OBRA 1990 Retirement System of the County of Milwaukee

Actuarial Valuation and Review as of January 1, 2024

May 2024

Segal

Segal

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May 31, 2024

Board of Trustees
OBRA 1990 Retirement System of the County of Milwaukee
901 North 9th Street
Milwaukee, Wisconsin 53233

Dear Board Members:

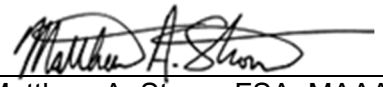
We are pleased to submit this Actuarial Valuation and Review as of January 1, 2024, of the OBRA 1990 Retirement System of the County of Milwaukee. This report summarizes the actuarial data used in the valuation, analyzes the preceding year's experience, and, as required by the Retirement Code, is the basis for the Actual Funding Contribution for fiscal year 2024 and the Budget Contribution for fiscal year 2025.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist in administering the Retirement System. The census information and financial information on which our calculations were based was prepared by the Retirement Plan Services (RPS) office. That assistance is gratefully acknowledged.

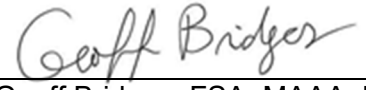
The actuarial calculations were directed under the supervision of Matthew Strom and Geoff Bridges. We are members of the American Academy of Actuaries and we meet the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States of the American Academy of Actuaries to render the actuarial opinion herein. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and the expectations for the System.

We look forward to reviewing this report and to answering any questions at an upcoming Board meeting.

Sincerely,



Matthew A. Strom, FSA, MAAA, EA
Senior Vice President and Actuary



Geoff Bridges, FSA, MAAA, EA
Vice President and Consulting Actuary

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Section 1: Actuarial Valuation Summary

Purpose and Basis

This report is prepared by Segal to present a valuation of the Plan as of January 1, 2024. The valuation is performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The measurements shown in this actuarial valuation may not be applicable for other purposes. In particular, the measures herein are not necessarily appropriate for assessing the sufficiency of Plan assets to cover the estimated cost of settling the Plan's benefit obligations. Future actuarial measurements may differ significantly from the current measurements 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; and changes in plan provisions or applicable law.

Certain disclosure information required by GASB Statements Nos. 67 and 68 as of December 31, 2023, for the System and the County is provided in Section 4.

The contribution requirements presented in this report are based on:

- The benefit provisions of the Pension Plan, as outlined in Chapter 203 of the County Code and administered by the Board;
- The characteristics of covered active members, inactive members, and retired members and beneficiaries as of January 1, 2024, provided by RPS;
- The unaudited assets of the Plan as of December 31, 2023, provided by RPS;
- Economic assumptions regarding future salary increases and investment earnings;
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc.; and
- The System's funding policy.

Valuation Highlights

1. Segal strongly recommends an actuarial funding method that targets 100% funding of the actuarial accrued liability. Generally, this implies payments that are ultimately at least enough to cover normal cost, interest on the unfunded actuarial accrued liability and the principal balance. The System's funding policy meets this standard.
2. Actual employer contributions made during the fiscal year ending December 31, 2023, were $186,000. When combined with interest to the end of the year, the total contributions were greater than the actuarially determined contribution (referred to as the Actual Funding Contribution) for 2023 by $102,883.
3. The results of this January 1, 2024, actuarial valuation are used to determine the Actual Funding Contribution for the fiscal year ending December 31, 2024, and the Budget Contribution for the fiscal year ending December 31, 2025. The Actual Funding Contribution for the year ending December 31, 2024, is $428,812, an increase of $132,897 from the Actual Funding Contribution for the year ending December 31, 2023. The amortization bases of the unfunded actuarial accrued liability are shown in Section 2, Exhibit F of this report.
4. The 2025 Budget Contribution, expected to be contributed in 2025, is $420,000.
5. The System uses an actuarial value of assets that is equal to market value. The funded ratio (the ratio of the actuarial value of assets to actuarial accrued liability) is 89.9% compared to the prior year's funded ratio of 86.4%. This ratio is one measure of funding status, and its history is a measure of funding progress. These measurements are not necessarily appropriate for assessing the sufficiency of Plan assets to cover the estimated cost of settling the System's benefit obligation or the need for or the amount of future contributions.
6. The rate of return on the actuarial/market value of assets was 11.42% for the plan year ending December 31, 2023. This resulted in an actuarial gain when measured against the assumed rate of return of 7.5% (applicable for the year ending December 31, 2023). We advise the Board to continue to monitor actual and anticipated investment returns relative to the assumed long-term rate of return on investments.
7. The unfunded actuarial accrued liability is $519,006, compared to the unfunded actuarial accrued liability of $724,088 in the prior valuation.
8. The actuarial gain from investment experience is $174,496.
9. The net experience loss from sources other than investment experience was approximately 2.1% of the actuarial accrued liability. Additional detail regarding this loss is shown in Section 2, Exhibit C.

10. Actuarial assumptions were changed to reflect the experience study completed by Segal for the period January 1, 2017, through December 31, 2021 and approved by the board. These include:
    a. Salary scale
    b. Mortality tables
    c. Retirement rates
    d. Termination rates

    The investment return assumption was updated to 6.80% from 7.50% to reflect the enactment of Act 12.
11. There were no changes in plan provisions since the prior valuation.
12. This report constitutes an actuarial valuation for the purpose of determining the actuarially determined contribution under the Plan's funding policy and measuring the progress of that funding policy. The Net Pension Liability (NPL) and Pension Expense under Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68, for inclusion in the plan and employer's financial statements as of January 1, 2023, and January 1, 2024, is shown in Section 4 of this report. The Actual Funding Contribution in this valuation is expected to be used as the actuarially determined contribution (ADC) for GASB financial reporting.
13. This actuarial report as of January 1, 2024, is based on financial and demographic data as of that date. Changes subsequent to that date are not reflected and will affect future actuarial costs of the Plan.

Summary of Key Valuation Results

		2024	2023
Actuarially determined contributions:	• Actual Funding Contribution for fiscal 2024 (and 2023)	$428,812	$295,915
	• Amount actually contributed for fiscal 2024 (and 2023)	TBD	186,000
	• Budget Contribution for fiscal 2025 (and 2024)	420,000	425,000
Actuarial accrued liability for plan year beginning January 1:	• Retired participants and beneficiaries	$908,703	$950,537
	• Inactive vested participants	3,620,846	3,965,067
	• Active participants	623,980	390,851
	• Total	5,153,529	5,306,455
	• Employer normal cost for plan year beginning January 1 (as of January 1)	127,460	82,211
Assets for plan year beginning January 1:	• Market value of assets (MVA)	$4,634,523	$4,582,367
	• Actuarial value of assets (AVA)	4,634,523	4,582,367
	• Actuarial value of assets as a percentage of market value of assets	100.00%	100.00%
Funded status for plan year beginning January 1:	• Unfunded/(overfunded) actuarial accrued liability based on AVA	$519,006	$724,088
	• Funded percentage on AVA basis	89.9%	86.4%
	• Remaining amortization period (average)	13	14
Key assumptions:	• Interest rate for determining liability as of January 1	6.80%	7.50%
	• Inflation rate	2.50%	2.50%
	• Interest rate for Budget Contribution for fiscal 2025 (and 2024)	6.80%	7.50%
Demographic data for plan year beginning January 1:	• Number of retired members	60	63
	• Number of vested former members	5,190	5,271
	• Number of active members	299	260
	• Total payroll	$3,423,194	$2,747,233
	• Average pay	11,449	10,566

Important Information About Actuarial Valuations

An actuarial valuation is a budgeting tool with respect to the financing of future projected obligations of a pension plan. It is an estimated forecast – the actual long-term cost of the Plan will be determined by the actual benefits and expenses paid and the actual investment experience of the Plan.

In order to prepare a valuation, Segal relies on a number of input items. These include:

Plan of benefits	Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits.
Membership data	An actuarial valuation for a plan is based on data provided to the actuary by the System. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
Assets	The valuation is based on the market value of assets as of the valuation date, as provided by the System.
Actuarial assumptions	In preparing an actuarial valuation, Segal projects the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This projection requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of each participant for each year. In addition, the benefits projected to be paid for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments. The projected benefits are then discounted to a present value, based on the assumed rate of return that is expected to be achieved on the plan's assets. There is a reasonable range for each assumption used in the projection and the results may vary materially based on which assumptions are selected. It is important for any user of an actuarial valuation to understand this concept. Actuarial assumptions are periodically reviewed to ensure that future valuations reflect emerging plan experience. While future changes in actuarial assumptions may have a significant impact on the reported results, that does not mean that the previous assumptions were unreasonable.
Modeling	Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Deterministic cost projections are based on a proprietary forecasting model. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the direction of the supervising actuary.

The user of Segal's actuarial valuation (or other actuarial calculations) should keep the following in mind:

The actuarial valuation is prepared at the request of the System and Board of Trustees. Segal is not responsible for the use or misuse of its report, particularly by any other party.
An actuarial valuation is a measurement of the plan's assets and liabilities at a specific date. Accordingly, except where otherwise noted, Segal did not perform an analysis of the potential range of future financial measures. The actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.
Actuarial results in this report are not rounded, but that does not imply precision.
If the System is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
Segal does not provide investment, legal, accounting, or tax advice. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan's provisions, but they may be subject to alternative interpretations. The System should look to its other advisors for expertise in these areas.

As Segal has no discretionary authority with respect to the management or assets of the Plan, it is not a fiduciary in its capacity as actuaries and consultants with respect to the Plan.

Section 2: Actuarial Valuation Results

A. Membership Data

The Actuarial Valuation and Review considers the number and demographic characteristics of covered participants, including active members, inactive members, retired members, and beneficiaries. This section presents a summary of significant statistical data on these participant groups.

As shown below, the ratio of non-active members to active members has been increasing. This increases the risks associated with the plan as the liabilities and costs are larger relative to the payroll of the active members in the plan.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A and B.

