

# RETIREMENT PLAN FOR EMPLOYEES OF NORTH TEXAS MUNICIPAL WATER DISTRICT

ACTUARIAL VALUATION

AS OF

JANUARY 1, 2025



Rudd and Wisdom, Inc.

[www.ruddwisdom.com](http://www.ruddwisdom.com)

9500 Arboretum Blvd., Suite 200  
Austin, Texas 78759  
Phone: 512-346-1590  
Fax: 512-345-7437

W. Lee Bello, A.S.A.  
Mitchell L. Bilbe, F.S.A.  
Evan L. Dial, F.S.A.  
Philip S. Dial, F.S.A.  
Charles V. Faerber, F.S.A., A.C.A.S.  
Mark R. Fenlaw, F.S.A.  
Brandon L. Fuller, F.S.A.  
Christopher S. Johnson, F.S.A.  
Oliver B. Kiel, F.S.A.  
Dustin J. Kim, F.S.A.



Edward A. Mire, F.S.A.  
Rebecca B. Morris, A.S.A.  
Amanda L. Murphy, F.S.A.  
Michael J. Muth, F.S.A.  
Khiem Ngo, F.S.A., A.C.A.S.  
Timothy B. Seifert, F.S.A.  
Raymond W. Tilotta  
Ronald W. Tobleman, F.S.A.  
David G. Wilkes, F.S.A.

December 18, 2025

Ms. Jeanne Chipperfield  
Assistant General Manager - Chief Financial Officer  
North Texas Municipal Water District  
501 E. Brown Street  
Wylie, Texas 75098

Re: Actuarial Valuation as of January 1, 2025

Dear Ms. Chipperfield:

Enclosed is the Actuarial Valuation of the Retirement Plan for Employees of North Texas Municipal Water District (the Plan) as of January 1, 2025. The purpose of this report is to:

- evaluate the funded status of the plan and to determine an actuarially reasonable contribution level that comports with the employer's funding policy for the plan year beginning January 1, 2025, and
- provide information about the Plan for purposes of compliance with Government Accounting Standards Board (GASB) Statement Nos. 67 and 68.

Note: This report may be provided to third parties only if distributed in its entirety.

### Funding Policy

The ultimate goal of a funding policy is to ensure that plan assets will be sufficient to pay all benefits to all plan participants and their beneficiaries as payments come due. A funding policy that requires contributions that are sufficient to pay the plan's Normal Cost and to amortize the plan's Unfunded Accrued Liability (UAL) over a reasonable period of time should be adequate to achieve this goal, subject to the risks inherent in any pension plan as further discussed below in the "Variability in Future Actuarial Measurement and Related Risks" section of this letter.

The Plan utilizes a funding policy that determines the Normal Cost and Accrued Liability using the Entry Age Normal (EAN) funding method. The UAL is the difference between this EAN Accrued Liability and the Actuarial Value of Plan Assets as of the valuation date.

Prior to the 2023 plan year, the employer's funding policy was based on an annual Actuarially Determined Contribution (ADC) sufficient to fund the sum of the Normal Cost under the EAN funding method and a level dollar amortization of the UAL over a closed 30-year period that began January 1, 2014.

In 2023, the employer adopted a new funding policy effective with the January 1, 2023 valuation. The new funding policy requires an annual ADC sufficient to fund the sum of the Normal Cost under the

EAN funding method and a level percentage of pay amortization of the UAL utilizing a closed period, layered amortization approach. The UAL comprises various sources, and under the layered amortization approach each component source of UAL is amortized over a separate closed period as follows:

Source of UAL Amortization Layers	UAL Closed Amortization Period <sup>1</sup>
Actuarial Experience Gain/Loss	20 years
Assumption and Method Changes	20 years
Plan Amendments	15 years
Transition to New Policy	21 years <sup>2</sup>

<sup>1</sup> Each layer is amortized using the level percentage of pay approach over the specified closed period.

<sup>2</sup> The current funding policy became effective on January 1, 2023. As of January 1, 2025, the remaining amortization period for the Transition amortization layer is 19 years.

The total ADC (i.e., the sum of the Normal Cost and the amortization amounts for each of the UAL layers) is determined both as a dollar amount and as a percentage of total estimated pensionable earnings for the calendar year containing the valuation date. The table below summarizes the current and prior year ADC.

	Annual Contribution		Increase / (Decrease) from 2024 to 2025
	2024	2025	
<b>1. Normal Cost (NC) at Beginning of Year</b>			
a. Total NC	\$ 7,769,065	\$ 8,366,714	
b. Employee Portion of NC <sup>1</sup>	\$ 1,410,345	\$ 1,730,802	
c. Employer Portion of NC (1.a. - 1.b.)	\$ 6,358,720	\$ 6,635,912	
<b>2. ADC</b>			
a. Normal Cost <sup>2</sup>	\$ 6,605,762	\$ 6,893,723	
b. UAL Amortization <sup>2</sup>	6,987,340	7,501,451	
c. Total	\$ 13,593,102	\$ 14,395,174	\$ 802,072
<b>3. Pensionable Earnings<sup>3</sup></b>	\$ 66,800,000	\$ 71,800,000	7.5%
<b>4. ADC as a Percent of Pensionable Earnings (2.c. / 3.)</b>	20.3%	20.0%	(0.3%)

<sup>1</sup> Represents 5.00% of pensionable earnings for employees hired after 2017.

<sup>2</sup> Includes interest assuming monthly payments to reflect payment of contributions throughout the year.

<sup>3</sup> Estimated.

**The Actuarially Determined Contribution (ADC) reflecting the current funding policy for the 2025 plan year is \$14,395,174 or 20.0% of estimated 2025 pensionable earnings. This amount is in addition to the employee contributions of 5% of pensionable earnings for those hired or re-hired after 2017. (See page III-1 of this report for the development of the ADC).**

As shown in the table above, the ADC for 2025 is approximately \$0.8 million higher than the ADC for 2024. The reasons for this increase are: (a) a scheduled \$0.2 million increase in the amortization of the pre-2025 amortization layers, (b) a \$0.3 million increase in the employer portion of the Normal Cost primarily due to the increase in the active headcount and (c) a \$0.3 million increase due to a new actuarial loss amortization layer.

In our opinion, the above contribution is a reasonable actuarially determined contribution consistent with prescribed Actuarial Standards of Practice.

### Action Items

The following list contains certain action items for District management:

1. Review the Management Summary (Section II) of this report.
2. Make contributions to the trust totaling \$14,395,174 for the twelve months ending December 31, 2025 in order to follow the employer's funding policy.
3. Include the applicable information in Section V in your District financial statements.
4. Notify us of any activities during the remainder of the 2025 plan year that could require updates to the next valuation on January 1, 2026 (e.g., a plan amendment, a change in the funding policy, a change in the investment policy, etc.).

### Variability in Future Actuarial Measurement and Related Risks

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 current economic or demographic assumptions;
- Increases or decreases expected as part of the natural operation of the methodology used for these measurements;
- Changes in economic or demographic assumptions; and
- Changes in plan provisions.

Risks that may reasonably be anticipated to significantly affect the plan's future financial condition include:

- Investment Risk (i.e., the potential that investment returns will be different than expected);  
  
Adverse investment experience can increase employer contribution requirements in future years. Favorable investment experience can have the opposite effect.
- Asset/Liability mismatch (i.e., the potential that changes in asset values are not matched by changes in the value of liabilities);

Mismatches can produce effects similar to adverse investment experience, but they can be amplified by assets and liabilities moving in opposite directions. This plan's assets are not matched to its liabilities. Instead, the employer has elected to invest with an asset mix intended to produce higher long-term returns on average than might be expected with an asset/liability matched portfolio, but this will frequently produce short term variances between asset growth and liability growth.

- Longevity and other demographic risks (i.e., the potential that mortality or other demographic experience will be different than expected);

Adverse longevity and other demographic experience can increase employer contribution requirements in future years. Favorable demographic experience can have the opposite effect.

- Contribution risk (i.e., the potential that actual future contributions deviate from expected future contributions).

If employer contributions are made below the level determined under the funding policy contemplated in this valuation, the employer contribution requirements may grow in the future, compounded with interest.

We can provide more detailed assessments of one or more of the above risks upon request. Assessment methods may include, but are not limited to, scenario tests and sensitivity tests. We have not been asked to perform and have not performed any stochastic or deterministic sensitivity analyses of the potential ranges of such future measurements, nor any of the more detailed assessments described above. We expect to perform some of these analyses in the forthcoming preparation of the FY26 budget estimates. If you have an interest in the results of any additional analyses, please let us know.

If you have any questions concerning this information, please do not hesitate to call or write.

Respectfully submitted,

RUDD AND WISDOM, INC.



Christopher S. Johnson, F.S.A.



Brandon L. Fuller, F.S.A.

CSJ/BLF:jl

Enclosures

cc: Drew Farris  
Holly Matthews  
Kristie Mixon  
Ike Obi



## RETIREMENT PLAN FOR EMPLOYEES OF NORTH TEXAS MUNICIPAL WATER DISTRICT

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### ACTUARIAL VALUATION

AS OF

**JANUARY 1, 2025**

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## Section I – Certification of Actuarial Valuation as of January 1, 2025

At the request of the North Texas Municipal Water District (the District), we have performed an actuarial valuation of the Retirement Plan for Employees of North Texas Municipal Water District (the Plan) as of January 1, 2025. The purpose of this report is to: (a) evaluate the funded status of the plan and to determine an actuarially reasonable contribution level for the plan year ending December 31, 2025 that comports with the employer's funding policy and (b) provide the information necessary to determine financial statement entries consistent with the Governmental Accounting Standards Board Statement No. 67 Financial Reporting for Pension Plans (GASB No. 67) and Governmental Accounting Standards Board Statement No. 68 Accounting and Financial Reporting for Pensions (GASB No. 68), as amended by Governmental Accounting Standards Board Statement No. 71 Pension Transition for Contributions Made Subsequent to the Measurement Date (GASB No. 71).

Actuarial computations under GASB Nos. 67 and 68 are for purposes of fulfilling governmental plan and employer financial accounting requirements. The calculations reported in Section V have been made on a basis consistent with our understanding of GASB Nos. 67 and 68 and the Plan. The information presented in Section V of this report is solely for purposes of compliance with GASB Nos. 67 and 68. Determinations for purposes other than meeting plan and employer financial accounting requirements may be significantly different from the results reported herein. Accordingly, additional determinations are needed for other purposes, such as judging benefit security at termination.

The District has elected to use a measurement date of December 31 which is the same as the end of the plan fiscal year as required under Paragraph No. 35 of GASB No. 67 and precedes the end of the employer fiscal year (September 30) as permitted under Paragraph No. 20 of GASB No. 68. Thus, a measurement date of December 31, 2024 has been used to report information for the 2024 plan fiscal year and the 2025 employer fiscal year.

We have based our valuation on the following information as of January 1, 2025 provided by the District: (a) current employee, former employee and retiree data, (b) asset information, and (c) plan provisions. We have used the actuarial methods and assumptions described in Section VI of this report. The actuarial valuation has been performed on the basis of the plan benefits described in Section VII.

To the best of our knowledge, all current employees eligible to participate in the plan as of the valuation date and all other individuals who have a remaining vested benefit or a remaining nonvested benefit under the plan have been included in the valuation. Further, all plan benefits have been considered in the development of plan costs.

The plan sponsor remains solely responsible for the accuracy and comprehensiveness of the data provided. However, to the best of our knowledge, no material biases exist with respect to any imperfections in the data provided by these sources. To the extent that any data imperfections exist in the historical compensation database, we have addressed the imperfections by application of the increase assumptions specified in Section VI. To the extent any imperfections exist in service records, we have relied on best estimates provided by the employer. We have not audited the data provided, but have reviewed it for reasonableness and consistency relative to previously provided information. We have utilized software licensed from Winklevoss Technologies, LLC in the development of the liabilities summarized in the report. We have independently confirmed the model developed by Winklevoss and have sufficiently tested it to ensure the model is an accurate representation of the plan's liabilities.

To the best of our knowledge, the actuarial information supplied in this report is complete and accurate. In our opinion the assumptions used, in the aggregate and individually, are reasonably related to the experience of the plan and to reasonable expectations. The assumptions represent a reasonable estimate of anticipated experience of the plan over the long-term future, and their selection complies with the applicable actuarial standards of practice. We are neither aware of any material inconsistencies among the assumptions nor are we aware of any unreasonable results caused by the aggregation of the assumptions.





We hereby certify that we are members of the American Academy of Actuaries who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

A handwritten signature in black ink that reads "Christopher S. Johnson".

Christopher S. Johnson, F.S.A.  
Enrolled Actuary Number 23-7100  
Member of American Academy of Actuaries

A handwritten signature in black ink that reads "Brandon L. Fuller".

Brandon L. Fuller, F.S.A.  
Enrolled Actuary Number 23-8409  
Member of American Academy of Actuaries

## Section II – Management Summary

All employer liabilities presented throughout this report have been determined based upon the actuarial methods and assumptions outlined in Section VI and the plan provisions outlined in Section VII.

