El Paso County Retirement Plan

ACTUARIAL VALUATION REPORT

as of January 1, 2025

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May 7, 2025

The Board of Trustees
El Paso County Retirement Plan
2880 International Circle, Suite N030
Colorado Springs, CO 80910

Re: Actuarial Valuation of the El Paso County Retirement Plan as of January 1, 2025

Dear Board Members:

We are pleased to present our Report on the actuarial valuation of the El Paso County Retirement Plan as of January 1, 2025.

This Report presents the results of the January 1, 2025 actuarial valuation of the El Paso County Retirement Plan. The Report describes the current actuarial condition of the El Paso County Retirement Plan, determines the Actuarially Determined Contribution (ADC), and analyzes changes in these rates.

We certify that the information contained in this report is accurate and fairly presents the actuarial position of the El Paso County Retirement Plan as of the valuation date.

All of our work conforms with generally accepted actuarial principles and practices, and to the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board.

The valuation was based upon information, furnished by the Plan, concerning Plan benefits, financial transactions, active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not audit the data. This report and these calculations are not intended as legal or accounting advice, and we would recommend review by legal counsel for the compliance of these calculations with all relevant agreements.

This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

The valuation results summarized in this report involve actuarial calculations that require assumptions about future events for the Pension Plan. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following:

- plan experience differing from that anticipated by the economic or demographic assumptions;
- changes in economic or demographic assumptions;
- increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status) and;
- changes in plan provisions or applicable law.

The 12.00% employer and 8.00% employee contributions are the rates that comply with the Plan Document. Due to the many factors affecting a retirement system, users of this report should be aware that contributions made at that rate do not necessarily guarantee long-term benefit security.

This report does not include a detailed assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment. We encourage a review and assessment of investment and other significant risks that may have a material effect on the plan's financial condition.

We believe that the assumptions and methods used in this report are reasonable and appropriate for the purpose for which they have been used. However, other assumptions and methods could also be reasonable and could result in materially different results. In addition, because it is not possible or practical to consider every possible contingency, we may use summary information, estimates or simplifications of calculations to facilitate the modeling of future events. We may also exclude factors or data that are deemed to be immaterial.

Certification

The undersigned are independent actuaries and consultants. Paul Wood, Bill Detweiler, and Krysti Kiesel are actuaries and meet the Qualification Standards of the American Academy of Actuaries. All three of the undersigned are experienced in performing valuations for large public retirement systems.

Respectfully submitted,
Gabriel, Roeder, Smith & Company

By Paul T Wood
Paul Wood, ASA, FCA, MAAA
Team Leader

By
Bill Detweiler, ASA, EA, FCA, MAAA
Consultant

By Krysti Kiesel
Krysti Kiesel, ASA, MAAA
Consultant

Table of Contents

SECTION A

EXECUTIVE SUMMARY

Executive Summary

Valuations are prepared annually, as of January 1 of each year, the first day of the fiscal year. The primary purposes of the valuation report are to measure the plan's liabilities, to determine the Actuarially Determined Contribution rate and to analyze changes in the El Paso County Retirement Plan's actuarial position.

In addition, the report provides summaries of the member data, financial data, plan provisions, and actuarial assumptions and methods.

Exhibit A.1

Executive Summary

	January 1, 2025	January 1, 2024
1. **Actuarially Determined Contribution**		
a. Total	$ 50,341,589	$ 47,030,192
b. Member Contributions	18,071,110	17,128,316
b. Net Employer Contribution	32,270,479	29,901,876
c. Net Employer %	14.29%	13.97%
2. **Funded Status**		
a. Actuarial Accrued Liability	$ 822,848,452	$ 782,274,483
b. Actuarial Value of Assets (AVA)	507,022,619	488,127,478
c. Unfunded Liability (AVA-basis)	315,825,833	294,147,005
d. Funded Ratio (AVA-basis)	61.6%	62.4%
e. Market Value of Assets (MVA)	$ 472,313,456	$ 457,098,809
f. Unfunded Liability (MVA-basis)	350,534,996	325,175,674
g. Funded Ratio (MVA-basis)	57.4%	58.4%
3. **Summary of Census Data**		
a. Actives		
i. Counts[1]	3,140	3,078
ii. Total Annual Projected Compensation[2]	$ 225,888,881	$ 214,103,946
iii. Average Projected Compensation[2]	73,436	70,778
iv. Average Age[2]	42.0	42.2
v. Average Service[2]	6.6	6.8
b. Members with Refunds Due Counts	771	617
c. Deferred Vested Member Counts[3]	360	343
d. Retired and Disabled Member Counts	2,003	1,942
e. Beneficiary Counts	152	145
g. Total Members Included in Valuation	6,426	6,125

[1] Includes 53 members on leave of absence in 2024 and 64 members on leave of absence in 2025.

[2] Excludes members on leave of absence.

[3] Includes 7 deferred disableds and 2 deferred beneficiaries in 2024, and 6 deferred disableds and 1 deferred beneficiary in 2025.

Financing Objectives

The El Paso County Retirement Plan is supported by member contributions, employer contributions, and net earnings on the investments of the fund. Contribution rates are set in the plan document. Currently the contribution rate is set at 8.00% for members. The contribution rate for employers increased from 11.40% to 12.00% at January 1, 2025.

The combined member and employer contributions are intended to be sufficient to pay the normal cost and to amortize the Unfunded Actuarial Accrued Liability (UAAL). Amortization bases for the UAAL are established each year and amortized based on the Board's policy. The Board's policy consists of amortizing the unfunded liability as of January 1, 2019, over a closed 30 year period with each subsequent amortization base created as a result of year to year experience changes over individual 25 year closed periods.

Progress toward Realization of Financing Objectives

The UAAL/(surplus) and the funded ratio (ratio of the actuarial value of assets to the actuarial accrued liability) illustrate the progress toward the realization of certain financing objectives. Based on the actuarial valuation as of January 1, 2025, the Plan has an unfunded liability of $315.83 million and a funded ratio of 61.62%. The funded ratio decreased from 62.4% to 61.62% and the Net Employer Actuarially Determined Contribution (ADC) increased, from 13.97% of pay, to 14.29% of pay.

The Net Employer Actuarially Determined Contribution as a percentage of pay for the year beginning January 1, 2025 is 14.29%. The expected Employer contribution is 12.00% of pay which creates a contribution shortfall of 2.29% of pay. This compares to a shortfall in the prior year of 2.57% of pay. The calculated ADC under the Board's funding policy can be considered a "Reasonable Actuarially Determined Contributions" as required by the Actuarial Standards of Practice. The funded status is projected to slowly increase over the next 30 years. Section I contains the 30-year baseline projection.

Experience During the Year

The plan experienced a non-service purchase related liability loss of $6.54 million during fiscal year 2024. The largest source of this loss was due to salary increases that were greater than expected.

The plan experienced an actuarial asset and contribution loss of $13.98 million during fiscal year 2024. This loss was due to the actuarial value of assets earning a return less than the assumed 7.00% return. The net overall result of the liability loss and the actuarial asset loss was an unfunded liability $20.52 million higher than expected at January 1, 2025.

Assumptions and methods

The assumptions and methods have not been updated since the prior valuation. The assumptions are those adopted by the Board effective with the January 1, 2024 valuation report based upon the actuary's analysis and recommendations from the Experience Study for the four-year period ending December 31, 2023.

The actuarial assumptions are summarized in Section G of our report. All actuarial assumptions used in this report are reasonable for the purposes of this valuations. Furthermore, the assumptions and methods used in this valuation follow the guidance in the applicable Actuarial Standards of Practice and are expected to have no significant bias.

The results of any actuarial valuation are dependent upon the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rates and funding periods. The actuarial calculations presented in this Report are intended to provide information for rational decision making.

Benefit Provisions

All of the benefit provisions reflected in this valuation are those which were in effect on January 1, 2025. Since the prior valuation, the employer contributions have been increased from 11.40% to 12.00%.