Member Population: 2015 – 2024

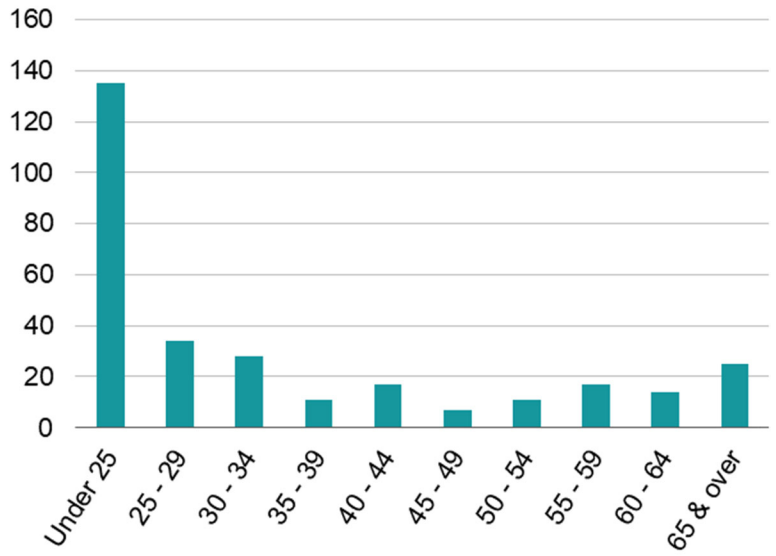
As of January 1	Active Members	Vested Terminated Members	Retired Members	Total Non-Actives	Ratio of Non-Actives to Actives
2015	394	4,783	47	4,830	12.26
2016	386	5,073	48	5,121	13.27
2017	354	5,961	55	6,016	16.99
2018	288	5,371	53	5,424	18.83
2019	379	5,370	52	5,422	14.31
2020	372	5,096	56	5,152	13.85
2021	323	5,086	56	5,142	15.92
2022	320	5,140	62	5,202	16.26
2023	260	5,271	63	5,334	20.52
2024	299	5,190	60	5,250	17.56

Active Members

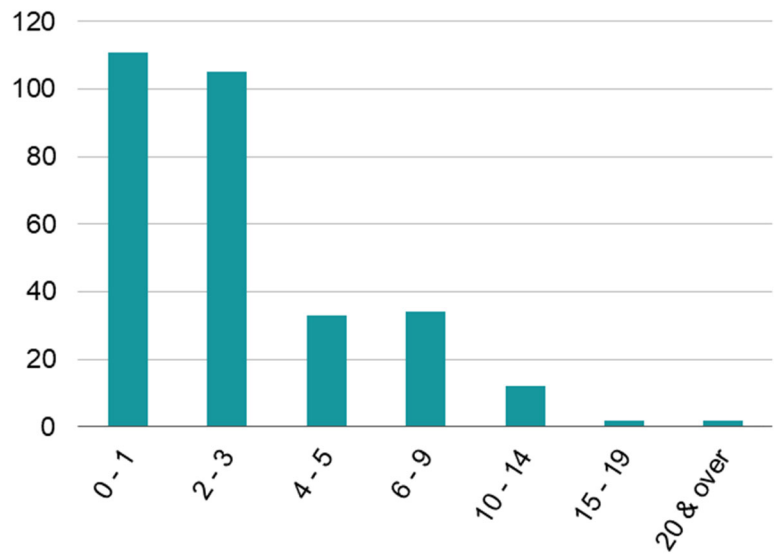
Plan costs are affected by the age, years of creditable service and payroll of active members. In this year's valuation, there were 299 active members with an average age of 33.9, average years of creditable service of 3.3 years, and average pay of $11,449. The 260 active members in the prior valuation had an average age of 33.0, average service of 3.2 years, and average pay of $10,566.

Distribution of Active Members as of January 1, 2024

ACTIVES BY AGE



ACTIVES BY YEARS OF CREDITABLE SERVICE



Inactive Members

In this year's valuation, there were 5,190 inactive members with a vested right to a deferred or immediate benefit. Average monthly annuities for members with a deferred benefit is $130. The average lump sum benefit for members with an immediate or deferred benefit is $160.

For comparison, in the previous valuation, there were 5,271 inactive members with a vested right to a deferred or immediate benefit. Average monthly annuities for members with a deferred benefit was $169. The average lump sum benefit for members with an immediate or deferred benefit was $164.

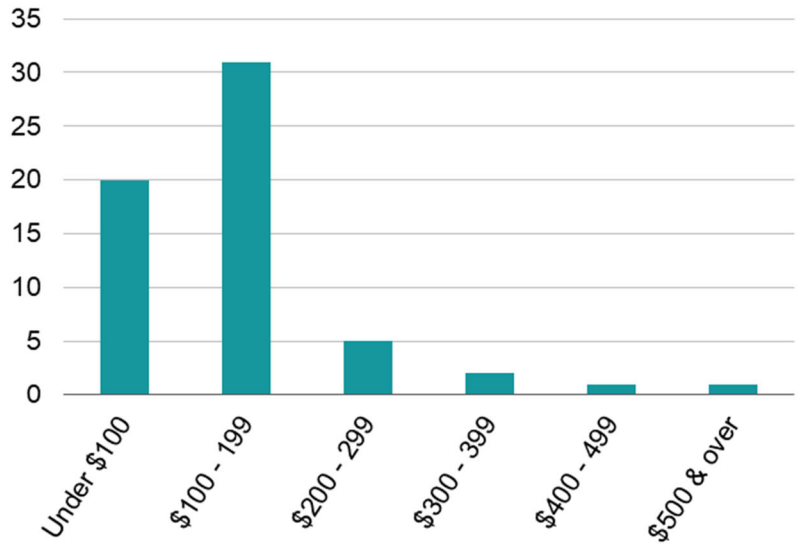
Retired Members and Beneficiaries

As of January 1, 2024, 60 retired members were receiving total monthly benefits of $8,724. For comparison, in the previous valuation, there were 63 retired members receiving monthly benefits of $9,306.

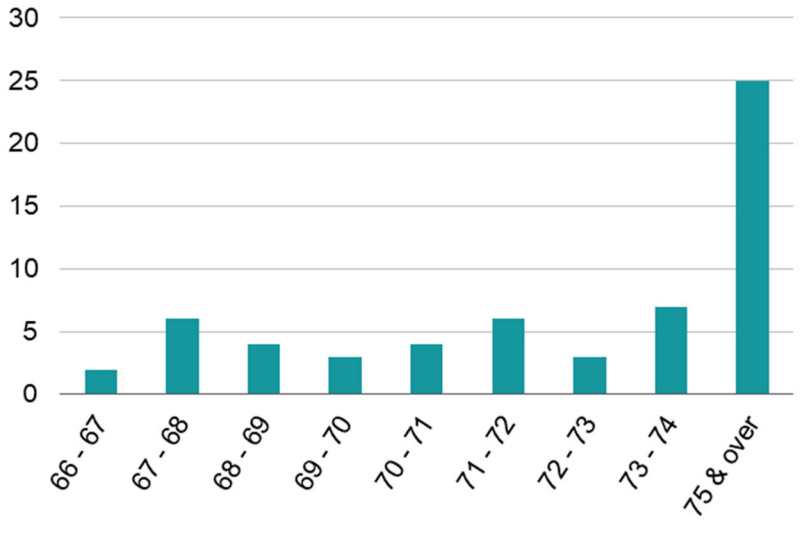
As of January 1, 2024, the average monthly benefit for retired members is $145, compared to $148 in the previous valuation. The average age for retired members is 73.9 in the current valuation, compared to 73.0 in the previous valuation.

Distribution of Pensioners as of January 1, 2024

PENSIONERS BY MONTHLY AMOUNT



PENSIONERS BY AGE



Historical Plan Population

The chart below demonstrates the progression of the active population over the last ten years. The chart also shows the growth among the retired population over the same time period.

Membership Data Statistics: 2015 – 2024

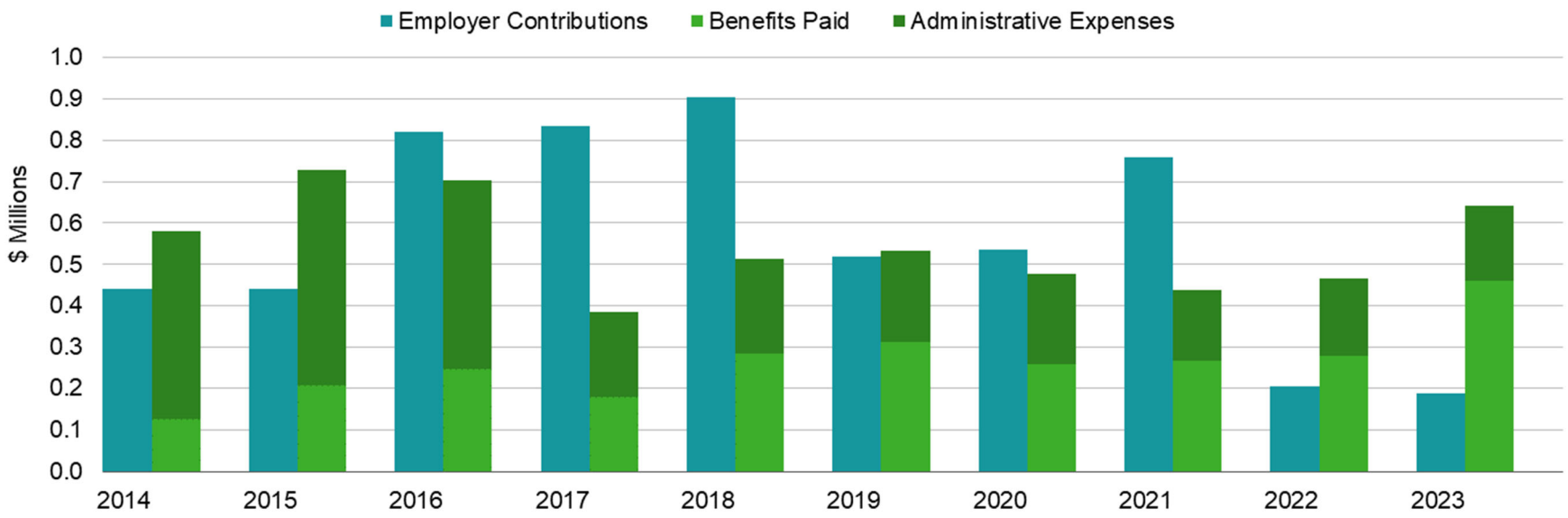
	Active Members			Retired Members		
As of January 1	Count	Average Age	Average Service	Count	Average Age	Average Monthly Amount
2015	394	29.0	3.5	47	N/A	151
2016	386	29.2	4.1	48	N/A	124
2017	354	30.4	4.1	55	69.5	117
2018	288	32.0	4.2	53	70.4	182
2019	379	32.7	3.7	52	71.1	143
2020	372	32.1	3.9	56	72.1	161
2021	323	34.3	4.1	56	72.1	149
2022	320	33.0	3.9	62	72.2	152
2023	260	33.0	3.2	63	73.0	148
2024	299	33.9	3.3	60	73.9	145

B. Financial Information

Retirement plan funding anticipates that, over the long term, both contributions and investment earnings (less investment fees and administrative expenses) will be needed to cover benefit payments. Retirement plan assets change as a result of the net impact of these income and expense components.

