ARIZONA CORRECTIONS OFFICER RETIREMENT PLAN

CONSOLIDATED REPORT

ACTUARIAL VALUATION
AS OF JUNE 30, 2024

CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR ENDING JUNE 30, 2026

FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

November 2024

Board of Trustees
Arizona Corrections Officer Retirement Plan
Phoenix, AZ

Re: Actuarial Valuation Report as of June 30, 2024 – Arizona Corrections Officer Retirement Plan

Dear Members of the Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the Arizona Corrections Officer Retirement Plan (CORP). The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to develop the appropriate funding requirements for the applicable plan year.

This report was prepared at the request of the Board and is intended for use by CORP and those designated or approved by the Board. It documents the valuation of the consolidated plan and provides summary information for CORP participating employers. This report may be provided to parties other than CORP only in its entirety and only with the permission of the Board. Foster & Foster is not responsible for the unauthorized use of this report.

The valuation has been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflects laws and regulations issued to date pursuant to the provisions of Title 38, Chapter 5, Article 6 of the Arizona Revised Statutes, as well as applicable federal laws and regulations. In our opinion, the assumptions used in this valuation, as adopted by the Board of Trustees, represent reasonable expectations of anticipated plan experience. Future actuarial measurements may differ significantly from the current measurements presented in this report for a variety of reasons including changes in applicable laws, changes in plan provisions, changes in assumptions, or plan experience differing from expectations. Due to the limited scope of the valuation, we did not perform an analysis of the potential range of such future measurements.

The computed contribution rates shown in the "Contribution Results" section should be considered minimum contribution rates that comply with the Board's funding policy and Arizona Statutes. Users of this report should be aware that contributions made at that rate do not guarantee benefit security. Given the importance of benefit security to any retirement system, we suggest that contributions to the Plan in excess of those presented in this report be considered.

The funding percentages and unfunded accrued liability as measured based on the actuarial value of assets will differ from similar measures based on the market value of assets. These measures, as provided, are appropriate for determining the adequacy of future contributions, but may not be appropriate for the purpose of settling a portion or all of the Plan's liabilities.

In conducting the valuation, we have relied on personnel, plan design, and asset information supplied by CORP through June 30, 2024 and the actuarial assumptions and methods described in the Actuarial Assumptions section of 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.

This valuation assumes the continuing ability of the participating employers to make the contributions necessary to fund this plan. A determination regarding whether or not the participating employers are actually able to do so is outside our scope of expertise. Consequently, we did not perform such an analysis.

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.

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 sections of this report are considered an integral part of the actuarial opinions.

To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the Arizona Corrections Officer Retirement Plan, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Arizona Corrections Officer Retirement Plan. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

If there are any questions, concerns, or comments about any of the items contained in this report, please contact us at 239-433-5500.

Respectfully Submitted,

Foster & Foster, Inc.

By: ______________________
Bradley R. Heinrichs, FSA, EA, MAAA

By: ______________________
Paul M. Baugher, FSA, EA, MAAA

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I. SUMMARY OF REPORT

The regular annual actuarial valuation of the Arizona Corrections Officer Retirement Plan, performed as of June 30, 2024, has been completed and the results are presented in this Report. The purpose of this valuation is to:

- Compute the liabilities associated with benefits likely to be paid on behalf of current retired and active members. This information is contained in the section entitled "Liability Support."
- Compare accumulated assets with the liabilities to assess the funded condition. This information is contained in the section entitled "Liability Support."
- Compute the employers' recommended contribution rates for the Fiscal Year beginning July 1, 2025. This information is contained in the section entitled "Contribution Results."

1. Key Valuation Results

The funded status as of June 30, 2024 and the employer contribution amounts applicable to the plan/fiscal year ending June 30, 2026 are as follows:

	Tier 1 & Tier 2 Members			Tier 3 Members *		
	Pension	**Health**	**Total**	**Pension**	**Health**	**Total**
Employer Contribution Rate	14.38%	0.00%	14.38%	4.07%	0.08%	4.15%
Funded Status	87.1%	169.2%	88.6%	98.7%	143.2%	99.6%

2. Comparison of Key Results to Prior Year

The chart below compares the results from this valuation with the results of the prior year's valuation (as of June 30, 2023):

Contribution Rate

	Tier 1 & Tier 2 Members			Tier 3 Members *		
Valuation Date	**Pension**	**Health**	**Total**	**Pension**	**Health**	**Total**
June 30, 2023	16.44%	0.00%	16.44%	4.13%	0.08%	4.21%
June 30, 2024	14.38%	0.00%	14.38%	4.07%	0.08%	4.15%

Funded Status

	Tier 1 & Tier 2 Members			Tier 3 Members		
Valuation Date	**Pension**	**Health**	**Total**	**Pension**	**Health**	**Total**
June 30, 2023	84.3%	164.3%	85.8%	101.0%	164.0%	102.3%
June 30, 2024	87.1%	169.2%	88.6%	98.7%	143.2%	99.6%

** The Tier 3 rates shown are the calculated rates as of the valuation date and do not reflect any Legacy costs that the employer must also contribute.*

3. Reasons for Change

Changes in the results from the prior year's valuation can be illustrated in the following tables along with high-level explanations for the entire Plan below:

Contribution Rate

	Tier 1 & Tier 2		Tier 3	
	Pension	**Health**	**Pension**	**Health**
Contribution Rate Last Valuation	16.44%	0.00%	4.13%	0.08%
Asset Experience	(0.03%)	(0.01%)	(0.01%)	0.00%
Payroll Base	(0.52%)	0.01%	0.00%	0.00%
Liability Experience	0.33%	(0.06%)	0.05%	0.00%
Additional Contributions	(1.49%)	0.00%	0.00%	0.00%
Assumption/Method Change	0.13%	0.00%	0.00%	0.00%
Other	(0.48%)	0.06%	(0.10%)	0.00%
Contribution Rate This Valuation	14.38%	0.00%	4.07%	0.08%

Funded Status

	Tier 1 & Tier 2		Tier 3	
	Pension	**Health**	**Pension**	**Health**
Funded Status Last Valuation	84.3%	164.3%	101.0%	164.0%
Asset Experience	0.0%	0.6%	0.2%	0.5%
Liability Experience	(0.5%)	2.9%	(18.9%)	(12.3%)
Additional Contributions	1.9%	0.0%	0.0%	0.0%
Assumption/Method Change	0.0%	0.0%	0.0%	0.0%
Other	1.4%	1.4%	16.4%	(9.0%)
Funded Status This Valuation	87.1%	169.2%	98.7%	143.2%

Assets Experience – Asset gains and losses (relative to the assumed earnings rate) are smoothed over seven years for Tiers 1 and 2 and over five years for Tier 3. The return on the market value of assets for the year ending June 30, 2024 was 10.2% for Tiers 1 and 2 and 10.7% for Tier 3. On a smoothed, actuarial value of assets basis, however, the average return was 7.1% for Tiers 1 and 2 and 7.2% for Tier 3. These returns nearly met the 2023 assumed earnings rate for Tiers 1 and 2 of 7.2% and exceeded the 2023 assumed earnings rate for Tier 3 of 7.0%.

Payroll Base – Under the current amortization policy for Tiers 1 and 2, the contribution rate is developed as a level percentage of payroll. Payroll for this purpose includes members of this plan and the defined contribution plan's members that would have been in this plan. To the extent that actual payroll is lower/greater than last year's projected payroll, the contribution rate will increase/decrease as a result.

Liability Experience – Experience overall was unfavorable, driven by higher than expected salary increases for actives and COLAs greater than expected.

Additional Contribution – Monies contributed in excess of the required contribution rate in order to pay down the unfunded liability.

Assumption / Method Change – The Board continued the decrease in the payroll growth assumption from 1.50% to 1.00%.

Other – This is the combination of all other factors that could impact liabilities year-over-year, with the primary sources being changes in member data.

4. Looking Ahead

The volatility in annual returns, which have produced both gains and losses in recent years, was dampened by the asset smoothing reflected in the actuarial value of assets. The gain realized this year will, in the absence of other losses, put downward pressure on the contribution rate next year.

5. Conclusion

The funded status for Tiers 1 and 2 will continue to improve if assumptions are met and contributions at least equal to the rates determined for each employer are made to the fund. The recent adoption of a layered amortization approach along with a plan to systematically lower the payroll growth assumption was an excellent step to improve funding and ensure the Plan is on a viable path.

The funded status for Tier 3 will stabilize as the population continues to grow, as contributions appear sufficient to keep the liabilities fully funded.

II. Contribution Results

Contribution Requirements

Development of Employer Contributions - Tiers 1 & 2 Members				
Valuation Date	June 30, 2024		June 30, 2023	
Applicable to Fiscal Year Ending	2026		2025	
	Rate	**Dollar**	**Rate**	**Dollar**
Pension				
Normal Cost				
Total Normal Cost	11.73%	$53,276,699	11.81%	$57,314,320
Employee Cost	(7.98%)	(36,247,127)	(7.96%)	(38,643,347)
Employer (Net) Normal Cost	3.75%	17,029,572	3.85%	18,670,973
Amortization of Unfunded Liability	10.63%	48,305,663	12.59%	61,103,780
Total Employer Cost (Pension)	14.38%	65,335,235	16.44%	79,774,753
Health				
Normal Cost	0.24%	$1,078,942	0.24%	$1,185,190
Amortization of Unfunded Liability	(0.24%)	(1,078,942)	(0.24%)	(1,185,190)
Total Employer Cost (Health)	0.00%	0	0.00%	0
Total Employer Cost (Pension + Health)	**14.38%**	**65,335,235**	**16.44%**	**79,774,753**
Total Minimum Contribution Requirement (if applicable)	6.00%		6.00%	
Alternate Contribution Rate (ACR) *	10.63%		12.59%	
Underlying Payroll (as of valuation date)		454,312,320		485,297,106

** The Alternate Contribution Rate is the sum of the positive amortization rates for Tiers 1 & 2 Pension and Health (subject to a 6% minimum) and is charged when retirees return to active status.*

The results above are shown both prior to and after the application of the statutory minimum contribution requirement of 6% of payroll.

