#### OBRA 1990 Retirement System of the County of Milwaukee

Actuarial Valuation and Review as of January 1, 2025

This valuation report should only be copied, reproduced, or shared with other parties in its entirety as necessary for the proper administration of the System.



© 2025 by The Segal Group, Inc.



101 North Wacker Drive, Suite 1800 Chicago, IL 60606-1722 segalco.com

May 20, 2025

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

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of January 1, 2025, 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 2025 and the Budget Contribution for fiscal year 2026.

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.

Segal does not audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. To the extent we can, however, Segal does review the data for reasonableness and consistency. Based on our review of the data, we have no reason to doubt the substantial accuracy of the information on which we have based this report and we have no reason to believe there are facts or circumstances that would affect the validity of these results.

The measurements shown in this actuarial valuation may not be applicable for other purposes. 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; and changes in plan provisions or applicable law.

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.

Board of Trustees May 20, 2025 Page 2

Segal makes no representation or warranty as to the future status of the System and does not guarantee any particular result. This document does not constitute legal, tax, accounting or investment advice or create or imply a fiduciary relationship. The Board is encouraged to discuss any issues raised in this report with the System's legal, tax and other advisors before taking, or refraining from taking, any action.

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

l Bridger

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



# Table of Contents

Section 1: Actuarial Valuation Summary	3
Purpose and Basis	3
Valuation Highlights	4
Risk	5
GASB	5
Summary of key valuation results	6
Important information about actuarial valuations	8
Section 2: Actuarial Valuation Results	
Membership data	10
Financial information	14
Actuarial experience	15
Changes in the actuarial accrued liability	20
Development of unfunded actuarial accrued liability	21
Amortization schedule for funding	22
Gross contribution requirements	24
Reconciliation of budget contribution requirement	25
Contribution for prior year and variance from the funding calculation contribution	26
History of employer contributions	27
Actuarial balance sheet	
Low-Default-Risk Obligation Measure (LDROM)	29
Risk	



Section 3: Supplemental Information	
Exhibit A: Table of plan coverage	
Exhibit B: Reconciliation of membership data	
Exhibit C: Summary statement of income and expenses on a market value basis	
Exhibit D: Summary statement of plan assets	35
Exhibit E: Development of the fund through December 31, 2024	
Exhibit F: Definition of pension terms	
Section 4: GASB 67 and 68 Information	42
Exhibit G: Net Pension Liability	42
Exhibit H: Schedules of changes in Net Pension Liability	45
Exhibit I: Deferred outflows of resources and deferred inflows of resources related to pensions	46
Exhibit J: Pension expense	48
Section 5: Actuarial Valuation Basis	49
Exhibit K: Statement of actuarial assumptions, methods and models	49
Exhibit L: Summary of plan provisions	53
Section 6: Additional summary tables of member data	52



#### **Purpose and basis**

This report is prepared by Segal to present a valuation of the System as of January 1, 2025. 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 System assets to cover the estimated cost of settling the System'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, 2024, 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 System, 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 as of January 1, 2025, provided by RPS;
- The unaudited assets of the System as of December 31, 2024, 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**

- 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.
- Actual employer contributions made during the fiscal year ending December 31, 2024, were \$425,000. 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 2024 by \$10,757.
- The results of this January 1, 2025 actuarial valuation are used to determine the Actual Funding Contribution for the fiscal year ending December 31, 2025, and the Budget Contribution for the fiscal year ending December 31, 2026. The Actual Funding Contribution for the year ending December 31, 2025, is \$373,468, a decrease of \$55,344 from the Actual Funding Contribution for the year ending December 31, 2024. The amortization bases of the unfunded actuarial accrued liability are shown in Section 2 of this report.
- The 2026 Budget Contribution, expected to be contributed in 2026, is \$328,000.
- 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 100.5% compared to the prior year's funded ratio of 89.9%. 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 System assets to cover the estimated cost of settling the System's benefit obligation or the need for or the amount of future contributions.
- The rate of return on the actuarial/market value of assets was 9.00% for the plan year ending December 31, 2024. This resulted in an actuarial gain when measured against the assumed rate of return of 6.8% (applicable for the year ending December 31, 2024). We advise the Board to continue to monitor actual and anticipated investment returns relative to the assumed long-term rate of return on investments.
- The overfunded actuarial accrued liability is \$27,649, compared to the unfunded actuarial accrued liability of \$519,006 in the prior valuation.
- The actuarial gain from investment experience is \$103,396.
- The net experience loss from sources other than investment experience was approximately 7.3% of the actuarial accrued liability. Additional detail regarding this loss is shown in Section 2.
- This actuarial report as of January 1, 2025, 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 System.



### **Risk**

- It is important to note that this actuarial valuation is based on plan assets as of December 31, 2024. The System's funded status does not reflect short-term economic fluctuations, but rather is based on the market values on the last day of the plan year. Segal is available to prepare projections of potential outcomes of market conditions and other demographic experience upon request.
- Since the actuarial valuation results are dependent on a given set of assumptions, there is a risk that emerging results may differ significantly as actual experience proves to be different from the assumptions. We have not been engaged to perform a detailed analysis of the potential range of the impact of risk relative to the System's future financial condition, but have included a brief discussion of some risks that may affect the System in Section 2. A more detailed assessment would provide the Board with a better understanding of the inherent risks and could be important for the System.