Additional financial information, including a summary of these transactions for the valuation year, is presented in *Section 3, Exhibits C, D* and *E*.

Comparison of Contributions to Benefits and Expenses Paid
For Years Ended December 31, 2014 – 2023



C. Actuarial Experience

To calculate the actuarially determined contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single years' experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

The net experience gain is $282,256 which includes $174,496 from investment gains and $107,760 in gains from all other sources. A discussion of the major components of the actuarial experience is on the following pages.

Actuarial Experience for Year Ended December 31, 2023

1	Net gain from investments*	$174,496
2	Net gain from other experience	107,760
3	Net experience gain: **1 + 2**	$282,256

* Details on next page.

Investment Experience

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the System's investment policy. The rate of return on the market value of assets was 11.42% for the year ended December 31, 2023.

For valuation purposes, the assumed rate of return on the actuarial value of assets is 7.50%. Since the actual return for the year was more than the assumed return, the Plan experienced an actuarial gain during the year ended December 31, 2023, with regard to its investments.

Investment Experience

		Year Ended December 31, 2023	Year Ended December 31, 2022
1	Investment income	$507,991	-$355,668
2	Average value of assets	4,446,600	5,164,250
3	Rate of return: **1 ÷ 2**	11.42%	-6.89%
4	Assumed rate of return	7.50%	7.50%
5	Expected investment income: **2 x 4**	333,495	387,319
6	Actuarial gain/(loss): **1 − 5**	$174,496	-$742,987

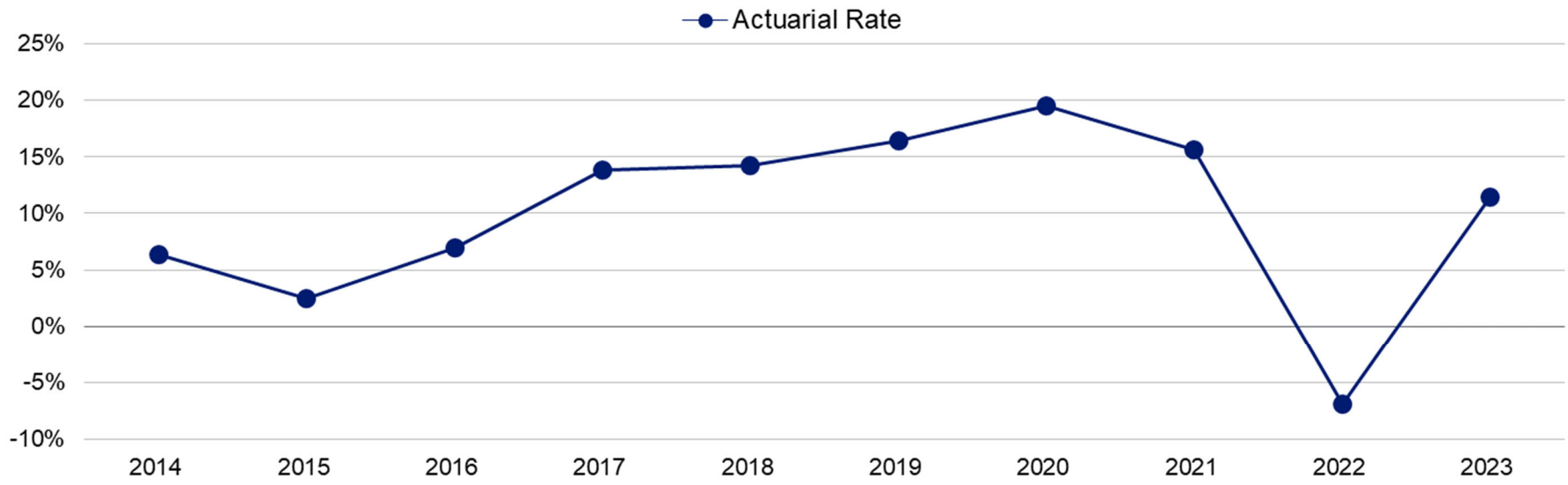
Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. The table below shows the rate of return on an actuarial basis compared to the market value investment return for the last 19 years, including averages over select time periods.

Investment Return: 2004 – 2023

	Investment Return			Investment Return	
Year Ended Dec. 31	Amount	Percent	Year Ended Dec. 31	Amount	Percent
2004	$87,400	11.4%	2014	$98,786	6.4%
2005	108,300	11.8	2015	37,449	2.5
2006	117,675	11.3	2016	87,752	7.0
2007	68,780	5.6	2017	242,489	13.9
2008	(298,101)	(23.2)	2018	346,862	14.3
2009	173,545	20.5	2019	501,003	16.4
2010	100,815	9.7	2020	697,231	19.5
2011	(56,201)	(8.2)	2021	693,645	15.6
2012	150,022	12.6	2022	(355,668)	-6.9
2012	150,022	12.6	2023	507,991	11.4
2013	223,162	14.0			
Most recent five-year average return					10.8%
Most recent ten-year average return					9.8%
Most recent fifteen-year average return					9.6%
Most recent twenty-year average return					7.7%

Note: Each year's yield is weighted by the average asset value in that year.

Actuarial Rates of Return for Years Ended December 31, 2014 – 2023



Other Experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- the extent of turnover among participants,
- retirement experience (earlier or later than projected),
- mortality (more or fewer deaths than projected),
- the number of disability retirements (more or fewer than projected), and
- salary increases (greater or smaller than projected).

The net gain from this other experience for the year ended December 31, 2023, amounted to $107,760, which is 2.1% of the actuarial accrued liability.

Experience Gain/(Loss) Due to Demographics for Year Ended December 31, 2023

Net turnover	($373,598)
Retirement	166,256
Mortality (more deaths than expected)	120,107
Salary increases for continuing actives	(30,652)
Miscellaneous*	225,647
Total	**$107,760**

* Includes gain/(loss) due to administrative expenses

D. Changes in the Actuarial Accrued Liability

The actuarial accrued liability as of January 1, 2024, is $5,153,529, a decrease of $152,926, or -2.9%, from the actuarial accrued liability as of the prior valuation date. The liability is expected to grow each year with normal cost and interest, and to decline due to benefit payments made. Additional fluctuations can occur due to actual experience that differs from expected (as discussed in the previous subsection).

Actuarial Assumptions

- There were changes in actuarial assumptions since the prior valuation. These changes reflect the recent Actuarial Experience study for the period January 1, 2017 through December 31, 2021 and approved by the board. These changes included:
  - Salary scale
  - Mortality tables
  - Retirement rates
  - Termination rates

  The investment return assumption was updated to 6.8% from 7.5% to reflect the enactment of Act 12.
- Details on actuarial assumptions and methods are in Section 5, Exhibit I.

Plan Provisions

- There were no changes in plan provisions since the prior valuation.
- A summary of plan provisions is in Section 5, Exhibit II.

E. Development of Unfunded Actuarial Accrued Liability

Development of Unfunded/(Overfunded) Actuarial Accrued Liability
For Year Ended December 31, 2023

1	Unfunded/(overfunded) actuarial accrued liability at beginning of year		$724,088
2	Normal cost at beginning of year (includes expenses)		262,353
3	Total contributions		(186,000)
4	Interest		
	• For whole year on **1 + 2**	$73,983	
	• For partial year on **3** (*See Exhibit I*)	(7,032)	
	Total interest		66,951
5	Expected unfunded/(overfunded) actuarial accrued liability		$867,392
6	Changes due to:		
	• Experience (gain)/loss	($282,256)	
	• Assumptions	(66,130)	
	• Funding method	0	
	• Plan provisions	0	
	Total changes		(348,386)
7	Unfunded/(overfunded) actuarial accrued liability at end of year		$519,006

F. Amortization Schedule for Funding

The actuarially determined contribution is equal to the employer normal cost payment and a payment on the unfunded/overfunded actuarial accrued liability (UAAL). Payments towards the UAAL are determined by amortizing sources of UAAL over various time periods, with amounts determined as a level percentage of payroll. The UAAL payment was reestablished on January 1, 2014, and amortized over 21 years. Future unanticipated increases in UAAL are amortized over closed 20-year periods. UAAL arising from contribution variances are amortized over closed 5-year periods. Amortization payments are assumed to remain level.

