

# INDIANA PUBLIC RETIREMENT SYSTEM

## PUBLIC EMPLOYEES' RETIREMENT FUND



### ACTUARIAL VALUATION

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**PREPARED AS OF JUNE 30, 2024**



November 7, 2024

Board of Trustees  
Indiana Public Retirement System  
1 North Capitol, Suite 001  
Indianapolis, IN 46204

Dear Members of the Board:

At your request, we performed an actuarial valuation of the Public Employees' Retirement Fund (PERF) as of June 30, 2024, for the purpose of estimating the actuarially determined contribution for the plan year ending June 30, 2026. Actuarial valuations are performed annually. The major findings of the valuation are contained in this report, which reflects the benefit and funding provisions in place on June 30, 2024. HEA 1004-2024 was passed and calls for funding the Supplemental Retirement Account at a level that could provide for a combination of 13<sup>th</sup> checks and a COLA, even though such benefits have not yet been promised. These provisions are reflected in this valuation, along with needed assumptions and funding methods that are consistent with the requirements.

In preparing our report, we relied, without audit, on information (some oral and some in writing) supplied by Indiana Public Retirement System (INPRS) staff. This information includes, but is not limited to, statutory provisions, member data and financial information. We did review the data to ensure that it was reasonably consistent and comparable with data from prior years. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete, our results may be different, and our calculations may need to be revised.

We certify that all costs and liabilities for PERF have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the plan and reasonable expectations); and which, in combination, offer the best estimate of anticipated experience affecting the plan. Nevertheless, the emerging costs will vary from those presented in this report to the extent actual experience differs from that projected by the actuarial assumptions.

We believe the actuarial assumptions used herein are reasonable. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in Appendix C. Specifically, we presented the proposed assumptions for the 2024 valuations to the Board on February 16, 2024, and the Board subsequently adopted their use at its April 26, 2024 meeting. These assumptions are applicable to both the funding and Governmental Accounting Standards Board (GASB) Statement Number 67 valuation calculations, unless otherwise noted.

In order to prepare the results in this report, we have utilized actuarial models that were developed to measure liabilities and develop actuarial costs. These models include tools that we have produced and tested, along with commercially available valuation software that we have reviewed to confirm the appropriateness and accuracy of the output. In utilizing these models, we develop



and use input parameters and assumptions about future contingent events along with recognized actuarial approaches to develop the needed results. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

We prepared a Risk Report for the INPRS Board in July 2024 that contains information which is relevant to PERF and should be considered part of this valuation report. Although the report was prepared using the data, methods, and assumptions of the June 30, 2023 valuation report, it is our professional opinion that the general results of the risk report are applicable to the June 30, 2024 valuation report as well.

Actuarial computations presented in this report are for purposes of determining the funding rates for the Plan. The calculations in the enclosed report have been made on a basis consistent with our understanding of the Plan's funding requirements and goals as adopted by the Board. Additionally, we have included actuarial computations for use in preparing certain reporting and disclosure requirements under Governmental Accounting Standards Board Statements Number 67 and Number 68. Determinations for purposes other than meeting these funding and disclosure requirements may be significantly different from the results contained in this report and require additional analysis.

The Annual Comprehensive Financial Report (ACFR) for INPRS contains several exhibits that disclose the actuarial position of the System. This annual report, prepared as of June 30, 2024, provides data and tables that we prepared for use in the following sections of the ACFR:

Financial Section:

- Note 1 – Tables of Plan Membership
- Note 8 – Net Pension Liability and Actuarial Information – Defined Benefit Plans
- Schedule of Changes in Net Pension Liability and Plan Fiduciary Net Position
- Schedule of Contributions
- Schedule of Notes to Required Supplementary Information

Actuarial Section:

- Summary of INPRS Funded Status (Included in the Board Summary)
- Historical Summary of Actuarial Valuation Results by Retirement Plan
- Summary of Actuarial Assumptions, Methods and Plan Provisions
- Analysis of Financial Experience (Included in the Unfunded Actuarial Accrued Liability Reconciliation)
- Solvency Test
- Schedule of Active Member Valuation Data
- Schedule of Retirants and Beneficiaries

Statistical Section:

- Membership Data Summary
- Ratio of Active Members to Annuitants
- Schedule of Benefit Recipients by Type of Benefit Option
- Schedule of Average Benefit Payments



The consultants who worked on this assignment are pension actuaries. Cavanaugh Macdonald's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate, and the assumptions and methods used meet the guidance provided in the applicable Actuarial Standards of Practice. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

The calculations were completed in compliance with applicable law and the calculations for GASB disclosure, in our opinion, meet the requirements of GASB 67 and GASB 68. We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate.

We respectfully submit the following report and look forward to discussing it with you.

Sincerely,

Brent A. Banister, PhD, FSA, EA, FCA, MAAA  
Chief Actuary

Edward Koebel, FCA, EA, MAAA  
Chief Executive Officer

Virginia Fritz, FSA, EA, FCA, MAAA  
Senior Actuary



# TABLE OF CONTENTS

	<u>Page</u>
<b>Section I</b>	Board Summary..... 1
<b>Section II</b>	Scope of the Report..... 7
<b>Section III</b>	Assets..... 8
	Table 1 – Development of Market Value of Assets (Base)..... 9
	Table 2 – Development of Market Value of Assets (Supplemental) ..... 10
	Table 3 – Development of Actuarial Value of Assets (Base)..... 11
	Table 4 – Development of Actuarial Value of Assets (Supplemental) ..... 12
<b>Section IV</b>	Plan Liabilities..... 13
	Table 5 – Actuarial Accrued Liability ..... 15
	Table 6 – Solvency Test ..... 16
	Table 7 – Reconciliation of Unfunded Actuarial Accrued Liability ..... 17
	Table 8 – Actuarial Gain/(Loss) ..... 18
	Table 9 – Gain/(Loss) Analysis by Source ..... 19
	Table 10 – Projected Benefit Payments ..... 20
<b>Section V</b>	Employer Contributions ..... 21
	Table 11 – Schedule of Amortization Bases (Base) ..... 23
	Table 12 – Schedule of Amortization Bases (Supplemental) ..... 24
	Table 13 – Actuarially Determined Contribution Rate ..... 25
	Table 14 – Investment Return Sensitivity ..... 26
<b>Section VI</b>	GASB Information..... 27
	Table 15 – Statement of Fiduciary Net Position under GASB No. 67 ..... 28
	Table 16 – Changes in Fiduciary Net Position under GASB No. 67 ..... 29
	Table 17 – Changes in Net Pension Liability under GASB No. 68 ..... 30
	Table 18 – Deferred Outflow of Resources ..... 30
	Table 19 – Deferred Inflow of Resources ..... 32
	Table 20 – Deferred Inflows and Outflows to be Recognized in PE ..... 33
	Table 21 – Pension Expense under GASB No. 68 ..... 34
	Notes to the Financial Statements under GASB No. 67 and 68 ..... 35
	Required Supplemental Information under GASB No. 67 and 68 ..... 38
<b>Appendix A</b>	Membership Data ..... 44
<b>Appendix B</b>	Summary of Plan Provisions ..... 55
<b>Appendix C</b>	Summary of Actuarial Methods and Assumptions..... 60
<b>Appendix D</b>	Glossary of Actuarial Terms ..... 67





## SECTION I – BOARD SUMMARY

This report presents the results of the June 30, 2024 actuarial valuation of the Public Employees' Retirement Fund (PERF). The primary purposes of performing this actuarial valuation are to:

- Determine the level of contributions for the plan year ending June 30, 2026 (December 31, 2026 for political subdivisions), along with the actuarial surcharge rate for the 2026 calendar year, that will be sufficient to meet the funding policy set out by the Board to comply with Indiana statutes.
- Disclose asset and liability measurements as well as the plan's funded status on the valuation date.
- Compare actual and expected experience of the Fund during the plan year ending June 30, 2024.
- Analyze and report on trends in plan contributions, assets and liabilities over the past several years.