### A. Actuarially Determined Contribution

	Annual Contribution	
	2024	2025
<b>1. Normal Cost at Beginning of Year</b>		
a. Total Normal Cost	\$ 7,769,065	\$ 8,366,714
b. Employee Portion of Normal Cost <sup>1</sup>	\$ 1,410,345	\$ 1,730,802
c. Employer Portion of Normal Cost (1.a. – 1.b.)	\$ 6,358,720	\$ 6,635,912
<b>2. Actuarially Determined Contribution (ADC)</b>		
a. Employer Normal Cost <sup>2</sup>	\$ 6,605,762	\$ 6,893,723
b. UAL Amortization <sup>2</sup>	6,987,340	7,501,451
c. Total	\$ 13,593,102	\$ 14,395,174
<b>3. ADC as a Percentage of Pensionable Earnings<sup>3</sup></b>	20.3%	20.0%

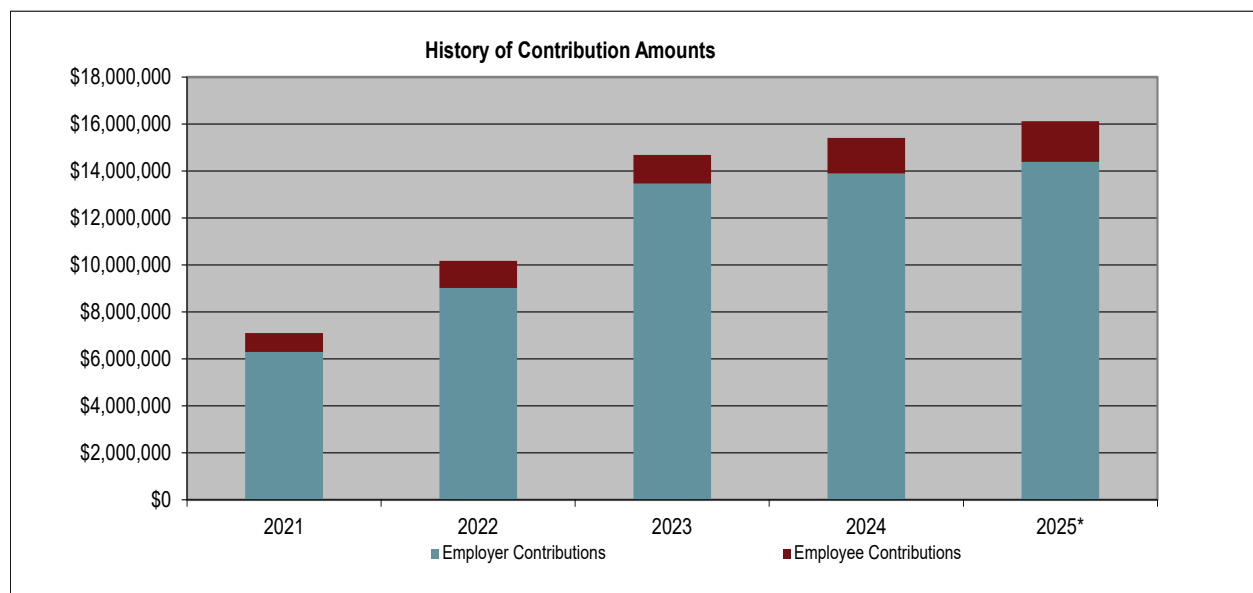
<sup>1</sup> Represents 5.00% of projected pensionable earnings for employees hired after 2017.

<sup>2</sup> Includes interest assuming monthly payments to reflect payment of contributions throughout the year.

<sup>3</sup> Based on estimated pensionable earnings of \$66,800,000 for 2024 and estimated pensionable earnings of \$71,800,000 for 2025.

The employer's Funding Policy determines the annual contribution amount as the sum of the **Normal Cost** and a closed period layered amortization of the **Unfunded Accrued Liability (UAL)**, where the UAL is the difference between the **Actuarial Value of Assets** and the **Actuarial Accrued Liability (AAL)**. (See page III-2 of this report for details about the sources of the amortization layers.) The AAL and the Normal Cost are determined using the **Entry Age Normal (EAN)** actuarial funding method as described in Section VI.A. of this report.

A 5-year history of the plan's actual contribution amounts is shown below.



\* Assuming the funding policy contribution from this report is contributed by employer.

## B. Participant Demographics as of January 1, 2025

Participants	Number	Estimated Pensionable Earnings for 2025
<b>Actives</b>	<b>923</b>	<b>\$ 71,800,000</b>
<b>Vested Terminated</b>	<b>215</b>	<b>N/A</b>
<b>Nonvested Terminated</b>	<b>115<sup>1</sup></b>	<b>N/A</b>
<b>Retirees and Beneficiaries</b>	<b>302</b>	<b>N/A</b>
<b>Total</b>	<b>1,555</b>	<b>\$ 71,800,000</b>

<sup>1</sup> Nonvested Terminated employees whose employee contribution account balances have not yet been refunded as of the valuation date.

## C. Funding Liabilities and Assets

	As of January 1, 2024	As of January 1, 2025
1. a. Market Value of Assets	\$ 131,893,557	\$ 149,871,541
b. Actuarial Value of Assets	\$ 139,368,734	\$ 152,789,792
2. Discount Rate	7.25%	7.25%
3. Present Value of Future Benefits		
a. Actives	\$ 176,405,126	\$ 188,484,539
b. Retirees	103,082,700	110,577,176
c. Beneficiaries	8,871,857	9,183,254
d. Disabled Retirees	322,247	306,044
e. Vested Terminated	9,300,153	10,973,477
f. Nonvested Terminated	<u>271,899</u>	<u>254,041</u>
g. Total	\$ 298,253,982	\$ 319,778,531
h. Funded Status [1.b./3.g.]	46.7%	47.8%
i. Present Value of Future Normal Costs [3.g. – 4.c.]	\$ 64,759,577	\$ 69,118,968
4. Entry Age Normal Accrued Liabilities		
a. Actives	\$ 111,645,549	\$ 119,365,571
b. Inactives	<u>121,848,856</u>	<u>131,293,992</u>
c. Total	\$ 233,494,405	\$ 250,659,563
d. Funded Status [1.b./4.c.] <sup>1</sup>	59.7%	61.0%
e. Unfunded Accrued Liability [4.c. – 1.b.]	\$ 94,125,671	\$ 97,869,771

<sup>1</sup> The Funded Status measured based on the Market Value of Assets would be 56.5% as of January 1, 2024 and 59.8% as of January 1, 2025

### 1. Liabilities

The **Present Value of Future Benefits (PVFB)** is the actuarial present value of the cost to finance projected benefits payable in the future, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.

The **Entry Age Normal Accrued Liability** attributes a portion of the PVFB to the past service of each individual, where the amount attributed to each year is spread on a level basis over the earnings of an individual from their plan entry date to their assumed retirement date from the plan.

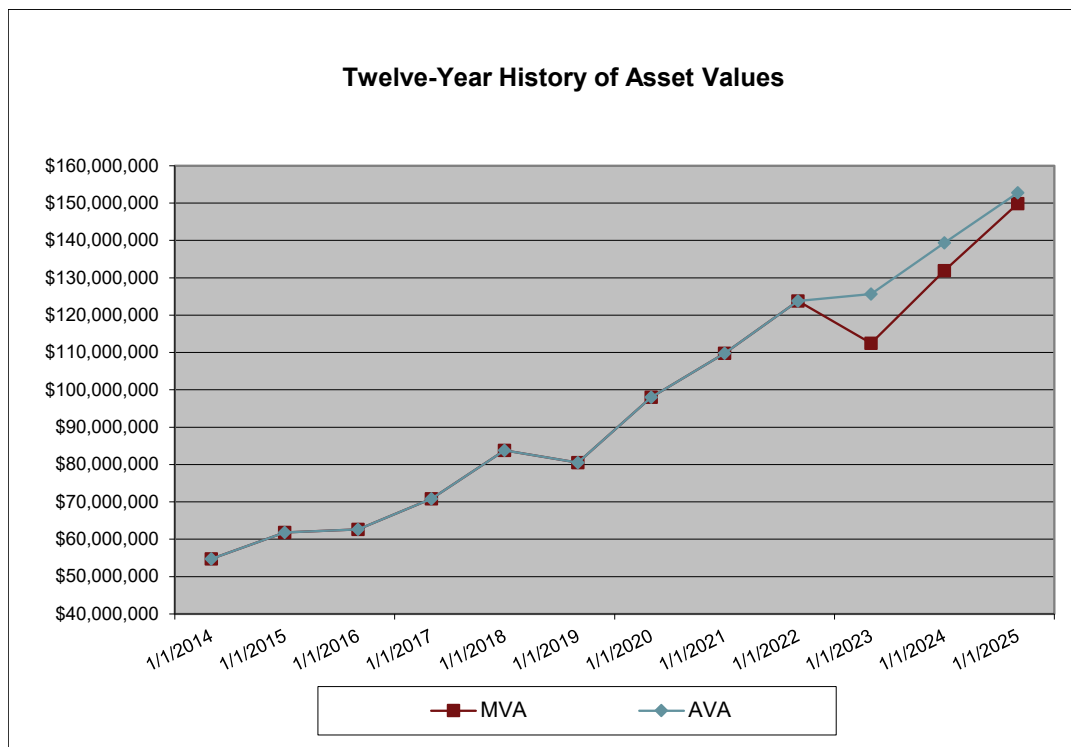
The liability measurements in this report are not appropriate for assessing the sufficiency of plan assets to cover the cost of settling plan obligations in the event the plan is terminated.

Further, additional contributions from the employer could be needed in the future even if asset values were equal to 100% of liabilities as measured for funding purposes.

## 2. Assets

Effective January 1, 2023, the **Actuarial Value of Assets (AVA)** smooths the volatility of the Market Value of Assets (MVA) by deferring recognition of asset gains or losses over a five-year period. This smoothing of the MVA in turn reduces the year over year fluctuation of Employer Contributions and can make it easier for the employer to budget its contribution each year. Prior to January 1, 2023, the AVA was equal to the MVA.

Below is a 12-year history of the MVA and the AVA.



The investment policy's targeted weighted-average asset allocations by asset class are as follows:

Investment Policy Asset Allocations		
Asset Class	Minimum Allocation	Maximum Allocation
Equity Securities	20%	80%
Debt Securities	20%	80%
Total	N/A	N/A

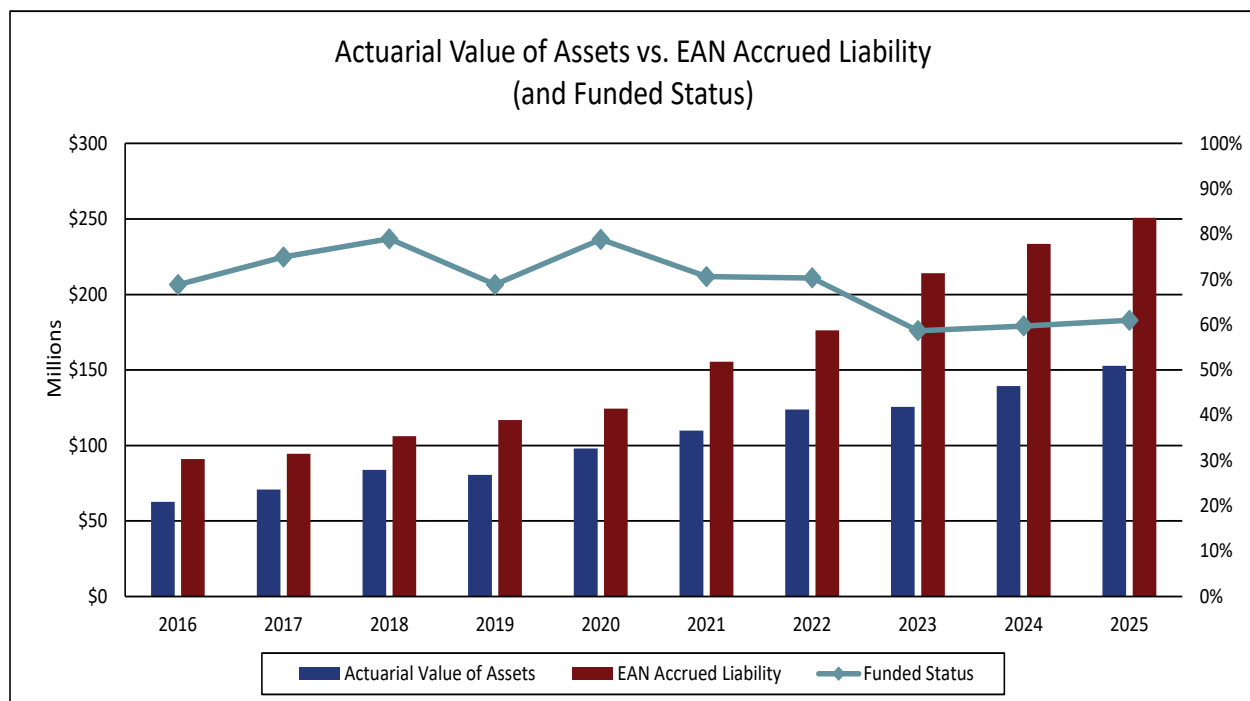
The plan's actual asset allocation by asset class as of January 1, 2025 is as follows:

Actual January 1, 2025 Asset Allocation	
Asset Class	Allocation
U.S. Equities	50%
International Equities	14%
Fixed Income	24%
Alternative Income	8%
Cash and Cash Equivalents	4%
Total	100%

The target asset allocation should be reviewed periodically against actual asset allocations. Furthermore, from time to time the plan's investment policy itself should be reviewed to ensure that the objectives stated in the policy are consistent with the plan sponsor's investment goals and risk tolerance, particularly as the plan approaches the point at which the value of plan assets equals or exceeds PVFB.

#### D. Funded Status Based on Entry Age Normal Accrued Liability

The **Funded Status** compares a measure of a plan's liabilities to its assets. The graph below compares the Actuarial Value of Assets to the EAN Accrued Liability for each of the last ten years.



#### E. Changes in Plan Provisions

This valuation reflects different plan provisions from those recognized in the prior valuation prepared for the plan. The definition of Earnings (paid on or after January 1, 2025) was amended to include an adjustment for employees on a 36/48 hour two-week shift cycle. In addition, the plan was amended to allow a vested terminated member to elect a refund of their employee contribution balance; such member would have no further rights to benefits under the plan. Plan provisions are summarized in Section VII.