Actual Funding Contribution Amortization Schedule for 2024

Type	Date Established	Initial Period	Initial Amount	Annual Payment	Years Remaining	Outstanding Balance
Reestablished UAAL	01/01/2015	21	$1,923,320	$186,084	12	$1,595,474
Increase to UAAL	01/01/2016	20	585,698	57,068	12	489,297
Actuarial Loss	01/01/2017	20	455,010	43,703	13	394,554
Actuarial Loss	01/01/2018	20	205,933	19,487	14	184,214
Change in Assumptions	01/01/2018	20	197,805	18,718	14	176,942
Actuarial Loss	01/01/2019	20	418,511	39,042	15	384,619
Actuarial Loss	01/01/2020	20	1,321,835	121,557	16	1,242,813
Contribution Variance	01/01/2020	5	53,763	12,361	1	12,361
Change in Assumptions	01/01/2020	20	340,838	31,344	16	320,463
Contribution Variance	01/01/2021	5	155,778	35,704	2	69,134
Actuarial Gain	01/01/2021	20	(4,747,134)	(430,620)	17	(4,552,999)
Actuarial Gain	01/01/2022	20	(372,705)	(33,346)	18	(363,469)
Contribution Variance	01/01/2022	5	(440,589)	(100,671)	3	(283,193)
Actuarial Loss	01/01/2023	20	1,286,261	113,497	19	1,271,837
Contribution Variance	01/01/2023	5	(40,998)	(9,340)	4	(33,940)
Actuarial Loss	01/01/2024	20	(282,256)	(24,560)	20	(282,256)
Contribution Variance	01/01/2024	5	102,883	23,369	5	102,883
Change in Assumptions	01/01/2024	20	(66,130)	(5,754)	20	(66,130)
Total				**$97,643**		**$662,604**

Payments for the subsequent year Budget Contribution are determined by rolling forward the outstanding balance and payment amounts for existing amortization bases and estimating the amounts of any new sources of UAAL.

Budget Contribution Amortization Schedule for 2025

Type	Date Established	Initial Period	Initial Amount	Annual Payment	Years Remaining	Outstanding Balance
Reestablished UAAL	01/01/2015	21	$1,923,320	$186,084	11	$1,505,228
Increase to UAAL	01/01/2016	20	585,698	57,068	11	461,621
Actuarial Loss	01/01/2017	20	455,010	43,703	12	374,709
Actuarial Loss	01/01/2018	20	205,933	19,487	13	175,929
Change in Assumptions	01/01/2018	20	197,805	18,718	13	168,984
Actuarial Loss	01/01/2019	20	418,511	39,042	14	369,076
Actuarial Loss	01/01/2020	20	1,321,835	121,557	15	1,197,501
Change in Assumptions	01/01/2020	20	340,838	31,344	15	308,779
Contribution Variance	01/01/2021	5	155,778	35,704	1	35,704
Actuarial Gain	01/01/2021	20	(4,747,134)	(430,620)	16	(4,402,701)
Actuarial Gain	01/01/2022	20	(372,705)	(33,346)	17	(352,571)
Contribution Variance	01/01/2022	5	(440,589)	(100,671)	2	(194,933)
Contribution Variance	01/01/2023	5	(40,998)	(9,340)	3	(26,273)
Actuarial Loss	01/01/2023	20	1,286,261	113,497	18	1,237,107
Actuarial Loss	01/01/2024	20	(282,256)	(24,560)	19	(275,219)
Contribution Variance	01/01/2024	5	102,883	23,369	4	84,921
Change in Assumptions	01/01/2024	20	(66,130)	(5,754)	19	(64,481)
Contribution Variance	01/01/2025	5	3,811	866	5	3,811
Total				**$86,148**		**$607,192**

For the 2025 Budget Contribution, a base for a contribution variance for 2025 is added and amortized over 5 years. This variance is based on the difference between the County's anticipated contribution and the Actual Funding Contribution for 2024.

G. Gross Contribution Requirements

The actuarially determined contribution is equal to the employer normal cost payment and a payment on the unfunded/overfunded actuarial accrued liability (as shown in Section 2, Exhibit F). The contribution requirements shown in this report are gross contribution amounts. It is our understanding that County staff will net out the amount of employee contributions that are collected to arrive at a net County contribution.

Gross Contribution Requirements

		Year Beginning January 1		
		2025	2024	
		Budget	Actual	Budget
1	Total normal cost, adjusted to end of year	$141,000	$136,127	$91,000
2	Net annual amortizations, adjusted to end of year	92,000	104,283	133,000
3	Expenses	187,000	188,402	201,000
4	Total contribution: **1 + 2 + 3, not less than zero**	420,000	428,812	425,000

The Actual Funding Contribution and 2025 Budget Contribution are based on participant data as of January 1, 2024.

For the 2025 Budget Contribution, the Normal Cost for 2025 is assumed to be 3.5% higher than the 2024 Normal Cost adjusted for the 6.80% investment return assumption. The 2025 administrative expenses are assumed to be 2.50% higher than the estimated administrative expenses for 2024.

H. Reconciliation of Budget Contribution Requirement

Reconciliation of Budget Contribution Requirement From 2024 to 2025

		Amount	
1	2024 Budget Contribution		$425,000
2	Increase/(decrease) during 2023 due to:		
	a) Unanticipated liability loss/(gain)	$9,000	
	b) Asset experience different than expected	-17,000	
	c) 2023 expenses other than assumed	−18,000	
	d) 2023 contribution variance other than assumed	30,000	
	e) Change due to assumption/method/plan changes	0	
	f) Total		4,000
3	2024 Actual Contribution (rounded): **1 + 2**		$429,000
4	Expected increase/(decrease) during 2024 due to:		
	a) Normal cost and existing amortization bases	-$9,000	
	b) Phase-in of deferred investment (gains) losses	0	
	c) Increase in expenses	(1,000)	
	d) Expected contribution variance for 2024	1,000	
	e) Full recognition of bases	0	
	f) Change due to assumption/method/plan changes	0	
	g) Total		-9,000
5	2025 Budget Contribution: **3 + 4**		$420,000

I. Contribution for Prior Year and Variance from the Funding Calculation Contribution

Differences between the Actual Funding Contribution and the County's actual contributions with interest are amortized over five-year periods using a level dollar basis. The following exhibit shows the calculation of the contribution variance for the 2023 plan year.

Calculation of Contribution Variance

	Item				Amount
1	Total Actual Funding Contribution, end-of-year basis, for 2023 plan year (from January 1, 2023 actuarial valuation report)				$295,915
2	Total employer contributions made:				
	Contribution Made	Fraction of a Year Invested	Contribution Amount	Interest to Year End**	End of Year Amount
	Bi-weekly	0%	$0	$0	$0
	06/30/2023*	50.41%	186,000	7,032	193,032
	Total		$186,000	$7,032	$193,032
3	Total member contributions made:				
	Contribution Made	Fraction of a Year Invested	Contribution Amount	Interest to Year End**	End of Year Amount
	Bi-weekly	50.0%	$0	$0	$0
4	Variance from funding calculation amount: **2 + 3 − 1**				$102,883

* Assumed employer contributions are made mid-year.
** Interest to December 31, 2023, at 7.50% per annum.

J. History of Employer Contributions

A history of the most recent years of contributions is shown below. Amounts contributed do not reflect interest.

History of Employer Contributions: 2010 – 2024

Fiscal Year Ended Dec. 31	Normal Cost with Interest	Net Amortization Payments	Expenses	Actuarially Determined Contribution	Amount Contributed	Percent Contributed
2010	$135,517	$580,199	N/A	$716,439	$786,000	109.71%
2011	189,929	617,199	N/A	807,028	2,022,000	250.55
2012	183,014	263,438	N/A	446,452	880,000	197.11
2013	163,337	225,288	N/A	388,625	360,000	92.63
2014	88,705	284,795	N/A	373,500	440,000	117.80
2015	92,281	168,351	$509,752	770,384	440,000	57.11
2016	81,893	223,830	520,844	826,567	819,000	99.08
2017	91,102	253,817	459,362	804,281	833,000	103.57
2018	97,576	275,493	204,323	577,392	904,000	156.57
2019	95,868	229,275	160,372	485,515	519,000	106.90
2020	93,308	388,935	220,924	712,043	536,000	75.28
2021	95,881	23,167	228,059	347,107	759,000	218.66
2022	93,379	(101,558)	177,856	169,677	203,000	119.64
2023	88,377	13,886	193,652	295,915	186,000	62.85
2024	136,127	104,283	188,402	428,812	TBD	TBD

K. Actuarial Balance Sheet

An overview of the Plan's funding is provided by an Actuarial Balance Sheet, which compares the total liabilities (current and future) to the total assets (current and future). The liabilities are calculated by determining the amount and timing of all future payments that will be made by the Plan for current participants. These payments are discounted at the valuation interest rate to the date of the valuation, thereby determining the present value of all benefits, referred to as the "liability" of the Plan.

Second, this liability is compared to the assets. The "assets" for this purpose include the net amount of assets already accumulated by the Plan, the present value of future member contributions, the present value of future employer normal cost contributions, and the present value of future employer amortization payments for the unfunded/overfunded actuarial accrued liability.

Actuarial Balance Sheet

	Valuation as of	
	January 1, 2024	**January 1, 2023**
Liabilities		
• Present value of benefits for retired participants	$908,703	$950,537
• Present value of benefits for inactive former participants	3,620,846	3,965,067
• Present value of benefits for active participants	1,877,257	1,459,159
Total liabilities	**$6,406,806**	**$6,374,763**
Assets		
• Total valuation value of assets	$4,634,523	$4,582,367
• Present value of future employer and employee contributions for:		
» Future Normal Costs	1,253,277	1,068,308
» Unfunded/(overfunded) actuarial accrued liability	519,006	724,088
Total of current and future assets	**$6,406,806**	**$6,374,763**

L. Low-Default-Risk Obligation Measure (LDROM)

In December 2021, the Actuarial Standards Board issued a revision of Actuarial Standard of Practice No. 4 (ASOP 4) Measuring Pension Obligations and Determining Pension Plan Costs or Contributions. One of the revisions to ASOP 4 requires the disclosure of a Low-Default-Risk Obligation Measure (LDROM) when performing a funding valuation. The LDROM presented in this report is calculated using the same methodology and assumptions used to determine the Actuarial Accrued Liability (AAL) used for funding, except for the discount rate. The LDROM is required to be calculated using "a discount rate…derived from low-default-risk fixed income securities whose cash flows are reasonably consistent with the pattern of benefits expected to be paid in the future."