### VALUATION RESULTS

The actuarial valuation results provide a “snapshot” view of the plan's financial condition on June 30, 2024. The plan's UAAL increased from \$2.680 billion last year to \$3.454 billion this year and the funded ratio decreased from 85.5% to 82.4%. The primary factors behind the decrease in the funded ratio were increases in future Supplemental Retirement Account Liabilities, the actuarial loss on the smoothed assets, and salaries increasing more than expected.

A summary of the key results from the June 30, 2024 actuarial valuation compared to the June 30, 2023 valuation is shown in the following table.

Valuation Results	June 30, 2023	June 30, 2024
Unfunded Actuarial Accrued Liability	\$ 2,679,579,791	\$ 3,454,447,170
Funded Ratio (Actuarial Assets)	85.45%	82.44%
Normal Cost	4.01%	4.04%
UAAL Amortization	2.91%	3.19%
Actuarially Determined Contribution Rate	6.92%	7.23%
Actuarially Determined Surcharge Rate	0.00%	1.63%
Surcharge Rate subject to Legal Constraints	0.00%	0.86%

Further detail on the valuation results can be found in the following sections of this Board Summary, including discussion regarding the change in the plan's assets, liabilities, and actuarial determined contribution rate between June 30, 2023 and June 30, 2024.





## SECTION I – BOARD SUMMARY

### ASSETS

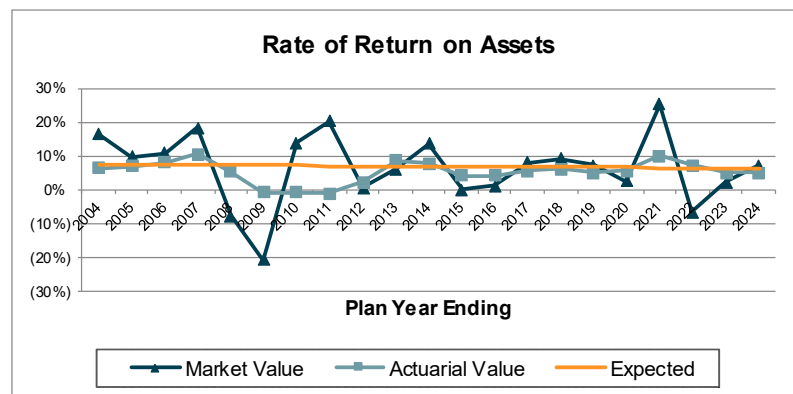
As of June 30, 2024, the plan had net assets of \$15.642 billion when measured on a market value basis. This was an increase of \$756 million from the prior year.

The market value of assets is not used directly in the calculation of the unfunded actuarial accrued liability and the actuarially determined contribution rate. An asset valuation method, which smoothes the effect of market fluctuations, is applied to determine the value of assets used in the valuation. The resulting amount is called the actuarial value of assets. In this year's valuation, the actuarial value of assets is \$16.219 billion, an increase of \$483 million from the prior year.

The components of change in the asset values are shown in the following table:

	Market Value	Actuarial Value
<b>Net Assets, June 30, 2023</b>	\$ 14,885,914,366	\$ 15,735,668,575
- Receipts	+ 721,937,227	+ 721,937,227
- Expenditures, Net of Administrative Expenses	- 1,028,879,054	- 1,028,879,054
- Net Investment Income	+ 1,063,189,657	+ 789,973,106
<b>Net Assets, June 30, 2024</b>	\$ 15,642,162,196	\$ 16,218,699,854
Estimated Rate of Return, Net of Expenses	7.2%	5.1%

The estimated rate of return on the actuarial value of assets was 5.1%, which was lower than the 6.25% investment return assumption applicable for the year ended June 30, 2024. As a result, there was an experience loss on assets of approximately \$182 million. Since the FY 2024 return on the market value of assets exceeded the 6.25% assumption, the net deferred investment loss decreased from \$850 million in last year's valuation to \$577 million in the current valuation. See Tables 1 through 4 of this report for detailed information on the market and actuarial value of assets.



*The rate of return of the actuarial value of assets has been less volatile than the market value return, illustrating the benefits of using an asset smoothing method. The smoothed actuarial value of plan assets has led to relatively steady actuarial valuation results over time, even with large market gains and losses.*





## SECTION I – BOARD SUMMARY

### LIABILITIES

The actuarial accrued liability is that portion of the present value of future benefits that is allocated to past service. The remaining portion will be paid by future normal costs. The difference between this liability and the actuarial value of assets as of the valuation date is called the unfunded actuarial accrued liability (UAAL). The dollar amount of unfunded actuarial accrued liability is reduced if the contributions to the plan exceed the normal cost for the year plus interest on the prior year's UAAL.

The unfunded actuarial accrued liability, including expected future COLAs, on both a market value and actuarial value of assets basis is shown as of June 30, 2024 in the following table:

	Market Value	Actuarial Value
Actuarial Accrued Liability	\$ 19,673,147,024	\$ 19,673,147,024
Value of Assets	15,642,162,196	16,218,699,854
Unfunded Actuarial Accrued Liability	\$ 4,030,984,828	\$ 3,454,447,170
Funded Ratio	79.51%	82.44%

See Table 5 of this report for the development of the unfunded actuarial accrued liability.

The total plan UAAL (on an actuarial basis) as of June 30, 2024 was \$3.454 billion, a \$774 million increase from the \$2.680 billion total UAAL last year. Factors in this increase included the increase in future Supplemental Retirement Account Liabilities (\$365 million), the actuarial loss on the smoothed assets (\$184 million), and the actuarial loss on liabilities (\$519 million), largely due to salaries increasing more than expected. The components of the change in the UAAL are quantified in Table 7 of this report. See Table 8 and Table 9 of this report for a breakdown of the components of experience gains/losses for greater detail on the base plan benefits.

An evaluation of the UAAL on a pure dollar basis may not provide a complete analysis since only the difference between the assets and liabilities (which are both large numbers) is reflected. Another way to evaluate the UAAL and the progress made in its funding is to track the funded ratio, the ratio of the actuarial value of assets to the actuarial accrued liability. The funded status information, which is based on the actuarial value of assets, is shown below (in millions).

	6/30/2020	6/30/2021	6/30/2022	6/30/2023	6/30/2024
Funded Ratio	83.3%	83.0%	84.9%	85.4%	82.4%
UAAL (in millions)	\$2,721.3	\$2,985.8	\$2,726.4	\$2,679.6	\$3,454.4

Note that the funded ratio does not indicate whether or not the plan assets are sufficient to settle benefits earned to date. The funded ratio, by itself, also may not be indicative of future funding requirements. In addition, if the funded ratios were shown using the market value of assets, the results would differ.