The benefit provisions are summarized in Section D of our Report.

Data

El Paso County staff supplied data for retired, active and inactive members as of January 1, 2025. We did not audit this data, but we did apply a number of tests to the data, and we have concluded that the data is reasonable and consistent with the prior year's data. El Paso County staff also supplied asset data as of January 1, 2025.

Financial Position

Due mostly to larger than expected increases in payroll and investment returns less than the assumed rate, the funded ratio on both an actuarial value of assets basis and a market value of assets basis decreased from January 1, 2024 to January 1, 2025.

Exhibit A.2
Funded Status Summary ($ in millions)

Valuation Date	January 1, 2025	January 1, 2024
Accrued Liability	$822.85	$782.27
Actuarial Value of Assets (smoothed)	507.02	488.13
Unfunded Accrued Liability (AVA basis)	$315.83	$294.15
Funded Ratio (AVA basis)	61.6%	62.4%
Market Value of Assets	$472.31	$457.10
Unfunded Accrued Liability (MVA basis)	$350.54	$325.17
Funded Ratio (MVA basis)	57.4%	58.4%
Market Value Rate of Return	4.3%	7.1%
Actuarial Value Rate of Return	4.8%	6.4%

The funded status alone is not appropriate for assessing the need for future contributions. The funded status is also not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.

Investment losses increased the Actuarially Determined Contribution by roughly 0.32%. Liability losses increased the Actuarially Determined Contribution by approximately 0.25%. Total payroll growth and other factors including the decrease in normal cost decreased the Actuarially Determined Contributions by roughly 0.25%. The Employer Net Actuarially Determined Contribution of 14.29% of pay for Fiscal Year 2025 is based on contributions being made throughout the year.

Exhibit A.3 Contribution Summary All Numbers Reported Middle of Year, Percent of Pay		
Fiscal Year Beginning	**January 1, 2025**	**January 1, 2024**
Total Normal Cost	12.84%	12.90%
Amortization of UAL	9.14%	8.78%
Assumed Expenses	0.31%	0.29%
Total Actuarially Determined Contribution	22.29%	21.97%
Estimated Member Contribution	8.00%	8.00%
Actuarially Determined Employer Contribution	14.29%	13.97%
Estimated County Contribution	12.00%	11.40%
Contribution Shortfall	2.29%	2.57%

SECTION B

VALUATION RESULTS

Actuarial Accrued Liability

Exhibit B.1 Actuarial Valuation Results Actuarial Accrued Liability		
	January 1, 2025	**January 1, 2024**
1. **Active Members**		
a. Retirement Benefits	$ 290,959,785	$ 283,178,909
b. Withdrawal Benefits	$ 4,536,028	3,805,822
c. Disability Benefits	$ 2,070,620	2,008,731
d. Death Benefits	$ 2,739,783	2,699,484
f. Total	$ 300,306,216	$ 291,692,946
2. **Members on Leave of Absence**	$ 1,295,489	$ 1,106,410
3. **Members with Deferred Benefits**	$ 38,797,946	$ 33,127,634
4. **Members Receiving Benefits**	$ 482,448,801	$ 456,347,493
5. **Total**	$ 822,848,452	$ 782,274,483
6. **Actuarial Value of Assets**	$ 507,022,619	$ 488,127,478
7. **Unfunded Actuarial Accrued Liability**	$ 315,825,833	$ 294,147,005

Normal Cost

Exhibit B.2 Actuarial Valuation Results Normal Cost		
	January 1, 2025	**January 1, 2024**
1. **Total Dollar Normal Cost**		
a. Retirement Benefits	$ 21,208,480	$ 20,233,191
b. Withdrawal Benefits	7,205,860	6,838,628
c. Disability Benefits	315,063	302,059
d. Death Benefits	264,502	255,386
e. Total	$ 28,993,905	$ 27,629,264
2. **Normal Cost as a Percentage of Pay**	12.84%	12.90%

Present Value of Projected Benefits

Exhibit B.3 Actuarial Valuation Results Present Value of Projected Benefits		
	January 1, 2025	**January 1, 2024**
1. **Active Members**		
a. Retirement Benefits	$ 439,673,553	$ 422,961,590
b. Withdrawal Benefits	57,988,635	53,895,198
c. Disability Benefits	4,173,217	4,000,012
d. Death Benefits	4,573,959	4,440,693
e. Total	$ 506,409,364	$ 485,297,493
2. **Members on Leave of Absence**	$ 1,295,489	$ 1,106,410
3. **Members with Deferred Benefits**	$ 38,797,946	$ 33,127,634
4. **Members Receiving Benefits**	$ 482,448,801	$ 456,347,493
5. **Total**	$ 1,028,951,600	$ 975,879,030

Actuarially Determined Contribution

Exhibit B.4 Development of the Actuarially Determined Contribution				
Fiscal Year Beginning	**January 1, 2025**		**January 1, 2024**	
	Dollar	**Percent of Pay**	**Dollar**	**Percent of Pay**
1. Total Normal Cost	$ 28,993,905	12.84%	$ 27,629,264	12.90%
2. Amortization of Unfunded Actuarial Liability	20,639,781	9.14%	18,784,419	8.78%
3. Assumed Administrative Expenses	707,903	0.31%	616,509	0.29%
4. Total Actuarially Determined Contribution (ADC)	$ 50,341,589	22.29%	$ 47,030,192	21.97%
5. Estimated Member Contribution	18,071,110	8.00%	17,128,316	8.00%
6. Actuarially Determined Employer Contribution	$ 32,270,479	14.29%	$ 29,901,876	13.97%
7. Estimated Employer Contribution	27,106,666	12.00%	24,407,850	11.40%
8. Contribution Shortfall	$ 5,163,813	2.29%	$ 5,494,026	2.57%
9. Annual Projected Payroll	$ 225,888,881		$ 214,103,946	

Amortization of Unfunded Actuarial Liability as of January 1, 2025

The Actuarially Determined Contribution (ADC) is calculated in accordance with the Funding Policy adopted by the Board. The unfunded actuarial accrued liability (UAAL) is amortized as a level percent of payroll using a layered approach beginning January 1, 2019. The UAAL as of January 1, 2019 was amortized over a 30-year closed period. Fluctuations in the UAAL due to plan experience different than assumed or changes in actuarial assumptions, methods or plan provisions subsequent to January 1, 2019 are amortized over a 25-year period.

The following summarizes the outstanding bases as of January 1, 2025.

Exhibit B.5
Calcualtion of UAAL Amortization Payment

UAAL as of January 1, 2025	$315,825,833
Total Prior Remaining Amortization Bases as of January 1, 2025	295,306,540
2025 Amortization Base as of January 1, 2025	**$20,519,293**
2025 Payment (25 years, level percent of pay amortization)	**$1,291,827**

		As of January 1, 2025		
Base Year	**Initial Base**	**Remaining Base**	**Years Remaining**	**Amortization Payment**
2025	$ 20,519,293	$ 20,519,293	25	$ 1,291,827
2024	31,496,190	31,649,800	24	2,042,383
2023	20,588,053	20,755,679	23	1,375,092
2022	(10,879,698)	(10,984,392)	22	(748,463)
2021	39,402,891	39,762,835	21	2,792,023
2020	8,697,313	8,698,052	20	630,733
2019	197,244,650	205,424,566	24	13,256,186
Total		**$ 315,825,833**		**$ 20,639,781**