Development of Employer Contributions – Tier 3 Members		
Valuation Date	June 30, 2024	June 30, 2023
Applicable to Fiscal Year Ending	2026	2025

Defined Benefit (DB) Retirement Plan [1]

	Rate	Dollar	Rate	Dollar
Pension				
Total Normal Cost	12.14%	$ 3,783,234	12.40%	$ 2,713,825
Amortization of Unfunded Liability	0.04%	12,465	0.00%	0
Total Pension Cost	12.18%	3,795,699	12.40%	2,713,825
Health				
Total Normal Cost	0.24%	74,792	0.24%	52,526
Amortization of Unfunded Liability	0.00%	0	0.00%	0
Total Health Cost	0.24%	74,792	0.24%	52,526
Total				
Total Calculated Tier 3 Required EE Individual Cost	8.27%	2,578,250	8.43%	1,844,234
Funding Policy Tier 3 Required EE Individual Cost [2]	8.38%	2,611,491	8.38%	1,834,020
Total Calculated Tier 3 Required ER Individual Cost (before Legacy)	4.15%	1,292,241	4.21%	922,117
Funding Policy Tier 3 Required ER Individual Cost (before Legacy) [2]	4.19%	1,305,746	4.19%	917,010
ER Legacy Cost of Tiers 1 & 2 Amort of Unfunded Liabilities [3]	35.27%	10,991,324	36.72%	8,036,423
Total Funding Policy Tier 3 Required ER Defined Benefit Cost	**39.46%**	**12,297,070**	**40.91%**	**8,953,433**
Underlying Payroll (as of valuation date)		31,163,379		21,885,684

[1] *Applicable to AOC Probation and Surveillance only.*

[2] *The "Funding Policy" cost was adopted in 2023 and first reflected in the June 30, 2023 valuation. This cost is a 3-year rolling average of the actual calculated costs. The total cost is split between employer and employee, in compliance with state statutes. Note that pension and health monies are split differently for the two parties based on IRS requirements. More information on this breakout is included in the "Historical Summary of Rates".*

[3] *Pursuant to ARS § 38-891(A), the amortization of positive unfunded liabilities for Tiers 1 & 2 shall be applied to all Tier 3 payroll on a level percent basis. However, while it is statutorily required to present the rates in this manner, these are the minimums where alternate methods for paying down that unfunded liability is at the discretion of each employer. Further, to understand the effects of reform in relation to Tier 3, compare the total rate of Tier 3 before application of those legacy costs.*

Development of Employer Contributions – Tier 3 Members		
Valuation Date	June 30, 2024	June 30, 2023
Applicable to Fiscal Year Ending	2026	2025

Defined Contribution (DC) Retirement Plan

	Rate	**Dollar**	**Rate**	**Dollar**
Tier 3 DC Only				
Employee Cost	7.00%	$ 21,152,611	7.00%	$ 16,549,827
Employee Health Subsidy Program Cost	0.20%	604,360	0.23%	543,780
Employee Disability Program Cost	0.43%	1,299,375	0.44%	1,040,275
Total Employee Cost	**7.63%**	**23,056,346**	**7.67%**	**18,133,882**
Employer Cost	5.00%	15,109,008	5.00%	11,821,305
Employer Health Subsidy Program Cost	0.20%	604,360	0.23%	543,780
Employer Disability Program Cost	0.43%	1,299,375	0.44%	1,040,275
Total Employer Cost (before Legacy)	**5.63%**	**17,012,743**	**5.67%**	**13,405,360**
ER Legacy Cost of Tiers 1 & 2 Amort of Unfunded Liabilities *	10.63%	32,121,751	12.59%	29,766,046
Total Employer Cost	**16.26%**	**49,134,494**	**18.26%**	**43,171,406**
Underlying Payroll (as of valuation date)		302,180,157		236,426,104

** Pursuant to ARS § 38-891(A), the amortization of positive unfunded liabilities for Tiers 1 & 2 shall be applied to all Tier 3 payroll on a level percent basis. However, while it is statutorily required to present the rates in this manner, these are the minimums where alternate methods for paying down that unfunded liability is at the discretion of each employer. Further, to understand the effects of reform in relation to Tier 3, compare the total rate of Tier 3 before application of those legacy costs.*

Historical Summary of Rates

			Pension			Health		
	Valuation Date June 30	**Fiscal Year Ending June 30**	**Normal Cost**	**Unfunded Amortization**	**Total**	**Normal Cost**	**Unfunded Amortization**	**Total**
TIERS 1 & 2	2020	2022	5.01%	26.42%	31.43%	0.29%	(0.19%)	0.10%
(Employer)	2021	2023	4.88%	20.59%	25.47%	0.29%	(0.29%)	0.00%
	2022	2024	4.52%	13.34%	17.86%	0.28%	(0.28%)	0.00%
	2023	2025	3.85%	12.59%	16.44%	0.24%	(0.24%)	0.00%
	2024	2026	3.75%	10.63%	14.38%	0.24%	(0.24%)	0.00%
TIER 3 *	2020	2022	4.95%	0.00%	4.95%	0.14%	0.00%	0.14%
(Employer)	2021	2023	4.95%	0.00%	4.95%	0.14%	0.00%	0.14%
	2022	2024	4.76%	0.00%	4.76%	0.14%	0.00%	0.14%
	2023	2025	4.05%	0.00%	4.05%	0.14%	0.00%	0.14%
	2024	2026	3.93%	0.01%	3.94%	0.25%	0.00%	0.25%
TIER 3 *	2020	2022	9.90%	0.00%	9.90%	0.28%	0.00%	0.28%
(Employee)	2021	2023	9.90%	0.00%	9.90%	0.28%	0.00%	0.28%
	2022	2024	9.52%	0.00%	9.52%	0.28%	0.00%	0.28%
	2023	2025	8.10%	0.00%	8.10%	0.28%	0.00%	0.28%
	2024	2026	8.37%	0.01%	8.38%	0.00%	0.00%	0.00%

* *Rates shown are Board approved Funding Policy rates. Starting in 2023, these rates are a 3-year rolling average of calculated EE/ER rates. Does not reflect Legacy costs that the employer must also contribute.*

III. Liability Support

Liabilities and Funded Ratios by Benefit - Tiers 1 & 2

	June 30, 2024	June 30, 2023
Pension		
Actuarial Present Value of Benefits (PVB)		
Retirees and Beneficiaries	$ 2,931,014,049	$ 2,756,301,888
Vested Members	66,982,620	60,564,766
Active Members	2,459,144,004	2,483,365,795
Total Actuarial Present Value of Benefits	5,457,140,673	5,300,232,449
Actuarial Accrued Liability (AAL)		
All Inactive Members	2,997,996,669	2,816,866,654
Active Members	2,122,049,525	2,116,344,649
Total Actuarial Accrued Liability	5,120,046,194	4,933,211,303
Actuarial Value of Assets (AVA)	4,461,039,238	4,158,864,289
Unfunded Actuarial Accrued Liability	659,006,956	774,347,014
Funded Ratio (AVA / PVB)	81.7%	78.5%
Funded Ratio (AVA / AAL)	87.1%	84.3%
Health		
Actuarial Present Value of Benefits (PVB)		
Retirees and Beneficiaries	$ 51,549,408	$ 48,782,939
Active Members	49,154,601	51,769,005
Total Present Value of Benefits	100,704,009	100,551,944
Actuarial Accrued Liability (AAL)		
All Inactive Members	51,549,408	48,782,939
Active Members	42,756,397	44,586,037
Total Actuarial Accrued Liability	94,305,805	93,368,976
Actuarial Value of Assets (AVA)	159,542,103	153,410,799
Unfunded Actuarial Accrued Liability	(65,236,298)	(60,041,823)
Funded Ratio (AVA / PVB)	158.4%	152.6%
Funded Ratio (AVA / AAL)	169.2%	164.3%

Pension liabilities were increased by $640,787 and health liabilities were increased by $140,542 under the lateral transfer methodology.

Liabilities and Funded Ratios by Benefit - Tier 3

	June 30, 2024	June 30, 2023
Pension		
Actuarial Present Value of Benefits (PVB)		
Retirees and Beneficiaries	267,667	0
Vested Members	1,086,964	652,521
Active Members	41,433,689	29,394,557
Total Actuarial Present Value of Benefits	42,788,320	30,047,078
Actuarial Accrued Liability (AAL)		
All Inactive Members	1,354,631	652,521
Active Members	10,199,534	6,456,660
Total Actuarial Accrued Liability	11,554,165	7,109,181
Actuarial Value of Assets (AVA)	11,409,593	7,181,569
Unfunded Actuarial Accrued Liability	144,572	(72,388)
Funded Ratio (AVA / PVB)	26.7%	23.9%
Funded Ratio (AVA / AAL)	98.7%	101.0%
Health		
Actuarial Present Value of Benefits (PVB)		
Retirees and Beneficiaries	0	0
Active Members	815,647	569,762
Total Present Value of Benefits	815,647	569,762
Actuarial Accrued Liability (AAL)		
All Inactive Members	0	0
Active Members	232,111	146,690
Total Actuarial Accrued Liability	232,111	146,690
Actuarial Value of Assets (AVA)	332,487	240,611
Unfunded Actuarial Accrued Liability	(100,376)	(93,921)
Funded Ratio (AVA / PVB)	40.8%	42.2%
Funded Ratio (AVA / AAL)	143.2%	164.0%

Derivation of Experience (Gain)/Loss

Actual experience will never exactly match assumed experience, except by coincidence. Ideally, gains and losses will cancel each other over a period of years, but sizable year-to-year fluctuations are common. Detail on the derivation of the experience (gain) / loss is shown below, along with sources of the gains and losses.

		Tiers 1 & 2		Tier 3	
		Pension	**Health**	**Pension**	**Health**
(1)	Unfunded Actuarial Accrued Liability as of June 30, 2023	774,347,014	(60,041,823)	(72,388)	(93,921)
(2)	Normal Cost Developed in Last Valuation	18,670,973	1,185,190	2,713,825	52,526
(3)	Actual Contributions	207,036,040	288,479	1,217,127	71,148
(4)	Expected Interest On (1), (2), and (3)	49,773,534	(4,247,882)	141,846	(5,414)
(5)	Expected Unfunded Actuarial Accrued Liability as of June 30, 2024 (1)+(2)-(3)+(4)	635,755,481	(63,392,994)	1,566,156	(117,957)
(6)	Changes to UAAL Due to Assumptions, Methods and Benefits	0	0	0	0
(7)	Change to UAAL Due to Actuarial (Gain)/Loss	23,251,475	(1,843,304)	(1,421,584)	17,581
(8)	Unfunded Actuarial Accrued Liability as of June 30, 2024	659,006,956	(65,236,298)	144,572	(100,376)

FY 2024 Gains and Losses by Source

	Tiers 1 & 2		Tier 3	
	Pension	**Health**	**Pension**	**Health**
Investment Return	(1,975,213)	(531,581)	(27,840)	(1,122)
Salary Increases	15,513,167	(1,085)	48,025	748
Retirement	(3,022,685)	(2,495,344)	-	-
Turnover	(11,917,805)	(528,207)	(41,488)	(2,969)
Disability	(3,099,311)	(10,178)	(118,116)	(1,885)
Death-In-Service	29,339	(38,742)	(37,228)	(2,321)
Retiree Mortality	(1,568,032)	(906,237)	267,685	-
Other *	29,292,015	2,668,070	(1,512,622)	25,130
Total	23,251,475	(1,843,304)	(1,421,584)	17,581

