits paid.

Death of Member Before Eligibility for a Deferred Retirement Benefit

Upon death before retirement and before the member is eligible for a deferred retirement benefit, the member's contributions without interest, less any disability benefit payments, are paid to the member's beneficiary, spouse, or legal representative.

Death of Member After Eligibility For Deferred Retirement

Condition for Benefit

Upon death in active service of a member who has completed 10 years of paid membership service, an allowance is payable to the member's surviving spouse, or if an unmarried member so elects, to the member's designated beneficiary.

Amount of Benefit

The pre-retirement survivorship benefit is 100% of the reduced retirement pension the member would have received had retirement occurred on the day of death.

Upon actual retirement, an unmarried member who had elected the pre-retirement joint and survivorship benefit will have his benefit reduced by an amount which is of equivalent actuarial value to the actuarial cost of the coverage for the pre-retirement joint survivorship benefit under such election.

A refund of contributions plus interest is made in lieu of a survivor's benefit if the surviving spouse or dependent so elects.

Optional Benefits

A member may elect to have the superannuation, early retirement or deferred retirement benefit otherwise payable converted to a smaller pension payable during the member's lifetime with the provision that, upon the member's death after pension payments commence, a specified part of such reduced pension will be continued to the member's designated beneficiary. In addition, a member may elect to have the member's benefit converted to a further reduced pension payable as above but with the additional provision that, if the member's designated beneficiary predeceases the member, benefit payments will revert to the unreduced amount and will be payable until the member's death.

Increases to Retired Members and Beneficiaries

The following increases to pensions in pay status have been made:

3% per year (simple interest) with the calculation period beginning on the later of the date of retirement and October 1, 1977, and ending on September 30, 1982. (The maximum increase was 15%.)

3% per year (simple interest) with the calculation period beginning on the later of the date of retirement and October 1, 1982, and ending on September 30, 1984. (The maximum increase was 6%.)

2% per year (simple interest) with the calculation period beginning on the later of the date of retirement and October 1, 1984, and ending on September 30, 1986. (The maximum increase was 4%.)

2% per year (simple interest) with the calculation period beginning on the later of the date of retirement and October 1, 1986, and ending on September 30, 1992. (The maximum increase was 12%.)

2% per year (simple interest) retroactive to October 1, 1992 with a maximum increase of 12%.

2% per year (simple interest) retroactive to October 1, 1998 with a maximum increase of 6%.

1% per year (simple interest) retroactive to October 1, 2001.

2% per year retroactive to October 1, 2004, with the calculation period beginning on the later of the date of retirement and October 1, 2006, and ending September 30, 2007. (The maximum increase was 4%.)

In December 2019 a one-time payment was provided to retirees according to the following schedule:

- Members retired between October 2, 2014 and October 1, 2019 – 20% of the Member's gross monthly benefit.
- Members retired between October 2, 2009 and October 1, 2014 – 40% of the Member's gross monthly benefit.
- Members retired between October 2, 2004 and October 1, 2009 – 60% of the Member's gross monthly benefit.
- Members retired on or before October 1, 2004 – 80% of the member's gross monthly benefit.

In December 2021 a one-time payment was provided to members who retired on or before October 1, 2021, equal to 50% of the member's gross monthly benefit.

CONTRIBUTIONS

By Members

Each member contributes 6% of compensation.

A member who has accrued the maximum retirement benefit of 75% of basic average salary may elect to terminate contributions.

By County

The County pays an amount equal to member's contributions.

TABLE 1

AGE – SERVICE TABLE

Distribution of Active Members as of October 1, 2024 by Age and Service Groups

Attained Age	Completed Years of Service									
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & Over	Total
Under 25	32	32								64
Avg Pay	47,678	44,077								45,877
25 to 29	35	94	39							168
Avg Pay	47,611	53,429	63,935							54,656
30 to 34	43	98	75	18						234
Avg Pay	44,814	53,455	64,724	78,116						57,376
35 to 39	33	76	88	27	14	1				239
Avg Pay	45,310	60,208	70,374	82,669	75,961	68,414				65,389
40 to 44	29	65	102	29	47	21	4			297
Avg Pay	53,332	66,137	71,073	82,878	86,533	75,376	77,556			72,251
45 to 49	31	90	94	16	52	68	39			390
Avg Pay	62,133	64,895	76,406	96,444	86,613	88,031	80,185			77,203
50 to 54	16	78	105	25	37	62	64	7		394
Avg Pay	61,075	72,222	82,652	74,013	89,266	90,774	87,711	100,361		82,198
55 to 59	19	71	79	21	36	51	56	8	2	343
Avg Pay	55,465	66,256	76,933	72,782	79,464	82,848	97,999	94,425	141,644	78,649
60 to 64	13	30	65	22	48	20	30	10	4	242
Avg Pay	61,757	68,398	72,359	82,457	74,645	96,137	89,205	76,364	113,004	77,561
65 to 69		10	23	10	13	9	3	2	2	72
Avg Pay		72,672	65,492	77,217	91,268	85,626	74,421	78,603	136,977	78,010
70 & Over		3	3	2	12	5	6	1	3	35
Avg Pay		90,286	62,841	52,047	70,343	90,736	77,781	71,455	136,936	80,292
Total Count	251	647	673	170	259	237	202	28	11	2,478
Avg Pay	51,478	61,474	72,996	80,316	82,670	87,079	88,639	87,508	129,097	72,357

TABLE 2

NUMBER OF RETIRED MEMBERS AND THEIR BENEFITS BY AGE

SERVICE RETIREMENTS

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefit
50 and Under	3	$ 158,605	$ 52,868
51 – 55	50	2,448,678	48,974
56 – 60	119	5,542,070	46,572
61 – 65	257	10,349,453	40,270
66 – 70	476	16,533,031	34,733
71 – 75	520	16,542,053	31,812
76 – 80	340	9,574,915	28,161
Over 80	309	7,390,047	23,916
Total	2,074	$ 68,538,852	$ 33,047

TABLE 3

NUMBER OF RETIRED MEMBERS AND THEIR BENEFITS BY AGE

DISABILITY RETIREMENTS

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefit
50 and Under	4	$ 86,577	$ 21,644
51 – 55	4	77,080	19,270
56 – 60	7	120,228	17,175
61 – 65	8	164,363	20,545
Over 65	33	498,438	15,104
Total	56	$ 946,686	$ 16,905

TABLE 4

NUMBER OF RETIRED MEMBERS AND THEIR BENEFITS BY AGE

BENEFICIARIES OF DECEASED MEMBERS

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefit
50 and Under	4	$ 45,512	$ 11,378
51 – 55	4	39,814	9,954
56 – 60	15	342,091	22,806
61 – 65	20	348,222	17,411
66 – 70	40	985,991	24,650
71 – 75	47	992,519	21,117
76 – 80	60	1,210,066	20,168
Over 80	102	1,351,640	13,251
Total	292	$ 5,315,855	$ 18,205

TABLE 5

NUMBER OF DEFERRED FORMER MEMBERS AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefit
50 and Under	21	$ 498,661	$ 23,746
51 – 55	20	457,499	22,875
56 – 60	38	980,580	25,805
61 and over	58	1,086,831	18,738
Total	137	$ 3,023,571	$ 22,070