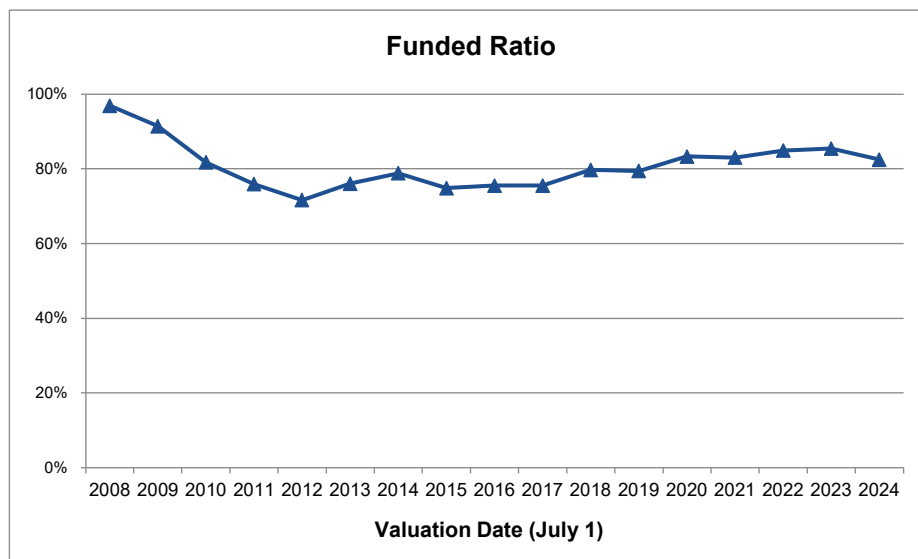






## SECTION I – BOARD SUMMARY

The funded ratio over a long period of time is shown in the following graph. The Plan's funded status has been gradually trending upward over the past number of years.



Note: Funded ratios exclude DC account balances.

### ACTUARIALLY DETERMINED CONTRIBUTION RATE

The Plan's actuarially determined contribution rate (ADC) consists of two components:

- A "normal cost" for the portion of projected liabilities allocated by the actuarial cost method to service of members during the year following the valuation date.
- An "unfunded actuarial accrued liability contribution" for the excess of the portion of projected liabilities allocated to service to date over the actuarial value of assets.

The UAAL contribution rate is determined by calculating the amortization payment on the UAAL as a level dollar amount over 20 years for each new amortization base. If the Fund's funded ratio exceeds 100% on a combined basis (base benefits plus SRA benefits), all prior amortization bases are eliminated and the negative UAAL (or "surplus") is amortized over an open 30-year period, as an offset to other Fund costs.

As a result of HEA 1004-2024, the SRA benefits outlined in the legislation must now be funded. Specifically, the new law calls for funding an indexed 13<sup>th</sup> check for those retiring before July 1, 2025 and a 1% COLA for those retiring after June 30, 2025. Since the method for funding is not prescribed, the Board has decided to use a funding method that parallels the base benefit funding method.

The total employer rate is the sum of the contributions to fund the base benefits plus the surcharge. The rate set for funding the benefits is equal to the greater of the current employer





## SECTION I – BOARD SUMMARY

contribution rate or the ADC calculated as described above. Once the plan reaches 95% funded, the employer contribution rate will be decreased by 25% of the difference between the existing rate and the ADC until the plan reaches 110% funded status. When the plan reaches 110% funded status, the employer contribution rate will be decreased to equal the ADC. The Board could decide, however, to set the rate higher in order to provide a sufficient surcharge for the COLA funding while preserving the base funding, subject to constraints in HEA 1004-2024.

See Table 13 of this report for the detailed development of the contribution rates which are summarized in the following table:

	June 30, 2023	June 30, 2024
Normal Cost	4.01%	4.04%
UAAL Amortization	2.91%	3.19%
Actuarially Determined Contribution Rate	6.92%	7.23%
Actuarially Determined Surcharge Rate	0.00%	1.63%
Surcharge Rate subject to Legal Constraints	0.00%	0.86%
Approved Employer Funding Rate	11.20%	11.20%

The actuarial required contribution, determined this year based on the snapshot of the plan taken on the valuation date of June 30, 2024, will change each year as the current deferred investment experience is recognized and other experience (both investment and demographic) unfolds to impact the plan. The actuarially determined rates decreased this year, remaining well below the Board-approved employer funding rate.

The June 30, 2024 actuarially determined contribution rate increased to 7.23% for the base benefits and 0.86% for the supplemental benefits when considering the legal constraints for the 2025 calendar year. As noted above, the Board will allocate 0.76% for the surcharge rate for supplemental benefits for the 2025 calendar year and 0.86% for the 2026 calendar year. Because this is lower than the current employer funding rate of 11.20%, no change in the current employer funding rate is needed.





## SECTION I – BOARD SUMMARY

### SUMMARY OF PRINCIPAL RESULTS

	June 30, 2022	June 30, 2023	June 30, 2024
<b>MEMBERSHIP</b>			
Active Members	120,967	119,398	121,200
Inactive Vested Members	34,413	35,174	35,805
Retired Members and Beneficiaries	94,360	96,922	99,151
Disabled Members	2,723	2,713	2,702
Total Members	252,463	254,207	258,858
Projected Annual Salaries of Active Members	\$ 5,821,019,121	\$ 6,312,888,255	\$ 6,767,983,564
Annual Retirement Payments for Retired Members, Disabled Members and Beneficiaries	\$ 922,039,763	\$ 967,807,406	\$ 1,004,501,855
<b>ASSETS AND LIABILITIES</b>			
Net Assets			
Market Value of Assets (MVA)	\$ 14,848,362,129	\$ 14,885,914,366	\$ 15,642,162,196
Actuarial Value of Assets (AVA)	15,275,803,990	15,735,668,575	16,218,699,854
Actuarial Accrued Liability (AAL)	18,002,194,131	18,415,248,366	19,673,147,024
Unfunded Actuarial Accrued Liability (UAAL):			
AAL - AVA	\$ 2,726,390,141	\$ 2,679,579,791	\$ 3,454,447,170
Funded Ratios			
AVA / AAL	84.86%	85.45%	82.44%
MVA / AAL	82.48%	80.83%	79.51%
<b>CONTRIBUTIONS</b>			
Normal Cost	4.02%	4.01%	4.04%
Amortization of UAAL	3.06%	2.91%	3.19%
Actuarially Determined Contribution Rate	7.08%	6.92%	7.23%
Actuarially Determined Surcharge Rate <sup>1</sup>	0.35%	0.00%	0.86%

<sup>1</sup> Rates for 2022 and 2023 valuations are applicable to next calendar year. Rate for 2025 calendar year is 0.76% and rate shown for the 2024 valuation is applicable to the 2026 calendar year.

Note: Liability and funded ratio results include both the base benefits and the supplemental benefits.





## SECTION II – SCOPE OF THE REPORT

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This report presents the actuarial valuation results of the Public Employees' Retirement Fund as of June 30, 2024. This valuation was prepared at the request of the Indiana Public Retirement System.

Please pay particular attention to our actuarial certification letter, where the guidelines employed in the preparation of this report are outlined. We also comment on the sources and reliability of both the data and the actuarial assumptions upon which our findings are based. Those comments are the basis for our certification that this report is complete and accurate to the best of our knowledge and belief.

A summary of the findings which result from this valuation is presented in the previous section. Section 3 describes the assets and investment experience of the plan. Sections 4 and 5 describe how the obligations of the plan are to be met under the actuarial cost method in use. Section 6 provides information required by the Governmental Accounting Standards Board (GASB) for reporting and disclosure under GASB 67 and GASB 68.

This report includes several appendices:

- Appendix A Schedules of valuation data classified by various categories of members.
- Appendix B A summary of the current benefit structure, as determined by the provisions of governing law on June 30, 2024.
- Appendix C A summary of the actuarial methods and assumptions used to estimate liabilities and determine contribution rates.
- Appendix D A glossary of actuarial terms.