The LDROM is a calculation assuming a plan's assets are invested in an all-bond portfolio, generally lowering expected long-term investment returns. The discount rate selected and used for this purpose is the Bond Buyer General Obligation 20-year Municipal Bond Index Rate, published at the end of each week. The last published rate in December of the measurement period, by The Bond Buyer (www.bondbuyer.com), is 3.26% for use effective December 31, 2023. This is the rate used to determine the discount rate for valuing reported public pension plan liabilities in accordance with Governmental Accounting Standards when plan assets are projected to be insufficient to make projected benefit payments, and the 20-year period reasonably approximates the duration of plan liabilities. The LDROM is not used to determine a plan's funded status or Actuarially Determined Contribution. The plan's expected return on assets, currently 6%, .80is used for these calculations.

As of December 31, 2023, the LDROM for the system is $9,009,031. The difference between the plan's AAL of $5,153,529 and the LDROM can be thought of as the increase in the AAL if the entire portfolio were invested in low-default-risk securities. Alternatively, this difference could also be viewed as representing the expected savings from investing in the plan's diversified portfolio compared to investing only in low-default-risk securities.

ASOP 4 requires commentary to help the intended user understand the significance of the LDROM with respect to the funded status of the plan, plan contributions, and the security of participant benefits. In general, if plan assets were invested exclusively in low-default-risk securities, the funded status would be lower and the Actuarially Determined Contribution would be higher. While investing in a portfolio with low-default-risk securities may be more likely to reduce investment volatility and the volatility of employer contributions, it also may be more likely to result in higher employer contributions or lower benefits.

M. Risk

The actuarial valuation results depend on a single set of assumptions; however, there is a risk that emerging results may differ significantly as actual experience proves to be different than projected from the current assumptions.

We have not been engaged to perform a detailed analysis of the potential range of the impact of risks relative to Milwaukee County's future financial condition but have included a brief discussion of some of the risks that may affect the Plan. A more detailed assessment of the risks could provide a better understanding of the risks inherent in the Plan. This assessment may include scenario testing, sensitivity testing, stress testing, and stochastic modeling. Milwaukee County might consider including stochastic modeling in order to provide a more detailed risk assessment.

A detailed risk assessment could be important for the Milwaukee County OBRA System because:

- The negative cash flow position of the Plan could be exacerbated by relatively small deviations from assumed future experience.
- Inactive participants account for the majority of the Plan's liabilities limiting options for reducing plan liabilities in the event of adverse experience.
- Projected employer contribution amounts may increase to an undesirable portion of County budget under adverse stress testing conditions.
- The risks identified below show significant potential for variability.

The following risks could significantly affect the Plans' future condition:

Investment Risk (the risk that returns will be different than expected)

The assets total approximately $4.63 million. If the actual market value return for the Plan Year were 1% different from the assumed (either higher or lower), the projected unfunded/overfunded actuarial liability would change by about $44,345.

If the prior year's investment performance resulted in a market value of assets that is 10% different from the current value, it would result in a change of $463,000 in the asset value. A 10% increase in assets would cause the unfunded liability (market value basis) to decrease from $0.52 million to $0.06 million. Likewise, a 10% decrease in the asset value, would cause the unfunded liability to increase from $0.52 million to $0.98 million.

The market value rate of return over the last ten years has ranged from a low of -6.9% to a high of 19.5%.

Longevity Risk (the risk that mortality experience will be different than expected)

The actuarial valuation includes an expectation of future improvement in life expectancy. Emerging plan experience that does not match these expectations will result in either an increase or decrease in the actuarially determined contribution.

A 10% reduction in the assumed mortality rates results in an increase in the liabilities of roughly 3% for most plans. For this plan, a 3% liability increase would result in an increase in the Actuarially Determined Contribution of $18,451. The Actuarially Determined Contribution would increase from $0.43 million to $0.45 million.

Demographic Risk (the risk that participant experience will be different than assumed)

Examples of this risk include:

- More or less active participant movement (i.e., additions and subtractions) than assumed, due to the seasonal nature of the workforce.
- Salary increases more or less than assumed.

Maturity Measures

The risk associated with a pension plan increases as it becomes more mature, meaning that the actives represent a smaller portion of the liabilities of the plan. When this happens, there is a greater risk that fluctuations in the experience of the non-active participants or of the assets of the plan can result in large swings in the contribution requirements.

- Currently the Plan has a non-active to active participant ratio of 17.6. For the prior year, benefits paid were $273,062 more than contributions received. However, as this Plan matures, more cash will be needed from the investment portfolio to meet benefit payments.
- As of December 31, 2023, the retired life actuarial accrued liability represents 18% of the total actuarial accrued liability. In addition, the actuarial accrued liability for inactive vested participants represents 70% of the total. The higher the non-active actuarial accrued liability is as a percent of the total liability, the greater the risk of volatility in results.

Section 3: Supplemental Information

Exhibit A – Table of Plan Coverage

Category	As of January 1 2024	2023	Change From Prior Year
Active members in valuation:			
• Number	299	260	+15.0%
• Average age	33.9	33.0	+0.9
• Average years of creditable service	3.3	3.2	+0.1
• Total payroll	$3,423,194	$2,747,233	+24.6%
• Average pay	11,449	10,566	+8.4%
Inactive members:			
• Number of terminated vested	5,190	5,271	-1.5%
• Average age	31.9	31.5	+0.4
Retired members:			
• Number in pay status	60	63	-4.8%
• Average age	73.9	73.0	+0.9
• Average monthly benefit	$145	$148	-2.0%

Exhibit B – Reconciliation of Membership Data

	Active Members	Vested Terminated Members	Retired Members	Total
Number as of January 1, 2023	**260**	**5,271**	**63**	**5,594**
• New participants	98	429	N/A	527
• Terminations – with vested rights	−113	113	0	0
• Retirements	0	−2	2	0
• Return to work / rehire	54	−45	0	9
• Deceased	0	−8	-3	−11
• Lump sum cash-outs	0	−559	-2	−561
• No benefit owed / escheated to the State	0	−9	0	−9
• Data adjustments	0	0	0	0
• **Number as of January 1, 2024**	**299**	**5,190**	**60**	**5,549**

Exhibit C – Summary Statement of Income and Expenses on a Market Value Basis

	Year Ended December 31, 2023		Year Ended December 31, 2022	
Net assets at market value at the beginning of the year		$4,582,367		$5,201,499
Contribution income:				
• Employer contributions	$186,000		$203,000	
• Member contributions	0		0	
• Less administrative expenses	−182,773		−187,298	
Net contribution income		$3,227		$15,702
Investment income:				
• Prorata share of earnings	$507,991		-$355,668	
Net investment income		$507,991		-$355,668
Total income available for benefits		**$511,218**		**-$339,966**
Less benefit payments:				
• Benefits paid to retirees	−$320,037		−$193,948	
• Account Withdrawals	−139,025		−85,218	
Net benefit payments		−$459,062		−$279,166
Change in reserve for future benefits		**$52,156**		**-$619,132**
Net assets at market value at the end of the year		**$4,634,523**		**$4,582,367**

Exhibit D – Summary Statement of Plan Assets

	December 31, 2023	December 31, 2022
Cash equivalents	$48,376	$17,129
Assets held by ERS Pension Plan	4,611,974	4,565,746
Contributions receivable	0	0
Total assets	$4,660,350	$4,582,875
Taxes payable	−25,827	−508
Net assets at market value	**$4,634,523**	**$4,582,367**
Net assets at actuarial value	**$4,634,523**	**$4,582,367**

Exhibit E – Development of the Fund Through December 31, 2023

Year Ended Dec. 31	Employer Contributions	Member Contributions	Net Other Income	Net Investment Return[1]	Admin. Expenses	Benefit Payments[2]	Market Value of Assets at Year-End	Actuarial Value of Assets at Year-End	Actuarial Value as a Percent of Market Value
2008							$859,923	$859,923	100.00%
2009	$660,925	$0	$0	$173,545	−$627,953	−$27,833	1,038,607	1,038,607	100.00%
2010	786,000	0	0	100,815	−519,351	−3,846	1,402,225	1,402,225	100.00%
2011	2,022,000	0	0	−56,201	−732,297	−1,400,202	1,235,525	1,235,525	100.00%
2012	880,000	0	0	150,022	−504,824	−99,116	1,661,607	1,661,607	100.00%
2013	360,000	0	0	223,162	−507,799	−133,976	1,602,994	1,602,994	100.00%
2014	440,000	0	0	98,786	−454,752	−126,636	1,560,392	1,560,392	100.00%
2015	440,000	0	0	37,449	−520,844	−206,452	1,310,545	1,310,545	100.00%
2016	819,000	0	0	87,752	−459,362	−244,349	1,513,586	1,513,586	100.00%
2017	833,000	0	0	242,489	−204,323	−179,481	2,205,271	2,205,271	100.00%
2018	904,000	0	0	346,862	−228,372	−284,300	2,943,461	2,943,461	100.00%
2019	519,000	0	0	501,003	−220,924	−312,584	3,429,956	3,429,956	100.00%
2020	536,000	0	0	697,231	−220,575	−256,265	4,186,347	4,186,347	100.00%
2021	759,000	0	0	693,645	−172,020	−265,473	5,201,499	5,201,499	100.00%
2022	203,000	0	0	-355,668	-187,298	-279,166	4,582,367	4,582,367	100.00%
2023	186,000	0	0	507,991	-182,773	-459,062	4,634,523	4,634,523	100.00%

[1] On a market basis, net of investment fees
[2] Includes lump sum cash outs

Exhibit F – Definition of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Actuarial Accrued Liability for Actives:	The equivalent of the accumulated normal costs allocated to the years before the valuation date.
Actuarial Accrued Liability for Pensioners:	The single-sum value of lifetime benefits to existing pensioners. This sum takes into account life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.
Actuarial Cost Method:	A procedure allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability that are used to determine the actuarially determined contribution.
Actuarial Gain or Loss:	A measure of the difference between actual experience and expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. Through the actuarial assumptions, rates of decrements, rates of salary increases, and rates of fund earnings have been forecasted. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge that may be the same as forecasted, or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., assets earn more than projected, salary increases are less than assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results yield actuarial liabilities that are larger than projected. Actuarial gains will shorten the time required for funding the actuarial balance sheet deficiency while actuarial losses will lengthen the funding period.
Actuarially Equivalent:	Of equal actuarial present value, determined as of a given date and based on a given set of Actuarial Assumptions.
Actuarial Present Value (APV):	The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. Each such amount or series of amounts is: Adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.) Multiplied by the probability of the occurrence of an event (such as survival, death, disability, withdrawal, etc.) on which the payment is conditioned, and Discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Actuarial Present Value of Future Plan Benefits:	The Actuarial Present Value of benefit amounts expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age, anticipated future compensation, and future service credits. The Actuarial Present Value of Future Plan Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.
Actuarial Valuation:	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial Valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB, such as the Actuarially Determined Contribution (ADC) and the Net Pension Liability (NPL).
Actuarial Value of Assets (AVA):	The value of the Fund's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly plans use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the ADC.
Actuarially Determined:	Values that have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the law.
Actuarially Determined Contribution (ADC):	The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under the Plan's funding policy. The ADC consists of the Employer Normal Cost and the Amortization Payment.
Amortization Method:	A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization Payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.
Amortization Payment:	The portion of the pension plan contribution, or ADC, that is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