Plan Experience

Exhibit B.6 Plan Experience for Fiscal Year 2024		
Liabilities		
1.	Actuarial Accrued Liability at January 1, 2024	782,274,483
2.	Normal Cost for Fiscal Year 2024	27,629,264
3.	Benefit Payments during Fiscal Year 2024	50,000,119
4.	Interest on Items 1-3 to End of Year	53,989,476
5.	Change in Actuarial Accrued Liability Due to Assumption Changes	0
6.	Expected Actuarial Accrued Liability at January 1, 2025	813,893,104
7.	Actual Actuarial Accrued Liability at January 1, 2025	822,848,452
8.	Liability Gain/(Loss)	(8,955,348)
	15.(b) Non-Service Purchase Gain/(Loss)	(6,538,442)
	8.(b) Change Due to Service Purchase	(2,416,906)
Assets		
9.	Actuarial Value of Assets at January 1, 2024	$ 488,127,478
10.	Benefit Payments and Administrative Expenses during Fiscal Year 2024	50,690,756
11.	Expected Contributions during Fiscal Year 2024	47,104,320
12.	Interest on Items 9 -11 to End of Year	34,045,521
13.	Expected Actuarial Value of Assets at January 1, 2025	518,586,563
14.	Actual Actuarial Value of Assets at January 1, 2025	507,022,619
15.	Total Asset and Contribution Gain/(Loss)	(11,563,944)
	15.(a) Asset Gain/(Loss)	(10,675,347)
	15.(b) Contribution Gain/(Loss)	(3,305,503)
	15.(c) Change Due to Service Purchase	2,416,906
Total		
16.	Total Gain/(Loss)	**$ (20,519,292)**

Plan Experience By Source

Exhibit B.7 Plan Experience for Fiscal Year 2024 Gain/(Loss) by Source		
1. Asset Gain/(Loss)	$	(10,675,347)
2. Contribution Gain/(Loss)	$	(3,305,503)
3. Non-Service Purchase Liability Gain/(Loss)		
a. Salary Gain/(Loss)	$	(4,005,121)
b. New Members and Rehire Gain/(Loss)		(596,775)
c. Withdrawal Gain/(Loss)		866,607
d. Disability Gain/(Loss)		(31,466)
e. Retirement Gain/(Loss)		(1,172,965)
f. Active Mortality Gain/(Loss)		(91,324)
g. Annuitant Mortality Gain/(Loss)		418,324
h. Other Demographic		(1,925,722)
i. Total	$	(6,538,442)
4. Total Gain/(Loss)	$	(20,519,292)

SECTION C

PLAN ASSETS

Statement of Plan Net Assets

Exhibit C.1
Statement of Plan Net Assets

	December 31, 2024	December 31, 2023
Assets		
Investments, at fair value:		
Cash	$ 9,538,013	$ 8,754,129
Domestic Equities	137,467,029	128,304,197
International Equities	69,545,361	70,818,773
Fixed income	103,553,565	102,177,691
Real assets	89,361,602	69,104,716
Diversifying Alternatives	61,499,799	60,799,038
Commodities funds	1,998,293	17,436,814
Total cash and investments	$ 472,963,662	$ 457,395,358
Receivables	314,436	556,507
Capital Assets, Net	0	0
Total assets	$ 473,278,098	$ 457,951,865
Liabilities and net assets held in trust for benefits		
Accrued liabilities	964,642	853,056
Total payables	$ 964,642	$ 853,056
Net assets held in trust for pension benefits	$ 472,313,456	$ 457,098,809

Statement of Changes in Plan Net Assets

Exhibit C.2 Statement of Changes in Plan Net Assets				
		Year Ended December 31, 2024		Year Ended December 31, 2023
Additions to Net Assets Attributed to:				
Contributions:				
Employer contributions	$	25,606,613	$	22,894,284
Employees contributions		20,719,063		19,292,372
Other		3,377		5,873
Total contributions	$	46,329,053	$	42,192,529
Investment Income:				
Net appreciation in fair value of investments	$	16,316,797	$	27,919,698
Interest and Dividends		5,461,999		4,639,931
Total Investment Income	$	21,778,796	$	32,559,629
Less Investment expense		(2,202,446)		(2,200,302)
Net investment income	$	19,576,350	$	30,359,327
Total additions	$	65,905,403	$	72,551,856
Deductions to Net Assets Attributed to:				
Benefit payments	$	44,640,053	$	42,672,326
Termination Refunds		4,622,395		3,266,880
Death		737,671		456,184
Administrative expenses		690,637		601,472
Total deductions	$	50,690,756	$	46,996,862
Change in net assets		15,214,647		25,554,994
Net assets held in trust for benefits:				
Beginning of year		457,098,809		431,543,815
End of year	$	472,313,456	$	457,098,809

Actuarial Value of Assets

Exhibit C.3
Development of the Actuarial Value of Assets

	Item				Year Ending December 31, 2024
1.	Actuarial value of assets, at beginning of year (prior to corridor)				$ 488,127,478
2.	Market value of assets, at beginning of year				$ 457,098,809
3.	Net new investments				
	a. Contributions received for prior plan year				$ 46,329,053
	b. Benefits paid and administrative expenses				(50,690,756)
	c. Net				$ (4,361,703)
4.	Market value of assets, at end of year				$ 472,313,456
5.	Net MVA earnings [(4) - (2) - (3c)]				$ 19,576,350
6.	Assumed investment return rate				7.00%
7.	Expected return				$ 31,846,839
8.	Excess return [(5) - (7)]				$ (12,270,489)
9.	Expected actuarial value of assets as of December 31, 2024 [(1) + (3c) + (7)]				$ 515,612,614
10.	Deferred amounts for fiscal year ending December 31,				
	Year	Gain/(Loss)	20% Recognized This Year	Percent Deferred	Amount Deferred
	a. 2024	$ (12,270,489)	$ (2,454,098)	80%	$ (9,816,391)
	b. 2023	316,568	63,314	60%	189,940
	c. 2022	(83,809,355)	(16,761,871)	40%	(33,523,742)
	d. 2021	42,205,158	8,441,032	20%	8,441,030
	e. 2020	10,608,136	2,121,628	0%	0
	f. Total	$ (42,949,982)	$ (8,589,995)		$ (34,709,163)
11.	Asset gain/(loss) to be recognized as of December 31, 2024				$ (8,589,995)
12.	80% of Market Value				$ 377,850,765
13.	120% of Market Value				$ 566,776,147
14.	Actuarial value of assets [(Item 9 + Item 11), but not more than Item 13 or less than Item 12]				$ 507,022,619

Annual Rates of Investment Return

Exhibit C.4 Average Annual Rates of Investment Return				
Fiscal Year Ended December 31,	Actuarial Value		Market Value	
	Annual	Cumulative	Annual	Cumulative
1995	11.2 %	11.2 %	21.4 %	21.4 %
1996	12.0	11.6	16.4	18.9
1997	12.4	11.9	16.5	18.1
1998	14.0	12.4	11.4	16.4
1999	13.7	12.7	4.8	14.0
2000	9.5	12.1	0.8	11.7
2001	5.7	11.2	(2.5)	9.5
2002	(2.4)	9.4	(8.0)	7.2
2003	3.0	8.7	26.3	9.1
2004	5.7	8.4	10.9	9.3
2005	6.9	8.2	5.9	9.0
2006	9.9	8.4	14.8	9.5
2007	12.1	8.6	7.3	9.3
2008	(11.5)	7.1	(28.1)	6.1
2009	15.6	7.6	16.1	6.7
2010	2.3	7.3	13.4	7.1
2011	0.0	6.8	(2.0)	6.6
2012	0.7	6.5	12.3	6.9
2013	10.4	6.7	14.4	7.3
2014	9.1	6.8	6.9	7.2
2015	6.3	6.8	(0.7)	6.8
2016	7.7	6.8	9.2	7.0
2017	8.2	6.9	13.5	7.2
2018	5.4	6.8	(2.7)	6.8
2019	6.0	6.8	15.2	7.1
2020	8.1	6.8	9.7	7.2
2021	10.1	7.0	16.9	7.6
2022	5.7	6.9	(10.2)	6.9
2023	6.4	6.9	7.1	6.9
2024	4.8	6.8	4.3	6.8

SECTION D

SUMMARY OF BENEFIT PROVISIONS

Summary of Benefit Provisions

Based on the Plan Originally effective September 1, 1967 and amended and restated effective January 1, 2022

Participation

Employers included in the Plan are El Paso County, El Paso County Public Health; Pikes Peak Library District; 4th Judicial District Attorney; El Paso County Board of Retirement; and any other agency, district, or governmental organization with employees now in existence or hereafter formed that is authorized for participation in the Plan by the Retirement Board.