### GASB

- This report constitutes an actuarial valuation for the purpose of determining the actuarially determined contribution under the System'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 December 31, 2024 and December 31, 2023, 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.
- The Net Pension Liability (NPL) is equal to the difference between the Total Pension Liability (TPL) and the System's fiduciary net position (equal to the market value of assets). The NPL as of December 31, 2024 is \$480,742.



### **Summary of Key Valuation Results**

Valuation Results	Current	Prior
Contributions for fiscal year beginning:	2025	2024
Actual Funding Contributions	\$373,468	\$428,812
Actual employer contributions	TBD	425,000
Budget Contribution for fiscal 2026 (and 2025)	328,000	420,000
Actuarial accrued liability for plan year beginning:		
Retired members	\$919,501	\$908,703
Inactive vested members	3,423,813	3,620,846
Active members	619,041	623,980
• Total	\$4,962,355	\$5,153,529
Employer normal cost for plan year beginning January 1	133,391	127,460
Assets for plan year beginning January 1:		
Market value of assets (MVA)	\$4,990,004	\$4,634,523
Actuarial value of assets (AVA)	4,990,004	4,634,523
<ul> <li>Actuarial value of assets as a percentage of market value of assets</li> </ul>	100.00%	100.00%
Funded status for plan year beginning January 1:		
Unfunded/(overfunded) actuarial accrued liability based on AVA	-\$27,649	\$519,006
Funded percentage on AVA basis	100.5%	89.9%
Remaining amortization period (average)	12	13
Key assumptions:		
Interest rate for determining liability as of January 1	6.80%	6.80%
Inflation rate	2.50%	2.50%
<ul> <li>Interest rate for Budget Contribution for fiscal 2026 (and 2025)</li> </ul>	6.80%	6.80%



Valuation Results	Current	Prior
GASB information:		
Discount rate	6.80%	6.80%
• 20-year bond rate	4.08%	4.08%
Blended rate	6.80%	6.80%
Total Pension Liability	\$5,470,746	\$5,380,116
Plan Fiduciary Net Position	4,990,004	4,634,523
Net Pension Liability	480,742	745,593
Pension Expense	192,285	82,389
Plan Fiduciary Net Position as a percentage of Total Pension Liability	91.21%	86.14%
Demographic data for plan year beginning January 1:		
Number of retired members	63	60
Number of inactive vested members	5,074	5,190
Number of active members	337	299
Total payroll	\$3,856,275	\$3,423,194
Average payroll	11,443	11,449



#### **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 System will be determined by the actual benefits and expenses paid and the actual investment experience of the System.

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.



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 at a specific date it is not a prediction of a plan's future financial condition. Accordingly, Segal did not perform an analysis of the potential range of financial measurements, except where otherwise noted.
- 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 and is not acting as a fiduciary to the System. The valuation is based on Segal's understanding of applicable guidance in these areas and of the System's provisions, but they may be subject to alternative interpretations. The System should look to their other advisors for expertise in these areas.
- While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.
- Segal's report shall be deemed to be final and accepted by the System upon delivery and review. Trustees should notify Segal immediately of any questions or concerns about the final content.



#### **Membership data**

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

As shown below, the ratio of non-active members to active members has been fairly stable over the last 10 years. A higher ratio 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.

As of January 1	Active Members	Vested Terminated Members	Retired Members	Total Non- Actives	Ratio of Non-Actives to Actives
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
2025	337	5,074	63	5,137	15.24

#### Member Population: 2016 – 2025



#### **Active members**

Plan costs are affected by the age, years of credited service and payroll of active members. In this year's valuation, there were 337 active members with an average age of 33.7, average years of credited service of 3.7 years, and average pay of \$11,443. The 299 active members in the prior valuation had an average age of 33.9, average service of 3.3 years, and average pay of \$11,449.

Distribution of Active Members as of January 1, 2025



#### Actives by Age

#### Actives by Years of Credited Service



#### **Inactive vested members**

In this year's valuation, there were 5,074 inactive members with a vested right to a deferred or immediate benefit. Average monthly annuities for members with a deferred benefit is \$140. The average lump sum benefit for members with an immediate or deferred benefit is \$166. For comparison, in the previous 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 was \$130. The average lump sum benefit for members with an immediate or deferred or immediate benefit.



#### **Retired members**

As of January 1, 2025, 63 retired members were receiving total monthly benefits of \$8,787. For comparison, in the previous valuation, there were 60 retired members receiving monthly benefits of \$8,724.

As of January 1, 2025, the average monthly benefit for retired members is \$140, compared to \$145 in the previous valuation. The average age for retired members is 73.7 in the current valuation, compared to 73.9 in the previous valuation.