** The combination of all other factors that could impact liabilities year-over-year, with the primary sources being changes in member data.*

IV. ASSET SUPPORT

Statement of Changes in Fiduciary Net Position for Year Ended June 30, 2024

Market Value Basis

	Tiers 1 & 2		Tier 3	
	Pension	Health	Pension	Health
Additions				
Contributions				
Member Contributions	$ 36,347,101	$ 0	$ 2,579,213	$ 0
Employer Contributions	207,036,041	0	1,217,127	0
Health Insurance Contributions	0	288,479	0	71,148
Total Contributions	243,383,142	288,479	3,796,340	71,148
Investment Income				
Net Increase in Fair Value	308,616,042	11,187,906	712,380	20,965
Interest and Dividends	77,286,673	2,801,785	178,401	5,251
Other Income	43,335,058	1,570,976	100,031	2,944
Less Investment Expenses	(7,376,880)	(206,415)	(17,028)	(387)
Net Investment Income	421,860,893	15,354,252	973,784	28,773
Transfers In	156,439	0	0	0
Total Additions	665,400,474	15,642,731	4,770,124	99,921
Deductions				
Distributions to Members				
Benefit Payments	223,603,494	0	1,483	0
Health Insurance Subsidy	0	5,188,182	0	0
Refund of Contributions	12,920,345	0	208,614	0
Total Distributions	236,523,839	5,188,182	210,097	0
Administrative Expenses	4,495,402	148,786	26,315	815
Transfers Out	500,673	0	2,650	0
Other	0	0	0	0
Total Deductions	241,519,914	5,336,968	239,062	815
Net Increase / (Decrease)	423,880,560	10,305,763	4,531,062	99,106
Net Position Held in Trust				
Prior Valuation	4,075,752,784	152,400,221	7,046,946	237,348
Beginning of the Year Adjustment	4	0	0	0
End of the Year	4,499,633,348	162,705,984	11,578,008	336,454

Development of Pension Actuarial Value of Assets - Tiers 1 & 2

A. Investment Income	
A1. Actual Investment Income	$ 417,365,491
A2. Expected Amount for Immediate Recognition	293,684,667
A3. Amount Subject to Amortization	123,680,824

	Year Ended June 30						
B. Amortization Schedule	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
2024 Experience (A3 / 7)	17,668,689	17,668,689	17,668,689	17,668,689	17,668,689	17,668,689	17,668,690
2023 Experience	2,641,788	2,641,788	2,641,788	2,641,788	2,641,788	2,641,789	
2022 Experience	(55,178,167)	(55,178,167)	(55,178,167)	(55,178,167)	(55,178,167)		
2021 Experience	57,594,125	57,594,125	57,594,125	57,594,122			
2020 Experience	(13,457,282)	(13,457,282)	(13,457,281)				
2019 Experience	(5,782,115)	(5,782,112)					
2018 Experience	(1,511,825)						
Total Amortization	1,975,213	3,487,041	9,269,154	22,726,432	(34,867,690)	20,310,478	17,668,690

C. Actuarial Value of Assets	
C1. Actuarial Value of Assets, June 30, 2023	4,158,864,289
C2. Non-investment Net Cash Flow	6,515,069
C3. Preliminary Actuarial Value of Assets, June 30, 2024 (A2 + B + C1 + C2)	4,461,039,238
C4. Market Value of Assets, June 30, 2024	4,499,633,348
C5. Final Actuarial Value of Assets, June 30, 2024 (C3 Within 20% Corridor of C4)	4,461,039,238

D. Rates of Return	
D1. Market Value Rate of Return	10.2%
D2. Actuarial Value Rate of Return	7.1%

Development of Health Actuarial Value of Assets - Tiers 1 & 2

A. Investment Income	
A1. Actual Investment Income	$ 15,205,466
A2. Expected Amount for Immediate Recognition	10,499,426
A3. Amount Subject to Amortization	4,706,040

	Year Ended June 30						
B. Amortization Schedule	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
2024 Experience (A3 / 7)	672,291	672,291	672,291	672,291	672,291	672,291	672,294
2023 Experience	86,024	86,024	86,024	86,024	86,024	86,021	
2022 Experience	(2,435,759)	(2,435,759)	(2,435,759)	(2,435,759)	(2,435,757)		
2021 Experience	3,479,700	3,479,700	3,479,700	3,479,703			
2020 Experience	(806,920)	(806,920)	(806,919)				
2019 Experience	(382,214)	(382,213)					
2018 Experience	(81,541)						
Total Amortization	531,581	613,123	995,337	1,802,259	(1,677,442)	758,312	672,294

C. Actuarial Value of Assets	
C1. Actuarial Value of Assets, June 30, 2023	153,410,799
C2. Non-investment Net Cash Flow	(4,899,703)
C3. Preliminary Actuarial Value of Assets, June 30, 2024 (A2 + B + C1 + C2)	159,542,103
C4. Market Value of Assets, June 30, 2024	162,705,984
C5. Final Actuarial Value of Assets, June 30, 2024 (C3 Within 20% Corridor of C4)	159,542,103

D. Rates of Return	
D1. Market Value Rate of Return	10.1%
D2. Actuarial Value Rate of Return	7.3%

Development of Pension Actuarial Value of Assets - Tiers 3

A. Investment Income	
A1. Actual Investment Income	$ 947,469
A2. Expected Amount for Immediate Recognition	616,591
A3. Amount Subject to Amortization	330,878

	Year Ended June 30				
B. Amortization Schedule	**2024**	**2025**	**2026**	**2027**	**2028**
2024 Experience (A3 / 5)	66,176	66,176	66,176	66,176	66,174
2023 Experience	6,222	6,222	6,222	6,221	
2022 Experience	(79,022)	(79,022)	(79,020)		
2021 Experience	43,088	43,090			
2020 Experience	(8,624)				
Total Amortization	27,840	36,466	(6,622)	72,397	66,174

C. Actuarial Value of Assets	
C1. Actuarial Value of Assets, June 30, 2023	7,181,569
C2. Non-investment Net Cash Flow	3,583,593
C3. Preliminary Actuarial Value of Assets, June 30, 2024 (A2 + B + C1 + C2)	11,409,593
C4. Market Value of Assets, June 30, 2024	11,578,008
C5. Final Actuarial Value of Assets, June 30, 2024 (C3 Within 20% Corridor of C4)	11,409,593

D. Rates of Return	
D1. Market Value Rate of Return	10.7%
D2. Actuarial Value Rate of Return	7.2%

Development of Health Actuarial Value of Assets - Tiers 3

A. Investment Income	
A1. Actual Investment Income	$ 27,958
A2. Expected Amount for Immediate Recognition	19,606
A3. Amount Subject to Amortization	8,352

	Year Ended June 30				
B. Amortization Schedule	**2024**	**2025**	**2026**	**2027**	**2028**
2024 Experience (A3 / 5)	1,670	1,670	1,670	1,670	1,672
2023 Experience	167	167	167	168	
2022 Experience	(2,773)	(2,773)	(2,775)		
2021 Experience	2,330	2,331			
2020 Experience	(272)				
Total Amortization	1,122	1,395	(938)	1,838	1,672

C. Actuarial Value of Assets	
C1. Actuarial Value of Assets, June 30, 2023	240,611
C2. Non-investment Net Cash Flow	71,148
C3. Preliminary Actuarial Value of Assets, June 30, 2024 (A2 + B + C1 + C2)	332,487
C4. Market Value of Assets, June 30, 2024	336,454
C5. Final Actuarial Value of Assets, June 30, 2024 (C3 Within 20% Corridor of C4)	332,487

D. Rates of Return	
D1. Market Value Rate of Return	10.2%
D2. Actuarial Value Rate of Return	7.5%

V. Member Statistics

Valuation Data Summary

	June 30, 2024		June 30, 2023	
	Tiers 1 & 2	**Tier 3**	**Tiers 1 & 2**	**Tier 3**
Actives				
Number	6,572	512	7,341	386
Average Current Age	44.6	34.2	43.8	33.6
Average Age at Employment	30.5	32.0	30.5	31.6
Average Past Service	14.1	2.2	13.3	2.0
Average Annual Salary	$62,820	$57,492	$60,617	$53,835
Actives (transferred)				
Number	221	7	244	3
Average Current Age	39.3	33.8	38.3	30.4
Average Age at Employment	29.6	30.5	29.5	27.7
Average Past Service	9.7	3.3	8.9	2.7
Average Annual Salary	$62,808	$56,127	$57,896	$50,106
Retirees				
Number	6,241	0	5,983	0
Average Current Age	64.7	N/A	64.6	N/A
Average Annual Benefit	$32,721	N/A	$31,950	N/A
Beneficiaries				
Number	908	1	874	0
Average Current Age	70.2	42.5	69.9	N/A
Average Annual Benefit	$22,269	$17,795	$21,590	N/A
Disability Retirees				
Number	171	0	173	0
Average Current Age	60.6	N/A	60.1	N/A
Average Annual Benefit	$22,771	N/A	$22,550	N/A
Inactive / Vested				
Number	3,710	148	3,676	105
Average Current Age	41.9	35.6	41.1	35.3
Average Accumulated Contributions	$10,463	$6,878	$9,715	$5,978
Total Number	17,823	668	18,291	494
Former Members (transferred)	N/A	N/A	N/A	N/A

Counts and Pay Summary by Service - Tiers 1 & 2

	Past Service									
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30+**	**Total Count**	**Total Pay**	**Average Pay**
< 25	0	2	0	0	0	0	0	2	54,223	27,112
25 - 29	7	297	6	0	0	0	0	310	17,461,689	56,328
30 - 34	21	752	270	3	0	0	0	1,046	62,025,312	59,298
35 - 39	7	421	564	241	4	0	0	1,237	76,907,494	62,173
40 - 44	10	216	335	519	104	1	0	1,185	75,894,952	64,046
45 - 49	2	176	215	372	175	44	0	984	63,782,970	64,820
50 - 54	3	111	235	331	138	96	11	925	59,838,409	64,690
55 - 59	2	73	130	203	91	61	28	588	38,023,257	64,665
60 - 64	2	40	83	120	64	34	31	374	24,053,537	64,314
65+	0	25	38	29	27	10	13	142	8,694,135	61,226
Total	54	2,113	1,876	1,818	603	246	83	6,793	426,735,978	62,820

Counts and Pay Summary by Service - Tier 3

	Past Service									
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30+**	**Total Count**	**Total Pay**	**Average Pay**
< 25	57	0	0	0	0	0	0	57	3,279,258	57,531
25 - 29	156	5	0	0	0	0	0	161	9,175,710	56,992
30 - 34	94	19	0	0	0	0	0	113	6,654,829	58,892
35 - 39	65	10	0	0	0	0	0	75	4,395,167	58,602
40 - 44	37	6	0	0	0	0	0	43	2,498,377	58,102
45 - 49	28	4	0	0	0	0	0	32	1,802,458	56,327
50 - 54	11	4	0	0	0	0	0	15	823,552	54,903
55 - 59	17	0	0	0	0	0	0	17	956,327	56,255
60 - 64	4	0	0	0	0	0	0	4	198,623	49,656
65+	2	0	0	0	0	0	0	2	44,607	22,304
Total	471	48	0	0	0	0	0	519	29,828,908	57,474

In-Payment Counts and Benefit Summary – All Tiers

Age	Count	Average Annual Benefit
< 40	45	16,554
40 - 44	142	30,262
45 - 49	456	31,057
50 - 54	803	31,911
55 - 59	937	33,565
60 - 64	1,159	33,978
65 - 69	1,229	31,882
70 - 74	1,081	31,239
75 - 79	787	30,129
80 - 84	445	24,947
85 - 89	176	21,540
90 - 94	52	18,349
95 - 99	8	18,286
100+	1	31,934
Total	7,321	31,191

"In-Payment" refers to retired, beneficiary, and disabled members.