Membership in the Retirement Plan is automatic upon the first day of Covered Employment. You are in Covered Employment when you are an elected or appointed official defined as a full-time employee or as a job-share employee by the Employer's Personnel Rules, Regulations and Policies.

You are not eligible to participate in the Retirement Plan if you are (1) officers and employees of any federally funded program that specifically excludes the use of federal funds for retirement programs and (2) leased employees within the meaning of Code Section 414(n)(2).

Member Contributions

Effective January 1, 2014, each member contributes 8.00% of compensation on a monthly basis. Effective July 1, 2005 interest on contributions is credited at a rate of 3.0% per annum compounded annually.

Contribution Accumulation means the sum of the Member's contributions to this Plan, together with the interest rate thereon.

After December 31, 1983 member contributions are picked up and paid by the County as provided in Code Section 414(h).

Employer Contributions

The Employer will contribute an amount that along with member contributions will be sufficient to provide benefits provided by the plan and pay all administrative expenses of the plan. The Employer will contribute an amount that along with member contributions will be sufficient to provide benefits provided by the plan and pay all administrative expenses of the plan. The Employer will contribute according to the following schedule:

- The Employer will contribute at a rate of 10.20% of pay for the period from January 1, 2022 through December 31, 2022.
- The Employer will contribute at a rate of 10.80% of pay for the period from January 1, 2023 through December 31, 2023.
- The Employer will contribute at a rate of 11.40% of pay for the period from January 1, 2024 through December 31, 2024.
- The Employer will contribute at a rate of 12.00% of pay for the period from January 1, 2025 and thereafter.

Credited Service

The sum of Past Service, Membership Service and Purchased Service. The Credited Service is used in determining the amount of pension benefits and benefit eligibility. Past Service includes any period of service rendered as a Full-Time Employee prior to September 1, 1967. Membership Service includes all service rendered as a Full-Time Employee after August 21, 1967. Purchased Service is limited to five years and is subject to the conditions outlined in Article IV Section 7 of the Plan Document. All service is measured in years and months.

Compensation

Compensation is the total regular compensation paid to the member, reflecting the normal regular salary or hourly wage rate, before any payroll deductions for income tax, Social Security, group insurance, or any other purpose, excluding bonuses, extra pay, overtime pay, workers' compensation, single-sum payments received in lieu of accrued vacation and sick leave upon termination of employment or during the course of employment, required contributions by the County under this Plan, or for Social Security, group insurance, retainers' fees under contract, or the like, but including compensation deferred under Sections 125, 403(b), 414(h), or 457 of the Internal Revenue Code.

Final Average Monthly Compensation

- *Members hired prior to January 1, 2022:*

  The average compensation of the highest paid 36 successive paid calendar months of Credited Service within the last 120 calendar months of Credited Service.

- *Members hired on or after January 1, 2022:*

  The average compensation of the highest paid 60 successive paid calendar months of Credited Service within the last 60 calendar months of Credited Service.

Accrued Benefit (Monthly)

The benefit determined as for normal retirement payable at the member's normal retirement date considering current earnings and service.

Vested Accrued Benefit

Eligibility:

- *Members hired prior to January 1, 2013:*

  Five years of Credited Service.

- *Members hired on or after January 1, 2013:*

  Eight years of Credited Service.

Benefit:

100% of the Accrued Benefit determined as of the date of termination payable at his Normal Retirement Date. The benefit may be reduced if payment commences before the Normal Retirement Date or the Special Early Retirement Date. The member may elect to receive his accumulated contributions in lieu of all other benefits.

Normal Retirement

Eligibility:

- *Members hired prior to January 1, 2010:*

  Attainment of age 62.

- *Members hired on or after January 1, 2010 and prior to January 1, 2013:*

  Attainment of age 62 and 5 years of Credited Service.

- *Members hired on or after January 1, 2013:*

  Attainment of age 62 and 8 years of Credited Service.

Monthly Benefit:

- *Members hired prior to January 1, 2010:*

  2.22% of final average monthly compensation times years of credited service earned through December 31, 2012 plus 2.00% of final average monthly compensation times years of credited service earned on or after January 1, 2013.

  Benefit shall not be greater than 75% of the member's final average monthly compensation.

- *Members hired on or after January 1, 2010 and prior to January 1, 2013:*

  2.00% of final average monthly compensation times years of credited service.

  Benefit shall not be greater than 75% of the member's final average monthly compensation.

- *Members hired on or after January 1, 2013:*

  2.00% of final average monthly compensation times years of credited service.

  Benefit shall not be greater than 60% of the member's final average monthly compensation.

Regular Early Retirement

Eligibility:

- *Members hired prior to January 1, 2013:*

  Attainment of age 55 and 5 years of Credited Service.

- *Members hired on or after January 1, 2013:*

  Attainment of age 55 and 8 years of Credited Service.

Benefit:

Vested Accrued Benefit determined as of the Early Retirement Date, reduced by 0.25% for each month payments commence prior to the Normal Retirement Date.

Special Early Retirement

Eligibility:

- *Members hired prior to January 1, 2010:*

  Age plus credited service equals 75 or more at termination.

- *Members hired on or after January 1, 2010 and prior to January 1, 2013:*

- Attainment of 5 years of credited service and age plus credited service equals 75 or more at termination.

- *Members hired on or after January 1, 2013:*

  Attainment of 8 years of credited service and age plus credited service equals 75 or more at termination. A minimum age of 50 applies to members hired on or after January 1, 2016.

- *Members hired on or after January 1, 2022 and members rehired on or after January 1, 2016 after receiving a distribution of Accumulated Contributions (if first hired before January 1, 2022) (Does not apply to sworn officers):*

  Attainment of 8 years of credited service and age plus credited service equals 80 or more at termination. Minimum age of 50 applies.

Benefit:

Vested Accrued Benefit determined as of the Special Early Retirement Date, unreduced for early payment.

Disability Retirement

Eligibility:

Total and permanent disability. Member qualifies for disability under the County's long-term disability plan or under Title II of the Social Security Act.

Benefit:

Normal Retirement Benefit considering annual rate of compensation at disability and Credited Service that would have accumulated if employment had continued uninterrupted to the later of the Normal Retirement Date, or the date that the County's long-term disability benefits end.

Benefits commence at Normal Retirement Date, or if later, the first day of the month after payments cease under the County's long-term disability insurance contract. For members hired on or after January 1, 2022, the disability retirement age is equal to the applicable "retirement age" as defined in Title II of the Federal Social Security Act

Termination Benefit

Members with less than five years of Credited Service receive a refund of the member's contributions.

Pre-Retirement Death Benefit

- *Member is not vested at his death:*

  Beneficiary receives member's accumulated contributions at date of death.

- *Member is vested at his death:*

  Spouse receives two times member's accumulated contributions at date of death; or

  A monthly benefit equal to 60% of the member's vested accrued benefit on his date of death, commencing the first day of the month after the member's death or age 55 whichever is later. If the member dies while in active service, on or after attainment of age 62 or attainment of eligibility for immediate retirement under the rule of 75, the surviving spouse is eligible to receive a monthly benefit payable for life as if the member retired the day before death and elected the 100% joint and survivor annuity.

Post-Retirement Death Benefit

A lump sum death benefit of $3,000 is payable to the member's designated beneficiary. In addition, applicable benefits will be paid if the member has elected an option providing for payments to a beneficiary, or has elected the normal form of benefit and dies prior to having received benefits for 120 months, or prior to having received benefits equal to his total accumulated contributions as of the date of his retirement.

Normal Form

- *Members hired prior to January 1, 2022:*

  10-year certain and life

- *Members hired on or after January 1, 2022:*

  Straight life annuity

Optional Forms

- 100% joint and survivor annuity
- 50% joint and survivor annuity
- 100% joint and survivor annuity with pop up
- 50% joint and survivor annuity with pop up
- Single life annuity

Optional Form Conversion Factors

Optional annuity forms are actuarially equivalent based on 8.00% interest and the 1994 Group Annuity Mortality table blended 50% male and 50% female.