## SECTION III - ASSETS

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In many respects, an actuarial valuation can be thought of as an inventory process. The inventory is taken as of the actuarial valuation date, which for this valuation is June 30, 2024. On that date, the assets available for the payment of benefits are appraised. The assets are compared with the liabilities of the plan, which are generally in excess of assets. The actuarial process then leads to a method of determining the contributions needed by members and the employer in the future to balance the plan assets and liabilities.

### Market Value of Assets

The current market value represents the "snapshot" or "cash-out" value of plan assets as of the valuation date. In addition, the market value of assets provides a basis for measuring investment performance from time to time.

Table 1 summarizes the changes in the market value of assets for the last two years for the base benefits, whereas Table 2 shows the changes for the supplemental reserve account. Table 15 (in the GASB section) provides detail regarding the allocation of investments in the trust.

### Actuarial Value of Assets

The market value of assets, representing a "cash-out" value of plan assets, may not be the best measure of the plan's ongoing ability to meet its obligations. To arrive at a suitable value of assets for the actuarial valuation, a technique for determining the actuarial value of assets is used which dampens swings in the market value while still indirectly recognizing market values. Under the asset smoothing methodology, the difference between the actual and assumed investment return on the market value of assets is recognized evenly over a five-year period.

Table 3 shows the development of the actuarial value of assets (AVA) as of the valuation date for the base benefits and Table 4 shows the information for the supplemental benefits.





## SECTION III - ASSETS

**TABLE 1**  
**DEVELOPMENT OF MARKET VALUE OF ASSETS**  
(Base Benefits)

	June 30, 2023	June 30, 2024
1. Market Value of Assets, Beginning of Year	\$ 14,735,366,460	\$ 14,736,690,044
2. Receipts		
a. Member (Includes Purchased Service) <sup>1</sup>	\$ 208,051	\$ 212,579
b. Employer (Includes Purchased Service) <sup>2</sup>	642,350,757	680,462,785
c. Miscellaneous	2,806	69,894
d. Total	<u>\$ 642,561,614</u>	<u>\$ 680,745,258</u>
3. Expenditures		
a. Benefit Payments	\$ 976,726,098	\$ 1,017,121,591
b. Refund of Contributions	0	0
c. Member Reassignment Transfers	5,876,185	3,939,862
d. Administrative Expense	21,696,048	21,769,213
e. Miscellaneous Expenditures	0	0
f. Total	<u>\$ 1,004,298,331</u>	<u>\$ 1,042,830,666</u>
4. Investment Return		
a. Investment Income	\$ 362,049,230	\$ 1,071,198,646
b. Securities Lending Income	1,011,071	780,435
c. Total Investment Return	<u>\$ 363,060,301</u>	<u>\$ 1,071,979,081</u>
5. Market Value of Assets, End of Year: (1) + (2d) - (3f) + (4c)	\$ 14,736,690,044	\$ 15,446,583,717
6. Rate of Return on Market Value of Assets, Net of Expenses <sup>3</sup>	2.34%	7.21%

<sup>1</sup> Includes \$208,051 of member service purchases during fiscal year 2023 and \$212,579 of member service purchases during fiscal year 2024.

<sup>2</sup> Includes \$3,802,034 of employer service purchases during fiscal year 2023 and \$369,275 of employer service purchases during fiscal year 2024.

<sup>3</sup> Based on individual fund experience. Assumes cash flows occur at mid-year.





## SECTION III - ASSETS

TABLE 2

### DEVELOPMENT OF MARKET VALUE OF ASSETS (Supplemental Benefits)

	June 30, 2023	June 30, 2024
1. Market Value of Assets, Beginning of Year	\$ 112,995,669	\$ 149,224,322
2. Receipts		
a. Employer Surcharge	\$ 40,502,915	\$ 41,191,969
b. Lottery Allocation	0	0
c. Non-Employer Entity Contributions	0	0
d. Miscellaneous	0	0
e. Total	\$ 40,502,915	\$ 41,191,969
3. Expenditures		
a. Benefit Payments	\$ 8,032,441	\$ 7,817,601
b. Administrative Expense	0	0
c. Miscellaneous Expenditures	0	0
d. Total	\$ 8,032,441	\$ 7,817,601
4. Investment Return		
a. Investment Income	\$ 3,749,123	\$ 12,970,938
b. Securities Lending Income	9,056	8,851
c. Total Investment Return	\$ 3,758,179	\$ 12,979,789
5. Market Value of Assets, End of Year: (1) + (2e) - (3d) + (4c)	\$ 149,224,322	\$ 195,578,479
6. Rate of Return on Market Value of Assets, Net of Expenses <sup>1</sup>	2.91%	7.82%

<sup>1</sup>Based on individual fund experience. Assumes cash flows occur at mid-year.





## SECTION III - ASSETS

**TABLE 3**

**DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS  
(Base Benefits)**

		<b>For Plan Year Ending June 30, 2024</b>		
1.	Market Value, as of June 30, 2023	\$	14,736,690,044	
2.	Receipts <sup>1</sup>	\$	680,745,258	
3.	Expenditures, Net of Administrative Expenses <sup>2</sup>	\$	(1,021,061,453)	
4.	Expected Return on Assets <sup>3</sup>	\$	910,408,247	
5.	Expected Market Value as of June 30, 2024: (1) + (2) + (3) + (4)	\$	15,306,782,096	
6.	Actual Market Value as of June 30, 2024	\$	15,446,583,717	
7.	Year end 2024 asset gain/(loss): (6) - (5)	\$	139,801,621	
8.	Deferred Investment Gains and Losses			
	Year Ended June 30:	Gain/(Loss)	Factor	Deferred Amount
a.	2021	\$ 2,414,432,006	20%	\$ 482,886,401
b.	2022	(2,062,978,404)	40%	(825,191,362)
c.	2023	(568,969,880)	60%	(341,381,928)
d.	2024	139,801,621	80%	111,841,297
e.	Total			\$ (571,845,592)
9.	Initial Actuarial Value as of June 30, 2024: (6) - (8e)	\$	16,018,429,309	
10.	Constraining Values			
a.	80% of Market Value: (6) x 0.8	\$	12,357,266,974	
b.	120% of Market Value: (6) x 1.2	\$	18,535,900,460	
11.	Actuarial Value as of June 30, 2024	\$	16,018,429,309	
12.	Actuarial Rate of Return, Net of Expenses <sup>4</sup>		5.07%	
13.	Actuarial Value of Assets as a Percent of Market Value: (11) / (6)		103.7%	
14.	Actuarial Value of Assets			
a.	Base Benefits	\$	16,018,429,309	
b.	Supplemental Benefits	\$	200,270,545	
c.	Total	\$	16,218,699,854	

<sup>1</sup> Includes Employer Contributions, Service Purchases, and Miscellaneous Receipts.

<sup>2</sup> Includes DB Benefit Payments and Member Reassignment Transfers.

<sup>3</sup> Assumes cash flows occur at mid-year and a return assumption of 6.25%.

<sup>4</sup> Assumes cash flows occur at mid-year.