VI. Actuarial Assumptions and Methods

Interest Rate	This is the assumed earnings rate on System assets, compounded annually, net of investment and administrative expenses. ***Tiers 1 & 2:*** 7.20% per year. ***Tier 3:*** 7.00% per year.
Salary Increases	See table at the end of this section. This is an annual increase for individual member's salary. These rates are based on a 2022 experience study using actual plan experience.
Inflation	2.50%.
Tier 3 Compensation Limit	$72,947 for calendar 2023. Assumed increases of 2.00% per year thereafter
Cost-of-Living Adjustment	1.85%.
Mortality Rates	These rates are used to project future decrements from the population due to death. ***Active Lives:*** PubS-2010 Employee mortality, adjusted by a factor of 1.28 for male members and 1.11 for female members, with generational improvements using 85% of the most recent projection scale (currently Scale MP-2021). 100% of active deaths are assumed to be in the line of duty. ***Inactive Lives:*** PubS-2010 Healthy Retiree mortality, adjusted by a factor of 1.33 for male retirees and 1.13 for female retirees, with generational improvements using 85% of the most recent projection scale (currently Scale MP-2021). ***Beneficiaries:*** PubS-2010 Survivor mortality, adjusted by a factor of 0.99 for male beneficiaries and adjusted by a factor of 1.09 for female beneficiaries, with generational improvements with 85% of most recent projection scale (currently Scale MP-2021).

Disabled Lives:
PubS-2010 Disabled mortality, adjusted by a factor of 1.02 for male disabled members and 0.98 for female disabled members, with generational improvements using 85% of the most recent projection scale (currently Scale MP-2021).

The mortality assumptions sufficiently accommodate anticipated future mortality improvements.

Retirement

These rates are used to project future decrements from the active population due to retirement. The rates below are based on a 2022 experience study using actual plan experience.

Tier 1 – reaching 20 (25 for dispatchers) years of service after age 62:
Age-related rates based on age at retirement: 35% per year from age 62 - 74 and 100% assumed at age 75.

Tier 1 – reaching 20 (25 for dispatchers) years of service before age 62:
Service-related rates based on service at retirement. See complete table of rates at the end of this section.

Tiers 2 & 3:
Age-related rates based on age at retirement:

Age	Rate
53-54	40%
55	30%
56-57	15%
58-59	30%
60-61	65%
62+	100%

Termination Rate

These rates are used to project future decrements from the active population due to termination. Complete table of rates based on service at termination are provided at the end of this section. The rates apply to members prior to retirement eligibility and are based on a 2022 experience study using actual plan experience.

Disability Rate

These rates are used to project future decrements from the active population due to disability. Complete table of rates based on age at disability are provided at the end of this section. These rates are based on a 2022 experience study using actual plan experience. 80% of disablements are assumed to be duty-related.

Marital Status	For active members, 75% of males and 50% of females are assumed to be married. Actual marital status is used, where applicable, for inactive members.
Spouse's Age	Male spouses are assumed to be two years older than female members and female spouses are assumed to be three years younger than males members.
Benefit Commencement	Deferred members are assumed to commence benefits as follows: • Less than 10 years service (all tiers): immediate refund of contributions • Tier 1 (10+ years service): life annuity payable at age 62 • Tiers 2 & 3 (10+ years service): immediate refund of contributions
Reverse DROP Election	Based on experience provided by PSPRS, 20% of eligible members are assumed to elect the reverse DROP benefit. Interest is credited at 2.00% annually.
Health Care Utilization	For active members, 60% of retirees are expected to utilize retiree health care. Actual utilization is used for inactive members.
Funding Method	Entry Age Normal Cost Method.
Lateral Transfers	When active members transfer between employers, the new employer's liability starts from their new date of hire with no past service liability (i.e., all liability is accrued through normal cost). Per PSPRS administrative decision, once the new employer's liability is fully funded, the liability will reflect all past service liability.
Actuarial Asset Method	Method described below. Note that during periods when investment performance exceeds (falls short) of the assumed rate, the actuarial value of assets will tend to be less (greater) than the market value of assets. ***Tiers 1 & 2:*** Each year the assumed investment income is recognized in full while the difference between actual and assumed investment income are smoothed over a 7-year period subject to a 20% corridor around the market value. ***Tier 3:*** Each year the assumed investment income is recognized in full while the difference between actual and assumed investment income are

	smoothed over a 5-year period subject to a 20% corridor around the market value.
Funding Policy Amortization Method	***Tiers 1 & 2:*** Any positive UAAL (assets less than liabilities) is amortized using a layered approach beginning with the June 30, 2020 valuation, with new amounts determined according to a Level Dollar method over a closed period of 15 years (phased into from current period of at most 30 years). Initial layer from June 30, 2019 valuation continues to be amortized according to a Level Percentage of Payroll method. Any negative UAAL (assets greater than liabilities) is amortized according to a Level Dollar method over an open period of 20 years. ***Tier 3:*** Any positive UAAL (assets less than liabilities) is amortized according to a Level Dollar method over a closed period of 10 years. No amortization is made of any negative UAAL (assets greater than liabilities).
Payroll Growth	1.00% per year. This is the annual increase for total employer payroll.

Changes to Actuarial Assumptions and Methods Since the Prior Valuation

The payroll growth assumption was lowered from 1.50% to 1.00%.

There were no method changes since the prior valuation.

Retirement Rates Tier 1 20 (25) years before Age 62

Service	Rate
20	32%
21	32%
22	20%
23	17%
24	17%
25	17%
26	24%
27	17%
28	17%
29	17%
30	25%
31	25%
32	25%
33	25%
34	30%
35	30%
36	30%
37+	100%

Termination Rates

Service	Tier 1 and Tier 2	Tier 3
0	23.0%	15.0%
1	20.0%	13.5%
2	16.5%	12.0%
3	15.5%	11.0%
4	14.0%	9.0%
5	10.5%	8.0%
6	10.0%	7.0%
7	9.0%	6.0%
8	8.0%	6.0%
9	8.0%	6.0%
10	8.0%	6.0%
11	6.5%	2.5%
12	5.0%	2.5%
13	4.0%	2.5%
14	3.0%	2.5%
15	3.0%	2.5%
16	2.0%	2.0%
17	2.0%	1.5%
18	2.0%	1.0%
19	2.0%	0.5%
20+	2.0%	0.5%

Age	Disability Rates Rate	Salary Scale Rate
20	0.020%	6.25%
21	0.020%	6.00%
22	0.020%	5.50%
23	0.020%	5.25%
24	0.020%	5.25%
25	0.020%	5.25%
26	0.020%	5.25%
27	0.020%	5.00%
28	0.020%	5.00%
29	0.020%	5.00%
30	0.020%	4.75%
31	0.020%	4.75%
32	0.020%	4.50%
33	0.020%	4.50%
34	0.020%	4.25%
35	0.035%	4.25%
36	0.035%	4.00%
37	0.035%	4.00%
38	0.035%	3.75%
39	0.035%	3.75%
40	0.045%	3.75%
41	0.045%	3.75%
42	0.045%	3.75%
43	0.045%	3.50%
44	0.045%	3.50%
45	0.055%	3.50%
46	0.055%	3.50%
47	0.055%	3.50%
48	0.055%	3.50%
49	0.055%	3.50%
50	0.080%	3.50%
51	0.080%	3.50%
52	0.080%	3.25%
53	0.080%	3.25%
54	0.080%	3.25%
55	0.100%	3.25%
56	0.100%	3.25%
57	0.100%	3.25%
58	0.100%	3.00%
59	0.100%	3.00%
60	0.200%	3.00%
61+	0.000%	3.00%

VII. Discussion of Risk

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 under various assumption scenarios. 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. Whenever possible, the recommended assumptions in this report reflect conservatism to allow for some margin of unfavorable future plan experience. However, it is still 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 does not increase according to 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.

- Contribution risk: This risk results from the potential that actual employer contributions may deviate from actuarially determined contributions, which are determined in accordance with the Board's funding policy. The funding policy is intended to result in contribution requirements that if paid when due, will result in a reasonable expectation that assets will accumulate to be sufficient to pay plan benefits when due. Contribution deficits, particularly large deficits and those that occur repeatedly, increase future contribution requirements and put the plan at risk for not being able to pay plan benefits when due.

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, 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 plans with a substantial inactive liability. Similarly, mature 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". Highlights of this information are discussed below:

- The Support Ratio, determined as the ratio of active to inactive members, has decreased for Tiers 1 and 2 from 111.8% on June 30, 2020 to 61.6% on June 30, 2024. This is expected since the plan is closed to new active members. For Tier 3, the Ratio decreased from 1,164.3% on June 30, 2020 to 348.3% on June 30, 2024, consistent with the growth of a new group.
- The Accrued Liability Ratio, determined as the ratio of the Inactive Accrued Liability, which is the liability associated with members who are no longer employed but are due a benefit from the plan, to the Total Accrued Liability, is 58.6% for Tiers 1 and 2. With a group of this maturity, losses due to lower than expected investment returns or demographic factors will need to be made up for over a shorter time horizon than would be needed for a less mature plan.
- The Funded Ratio, determined as the ratio of the Actuarial Value of Assets to the Total Accrued Liability, has increased from 52.1% on June 30, 2020 to 87.1% on June 30, 2024, due mainly to contributions in excess of the required amount. For Tier 3, the Ratio decreased from 117.8% on June 30, 2020 to 98.7% on June 30, 2024, consistent with a new group with appropriate contribution rates.
- The Net Cash Flow Ratio, determined as the ratio of the Net Cash Flow (contributions minus benefit payments) to the Market Value of Assets, increased from 1.1% on June 30, 2020 to 0.1% on June 30,

2024, meaning that contributions are currently covering the group's benefit payments. For Tier 3, the Ratio was 31.0%, which is consistent with a new benefit that is beginning to accumulate assets.