Assumptions or Actuarial Assumptions:	The estimates upon which the cost of the Fund is calculated, including: Investment return - the rate of investment yield that the Fund will earn over the long-term future; Mortality rates - the death rates of employees and pensioners; life expectancy is based on these rates; Retirement rates - the rate or probability of retirement at a given age; Withdrawal rates - the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement; Salary increase rates - the rates of salary increase due to inflation and productivity growth.
Closed Amortization Period:	A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example, if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc. See Open Amortization Period.
Decrements:	Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or withdrawal.
Defined Benefit Plan:	A retirement plan in which benefits are defined by a formula applied to the member's compensation and/or years of service.
Defined Contribution Plan:	A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.
Employer Normal Cost:	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
Experience Study:	A periodic review and analysis of the actual experience of the Fund that may lead to a revision of one or more Actuarial Assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified as deemed appropriate by the Actuary.
Funded Ratio:	The ratio of the Actuarial Value of Assets (AVA) to the Actuarial Accrued Liability (AAL). Plans sometimes calculate a market funded ratio, using the market value of assets (MVA), rather than the AVA.
GASB 67 and GASB 68:	Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68. These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 67 sets the rules for the systems themselves.
Investment Return:	The rate of earnings of the Fund from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.

Net Pension Liability (NPL):	The Net Pension Liability is equal to the Total Pension Liability minus the Plan Fiduciary Net Position.
Normal Cost:	That portion of the Actuarial Present Value of pension plan benefits and expenses allocated to a valuation year by the Actuarial Cost Method. Any payment with respect to an Unfunded Actuarial Accrued Liability is not part of Normal Cost (see Amortization Payment). For pension plan benefits that are provided in part by employee contributions, Normal Cost refers to the total of employee contributions and employer Normal Cost unless otherwise specifically stated.
Open Amortization Period:	An open amortization period is one that is used to determine the Amortization Payment, but which does not change over time. If the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period with level percentage of payroll is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never decrease, but will become smaller each year, in relation to covered payroll, if the Actuarial Assumptions are realized.
Plan Fiduciary Net Position:	Market value of assets.
Total Pension Liability (TPL):	The actuarial accrued liability under the entry age normal cost method and based on the blended discount rate as described in GASB 67 and 68.
Unfunded Actuarial Accrued Liability (UAAL):	The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. This value may be negative, in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus.
Valuation Date or Actuarial Valuation Date:	The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Plan Benefits is determined. The expected benefits to be paid in the future are discounted to this date.

Section 4: GASB 67 and 68 Information

Exhibit 1 – Net Pension Liability

The components of the Net Pension Liability were as follows:

	January 1, 2024	January 1, 2023
Total Pension Liability	$5,380,116	$5,533,668
Plan Fiduciary Net Position	(4,634,523)	(4,582,367)
Net Pension Liability	$745,593	$951,301
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	86.1%	82.8%

The Net Pension Liability was measured as of December 31, 2023, and is determined based on the Total Pension Liability from the January 1, 2024, actuarial valuation.

Plan provisions. The plan provisions used in the measurement of the Net Pension Liability are the same as those used in the actuarial valuation as of January 1, 2024.

Actuarial assumptions. The Total Pension Liability was determined by an actuarial valuation as of January 1, 2024, using the following actuarial assumptions, applied to all periods included in the measurement:

Actuarial cost method	Entry Age Normal – Level Dollar
Inflation	2.50%
Salary increases	5.00%
Investment rate of return	6.80%, net of pension plan investment expenses

Mortality

Pre-retirement:	Males – Pub-2010 General Male Employee Table, projected with generation projection using scale MP-2021.
	Females –Pub-2010 General Female Employee Table, projected with generation projection using scale MP-2021.
Healthy Retiree:	Males –104% of Pub-2010 General Male Retired Lives Table, projected with generation projection using scale MP-2021.
	Females –121% of Pub-2010 General Female Retired Lives Table, projected with generation projection using scale MP-2021.

The actuarial assumptions used were based on the results of an experience study approved by the board. They are the same as the assumptions used in the January 1, 2024, funding actuarial valuation.

The long-term expected rate of return on pension plan investments is 6.80%. The long-term expected rate of return was determined using a method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Discount rate: The discount rate used to measure the Total Pension Liability was 6.80% as of December 31, 2023. The projection of cash flows used to determine the discount rate assumed employer contributions will be made at rates equal to those based on this January 1, 2024, Actuarial Valuation Report. For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs of future plan members and their beneficiaries are not included. Based on those assumptions, the pension plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members as of December 31, 2023. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability as of December 31, 2023.

Sensitivity of the Net Pension Liability to changes in the discount rate: The following presents the Net Pension Liability, calculated using the discount rate of 6.80%, as well as what the Net Pension Liability would be if it were calculated using a discount rate that is one-percentage-point lower (5.80%) or one-percentage-point higher (7.80%) than the current rate:

	1% Decrease (5.80%)	Current Discount Rate (6.80%)	1% Increase (7.80%)
Net Pension Liability as of December 31, 2023	$507,731	$745,593	($592,946)

Exhibit 2 – Schedules of Changes in Net Pension Liability

	Year Ending December 31, 2023	Year Ending December 31, 2022
Total Pension Liability		
Service cost	$125,333	$97,999
Interest	407,210	385,568
Change of benefit terms	0	0
Differences between expected and actual experience	(110,536)	146,771
Changes of assumptions	(116,497)	0
Benefit payments, including refunds of employee contributions	(459,062)	(279,166)
Net change in Total Pension Liability	**$(153,552)**	**$351,172**
Total Pension Liability – beginning	**5,533,668**	**5,182,496**
Total Pension Liability – ending (a)	**5,380,116**	**$5,533,668**
Plan Fiduciary Net Position		
Contributions – employer	$186,000	$203,000
Contributions – employee	0	0
Net investment income	507,990	(355,668)
Benefit payments, including refunds of employee contributions	(459,062)	(279,166)
Administrative expense	(182,772)	(187,298)
Other	0	0
Net change in Plan Fiduciary Net Position	**52,156**	**(619,132)**
Plan Fiduciary Net Position – beginning	**4,582,367**	**5,201,499**
Plan Fiduciary Net Position – ending (b)	**4,634,523**	**$4,582,367**
Net Pension Liability – ending (a) – (b)	**745,593**	**$951,301**
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	**86.14%**	**82.81%**
Covered employee payroll	**2,747,233**	**$3,003,400**
Net Pension Liability as percentage of covered employee payroll	**27.14%**	**31.7%**

Exhibit 3 – Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

As shown in *Exhibit 2*, during the plan year that ended December 31, 2023, the changes in Net Pension Liability due to differences between expected and actual demographic experience is a decrease of $110,536. The average expected remaining service lives of all members is 0.4 years, determined as of January 1, 2024 (the beginning of the measurement period ending December 31, 2023). Therefore, the full amount is recognized in pension expense in the current fiscal year.

Based on the assumed investment return of 6.80%, the expected net investment income for the year was $302,369. As shown in Exhibit 4, the actual net investment income for the year was $507,990. The difference between actual and expected investment experience is an increase in Net Pension Liability of -$205,621, which is recognized over a 5-year period. Of this amount, $41,125 is reflected in the current year and $164,496 is reflected as a deferred inflow of resources related to pensions.

	Year Established	Original Balance	Original Amortization Period	Amortization Amount During 2023	Outstanding Balance at December 31, 2023
Outflows					
Investment	2022	742,987	5.0 years	148,597	445,791
Total outflows				**$148,597**	**$445,791**
Inflows					
Investments	2019	264,721	5.0 years	52,944	0
Investments	2020	429,329	5.0 years	85,866	85,866
Investments	2021	360,928	5.0 years	72,186	144,372
Experience	2023	110,536	0.4 years	110,536	0
Assumptions	2023	116,497	0.4 years	116,497	0
Investment	2023	205,621	5.0 years	41,125	164,496
Total inflows				**$479,154**	**$394,734**

Exhibit 3 – Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions (continued)

	December 31, 2023	December 31, 2022
Deferred Outflows of Resources (Outstanding Balances)		
Difference between expected and actual experience in the Total Pension Liability	$0	$0
Changes of assumptions	0	0
Net difference between projected and actual earnings on pension plan investments	51,057	153,154
Total Deferred Outflows of Resources	**$51,057**	**$153,154**
Deferred Inflows of Resources (Outstanding Balances)		
Difference between expected and actual experience in the Total Pension Liability	$0	$0
Changes of assumptions	0	0
Net difference between projected and actual earnings on pension plan investments	0	0
Total Deferred Inflows of Resources	**$0**	**$0**
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Year Ended December 31:		
2023	N/A	$(62,399)
2024	$(50,579)	(9,455)
2025	35,287	76,411
2026	107,473	148,597
2027	(41,124)	0
2028	0	0
Thereafter	0	0

Exhibit 4 – Pension Expense

Exhibit 4 below shows the individual components of collective pension expense, which totaled $82,389 for the fiscal year that ended December 31, 2023.