## SECTION III - ASSETS

**TABLE 4**

**DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS**  
(Supplemental Benefits)

		<b>For Plan Year Ending June 30, 2024</b>		
1. Market Value, as of June 30, 2023		\$	149,224,322	
2. Receipts		\$	41,191,969	
3. Expenditures, Net of Administrative Expenses		\$	(7,817,601)	
4. Expected Return on Assets <sup>1</sup>		\$	10,369,469	
5. Expected Market Value as of June 30, 2024: (1) + (2) + (3) + (4)		\$	192,968,159	
6. Actual Market Value as of June 30, 2024		\$	195,578,479	
7. Year end 2024 asset gain/(loss): (6) - (5)		\$	2,610,320	
8. Deferred Investment Gains and Losses				
	Year Ended June 30:	Gain/(Loss)	Factor	Deferred Amount
a.	2021	\$ 8,826,688	20%	\$ 1,765,338
b.	2022	(14,886,020)	40%	(5,954,408)
c.	2023	(4,318,753)	60%	(2,591,252)
d.	2024	2,610,320	80%	2,088,256
e.	Total			\$ (4,692,066)
9. Initial Actuarial Value as of June 30, 2024: (6) - (8e)		\$		200,270,545
10. Constraining Values				
a.	80% of Market Value: (6) x 0.8		\$	156,462,783
b.	120% of Market Value: (6) x 1.2		\$	234,694,175
11. Actuarial Value as of June 30, 2024		\$		200,270,545
12. Actuarial Rate of Return, Net of Expenses <sup>2</sup>				4.92%
13. Actuarial Value of Assets as a Percent of Market Value: (11) / (6)				102.4%

<sup>1</sup> Assumes cash flows occur at mid-year and a return assumption of 6.25%.

<sup>2</sup> Assumes cash flows occur at mid-year.





## SECTION IV – PLAN LIABILITIES

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In the previous section, an actuarial valuation was compared with an inventory process, and an analysis was given of the inventory of assets of the Public Employees' Retirement Fund as of the valuation date, June 30, 2024. In this section, the discussion will focus on the commitments (future benefit payments) of the plan, which are referred to as its liabilities.

The liability calculations for the June 30, 2024 Public Employees' Retirement Fund valuation are based on census data collected as of June 30, 2023. Standard actuarial techniques are used to adjust these results from June 30, 2023 to June 30, 2024. While these roll-forward techniques are based on all actuarial assumptions being met during the intervening year, there will, of course, be many of the assumptions that will not be met exactly. In general, this does not materially affect the resulting calculations or conclusions in this report. Should there be a year in which events, such as plan changes, occur that would affect the results, adjustments in the roll-forward methods would be made to appropriately reflect the events.

All liabilities reflect the benefit provisions and actuarial assumptions in place as of June 30, 2024.

### Actuarial Accrued Liability

A fundamental principle in financing the liabilities of a retirement program is that the cost of its benefits should be related to the period in which benefits are earned, rather than to the period of benefit distribution. An actuarial cost method is a mathematical technique that allocates the present value of future benefits into annual costs. In order to do this allocation, it is necessary for the funding method to "breakdown" the present value of future benefits into two components:

- (1) that which is attributable to the past and
- (2) that which is attributable to the future.

Actuarial terminology calls the part attributable to the past the "past service liability" or the "actuarial accrued liability." The portion allocated to the future is known as the present value of future normal costs, with the specific piece of it allocated to the current year being called the "normal cost."

Table 5 contains the calculation of actuarial accrued liability for the Plan under the Entry Age Normal actuarial cost. This amount is split between the base benefit and the supplemental benefit. Granted supplemental benefits are the present value of legislated benefits, whereas future supplemental benefits represent those assumed to occur based on the Plan's COLA assumption.

### Low-Default-Risk Obligation Measure

Under the revised Actuarial Standards of Practice (ASOP) No. 4 effective for valuations after February 15, 2023, we are required to include a low-default-risk obligation measure of the System's liability in our funding valuation report. This is an informational disclosure as described below and would not be appropriate for assessing the funding progress or health of the plan. This measure uses the unit credit cost method and reflects all the assumptions and provisions of the funding valuation (including the assumed COLA paid from the SRA), except that the discount rate is derived from considering low-default-risk fixed income securities. We considered the FTSE





## SECTION IV – PLAN LIABILITIES

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Pension Discount Curve based on market bond rates published by the Society of Actuaries as of June 30, 2024 and with the 30-year spot rate used for all durations beyond 30 because this provides an appropriate set of discount rates for this intended purpose. Using these assumptions, we calculate a liability of approximately \$17,865,389,000. This amount approximates the termination liability if the plan (or all covered employment) ended on the valuation date and all of the accrued benefits had to be paid with cash-flow matched bonds. If the plan were funded with the intent of being able to be terminated at any valuation date, contribution requirements may need to increase and would also be more volatile. This assurance of funded status and benefit security is typically more relevant for corporate plans than for governmental plans since governments rarely have the need or option to completely terminate a plan. However, this informational disclosure is required for all plans whether corporate or governmental and care should be taken to ensure the one size fits all metric is not misconstrued.





## SECTION IV – PLAN LIABILITIES

TABLE 5

### ACTUARIAL ACCRUED LIABILITY (Base and Supplemental Benefits)

As of June 30, 2024	Base Benefits	Supplemental Benefits		Total
		Granted	Future	
1. Actuarial Accrued Liability				
a. Active & Inactive Members	\$ 9,174,788,438	\$ 2,531,795	\$ 788,743,854	\$ 9,966,064,087
b. In-pay Members	9,275,458,340	105,606,743	326,017,854	9,707,082,937
c. Total	\$ 18,450,246,778	\$ 108,138,538	\$ 1,114,761,708	\$ 19,673,147,024
2. Actuarial Value of Assets	\$ 16,018,429,309	\$ 108,138,538	\$ 92,132,007	\$ 16,218,699,854
3. Unfunded Actuarial Accrued Liability: (1c) - (2)	\$ 2,431,817,469	\$ 0	\$ 1,022,629,701	\$ 3,454,447,170
4. Funded Ratio: (2) / (1c)	86.8%	100.0%	8.3%	82.4%





## SECTION IV – PLAN LIABILITIES

**TABLE 6**  
**SOLVENCY TEST**  
(Base and Supplemental Benefits)

Actuarial Valuation as of June 30	Actuarial Accrued Liabilities (AAL)				Portion of AAL Covered by Assets				
	Active Member Contributions	Retirees and Beneficiaries	Active Member (Employer Financed Portion)	Total Actuarial Accrued Liabilities	Actuarial Value of Assets	Active Member Contributions	Retirees and Beneficiaries	Active Member (Employer Financed Portion)	Total Actuarial Accrued Liabilities
2024	\$0	\$9,707,083	\$9,966,064	\$19,673,147	\$16,218,700	N/A	100.0%	65.3%	82.4%
2023	0	9,287,725	9,127,523	18,415,248	15,735,669	N/A	100.0	70.6	85.4
2022	0	8,955,627	9,046,567	18,002,194	15,275,804	N/A	100.0	69.9	84.9
2021	0	8,655,768	8,907,389	17,563,157	14,577,352	N/A	100.0	66.5	83.0
2020	0	8,050,791	8,230,963	16,281,754	13,560,460	N/A	100.0	66.9	83.3
2019	0	8,068,490	8,507,570	16,576,060	13,157,802	N/A	100.0	59.8	79.4
2018	0	7,768,231	8,323,142	16,091,373	12,823,930	N/A	100.0	60.7	79.7
2017	2,770,962	7,834,962	8,500,291	19,106,215	15,098,920	100.0	100.0	52.9	79.0
2016	2,656,892	7,595,088	8,156,966	18,408,946	14,553,059	100.0	100.0	52.7	79.1
2015	2,717,173	6,981,308	8,282,087	17,980,568	14,131,884	100.0	100.0	53.5	78.6

Note: Dollar amounts are in thousands of dollars. Amounts before 2018 reflect the inclusion of DC balances in both the active member contributions and the assets.