Distribution of Retired Members as of January 1, 2025



By Monthly Amount







### **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.

۵ Jan	As of Juary 1	Active Count	Active Average Age	Active Average Service	Retired Count	Retired Average Age	Retired Average Monthly Amount
2	2016	386	29.2	4.1	48	N/A	\$124
2	2017	354	30.4	4.1	55	69.5	117
2	2018	288	32.0	4.2	53	70.4	182
2	2019	379	32.7	3.7	52	71.1	143
2	2020	372	32.1	3.9	56	72.1	161
2	2021	323	34.3	4.1	56	72.1	149
2	2022	320	33.0	3.9	62	72.2	152
2	2023	260	33.0	3.2	63	73.0	148
2	2024	299	33.9	3.3	60	73.9	145
2	2025	337	33.7	3.7	63	73.7	139

#### Membership Data Statistics: 2016 – 2025



### **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.



#### Comparison of Contributions to Benefits and Expenses Paid For Years Ended December 31, 2015 – 2024



#### **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 \$466,907 which includes \$103,396 from investment gains and \$363,511 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, 2024

Source	Amount
1 Net gain/(loss) from investments	\$103,396
2. Net gain/(loss) from other experience	363,511
3 Net experience gain/(loss): 1 + 2	\$466,907



#### **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 9.0% for the year ended December 31, 2024.

For valuation purposes, the assumed rate of return on the actuarial value of assets is 6.80%. Since the actual return for the year was more than the assumed return, the System experienced an actuarial gain during the year ended December 31, 2024, with regard to its investments.

		2024	2023
1.	Investment income	\$422,516	\$507,991
2.	Average value of assets	4,692,938	4,446,600
3.	Rate of return: <b>1</b> ÷ <b>2</b>	9.00%	11.42%
4.	Assumed rate of return	6.80%	7.50%
5.	Expected investment income: 2 x 4	319,120	333,495
6.	Net investment gain/(loss): 1 – 5	\$103,396	\$174,496

#### Investment Experience for Year Ended December 31



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 20 years, including averages over select time periods.

	Amount	Percent		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	2024	422,516	9.0
Most rece	ent five-year avera	ge return			9.4%
Most recent ten-year average return					10.0%
Most rece	ent fifteen-year ave	rage return			8.9%
Most recent twenty-year average return					7.6%

#### Investment Return for Year Ended December 31

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







#### Actuarial Rates of Return for Years Ended December 31



#### **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 members,
- 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, 2024, amounted to \$365,511, which is 7.4% of the actuarial accrued liability.

ł	Experience (	Gain/(Lo	ss) Due to	o Demographic	s for Year	Ended Decen	nber 31, 2024

Net turnover	\$49,470
Retirement	429,485
Mortality (more deaths than expected)	130,047
Salary increases for continuing actives	659
Miscellaneous <sup>1</sup>	-244,150
Total	\$365,511



### Changes in the actuarial accrued liability

The actuarial accrued liability as of January 1, 2025, is \$4,962,355, a decrease of \$191,174, or 3.7%, 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 are no changes in actuarial assumptions since the prior valuation.
- Details on actuarial assumptions and methods are in Section 5.

#### **Plan provisions**

- There are no changes in plan provisions since the prior valuation.
- A summary of plan provisions is in Section 5.





### Unfunded/(Overfunded) actuarial accrued liability

#### Development of Unfunded/(Overfunded) Actuarial Accrued Liability For Year Ended December 31, 2024

7.	Unfunded/(overfunded) actuarial accrued liability at end of year	-\$27,649
	e) Total changes	-466,907
	d) Plan provisions	0
	c) Funding method	0
	b) Assumptions	0
	a) Experience (gain)/loss	-466,907
6.	Changes due to:	
5.	Expected unfunded/(overfunded) actuarial accrued liability	439,258
4.	Interest on 1, 2 & 3	41,386
3.	Total contributions	-425,000
2.	Normal cost at beginning of year (includes expenses)	303,866
1.	Unfunded/(overfunded) actuarial accrued liability at beginning of year	\$519,006



### 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.

Туре	Date Established	Initial Period	Initial Amount	Annual Payment	Years Remaining	Outstanding Balance
Reestablished UAAL	01/01/2015	21	\$1,923,320	\$186,084	11	\$1,505,229
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	175,928
Change in Assumptions	01/01/2018	20	197,805	18,718	13	168,983
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	35,703
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
Actuarial Loss	01/01/2023	20	1,286,261	113,497	18	1,237,107
Contribution Variance	01/01/2023	5	-40,998	-9,340	3	-26,273
Actuarial Gain	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	-64,482
Actuarial Gain	01/01/2025	20	-466,907	-40,627	20	-466,907
Contribution Variance	01/01/2025	5	-10,757	-2,443	5	-10,757
Total				\$42,211		\$125,714

