MONTARA WATER AND SANITARY DISTRICT AGENDA

For Meeting Of: **May 7, 2026**

TO: BOARD OF DIRECTORS

FROM: Clemens Heldmaier, General Manager

SUBJECT: Review and Possible Action Concerning Receipt of the June 30, 2025 Actuarial Valuation and Adjustments to Contribution Rates for the next two Fiscal Years (2026-27 & 2027-28).

Beginning in fiscal year 2015-16, the District adopted a defined benefit plan for employees. The District received an actuarial report to establish contribution rates for both the District and Employees based on current PEPRA laws. At that time, it was decided the District contribution would be 6.5% and the employee portion would be 8.25%.

The Plan has been in existence for ten (10) fiscal years. As prescribed by current CA regulations, the District has performed a bi-annual actuarial valuation in order to establish updated contribution rates.

The June 30, 2025 actuarial makes a number of assumptions regarding discount rates, payroll increases, and mortality. In addition to these assumptions, the actuarial also takes into account plan assets over the life of the fund and contributions over the past two fiscal years. For all intents & purposes the current report shows that the plan is fully funded.

The current actuarial recommends a reduction to the employer contribution rate beginning on July 1, 2026 (FY 2026-27) to 7.75%, a decrease of 0.91% from 8.66% used for fiscal year 2025-26.

The estimated impact of the 0.91% decrease on covered payroll will be calculated as a part of the budget process for FY 2026-27. This rate will be used for two fiscal years (FY 26-27 & FY 27-28). An updated valuation will be performed on measurement date 6/30/2027 for the fiscal years 2029-30 & 2030-31 which will get us back to our normal two year cycle.

Our current recommendation is to leave employee contribution rates unadjusted at 8.5%.

Braeleen Ballard with Foster - Foster will be presenting the results of the actuarial study.

MONTARA WATER AND SANITARY DISTRICT AGENDA

For Meeting Of: **May 7, 2026**

TO: BOARD OF DIRECTORS

FROM: Clemens Heldmaier, General Manager

RECOMMENDATION:

Receive and accept June 30, 2025 Actuarial Valuation Report of District PARS Retirement Plan and Adopt Resolution No._____ Adjusting Employer Paid Member Constributions for Fiscal Years 2026-27 and 2027-28.

Attachments

RESOLUTION NO. ____

RESOLUTION OF THE MONTARA WATER AND SANITARY DISTRICT ADJUSTING EMPLOYER PAID MEMBER CONTRTIBUTIONS FOR FISCAL YEARS 2026/27 & 2027/28

WHEREAS, the governing body of the of the Montara Water and Sanitary District ("District") has the authority to implement Government Code Section 20691; and

WHEREAS, the District has a written labor policy or agreement which specifically provides for the normal member contributions to be paid by the employer ("Employer Paid Member Contributions").

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF THE MONTARA WATER AND SANITARY DISTRICT, A PUBLIC AGENCY IN THE COUNTY OF SAN MATEO, CALIFORNIA, AS FOLLOWS:

The District Board identifies and adopts the following conditions for the purpose of its election to pay Employer Paid Member Contributions:

- This benefit shall apply to all employees of the District.
- This benefit shall consist of a reduction to the employer contribution rate as Employer Paid Member Contributions set forth in the Foster & Foster, Inc., June 30, 2025 Actuarial Valuation Report of District PARS Retirement Plan, which is incorporated by this reference as though fully set forth herein.
- The effective date of this Resolution shall be the date of its adoption for contribution rates commencing on July 1, 2026.
- The District General Manager is authorized to appropriate and transfer budget funds as necessary for the implementation of these conditions.