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 pages 8 and 9 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 4.21%, resulting in an LDROM of $7,850,526,245 for Tiers 1 and 2 and $22,650,438 for Tier 3. The LDROM should not be considered the "correct" liability measurement; it simply shows a possible outcome if the Board elected to hold a very low risk asset portfolio. The Board 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. Unnecessarily high contribution requirements in the near term may not be affordable and could imperil plan sustainability and benefit security.

Plan Maturity Measures and Other Risk Metrics – Tiers 1 & 2

	6/30/2024	6/30/2023	6/30/2022	6/30/2021	6/30/2020
Support Ratio					
Total Actives	6,793	7,585	8,394	9,645	10,773
Total Inactives	11,030	10,706	10,527	10,106	9,639
Actives / Inactives	61.6%	70.8%	79.7%	95.4%	111.8%
Asset Volatility Ratio					
Market Value of Assets (MVA)	4,499,633,348	4,075,752,784	3,713,400,295	3,215,933,036	2,070,559,462
Total Annual Payroll	426,735,978	459,118,577	445,910,155	480,729,371	533,673,543
MVA / Total Annual Payroll	1,054.4%	887.7%	832.8%	669.0%	388.0%
Accrued Liability (AL) Ratio					
Inactive Accrued Liability	2,997,996,669	2,816,866,654	2,621,294,239	2,400,025,718	2,235,778,137
Total Accrued Liability	5,120,046,194	4,933,211,303	4,589,933,079	4,351,506,188	4,225,066,906
Inactive AL / Total AL	58.6%	57.1%	57.1%	55.2%	52.9%
Funded Ratio					
Actuarial Value of Assets (AVA)	4,461,039,238	4,158,864,289	3,822,268,062	2,964,749,664	2,202,747,086
Total Accrued Liability	5,120,046,194	4,933,211,303	4,589,933,079	4,351,506,188	4,225,066,906
AVA / Total Accrued Liability	87.1%	84.3%	83.3%	68.1%	52.1%
Net Cash Flow Ratio					
Net Cash Flow *	5,642,174	72,718,118	626,873,780	571,104,745	22,526,150
Market Value of Assets (MVA)	4,499,633,348	4,075,752,784	3,713,400,295	3,215,933,036	2,070,559,462
Net Cash Flow / MVA	0.1%	1.8%	16.9%	17.8%	1.1%

* *Determined as total contributions minus benefit payments. Administrative expenses are typically included but are considered part of the net interest rate assumption for this plan.*

Plan Maturity Measures and Other Risk Metrics – Tier 3

	6/30/2024	6/30/2023	6/30/2022	6/30/2021	6/30/2020
Support Ratio					
Total Actives	519	389	287	218	163
Total Inactives	149	105	61	37	14
Actives / Inactives	348.3%	370.5%	470.5%	589.2%	1,164.3%
Asset Volatility Ratio					
Market Value of Assets (MVA)	11,578,008	7,046,946	4,140,939	2,668,803	1,049,886
Total Annual Payroll	29,828,908	20,930,645	13,648,856	9,715,138	7,128,851
MVA / Total Annual Payroll	38.8%	33.7%	30.3%	27.5%	14.7%
Accrued Liability (AL) Ratio					
Inactive Accrued Liability	1,354,631	652,521	322,732	179,351	42,399
Total Accrued Liability	11,554,165	7,109,181	3,993,173	2,162,749	922,405
Inactive AL / Total AL	11.7%	9.2%	8.1%	8.3%	4.6%
Funded Ratio					
Actuarial Value of Assets (AVA)	11,409,593	7,181,569	4,345,704	2,523,714	1,086,471
Total Accrued Liability	11,554,165	7,109,181	3,993,173	2,162,749	922,405
AVA / Total Accrued Liability	98.7%	101.0%	108.8%	116.7%	117.8%
Net Cash Flow Ratio					
Net Cash Flow *	3,586,242	2,503,033	1,617,483	1,280,905	806,918
Market Value of Assets (MVA)	11,578,008	7,046,946	4,140,939	2,668,803	1,049,886
Net Cash Flow / MVA	31.0%	35.5%	39.1%	48.0%	76.9%

** Determined as total contributions minus benefit payments. Administrative expenses are typically included but are considered part of the net interest rate assumption for this plan.*

VIII. Summary of Current Plan

The following is a summary of the benefit provisions provided in Title 38, Chapter 5, Article 6 of the Arizona Revised Statutes.

Membership	Full-time employees of a participating employer in a designated position, whose customary employment is at least 40 hours each week. Includes employees hired after July 1, 2018 only if they are a judiciary probation or surveillance officer who makes the irrevocable election to participate in the plan.
Benefit Tiers	Benefits differ for members based on their hire date: Tier — Hire Date 1 — Hired before January 1, 2012 2 — Hired on or after January 1, 2012 but before July 1, 2018 3 — Hired on or after July 1, 2018
Salary	Salary is the amount including base salary, shift and military differential pay, and holiday pay, paid to an employee on a regular payroll basis. For Tier 3 members, salary is limited by statutory cap ($70,000 with adjustments by the Board).
Average Monthly Benefit Salary	***Tier 1:*** One-thirty-sixth of the highest total salary during a period of thirty-six consecutive months of service within the last one hundred twenty months of service. ***Tier 2 & 3:*** One-sixtieth of the highest total salary during a period of sixty consecutive months of service within the last one hundred twenty months of service.
Credited Service	Total periods of service, both from service other State plans and those compensated periods of service for which the member made contributions to the fund.
Normal Retirement Date	***Tier 1:*** First day of the month following attainment of 1) age 62 with 10 years of Credited Service, 2) 20 (25, if dispatcher) years of Credited Service, or 3) age and Credited Service points equal to 80.

Tier 2:
First day of month following the attainment of 1) age 52.5 with 25 years of Credited Service, or 2) age 62 with 10 years of Credited Service.

Tier 3:
First day of month following the attainment of age 55 with 10 years of Credited Service.

Benefit

Tier 1:
2.50% times Credited Service (up to 20 years) times Average Monthly Salary. If Credited Service exceeds 20 years, an additional 2.00% accrual is provided for up to five years. If Credited Service exceeds 25 years, the additional accrual for service in excess of 20 years is increased to 2.50%. Maximum benefit equals 80% of Average Monthly Salary.

Tier 2:
2.50% times Credited Service times Average Monthly Salary (maximum benefit equals 80% of Average Monthly Salary).

Tier 3:
Benefit multiplier (below) times Average Monthly Benefit Salary times Credited Service (maximum benefit of 80% of Average Monthly Benefit Salary):

Credited Service	Benefit Multiplier
10 years, but less than 15	1.25%
15 years, but less than 20	1.50%
20 years, but less than 22	1.75%
22 years, but less than 25	2.00%
25+ years	2.25%

Form of Benefit

For married retirees, an annuity payable for the life of the member with 80% continuing to the eligible spouse upon death. For unmarried retirees, the normal form is a single life annuity.

Early Retirement

Only applicable to Tier 3 members:

Date

Attainment of age 52.5 and 10 years of Credited Service.

Benefit

Actuarial equivalent of Normal Retirement benefit.

Disability Benefit – Duty-Related

Eligibility

Total and permanent disability incurred in performance of duty.

Benefit Amount: The greater of 1) 50% of Average Monthly Salary, and 2) the Normal Retirement pension that the member is entitled to receive.

Disability Benefit – Ordinary

Eligibility: Total and permanent disability not incurred in performance of duty.

Benefit Amount

- Dispatchers: Normal Retirement pension that the member is entitled to receive prorated on Credited Service (maximum 25 years) over 25.
- All Others: Normal Retirement pension that the member is entitled to receive prorated on Credited Service (maximum 20 years) over 20.

Pre-Retirement Death Benefit

Payable to Eligible Survivor: Payable to eligible spouse for life; payable to eligible children until adopted, age 18, or age 23 if full-time student. Note that this benefit is only payable following death of an active member.

- Service Incurred: 100% of Average Monthly Salary
- Non-Service Incurred: 40% of Average Monthly Salary.

No survivors: Two times member's accumulated contributions.

Vesting (Termination)

Deferred Annuity: ***Tier 1*:**
For those with 10 or more years of Credited Service, an annuity based on two times member's accumulated contributions, deferred to age 62. Member is not entitled to survivor benefits, benefit increases, or group health insurance subsidy.

Return of Contributions: ***Tier 1*:**
Lump sum payment of accumulated contributions, plus additional amount based on years of credited service.

Service	Additional % of Contributions
Less than 5 years	0%
5 years	25%
6 years	40%
7 years	55%
8 years	70%
9 years	85%
10+ years	100%

Tiers 2 & 3:
Lump sum payment of accumulated contributions, with interest at rate determined by the Board.

Cost-of-Living Adjustment

Payable to retired member or survivor of retired member

Tiers 1 & 2
Compound cost-of-living adjustment on base benefit. First payment is made on July 1, 2018, with annual adjustments effective every July 1 thereafter.

Cost-of-living adjustment will be based on the average annual percentage change in the Metropolitan Phoenix-Mesa Consumer Price Index published by the United states Department of Labor, Bureau of Statistics. Maximum increase of 2%.

Tier 3
Compound cost-of-living adjustment on base benefit beginning earlier of fist calendar year after the 7th anniversary of retirement or when the retired member reaches 60 years of age.
A cost-of-living adjustment shall be paid on July 1 each year that the funded ratio for members hired on or after July 1, 2018 is 70% or more.

The cost-of-living adjustment will be based on the average annual percentage change in the Metropolitan Phoenix-Mesa Consumer Price Index published by the United States Department of Labor, Bureau of Statistics. The cost-of-living adjustment will not exceed:

- 2%, if funded ratio for members who are hired on or after July 1, 2018 is 90% or more;
- 1.5%, if funded ratio for members who are hired on or after July 1, 2018 is 80-90%;
- 1%, if funded ratio for members who are hired on or after July 1, 2018 is 70-80%.

Reverse Deferred Retirement Option Plan (Reverse DROP):

Eligibility

Tier 1 and eligible for normal pension with at least 24 years of Credited Service (25 years for dispatchers). Must not have been awarded disability pension.

Reverse DROP Date

First day of month immediately following completion of required Credited Service or date not more than 60 consecutive months before the date the member elects to participate in the Reverse DROP, whichever is later.