#### Actual Funding Contribution Amortization Schedule for 2025

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 2026

Туре	Date Established	Initial Period	Initial Amount	Annual Payment	Years Remaining	Outstanding Balance
Reestablished UAAL	01/01/2015	21	\$1,923,320	\$186,084	10	\$1,408,847
Increase to UAAL	01/01/2016	20	585,698	57,068	10	432,062
Actuarial Loss	01/01/2017	20	455,010	43,703	11	353,514
Actuarial Loss	01/01/2018	20	205,933	19,487	12	167,079
Change in Assumptions	01/01/2018	20	197,805	18,718	12	160,484
Actuarial Loss	01/01/2019	20	418,511	39,042	13	352,476
Actuarial Loss	01/01/2020	20	1,321,835	121,557	14	1,149,108
Change in Assumptions	01/01/2020	20	340,838	31,344	14	296,301
Actuarial Gain	01/01/2021	20	-4,747,134	-430,620	15	-4,242,183
Actuarial Gain	01/01/2022	20	-372,705	-33,346	16	-340,933
Contribution Variance	01/01/2022	5	-440,589	-100,671	1	-100,671
Contribution Variance	01/01/2023	5	-40,998	-9,340	2	-18,085
Actuarial Loss	01/01/2023	20	1,286,261	113,497	17	1,200,015
Actuarial Loss	01/01/2024	20	-282,256	-24,560	18	-267,704
Contribution Variance	01/01/2024	5	102,883	23,369	3	65,738
Change in Assumptions	01/01/2024	20	-66,130	-5,754	18	-62,721
Actuarial Gain	01/01/2025	20	-466,907	-40,627	19	-455,267
Contribution Variance	01/01/2025	5	-10,757	-2,443	4	-8,879
Contribution Variance	01/01/2026	5	-46,531	-10,569	5	-46,531
Total				-\$4,063		\$42,650

For the 2026 Budget Contribution, a base for a contribution variance for 2026 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 2025.

#### **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). 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.

#### 2026 Budget 2025 Actual 2025 Budget \$147,000 \$142,462 \$141,000 1. Total normal cost, adjusted to end of year -4,000 45,081 92,000 Net annual amortizations, adjusted to end of year 2. 185,000 185,925 187,000 Expenses 3. \$420,000 \$328,000 \$373,468 4. Total contribution: 1 + 2 + 3, not less than zero

#### Gross Contribution Requirements for Year Beginning January 1

The Actual Funding Contribution and 2026 Budget Contribution are based on member data as of January 1, 2025.

For the 2026 Budget Contribution, the Normal Cost for 2026 is assumed to be 3.5% higher than the 2025 Normal Cost adjusted for the 6.80% investment return assumption. The 2026 administrative expenses are assumed to be 2.50% higher than the estimated administrative expenses for 2025.



### **Reconciliation of budget contribution requirement**

#### Reconciliation of Budget Contribution Requirement From 2025 to 2026

1.	2025 Budget Contribution	\$420,000
2.	Increase/(decrease) during 2024 due to:	
	a) Unanticipated liability loss/(gain)	-\$6,000
	b) Asset experience different than expected	-10,000
	c) Expenses other than assumed	-7,000
	d) Contribution variance other than assumed	-24,000
	e) Change due to assumption/method/plan changes	0
	f) Total	-\$47,000
3.	2025 Actual Contribution (rounded): 1 + 2	\$373,000
4.	Expected increase/(decrease) during 2025 due to:	
	a) Normal cost and existing amortization bases	-\$33,000
	b) Phase-in of deferred investment (gains) losses	0
	c) Increase in expenses	-1,000
	d) Expected contribution variance	-11,000
	e) Full recognition of bases	0
	f) Change due to assumption/method/plan changes	0
	g) Total	-\$45,000
5.	2026 Budget Contribution: 3 + 4	\$328,000



# 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 2025 plan year.

	Item	Fraction of a Year Invested	Contribution Amount	Interest to Year End <sup>1</sup>	End of Year Amount					
1.	Total Actual Funding Contribution, for 2024 plan year (from January 1, 2025 actuarial valuation report)				\$428,812					
2.	Total employer contributions made <sup>2</sup> :									
	a) June 30, 2024	50.7%	425,000	14,568	439,568					
3.	Total: 1 + 2a		\$425,000	\$14,568	\$439,568					
4.	Total Bi-weekly member contributions made:	50.0%	\$0	\$0	\$0					
Va	/ariance from funding calculation amount: 3 + 4 – 1 \$10,757									

#### Calculation of Contribution Variance

<sup>1</sup> Interest to December 31, 2024 at 6.80% per annum.

<sup>2</sup> Assumed employer contributions are made middle of year.



#### **History of employer contributions**

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

December 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	425,000	99.11
2025	142.462	45.081	185.926	373.469	TBD	TBD

#### History of Employer Contributions for Fiscal Year Ended



#### **Actuarial balance sheet**

An overview of the System'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 System for current members. 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 System.

Second, this liability is compared to the assets. The "assets" for this purpose include the net amount of assets already accumulated by the System, 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.

	2025	2024
Liabilities		
Present value of benefits for retired members	\$919,501	\$908,703
Present value of benefits for inactive vested members	3,423,813	3,620,846
Present value of benefits for active members	2,208,211	1,877,257
Total liabilities	\$6,551,525	\$6,406,806
Current and future assets		
Total valuation value of assets	\$4,990,004	\$4,634,523
Present value of future employer and employee contributions for:		
a) Future Normal Costs	1,589,170	1,253,277
b) Unfunded actuarial accrued liability	-27,649	519,006
Total of current and future assets	\$6,551,525	\$6,406,806

#### Actuarial Balance Sheet as of January 1



### Low-Default-Risk Obligation Measure (LDROM)

Actuarial Standard of Practice No. 4 (ASOP 4) Measuring Pension Obligations and Determining Pension Plan Costs or Contributions. 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 4.08% for use effective December 31, 2024. 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 6.80%, is used for these calculations.

As of December 31, 2024, the LDROM for the system is \$7,390,818. The difference between the plan's AAL of \$2,428,463 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.