_____
President, Montara Water and Sanitary District

COUNTERSIGNED:

_____
Secretary, Montara Water and Sanitary District

* * * *

I HEREBY CERTIFY that the foregoing Resolution No. _____ was duly and regularly adopted and passed by the Board of Directors of the Montara Water and Sanitary District, San Mateo County, California, at a regular meeting on May 7, 2026 by the following vote:

AYES, Directors:

NOES, Directors:

ABSENT, Directors:

_____

Secretary, Montara Water and Sanitary District

Montara Water and Sanitary District PARS Retirement Plan

Actuarial Valuation

As of June 30, 2025
Plan Funding for Fiscal Year 2026/27 and 2027/28

FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

April 6, 2026

Clemens Heldmaier
General Manager

Re: Montara Water and Sanitary District PARS Retirement Plan
Actuarial Valuation as of June 30, 2025

Dear Mr. Heldmaier,

This report details the biennial actuarial valuation of the Montara Water and Sanitary District PARS Retirement Plan as of June 30, 2025. The valuation was performed to determine the Plan's June 30, 2025 funded status, calculate the fiscal year 2026/27 and 2027/28 Actuarially Determined Contributions, and calculate the employee contribution required under PEPRA. Use of the results for other purposes may not be applicable and could produce significantly different results.

DATA AND ASSUMPTIONS

In preparing this report, we have relied on:

- Census data for active employees and retirees supplied by the District
- Trust statements prepared by the trustee
- Program benefit design including copies of relevant documents
- Actuarial assumptions and methods described in this report

While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report. In our opinion, the assumptions used in the valuation represent reasonable expectations of anticipated experience. Other sets of assumptions and methods could also be reasonable and could produce materially different results.

DISCLOSURES AND LIMITATIONS

Future actuarial measurements may differ significantly from the current measurements presented in this report due to factors such as the following:

- Plan experience differing from that anticipated by the economic or demographic assumptions
- Changes in economic or demographic assumptions or in actuarial methods
- 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)
- Changes in plan provisions or applicable law

Due to the limited scope of this report, we did not provide an analysis of these potential differences.

In performing the analysis, we used third-party software to model (calculate) the underlying liabilities and costs. These results are reviewed in the aggregate and for individual sample lives. The output from the software is either used directly or input into internally developed models to generate the costs. All internally developed models are reviewed as part of the process. As a result of this review, we believe that the models have produced reasonable results. We do not believe there are any material inconsistencies among assumptions or unreasonable output produced due to the aggregation of assumptions.

ACTUARIAL CERTIFICATION

The valuation has been conducted in accordance with all applicable laws and regulations, as well as generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board.

The undersigned are familiar with the immediate and long-term aspects of Pension valuations and meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All the sections of this report are considered an integral part of the actuarial opinions.

To our knowledge, no associate of Foster & Foster, Inc. working on this report has any direct financial interest or indirect material interest in the Montara Water and Sanitary District PARS Retirement Plan. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

Respectfully submitted,
Foster & Foster, Inc.