## F. Changes in Actuarial Methods and Assumptions

This valuation reflects different actuarial methods and assumptions from those recognized in the prior valuation prepared for the plan. The assumed percentage of active members terminating with a vested benefit and electing a refund of contributions was updated in conjunction with the plan amendment allowing them to do so. Actuarial methods and assumptions are summarized in Section VI.

## G. Plan Maturity Measures

The following measures may help the employer assess the relative risks associated with a particular asset mix for the trust's portfolio, a particular funding policy, whether to consider or reconsider asset/liability matching for all or a portion of the portfolio, and other risks disclosed in the transmittal letter to this report.

Measure	2025	2024	2023
1. Ratio of Retired Life Accrued Liability to Total Accrued Liability	47.9%	48.1%	49.6%
Commentary: Retired participants and beneficiaries account for approximately 48% of plan liabilities as of January 1, 2025. The higher this percentage, the more mature the plan is considered to be. Mature plans are more sensitive to investment volatility.			
2. Ratio of Expected Annual Benefit Payments to Market Value of Assets	7.1%	7.4%	8.0%
Commentary: Benefit payments divided by assets is a benchmark for how quickly assets are being liquidated. The plan's expected benefit payments for 2025 equal approximately 7.0% of the plan asset market value, an amount less than the current long term rate of return assumption.			
3. Duration of Actuarial Accrued Liability <sup>1</sup>	12.1	12.2	12.2
Commentary: Duration is an indicator of the impact of small changes in discount rates on plan liabilities. The higher the duration, the more sensitive a plan's obligations are to changes in discount rates. The typical duration for an ongoing pension plan that does not offer lump sums is about 10-15 years. Plans with a higher proportion of retirees will tend to have shorter durations.			

<sup>1</sup> Modified duration of the plan's Actuarial Accrued Liability (AAL) estimated by examining the impact of a 100 basis point shift in discount rates on AAL. We used the following formula for this purpose:

$$\left[1 - \left(\frac{AAL_1}{AAL_2}\right)\right] / (i_1 - i_2)$$

## H. Low-Default Risk Obligation Measure

The Low-Default-Risk Obligation Measure (LDROM) is meant to represent the cost to the plan to purchase low-default-risk fixed income securities whose cash flows match the expected pattern of benefits (accrued as of the measurement date) expected to be paid in the future. The LDROM is required to be calculated and disclosed annually pursuant to Actuarial Standards of Practice No. 4.

When calculating this measure, an immediate gain actuarial cost method is used along with a discount rate or discount rates derived from low-default-risk fixed income securities. Examples of discount rates that may meet this requirement include:

1. US Treasury yields;
2. Rates implicit in settlement of pension obligations including purchases of annuities from insurance companies;
3. Yields on corporate or tax-exempt general obligation municipal bonds that receive one of the two highest ratings given by a recognized ratings agency;
4. Non-stabilized ERISA funding rates for single employer plans; and
5. Multiemployer current liability rates.

We have used the entry age normal funding method and the FTSE Pension Liability Index (Short Duration) as of December 31, 2024 (5.44%) as the discount rate in our calculation of the LDROM. This discount rate was selected to reflect an approximation of the yields on high-quality corporate bonds that would provide the necessary cash flows to pay benefits when due. All other assumptions used in determining the obligation measure are the same assumptions as those used in the funding valuation. The LDROM is shown below:

<b>Low-Default-Risk Obligation Measure</b>	<b>\$ 323,632,554<sup>1</sup></b>

<sup>1</sup> Determined using 5.44% as the discount rate.

Investing in a diversified portfolio is expected to produce lower contribution requirements over time. Comparing the LDROM to the Actuarial Accrued Liability presented elsewhere in this report illustrates the expected reduction in future funding obligations achieved by investing in a diversified portfolio with appropriate levels of risk instead of solely in fixed income securities.

Low-default-risk investments are still subject to market volatility and investing solely in low-default-risk investments may or may not be considered a prudent investment strategy. Switching to investing solely in high quality bonds could result in unnecessarily high contributions in the near term.

Because plan assets are not invested in all bond-portfolios, the LDROM does not accurately reflect the plan's funding status, nor does it offer insights into required plan contributions or the security of participant benefits.

## Section III – Detailed Actuarial Valuation Results

### A. Development of Actuarially Determined Contribution

	January 1, 2025	As a % of Pensionable Earnings
1. Estimated Pensionable Earnings for Valuation Year	\$ 71,800,000	
2. Present Value of Future Benefits	\$ 319,778,531	
3. Actuarial Accrued Liability	\$ 250,659,563	
4. Actuarial Value of Assets	\$ 152,789,792	
5. Unfunded Accrued Liability (UAL) (Item 3. – Item 4.)	\$ 97,869,771	
6. Present Value of Future Normal Costs (Item 2. – Item 3.)	\$ 69,118,968	
7. Normal Cost at Beginning of Year		
a. Total Normal Cost	\$ 8,366,714	11.6%
b. Employee Portion of Normal Cost <sup>1</sup>	\$ 1,730,802	2.4%
c. Employer Portion of Normal Cost (Item 7.a. – Item 7.b.)	\$ 6,635,912	9.2%
8. Actuarially Determined Contribution		
a. Normal Cost <sup>2</sup>	\$ 6,893,723	9.6%
b. Amortization of UAL <sup>2,3</sup>	<u>7,501,451</u>	<u>10.4%</u>
c. Total	\$ 14,395,174	20.0%

<sup>1</sup> 5% of estimated 2025 pensionable earnings of \$34,616,037 for members hired or rehired after December 31, 2017.

<sup>2</sup> Includes interest assuming monthly payments to reflect payment of contributions throughout the year.

<sup>3</sup> Calculated using layered amortization as a level percent of projected pensionable earnings with different closed amortization periods for each layer. (See page III-2 for details.)

### B. Development of Actuarial (Gain)/Loss

	January 1, 2025
1. Prior Year Actual Unfunded Accrued Liability	\$ 94,125,671
2. Prior Year Normal Cost as of Beginning of Year	7,769,065
3. Interest on above amounts at 7.25%	7,387,368
4. Expected Employer and Employee Contributions for Prior Year (with mid-year weighted credited interest)	<u>(15,545,986)</u>
5. Current Year Expected Unfunded Accrued Liability	\$ 93,736,118
6. Current Year Actual Unfunded Accrued Liability	\$ 97,869,771
7. Total Actuarial (Gain)/Loss [(6.) – (5.)]	\$ 4,133,653
8. Sources of Actuarial (Gain)/Loss	
a. Plan Amendments	\$ (145,297)
b. Change in Actuarial Assumptions	0
c. Change in Actuarial Methods	0
d. Experience (Gain)/Loss	1,842,287
e. Asset (Gain)/Loss	<u>2,436,663</u>
f. Total (Gain)/Loss	\$ 4,133,653

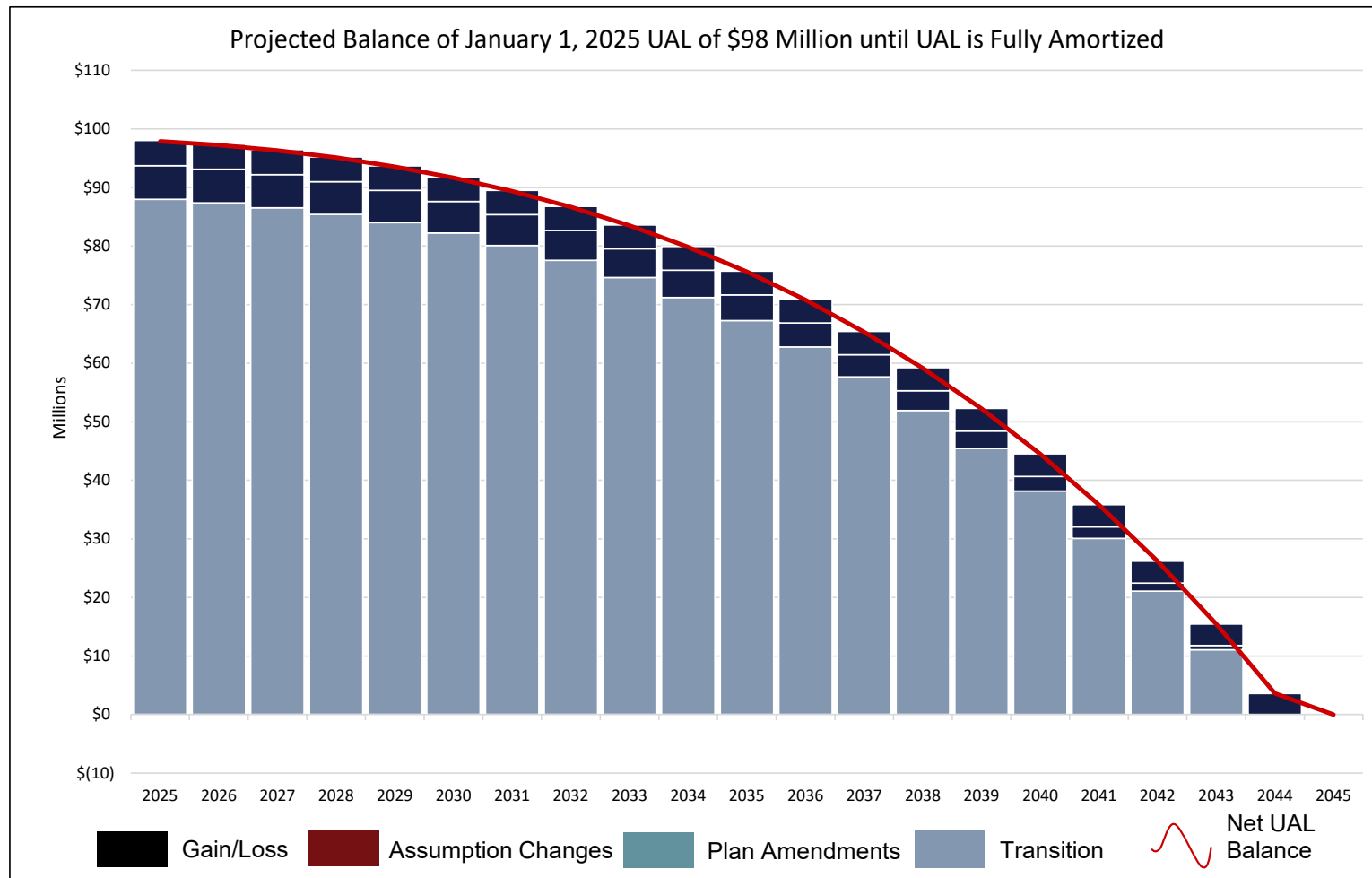


### C. Schedule of Unfunded Accrued Liability Layers and Amortization Payments

As of January 1, 2025						
UAL Source	Date Established	Initial Amount	Amortization Period		Outstanding Balance	Annual Amortization Payment
			Initial Years	Years Remaining		
Transition to New Policy	January 1, 2023	\$ 88,493,316	21	19	\$ 87,970,698	\$ 6,501,700
Actuarial (Gain)/Loss	January 1, 2024	5,789,380	20	19	5,765,420	426,108
Actuarial (Gain)/Loss	January 1, 2025	4,278,950	20	20	4,278,950	305,765
Plan Amendment	January 1, 2025	(145,297)	15	15	(145,297)	(12,661)
Total					\$ 97,869,771	\$ 7,220,912 <sup>1</sup>

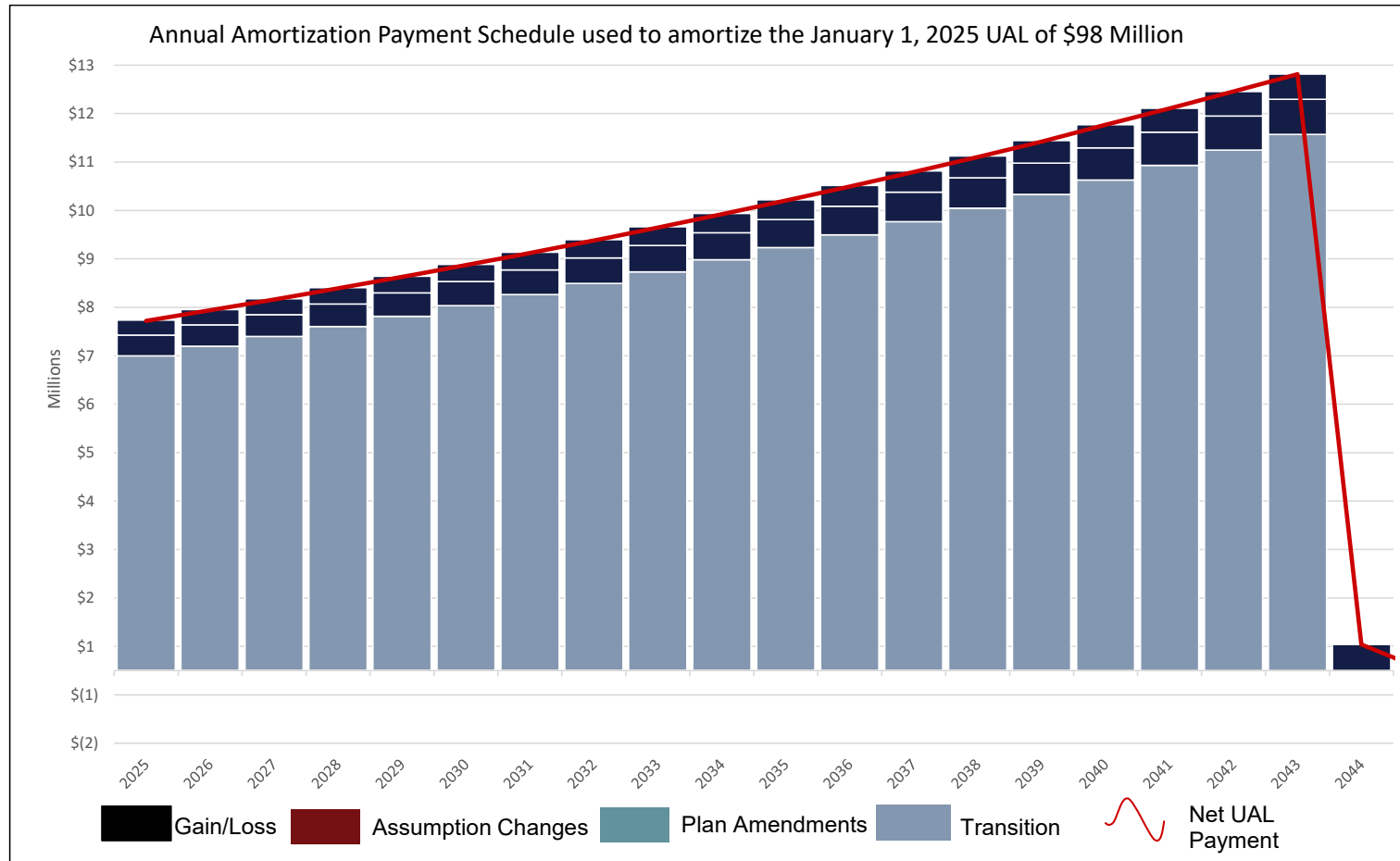
<sup>1</sup> Amount determined as of beginning of the year. The total Annual Amortization Payment with interest assuming payments are made monthly is \$7,501,451.