### **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 System. A more detailed assessment of the risks could provide a better understanding of the risks inherent in the System. 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 System could be exacerbated by relatively small deviations from assumed future experience.
- Inactive members account for the majority of the System'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 System's future condition:

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

The assets total approximately \$4.99 million. If the actual market value return for the System Year were 1% different from the assumed (either higher or lower), the unfunded/overfunded actuarial liability would change by about \$46,929.

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 \$499,000 in the asset value. A 10% increase in assets would cause the overfunded liability (market value basis) to increase from \$0.03 million to \$0.50 million. Likewise, a 10% decrease in the asset value, would cause the overfunded liability to decrease from \$0.03 million to an unfunded of \$0.5 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 \$18,109. The Actuarially Determined Contribution would increase from \$0.37 million to \$0.39 million.

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

Examples of this risk include:

- More or less active member 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 members or of the assets of the plan can result in large swings in the contribution requirements.

- Currently the System has a non-active to active member ratio of 15.2. For the prior year, benefits paid and expenses were \$67,035 more than contributions received. However, as this System matures, more cash will be needed from the investment portfolio to meet benefit payments.
- As of December 31, 2024, the retired life actuarial accrued liability represents 19% of the total actuarial accrued liability. In addition, the actuarial accrued liability for inactive vested members 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.





### Exhibit A: Table of plan coverage as of January 1

Category	2025	2024	Change From Prior Year	
Active members in valuation:				
Number	337	299	+12.7%	
Average age	33.7	33.9	-0.2	
Average years of creditable service	3.7	3.3	+0.4	
Total payroll	\$3,856,275	\$3,423,194	+12.6%	
Average pay	11,443	11,449	-0.5%	
Inactive members:				
Inactive vested members	5,074	5,190	-2.2%	
Average age	31.8	31.9	-0.1	
Retired members:				
Count	63	60	5.0%	
Average age	73.7	73.9	-0.2	
Average monthly benefit	\$139	\$145	-4.1%	



### **Exhibit B: Reconciliation of membership data**

Description	Active Members	Vested Terminated Members	Retired Members	Total
Number as of January 1, 2024	299	5,190	60	5,549
New members	87	403	N/A	490
• Terminations – with vested rights	-145	145	0	0
Retirements	-1	-7	8	0
Return to work / rehire	115	-115	0	0
• Deceased	0	-11	-3	-14
Lump sum cash-outs	-18	-531	-2	-551
No benefit owed / escheated to the State	0	0	0	0
Data adjustments	0	0	0	0
Number as of January 1, 2025	337	5,074	63	5,474

OBRA 1990 Retirement System of the County of Milwaukee Actuarial Valuation as of January 1, 2025



# Exhibit C: Summary statement of income and expenses on a market value basis

#### Income and Expenses for Years Ended December 31

	2024	2023
Contribution income:		
Employer contributions	\$425,000	\$186,000
Member contributions	0	0
Administrative expenses	-180,371	-182,773
Net contribution income	\$244,629	\$3,227
Investment income:		
Prorata share of earnings	\$422,516	\$507,991
Net investment income	\$422,516	\$507,991
Total income available for benefits	\$667,145	\$511,218
Less benefit payments:		
Benefits paid to retirees	-\$162,331	-\$320,037
Account Withdrawals	-149,333	-139,025
Net benefit payments	-\$311,664	-\$459,062
Change in reserve for future benefits	\$355,481	\$52,156
Net assets at market value at the beginning of the year	\$4,634,523	\$4,582,367
Net assets at market value at the end of the year	\$4,990,004	\$4,634,523



### Exhibit D: Summary statement of plan assets

Statement of Plan Assets as of December 31

	2024	2023
Cash equivalents	\$32,314	\$48,376
Assets held by ERS Pension Plan	4,973,335	4,611,974
Contributions receivable	0	0
Total assets	\$5,005,649	\$4,660,350
Taxes payable	-15,645	-25,827
Net assets at market value	\$4,990,004	\$4,634,523
Net assets at actuarial value	\$4,990,004	\$4,634,523



#### Exhibit E: Development of the fund through December 31, 2024

Year Ended December 31	Employer Contributions	Member Contributions	Net Other Income	Net Investment Return <sup>1</sup>	Admin. Expenses	Benefit Payments <sup>2</sup>	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%
2024	425,000	0	0	422,516	-180,371	-311,664	4,990,004	4,990,004	100.00%