Benefit Amount	Calculated based on Credited Service and Average Monthly Salary as of the Reverse DROP Date.
Reverse DROP Lump Sum	Accumulated benefit amounts (with interest) from Reverse DROP date to the date the member elected to participate in Reverse DROP. Interest is equal to the yield on five-year Treasury note as of the first day of the month, as published by the Federal Reserve Board.

<u>Post-Retirement Health Insurance Subsidy</u>

Eligibility: Retired member or survivor who elect health coverage provided by the state or participating employer.

Maximum Subsidy Amounts (monthly)

	Member Only	With Dependents
Medicare Eligible	$100	$170
One w/ Medicare	N/A	$215
Not Medicare Eligible	$150	$260

<u>Employee Contributions</u>

Tiers 1 and 2:
Non-dispatchers: 8.41% of salary, or 50/50 split of total employer and employee costs, whichever is lower, until the plan is 100% funded. Minimum contribution of 7.65% of salary.

Dispatchers: 0.45% less than non-dispatcher rate until plan is 100% funded; equal thereafter.

Tier 3:
66.7% of the Normal Cost plus 50% of a level-dollar amortization of unfunded actuarial accrued liability over a closed period not to exceed 10 years.

<u>Employer Contributions</u>

Tiers 1 & 2:
Normal Cost, plus amortization of unfunded actuarial accrued liability over a closed period not to exceed 20 years. Contribution will never be less than 6% of payroll.

Tier 3:
33.3% of the Normal Cost plus 50% of a level-dollar amortization of unfunded actuarial accrued liability over a closed period not to exceed 10 years.

Changes to Benefit Provisions Since the Prior Valuation

None.

IX. ACTUARIAL FUNDING POLICY

A pension plan funding policy describes how pension funding will improve for underfunded plans or maintain funded benefits for funded plans over time for those benefits defined in Arizona Revised Statutes (ARS). Those benefits defined in ARS are to be equitably managed and administered by the Arizona Public Safety Personnel Retirement System (PSPRS agency).

This Actuarial Funding Policy identifies the funding objectives and elements of the actuarial funding policy set by the Board for the PSPRS agency. The Board adopted this Funding Policy to help ensure the systematic funding of future benefit payments for members of the retirement systems as established by the legislature.

This policy covers all retirements systems administered by the Board: The Public Safety Personnel Retirement System (PSPRS); the Correction Officers Retirement Plan (CORP); and the Elected Officials Retirement Plan (EORP).

To achieve the systematic funding of future benefits, metrics are identified to measure the progress, or the lack of progress, over time to identify trends. These trends inform the continuation of the current policies or identify areas of needed research for consideration.

This funding policy is reviewed annually and adopted by the Board in accordance with ARS 38-863.02. This policy was reviewed and adopted by the Board in September 2024.

PSPRS Statement of Purpose

The Purpose of the Public Safety Personnel Retirement System is to provide uniform, consistent, and equitable statewide retirement programs for those who have been entrusted to our care.

Funding Objectives

1. Maintain adequate assets so that current plan assets, plus future contributions and investment earnings, are sufficient to fund all benefits expected to be paid to members and their beneficiaries.
    a. Corollary 1a: Current and future contributions should be calculated based upon assumptions that reflect the Board's best estimate of future experience and methods that appropriately allocate costs to address generational equity.
    b. Corollary 1b: While the shorter-term objective is to fully fund the Actuarial Accrued Liability (AAL) that estimates benefits earned as of the valuation date, contributions should target the long-term Present Value of Benefits (PVB) to fund all benefits and help offset risks.
    c. As closed plans mature, the target funding should be 110% of AAL or 100% of PVB, whichever is greater.

2. Maintain public policy goals of accountability and transparency through stakeholder communication and education. Each policy element is clear in intent and effect, and each should be considered in a balanced approach to determine how and when the funding requirements of the plan will be met.
    a. Corollary 2a: Board shall provide stakeholders with separate reports and tools to help explain current results as well as to help model future funding requirements.

3. Promote intergenerational equity. Defined benefit pensions are designed with a long-term perspective and designed to minimize contribution volatility that cannot avoid some level of generational cost shift. However, the goal is that each generation of members and employers (taxpayers) should, to the extent possible, incur the cost of benefits for the employees who provide services to them, rather than shifting those costs to other generations of members and employers (taxpayers).
    a. Corollary 3a: A systematic reduction of the Unfunded Actuarial Accrued Liability (UAAL) over a reasonable time period is paramount to achieving this objective.

Consideration can be given to reduce volatility, to the extent possible, of employer and employee contribution rates as long as the integrity of the objectives listed above is not compromised.

Elements of Actuarial Funding Policy

1. Actuarial Cost Method
    a. The Entry Age Normal level percent of pay actuarial cost method of valuation shall be used in determining the AAL and Normal Cost. Differences in the past between assumed experience and actual experience ("actuarial gains and losses") shall become part of the AAL. The Normal Cost shall be determined on an individual basis for each active member.

2. Asset Smoothing Method
    a. The investment gains or losses of each valuation period, resulting from the difference between the actual investment return and assumed investment return, shall be recognized annually in level amounts over five years (Tier 3) or seven years (Tiers 1 and 2) in calculating the Actuarial Value of Assets (AVA).
    b. The AVA so determined shall be subject to a 20% corridor relative to the Market Value of Assets (MVA).

3. Amortization Method (Unfunded Amounts)
    a. The AVA is subtracted from the computed AAL. Any unfunded amount is amortized as a level percent of payroll over a closed period.
    b. The unfunded liabilities, for EORP and Tiers 1 & 2 for both PSPRS and CORP, determined in the 6/30/2019 actuarial valuation will become the initial layer for each employer beginning with the 6/30/2020 actuarial valuation and amortized using the current closed year period for that employer and continue to decrease each year.
        i. The payroll growth rate assumption used to amortize the PSPRS 6/30/2019 Unfunded Liability will be decreased by 0.5% beginning with the 6/30/2021 actuarial valuation and again each year with the intention of ultimately achieving 0.0%.
        ii. The payroll growth rate used to amortize the Correction Officers Retirement Plan (CORP) 6/30/2019 Unfunded Liability will be 3.0% beginning with the 6/30/2020 actuarial valuation, and future years will be reduced by 0.5% until 0.0% is reached.
        iii. The payroll growth rate used to amortize the Elected Officials Retirement Plan (EORP) 6/30/2019 Unfunded Liability will be 2.5% beginning with the 6/30/2020 actuarial valuation, and future years will be reduced by 0.5% until 0.0% is reached.
    c. Gains and losses, for EORP and Tiers 1 & 2 for both PSPRS and CORP, for each employer beginning with the 6/30/2020 actuarial valuation will be amortized as a new layer over the same amortization period as the regular unfunded liability to a minimum of 15 years. Once the

amortization period for each employer decreases to 15 years, each subsequent year's gains and losses will be amortized as a new 15-year closed layer.

   i. The payroll growth rate used to amortize the unfunded liability for all Plans under this paragraph will be 0.0% (i.e. level-dollar amortization).

d. Tier 3 amortization methods are established in ARS 38-843.G and ARS 38-891.K.

4. Amortization Method (Overfunded Amounts)
   a. The AVA is subtracted from the target funding level (greater of 110% of AAL or 100% of PVB). Any overfunded amount is amortized as a level dollar amount over an open 10-year period.

5. Tier 3 Rate Calculation
   a. Tier 3 is distinct from Tiers 1 & 2 in PSPRS and CORP as the contributions are a shared percentage (50/50 split for PSPRS: for CORP, employer 1/3 and member 2/3 of the normal cost plus 50 percent each, member and employer, of the UAAL amortization) for employers and members based on the actuarially calculated rate. To reduce the impact of volatility to rates, the Tier 3 rates will be smoothed over a 3-year rolling period based on the actuarially calculated rates for each year's actuarial valuation.
      i. Beginning with the 6/30/2023 valuation, the prospective Tier 3 rates set by the Board of Trustees are planned to be a rolling average of the actuarial calculated Tier 3 rates using the 6/30/2023, 6/30/2022 and 6/30/2021 rates in the initial process.
      ii. As assumptions may be updated year-to-year, the prior calculated rates are not updated for those changes, the prior calculated rates are used to smooth in the new rates.
   b. At the May 2023 Board Meeting, the Board changed the assumed rate of return for CORP Tier 3, which was at 7.2%, to match the 7.0% assumed rate of return for PSPRS Tier 3. The Board committed to continue to monitor market conditions and directions with the intent to ultimately adopt a single assumed rate of return for all investments for retirement systems/plans administered by PSPRS agency.

6. Assumed Rate of Return (ARR)
   a. At the May 2023 Board Meeting, the Board changed the assumed rate of return for CORP Tier 3, which was at 7.2%, to match the 7.0% assumed rate of return for PSPRS Tier 3. The Board will continue to monitor market conditions and directions with the intent to ultimately adopt a single assumed rate of return for all investments for retirement systems/plans administered by PSPRS agency.

7. EORP Floor Considerations
   a. Establish a "floor" for EORP based on the immediately previous valuation by adjusting payroll growth, amortization periods of the original layer or other possible options, to improve funding in maintaining contribution levels opposed to reducing employer contributions.

Metrics to Monitor Funding Objectives

1. Appropriateness of Assumptions – Gain/Loss Experience (Corollary 1a)
   a. Metric: Do the cumulative gain/loss layers over the prior five years exceed 8% of plan assets?
   b. Measurement: History of annual gain/loss (split by asset and liability experience) and five-year cumulative results will be tracked.
   c. Action Plan: This metric assumes that a full experience study is performed at least every five years so objective of measurement is to monitor interim experience. If the metric answer is yes, a review of the sources or causes of gains and losses should be analyzed and presented to the Advisory Committee to provide a recommendation to the Board of Trustees. The analysis and presentation are intended to provide a basis for consideration if assumption changes are warranted between full experience studies.

2. Funding Targets (Corollary 1b)
   a. Metric: Has the funded status, on both an AAL and PVB basis when compared to the MVA, increased over a five-year period?
   b. Measurement: History of funded status measures will be tracked.
   c. Action Plan: If the answer is no and not readily explainable (e.g., significant assumption change), a review of the reason(s) for the decrease should be researched and presented to the Advisory Committee to provide a recommendation to the Board of Trustees. The analysis and presentation are intended to provide a basis for consideration if changes to assumptions and/or methods are warranted between full experience studies.

3. Communication with Stakeholders (Corollary 2a)
   a. Metric: Have reports and budgeting tools been provided to stakeholders in a timely fashion?
   b. Measurement: Yes/No answer based on input from PSPRS administrator. (An annual standard survey of stakeholders – 3 to 5 questions.)
   c. Action Plan: If the answer is no, and periodically regardless (e.g., every three years), PSPRS staff will revisit this metric to report to the Advisory Committee to provide a recommendation to the Board of Trustees if current reports / tools are sufficient and if the delivery timing is appropriate.