## D. Projected Balance of January 1, 2025 UAL



\* January 1, 2025 Plan Amendment layer included, but not visible due to the relative size as compared to the other layers shown in the graph.

## E. UAL Annual Amortization Schedule as of January 1, 2025



\* January 1, 2025 Plan Amendment layer included, but not visible due to the relative size as compared to the other layers shown in the graph.

## Section IV – Summary of Assets

### A. Summary of Market Value of Assets (Statement of Fiduciary Net Position for GASB Purposes)

	January 1, 2024	January 1, 2025
1. Assets		
a. Cash and cash equivalents	\$ 6,223,971	\$ 6,399,360
b. Receivables:		
i. Employee and Employer Contributions	\$ 0	\$ 0
ii. Interest	0	0
iii. Dividends	0	0
iv. Total receivables	\$ 0	\$ 0
c. Investments:		
i. Fixed income	\$ 31,547,940	\$ 35,893,162
ii. Stocks	80,906,443	95,892,113
iii. Short-term investments	0	0
iv. Real estate	0	0
v. Alternative investments	13,215,203	11,686,906
vi. Total investments	\$ 125,669,586	\$ 143,472,181
d. Total assets [a. + b.iv. + c.vi.]	\$ 131,893,557	\$ 149,871,541
2. Liabilities		
a. Accounts payable and accrued liabilities	\$ 0	\$ 0
b. Total liabilities	\$ 0	\$ 0
3. Market Value of Assets [1.d. – 2.b.]	\$ 131,893,557	\$ 149,871,541

**B. Income Statement for Market Value of Assets (Statement of Changes in Fiduciary Net Position for GASB Purposes)**

	2023	2024
1. Additions		
a. Contributions:		
i. Employer	\$ 13,471,420	\$ 13,899,995
ii. Member	<u>1,220,906</u>	<u>1,517,658</u>
iii. Total contributions	\$ 14,692,326	\$ 15,417,653
b. Investment income:		
i. Net appreciation in market value of investments	\$ 9,407,631	\$ 6,022,896
ii. Interest income	1,145,812	1,322,539
iii. Dividend income	3,142,895	5,463,787
iv. Less investment expenses	<u>(336,994)</u>	<u>(386,858)</u>
v. Net investment income	\$ 13,359,344	\$ 12,422,364
c. Other	\$ 0	\$ 0
d. Total additions	\$ 28,051,670	\$ 27,840,017
2. Deductions		
a. Benefit payments including refunds of employee contributions	\$ 8,657,870	\$ 9,862,033
b. Administrative expenses	0	0
c. Other	<u>0</u>	<u>0</u>
d. Total deductions	\$ 8,657,870	\$ 9,862,033
3. Net increase/(decrease) in Market Value [1.d. – 2.d.]	\$ 19,393,800	\$ 17,977,984
4. Market Value of Assets		
a. Beginning of Year	\$ 112,499,757	\$ 131,893,557
b. End of Year	\$ 131,893,557	\$ 149,871,541
5. Rate of Return		
a. Net of Investment-Related Expenses	11.64%	9.20%
b. Gross	11.96%	9.50%
6. Direct Investment-Related Expenses [5.b. – 5.a.]	0.32%	0.30%

### C. Development of Actuarial Value of Assets

1. Calculation of Adjusted Market Value of Assets	01/01/2021 – 12/31/2021	01/01/2022 – 12/31/2022	01/01/2023 – 12/31/2023	01/01/2024 – 12/31/2024
a. Market Value of Assets (MVA) at beginning of period	\$ 109,779,061	\$ 123,824,689	\$ 112,499,757	\$ 131,893,557
b. Contributions	7,082,754	10,181,486	14,692,326	15,417,653
c. Benefit Payments	(7,423,640)	(8,307,489)	(8,657,870)	(9,862,033)
d. Expenses	0	0	0	0
e. Expected Investment Return <sup>1</sup>	8,772,570	9,674,435	8,382,277	9,769,782
f. Expected MVA at end of period	\$ 118,210,745	\$ 135,373,121	\$ 126,916,490	\$ 147,218,959
g. Actual MVA at end of period	\$ 123,824,689	\$ 112,499,757	\$ 131,893,557	\$ 149,871,541
h. Asset Gain / (Loss) [Item 1.g. – Item 1.f.]	\$ 5,613,944	\$ (22,873,364)	\$ 4,977,067	\$ 2,652,582

2. Calculation of Deferred Gain / (Loss)			
Year Ending	Asset Gain / (Loss)	Percent Deferred	Deferred Gain / (Loss)
a. December 31, 2024	\$ 2,652,582	80%	\$ 2,122,066
b. December 31, 2023	4,977,067	60%	2,986,240
c. December 31, 2022	(22,873,364)	40%	(9,149,346)
d. December 31, 2021	5,613,944	20%	1,122,789
e. Total			\$ (2,918,251)

3. Calculation of Actuarial Value of Assets	As of January 1, 2025
a. Market Value of Assets (MVA)	\$ 149,871,541
b. Total Deferred Gain / (Loss) [Item 2.e.]	\$ (2,918,251)
c. Preliminary Actuarial Value of Assets (AVA) [Item 3.a. – Item 3.b.]	\$ 152,789,792
d. Corridor for AVA	
i. 80% of Item 3.a.	\$ 119,897,233
ii. 120% of Item 3.a.	\$ 179,845,849
e. AVA [Item 3.c. but not less than Item 3.d.i. nor greater than Item 3.d.ii.]	\$ 152,789,792
f. Ratio of AVA to MVA [Item 3.e. ÷ Item 3.a.]	101.95%

<sup>1</sup> Investment return assumed to be 7.25% in 2024 and 2023, 7.75% in 2022 and 8.00% in 2021. Contributions, Benefit Payments and Expenses assumed to be contributed or paid in the middle of the year.

## Section V – GASB Nos. 67 and 68 Information

### A. Background and Summary of Results

#### Income Statement and Balance Sheet Information

This report provides the GASB No. 68 pension expense for income statement purposes (see Section V.B.7.). In addition, this report provides the Net Pension Liability to be reported on the employer's balance sheet (see Section V.B.4.).

#### Measurement Date and Valuation Date

The plan's fiscal year ends on December 31 and the employer's fiscal year ends on September 30. The District has elected to use a measurement date of December 31, 2024 to meet the reporting requirements of both GASB No. 67 and GASB No. 68; use of a measurement date equal to the plan's most recent fiscal year-end is required under Paragraph No. 35 of GASB No. 67, and use of a measurement date that precedes the last date of the employer's fiscal year by nine months meets the requirement that the measurement date be no earlier than the end of the employer's prior fiscal year (i.e., September 30, 2024) under Paragraph No. 20 of GASB No. 68.

A December 31, 2024 valuation date has been used in the preparation of this report. This date meets the requirements of Paragraph No. 37 of GASB No. 67 because the valuation date is within 24 months of the December 31, 2024 plan fiscal year end, and it meets the requirements of Paragraph No. 22 of GASB No. 68 because the valuation date is within 30 months and one day of the September 30, 2025 fiscal year end.

#### Discount Rate

In accordance with Paragraph No. 40 of GASB No. 67 and Paragraph No. 26 of GASB No. 68, the discount rate is the single rate which is used to discount projected benefits to determine the plan liability. This single rate reflects the following:

- (a) the long-term rate of return on pension plan investments that are expected to be used to finance the payment of benefits to the extent that (i) the pension plan's fiduciary net position (i.e., plan assets) is projected to be sufficient to make projected benefit payments and (ii) pension plan assets are expected to be invested using a strategy to achieve that return, and
- (b) the yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale) to the extent that conditions in (a) are not met.

A plan that is expected to have sufficient assets to pay all benefits when due must base the discount rate solely on the rate described in (a) above, but a plan that is expected to have insufficient assets is based on a blend of rates (a) and (b) above. Presently, the plan is expected to have sufficient assets to pay all benefits when due based on current assets and projected future contributions, so the current discount rate is based solely on (a) above. The current discount rate is summarized in the table below:

Equivalent Single Discount Rate Determination	
1. Measurement Date	12/31/2024
2. Long-term expected rate of return (LTROR)	7.25%
3. Bond Buyer Index of general obligation 20-year bonds	4.08%
4. Projected year of asset depletion	None <sup>1</sup>
5. Single Discount Rate equivalent to using: (a) LTROR for years prior to depletion date and (b) the 20-year bond rate for years on and after depletion date	<b>7.25%</b>

<sup>1</sup> Accumulated funds and expected contributions are projected to cover benefit payments in all future years.

### Accounting and Reporting Requirements Under GASB No. 68

Under GASB No. 68, an employer must adhere to the following accounting and financial reporting requirements:

- Balance Sheet Liability:** The Net Pension Liability is required to be reported on the employer's balance sheet and is equal to the actuarial present value of projected benefit payments attributed to past periods (Total Pension Liability) reduced by the plan assets (Fiduciary Net Position). The District's Net Pension Liability to be reported as of September 30, 2025 is \$100,788,022.
- Pension Expense:** The Pension Expense is not equal to the pension contributions. Instead, changes in the Net Pension Liability from one period to the next are used to determine the Pension Expense. Some changes are charged in full to expense while others are amortized over short periods. The District's FY2025 Pension Expense is \$23,781,257.
- Notes to Financial Statements:** The following items must be reported in the employer's Notes to Financial Statements:
  - Deferred Outflows and Inflows of Resources – The changes in Net Pension Liability not recorded to expense during the current measurement period must be reported as Deferred Outflows and Inflows of Resources Related to Pensions. See Section V.B.7. for additional details.
  - Pension Plan Description – See Section V.B.2. of this report for a description of the Pension Plan which should be included in the Notes.
  - Information about the Net Pension Liability – The Notes should include information about significant assumptions and other inputs (including information about the discount rate), changes in the Net Pension Liability during the current measurement period, sensitivity of Net Pension Liability to changes in the discount rate, the current Pension Expense, a schedule of the net amount of the employer's Deferred Outflows/Inflows of Resources that will be recognized in Pension Expense over the next five years and payables to the Pension Plan outstanding at the end of reporting period. See Sections V.B.3. through V.B.8. of this report for additional details.
- Required Supplementary Information (RSI)** – See Section V.C. of this report for information that should be included in the RSI of the employer's financial statements.



## **B. Disclosures**

### **1. Summary of Significant Accounting Policies**

For purposes of measuring the Net Pension Liability, Deferred Outflows of Resources and Deferred Inflows of Resources related to Pensions, and Pension Expense, information about the Fiduciary Net Position of the Retirement Plan for Employees of North Texas Municipal Water District (the Plan) and additions to/deductions from the Plan's Fiduciary Net Position have been determined on the same basis as they are reported by the Plan itself. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

### **2. General Information about the Pension Plan**

#### **a. Plan Description**

The District provides a Retirement Plan for Employees of North Texas Municipal Water District, a single-employer defined benefit pension plan, for all of its eligible full-time employees through an AETNA Life Insurance Company group pension defined benefit fund contract. The Plan is administered by the District's Retirement Plans Committee. The Plan does not issue separate financial statements. An employee will become a participant in the Plan on the date of full-time employment.

#### **b. Benefits Provided**

Benefits are established and may be amended by the District's Board of Directors. Benefits provided by the Plan include retirement, disability and preretirement death benefits. The benefit formula provides for a 10-year certain and continuous annuity. Preretirement death benefits are provided as a lump sum equal to the greater of the present value of the accrued benefit or current vested wages. The benefit at retirement is calculated as follows:

- Normal Retirement (Age 65) – 3% of career compensation plus 1% of all yearly compensation in excess of covered compensation for each year.
- Early Retirement (over age 55 with at least 20 years of service) – The annual accrued benefit equals the accrued benefit based on service to the early retirement date, reduced by 5% for each year a member retires before the normal retirement date. There is no reduction in benefits for a member who retires whose age plus years of service total at least 80.
- Late Retirement (after normal retirement date) – The benefit accrued to the late retirement date.
- Disability (certified to be permanently and totally disabled on or after May 1, 1990) – 60% of final average monthly compensation reduced by 64% of Social Security disability.

See Section VII of this report for additional details about the plan's formula, vesting schedule, mandatory employee contributions, optional annuity forms and annual cost-of-living adjustments.