Drew Ballard, FSA, EA, MAAA

Braeleen Ballard, FSA, EA, MAAA

TABLE OF CONTENTS

VALUATION RESULTS SUMMARY **5**

CHANGES SINCE PRIOR VALUATION **6**

DEVELOPMENT OF EMPLOYEE CONTRIBUTION RATE **7**

ACTUARIAL (GAIN)/LOSS **8**

ASSET INFORMATION **9**

Market Value of Plan Assets 9

Actuarial Value of Plan Assets 9

Development of Actuarial Value of Assets 10

Discount Rate Development 11

PARTICIPANT STATISTICS **12**

ACTUARIAL ASSUMPTIONS AND METHODS **15**

BENEFIT SUMMARY **17**

SUPPLEMENTARY INFORMATION **18**

Glossary 18

Discussion of Risk 20

VALUATION RESULTS SUMMARY

Valuation Date	6/30/2025	6/30/2023
Discount Rate	6.25%	6.25%
PRESENT VALUE OF FUTURE BENEFITS		
Actives	$3,291,476	$2,857,275
Inactives	178,528	223,140
Total Present Value of Future Benefits	3,470,004	3,080,415
ACTUARIAL ACCRUED LIABILITY (AAL)		
Actives	$1,578,452	$1,203,612
Inactives	178,528	223,140
Total AAL	1,756,980	1,426,752
ASSETS		
Market Value	$1,971,925	$1,383,214
Actuarial Value	1,844,711	1,421,254
UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)		
Market Value Basis	($214,945)	$43,538
Actuarial Value Basis	(87,731)	5,498
FUNDED RATIO		
Market Value Basis	112.2%	96.9%
Actuarial Value Basis	105.0%	99.6%
ACTUARIAL DETERMINED CONTRIBUTION (ADC)		
Employer Normal Cost (middle of year pmt)	$70,013	$72,137
Admin. Expenses paid from Trust	200	100
Amortization Payment[1]	-	740
Total	70,213	72,977
Projected Payroll (PEPRA-limited)	905,460	843,045
Employee Contribution Rate[2]	8.50%	8.50%
Total Employer Cost[3]	7.75%	8.66%
PARTICIPANT DATA		
Actives	8	8
Inactives[4]	4	4
Total	12	12

[1] As of 6/30/2025 the total plan has no UAAL (i.e. it is in a surplus position). The amortization of UAAL is $0, because PEPRA requires contributions at least equal to the normal cost.

[2] Percent of PEPRA-limited pay

[3] As percent of projected PEPRA-limited pay

[4] Includes terminated members awaiting a refund of contributions

CHANGES SINCE PRIOR VALUATION

PLAN CHANGES

There have been no plan changes since the prior valuation.

ACTUARIAL ASSUMPTION/METHOD CHANGES

Demographic assumptions and merit salary increases were updated based on the CalPERS 2000-2023 Experience Study.

The valuation reflects no method changes since the prior valuation.

DEVELOPMENT OF EMPLOYEE CONTRIBUTION RATE

The employee contribution rate is adjusted when the total normal cost rate changes by at least 1% of limited payroll, compared to the total normal cost rate from the valuation where the most recent adjustment was made. The most recent adjustment was made with the 6/30/23 valuation. The total normal cost rate in the 6/30/23 valuation was 17.06%. The total normal cost rate in the 6/30/25 valuation is 16.23%. Since the total normal cost change is not more than 1% of limited payroll, no adjustment has been made to the employee contribution rate.

	6/30/25 Valuation 2026/27 and 2027/28 Contributions
Normal Cost from 6/30/23 Valuation	
Total Normal Cost Rate	17.06%
Final Employee Contribution Rate	8.50%
(50% of total, rounded to the nearest ¼ %)	
Total Normal Cost Rate from 6/30/25 Valuation	16.23%
Change in Total Normal Cost Rate from 6/30/23 Valuation	0.83%
Change in Employee Contribution?	No
Final Employee Contribution Rate *(to be applied to PEPRA-Limited Payroll)*	8.50%

ACTUARIAL (GAIN)/LOSS

	Actuarial Accrued Liability	(Actuarial Value of Assets)	UAAL
ACTUAL ON 6/30/2023	$1,426,752	($1,421,254)	$5,498
EXPECTED ON 6/30/2025	1,813,540	(1,783,354)	30,186
EXPERIENCE (GAINS)/LOSSES			
Demographic/Other	57,485	-	57,485
Investment (Gain)/Loss	-	(61,357)	(61,357)
ASSUMPTION (GAINS)/LOSSES			
CalPERS Experience Study	(114,044)	-	(114,044)
TOTAL CHANGES	(56,559)	(61,357)	(117,917)
ACTUAL ON 6/30/2025	1,756,980	(1,844,711)	(87,731)

ASSET INFORMATION

MARKET VALUE OF PLAN ASSETS

	2023/24	2024/25
Market Value, Beginning of Year	$1,383,214	$1,630,512
Employer Contributions	61,058	62,728
Employee Contributions	63,534	66,595
Benefit Payments	(69,145)	(14,381)
Admin. Expenses	(147)	(157)
Net Investment Earnings	191,999	226,629
Market Value, End of Year	1,630,512	1,971,925
Approximate Return	13.6%	13.4%