<sup>1</sup> On a market basis, net of investment fees

<sup>2</sup> 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 retirees and beneficiaries	Actuarial Present Value of lifetime benefits to existing retirees and beneficiaries. This sum takes account of life expectancies appropriate to the ages of the annuitants 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 that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which 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.
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	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 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 Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive members entitled to either a refund of member contributions 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, as well as Actuarially Determined Contributions.
Actuarial value of assets	The value of the Plan'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 Actuarially Determined Contribution.
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 Plan.
Actuarially determined contribution	The employer's 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 Unfunded Actuarial Accrued Liability. 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 Unfunded Actuarial Accrued Liability. 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 intended to pay off the Unfunded Actuarial Accrued Liability.
Assumptions or actuarial assumptions	<ul> <li>The estimates upon which the cost of the Plan is calculated, including:</li> <li>Investment return — the rate of investment yield that the Plan will earn over the long-term future;</li> <li>Mortality rates — the rate or probability of death at a given age for employees and retirees;</li> <li>Retirement rates — the rate or probability of retirement at a given age or service;</li> <li>Disability rates — the rate or probability of disability retirement at a given age;</li> <li>Withdrawal rates — the rate or probability at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement;</li> <li>Salary increase rates — the rates of salary increase due to inflation, real wage growth and merit and promotion increases.</li> </ul>
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 20 years, it is 19 years at the end of one year, 18 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 based on the member's compensation, age 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 Plan 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 based on recommendations from the Actuary.
Funded ratio	The ratio of the Actuarial Value of Assets AVA to the Actuarial Accrued Liability (AAL). Plans sometimes also 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 Plan 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	The portion of the Actuarial Present Value of Future Benefits and expenses, if applicable, allocated to a valuation year by the Actuarial Cost Method. Any payment with respect to an Unfunded Actuarial Accrued Liability is not part of the Normal Cost (see Amortization Payment). For pension plan benefits that are provided in part by employee contributions, Normal Cost refers to the total of member contributions and employer Normal Cost unless otherwise specifically stated.
Open amortization period	An open amortization period is one which 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 each future year in determining the Amortization Period.
Plan Fiduciary Net Position	Market value of assets.
Service costs	The portions of the actuarial present value of projected benefit payments that are attributed to valuation years.
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	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 or an Overfunded Actuarial Accrued Liability.
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 Benefits is determined. The expected benefits to be paid in the future are discounted to this date.



### **Exhibit G: Net Pension Liability**

Components of the Net Pension Liability	Current	Prior
Measurement date and reporting date for the System	December 31, 2024	December 31, 2023
Total Pension Liability	\$5,470,746	\$5,380,116
Plan Fiduciary Net Position	4,990,004	4,634,523
Net Pension Liability	480,742	745,593
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	91.21%	86.1%

**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, 2025.

Actuarial assumptions. The Total Pension Liability (TPL) as of December 31, 2024, which was determined based on the results of an actuarial valuation as of January 1, 2025, used the following actuarial assumptions, applied to all periods included in the measurement:

Assumption Type	Assumption
Inflation	2.50%
Salary increases	5.00%
Net investment rate of return	6.80%, net of pension plan investment expenses



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

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, 2025 funding actuarial valuation.



#### Determination of discount rate and investment rates of return

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 January 1, 2025. 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, 2025, 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, as well as projected contributions from future plan members, are not included. Based on those assumptions, the pension System's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members as of January 1, 2025. 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, 2024.

#### **Discount rate sensitivity**

**Sensitivity of the Net Pension Liability to changes in the discount rate.** The following presents the Net Pension Liability (NPL) as of December 31, 2024, 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	Current Discount	1% Increase
	(5.80%)	Rate (6.80%)	(7.80%)
Net Pension Liability	\$1,309,138	\$480,742	-\$171,355



#### **Exhibit H: Schedules of changes in Net Pension Liability**

Components of Net Pension Liability	Current	Prior
Reporting and Measurement Date	December 31, 2024	December 31, 2023
Total Pension Liability		
Service cost	\$189,784	\$125,333
Interest	368,157	407,210
Change of benefit terms	0	0
Differences between expected and actual experience	-155,647	-110,536
Changes of assumptions	0	-116,497
Benefit payments, including refunds of employee contributions	-311,664	-459,062
Net change in Total Pension Liability	\$90,630	-\$153,552
Total Pension Liability – beginning	5,380,116	5,533,668
Total Pension Liability – ending (a)	\$5,470,746	\$5,380,116
Plan Fiduciary Net Position		
Contributions – employer	\$425,000	\$186,000
Contributions – employee	0	0
Net investment income	422,516	507,990
Benefit payments, including refunds of member contributions	-311,664	-459,062
Administrative expense	-180,371	-182,772
Net change in Plan Fiduciary Net Position	\$355,481	\$52,156
Plan Fiduciary Net Position – beginning	4,634,523	4,582,367
Plan Fiduciary Net Position – ending (b)	\$4,990,004	\$4,634,523
Net Pension Liability		
Net Pension Liability – ending (a) – (b)	\$480,742	\$745,593
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	91.21%	86.14%
Covered employee payroll	3,423,194	2,747,233
Net Pension Liability as percentage of covered employee payroll	14.04%	27.14%



# Exhibit I: Deferred outflows of resources and deferred inflows of resources related to pensions

	Year Established	Original Balance	Original Amortization Period	Amortization Amount During 2024	Outstanding Balance at December 31, 2024
Outflows					
Investments	2022	742,987	5.0 years	\$148,597	\$297,194
Total outflows				\$148,597	\$297,194
Inflows					
Investments	2020	429,329	5.0 years	\$85,866	\$0
Investments	2021	360,928	5.0 years	72,186	72,186
Investments	2023	205,621	5.0 years	41,125	123,371
Investments	2024	103,396	5.0 years	20,680	82,716
Experience	2024	155,647	0.4 years	155,647	0
Total inflows				\$375,504	\$278,273