There have been plan amendments that affect the valuation of plan benefits since the prior valuation was prepared for this plan. The definition of Earnings (paid on or after January 1, 2025) was amended to include an adjustment for employees on a 36/48 hour two-week shift cycle. In addition, the plan was amended to allow a vested terminated member to elect a refund of their employee contribution balance; such member would have no further rights to benefits under the plan. The current plan provisions are summarized in Section VII of this report.

### c. Employees Covered by Benefit Terms

As of the December 31, 2024 measurement date, the following numbers of employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefits	302
Inactive employees entitled to but not yet receiving benefits	330 <sup>1</sup>
Active employees	<u>923</u>
Total	1,555

### d. Contributions

The District's annual minimum contribution is actuarially calculated. The significant actuarial assumptions used to compute the actuarially determined contribution are the same as those used to compute the accrued liability as set forth below. Effective January 1, 2023, the unfunded actuarial liability is amortized using a closed period, layered amortization approach. The unfunded actuarial liability comprises various sources, and under the layered amortization approach each component source of unfunded actuarial liability is amortized over a separate closed period.

Effective January 1, 2018, employees who enter service on or after January 1, 2018 shall make mandatory contributions to the Plan at the rate of 5% of annual earnings and subject to 3.5% plan interest rate credits per year.

For the plan year ended December 31, 2024, the District made contributions of \$13,899,995, which represent 17.6% of annual covered payroll. These contributions were based on actuarially determined contribution requirements through an actuarial valuation performed at January 1, 2024. For the fiscal year ended September 30, 2025, the District made contributions of \$14,500,000 of which contributions subsequent to the measurement date through September 30, 2025 were \$10,874,995.

## 3. Net Pension Liability

The Employer's Net Pension Liability reported for the fiscal year ending September 30, 2025 was measured as of December 31, 2024, and the Total Pension Liability used to calculate the Net Pension Liability was determined by an actuarial valuation as of that same date.

### a. Actuarial Assumptions

The Total Pension Liability in the December 31, 2024 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.50%
Salary increases	2.50% to 6.50% <sup>2</sup>
Investment rate of return	7.25% net of plan investment expenses <sup>2</sup>

Mortality rates were based on the PubG-2010 mortality tables. Mortality was projected generationally using Scale MP-2021.

Many of the actuarial assumptions used in this valuation were based on the results of an actuarial experience study performed as of December 31, 2022.

<sup>1</sup> Includes 115 Nonvested Terminated employees whose employee contribution account balances had not yet been refunded as of the valuation date.

<sup>2</sup> Includes inflation.

At least one assumption or other input has been updated since the prior valuation as shown in Section VI of this report.

The long-term expected rate of return on plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation) are developed for each major asset class. The ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by an asset allocation percentage which is based on the nature and mix of current and expected plan investments. This weighted-return is then increased by expected inflation and reduced by assumed investment expenses.

Best estimates of geometric real rates of return for each major asset class included in the Plan's asset allocation as of December 31, 2024 are summarized in the following tables:

Asset Class	Allocation (A)	Long-Term Expected Real Rate of Return (B)	Target Allocation Long-Term Expected Real Rate of Return: (A) x (B)
Cash and Cash Equivalents	4.00%	0.25%	0.010%
Fixed Income	24.00%	2.00%	0.480%
U.S. Equities	50.00%	7.25%	3.625%
International Equities	14.00%	5.25%	0.735%
Alternative Income	8.00%	4.10%	0.328%
Total	100.00%	N/A	5.178%

Development of Expected Long-Term Rate of Return	
Real Rate of Investment Return Assumption	5.178%
Assumed Inflation	2.500%
Assumed Investment Expenses	(0.300%)
Unrounded Expected Long-Term Rate of Return	7.378%
Selected Rounded Expected Long-Term Rate of Return	<b>7.25%</b>

#### b. Discount Rate

The discount rate used to measure the Total Pension Liability was 7.25%. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current contribution rate and that employer contributions will be made in amounts equal to the actuarially determined contribution amounts. Based on those assumptions, the plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

#### 4. Changes in the Net Pension Liability

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) – (b)
<b>Balance at September 30, 2024<sup>1</sup></b>	\$ 233,494,405	\$ 131,893,557	\$ 101,600,848
<b>Changes for the year:</b>			
Service cost	\$ 7,769,065		\$ 7,769,065
Interest	17,140,358		17,140,358
Differences between expected and actual experience	2,263,065		2,263,065
Change of benefit terms	(145,297)		(145,297)
Contributions – employer		\$ 13,899,995	(13,899,995)
Contributions – employee		1,517,658	(1,517,658)
Net investment income <sup>2</sup>		12,422,364	(12,422,364)
Benefit payments, including refunds of employee contributions	(9,862,033)	(9,862,033)	0
Other	0	0	0
Administrative expense		0	0
Assumption changes	0		0
<b>Net changes</b>	\$ 17,165,158	\$ 17,977,984	\$ (812,826)
<b>Balances at September 30, 2025<sup>3</sup></b>	\$ 250,659,563	\$ 149,871,541	\$ 100,788,022

<sup>1</sup> Information for the fiscal year ended September 30, 2024 was taken as of the measurement date of December 31, 2023 as permitted by Paragraph No. 20 of GASB No. 68.

<sup>2</sup> Net of investment expense but not administrative expense per Q/A #82 of GASB No. 68 Guide to Implementation.

<sup>3</sup> Information for the fiscal year ended September 30, 2025 was taken as of the measurement date of December 31, 2024 as permitted by Paragraph No. 20 of GASB No. 68.

#### 5. Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the Net Pension Liability, calculated using a discount rate of 7.25%, as well as what the Net Pension Liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.25%) or 1-percentage-point higher (8.25%) than the current rate:

	1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)
Employer's Net Pension Liability	\$ 137,744,216	\$ 100,788,022	\$ 70,471,225

#### 6. Pension Plan Fiduciary Net Position

Detailed information about the pension plan's Fiduciary Net Position is shown in Section IV of this report.

**7. Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions**

For the year ended September 30, 2025, the Employer recognized Pension Expense of \$23,781,257.

**a. Components of Pension Expense for the Fiscal Year Ended September 30, 2025**

Service Cost	\$ 7,769,065
Interest on the total pension liability	17,140,358
Amortization of differences between expected and actual experience <sup>1</sup>	4,350,477
Amortization of changes of assumptions <sup>1</sup>	4,102,468
Change of benefit terms	(145,297)
Employee contributions	(1,517,658)
Projected earnings on pension plan investments	(9,760,151)
Amortization of differences between projected and actual earnings on plan investments <sup>2</sup>	1,841,995
Pension plan administrative expense	0
Total pension expense	\$ 23,781,257

At September 30, 2025<sup>3</sup>, the Employer reported deferred outflows of resources and deferred inflows of resources related to pensions from the sources listed in the table below.

**b. Balances of Deferred Outflows of Resources and Deferred Inflows of Resources as of September 30, 2025**

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 13,172,631	\$ 279,015
Changes of assumptions	15,051,354	254,621
Net difference between projected and actual earnings on pension plan investments <sup>4</sup>	2,845,638	0
Total	\$ 31,069,623	\$ 533,636

**c. Amounts reported as Deferred Outflows/(Inflows) of resources related to pensions that will be recognized in pension expense**

Year Ended September 30	Outflow/(Inflow)
2026	\$ 9,804,011
2027	10,895,727
2028	5,075,779
2029	3,469,523
2030	1,066,682
Thereafter	224,265

<sup>1</sup> Per Paragraph No. 33.a. of GASB No. 68, amortized over a straight-line closed period equal to the average remaining service period for all employees (active and inactive) who are provided with benefits through the pension plan. (See Section V for details.)

<sup>2</sup> Per Paragraph No. 33.b. of GASB No. 68, amortized over a straight-line closed 5-year period.

<sup>3</sup> Amounts recognized in the fiscal year represent changes between the current and prior measurement dates.

<sup>4</sup> Per paragraph No. 33.b. of GASB No. 68, deferred outflows of resources and deferred inflows of resources arising from differences between projected and actual pension plan investment earnings in different measurement periods should be aggregated and reported as a net deferred outflow or net deferred inflow of resources.

**8. Payable to the Pension Plan**

At September 30, 2025, the Employer has contributions of \$0 payable to the pension plan for the 2025 plan year.

## C. Required Supplementary Information

### 1. Schedule of Changes in the Employer's Net Pension Liability and Related Ratios

Last 10 Fiscal Years (Dollar amounts in thousands)

	2025 <sup>1</sup>	2024	2023	2022	2021	2020	2019	2018	2017	2016
<b>1. Total Pension Liability</b>										
a. Service cost	\$ 7,769	\$ 6,911	\$ 4,949	\$ 3,726	\$ 3,726	\$ 3,712	\$ 3,428	\$ 2,897	\$ 2,517	\$ 3,058
b. Interest	17,140	15,719	13,718	12,449	12,542	10,062	9,451	8,582	7,643	6,614
c. Changes of benefit terms	(145)	0	0	0	13,026	0	0	(843)	0	0
d. Differences between expected and actual experience	2,263	5,367	9,111	3,480	2,104	(1,312)	5,496	6,366	(2,503)	8,442
e. Changes of assumptions	0	0	18,540 <sup>2</sup>	8,389	4,794	(243)	(3,039)	(1,928)	(1,115)	(6,899)
f. Benefit payments, including refunds of employee contributions	(9,862)	(8,658)	(8,307)	(7,424)	(5,057)	(4,749)	(4,517)	(3,507)	(3,092)	(2,617)
g. Other	0	0	0	0	0	0	0	0	0	0
<b>h. Net Change in Total Pension Liability</b>	\$ 17,165	\$ 19,339	\$ 38,011	\$ 20,620	\$ 31,135	\$ 7,469	\$ 10,819	\$ 11,568	\$ 3,450	\$ 8,599
<b>i. Total Pension Liability - Beginning</b>	<u>233,495</u>	<u>214,156</u>	<u>176,145</u>	<u>155,525</u>	<u>124,390</u>	<u>116,921</u>	<u>106,102</u>	<u>94,534</u>	<u>91,085</u>	<u>82,486</u>
<b>j. Total Pension Liability - Ending</b>	\$ 250,660	\$ 233,495	\$ 214,156	\$ 176,145	\$ 155,525	\$ 124,390	\$ 116,921	\$ 106,102	\$ 94,535	\$ 91,085
<b>2. Plan Fiduciary Net Position</b>										
a. Contributions – employer	\$ 13,900	\$ 13,472	\$ 9,203	\$ 6,300	\$ 8,108	\$ 6,808	\$ 6,450	\$ 6,765	\$ 5,957	\$ 4,999
b. Contributions – employee	1,517	1,221	978	783	577	347	98	0	0	0
c. Net investment income	12,422	13,359	(13,199)	14,387	8,101	15,158	(5,315)	9,686	5,284	(1,337)
d. Benefit payments, including refunds of employee contributions	(9,862)	(8,658)	(8,307)	(7,424)	(5,057)	(4,749)	(4,517)	(3,507)	(3,092)	(2,617)
e. Administrative expense	0	0	0	0	0	0	0	0	0	(195)
f. Other	0	0	0	0	0	0	0	0	0	0
<b>g. Net Change in Plan Fiduciary Net Position</b>	\$ 17,977	\$ 19,394	\$ (11,325)	\$ 14,046	\$ 11,729	\$ 17,564	\$ (3,284)	\$ 12,944	\$ 8,149	\$ 850
<b>h. Plan Fiduciary Net Position - Beginning</b>	<u>131,894</u>	<u>112,500</u>	<u>123,825</u>	<u>109,779</u>	<u>98,050</u>	<u>80,486</u>	<u>83,770</u>	<u>70,827</u>	<u>62,678</u>	<u>61,828</u>
<b>i. Plan Fiduciary Net Position - Ending</b>	\$ 149,871	\$ 131,894	\$ 112,500	\$ 123,825	\$ 109,779	\$ 98,050	\$ 80,486	\$ 83,771	\$ 70,827	\$ 62,678
<b>3. Employer's Net Pension Liability – Ending [Item 1(j) – 2(i)]</b>	\$ 100,788	\$ 101,601	\$ 101,656	\$ 52,320	\$ 45,746	\$ 26,340	\$ 36,435	\$ 22,331	\$ 23,708	\$ 28,407
<b>4. Plan Fiduciary Net Position as a Percentage of the Total Pension Liability</b>	59.79%	56.49%	52.53%	70.30%	70.59%	78.82%	68.84%	78.95%	74.92%	68.81%
<b>5. Covered-Employee Payroll<sup>3</sup></b>	\$ 78,958	\$ 73,399	\$ 66,021	\$ 49,341	\$ 53,290	\$ 42,877	\$ 41,022	\$ 33,587	\$ 31,778	\$ 30,085
<b>6. Employer's Net Pension Liability as a Percentage of Covered-Employee Payroll</b>	127.65%	138.42%	153.98%	106.04%	85.85%	61.43%	88.82%	66.49%	74.61%	94.42%

<sup>1</sup> Information is presented using a December 31, 2024 measurement date as permitted under Paragraph No. 20 of GASB No. 68.

<sup>2</sup> Several demographic and economic assumptions were updated to reflect recommended assumptions from an Actuarial Experience Study.

<sup>3</sup> Total compensation (not just pensionable compensation, if different) based on census used in the valuation per Q/A No. 106 of the *Guide to Implementation of GASB Statement 68*.