Annual pension expense for the year can also be viewed as the change in net pension liability, plus employer contributions for the year, less the change in outstanding balances of deferred outflows and deferred inflows of resources from the end of the prior fiscal year to end of the current fiscal year. The change in net pension liability during the year was -$205,708 and employer contributions were $186,000. The net value of deferred outflows and deferred inflows of resources as of the end of the current fiscal year is $51,057 compared to the net value as of the end of the prior fiscal of $153,154 for a change of $102,097. Therefore, the pension expense for the fiscal year that ended December 31, 2023, is -$205,708 + $186,000 + $102,097, or $82,389.

	Fiscal Year Ending December 31, 2023	Fiscal Year Ending December 31, 2022
Components of pension expense		
• Service Cost	125,333	97,999
• Interest on the total pension liability	407,210	385,568
• Projected earnings on plan investments	(302,369)	(387,319)
• Contributions - member	0	0
• Administrative expense	182,772	187,298
• Current year recognition of:		
Changes of assumptions	(116,497)	0
Difference between expected and actual experience	(110,536)	146,771
Difference between projected and actual earnings on pension plan investments	(103,524)	(94,095)
Change of benefit terms	0	0
Total pension expense	**$82,389**	**$336,222**

Section 5: Actuarial Valuation Basis

Exhibit I: Statement of actuarial assumptions, methods and models

Rationale for assumptions

The information and analysis used in selecting each assumption that has a significant effect on this actuarial valuation is shown in the Actuarial Experience Study as approved by the board. Assumptions that were changed from the prior valuation include mortality rates, salary scale, retirement rates, turnover rates and the net investment return assumption. Current data is reviewed in conjunction with each annual valuation. Based on professional judgment, no assumption changes are warranted at this time, beyond the assumption changes recommended by Segal in the most recent Actuarial Experience Study.

Net investment return

6.80%.

The investment return assumption was updated to 6.80%. The net investment return assumption is a long-term estimate derived from historical data, current and recent market expectations, and professional judgment. As part of the recent experience study analysis, a building block approach was used that reflects inflation expectations and anticipated risk premiums for each of the portfolio's asset classes, as well as the Plan's target asset allocation.

Salary increases

5.00% per annum, compounded annually. Salary is limited to Social Security taxable wage base for the plan year. The limit is increased by 2.50% per year.

Payroll growth

3.50%, used for purposes of projecting the Normal Cost amount in the Budget Contribution calculation.

Mortality rates

Healthy Annuitants: For males, 104% of Pub-2010 General Male Retired Lives Table, projected with generation projection using scale MP-2021. For females, 121% of Pub-2010 General Female Retired Lives Table, projected with generation projection using scale MP-2021.

Death in Active Service: For males, Pub-2010 General Male Employee Table, projected with generation projection using scale MP-2021. For females, Pub-2010 General Female Employee Table, projected with generation projection using scale MP-2021.

The tables reasonably reflect the mortality experience of the Plan as of the measurement date.

The generational projection of the mortality tables past the measurement date reflects future mortality improvement between the measurement date and those years.

Termination rates for retirement

	Withdrawal - Select Period Termination Rates + Ultimate (%)	
Age	**< 5 years**	**Ultimate**
20	25.00	25.00
25	22.50	20.00
30	20.00	15.00
35	17.50	12.50
40	15.00	7.50
45	12.50	5.00
50	12.50	2.50
55	15.00	2.00
60	10.00	1.00

The withdrawal rates are based on historical and current demographic data, adjusted to reflect estimated future experience and professional judgment. As part of the analysis, a comparison was made between the actual withdrawals and disability retirements by age based on the prior assumptions over the most recent experience study period.

Retirement rates for active participants

Age	Rate (%)
65 – 71	50
72	100

The retirement rates for active participants are based on historical and current demographic data, adjusted to reflect estimated future experience and professional judgment.

Retirement rates for inactive vested participants

Age	Rate (%)
65	50
66 – 69	5
70	100

The retirement rates for active participants are based on historical and current demographic data, adjusted to reflect estimated future experience and professional judgment.

Unknown data for participants

Same as those exhibited by participants with similar known characteristics. If not specified, participants are assumed to be male.

Lump sum amounts are provided for the inactive participants who will receive a lump sum benefit in 6 years after termination of employment, or age 65, whichever is earlier. If a lump sum amount was not provided in the data, we assume the inactive participant will be receiving a deferred monthly benefit.

Actuarial value of assets

Market value of assets

Actuarial cost method

For Funding purposes, liabilities and contributions are computed using the Unit Credit Cost Method.

The outstanding balance of the Unfunded Actuarial Accrued Liability as of January 1, 2015, is being amortized over a fixed 21-year period. Changes to the Unfunded Actuarial Accrued Liability arising from plan changes, assumption changes, and experience gains and losses are amortized at a level dollar amount over a 20-year period.

The variance between the actual contribution and the contribution requirement for a year is amortized over a five-year period on a level dollar basis.

Exhibit II: Summary of plan provisions

This exhibit summarizes the major provisions of the Plan included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan year

January 1 through December 31

Plan status

Ongoing

Membership

Any person employed by the County for whom the County is not obligated to collect and withhold FICA taxes. However, such persons shall not include: 1) an employed hired to relieve him from unemployment; 2) an employee of a hospital, home, or institution where he is an inmate; 3) an employee who is a temporary employee to handle fire, storm, snow, earthquake or similar emergencies; 4) an employee paid on a fee basis as self-employed; or 5) an employee who is a member of a collective bargaining unit covered by an agreement which does not provide for his inclusion.

Vesting service

One year of service is credited on and after January 1, 1992, for each plan year during which the employees are employed at any time. However, the employee shall no receive credit for any plan year in which the County is obligated to collected and withhold FICA taxes. If, during such plan year, FICA taxes are withheld for only a portion of the year, the employees shall receive a pro rata credit for the portion of the year worked when no FICA taxes are withheld.

Benefit service

Same as vesting service.

Compensation

Earnable compensation shall include the compensation earned during the period for which no FICA tax was withheld, exclusive of any amounts reimbursed for moving expenses. However, such compensation shall be limited to the Social Security taxable wage base for the plan year.

Final average salary (FAS)

Final average salary means the average of the total earnings accumulated during the plan years of employment with the County, with the exception of years prior to January 1, 1992.

Normal retirement eligibility

Age 65

Normal retirement amount

2% of the member's final average salary multiplied by years of service (not in excess of 30)

Deferred vested benefit

Upon termination of employment, a member is eligible for a deferred vested pension commencing at age 65. Such benefit shall be calculated the same as for normal retirement, considering average compensation and service termination.

Section 6: Additional Summary Tables of Member Data

TABLE 1 – SUMMARY OF MEMBERSHIP DATA AS OF JANUARY 1, 2024

Active Participants

Number of Participants	299
Average Annual Salaries*	$11,449
Average Age	33.9
Average Service	3.3

* The salaries shown in the table above represent a rate of pay increased by the salary assumption

Inactive Participants

	Count	Annual Annuities*	Average Monthly Annuities*	Average Future Lump Sum
Participants with Deferred Benefits	5,190	$654,421	$130	$160
Retired Participants	60	104,687	145	-
Total	**5,250**	**$759,108**	**$175**	

*Only included for participants with deferred annuities

TABLE 2 – FIVE-YEAR HISTORY OF MEMBERSHIP DATA

Active Participants

Valuation as of January 1	Number of Active Participants	Percentage Change in Membership	Total Annual Payroll	Percentage Change in Payroll
2024	299	15.00%	$3,423,194	24.61%
2023	260	(18.75%)	$2,747,233	(8.53)%
2022	320	(0.93%)	3,003,400	10.39%
2021	323	(13.17%)	2,720,682	(15.68%)
2020	372	(1.85%)	3,226,456	(4.77%)

Retired Participants

Valuation as of January 1	Number on roll	Net Change	Percentage Change in Membership	Annual Annuities	Percentage Change in Annuities
2024	60	(3)	(4.76)%	$104,687	(9.37)%
2023	63	1	1.61%	$111,677	(1.33)%
2022	62	6	10.71%	113,184	12.86%
2021	56	0	0.00%	100,287	(7.51%)
2020	56	4	7.69%	108,430	21.25%

TABLE 3 – PARTICIPANTS IN ACTIVE SERVICE AS OF DECEMBER 31, 2023 BY AGE, YEARS OF CREDITABLE SERVICE, AND AVERAGE PAYROLL

(Compensation in cells with fewer than 20 records has been suppressed)

		Years of Creditable Service								
Age	**Total**	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40 & over**
Under 25	135	126	9	- -	- -	- -	- -	- -	- -	- -
	$10,028	$9,202	- -	- -	- -	- -	- -	- -	- -	- -
25 - 29	34	18	12	4	- -	- -	- -	- -	- -	- -
	$10,111	- -	- -	- -	- -	- -	- -	- -	- -	- -
30 - 34	28	20	5	2	1	- -	- -	- -	- -	- -
	$14,012	$12,515	- -	- -	- -	- -	- -	- -	- -	- -
35 - 39	11	10	1	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
40 - 44	17	13	2	1	- -	- -	1	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
45 - 49	7	6	- -	- -	- -	- -	- -	1	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
50 - 54	11	7	4	- -	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
55 - 59	17	12	4	- -	1	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
60 - 64	14	10	3	1	- -	- -	- -	- -	- -	- -
	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
65 & over	25	14	7	4	- -	- -	- -	- -	- -	- -
	$11,891	- -	- -	- -	- -	- -	- -	- -	- -	- -
Total	**299**	**236**	**47**	**12**	**2**	**- -**	**1**	**1**	**- -**	**- -**
	$11,449	**$10,485**	**$14,515**	**- -**	**- -**	**- -**	**- -**	**- -**	**- -**	**- -**

TABLE 4A – DETAILED TABULATIONS OF THE DATA

The Number and Annual Salaries of Members in Active Service Distributed by Age as of January 1, 2024

(Compensation in cells with fewer than 20 records has been suppressed)