# Exhibit J: Deferred outflows of resources and deferred inflows of resources related to pensions (continued)

	Current	Prior
Reporting and measurement dates	December 31, 2024	December 31, 2023
Deferred outflows of resources		
Changes of assumptions	\$0	\$0
Net difference between projected and actual earnings on pension plan investments	18,921	51,057
Difference between expected and actual experience in the Total Pension Liability	0	0
Total deferred outflows of resources	\$18,921	\$51,057
Deferred inflows of resources		
Changes of assumptions	\$0	\$0
Net difference between projected and actual earnings on pension plan investments	0	0
Difference between expected and actual experience in the Total Pension Liability	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:		
December 31:		
2024	N/A	-\$50,579
2025	\$14,607	35,287
2026	86,793	107,473
2027	-61,800	-41,124
2028	-20,679	0
Thereafter	0	0



### **Exhibit K: Pension expense**

Components of pension expense	Current	Prior	
Reporting and measurement dates	December 31, 2024	December 31, 2023	
Service cost	189,784	125,333	
Interest	368,157	407,210	
Current-period benefit changes	0	0	
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	-155,647	-110,536	
Expensed portion of current-period changes of assumptions	0	-116,497	
Member contributions	0	0	
Projected earnings on pension plan investments	-319,120	-302,369	
Expensed portion of current-period differences between actual and projected earnings on pension plan investments	-20,680	-41,125	
Administrative expense	180,371	182,772	
Recognition of beginning of year deferred outflows of resources as pension expense	148,597	148,597	
Recognition of beginning of year deferred inflows of resources as pension expense	-199,177	-210,996	
Total pension expense	\$192,285	\$82,389	



### Exhibit L: 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 System'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 System 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**

	Rales + Olimale (%)					
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				

#### Withdrawal - Select Period Termination

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 members**

	Rate (%)
Age	
65 – 71	50
72	100

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

#### **Retirement rates for inactive vested members**

	Rate (%)			
Age				
65	50			
66 – 69	5			
70	100			

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

#### Unknown data for members

Same as those exhibited by members with similar known characteristics. If not specified, members are assumed to be male. Lump sum amounts are provided for the inactive members 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 member 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.

#### Models

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. 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 supervision of the responsible actuary.



### **Exhibit M: Summary of plan provisions**

This exhibit summarizes the major provisions of the System 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.



Table 1 – Summary of Membership Data as of January 1, 2025

#### **Active members**

Item	Total
Number of members	337
Average Annual Salaries*	\$11,443
Average Age	33.7
Average Service	3.7

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

#### **Inactive members**

	Count	Annual Annuities*	Average Monthly Annuities*	Average Future Lump Sum
Members with deferred benefits	5,074	\$560,428	\$140	\$166
Retired members	63	105,446	139	N/A
Total	5,137	\$665,874		

\*Only included for members with deferred annuities



Table 2 – Five-Year History of Membership Data

#### **Active members**

January 1	Number of Active Members	Percentage Change in Membership	Total Annual Payroll	Percentage Change in Payroll
2025	337	12.71%	\$3,856,275	12.65%
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%

#### **Retired members**

January 1	Number on roll	Net Change	Percentage Change in Membership	Annual Annuities	Percentage Change in Annuities
2025	63	3	5.00%	\$105,446	0.73%
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%



Table 3 – Members in Active Service as of January 1, 2025 by Age, Years of Credited Service, and Average Payroll

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

Years of Credited Service										
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	124	117	7							
	\$9,657	\$9,432								
25 - 29	39	27	11	1						
	\$13,040	\$11,073								
30 - 34	43	27	10	5	1					
	\$13,904	\$13,643								
35 - 39	32	21	7	2	1	1				
	\$12,343	\$12,915								
40 - 44	28	17	8	2		1				
	\$11,367									
45 - 49	19	12	3	1	3					
	-									
50 - 54	14	9	3	1			1			
55 - 59	11	8	2		1					
60 - 64	19	15	3	1						
65 & over	8	5	0	3						
Total	337	258	54	16	6	2	1			
	\$11,443	\$10,809	\$14,521							

OBRA 1990 Retirement System of the County of Milwaukee Actuarial Valuation as of January 1, 2025



#### Section 6: Additional Summary Tables of Member data Table 4A – Detailed Tabulations of the Data

#### The Number and Annual Salaries of Members in Active Service Distributed by Age as of January 1, 2025

		Men		Women		Total
Age	Number	Compensation	Number	Compensation	Number	Compensation
16	8		4		12	
17	9		6		15	
18	13		5		18	
19	17		10		27	220,000
20	6		4		10	
21	6		5		11	
22	5		6		11	
23	4		4		8	
24	8		4		12	
25	8		6		14	
26	2		4		6	
27	2		2		4	
28	5		5		10	
29	5		0		5	
30	4		2		6	
31	8		5		13	
32	7		3		10	
33	4		3		7	
34	5		2		7	
35	3		3		6	
36	5		3		8	



#### 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, 2025

		Men		Women		Total
Age	Number	Compensation	Number	Compensation	Number	Compensation
37	4		3		7	
38	2		4		6	
39	3		2		5	
40	2		2		4	
41			1		1	
42	2		2		4	
43	4		5		9	
44	7		3		10	
45	4		3		7	
46	3		2		5	
47			1		1	
48	3		1		4	
49	2				2	
50	1		1		2	
52	3		1		4	
53	3		1		4	
54	2		2		4	
55	1		2		3	
56	3		1		4	
58	2		1		3	
59	1				1	