4. Timely Recognition of Costs (Corollary 3a)
   a. Metric: Has the percentage of unfunded liability subject to negative amortization decreased over a five-year lookback period?
   b. Measurement: History of unfunded liability subject to negative amortization as a percentage of total unfunded liability will be tracked.
   c. Action Plan: If the answer is no, and not readily explainable (e.g., adopted assumption changes being phased in are anticipated to address negative amortization), a review of the reason(s) for negative amortization should be researched and presented to the Advisory Committee to provide a recommendation to the Board of Trustees. The analysis and presentation are intended to provide a basis for consideration if changes to assumptions and/or methods are warranted between full experience studies.

X. GLOSSARY

Actuarial Accrued Liability – Computed differently under different funding methods, the actuarial accrued liability generally represents the portion of the actuarial present value of benefits attributable to service credit earned (or accrued) as of the valuation date.

Actuarial Present Value of Benefits – Amount which, together with future interest, is expected to be sufficient to pay all benefits to be paid in the future, regardless of when earned, as determined by the application of a particular set of actuarial assumptions; equivalent to the actuarial accrued liability plus the present value of future normal costs attributable to the members.

Actuarial Assumptions – Assumptions as to the occurrence of future events affecting pension costs. These assumptions include rates of investment earnings, changes in salary, rates of mortality, withdrawal, disablement, and retirement as well as statistics related to marriage and family composition.

Actuarial Cost Method – A method of determining the portion of the cost of a pension plan to be allocated to each year; sometimes referred to as the "actuarial funding method." Each cost method allocates a certain portion of the actuarial present value of benefits between the actuarial accrued liability and future normal costs.

Actuarial Equivalence – Series of payments with equal actuarial present values on a given date when valued using the same set of actuarial assumptions.

Actuarial Present Value - The amount of funds required as of a specified date to provide a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest, and by probabilities of payments between the specified date and the expected date of payment.

Actuarial Value of Assets – The value of cash, investments, and other property belonging to the pension plan as used by the actuary for the purpose of the actuarial valuation. This may correspond to market value of assets, or some modification using an asset valuation method to reduce the volatility of asset values.

Asset Gain (Loss) – That portion of the actuarial gain attributable to investment performance above (below) the expected rate of return in the actuarial assumptions.

Amortization – Paying off an interest-discounted amount with periodic payments of interest and (generally) principal, as opposed to paying off with a lump sum payment.

Amortization Payment – That portion of the pension plan contribution designated to pay interest and reduce the outstanding principal balance of unfunded actuarial accrued liability. If the amortization payment is less than the accrued interest on the unfunded actuarial accrued liability the outstanding principal balance will increase.

Assumed Earnings Rate – The interest rate used in developing present values to reflect the time value of money.

Decrements – Events which result in the termination of membership in the system such as retirement, disability, withdrawal, or death.

Entry Age Normal (EAN) Funding Method – A standard actuarial funding method whereby each member's normal costs (service costs) are generally level as a percentage of pay from entry age until retirement. The annual cost of benefits is comprised of the normal cost plus an amortization payment to reduce the UAL.

Experience Gain (Loss) – The difference between actual unfunded actuarial accrued liabilities and anticipated unfunded actuarial accrued liabilities during the period between two valuation dates. It is a measurement of the difference between actual and expected experience, and may be related to investment earnings above (or below) those expected or changes in the liability due to fewer (or greater) than expected numbers of retirements, deaths, disabilities, or withdrawals, or variances in pay increases relative to assumed pay increases. The effect of such gains (or losses) is to decrease (or increase) future costs.

Funded Ratio – A measure of the ratio of the actuarial value of assets to liabilities of the system. Typically, the assets used in the measure are the actuarial value of assets as determined by the asset valuation method. The funded ratio depends not only on the financial strength of the plan but also on the asset valuation method used to determine the assets and on the funding method used to determine the liabilities.

Market Value of Assets (MVA) – The value of assets as they would trade on an open market.

Normal Cost – Computed differently under different funding methods, generally that portion of the actuarial present value of benefits allocated to the current plan year.

Unfunded Actuarial Accrued Liability (UAAL) – The excess of the actuarial accrued liability over the valuation assets; sometimes referred to as "unfunded past service liability". UAL increases each time an actuarial loss occurs and when new benefits are added without being fully funded initially and decreases when actuarial gains occur.

APPENDIX A: SUMMARY OF POPULATION DATA BY EMPLOYER - TIERS 1 & 2

Employer Number	Employer Name	Number of Actives	Active Payroll	Number of Retirees	Annual Retiree Benefits	Number of Inactive/ Vested	Inactive/Vested Accum. Member Contrib.	Number Transferred Out
500	Department of Corrections - Detention	3,781	224,133,062	4,301	120,202,132	1,460	14,070,020	155
501	Dept of Juvenile Corrections - Detention	145	8,031,313	328	9,767,845	256	1,873,408	15
502	Pinal County - Detention	89	5,297,977	70	2,153,722	29	423,951	8
503	Gila County - Detention	18	1,212,615	19	368,433	35	278,635	3
504	Graham County - Detention	8	474,994	7	156,632	28	92,260	5
505	Maricopa County - Detention	1,064	73,550,559	871	30,325,750	518	7,306,908	62
506	City of Avondale - Detention	8	555,387	5	186,483	6	93,324	2
507	La Paz County - Detention	7	395,808	2	49,096	9	192,042	2
510	Yuma County - Detention	61	3,958,645	41	1,237,234	77	640,024	12
515	Pima County - Detention	199	13,426,760	274	9,011,706	184	2,052,704	12
520	Apache County - Detention	3	171,322	8	164,496	22	52,888	3
525	Cochise County - Detention	22	1,290,633	41	810,744	37	306,693	8
530	Coconino County - Detention	28	1,935,476	25	801,802	78	510,198	10
535	Mohave County - Detention	32	2,079,842	23	481,133	85	395,760	4
540	Santa Cruz County - Detention	4	152,892	6	154,920	30	251,460	2
545	Navajo County - Detention	15	857,018	12	268,031	42	193,074	7
550	Yavapai County - Detention	65	4,493,623	67	1,753,340	140	953,540	9
555	Pinal County - Dispatchers	3	189,398	5	193,476	8	60,840	0
556	Town of Oro Valley - Dispatchers	2	145,894	6	207,813	2	24,102	0
557	Town of Marana - Dispatchers	1	68,675	6	221,814	2	3,662	0
558	Gila County - Dispatchers	1	72,947	4	133,740	5	52,810	0
559	Town of Wickenburg - Dispatchers	0	0	3	48,487	2	47,538	0
560	Graham County - Dispatchers	1	54,913	1	37,713	3	20,838	0
561	Yavapai County - Dispatchers	1	72,947	3	70,902	1	46,428	0
562	City of Somerton - Dispatchers	2	104,043	2	75,244	2	42,896	0
563	Department of Public Safety - Dispatchers	9	632,586	24	980,870	4	57,932	0
564	Department of Public Safety - Detention	7	390,481	0	0	2	72,070	0
575	Administrative Office of the Courts	1,217	82,986,168	1,166	48,465,598	643	8,701,076	80
	TOTAL	6,793	426,735,978	7,320	228,329,156	3,710	38,817,081	N/A

APPENDIX B: SUMMARY OF PENSION FUNDED STATUS BY EMPLOYER - TIERS 1 & 2

Employer Number	Employer Name	Liability (PVB)	Liability (AAL)	Assets (AVA)	Assets (MV)	Unfunded (AAL - AVA)	Unfunded (AAL - MV)	Funded Percent (AVA/AAL)	Funded Percent (MV/AAL)
500	Department of Corrections - Detention	2,731,300,315	2,550,689,223	2,461,190,245	2,482,482,918	89,498,978	68,206,305	96.5%	97.3%
501	Dept of Juvenile Corrections - Detention	163,321,667	157,950,035	156,929,399	158,287,053	1,020,636	(337,018)	99.4%	100.2%
502	Pinal County - Detention	65,718,931	62,369,354	64,365,293	64,922,141	(1,995,939)	(2,552,787)	103.2%	104.1%
503	Gila County - Detention	10,968,092	10,187,208	10,139,976	10,227,701	47,232	(40,493)	99.5%	100.4%
504	Graham County - Detention	3,941,662	3,591,807	3,276,622	3,304,970	315,185	286,837	91.2%	92.0%
505	Maricopa County - Detention	859,367,585	799,923,122	722,633,040	728,884,807	77,290,082	71,038,315	90.3%	91.1%
506	City of Avondale - Detention	4,636,894	3,760,531	3,176,930	3,204,415	583,601	556,116	84.5%	85.2%
507	La Paz County - Detention	2,793,795	2,410,920	2,326,826	2,346,956	84,094	63,964	96.5%	97.3%
510	Yuma County - Detention	39,443,975	35,816,088	32,993,005	33,278,439	2,823,083	2,537,649	92.1%	92.9%
515	Pima County - Detention	195,117,762	183,592,392	158,007,225	159,374,204	25,585,167	24,218,188	86.1%	86.8%
520	Apache County - Detention	3,007,125	2,878,150	3,259,250	3,287,447	(381,100)	(409,297)	113.2%	114.2%
525	Cochise County - Detention	17,902,949	16,855,412	10,102,184	10,189,582	6,753,228	6,665,830	59.9%	60.5%
530	Coconino County - Detention	25,893,401	24,013,454	21,801,293	21,989,904	2,212,161	2,023,550	90.8%	91.6%
535	Mohave County - Detention	15,552,193	13,602,308	11,773,668	11,875,526	1,828,640	1,726,782	86.6%	87.3%
540	Santa Cruz County - Detention	3,133,081	2,989,583	3,041,115	3,067,425	(51,532)	(77,842)	101.7%	102.6%
545	Navajo County - Detention	8,014,333	7,332,437	7,505,820	7,570,756	(173,383)	(238,319)	102.4%	103.3%
550	Yavapai County - Detention	48,920,911	45,018,252	29,275,198	29,528,469	15,743,054	15,489,783	65.0%	65.6%
555	Pinal County - Dispatchers	3,688,629	3,502,513	4,243,466	4,280,178	(740,953)	(777,665)	121.2%	122.2%
556	Town of Oro Valley - Dispatchers	4,088,173	3,995,956	4,106,486	4,142,013	(110,530)	(146,057)	102.8%	103.7%
557	Town of Marana - Dispatchers	3,689,825	3,620,927	3,437,746	3,467,487	183,181	153,440	94.9%	95.8%
558	Gila County - Dispatchers	2,249,280	2,233,521	2,463,441	2,484,753	(229,920)	(251,232)	110.3%	111.2%
559	Town of Wickenburg - Dispatchers	529,464	529,464	666,351	672,116	(136,887)	(142,652)	125.9%	126.9%
560	Graham County - Dispatchers	947,400	913,922	881,301	888,925	32,621	24,997	96.4%	97.3%
561	Yavapai County - Dispatchers	1,696,595	1,604,507	1,031,507	1,040,431	573,000	564,076	64.3%	64.8%
562	City of Somerton - Dispatchers	1,959,546	1,880,106	1,030,157	1,039,069	849,949	841,037	54.8%	55.3%
563	Department of Public Safety - Dispatchers	19,821,113	19,457,512	19,515,068	19,683,900	(57,556)	(226,388)	100.3%	101.2%
564	Department of Public Safety - Detention	1,041,782	753,537	1,046,591	1,055,645	(293,054)	(302,108)	138.9%	140.1%
575	Administrative Office of the Courts	1,218,394,195	1,158,573,953	720,820,032	727,056,115	437,753,921	431,517,838	62.2%	62.8%
	Unallocated	0	0	3	3	(3)	(3)		
	TOTAL	5,457,140,673	5,120,046,194	4,461,039,238	4,499,633,348	659,006,956	620,412,846	87.1%	87.9%