	Men		Women		Total	
Age	Number	Compensation	Number	Compensation	Number	Compensation
16	1	- -	1	- -	2	- -
17	17	- -	11	- -	28	$204,012
18	16	- -	9	- -	25	176,050
19	14	- -	5	- -	19	- -
20	10	- -	7	- -	17	- -
21	4	- -	7	- -	11	- -
22	7	- -	4	- -	11	- -
23	7	- -	5	- -	12	- -
24	5	- -	5	- -	10	- -
25	6	- -	5	- -	11	- -
26	3	- -	5	- -	8	- -
27	5	- -	5	- -	10	- -
28	1	- -	1	- -	2	- -
29	1	- -	2	- -	3	- -
30	3	- -	3	- -	6	- -
31	5	- -	2	- -	7	- -
32	2	- -	2	- -	4	- -
33	5	- -	1	- -	6	- -
34	2	- -	3	- -	5	- -
35	- -	- -	- -	- -	- -	- -
36	1	- -	2	- -	3	- -

TABLE 4A – DETAILED TABULATIONS OF THE DATA (CONTINUED)

The Number and Annual Salaries of Members in Active Service Distributed by Age as of January 1, 2024

(Compensation in cells with fewer than 20 records has been suppressed)

	Men		Women		Total	
Age	Number	Compensation	Number	Compensation	Number	Compensation
37	2	- -	1	- -	3	- -
38	2	- -	1	- -	3	- -
39	1	- -	1	- -	2	- -
40	3	- -	- -	- -	3	- -
41	2	- -	- -	- -	2	- -
42	3	- -	3	- -	6	- -
43	4	- -	1	- -	5	- -
44	- -	- -	1	- -	1	- -
45	- -	- -	1	- -	1	- -
46	1	- -	1	- -	2	- -
47	2	- -	- -	- -	2	- -
48	1	- -	1	- -	2	- -
49	- -	- -	- -	- -	- -	- -
50	- -	- -	1	- -	1	- -
51	1	- -	1	- -	2	- -
52	3	- -	- -	- -	3	- -
53	1	- -	1	- -	2	- -
54	- -	- -	3	- -	3	- -
55	3	- -	2	- -	5	- -
56	2	- -	- -	- -	2	- -
57	4	- -	2	- -	6	- -

TABLE 4A – DETAILED TABULATIONS OF THE DATA (CONTINUED)

The Number and Annual Salaries of Members in Active Service Distributed by Age as of January 1, 2024

(Compensation in cells with fewer than 20 records has been suppressed)

	Men		Women		Total	
Age	Number	Compensation	Number	Compensation	Number	Compensation
58	1	- -	- -	- -	1	- -
59	2	- -	1	- -	3	- -
60	3	- -	3	- -	6	- -
61	2	- -	1	- -	3	- -
62	- -	- -	- -	- -	- -	- -
63	2	- -	2	- -	4	- -
64	1	- -	- -	- -	1	- -
65	2	- -	2	- -	4	- -
66	2	- -	3	- -	5	- -
67	- -	- -	1	- -	1	- -
68	2	- -	2	- -	4	- -
69	1	- -	2	- -	3	- -
70	1	- -	1	- -	2	- -
71	- -	- -	- -	- -	- -	- -
72	2	- -	1	- -	3	- -
73	1	- -	- -	- -	1	- -
74	- -	- -	- -	- -	- -	- -
75	1	- -	- -	- -	1	- -
76	- -	- -	- -	- -	- -	- -
77	- -	- -	1	- -	1	- -
Grand Total	**173**	**$2,128,454**	**126**	**$1,294,740**	**299**	**$3,423,194**

TABLE 4B – DETAILED TABULATIONS OF THE DATA

The Number and Annual Salaries of Members in Active Service Distributed by Years of Service as of January 1, 2024

(Compensation in cells with fewer than 20 records has been suppressed)

	Men		Women		Total	
Service	Number	Compensation	Number	Compensation	Number	Compensation
0	3	- -	4	- -	7	- -
1	63	$577,553	41	$264,011	104	$841,563
2	47	602,050	30	334,090	77	936,140
3	19	- -	9	- -	28	348,930
4	9	- -	11	- -	20	249,976
5	8	- -	5	- -	13	- -
6	6	- -	5	- -	11	- -
7	6	- -	5	- -	11	- -
8	3	- -	6	- -	9	- -
9	2	- -	1	- -	3	- -
10	1	- -	2	- -	3	- -
11	3	- -	2	- -	5	- -
12	1	- -	2	- -	3	- -
13	- -	- -	1	- -	1	- -
14	- -	- -	- -	- -	- -	- -
15	- -	- -	- -	- -	- -	- -
16	1	- -	- -	- -	1	- -
17	- -	- -	- -	- -	- -	- -
18	1	- -	- -	- -	1	- -
26	- -	- -	1	- -	1	- -
30	- -	- -	1	- -	1	- -
Grand Total	**173**	**$2,128,454**	**126**	**$1,294,740**	**299**	**$3,423,194**

TABLE 4C – DETAILED TABULATIONS OF THE DATA

The Number and Annual Benefits Payable to Participants with Deferred Benefits Distributed by Age as of January 1, 2024

	Men		Women		Total	
Age	Number	Annuities*	Number	Annuities*	Number	Annuities*
16	18	- -	14	- -	32	- -
17	57	- -	33	- -	90	- -
18	86	- -	54	$1,822	140	$1,822
19	87	$1,822	59	- -	146	1,822
20	97	- -	87	- -	184	- -
21	121	1,822	88	- -	209	1,822
22	148	- -	109	- -	257	- -
23	184	1,822	141	- -	325	1,822
24	198	1,822	147	3,324	345	5,146
25	191	1,502	154	1,822	345	3,324
26	168	60	147	- -	315	60
27	191	4,507	129	- -	320	4,507
28	145	4,827	134	- -	279	4,827
29	148	3,325	112	1,502	260	4,827
30	99	5,619	78	6,010	177	11,629
31	79	2,758	63	3,005	142	5,763
32	80	8,103	49	617	129	8,719
33	49	1,502	38	1,502	87	3,005
34	49	723	26	1,502	75	2,225
35	40	8,547	39	8,364	79	16,912
36	41	5,633	29	2,350	70	7,983
37	47	12,427	23	5,229	70	17,656
38	30	10,113	22	3,597	52	13,710
39	26	3,099	28	5,836	54	8,936

TABLE 4C – DETAILED TABULATIONS OF THE DATA (CONTINUED)

The Number and Annual Benefits Payable to Participants with Deferred Benefits Distributed by Age as of January 1, 2024

Age	Men		Women		Total	
	Number	Annuities*	Number	Annuities*	Number	Annuities*
40	26	$21,252	19	$3,863	45	$25,115
41	33	7,429	17	3,699	50	11,128
42	24	17,316	17	13,702	41	31,018
43	33	6,891	17	7,378	50	14,269
44	24	14,949	13	5,515	37	20,464
45	21	11,318	8	1,911	29	13,229
46	18	6,866	17	5,036	35	11,902
47	28	15,947	16	2,677	44	18,624
48	22	9,350	8	6,947	30	16,297
49	16	13,784	11	3,042	27	16,826
50	25	9,967	20	10,558	45	20,524
51	19	10,392	10	3,358	29	13,750
52	17	7,423	13	5,776	30	13,199
53	20	15,394	12	8,431	32	23,825
54	13	6,347	9	7,313	22	13,661
55	18	8,023	13	1,120	31	9,143
56	22	6,790	20	3,357	42	10,147
57	11	3,405	13	8,015	24	11,420
58	18	13,250	9	7,150	27	20,401
59	24	4,475	12	10,318	36	14,793
60	27	25,011	11	4,627	38	29,637
61	23	17,879	10	5,903	33	23,781
62	24	19,870	9	10,280	33	30,149
63	25	6,599	15	16,146	40	22,744

TABLE 4C – DETAILED TABULATIONS OF THE DATA (CONTINUED)

The Number and Annual Benefits Payable to Participants with Deferred Benefits Distributed by Age as of January 1, 2024

Age	Men		Women		Total	
	Number	Annuities*	Number	Annuities*	Number	Annuities*
64	27	$14,513	14	$10,185	41	$24,698
65	21	8,743	9	5,269	30	14,011
66	12	8,382	8	2	20	8,384
67	15	10,948	5	7,483	20	18,431
68	7	3,917	1	- -	8	3,917
69	8	6,132	- -	- -	8	6,132
70	3	3,195	2	- -	5	3,195
71	5	3,226	- -	- -	5	3,226
72	4	793	2	- -	6	793
73	3	4,748	3	1,826	6	6,574
74	2	3	- -	- -	2	3
75	- -	- -	- -	- -	- -	- -
76	2	1,082	- -	- -	2	1,082
77	3	16	- -	- -	3	16
78	1	3	- -	- -	1	3
79	- -	- -	- -	- -	- -	- -
80	- -	- -	- -	- -	- -	- -
81	- -	- -	1	1,394	1	1,394
Grand Total	**3,023**	**$425,658**	**2,167**	**$228,763**	**5,190**	**$654,421**

* Only included for participant with deferred annuities

TABLE 4D – DETAILED TABULATIONS OF THE DATA

The Number and Annual Benefits Payable to Members Receiving Benefits Distributed by Age as of January 1, 2024

Age	Men Number	Men Annuities	Women Number	Women Annuities	Total Number	Total Annuities
65	- -	- -	- -	- -	- -	- -
66	1	$1,188	1	$1,720	2	$2,908
67	3	6,958	3	5,644	6	12,601
68	4	8,926	- -	- -	4	8,926
69	2	3,896	1	1,667	3	5,563
70	4	11,626	- -	- -	4	11,626
71	4	6,024	2	2,664	6	8,688
72	- -	- -	- -	- -	- -	- -
73	3	2,835	- -	- -	3	2,835
74	6	7,415	1	5,291	7	12,706
75	1	2,990	2	2,750	3	5,740
76	2	2,187	3	3,485	5	5,672
77	3	8,288	2	4,082	5	12,369
78	3	4,690	- -	- -	3	4,690
79	1	1,923	1	829	2	2,752
80	2	2,046	1	690	3	2,736
81	1	1,349	1	967	2	2,316
82	- -	- -	- -	- -	- -	- -
83	1	1,585	- -	- -	1	1,585
84	1	975	- -	- -	1	975
Total	**42**	**$74,899**	**18**	**$29,788**	**60**	**$104,487**

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