ACTUARIAL VALUE OF PLAN ASSETS

	2023/24	2024/25
Market Value, Beginning of Year	$1,383,214	$1,630,512
Employer Contributions	61,058	62,728
Employee Contributions	63,534	66,595
Benefit Payments	(69,145)	(14,381)
Admin. Expenses	(147)	(157)
Expected Investment Earnings	88,185	105,499
Expected Market Value, End of Year	1,526,698	1,850,796
Actual Market Value, End of Year	1,630,512	1,971,925
Investment Gain/(Loss)	103,814	121,130
Deferred Investment Gain/(Loss)	51,644	127,215
Actuarial Value, End of Year	1,578,867	1,844,711
Approximate Return	7.1%	9.2%

DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS

CALCULATION OF ACTUARIAL VALUE OF ASSETS

		Gain/(Loss)	Recognition Percentage	Actuarial Value of Assets
Market Value of Assets, 6/30/2025				$1,971,925
Gains/(Losses) Not Yet Recognized,				
Year Ended:	6/30/2025	121,130	80%	96,904
	6/30/2024	103,814	60%	62,289
	6/30/2023	43,913	40%	17,565
	6/30/2022	(247,713)	20%	(49,543)
Total Deferred Investment Gains/(Losses)				127,215
Preliminary Actuarial Value of Assets, 6/30/2025				1,844,711
Limited Actuarial Value of Assets, 6/30/2025				1,844,711

DISCOUNT RATE DEVELOPMENT

	PARS Capital Appreciation	PARS Balanced	PARS Moderate	PARS Moderately Conservative	PARS Conservative
TARGET ALLOCATION					
Global Equity	75%	60%	50%	30%	15%
Fixed Income	20%	35%	45%	65%	80%
Cash	5%	5%	5%	5%	5%
Total	100%	100%	100%	100%	100%
DISCOUNT RATE CONFIDENCE LEVEL					
50%	**6.25%**	5.75%	5.50%	4.50%	4.00%
55%	6.00%	5.50%	5.25%	4.50%	3.75%
60%	5.50%	5.25%	5.00%	4.25%	3.75%

FUTURE EXPECTED RETURNS

- Stochastic simulations of geometric average returns over 20 years
- 5,000 trials
- 2.50% inflation assumption

Projections based on 8 independent Investment Advisors 2021 10-year Capital Market Assumptions and where available, investment advisors long-term trends.

PARTICIPANT STATISTICS

STATISTICAL DATA

	6/30/2019	6/30/2021	6/30/2023	6/30/2025
ACTIVES				
Number	7	8	8	8
Average Current Age	39.5	40.7	42.4	45.0
Average Service				
District	6.2	7.4	8.2	9.9
Benefit[5]	4.5	5.8	6.8	8.6
Total Payroll	$670,000	$844,000	$893,000	$992,000
SERVICE RETIREES				
Number	2	2	2	2
Average Current Age	67.2	69.2	71.2	73.2
Average Monthly Benefit	$537	$559	$581	$605
TERMINATED				
Number	-	1	2	2
Total Account Balance	n/a	$ 374	$54,013	$13,529

[5] Includes purchased service credit for District service before 7/1/2015

AGE AND SERVICE DISTRIBUTION

	Benefit Service							
Age	< 1	1-4	5-9	10-14	15-19	20-24	25+	Total
< 25	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-
30-34	-	-	1	-	-	-	-	1
35-39	1	-	2	1	-	-	-	4
40-44	-	-	-	-	-	-	-	-
45-49	-	-	-	-	-	-	-	-
50-54	-	-	-	1	-	-	-	1
55-59	-	-	1	-	1	-	-	2
60-64	-	-	-	-	-	-	-	-
65+	-	-	-	-	-	-	-	-
Total	1	-	4	2	1	-	-	8

PARTICIPANT RECONCILIATION

	Actives	Service Retirees	Survivors	Terminated	Total
Number, June 30, 2023	8	2	-	2	12
Terminations	(1)	-	-	1	-
Retirements	-	-	-	-	-
Deaths with Survivor	-	-	-	-	-
Deaths without Survivor	-	-	-	-	-
Data Corrections	-	-	-	-	-
New Hires	1	-	-	-	1
Refund of Contributions				(1)	(1)
Number, June 30, 2025	8	2	-	2	12