Payment Date

Benefits are paid on the first day of the month following eligibility for receipt.

SECTION E

SUMMARY OF PARTICIPANT DATA

Summary of Census Data

Exhibit E.1 Summary of Census Data		
	January 1, 2025	January 1, 2024
1. **Active Members**		
a. Counts[1]	3,140	3,078
b. Annual Projected Compensation[2]	$ 225,888,881	$ 214,103,946
c. Average Annual Compensation[2]	$ 73,436	$ 70,778
d. Average Age[2]	42.0	42.2
e. Average Service[2]	6.6	6.8
f. Accumulated Member Contributions with Interest[2]	$ 113,301,128	$ 108,537,023
2. **NonVested Members with Refunds Due**		
a. Counts	771	617
b. Amount of Refunds Due	$ 4,989,056	$ 3,736,758
3. **Deferred Vested Members[3]**		
a. Counts	360	343
b. Annual Deferred Benefits	$ 4,039,411	$ 3,623,857
c. Average Benefit	$ 11,221	$ 10,565
4. **Retired and Disabled Members**		
a. Counts	2,003	1,942
b. Annual Benefits	$ 43,955,763	$ 41,534,350
c. Average Benefit	$ 21,945	$ 21,387
5. **Beneficiaries**		
a. Counts	152	145
b. Annual Benefits	$ 2,142,077	$ 2,026,485
c. Average Benefit	$ 14,093	$ 13,976
6. Total Members Included in Valuation	6,426	6,125

[1] Includes 53 members on leave of absence in 2024 and 64 members on leave of absence in 2025.

[2] Excludes members on leave of absence

[3] Includes 7 deferred disableds and 2 deferred beneficiaries in 2024, and 6 deferred disableds and 1 deferred beneficiary in 2025.

Summary of Changes in Participant Status

Exhibit E.2
Summary of Changes in Participant Status
During Fiscal Year 2024

	Active Members[1]	With Deferred Benefits[2]	With Refunds Due	Retirees	Disabled Retirees	Beneficiaries	Total
As of January 1, 2024	3,078	343	617	1,929	13	145	6,125
Age retirements	(93)	(11)		104			0
Disability retirements		(1)			1		0
Deferred disability							0
Deaths	(1)			(20)	(1)	(2)	(24)
Vested terminations	(42)	42					0
Rehires	4		(3)	(1)			0
Cashouts	(215)	(12)	(59)				(286)
Expiration of benefits				(12)		(4)	(16)
Terminated nonvested with refunds due	(141)		141				0
New beneficiary or Alternate Payee		(1)		(10)		13	2
New entrants during the year[3]	550		75				625
Data correction							0
Net change	62	17	154	61		7	301
As of January 1, 2025	3,140	360	771	1,990	13	152	6,426

[1] Includes 53 members on leave of absence in 2024 and 64 members on leave of absence in 2025.

[2] Includes 6 deferred disabled members and 1 deferred beneficiary at January 1, 2025

[3] Includes 75 members who were hired and terminated in 2024 with refunds due.

Active Member Counts by Age and Service

Exhibit E.3
Active Member Counts by Age and Service[1]
as of January 1, 2025

Age	Service								
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 35	Total
Under 20	8								8
20-24	116	1							117
25-29	359	46	1						406
30-34	293	127	11	1					432
35-39	271	130	73	12					486
40-44	197	97	89	38	11				432
45-49	127	77	44	32	30	5			315
50-54	104	57	50	46	31	15	1		304
55-59	91	53	44	47	28	9	2	1	275
60-64	73	48	33	32	19	5	1	6	217
Over 65	29	11	19	10	10	3	1	1	84
Total	1,668	647	364	218	129	37	5	8	3,076

[1] Excludes 64 members on leave of absence.

Active Member Average Salary by Age and Service

Exhibit E.4 Active Member Average Salary at Valuation Date by Age and Service[1] as of January 1, 2025									
Age	**Service**								
	0-4	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**Over 35**	**Total**
Under 20	48,141								48,141
20-24	59,218	*							59,239
25-29	62,636	75,393	*						64,098
30-34	66,470	77,941	91,668	*					70,491
35-39	68,614	79,131	86,858	80,280					74,455
40-44	70,456	78,529	90,258	93,496	102,021				79,179
45-49	66,837	84,516	90,207	102,267	91,416	116,230			81,147
50-54	66,510	75,718	77,399	83,371	109,601	111,954	*		79,702
55-59	63,611	73,887	76,543	78,492	90,120	93,046	147,614	*	74,491
60-64	64,132	67,289	76,758	78,587	86,461	75,409	*	68,908	71,186
Over 65	67,526	83,094	61,013	86,819	67,649	83,697	*	*	71,168
Total	65,662	77,617	83,380	86,080	93,837	100,703	129,073	69,277	73,436

[1] Average Salary not shown if group contains less than three members

Inactive Member Annual Benefit Summary by Age

Exhibit E.5
Summary of Inactive Members

	Deferred Members[1]		Retired Members[2]		Beneficiaries/QDROs	
Age	**Number of Members**	**Annual Benefit**	**Number of Members**	**Annual Benefit**	**Number of Members**	**Annual Benefit**
<50	145	$ 1,807,373	7	$ 327,275	5	$ 86,718
50-54	97	1,227,633	41	1,838,812	3	45,796
55-59	81	721,003	140	4,175,788	2	17,594
60-64	36	274,574	326	8,829,508	13	355,230
65-69	1	8,828	460	10,254,228	21	416,651
70-74	0	0	429	8,846,840	28	359,214
75-79	0	0	322	5,602,031	32	347,647
80-84	0	0	169	2,684,763	25	280,343
85 & Up	0	0	109	1,396,516	23	232,885

[1] Includes 6 deferred disabled and 1 deferred beneficiary.

[2] Includes 13 disabled members.

Inactive Member Statistics

Exhibit E.6
Inactive Member Information as of January 1, 2025

			Annual Benefit
Participants Receving Benefits	**Counts**		**Amount**
Retired	1,990	$	43,749,661
Disabled	13		206,103
Beneficiaries	152		2,142,077
Total	2,155	$	46,097,841
Participants with Deferred Benefits			
Deferred Vested	353	$	3,967,548
Disabled	6		57,429
Beneficiaries	1		14,433
Total	360	$	4,039,410

Active Member Statistics

Exhibit E.7 Active Member Information as of January 1, 2025					
Active Participants as of January 1, 2024[1]	**Counts**	**Average Age**	**Average Service**	**Average Payroll**	
Continuing	2,317	43.0	7.4	$	71,995
New	708	36.7	0.6		55,088
Total	3,025	42.2	6.8	$	70,778
Active Participants as of January 1, 2025[1]					
Continuing	2,530	43.4	7.9	$	76,287
New	546	35.5	0.6		60,023
Total	3,076	42.0	6.6	$	73,436

[1]Excludes 53 members on leave of absence as of January 1, 2024 and 64 members on leave of absence as of January 1, 2025.