## 2. Schedule of Employer Contributions

Last 10 Fiscal Years (Dollar amounts in thousands)

	Fiscal Year Ended September 30									
	2025	2024	2023	2022	2021	2020	2019	2018	2017	2016
1. Actuarially determined contribution	\$ 14,195	\$ 13,324	\$ 11,762	\$ 9,478	\$ 7,599	\$ 6,510	\$ 5,195	\$ 5,213	\$ 5,034	\$ 4,600
2. Contributions in Relation to the Actuarially Determined Contribution	\$ 14,500	\$ 13,700	\$ 12,500	\$ 6,300	\$ 8,108	\$ 6,808	\$ 6,450	\$ 6,765	\$ 5,957	\$ 4,999
3. Contribution Deficiency/(Excess) [(1.) – (2.)]	\$ (305)	\$ (376)	\$ (738)	\$ 3,178	\$ (509)	\$ (298)	\$ (1,255)	\$ (1,552)	\$ (923)	\$ (399)
4. Covered-Employee Payroll <sup>1</sup>	\$ 83,301	\$ 77,774	\$ 72,059	\$ 58,287	\$ 53,444	\$ 54,413	\$ 47,598	\$ 33,587	\$ 31,778	\$ 30,085
5. Contributions as a Percentage of Covered-Employee Payroll	17.41%	17.62%	17.35%	10.81%	15.17%	12.51%	13.55%	20.14%	18.75%	16.62%

Notes to Schedule for current fiscal year:

Valuation Date: January 1, 2025

Actuarially determined contribution rates are calculated as of January 1, 2025 which is the most recent valuation date prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates for 2025:

Actuarial cost method	Entry age
Amortization method	Level percent, layered closed periods
Remaining amortization period	Layered amortization with weighted-average remaining amortization period of 19.1 years
Asset valuation method	5-year smoothed market value
Inflation	2.50%
Salary increases	2.50% to 6.50%, including inflation
Investment rate of return	7.25% net of pension plan investment expenses, including inflation
Retirement age	Rates that vary by age
Mortality	Amount-weighted General Tables (i.e., PubG-2010) projected generationally using Scale MP-2021 mortality improvement rates.

<sup>1</sup> Total compensation (not just pensionable compensation, if different) based on census used in the valuation per Q/A No. 106 of the *Guide to Implementation of GASB Statement 68*.



### 3. Schedule of Money-Weighted Rate of Return

Last 10 Fiscal Years

Fiscal Year Ending	Annual Money Weighted Net Rate of Return
September 30, 2025	9.20%
September 30, 2024	11.64%
September 30, 2023	(10.58)%
September 30, 2022	13.16%
September 30, 2021	8.18%
September 30, 2020	18.56%
September 30, 2019	(6.29)%
September 30, 2018	13.48%
September 30, 2017	8.36%
September 30, 2016	(2.15)%

## D. Amortization Schedules of Outflows and Inflows of Resources

In accordance with Paragraph Nos. 33a and 33b of GASB No. 68, the effects of differences between expected and actual experience, changes of assumptions or other inputs and differences between projected and actual earnings on pension plan investments should be included in pension expense, beginning in the current measurement period. The following tables illustrate the application of this requirement.

### 1. Differences between Expected and Actual Experience

Measurement Period Ended 12/31	Differences Between Expected and Actual Experience <sup>1</sup>	Average Expected Remaining Service Lives (Years)	Remaining Recognition Period as of 12/31/2023	Increase (Decrease) in Pension Expense Arising from the Effects of Differences between Expected and Actual Experience (Measurement Period Ended December 31)						
				2024	2025	2026	2027	2028	2029	Thereafter
2017	\$ 6,366,137	7.60	0.60	\$ 502,587	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	5,496,264	7.50	1.50	732,732	367,140	-	-	-	-	-
2019	(1,312,401)	7.62	2.62	(172,231)	(172,231)	(106,784)	-	-	-	-
2020	2,104,282	7.13	3.13	295,131	295,131	295,131	38,365	-	-	-
2021	3,479,727	6.70	3.70	519,362	519,362	519,362	363,555	-	-	-
2022	9,110,773	6.70 <sup>2</sup>	4.70	1,359,817	1,359,817	1,359,817	1,359,817	951,871	-	-
2023	5,366,556	6.94 <sup>2</sup>	5.94	773,279	773,279	773,279	773,279	773,279	726,882	-
2024	2,263,065	6.66 <sup>2</sup>	6.66	339,800	339,800	339,800	339,800	339,800	339,800	224,265
Net increase (decrease) in Pension expense				\$ 4,350,477 <sup>3</sup>	\$ 3,482,298	\$ 3,180,605	\$ 2,874,816	\$ 2,064,950	\$ 1,066,682	\$ 224,265

### 2. Changes of Assumptions or Other Inputs

Measurement Period Ended 12/31	Changes of Assumptions or Other Inputs <sup>1</sup>	Average Expected Remaining Service Lives (Years)	Remaining Recognition Period as of 12/31/2023	Increase (Decrease) in Pension Expense Arising from the Effects of Changes of Assumptions or Other Inputs (Measurement Period Ended December 31)						
				2024	2025	2026	2027	2028	2029	Thereafter
2017	\$ (1,928,083)	7.60	0.60	\$ (152,218)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	(3,038,517)	7.50	1.50	(405,078)	(202,971)	-	-	-	-	-
2019	(242,954)	7.62	2.62	(31,884)	(31,884)	(19,766)	-	-	-	-
2020	4,794,071	7.13	3.13	672,380	672,380	672,380	87,411	-	-	-
2021	8,389,128	6.70	3.70	1,252,109	1,252,109	1,252,109	876,474	-	-	-
2022	18,539,968	6.70 <sup>2</sup>	4.70	2,767,159	2,767,159	2,767,159	2,767,159	1,937,014	-	-
2023	0	N/A	N/A	-	-	-	-	-	-	-
2024	0	N/A	N/A	-	-	-	-	-	-	-
Net increase (decrease) in Pension expense				\$ 4,102,468 <sup>3</sup>	\$ 4,456,793	\$ 4,671,882	\$ 3,731,044	\$ 1,937,014	\$ 0	\$ 0

<sup>1</sup> See the Schedule of Changes in the Net Pension Liability in Section V.C.1. Positive amounts represent increases in the Net Pension Liability and result in increases in pension expense and deferred outflows of resources. Negative amounts represent decreases in the Net Pension Liability and result in decreases in pension expense and increases in deferred inflows of resources.

<sup>2</sup> Determined in accordance with Q/A Nos. 85 and 88 of the *Guide to Implementation of GASB Statement 68 on Accounting and Financial Reporting for Pensions*.

<sup>3</sup> Amount included in pension expense for measurement period ended December 31, 2024.

### 3. Differences between Projected and Actual Earnings on Pension Plan Investments

Measurement Period Ended 12/31	Differences between Projected and Actual Earnings on Pension Plan Investments <sup>2</sup>	Closed Five-Year Period	Remaining Recognition Period as of 12/31/2023	Increase (Decrease) in Pension Expense Arising from the Effects of Differences between Projected and Actual Earnings on Pension Plan Investments (Measurement Period Ended December 31)						
				2024	2025	2026	2027	2028	2029	Thereafter
2020	\$ (114,633)	5.00	1.00	\$ (22,925)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2021	(5,891,600)	5.00	2.00	(1,178,320)	(1,178,320)	-	-	-	-	-
2022	22,866,605	5.00	3.00	4,573,321	4,573,321	4,573,321	-	-	-	-
2023	(4,988,190)	5.00	4.00	(997,638)	(997,638)	(997,638)	(997,638)	-	-	-
2024	(2,662,213)	5.00	5.00	(532,443)	(532,443)	(532,443)	(532,443)	(532,441)	-	-
Net increase (decrease) in Pension expense				\$ 1,841,995 <sup>1</sup>	\$ 1,864,920	\$ 3,043,240	\$ (1,530,081)	\$ (532,441)	\$ 0	\$ 0

<sup>1</sup> Amount included in pension expense for measurement period ended December 31, 2024.

<sup>2</sup> Amounts are equal to net investment income (see the Schedule of Changes in the Net Pension Liability in Section V.C.1.) less projected earnings. Positive amounts represent investment returns that are less than projected and, therefore, increase pension expense. Negative amounts represent investment returns that are greater than projected and, therefore, decrease pension expense.

## E. Determination of Balances of Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

### 1. Differences between Expected and Actual Experience

Measurement Period Ended December 31	Experience Losses <sup>1</sup> (a)	Experience Gains <sup>1</sup> (b)	Amounts Included in Pension Expense through 12/31/2024 <sup>3</sup> (d)	Balances at 12/31/2024 <sup>2</sup>	
				Deferred Outflows of Resources (a) – (d)	Deferred Inflows of Resources (b) – (d)
2018	\$ 5,496,264	\$ N/A	\$ 5,129,124	\$ 367,140	\$ -
2019	N/A	(1,312,401)	(1,033,386)	-	(279,015)
2020	2,104,282	N/A	1,475,655	628,627	-
2021	3,479,727	N/A	2,077,448	1,402,279	-
2022	9,110,773	N/A	4,079,451	5,031,322	-
2023	5,366,556	N/A	1,546,558	3,819,998	-
2024	2,263,065	N/A	339,800	1,923,265	-
			\$ 13,614,650	\$ 13,172,631	\$ (279,015)

### 2. Changes of Assumptions or Other Inputs

Measurement Period Ended December 31	Increases in the Total Pension Liability <sup>4</sup> (a)	Decreases in the Total Pension Liability <sup>4</sup> (b)	Amounts Included in Pension Expense through 12/31/2024 <sup>5</sup> (d)	Balances at 12/31/2024 <sup>2</sup>	
				Deferred Outflows of Resources (a) – (d)	Deferred Inflows of Resources (b) – (d)
2018	\$ N/A	\$ (3,038,517)	\$ (2,835,546)	\$ -	\$ (202,971)
2019	N/A	(242,954)	(191,304)	-	(51,650)
2020	4,794,071	N/A	3,361,900	1,432,171	-
2021	8,389,128	N/A	5,008,436	3,380,692	-
2022	18,539,968	N/A	8,301,477	10,238,491	-
2023	N/A	N/A	-	-	-
2024	N/A	N/A	-	-	-
			\$ 13,644,963	\$ 15,051,354	\$ (254,621)

### 3. Differences between Projected and Actual Earnings on Pension Plan Investments

Measurement Period Ended December 31	Investment Earnings Less Than Projected <sup>6</sup> (a)	Investment Earnings Greater Than Projected <sup>6</sup> (b)	Amounts Included in Pension Expense through 12/31/2024 <sup>8</sup> (d)	Balances at 12/31/2024 <sup>7</sup>	
				Deferred Outflows of Resources (a) – (d)	Deferred Inflows of Resources (b) – (d)
2021	\$ N/A	\$ (5,891,600)	\$ (4,713,280)	\$ -	\$ (1,178,320)
2022	22,866,605	N/A	13,719,963	9,146,642	-
2023	N/A	(4,988,190)	(1,995,276)	-	(2,992,914)
2024	N/A	(2,662,213)	(532,443)	-	(2,129,770)
			\$ 6,478,964	\$ 9,146,642	\$ (6,301,004)

Please see footnotes on following page.

- <sup>1</sup> See the Schedule of Changes in the Net Pension Liability in Section V.C.1. or the Schedule of Differences between Expected and Actual Experience in Section V.D.1. Experience losses are presented as positive amounts. Experience gains are presented as negative amounts.
- <sup>2</sup> Deferred outflows of resources are presented as positive amounts. Deferred inflows of resources are presented as negative amounts.
- <sup>3</sup> Amounts are equal to the sum of increases (decreases) in pension expense through the measurement year ending December 31, 2024 due to the differences between expected and actual experience in column (a) or column (b). Positive amounts increase pension expense and decrease deferred outflows of resources balances. Negative amounts decrease pension expense and decrease deferred inflows of resources balances.
- <sup>4</sup> See the Schedule of Changes in the Net Pension Liability in Section V.C.1. or the Schedule of Changes of Assumptions or Other Inputs in Section V.D.2.
- <sup>5</sup> Amounts are equal to the sum of increases (decreases) in pension expense through the measurement year ending December 31, 2024 due to the changes of assumptions or other inputs in column (a) or column (b). Positive amounts increase pension expense and decrease deferred outflows of resources balances. Negative amounts decrease pension expense and decrease deferred inflows of resources balances.
- <sup>6</sup> Amounts equal to net investment income (see the Schedule of Changes in the Net Pension Liability in Section V.C.1.) less projected earnings (see the projected earnings on pension plan investments in Section V.B.7.). See the Schedule of Differences between Projected and Actual Earnings on Pension Plan Investments in Section V.D.3. Investment earnings less than projected are presented as positive amounts. Investment earnings greater than projected are presented as negative amounts.
- <sup>7</sup> Deferred outflows of resources are presented as positive amounts. Deferred inflows of resources are presented as negative amounts. In conformity with Paragraph No. 33b of GASB No. 68, deferred outflows of resources and deferred inflows of resources arising from differences between projected and actual earnings on pension plan investments in different measurement periods are aggregated and reported as a net deferred outflow of resources or a net deferred inflow of resources. Therefore, at December 31, 2024, there is a net deferred outflow of resources arising from differences between projected and actual earnings on pension plan investments of \$2,845,638, calculated as the deferred outflow balance of \$9,146,642 net of the deferred inflow balance of \$(6,301,004).
- <sup>8</sup> Amounts are equal to the sum of increases (decreases) in pension expense through the measurement year ending December 31, 2024 due to the differences between projected and actual earnings on pension plan investments in column (a) or column (b). Positive amounts increase pension expense and decrease deferred outflows of resources balances. Negative amounts decrease pension expense and decrease deferred inflows of resources balances.