ACTUARIAL ASSUMPTIONS AND METHODS

Interest Rate	6.25% per year compounded annually, net of investment related expenses.
Mortality, Withdrawal, Disability and Retirement Rates	Rates from CalPERS 2000-2023 Experience Study. (previously 2000-2019) Mortality projected fully generational with Scale MP-2021.
Inflation	2.50%.
Salary Increases	Merit Increases – CalPERS 2000-2023 Experience Study (previously 2000-2019) Aggregate payroll increases – 2.75%
Funding Method	Entry Age Normal Cost Method.
Actuarial Asset Method	Investment gains and losses are smoothed over a 5-year period. In the first year, 20% of the prior year's gain or loss is recognized. In the second year 40%, in the third year 60%, in the fourth year 80%, and in the fifth year 100% of the gain or loss is recognized. The actuarial investment gain or loss is defined as the actual return on investments minus the actuarial assumed investment return. Actuarial Assets shall not be less than 80% nor greater than 120% of the Market Value of Assets.
Amortization Method	Level percentage of payroll, assuming 2.75% annual aggregate payroll growth
Amortization Period	10 years
Administrative Expenses	Expenses paid out of the fund other than investment-related expenses are assumed to be equal to the average of those paid in the previous two years.

BASIS FOR ASSUMPTIONS

- CalPERS 2000-2023 experience study was used
- Mortality improvement based on Society of Actuaries table
- Inflation based on our estimate for the Plan's very long time horizon
- Capital market assumptions based on 2021 Foster & Foster stochastic analysis, taking into account capital market assumptions of investment advisory firms
- Other demographic assumptions are based on our best estimates, taking into account the limited experience of this plan and other similarly situated plans

BENEFIT SUMMARY

Eligibility	Age 62 with 5 years District service.
Retirement Benefit	2% x Final Pay x Benefit Service payable at age 62. Final Pay is the highest average 36 months limited to PEPRA limit ($159,773 in 2026).
Service	Benefit service is years with District after 7/1/15 and purchased credit for District service before 7/1/2015.
Death Benefits	After 5 years District service – spousal benefit.
Termination	Refund of employee contributions with 3% interest or deferred formula benefit calculated at termination.
Disability	Refund of employee contributions with 3% interest or deferred formula benefit calculated at termination.
Employee Contributions	½ of Normal Cost. Calculated as a percent of pay up to PEPRA pay limit. Depends on discount rate and other actuarial assumptions. Recalculated in each actuarial valuation.
Service Buy-Back	Employees may purchase credit for District service before 7/1/2015 by paying the full actuarial cost.
COLA	2% increases per year after retirement.
Benefit Form	Single life annuity, spousal continuation benefits paid by retiree.

SUPPLEMENTARY INFORMATION

GLOSSARY

Actuarial Accrued Liability (AAL)	The portion of the actuarial present value of benefits, as determined under a particular actuarial cost method that is not provided for by future normal costs.
Actuarial Cost Method	A procedure for allocating the actuarial present value of projected benefits (and expenses, if applicable) to time periods, usually in the form of a normal cost and an actuarial accrued liability.
Actuarial Gain/Loss	A measure of the difference between actual experience and expected experience based on a set of actuarial assumptions during the period between two actuarial valuation dates.
Actuarial Value of Assets	The asset value used in the valuation to determine the actuarially determined contribution. It represents the plan's market value of assets with adjustments according to the plan's actuarial asset method. These adjustments produce a "smoothed" value that is likely to be less volatile from year to year than the market value of assets.
Actuarially Determined Contribution (ADC)	A target or recommended contribution as determined by the actuary for the applicable plan year. This is typically comprised of the normal cost (and expenses, if applicable) plus a UAAL amortization payment, adjusted for interest according to the timing of contributions during the applicable plan year.
Amortization Method	A method for determining the amount, timing, and pattern of recognition of the unfunded actuarial accrued liability
Discount Rate	The estimated long-term net expected return on assets used to determine the actuarial present value of benefits.
Entry Age Actuarial Cost Method	Under this method, the normal cost is the sum of the individual normal costs for all active participants. For an active participant, the normal cost is determined by allocating the actuarial present value of benefits on a level basis between the entry age and assumed exit age(s).