Closed Group Projected Participant Counts

Exhibit E.8 Closed Group Projected Participant Counts				
Fiscal Year Ended December 31,	Actives	Participants Receiving Benefits	Participants with Deferred Benefits	Total
2025	3,076	2,306	325	5,707
2026	2,649	2,427	306	5,382
2027	2,318	2,523	305	5,146
2028	2,054	2,610	310	4,974
2029	1,836	2,700	304	4,840
2030	1,653	2,774	311	4,738
2031	1,492	2,837	321	4,650
2032	1,352	2,891	332	4,575
2033	1,229	2,938	342	4,509
2034	1,122	2,980	345	4,447
2035	1,025	3,006	349	4,380
2036	937	3,032	341	4,310
2037	857	3,045	333	4,235
2038	783	3,057	317	4,157
2039	714	3,055	304	4,073
2040	651	3,052	285	3,988
2041	590	3,040	268	3,898
2042	534	3,029	242	3,805
2043	481	3,004	226	3,711
2044	430	2,982	201	3,613
2045	382	2,950	182	3,514
2046	335	2,916	160	3,411
2047	293	2,873	143	3,309
2048	251	2,825	125	3,201
2049	214	2,776	106	3,096
2050	179	2,722	86	2,987
2051	148	2,660	71	2,879
2052	121	2,597	54	2,772
2053	97	2,525	41	2,663
2054	77	2,449	30	2,556

Closed Group Projected Benefit Payments

Exhibit E.9 10-Year Projected Benefit Payments (Closed Group)			
Fiscal Year Ended December 31,	**Actives**	**Inactives**	**Total**
2025	$ 6,153,645	$46,390,979	$ 52,544,624
2026	8,278,607	46,309,165	54,587,772
2027	10,145,528	45,981,673	56,127,201
2028	11,972,853	45,551,455	57,524,308
2029	13,888,727	45,287,635	59,176,362
2030	15,759,830	44,864,722	60,624,552
2031	17,754,994	44,246,638	62,001,632
2032	19,761,166	43,617,203	63,378,369
2033	21,946,501	42,922,783	64,869,284
2034	24,608,209	42,281,867	66,890,076

History of Refunds

Exhibit E.10 History of Refunds	
Fiscal Year Ended December 31,	Refund Amount
1993	$ 633,773
1994	544,504
1995	976,233
1996	1,003,922
1997	1,037,519
1998	1,132,847
1999	1,292,444
2000	1,407,960
2001	1,597,686
2002	998,709
2003	1,414,807
2004	1,634,848
2005	1,755,564
2006	1,545,738
2007	1,841,048
2008	1,997,056
2009	1,912,000
2010	1,775,640
2011	2,222,415
2012	1,548,635
2013	2,152,586
2014	1,812,170
2015	2,669,776
2016	2,750,891
2017	2,580,883
2018	3,489,279
2019	3,793,270
2020	2,888,677
2021	4,851,083
2022	5,271,822
2023	3,266,880
2024	4,622,395

SECTION F

HISTORICAL SCHEDULES

Schedule of Funding Progress

Exhibit F.1 Schedule of Funding Progress						
Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Unfunded AAL (UAAL)	Funded Ratio	Covered Payroll	UAAL as a Percentage of Covered Payroll
(1)	(2)	(3)	(4)=(3)-(2)	(5)=(2)/(3)	(6)	(7)=(4)/(6)
1/1/2005	$ 219,697,172	$ 249,693,945	$ 29,996,773	88.0%	$ 92,757,865	32.3%
1/1/2006	234,660,873	270,180,072	35,519,199	86.9%	98,915,975	35.9%
1/1/2007	257,214,257	293,358,174	36,143,917	87.7%	103,402,651	35.0%
1/1/2008	285,740,434	312,549,096	26,808,662	91.4%	105,140,088	25.5%
1/1/2009	249,776,755	331,357,842	81,581,087	75.4%	102,703,108	79.4%
1/1/2010	282,841,807	354,376,983	71,535,176	79.8%	106,956,655	66.9%
1/1/2011	285,036,737	375,801,894	90,765,157	75.8%	112,232,244	80.9%
1/1/2012	280,213,871	393,086,243	112,872,372	71.3%	116,611,366	96.8%
1/1/2013	278,031,207	414,530,914	136,499,707	67.1%	115,762,200	117.9%
1/1/2014	301,765,407	434,464,401	132,698,994	69.5%	124,039,614	107.0%
1/1/2015	324,497,273	457,473,648	132,976,375	70.9%	130,478,820	101.9%
1/1/2016	339,106,141	484,640,011	145,533,870	70.0%	138,679,959	104.9%
1/1/2017	357,495,370	509,493,916	151,998,546	70.2%	146,372,726	103.8%
1/1/2018	378,292,120	531,589,132	153,297,012	71.2%	151,258,230	101.3%
1/1/2019	385,753,041	582,997,691	197,244,650	66.2%	158,714,516	124.3%
1/1/2020	396,034,427	603,800,177	207,765,750	65.6%	163,125,399	127.4%
1/1/2021	417,906,930	665,765,296	247,858,366	62.8%	173,607,206	142.8%
1/1/2022	448,487,993	687,487,828	238,999,835	65.2%	177,344,819	134.8%
1/1/2023	463,543,092	724,780,703	261,237,611	64.0%	195,194,383	133.8%
1/1/2024	488,127,478	782,274,483	294,147,005	62.4%	214,103,946	137.4%
1/1/2025	507,022,619	822,848,452	315,825,833	61.6%	225,888,881	139.8%

Schedule of Employer Contributions

Exhibit F.2 Schedule of Employer Contributions			
Fiscal Year Ended December 31,	Actuarially Determined Contribution	Actual County Contribution	Percentage Contributed
2012	$ 11,299,311	$ 8,736,581	77.3%
2013	13,574,900	8,930,855	65.8%
2014	10,603,632	10,321,799	97.3%
2015	10,763,245	10,638,797	98.8%
2016	11,628,725	11,315,200	97.3%
2017	12,259,925	11,941,183	97.4%
2018	12,466,202	12,329,099	98.9%
2019	16,314,533	12,912,807	79.1%
2020	17,269,676	14,230,827	82.4%
2021	22,756,704	14,078,462	61.9%
2022	22,553,655	19,089,097	84.6%
2023	24,550,852	22,894,284	93.3%
2024	29,901,876	25,606,613	85.6%
2025	32,270,479	TBD	TBD

Supplementary Information

Exhibit F.3 Supplementary Information	
Valuation Date	January 1, 2025
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percent of Payroll Closed
Remaining Amortization Period	24 Years
Asset Valuation Method	5-Year Smoothed Market
Actuarial Assumptions:	
Investment Rate of Return	7.00%
Projected Salary Increases	Service-based increases from 3.0% to 9.00%
Inflation	2.50%
Cost of Living Adjustments	N/A

SECTION G

ACTUARIAL ASSUMPTIONS AND METHODS

Summary of Actuarial Methods and Assumptions

I. Valuation Date

The valuation date is January 1st of each plan year. This is the date as of which the actuarial present value of future benefits and the actuarial value of assets are determined.

II. Actuarial Cost Method

The actuarial valuation uses the Entry Age Normal actuarial cost method. Under this method, the employer contribution rate is the sum of (i) the employer normal cost rate including administative expesnes, and (ii) a rate that will amortize the unfunded actuarial liability.

1. The valuation is prepared on the projected benefit basis. The present value of each participant's expected benefit payable at retirement or termination is determined, based on age, service, sex, compensation, and the interest rate assumed to be earned in the future. The calculations take into account the probability of a participant's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of terminating with a service benefit. Future salary increases are also anticipated. The present value of the expected benefits payable on account of the active participants is added to the present value of the expected future payments to retired participants and beneficiaries to obtain the present value of all expected benefits payable from the Plan on account of the present group of participants and beneficiaries.

2. The employer contributions required to support the benefits of the Plan are determined following a level percent funding approach, and consist of a normal cost contribution including administrative expenses and an accrued liability contribution.

3. The normal contribution is determined using the Entry Age Normal cost method. Under this method, a calculation is made to determine the average uniform and constant percentage rate of employer contribution which, if applied to the compensation of each new participant during the entire period of anticipated covered service, would be required in addition to the contributions of the participant to meet the cost of all benefits payable on their behalf.

4. The unfunded accrued liability contributions are determined by subtracting the actuarial value of assets from the actuarial accrued liability. Amortization bases are established each year and amortized as a level percentage of payroll based on the Board's policy. The Board's policy consists of amortizing the unfunded liability as of January 1, 2019, over a closed 30-year period with each subsequent amortization base created as a result of year to year experience changes over individual 25-year closed periods. The current year amortization base is determined by taking the current unfunded liability less the outstanding amounts of prior year bases.