## SECTION IV – PLAN LIABILITIES

TABLE 7

### RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY (Base and Supplemental Benefits)

For Year Ending June 30, 2024

	Base	Base and Supplemental
1. Unfunded Actuarial Accrued Liability as of June 30, 2023	\$ 2,116,816,783	\$ 2,679,579,791
2. Normal Cost	253,146,819	266,403,884
3. Actuarially Determined Contribution	(437,126,001)	(437,126,001)
4. Interest	120,802,350	156,803,605
5. Expected Unfunded Actuarial Accrued Liability as of June 30, 2024	\$ 2,053,639,951	\$ 2,665,661,279
6. Actuarial Value of Asset Changes		
a. Investment Experience (Gain)/Loss	\$ 181,586,662	\$ 183,914,248
b. Contributions (Above)/Below the Actuarially Determined Contribution and Other (Gain)/Loss	\$ (236,866,984)	\$ (279,346,202)
7. Actuarial Accrued Liability Changes		
a. Actuarial Accrued Liability Experience (Gain)/Loss	\$ 433,457,840	\$ 518,799,744
b. Additional Liability Due to Benefit Changes	0	365,418,101
c. Additional Liability Due to Assumption Changes	0	0
8. Total Experience (Gain)/Loss	\$ 378,177,518	\$ 788,785,891
9. Unfunded Actuarial Accrued Liability as of June 30, 2024: (5) + (8)	\$ 2,431,817,469	\$ 3,454,447,170





## SECTION IV – PLAN LIABILITIES

TABLE 8

### ACTUARIAL GAIN/(LOSS) (Base and Supplemental Benefits)

<b>Liabilities</b>	Base	Base and Supplemental
1. Actuarial Accrued Liability as of June 30, 2023	\$ 17,694,197,533	\$ 18,415,248,366
2. Normal Cost for Plan Year Ending June 30, 2024	253,146,819	266,403,884
3. Benefit Payments During Plan Year <sup>1</sup>	(1,017,019,627)	(1,024,837,228)
4. Service Purchases (employee and employer)	581,854	581,854
5. Member Reassignment Transfers	(3,939,862)	(3,939,862)
6. Interest at 6.25%	1,089,822,221	1,135,472,165
7. Change Due to Benefit Changes	0	365,418,101
8. Change Due to Assumption Changes	0	0
9. Expected Actuarial Accrued Liability as of June 30, 2024	\$ 18,016,788,938	\$ 19,154,347,280
10. Actuarial Accrued Liability as of June 30, 2024	\$ 18,450,246,778	\$ 19,673,147,024
<b>Assets</b>		
11. Actuarial Value of Assets as of June 30, 2023	\$ 15,577,380,750	\$ 15,735,668,575
12. Receipts During Plan Year	680,745,258	721,937,227
13. Expenditures, Excluding Expenses, During Plan Year	(1,021,061,453)	(1,028,879,054)
14. Interest at 6.25%	962,951,416	973,887,354
15. Expected Actuarial Value of Assets as of June 30, 2024	\$ 16,200,015,971	\$ 16,402,614,102
16. Actuarial Value of Assets as of June 30, 2024	\$ 16,018,429,309	\$ 16,218,699,854
<b>Experience Gain / (Loss)</b>		
17. Liability Actuarial Experience Gain/(Loss): (9) - (10)	\$ (433,457,840)	\$ (518,799,744)
18. Asset Actuarial Experience Gain/(Loss): (16) - (15)	(181,586,662)	(183,914,248)
19. Total Actuarial Experience Gain/(Loss): (17) + (18)	\$ (615,044,502)	\$ (702,713,992)

<sup>1</sup> Does not include miscellaneous expenses or benefit overpayments.





## SECTION IV – PLAN LIABILITIES

TABLE 9

**EXPERIENCE GAIN/(LOSS) ANALYSIS BY SOURCE**  
(Base Benefits)

<b>Liability Sources (in thousands)</b>		<b>Gain/(Loss)*</b>
Retirement	\$	(38,365)
Termination		23,410
Disability		(2,068)
Mortality		20,275
Salary		(335,161)
New Entrants/Rehires		(65,292)
Miscellaneous		(36,257)
Total Liability Experience Gain/(Loss)	\$	(433,458)
as a % of AAL		(2.3%)
Asset Experience Gain/(Loss)	\$	(181,587)
Net Actuarial Experience Gain/(Loss)	\$	(615,045)

\*Numbers may not add due to rounding.







## SECTION IV – PLAN LIABILITIES

**TABLE 10**

**PROJECTED BENEFIT PAYMENTS**  
(Base and Supplemental Benefits)

<u>Plan Year Ending June 30</u>	<u>Benefit Amount</u>
2024	\$ 1,158,802,403
2025	1,198,779,667
2026	1,239,748,831
2027	1,278,902,475
2028	1,308,691,047
2029	1,339,684,713
2030	1,368,047,627
2031	1,394,911,444
2032	1,419,209,671
2033	1,440,200,244
2034	1,459,024,641
2035	1,474,511,524
2036	1,487,091,850
2037	1,496,368,963
2038	1,502,460,364
2039	1,505,858,342
2040	1,506,796,544
2041	1,505,146,705
2042	1,501,193,844
2043	1,495,118,595
2044	1,487,170,871
2045	1,477,334,709
2046	1,465,218,774
2047	1,450,988,927
2048	1,434,980,972
2049	1,417,560,937
2050	1,398,158,010
2051	1,377,409,406
2052	1,354,846,877
2053	1,330,624,006

Note: Payouts reflect nominal payouts for current members, assuming that all future assumptions are met.





## SECTION V – EMPLOYER CONTRIBUTIONS

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The previous two sections were devoted to a discussion of the assets and liabilities of the plan. We now turn to considering how the benefits will be funded. The method used to determine the incidence of the contributions in various years is called the actuarial cost method. Under an actuarial cost method, the contributions required to meet the difference between current assets and current liabilities are allocated each year between two elements: (1) the normal cost rate and (2) the unfunded actuarial accrued liability contribution rate.

The term “fully funded” is often applied to a plan in which contributions at the normal cost rate are sufficient to pay for the benefits of existing employees as well as for those of new employees. More often than not, plans are not fully funded, either because of past benefit improvements that have not been completely funded, contribution levels, or because of actuarial deficiencies that have occurred because experience has not been as favorable as anticipated by the actuarial assumptions. Under these circumstances, an unfunded actuarial accrued liability (UAAL) exists. Likewise, when the actuarial value of assets is greater than the actuarial accrued liability, a surplus exists.

### Description of Contribution Rate Components

The Entry Age Normal (EAN) actuarial cost method is used for the valuation. Under that method, the normal cost for each year from entry age to assumed exit age is a constant percentage of the member's year by year projected compensation. The portion of the present value of future benefits not provided by the present value of future normal costs is the actuarial accrued liability. The unfunded actuarial accrued liability/(surplus) represents the difference between the actuarial accrued liability and the actuarial value of assets as of the valuation date. For PERF purposes, this calculation excludes consideration of future COLAs. The unfunded actuarial accrued liability is calculated each year and reflects experience gains and losses. New amortization bases are funded over 20 years using a level dollar payment approach.

Funding for future COLAs is provided by using a surcharge. This rate is calculated using the same methodology as the base benefits, except that the rate must adhere to HEA 1004-2024, which limits the rate to a 0.1% increase over the prior year's surcharge rate and does not allow a decrease through December 31, 2029.

The contribution rate based on the June 30, 2024 actuarial valuation will be used to calculate the actuarially determined employer contribution rate to the Public Employees' Retirement Fund for the plan year beginning July 1, 2025 for state employers and for the calendar year beginning January 1, 2026 for the political subdivisions. The supplemental benefit surcharge rate will be used to calculate the actuarially determined employer contribution rate for the 2025 calendar year. In general, contributions are computed in accordance with a stable percent-of-payroll funding objective.