Market Value of Assets	The fair market value of plan assets as of the valuation date. This amount may be adjusted to produce an Actuarial Value of Assets for plan funding purposes.
Normal (Current Year's) Cost	The current year's cost for benefits yet to be funded. Under the Entry Age Normal cost method, it is determined for each participant as the present value of future benefits, determined as of the Member's entry age, amortized as a level percentage of compensation over the anticipated number of years of participation, determined as of the entry age.
Projected Annual Payroll	The projected annual rate of pay for the fiscal year following the fiscal year beginning on the valuation date of all covered Members.
Present Value of Benefits	The single sum value on the valuation date of all future benefits to be paid to current plan participants.
Total Annual Payroll	The projected annual rate of pay for the fiscal year beginning on the valuation date of all covered Members.
Unfunded Actuarial Accrued Liability (UAAL)	The difference between the actuarial accrued liability (described above) and the Actuarial Value of Assets. Under the Entry Age Normal Actuarial Cost Method, an actuarial gain or loss, based on actual versus expected UAAL, is determined in conjunction with each valuation of the plan.

DISCUSSION OF RISK

Actuarial Standards of Practice (ASOP) No. 51, Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions, states that the actuary should identify risks that, in the actuary's professional judgment, may reasonably be anticipated to significantly affect the plan's future financial condition.

Throughout this report, actuarial results are determined using various actuarial assumptions. These results are based on the premise that all future plan experience will align with the plan's actuarial assumptions; however, there is no guarantee that actual plan experience will align with the plan's assumptions. It is possible that actual plan experience will differ from anticipated experience in an unfavorable manner that will negatively impact the plan's funded position.

Below are examples of ways in which plan experience can deviate from assumptions and the potential impact of that deviation. Typically, this results in an actuarial gain or loss representing the current-year financial impact on the plan's unfunded liability of the experience differing from assumptions; this gain or loss is amortized over a period of time determined by the plan's amortization method. When assumptions are selected that adequately reflect plan experience, gains and losses typically offset one another in the long term, resulting in a relatively low impact on the plan's contribution requirements associated with plan experience. When assumptions are too optimistic, losses can accumulate over time and the plan's amortization payment could potentially grow to an unmanageable level.

- Investment Return: When the rate of return on the Actuarial Value of Assets falls short of the assumption, this produces a loss representing assumed investment earnings that were not realized. Further, it is unlikely that the plan will experience a scenario that matches the assumed return in each year as capital markets can be volatile from year to year. Therefore, contribution amounts can vary in the future.
- Salary Increases: When a plan participant experiences a salary increase that was greater than assumed, this produces a loss representing the cost of an increase in anticipated plan benefits for the participant as compared to the previous year. The total gain or loss associated with salary increases for the plan is the sum of salary gains and losses for all active participants.
- Payroll Growth: The plan's payroll growth assumption, if one is used, causes a predictable annual increase in the plan's amortization payment in order to produce an amortization payment that remains constant as a percentage of payroll if all assumptions are realized. If payroll increases less than the plan's payroll growth assumption, the plan's amortization payment can increase significantly as a percentage of payroll even if all assumptions other than the payroll growth assumption are realized.
- Demographic Assumptions: Actuarial results take into account various potential events that could happen to a plan participant, such as retirement, termination, disability, and death. Each of these potential events is assigned a liability based on the likelihood of the event and the financial consequence of the event for the plan. Accordingly, actuarial liabilities reflect a blend of financial

consequences associated with various possible outcomes (such as retirement at one of various possible ages). Once the outcome is known (e.g. the participant retires) the liability is adjusted to reflect the known outcome. This adjustment produces a gain or loss depending on whether the outcome was more or less favorable than other outcomes that could have occurred.