## F. Additional Information

### 1. Detailed Calculations of Certain Components of Pension Expense

	2025 Fiscal Year
1. Interest on Total Pension Liability	
a. Total Pension Liability on prior Measurement Date (December 31, 2023)	\$ 233,494,405
b. Service Cost	\$ 7,769,065
c. Benefit Payments	\$ (9,862,033)
d. Discount Rate as of prior Measurement Date (December 31, 2023)	7.25%
e. Interest on Total Pension Liability $[(a. + b.) \times d.] + \{c. \times [(1 + d.)^{0.5} - 1]\}$	\$ 17,140,358
2. Projected Earnings on Pension Plan Investments	
a. Plan Fiduciary Net Position on prior Measurement Date (December 31, 2023)	\$ 131,893,557
b. Contributions – employer	\$ 13,899,995
c. Contributions – employee	\$ 1,517,658
d. Other	\$ 0
e. Benefit Payments	\$ (9,862,033)
f. Administrative Expense	\$ 0
g. Expected Rate of Return on Plan Assets	7.25%
h. Projected Earnings on Pension Plan Investments $(a. \times g.) + \{(b. + c. + d. + e. + f.) \times [(1 + g.)^{0.5} - 1]\}$	\$ 9,760,151

### 2. Change in Deferred Outflows of Resources and Deferred Inflows of Resources

	Change in Deferred Outflows of Resources	Change in Deferred Inflows of Resources
Differences between expected and actual experience	\$ (2,259,643)	\$ (172,231)
Changes of assumptions	(4,691,648)	(589,180)
Net difference between projected and actual earnings on pension plan investments	(4,504,208)	0
Total	\$ (11,455,499)	\$ (761,411)

### 3. Change in Balance Sheet Items

Change in Net Pension Liability	\$ (812,826)
Change in deferred outflows	11,455,499
Change in deferred inflows	(761,411)
Employer contributions	13,899,995
Total pension expense	\$ 23,781,257

#### 4. Calculation of Money-Weighted Rate of Return

Plan Investments/ Net External Cash Flows (a)	Periods Invested (b)	Period Weight (c) = (b) / 12	(d) = (a) x (1 + r <sub>mw</sub> ) <sup>(c)</sup> where r <sub>mw</sub> = 0.0919507%	(d)
Market Value at January 1, 2024 \$ 131,893,557	12	1.0000	131,893,557 x (1 + 0.0919507) <sup>1.0000</sup>	\$ 144,021,274
<u>Monthly net external cash flows:</u>				
January 2024 490,072	12	1.0000	490,071 x (1 + 0.0919507) <sup>1.0000</sup>	535,134
February 2024 480,329	11	0.9167	480,329 x (1 + 0.0919507) <sup>0.9167</sup>	520,665
March 2024 1,751,673	10	0.8333	1,751,673 x (1 + 0.0919507) <sup>0.8333</sup>	1,884,903
April 2024 (767,662)	9	0.7500	(767,662) x (1 + 0.0919507) <sup>0.7500</sup>	(820,016)
May 2024 1,672,758	8	0.6667	1,672,758 x (1 + 0.0919507) <sup>0.6667</sup>	1,773,789
June 2024 (962,355)	7	0.5833	(962,355) x (1 + 0.0919507) <sup>0.5833</sup>	(1,013,025)
July 2024 1,502,025	6	0.5000	1,502,025 x (1 + 0.0919507) <sup>0.5000</sup>	1,569,563
August 2024 (839,740)	5	0.4167	(839,740) x (1 + 0.0919507) <sup>0.4167</sup>	(871,089)
September 2024 558,998	4	0.3333	558,998 x (1 + 0.0919507) <sup>0.3333</sup>	575,631
October 2024 595,905	3	0.2500	595,905 x (1 + 0.0919507) <sup>0.2500</sup>	609,155
November 2024 545,382	2	0.1667	545,382 x (1 + 0.0919507) <sup>0.1667</sup>	553,437
December 2024 528,234	1	0.0833	528,234 x (1 + 0.0919507) <sup>0.0833</sup>	532,120
Market Value at December 31, 2024 \$ 149,871,541				\$ 149,871,541

## Section VI - Actuarial Methods and Assumptions

### A. Actuarial Methods

#### 1. Actuarial Funding Method

The Entry Age Normal actuarial funding method is used in determining the contribution requirements for the plan. The actuarial funding method is the procedure by which the actuary annually identifies a series of annual contributions which, along with current assets and future investment earnings, will fund the expected plan benefits. The Entry Age Normal funding method compares the excess of the present value of expected future plan benefits over the current value of plan assets. This difference represents the expected present value of current and future contributions that will be paid into the plan. The contributions are divided into two components: an annual normal cost (or current cost) and an amortization charge for the unfunded accrued liability.

The normal cost for the plan is the sum of individually determined normal costs for each active participant. Each active participant's normal cost is the current annual contribution in a series of annual contributions which, if made throughout the participant's total period of employment, would fund his expected benefits from the plan. Each participant's normal cost is calculated to be an annual constant percentage of his expected compensation in each year of employment.

The plan's current accrued liability is the excess of the present value of expected future benefits over the present value of all future remaining normal cost contributions of active participants. The unfunded accrued liability is the amount by which the actuarial accrued liability exceeds the current plan assets. The unfunded accrued liability is recalculated each time a valuation is performed and is amortized as a level percentage of pay amount over a closed period in layers. The initial transition layer as of January 1, 2023 is amortized over 21 years.

#### 2. Market Value of Assets (Plan Fiduciary Net Position)

Market Value of Assets as of the valuation date equals Fair Value plus any receivable contributions made or to be made for a prior plan year.

#### 3. Actuarial Value of Assets

The Actuarial Value of Assets (AVA) is equal to the market value adjusted by deferred recognition of asset gains and losses over a five-year period. The asset gains/(losses) are equal to the excess/(shortfall) of actual market value over/(under) expected market value determined using the assumed investment return of 7.25% (7.75% in 2022 and 8.00% in years prior to 2022). The asset gains/(losses) are determined at the end of the year in which they occur. These gains/(losses) are recognized twenty percent (20%) each year over the next five (5) years beginning in the year in which the gain or loss occurs. The AVA is subject to a 20% corridor such that the market value adjusted by the deferred asset gains and losses will not be less than 80% nor greater than 120% of the market value of assets.



## B. Actuarial Assumptions

1. Investment Return (Discount Rate): 7.25% (net of investment-related expenses) per annum.
2. Mortality: Participants are expected to exhibit mortality in accordance with the following mortality tables:
  - a. Pre-retirement Mortality: Amount-weighted Pub-2010 General Employee Tables (i.e., PubG-2010) projected generationally from the 2010 base year using Scale MP-2021 mortality improvement rates
  - b. Post-retirement Mortality:
    - i. Healthy Retirees: Amount-weighted Pub-2010 General Tables for Healthy Retirees (i.e., PubG-2010) projected generationally from the 2010 base year using Scale MP-2021 mortality improvement rates
    - ii. Disabled Retirees: Amount-weighted Pub-2010 General Tables for Disabled Retirees (i.e., PubG-2010) projected generationally from the 2010 base year using Scale MP-2021 mortality improvement rates
    - iii. Contingent Survivors: Amount-weighted Pub-2010 General Tables for Contingent Survivors<sup>1</sup> (i.e., PubG-2010) projected generationally from the 2010 base year using Scale MP-2021 mortality improvement rates

<sup>1</sup> Amount-weighted Pub-2010 General Tables for Healthy Retirees prior to retiree death

Rationale: This assumption reflects the Society of Actuaries' most recent study (and updates thereto) on mortality which reflects current trends in mortality and expected mortality improvements.

3. Retirement: Active participants are assumed to retire in accordance with the annual rates as illustrated below:

Age	Annual Retirement Rates Per 100 Participants
52-54	10.0
55	8.0
56-60	10.0
61	13.5
62-64	17.0
65-70	27.5
71	45.5
72	63.0
73	82.0
74	100.0

Rationale: This assumption is based upon the actuary's review of recent retirement experience in this plan, adjusted for the actuary's future expectations. The experience study was completed in June 2023.

4. Disability Retirement: None.
5. Termination: Active participants are assumed to terminate their employment for causes other than death or retirement in accordance with annual rates as illustrated below.

Years of Service	Annual Termination Rates per 100 Participants
<2	21.00
2	15.00
3	9.00
4	8.60
5	8.20
6	7.80
7	7.40
8	7.00
9	5.00
10	2.60
11	3.20
12	3.80
13	4.40
14	5.00
15	4.50
16	4.00
17	3.50
18	3.00
19	2.50
20	2.00
21+	1.50

Rationale: This assumption is based upon the actuary's review of recent termination experience in this plan, adjusted for the actuary's future expectations. The experience study was completed in June 2023.

6. Form of Payment:
- Upon separation from service due to retirement, active participants are assumed to elect the normal form of payment (10-year certain and life annuity).
  - For active participants with an employee contribution balance, upon separation from service due to vested termination:
    - 20% are assumed to elect a refund of their employee contribution balance and forfeit all remaining benefits.
    - 80% are assumed to elect to receive a deferred annuity benefit commencing at age 65 in the normal form of payment
  - Beneficiaries of participants who separate from service due to death are assumed to receive payment in a single lump sum.
  - Current deferred vested participants and active participants without an employee contribution balance upon separation from service due to vested termination are

assumed to elect to receive a deferred annuity benefit commencing at age 65 in the normal form of payment.

- e. Beneficiaries of deferred vested participants who die prior to reaching retirement age are assumed to receive payment of the employee contribution balance, if any, in a single lump sum.
7. Social Security Taxable Wage Base Increase: The benefits of this plan are determined, in part, by 35-year averages of the Social Security Taxable Wage Base. The Social Security Taxable Wage Base is assumed to increase at an annual rate of 3.00%.

Rationale: This assumption is based upon the actuary's review of inflation experience since 1968 and the relative relationship between this assumption and national average wage growth.

8. Salary Increases: Participant compensation is assumed to increase at an annual rate of 2.50% inflation with additional annual increments due to promotion/longevity in accordance with annual rates as illustrated below.

Age Range	Promotion/Longevity Increase
20-24	4.00%
25-29	3.00%
30-34	2.25%
35-39	2.00%
40-44	1.75%
45-49	1.25%
50-54	1.00%
55-59	1.00%
60-64	0.00%
65+	0.00%

Rationale: This assumption is based upon the actuary's review of recent wage growth experience in this plan, adjusted for the actuary's future expectations. The experience study was completed in June 2023.

9. Payroll Growth: For purposes of total participant projected payroll, payroll is assumed to increase 3.00% per year based on assumed level membership.
10. Marital Status: Not applicable.
11. Administrative Expenses: Administrative expenses that are not related to investment expenses are assumed to be paid out of general employer assets.
12. General Price Inflation: The assumed investment return (discount rate) and other assumptions with an inflationary component include the same inflation assumption of 2.50% attributable to changes in general price levels.

Rationale: This assumption is based upon the actuary's review of inflation experience since 1968.

13. COLA Increase: Cost-of-living adjustments (COLAs) for current and future retirees and beneficiaries are assumed to be 2.00% compounded annually.

Rationale: This assumption is based upon the actuary's review of inflation experience since 1968.

14. Recognition of IRC Benefit and Compensation Limitations: The benefit and compensation limitations under IRC Sections 415(b) and 401(a)(17) have been reflected in the determination of plan costs, and these limits are assumed to increase at the annual rate of 2.50%.

15. Changes in Assumptions:

The following assumptions have been updated since the previous valuation:

a. Form of Payment:

- i. Current: See item B.6. above.
- ii. Prior:
  - a. Upon separation from service for causes other than death, active participants are assumed to elect the normal form of payment (10-year certain and life annuity).
  - b. Beneficiaries of participants who separate from service due to death are assumed to receive payment in a single lump sum.
  - c. Current deferred vested participants are assumed to elect to receive a deferred annuity benefit commencing at age 65 in the normal form of payment.

## Section VII – Outline of Principal Eligibility and Benefit Provisions

<b>A. Identifying Data</b>											
<i>Plan Name:</i>	Retirement Plan for Employees of North Texas Municipal Water District										
<i>Type of Plan:</i>	Defined benefit										
<i>Plan Sponsor:</i>	North Texas Municipal Water District										
<i>Plan Year:</i>	January 1 - December 31										
<i>Employer:</i>	North Texas Municipal Water District										
<b>B. Participation</b>											
<i>Minimum Age:</i>	21 for employees hired prior to January 1, 2018; none for employees hired on or after January 1, 2018										
<i>Maximum Age at Hire:</i>	None										
<i>Service:</i>	Two years of service for employees hired prior to January 1, 2018; none for employees hired on or after January 1, 2018										
<i>Employee Classification:</i>	Full-time										
<i>Entry Date:</i>	First of the month coinciding with or next following satisfaction of eligibility requirements										
<b>C. Contributions</b>											
<i>Participant:</i>	None for employees hired prior to January 1, 2018; 5% of pensionable earnings for employees hired on or after January 1, 2018. Contributions are accumulated with 3.5% interest per annum compounded annually.										
<i>Employer:</i>	The annual Actuarially Determined Contribution under the current funding policy is the sum of the Normal Cost under the Entry Age Normal funding method and a level percentage of pay amortization of the Unfunded Accrued Liability utilizing a closed period, layered amortization approach as follows:										
	<table border="1"> <thead> <tr> <th>Source of UAL Amortization Layers</th><th>UAL Closed Amortization Period<sup>1</sup></th></tr> </thead> <tbody> <tr> <td>Actuarial Experience Gain/Loss</td><td>20 years</td></tr> <tr> <td>Assumption and Method Changes</td><td>20 years</td></tr> <tr> <td>Plan Amendments</td><td>15 years</td></tr> <tr> <td>Transition to New Policy</td><td>21 years<sup>2</sup></td></tr> </tbody> </table>	Source of UAL Amortization Layers	UAL Closed Amortization Period <sup>1</sup>	Actuarial Experience Gain/Loss	20 years	Assumption and Method Changes	20 years	Plan Amendments	15 years	Transition to New Policy	21 years <sup>2</sup>
Source of UAL Amortization Layers	UAL Closed Amortization Period <sup>1</sup>										
Actuarial Experience Gain/Loss	20 years										
Assumption and Method Changes	20 years										
Plan Amendments	15 years										
Transition to New Policy	21 years <sup>2</sup>										
	<sup>1</sup> Each layer is amortized using the level percentage of pay approach over the specified closed period.										
	<sup>2</sup> Transition to new funding policy occurred on January 1, 2023.										
<b>D. Eligibility for Retirement</b>											
<i>Normal Retirement:</i>	Age 65 (first of month coincident with or next following)										
<i>Early Retirement:</i>	Age 55 plus 20 years of service, or any age if sum of age and years of service is at least 80 years										
<i>Disability Retirement:</i>	Totally and permanently disabled and has completed at least two years of service										
<b>E. Retirement Benefit Monthly Amount</b>											
<i>Normal Retirement:</i>	For each plan year on and after May 1, 1990, 3% of annual pensionable earnings plus 1% of annual pensionable earnings in excess of covered compensation for the plan year										
<i>Late Retirement:</i>	Same formula as normal retirement										
<i>Early Retirement:</i>	Amount equal to monthly normal retirement benefit accrued at early retirement date reduced 5% for each year that early retirement precedes normal retirement  If the sum of age and years of service is at least 80 years, there is no reduction to the retirement benefit accrued at early retirement date										
<i>Disability:</i>	60% of final average monthly earnings less 64% of Social Security disability benefit										