APPENDIX C: SUMMARY OF PENSION CONTRIBUTION BY EMPLOYER - TIERS 1 & 2

Employer Number	Employer Name	ER NC%	UAAL Pmt %	Calculated ER Cont.	Required ER Cont.
500	Department of Corrections - Detention	4.31%	2.35%	6.66%	6.66%
501	Dept of Juvenile Corrections - Detention	3.90%	0.71%	4.61%	6.00%
502	Pinal County - Detention	3.81%	0.00%	3.81%	6.00%
503	Gila County - Detention	2.65%	0.00%	2.65%	6.00%
504	Graham County - Detention	6.17%	1.54%	7.71%	7.71%
505	Maricopa County - Detention	3.88%	8.97%	12.85%	12.85%
506	City of Avondale - Detention	9.96%	8.97%	18.93%	18.93%
507	La Paz County - Detention	4.51%	1.63%	6.14%	6.14%
510	Yuma County - Detention	4.47%	3.36%	7.83%	7.83%
515	Pima County - Detention	3.46%	9.27%	12.73%	12.73%
520	Apache County - Detention	2.45%	(1.25%)	1.20%	1.20%
525	Cochise County - Detention	2.87%	25.59%	28.46%	28.46%
530	Coconino County - Detention	3.03%	5.24%	8.27%	8.27%
535	Mohave County - Detention	4.19%	3.46%	7.65%	7.65%
540	Santa Cruz County - Detention	4.15%	0.00%	4.15%	6.00%
545	Navajo County - Detention	3.38%	0.00%	3.38%	6.00%
550	Yavapai County - Detention	3.99%	15.43%	19.42%	19.42%
555	Pinal County - Dispatchers	2.77%	(2.77%)	0.00%	0.00%
556	Town of Oro Valley - Dispatchers	1.54%	0.00%	1.54%	6.00%
557	Town of Marana - Dispatchers	3.22%	32.16%	35.38%	35.38%
558	Gila County - Dispatchers	0.82%	(0.82%)	0.00%	0.00%
559	Town of Wickenburg - Dispatchers	0.00%	0.00%	0.00%	0.00%
560	Graham County - Dispatchers	2.15%	5.03%	7.18%	7.18%
561	Yavapai County - Dispatchers	2.26%	63.09%	65.35%	65.35%
562	City of Somerton - Dispatchers	3.14%	91.24%	94.38%	94.38%
563	Department of Public Safety - Dispatchers	2.34%	0.00%	2.34%	6.00%
564	Department of Public Safety - Detention	1.47%	(0.07%)	1.40%	1.53%
575	Administrative Office of the Courts	2.21%	35.27%	37.48%	37.48%
	TOTAL	3.75%	10.63%	14.38%	14.38%

APPENDIX D: SUMMARY OF HEALTH FUNDED STATUS BY EMPLOYER - TIERS 1 & 2

Employer Number	Employer Name	Liability (PVB)	Liability (AAL)	Assets (AVA)	Assets (MV)	Unfunded (AAL - AVA)	Unfunded (AAL - MV)	Funded Percent (AVA/AAL)	Funded Percent (MV/AAL)
500	Department of Corrections - Detention	60,059,598	56,460,650	95,829,580	97,729,977	(39,368,930)	(41,269,327)	169.7%	173.1%
501	Dept of Juvenile Corrections - Detention	3,541,098	3,421,017	7,971,858	8,129,948	(4,550,841)	(4,708,931)	233.0%	237.6%
502	Pinal County - Detention	1,278,530	1,186,487	2,092,057	2,133,545	(905,570)	(947,058)	176.3%	179.8%
503	Gila County - Detention	191,848	176,948	517,878	528,148	(340,930)	(351,200)	292.7%	298.5%
504	Graham County - Detention	59,448	52,547	116,854	119,172	(64,307)	(66,625)	222.4%	226.8%
505	Maricopa County - Detention	13,223,670	12,214,663	23,717,453	24,187,794	(11,502,790)	(11,973,131)	194.2%	198.0%
506	City of Avondale - Detention	62,248	56,751	67,383	68,719	(10,632)	(11,968)	118.7%	121.1%
507	La Paz County - Detention	43,862	39,002	35,311	36,011	3,691	2,991	90.5%	92.3%
510	Yuma County - Detention	576,531	515,552	1,656,745	1,689,600	(1,141,193)	(1,174,048)	321.4%	327.7%
515	Pima County - Detention	2,832,972	2,642,667	5,189,280	5,292,189	(2,546,613)	(2,649,522)	196.4%	200.3%
520	Apache County - Detention	67,362	65,111	263,706	268,936	(198,595)	(203,825)	405.0%	413.0%
525	Cochise County - Detention	307,799	286,908	960,539	979,587	(673,631)	(692,679)	334.8%	341.4%
530	Coconino County - Detention	377,167	347,211	646,001	658,812	(298,790)	(311,601)	186.1%	189.7%
535	Mohave County - Detention	215,620	187,619	1,007,621	1,027,604	(820,002)	(839,985)	537.1%	547.7%
540	Santa Cruz County - Detention	113,155	109,551	229,068	233,611	(119,517)	(124,060)	209.1%	213.2%
545	Navajo County - Detention	107,312	93,004	570,816	582,136	(477,812)	(489,132)	613.8%	625.9%
550	Yavapai County - Detention	676,855	620,899	1,780,007	1,815,306	(1,159,108)	(1,194,407)	286.7%	292.4%
555	Pinal County - Dispatchers	44,474	41,062	250,032	254,990	(208,970)	(213,928)	608.9%	621.0%
556	Town of Oro Valley - Dispatchers	30,581	28,821	91,076	92,882	(62,255)	(64,061)	316.0%	322.3%
557	Town of Marana - Dispatchers	25,292	24,100	74,476	75,953	(50,376)	(51,853)	309.0%	315.2%
558	Gila County - Dispatchers	19,325	18,923	140,584	143,372	(121,661)	(124,449)	742.9%	757.7%
559	Town of Wickenburg - Dispatchers	871	871	64,257	65,532	(63,386)	(64,661)	7377.4%	7523.8%
560	Graham County - Dispatchers	8,119	7,269	33,594	34,260	(26,325)	(26,991)	462.2%	471.3%
561	Yavapai County - Dispatchers	53,554	52,544	37,716	38,464	14,828	14,080	71.8%	73.2%
562	City of Somerton - Dispatchers	24,676	22,105	38,552	39,317	(16,447)	(17,212)	174.4%	177.9%
563	Department of Public Safety - Dispatchers	369,793	362,018	227,201	231,706	134,817	130,312	62.8%	64.0%
564	Department of Public Safety - Detention	16,946	11,608	14,446	14,733	(2,838)	(3,125)	124.4%	126.9%
575	Administrative Office of the Courts	16,375,303	15,259,897	15,918,010	16,233,681	(658,113)	(973,784)	104.3%	106.4%
	Unallocated	0	0	2	(1)	(2)	1		
	TOTAL	100,704,009	94,305,805	159,542,103	162,705,984	(65,236,298)	(68,400,179)	169.2%	172.5%

APPENDIX E: SUMMARY OF HEALTH CONTRIBUTION BY EMPLOYER - TIERS 1 & 2

Employer Number	Employer Name	ER NC%	UAAL Pmt %	Calculated ER Cont.
500	Department of Corrections - Detention	0.25%	(0.25%)	0.00%
501	Dept of Juvenile Corrections - Detention	0.27%	(0.27%)	0.00%
502	Pinal County - Detention	0.29%	(0.29%)	0.00%
503	Gila County - Detention	0.21%	(0.21%)	0.00%
504	Graham County - Detention	0.32%	(0.32%)	0.00%
505	Maricopa County - Detention	0.22%	(0.22%)	0.00%
506	City of Avondale - Detention	0.11%	(0.09%)	0.02%
507	La Paz County - Detention	0.15%	0.06%	0.21%
510	Yuma County - Detention	0.22%	(0.22%)	0.00%
515	Pima County - Detention	0.20%	(0.20%)	0.00%
520	Apache County - Detention	0.18%	(0.18%)	0.00%
525	Cochise County - Detention	0.25%	(0.25%)	0.00%
530	Coconino County - Detention	0.19%	(0.19%)	0.00%
535	Mohave County - Detention	0.19%	(0.19%)	0.00%
540	Santa Cruz County - Detention	0.29%	(0.29%)	0.00%
545	Navajo County - Detention	0.25%	(0.25%)	0.00%
550	Yavapai County - Detention	0.18%	(0.18%)	0.00%
555	Pinal County - Dispatchers	0.30%	(0.30%)	0.00%
556	Town of Oro Valley - Dispatchers	0.20%	(0.20%)	0.00%
557	Town of Marana - Dispatchers	0.35%	(0.35%)	0.00%
558	Gila County - Dispatchers	0.20%	(0.20%)	0.00%
559	Town of Wickenburg - Dispatchers	0.00%	0.00%	0.00%
560	Graham County - Dispatchers	0.27%	(0.27%)	0.00%
561	Yavapai County - Dispatchers	0.19%	1.69%	1.88%
562	City of Somerton - Dispatchers	0.49%	(0.49%)	0.00%
563	Department of Public Safety - Dispatchers	0.29%	2.13%	2.42%
564	Department of Public Safety - Detention	0.13%	0.00%	0.13%
575	Administrative Office of the Courts	0.23%	0.00%	0.23%
	TOTAL	0.24%	(0.24%)	0.00%