The methodology of developing the contribution rate is designed to fund the benefits over a reasonable period with a stable contribution pattern. The current UAAL for the base benefits will be funded over the next 20 years, although the funding policy is likely to result in this being accomplished sooner. The COLA benefits are funded in a similar manner, beginning with this valuation, in keeping with HEA 1004-2024. The contribution rate shown in Table 14 under the current assumptions reflects a rate that could fund both the base benefits and COLAs in a reasonable manner.





## SECTION V – EMPLOYER CONTRIBUTIONS

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### Contribution Rate Summary

In Table 11 the amortization payment related to the unfunded actuarial accrued liability/(surplus), as of June 30, 2023, is developed. The surcharge needed to fund the assumed COLAs is developed in Table 12. Table 13 develops the actuarially determined contribution rate for the Plan. The contribution rates shown in this report are based on the actuarial assumptions and cost methods described in Appendix C. Additionally, in Table 14 the contribution amounts under alternative discount rates are provided to illustrate the sensitivity of the contribution requirements relative to the selection of the investment return assumption.





## SECTION V – EMPLOYER CONTRIBUTIONS

TABLE 11

### SCHEDULE OF AMORTIZATION BASES (Base Benefits)

Amortization Bases <sup>1</sup>	Original Amount <sup>2</sup>	June 30, 2024 Remaining Payments	Date of Last Payment	Outstanding Balance as of June 30, 2024	Annual Contribution
2006 Fresh Start - Political Only	233,415,887	12	7/1/2036	146,879,431	16,715,532
2007 UAAL Base - Political Only	4,630,369	13	7/1/2037	3,051,073	329,130
2008 State Fresh Start and PSD Experience	91,514,739	14	7/1/2038	63,531,009	6,532,873
2009 UAAL Base	618,751,215	15	7/1/2039	447,769,273	44,103,158
2010 UAAL Base	1,223,323,148	16	7/1/2040	919,041,172	87,067,110
2011 UAAL Base	788,425,716	17	7/1/2041	612,711,283	56,033,997
2012 UAAL Base	817,830,775	18	7/1/2042	655,388,826	58,043,078
2013 UAAL Base	(450,263,746)	19	7/1/2043	(371,059,919)	(31,913,039)
2014 UAAL Base	(211,870,908)	20	7/1/2044	(179,113,172)	(14,997,002)
2015 UAAL Base	954,017,677	21	7/1/2045	825,554,660	67,443,306
2016 UAAL Base	67,185,548	12	7/1/2036	49,807,247	5,668,286
2017 UAAL Base	217,123,363	13	7/1/2037	169,539,089	18,288,768
2018 UAAL Base	(1,186,925,679)	14	7/1/2038	(970,743,148)	(99,821,201)
2019 UAAL Base	196,792,517	15	7/1/2039	167,777,187	16,525,260
2020 UAAL Base	(624,471,324)	16	7/1/2040	(552,703,698)	(52,361,434)
2021 UAAL Base	235,638,581	17	7/1/2041	215,738,467	19,729,828
2022 UAAL Base	(226,715,387)	18	7/1/2042	(214,341,616)	(18,982,697)
2023 UAAL Base	66,574,499	19	7/1/2043	64,812,787	5,574,229
2024 UAAL Base	378,177,518	20	7/1/2044	378,177,518	31,664,499
Total				\$ 2,431,817,469	\$ 215,643,681
1. Total UAAL Amortization Payments					\$ 215,643,681
2. Projected Payroll for FY 2025					\$ 6,767,983,564
3. UAAL Amortization Payment Rate					3.19%

<sup>1</sup> Amortization bases prior to 2018 are the State and Political Subdivision bases combined.

<sup>2</sup> The original amounts from 2017 to 2013 were provided by the prior actuary. Amounts prior to that were estimated by INPRS.





## SECTION V – EMPLOYER CONTRIBUTIONS

TABLE 12

### SCHEDULE OF AMORTIZATION BASES (Supplemental Benefits)

Amortization Bases	Original Amount	June 30, 2024 Remaining Payments	Date of Last Payment	Outstanding Balance as of June 30, 2024	Annual Contribution
2024 UAAL Base	1,022,629,701	20	7/1/2044	1,022,629,701	85,623,961
Total				\$ 1,022,629,701	\$ 85,623,961
1. Total UAAL Amortization Payments					\$ 85,623,961
2. Projected Payroll for FY 2025					\$ 6,767,983,564
3. UAAL Amortization Payment Rate					1.27%





## SECTION V – EMPLOYER CONTRIBUTIONS

TABLE 13

**ACTUARIALLY DETERMINED CONTRIBUTION RATE**  
(Base and Supplemental Benefits)

	<b>Base Benefits</b>	<b>Supplemental Benefits</b>	<b>Total</b>
1. Projected Payroll for FY 2025	\$ 6,767,983,564	\$ 6,767,983,564	
2. Normal Cost Rate as of June 30, 2023 Census	4.04%	0.36%	4.40%
3. Amortization of UAAL as of June 30, 2024			
a. Dollar Amount	\$ 215,643,681	\$ 85,623,961	
b. Percent of Projected Pay	3.19%	1.27%	4.46%
4. Preliminary Actuarially Determined Contribution Rate: (2) + (3b)	7.23%	1.63%	8.86%
5. Supplemental Benefit Surcharge Cap for 2026 calendar year (Not to exceed 0.1% over prior year through December 31, 2029)		0.86%	
6. Actuarially Determined Contribution Rate Subject to Legal Constraints	7.23%	0.86%	8.09%
7. Board Policy Surcharge Rate (for 2026 calendar year)		0.86%	
8. Board Policy Contribution Rate			11.20%





## SECTION V – EMPLOYER CONTRIBUTIONS

**TABLE 14**  
**INVESTMENT RETURN SENSITIVITY**  
(Base and Supplemental Benefits)

	<b>1.00% Decrease: (5.25%)</b>	<b>0.75% Decrease: (5.50%)</b>	<b>0.50% Decrease: (5.75%)</b>	<b>0.25% Decrease: (6.00%)</b>	<b>Current Assumption: (6.25%)</b>
<b>Funded Status</b>					
Actuarial Accrued Liability	\$22,064,099,517	\$21,423,227,828	\$20,812,236,252	\$20,229,410,433	\$19,673,147,024
Actuarial Value of Assets	16,218,699,854	16,218,699,854	16,218,699,854	16,218,699,854	16,218,699,854
Unfunded Actuarial Accrued Liability	\$5,845,399,663	\$5,204,527,974	\$4,593,536,398	\$4,010,710,579	\$3,454,447,170
Funded Ratio	73.5%	75.7%	77.9%	80.2%	82.4%
<b>Actuarially Determined Contribution Amount</b>					
Normal Cost	\$390,864,934	\$364,836,175	\$340,749,844	\$318,449,317	\$297,791,277
UAAL Amortization	467,555,329	425,123,009	383,282,777	342,006,541	301,267,642
Actuarially Determined Contribution Amount	\$858,420,263	\$789,959,184	\$724,032,621	\$660,455,858	\$599,058,919
Actuarially Determined Contribution Rate	12.68%	11.67%	10.70%	9.76%	8.86%
	<b>0.25% Increase: (6.50%)</b>	<b>0.50% Increase: (6.75%)</b>	<b>0.75% Increase: (7.00%)</b>	<b>1.00% Increase: (7.25%)</b>	<b>1.25% Increase: (7.50%)</b>
<b>Funded Status</b>					
Actuarial Accrued Liability	\$19,141,945,928	\$18,634,403,103	\$18,149,203,906	\$17,685,116,917	\$17,240,988,215
Actuarial Value of Assets	16,218,699,854	16,218,699,854	16,218,699,854	16,218,699,854	16,218,699,854
Unfunded Actuarial Accrued Liability	\$2,923,246,074	\$2,415,703,249	\$1,930,504,052	\$1,466,417,063	\$1,022,288,361
Funded Ratio	84.7%	87.0%	89.4%	91.7%	94.1%
<b>Actuarially Determined Contribution Amount</b>					
Normal Cost	\$278,644,539	\$260,888,994	\$244,414,633	\$229,120,672	\$214,914,742
UAAL Amortization	261,040,819	221,302,119	182,028,865	143,199,578	104,793,919
Actuarially Determined Contribution Amount	\$539,685,358	\$482,191,113	\$426,443,498	\$372,320,250	\$319,708,661
Actuarially Determined Contribution Rate	7.97%	7.12%	6.30%	5.50%	4.72%