<b>F. Normal Form of Monthly Payment</b>	10-Year Certain and Life Annuity						
<b>G. Optional Forms of Payment</b>	<p>Other optional forms of payment are available that are actuarially equivalent to the Normal Form of monthly payment. Optional forms of payment include:</p> <p>Social Security Adjustment Option Joint and 50% Contingent Annuity Joint and 2/3 Contingent Annuity Joint and 75% Contingent Annuity Joint and 100% Survivor Annuity</p>						
<b>H. Vested Termination Benefits</b>	<p><i>Benefit:</i> Entitlement to vested percentage of accrued normal retirement benefit.</p> <p><i>Vesting Schedule for Employer Provided Benefits:</i></p> <table border="1"> <thead> <tr> <th>Years of Service</th><th>Vesting Percent</th></tr> </thead> <tbody> <tr> <td>less than 5</td><td>0%</td></tr> <tr> <td>5 or more</td><td>100%</td></tr> </tbody> </table> <p><i>Accrued Normal Retirement Benefit:</i> A participant is always 100% vested in the employee contributions. The monthly benefit that a participant has accrued before reaching normal retirement age payable in the normal form of payment beginning at normal retirement age; the amount of the accrued benefit is determined when a participant terminates his employment and is calculated like the normal retirement benefit but using only years of service and compensation credited at date of termination.</p> <p><i>Optional Refund of Employee Contribution Balance:</i> Vested terminated participants with an employee contribution balance are eligible to elect a refund of their employee contribution balance (election must occur within 90 days of the date of termination) and forfeit all remaining plan benefits.</p>	Years of Service	Vesting Percent	less than 5	0%	5 or more	100%
Years of Service	Vesting Percent						
less than 5	0%						
5 or more	100%						
<b>I. Pre-retirement Death Benefits</b>	<ol style="list-style-type: none"> <li>Death of Active Participant Payment of lump sum benefit which is the greater of: <ol style="list-style-type: none"> <li>the present value of the participant's vested accrued benefit, and</li> <li>the participant's current annual earnings multiplied by their vesting percentage</li> </ol> </li> <li>Death of Vested Terminated Participant <ol style="list-style-type: none"> <li>with Employee Contribution Balance: refund of employee contribution balance</li> <li>without Employee Contribution Balance: none</li> </ol> </li> <li>Death of Nonvested Terminated Participant <ol style="list-style-type: none"> <li>with Employee Contribution Balance: refund of employee contribution balance</li> <li>without Employee Contribution Balance: none</li> </ol> </li> </ol>						
<b>J. Basis of Actuarial Equivalence</b>	7% and applicable mortality table under IRC Section 417(e)(3)						
<b>K. Covered Compensation</b>	The average of the Social Security Taxable Wage Bases in effect for each calendar year during the 35-year period ending with the last day of the calendar year in which the participant attains (or will attain) Social Security Retirement age.						
<b>L. Earnings</b>	Earnings while a participant, excluding any bonuses, overtime and other forms of additional compensation.						
<b>M. Cost-of-Living Adjustments</b>	As of the first day of each plan year following retirement, the monthly amount of benefit will be subject to adjustments based on the Consumer Price Index (Urban Wage Earners and Clerical Workers) (CPI). The adjustment for each plan year will be determined by dividing the CPI for the fourth month preceding the beginning of the plan year by the CPI for the fourth month prior to the immediately preceding plan anniversary, or if later, the fourth month preceding the participant's retirement date. The adjustment is subject to a minimum of 0% and a maximum of 3%.						
<b>N. Service</b>	Employment as an employee of the employer or any state, municipality, county, other water district, or the United States military.						

## Section VIII – Summary of Participant Data

### A. Participant Data Reconciliation

	Active Participants	Current Payment Status	Vested Terminated	Nonvested Terminated	Total
<b>1. As of January 1, 2024</b>	887	285	189	122	1,483
<b>2. Change of status</b>					
a. early retirement	(12)	12	0	0	0
b. normal retirement	(1)	3	(2)	0	0
c. late retirement	(4)	4	0	0	0
d. disability	0	0	0	0	0
e. death	(3)	1	(1)	0	(3)
f. nonvested termination	(84)	0	0	82	(2)
g. vested termination	(30)	0	30	0	0
h. completion of payment	0	(4)	0	(89)	(93)
i. rehires	4	0	(1)	0	3
j. other <sup>1</sup>	0	1	0	0	1
k. net changes	(130)	17	26	(7)	(94)
<b>3. New participants</b>	166	0	0	0	166
<b>4. As of January 1, 2025</b>	923	302	215	115 <sup>2</sup>	1,555

<sup>1</sup> New Alternate Payee due to Qualified Domestic Relations Order (QDRO)

<sup>2</sup> Nonvested terminated participants who had not received a refund of their employee contribution account balances as of January 1, 2025.

## B. Age/Service/Earnings Table

Age, Service and Average Earnings Table for Actives as of January 1, 2025

Current Years of Benefit Service												
Current Age	t < 1	1 <= t < 5	5 <= t < 10	10 <= t < 15	15 <= t < 20	20 <= t < 25	25 <= t < 30	30 <= t < 35	35 <= t < 40	40 <= t	Age Totals/ Row Averages	Percent of Total
x < 25	29	22	1	0	0	0	0	0	0	0	52	5.63%
25 ≤ x < 30	48,161	49,608	*	0	0	0	0	0	0	0	48,962	8.56%
	22	37	18	2	0	0	0	0	0	0	79	
30 ≤ x < 35	52,053	58,247	59,718	*	0	0	0	0	0	0	56,853	12.68%
	17	38	43	19	0	0	0	0	0	0	117	
35 ≤ x < 40	62,699	60,354	63,040	79,560	0	0	0	0	0	0	64,801	12.03%
	14	28	32	22	15	0	0	0	0	0	111	
40 ≤ x < 45	70,389	65,996	74,408	73,618	83,303	0	0	0	0	0	72,825	13.76%
	9	16	26	25	34	15	2	0	0	0	127	
45 ≤ x < 50	57,518	72,003	83,950	94,473	92,510	87,592	*	0	0	0	85,129	12.46%
	5	17	23	22	20	18	9	1	0	0	115	
50 ≤ x < 55	*	76,945	98,815	79,010	98,304	107,915	89,902	*	0	0	90,669	12.35%
	6	17	24	17	20	10	15	5	0	0	114	
55 ≤ x < 60	84,185	61,865	89,234	101,944	87,255	117,883	94,194	*	0	0	90,075	11.05%
	7	11	19	15	19	14	8	4	5	0	102	
60 ≤ x < 65	58,254	71,120	67,610	74,842	88,128	93,181	109,328	*	*	0	83,034	9.21%
	8	7	12	15	20	7	5	3	4	4	85	
x ≥ 65	80,926	65,559	72,414	82,161	96,641	81,898	*	*	*	*	88,592	2.27%
	0	6	3	6	2	0	1	0	3	0	21	
	0	65,184	*	78,769	*	0	*	0	*	0	84,893	
Service Totals	117	199	201	143	130	64	40	13	12	4	923	100.00%
Percent of Total	12.68%	21.56%	21.78%	15.49%	14.09%	6.93%	4.33%	1.41%	1.30%	0.43%	100.00%	
Earnings Average	59,685	62,975	75,707	83,274	91,467	98,641	94,510	104,511	122,935	*	77,998	100.00%

Average Attained Age: 44.1  
 Average Annual Payrate: \$ 77,998  
 Average Service: 11.1

\* Value is excluded when the number of participants is five or less.



**C. Summary of Vested Terminated Participants as of January 1, 2025**

Age	Count	Sum of Monthly Benefits	Average Monthly Benefits
$x < 35$	17	\$ 8,040	\$ 473
$35 \leq x < 40$	33	26,404	\$ 800
$40 \leq x < 45$	38	29,341	\$ 772
$45 \leq x < 50$	22	13,672	\$ 621
$50 \leq x < 55$	35	34,732	\$ 992
$55 \leq x < 60$	31	26,437	\$ 853
$60 \leq x < 65$	34	31,550	\$ 928
$x \geq 65$	5	1,946	\$ 389
<b>Total</b>	215	\$ 172,122	\$ 801

**D. Summary of Nonvested Terminated Participants as of January 1, 2025**

Count	Sum of Employee Contribution Account Balances	Average of Employee Contribution Account Balances
115	\$ 254,041	\$ 2,209

**E. Summary of Retirees and Beneficiaries as of January 1, 2025**

Age	Count	Sum of Monthly Benefits	Average Monthly Benefits
$x < 55$	8	\$ 18,283	\$ 2,285
$55 \leq x < 60$	25	76,220	\$ 3,049
$60 \leq x < 65$	52	164,966	\$ 3,172
$65 \leq x < 70$	91	237,535	\$ 2,610
$70 \leq x < 75$	70	164,294	\$ 2,347
$75 \leq x < 80$	35	99,449	\$ 2,841
$80 \leq x < 85$	13	28,061	\$ 2,159
$85 \leq x < 90$	6	6,949	\$ 1,158
$90 \leq x$	2	1,299	\$ 650
<b>Total</b>	302	\$ 797,056	\$ 2,639

## Section IX – Glossary of Actuarial Terms

<b>Actuarial Accrued Liability</b>	This is computed differently under different actuarial cost methods. Generally, the Actuarial Accrued Liability represents the portion of the Present Value of Future Benefits attributed to periods of service preceding the valuation date.
<b>Actuarial Gain (Loss)</b>	A measure of the difference between actual experience and that expected based on the actuarial assumptions during the period between two actuarial valuation dates, as determined in accordance with the particular actuarial cost method used.
<b>Actuarial Value of Assets</b>	The value of Plan Assets used by an actuary for an actuarial valuation. <i>(See the Actuarial Methods and Assumptions section of this report for a description of the methodology used to determine the Actuarial Value of Assets used in this report.)</i>
<b>Actuarially Determined Contribution (ADC)</b>	A recommended contribution for the reporting period determined in conformity with Actuarial Standards of Practice.
<b>Discount Rate</b>	For GASB purposes, the single rate of return that, when applied to all projected benefit payments, results in a present value of future benefits equal to the total of the present values determined using (a) the long-term expected rate of return for the periods during which the plan's fiduciary net position is sufficient to make the projected benefit payments and (b) the municipal bond rate for the remaining periods of the projection.
<b>Entry Age Normal Actuarial Cost Method</b>	An actuarial cost method under which the Present Value of Future Benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit ages. The portion of this actuarial present value allocated to the year of service during the valuation year is called the Normal Cost. The portion of this present value not provided for at a valuation date by the Present Value of Future Normal Costs is called the Actuarial Accrued Liability.
<b>Fiduciary Net Position</b>	The market value of plan assets.
<b>Long-Term Expected Rate of Return</b>	The expected return on plan investments that are expected to be used to finance the payment of benefits.
<b>Money-Weighted Rate of Return</b>	A method of calculation period-by-period returns on plan investments that adjusts for the changing amounts actually invested. For purposes of GASB No. 67, the money-weighted rate of return is calculated as the internal rate of return on pension plan investments, net of investment expense.
<b>Municipal Bond Rate</b>	A yield or index rate for 20-year, tax exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale).
<b>Net Pension Liability</b>	The Net Pension Liability is equal to the Total Pension Liability reduced by the Fiduciary Net Position.
<b>Normal Cost (Service Cost)</b>	Computed differently under different actuarial cost methods, the Normal Cost generally represents the portion of the Actuarial Present Value of Future Benefits attributed to the current year of service for active employees.

<b>Present Value of Accrued Benefits</b>	The actuarial present value of all accrued benefits (i.e., all benefits attributed by the pension benefit formula to employee service and compensation rendered prior to the valuation date).
<b>Present Value of Future Benefits</b>	Future benefits include all benefits estimated to be payable to plan members (retirees and beneficiaries, terminated employees entitled to benefits but not yet receiving them, and current active members) as a result of their service through the valuation date and their expected future service. The actuarial Present Value of Future Benefits as of the valuation date is the present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.
<b>Present Value of Future Normal Costs</b>	The difference between the Present Value of Future Benefits and the Actuarial Accrued Liability under a given actuarial cost method.
<b>Total Pension Liability</b>	The portion of the Present Value of Future Benefits that is attributed to past periods of a member's service in conformity with the requirements of GASB No. 67 and GASB No. 68.
<b>Unfunded Accrued Liability</b>	The excess, if any, of the Accrued Liability over the Actuarial Value of Assets.