III. Actuarial Value of Assets

The actuarial value of assets is based on recognizing gains and losses over a five-year period where gains and losses are determined by comparing the projected market value of assets (based on the prior year's market value of assets, cash flows during the year and expected investment returns on those amounts) to the current year's market value of assets. The actuarial value of assets must be between 80% and 120% of market value.

IV. Actuarial Assumptions

A. Economic Assumptions

1. Investment return: 7.00% per annum, compounded annually, composed of an assumed 2.50% inflation rate and a 4.50% real rate of return. This rate represents the assumed return, net of all investment expenses.
2. Salary increase rate: Inflation rate of 2.50%, plus merit and productivity component as shown.

Completed Years of Service	Percentage Increase in Salary		
	Merit	Inflation	Total
1	6.50 %	2.50 %	9.00 %
5	3.25	2.50	5.75
10	2.50	2.50	5.00
15	1.75	2.50	4.25
20	1.50	2.50	4.00
25	1.50	2.50	4.00

1. Wage inflation: 3.00%
2. Amortization Payroll growth: 3.00%

B. Demographic Assumptions

1. Mortality rates (pre- and post-retirement) – The valuation assumes fully generational mortality. The base mortality table used for pre-retirement is the PubG-2010 Employee Mortaity Table for General Employees, and the base morality table used for post-retirement is the PubG-2010 Healthy Retiree Mortality Table for General Employees. Females rates are set forward two years for both pre- and post-retirement. Future mortality improvements are assumed each year using the ultimate rates from the MP-2020 tables. Sample rates for 2025 shown below:

Sample Attained Ages	Probability of Death Pre-Retirement	
	Men	Women
20	0.03 %	0.01 %
25	0.02	0.01
30	0.03	0.01
35	0.04	0.02
40	0.05	0.04
45	0.08	0.05
50	0.12	0.08
55	0.18	0.12
60	0.26	0.18
65	0.38	0.30
70	0.58	0.50

Sample Attained Ages	Probability of Death Post-Retirement	
	Men	Women
20	0.03 %	0.01 %
25	0.02	0.01
30	0.03	0.01
35	0.04	0.02
40	0.05	0.04
45	0.09	0.09
50	0.24	0.20
55	0.35	0.26
60	0.50	0.37
65	0.75	0.62
70	1.27	1.11
75	2.24	1.98
80	4.04	3.62
85	7.54	7.01
90	13.35	12.95

1. Mortality rates (post-disablement) – PubG-2010 Disability Mortality Table for General Employees. Females rates are set forward two years. Future mortality improvements are assumed each year using the ultimate rates from the MP-2020 tables. Sample rates for 2025 shown below:

Sample Attained Ages	Probability of Death Post-Disability	
	Men	Women
20	0.34 %	0.16 %
25	0.23	0.16
30	0.29	0.25
35	0.37	0.39
40	0.53	0.61
45	0.82	0.95
50	1.31	1.29
55	1.72	1.49
60	2.04	1.67
65	2.50	2.01
70	3.24	2.69
75	4.35	3.92
80	6.22	6.06
85	9.49	9.66
90	14.78	14.22

3. Disability rates. Sample rates shown below:

Sample Attained Ages	Probability of Disablement Next Year	
	Men	Women
25	0.02 %	0.02 %
30	0.02	0.02
35	0.03	0.03
40	0.05	0.05
45	0.06	0.06
50	0.10	0.10
55	0.18	0.18
60	0.18	0.18

4. Termination rates (for causes other than death, disability or retirement): Termination rates are based on service. Termination rates are not applied after a member becomes eligible for a retirement benefit. Rates shown below:

Completed Years of Service	Probability of Termination Next Year	
	Men	Women
1	20.00	20.00 %
5	10.00	13.00
10	5.50	8.00
15	4.00	3.00
20+	2.00	2.00

5. Refund Assumption for Active Members Who Withdraw:

Completed Years of Service	Percent Electing Refund
0-7	100%
8	50%
9	40%
10+	15%

6. Retirement rates

Attained Age	Unreduced	Reduced
< 50	30.00%	
50	30.00%	
51	25.00%	
52	17.50%	
53	17.50%	
54	17.50%	
55	17.50%	7.00%
56	17.50%	7.00%
57	17.50%	8.00%
58	17.50%	9.00%
59	17.50%	10.00%
60	17.50%	10.00%
61	20.00%	10.00%
62	25.00%	
63	25.00%	
64	25.00%	
65	27.50%	
66	32.50%	
67	37.50%	
68	37.50%	
69-74	40.00%	
75+	100.00%	

C. Expense Loading. Based on an estimate for the year by applying a year of inflation to the actual administrative expenses from Fiscal Year 2024. For 2025, the administrative expense loading is $707,903.

D. Other Assumptions

1. Percent married: 75% of employees are assumed to be married.

2. Age difference: Male members are assumed to be three years older than their spouses, and female members are assumed to be three years younger than their spouses.

3. Cost of living adjustment: None.

4. Optional forms: Members are assumed to elect the normal form of benefit.

5. Future deferred vested participants are assumed to retire at age 55. Current deferred vested participants are assumed to retire at the earlier of age 57 or the age they meet special early retirement eligibility. Deferred disabled participants are assumed to commence benefits at age 62 (age 67 for members hired on or after January 1, 2022).

6. Pay increase timing: Middle of year.

7. Decrement timing: Decrements of all types are assumed to occur mid-year.

8. Eligibility testing: Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.

9. Decrement relativity: Decrement rates are used directly, without adjustment for multiple decrement table effects.

10. Incidence of Contributions: Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.

11. Normal cost: Calcuated on an open group basis to account for new entrant liaiblity.

SECTION H

RISKS ASSOCIATED WITH MEASURING THE ACCRUED LIABILITY

Risks Associated with Measuring the Accrued Liability and Actuarially Determined Contribution

The determination of the accrued liability and the actuarially determined contribution requires the use of assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that result from the differences between actual experience and the actuarial assumptions.

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

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

1. Investment risk – actual investment returns may differ from the expected returns;
2. Asset/Liability mismatch – changes in asset values may not match changes in liabilities, thereby altering the gap between the accrued liability and assets and consequently altering the funded status and contribution requirements;
3. Contribution risk – actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
4. Salary and Payroll risk – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
5. Longevity risk – members may live longer or shorter than expected and receive pensions for a period of time other than assumed;
6. Other demographic risks – members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

The effects of certain trends in experience can generally be anticipated. For example if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the cost of the plan can be expected to increase (or decrease). Likewise if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

Risks Associated with Measuring the Accrued Liability and Actuarially Determined Contribution

The computed contribution rate shown on Exhibit B.4 may be considered as a minimum contribution rate that complies with the Board's policy. Actual contributions are set by statute. The timely receipt of the contributions is critical to support the financial health of the plan. Users of this report should be aware that contributions made at the statutory rate do not necessarily guarantee benefit security.

Plan Maturity Measures

Risks facing a pension plan evolve over time. A young plan with virtually no investments and paying few benefits may experience little investment risk. An older plan with a large number of members in pay status and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures include the following:

	January 1, 2025	January 1, 2024	January 1, 2023	January 1, 2022	January 1, 2021
Ratio of the market value of assets to total payroll	2.1	2.1	2.2	2.8	2.5
Ratio of actuarial accrued liability to payroll	3.6	3.7	3.7	3.9	3.8
Ratio of actives to retirees and beneficiaries	1.5	1.5	1.5	1.5	1.5
Ratio of net cash flows to market value of assets	-0.8%	-1.0%	-2.3%	-2.2%	-2.1%
Duration of the actuarial accrued liability	12.3	12.3	12.3	12.3	12.1

Ratio of Market Value of Assets to Payroll

The relationship between assets and payroll is a useful indicator of the potential volatility of contributions. For example, if the market value of assets is 4.0 times the payroll, a return on assets 5% different than assumed would equal 20% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in plan sponsor contributions as a percentage of payroll.