IMPACT OF PLAN MATURITY ON RISK

For newer pension plans, most of the participants and associated liabilities are related to active members who have not yet reached retirement age. As pension plans continue in operation and active members reach retirement ages, liabilities begin to shift from being primarily related to active members to being shared amongst active and retired members. Plan maturity is a measure of the extent to which this shift has occurred. It is important to understand that plan maturity can have an impact on risk tolerance and the overall risk characteristics of the plan. For example, closed plans with a large amount of retired liability do not have as long of a time horizon to recover from losses (such as losses on investments due to lower than expected investment returns) as plans where the majority of the liability is attributable to active members. For this reason, less tolerance for investment risk may be warranted for highly mature closed plans with a substantial inactive liability. Similarly, mature closed plans paying substantial retirement benefits resulting in a small positive or net negative cash flow can be more sensitive to near term investment volatility, particularly if the size of the fund is shrinking, which can result in less assets being available for investment in the market.

To assist with determining the maturity of the plan, we have provided some relevant metrics in the table following titled “Plan Maturity Measures and Other Risk Metrics”.

PLAN MATURITY MEASURES AND OTHER RISK METRICS

	6/30/2021	6/30/2023	6/30/2025
SUPPORT RATIO			
Total Actives	8	8	8
Total Inactives[6]	2	2	2
Actives / Inactives	400.0%	400.0%	400.0%
ASSET VOLATILITY RATIO			
Market Value of Assets (MVA)	1,226,208	1,383,214	1,971,925
Total Annual Payroll	844,000	893,000	992,000
MVA / Total Annual Payroll	145.3%	154.9%	198.8%
ACCRUED LIABILITY (AL) RATIO			
Inactive Accrued Liability	172,421	223,140	178,528
Total Accrued Liability (EAN)	1,034,099	1,426,752	1,756,980
Inactive AL / Total AL	16.7%	15.6%	10.2%
FUNDED RATIO			
Actuarial Value of Assets (AVA)	1,082,497	1,421,254	1,844,711
Total Accrued Liability (EAN)	1,034,099	1,426,752	1,756,980
AVA / Total AL	104.7%	99.6%	105.0%
NET CASH FLOW RATIO			
Net Cash Flow[7]	99,761	108,833	114,785
Market Value of Assets (MVA)	1,226,208	1,383,214	1,971,925
Net Cash Flow / MVA	8.1%	7.9%	5.8%

[6] Excludes terminated participants awaiting a refund of member contributions.
[7] Determined as total contributions minus benefit payments and administrative expenses.

LOW DEFAULT RISK OBLIGATION MEASURE

ASOP No. 4, Measuring Pension Obligations and Determining Pension Plan Costs or Contributions, was revised as of December 2021 to include a "low-default-risk obligation measure" (LDROM). This liability measure is consistent with the determination of the actuarial accrued liability shown on page 5 in terms of member data, plan provisions, and assumptions/methods, including the use of the Entry Age Normal Cost Method, except that the interest rate is tied to low-default-risk fixed income securities. The S&P Municipal Bond 20 Year High Grade Rate Index (daily rate closest to, but not later than, the measurement date) was selected to represent a current market rate of low risk but longer-term investments that could be included in a low-risk asset portfolio. The interest rate used in this valuation was 4.81%, resulting in an LDROM of $2.3 million. The LDROM should not be considered the "correct" liability measurement; it simply shows a possible outcome if the District elected to hold a very low risk asset portfolio. The District actually invests the pension plan's contributions in a diversified portfolio of stocks and bonds and other investments with the objective of maximizing investment returns at a reasonable level of risk. Consequently, the difference between the plan's Actuarial Accrued Liability disclosed earlier in this section and the LDROM can be thought of as representing the expected taxpayer savings from investing in the plan's diversified portfolio compared to investing only in high quality bonds.

The actuarial valuation reports the funded status and develops contributions based on the expected return of the plan's investment portfolio. If instead, the plan switched to investing exclusively in high quality bonds, the LDROM illustrates that reported funded status would be lower (which also implies that the Actuarially Determined Contributions would be higher), perhaps significantly.

It is important to note that the actuary has identified the risks above as the most significant risks based on the characteristics of the plan and the nature of the project, however, it is not an exhaustive list of potential risks that could be considered. Additional advanced modeling, as well as the identification of additional risks, can be provided at the request of the audience addressed on page 2 of this report.