#### 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, 2025

		Men		Women		Total
Age	Number	Compensation	Number	Compensation	Number	Compensation
60	4		1		5	
61	1		2		3	
62	3		2		5	
64	3		3		6	
66	1		1		2	
67			1		1	
68	2				2	
69			1		1	
72	1				1	
73	1				1	
Total	202	\$2,348,019	135	\$1,508,256	337	\$3,856,275



#### 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, 2025

		Men		Women		Total
Service	Number	Compensation	Number	Compensation	Number	Compensation
0	10		9		19	
1	66	\$558,928	42	\$356,170	108	\$915,097
2	37	418,444	21	265,552	58	683,995
3	22	365,752	19		41	561,791
4	20	319,281	12		32	445,689
5	8		5		13	
6	6		8		14	
7	6		4		10	
8	6		4		10	
9	5		2		7	
10	4				4	
11	2		3		5	
12	2		1		3	
13	1		1		2	
14	1		1		2	
15	1		1		2	
16	1				1	
17			1		1	
18	2				2	
20			1		1	
21	1				1	
27	1				1	
Total	202	\$2,348,019	135	\$1,508,256	337	\$3,856,275



#### Table 4C – Detailed Tabulations of the Data

		Men		Women		Total
Age	Number	Annuities*	Number	Annuities*	Number	Annuities*
16	21	\$2,892	10		31	\$2,892
17	57	2,892	37		94	2,892
18	96		64	\$8,676	160	8,676
19	101		79	5,784	180	5,784
20	116	5,784	73	2,892	189	8,676
21	120	2,892	103		223	2,892
22	127		94	2,892	221	2,892
23	154	2,892	115		269	2,892
24	174		142		316	
25	189		136	2,892	325	2,892
26	182		147	3,923	329	3,923
27	154	60	138		292	60
28	172	2,892	117		289	2,892
29	124		115		239	
30	121	2,893	82		203	2,893
31	76	792	61		137	792
32	60	1,256	51		111	1,256
33	59	3,596	45	617	104	4,212
34	39		38		77	
35	40	723	22		62	723
36	30	2,538	33	3,857	63	6,395
37	34	2,629	22	848	56	3,476
38	42	10,924	23	3,727	65	14,651
39	28	7,108	21	2,095	49	9,203

The Number and Annual Benefits Payable to Members with Deferred Benefits Distributed by Age as of January 1, 2025



#### Section 6: Additional Summary Tables of Member data Table 4C – Detailed Tabulations of the Data (Continued)

#### The Number and Annual Benefits Payable to Members with Deferred Benefits Distributed by Age as of January 1, 2025

		Men		Women		Total
Age	Number	Annuities*	Number	Annuities*	Number	Annuities*
40	26	\$1,597	24	\$4,847	50	\$6,444
41	24	21,252	16		40	23,612
42	33	7,429	14		47	8,123
43	22	12,489	15		37	23,187
44	28	3,566	18		46	9,442
45	18		12		30	11,130
46	15		6		21	6,580
47	20	6,866	19		39	11,902
48	28	14,445	18		46	17,122
49	20	9,350	10		30	20,823
50	15		9		24	13,502
51	24	8,464	22	10,558	46	19,022
52	17		8		25	12,415
53	16	5,601	13		29	9,875
54	20	13,892	11		31	18,998
55	12		11		23	13,228
56	21	9,412	13		34	10,533
57	25	6,790	18		43	10,147
58	15		15		30	8,415
59	18		9		27	20,401
60	24	2,656	14		38	12,974
61	28	25,011	10		38	29,637
62	26	17,879	10		36	23,781
63	24	18,182	9		33	28,462



#### Table 4C – Detailed Tabulations of the Data (Continued)

#### The Number and Annual Benefits Payable to Members with Deferred Benefits Distributed by Age as of January 1, 2025

		Men		Women		Total
Age	Number	Annuities*	Number	Annuities*	Number	Annuities*
64	25	\$9,572	16		41	25,718
65	20	10,156	12		32	19,705
66	7		7		14	
67	9		3		12	
68	7		4		11	
69	6		2		8	
70	6				6	
71	4		1		6	
72	4				4	
73	2				2	
74	2		1		3	
75	2				2	
77	2				2	
78	1				1	
79	1				1	
80	1				1	
82			1		1	
Total	2,934	\$360,996	2,140	\$199,432	5,074	\$560,428

\* Only included for members with deferred annuities



#### Section 6: Additional Summary Tables of Member data Table 4D – Detailed Tabulations of the Data

#### The Number and Annual Benefits Payable to Members Receiving Benefits Distributed by Age as of January 1, 2025

		Men		Women		Total
Age	Number	Annuities	Number	Annuities	Number	Annuities
65	3		1		4	
66	2		1		3	
67	1		2		3	
68	3		2		5	
69	4				4	
70	2		1		3	
71	4				4	
72	4		2		6	
74	3				3	
75	5		1		6	
76			2		2	
77	2		3		5	
78	2		2		4	
79	3				3	
80	1		1		2	
81	2		1		3	
82	1		1		2	
85	1		1		1	
Total	43	\$74,489	20	\$30,956	63	\$105,446

6498341v3/14308.002