Ratio of Actuarial Accrued Liability to Payroll

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of contributions for a fully funded plan. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time.

The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 5.5 times the payroll, a change in liability 2% other than assumed would equal 11% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also plan sponsor contributions) as a percentage of payroll.

Risks Associated with Measuring the Accrued Liability and Actuarially Determined Contribution

Ratio of Actives to Retirees and Beneficiaries
A young plan with many active members and few retirees will have a high ratio of active to retirees. A mature open plan may have close to the same number of actives to retirees resulting in a ratio near 1.0. A super-mature or closed plan may have significantly more retirees than actives resulting in a ratio below 1.0.

Ratio of Net Cash Flow to Market Value of Assets
A positive net cash flow means contributions exceed benefits and expenses. A negative cash flow means existing funds are being used to make payments. A certain amount of negative net cash flow is generally expected to occur when benefits are prefunded through a qualified trust. Large negative net cash flows as a percent of assets may indicate a super-mature plan or a need for additional contributions.

Duration of Actuarial Accrued Liability
The duration of the actuarial accrued liability may be used to approximate the sensitivity to a 1% change in the assumed rate of return. For example, duration of 10 indicates that the liability would increase approximately 10% if the assumed rate of return were lowered 1%.

Additional Risk Assessment
Additional risk assessment is outside the scope of the annual actuarial valuation. Additional assessment may include scenario tests, sensitivity tests, stochastic modeling, stress tests, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability.

Risks Measures – Low Default Risk Obligation Measure

Introduction

In December 2021, the Actuarial Standards Board (ASB) adopted a revision to Actuarial Standard of Practice (ASOP) No. 4, Measuring Pension Obligations and Determining Pension Plan Costs or Contributions. The revised ASOP No. 4 requires the calculation and disclosure of a liability referred to by the ASOP as the "Low-Default-Risk Obligation Measure" (LDROM). The rationale that the ASB cited for the calculation and disclosure of the LDROM was included in the Transmittal Memorandum of ASOP No. 4 and is presented below (emphasis added):

> "The ASB believes that the calculation and disclosure of this measure provides **appropriate, useful information for the intended user regarding the funded status of a pension plan**. The calculation and disclosure of this additional measure is **not intended to suggest that this is the "right" liability measure** for a pension plan. However, the ASB does believe that **this additional disclosure provides a more complete assessment of a plan's funded status and provides additional information regarding the security of benefits that members have earned as of the measurement date.**"

Comparing the Accrued Liabilities and the LDROM

One of the fundamental financial objectives of the El Paso County Retirement Plan (EPCRP) is to finance each member's retirement benefits over the period from the member's date of hire until the member's projected date of retirement (entry age actuarial cost method) as a level percentage of payroll. To fulfill this objective, the discount rate that is used to value the accrued liabilities of EPCRP is set equal to the expected return on the Fund's diversified portfolio of assets (referred to sometimes as the investment return assumption). For EPCRP, the investment return assumption is 7.00%.

The LDROM is meant to approximately represent the lump sum cost to a plan to purchase low-default-risk fixed income securities whose resulting cash flows essentially replicate in timing and amount the benefits earned (or the costs accrued) as of the measurement date. The LDROM is very dependent upon market interest rates at the time of the LDROM measurement. The lower the market interest rates, the higher the LDROM, and vice versa. The LDROM results presented in this report are based on the entry age actuarial cost method and discount rates based upon the intermediate rate from the FTSE Pension Discount Curve and Liability Index published by the Society of Actuaries. This rate is 5.49% as of December 31, 2024. This measure may not be appropriate for assessing the need for or amount of future contributions. This measure may not be appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligation.

The difference between the two measures (Valuation and LDROM) is one illustration of the savings the sponsor anticipates by taking on risk in a diversified portfolio.

Valuation AAL	LDROM AAL
$822,848,452	$983,388,195

SECTION I

30-YEAR BASELINE PROJECTION

Baseline Projections – 8.0% Employee and 12.0% Employer Contributions

El Paso County Retirement Plan
Projection Results Based on January 1, 2025 Actuarial Valuation
Discount Rate: 7.00%

Valuation as of January 1,	Market Return for FY Beginning on Valuation Date	Contribution Rate for Fiscal Year Following Valuation Date		Compensation for Fiscal Year	Employer Contributions for Fiscal Year (in Millions)	Actuarial Accrued Liability (AAL, in Millions)	Actuarial Value of Assets (AVA, in Millions)	Unfunded Actuarial Accrued Liability (UAAL, in Millions)	Funded Ratio	Market Value of Assets (MVA, in Millions)	Funded Ratio based on MVA
		Employee - %	Employer - %								
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
2025	7.00%	8.00%	12.00%	$226	$27	$823	$507	$316	61.6%	$472	57.4%
2026	7.00%	8.00%	12.00%	234	28	853	520	333	61.0%	496	58.2%
2027	7.00%	8.00%	12.00%	243	29	886	526	360	59.4%	521	58.8%
2028	7.00%	8.00%	12.00%	252	30	918	550	368	59.9%	547	59.6%
2029	7.00%	8.00%	12.00%	261	31	953	575	377	60.4%	575	60.4%
2030	7.00%	8.00%	12.00%	270	32	987	605	382	61.3%	605	61.3%
2031	7.00%	8.00%	12.00%	280	34	1,022	636	387	62.2%	636	62.2%
2032	7.00%	8.00%	12.00%	289	35	1,059	669	390	63.2%	669	63.2%
2033	7.00%	8.00%	12.00%	299	36	1,098	704	394	64.1%	704	64.1%
2034	7.00%	8.00%	12.00%	309	37	1,139	741	397	65.1%	741	65.1%
2035	7.00%	8.00%	12.00%	319	38	1,179	781	399	66.2%	781	66.2%
2036	7.00%	8.00%	12.00%	329	39	1,224	824	400	67.3%	824	67.3%
2037	7.00%	8.00%	12.00%	339	41	1,268	869	399	68.6%	869	68.6%
2038	7.00%	8.00%	12.00%	350	42	1,316	917	398	69.7%	917	69.7%
2039	7.00%	8.00%	12.00%	362	43	1,363	968	394	71.1%	968	71.1%
2040	7.00%	8.00%	12.00%	372	45	1,415	1,023	392	72.3%	1,023	72.3%
2041	7.00%	8.00%	12.00%	384	46	1,467	1,080	387	73.6%	1,080	73.6%
2042	7.00%	8.00%	12.00%	396	47	1,520	1,140	380	75.0%	1,140	75.0%
2043	7.00%	8.00%	12.00%	408	49	1,575	1,204	371	76.4%	1,204	76.4%
2044	7.00%	8.00%	12.00%	420	50	1,632	1,272	360	77.9%	1,272	77.9%
2045	7.00%	8.00%	12.00%	433	52	1,692	1,343	349	79.4%	1,343	79.4%
2046	7.00%	8.00%	12.00%	446	53	1,751	1,418	333	81.0%	1,418	81.0%
2047	7.00%	8.00%	12.00%	460	55	1,821	1,498	323	82.2%	1,498	82.2%
2048	7.00%	8.00%	12.00%	474	57	1,885	1,582	303	83.9%	1,582	83.9%
2049	7.00%	8.00%	12.00%	488	59	1,948	1,670	278	85.7%	1,670	85.7%
2050	7.00%	8.00%	12.00%	503	60	2,012	1,764	248	87.7%	1,764	87.7%
2051	7.00%	8.00%	12.00%	517	62	2,098	1,862	235	88.8%	1,862	88.8%
2052	7.00%	8.00%	12.00%	533	64	2,169	1,966	202	90.7%	1,966	90.7%
2053	7.00%	8.00%	12.00%	549	66	2,236	2,076	159	92.9%	2,076	92.9%
2054	7.00%	8.00%	12.00%	566	68	2,309	2,192	117	94.9%	2,192	94.9%
2055	7.00%	8.00%	12.00%	583	70	2,386	2,315	71	97.0%	2,315	97.0%