Note: Comparisons are based on funding the COLA in the same method as the base benefit, rather than with a surcharge. Consequently, these results are for comparative purposes only and will not match the actual results under the funding policy.





## SECTION VI – GASB INFORMATION

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### GASB NO. 67 AND GASB NO. 68

The Governmental Accounting Standards Board issued Statement No. 67 (GASB 67), “Financial Reporting for Pension Plans” and Statement No. 68 (GASB 68), “Accounting and Financial Reporting for Pensions” in June 2012. The effective date for reporting under GASB 67 for the INPRS Plans was the fiscal year ending June 30, 2014. GASB 68’s effective date for employers is the first fiscal year beginning after June 15, 2014.

The sections that follow provide the results of all the required calculations, presented in the order set out in GASB 68 for note disclosure and Required Supplementary Information (RSI). Some of this information was provided by the INPRS for use in this report.

The discount rate used for these disclosures is the assumed return on assets of 6.25%. We have verified that the current assets in conjunction with future contributions made on behalf of current members (including all contributions to fund any past service liability) will be sufficient to make the anticipated benefit payments to be provided to the current members.

To the best of our knowledge, the information contained in this report is complete and accurate. The calculations were performed by qualified actuaries according to generally accepted actuarial principles and practices, as well as in conformity with Actuarial Standards of Practice issued by the Actuarial Standards Board. The calculations are based on the current provisions of the plan, and on actuarial assumptions that are internally consistent and individually reasonable based on the actual experience of the plan. In addition, the calculations were completed in compliance with applicable law and, in our opinion, meet the requirements of GASB 67 and GASB 68.







## SECTION VI – GASB INFORMATION

TABLE 15

### STATEMENT OF FIDUCIARY NET POSITION

	<b>June 30, 2024</b>
<b>1. Assets</b>	
a. Cash	\$ 3,630,978
b. Receivables	
i. Contributions and Miscellaneous Receivables	\$ 9,831,350
ii. Investments Receivable	256,716,345
iii. Foreign Exchange Contracts Receivable	2,490,092,989
iv. Interest and Dividends	40,847,442
v. Receivables Due From Other Funds	2,935,767
vi. Total Receivables	\$ 2,800,423,893
c. Investments	
i. Short-Term Investments	\$ 0
ii. Pooled Repurchase Agreements	3,542,830
iii. Pooled Short-Term Investments	1,280,878,655
iv. Pooled Fixed Income	4,272,647,968
v. Pooled Equity	2,060,851,244
vi. Pooled Alternative Investments	8,594,525,236
vii. Pooled Derivatives	5,306,011
viii. Pooled Investments	0
ix. Securities Lending Collateral	50,210,989
x. Total Investments	\$ 16,267,962,933
d. Net Capital Assets	5,429,636
e. Other Assets	312,448
f. Total Assets: a + b(vi) + c(x) + d + e	\$ 19,077,759,888
<b>2. Liabilities</b>	
a. Administrative Payable	\$ 10,571,814
b. Retirement Benefits Payable	801,511
c. Investments Payable	782,259,075
d. Foreign Exchange Contracts Payable	2,481,013,761
e. Securities Lending Obligations	50,210,989
f. Securities Sold Under Agreement to Repurchase	110,740,542
g. Due To Other Funds	0
h. Due to Other Governments	0
i. Total Liabilities: a + b + c + d + e + f + g + h	\$ 3,435,597,692
<b>3. Fiduciary Net Position Restricted for Pensions: (1)(f) - (2)(i)</b>	<b>\$ 15,642,162,196</b>





## SECTION VI – GASB INFORMATION

TABLE 16

### STATEMENT OF CHANGES IN FIDUCIARY NET POSITION

For Fiscal Year Ending June 30, 2024

<b>1. Fiduciary Net Position as of June 30, 2023</b>	<b>\$ 14,885,914,366</b>
<b>2. Additions</b>	
a. Contributions	
i. Member Contributions	\$ 0
ii. Employer Contributions	721,285,479
iii. Service Purchases (Employer and Member) <sup>1</sup>	581,854
iv. Non-Employer Contributing Entity Contributions	0
v. Total Contributions	<u>\$ 721,867,333</u>
b. Investment Income/(Loss)	
i. Net Appreciation/(Depreciation)	\$ 952,667,081
ii. Net Interest and Dividend Income	226,425,569
iii. Securities Lending Income	922,343
iv. Other Net Investment Income	2,035,112
v. Investment Management Expenses	(90,366,959)
vi. Direct Investment Expenses	(6,591,219)
vii. Securities Lending Expenses	(133,057)
viii. Total Investment Income/(Loss)	<u>\$ 1,084,958,870</u>
c. Other Additions	
i. Member Reassignments	8,554,378
ii. Miscellaneous Receipts	69,894
iii. Total Other Additions	<u>\$ 8,624,272</u>
d. Total Revenue (Additions): a(v) + b(viii) + c(iii)	<u>\$ 1,815,450,475</u>
<b>3. Deductions</b>	
a. Pension, Survivor and Disability Benefits	\$ 1,024,939,192
b. Death and Funeral Benefits	0
c. Distributions of Contributions and Interest	0
d. Administrative Expenses <sup>2</sup>	21,769,213
e. Member Reassignments	12,494,240
f. Miscellaneous Expenses	0
g. Total Expenses (Deductions)	<u>\$ 1,059,202,645</u>
<b>4. Net Increase (Decrease) in Fiduciary Net Position: (2)(d) - (3)(g)</b>	<b>\$ 756,247,830</b>
<b>5. Fiduciary Net Position as of June 30, 2024: (1) + (4)</b>	<b>\$ 15,642,162,196</b>

<sup>1</sup> Service purchases paid by employer of \$369,275 and employee of \$212,579.

<sup>2</sup> Includes \$1,762,100 of hybrid plan contributions and \$303,859 of My Choice plan contributions made by INPRS.





## SECTION VI – GASB INFORMATION

TABLE 17

### SCHEDULE OF CHANGES IN NET PENSION LIABILITY

For Fiscal Year Ending June 30, 2024

	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) – (b)
<b>1. Balance at June 30, 2023</b>	\$ 18,415,248,366	\$ 14,885,914,366	\$ 3,529,334,000
<b>2. Changes for the Year:</b>			
Service Cost (SC) <sup>1</sup>	266,403,884		266,403,884
Interest Cost	1,135,468,978		1,135,468,978
Experience (Gains)/Losses	518,904,895		518,904,895
Assumption Changes	0		0
Plan Amendments	365,418,101		365,418,101
Benefit Payments	(1,024,939,192)	(1,024,939,192)	0
Service Purchases			
Employer Contributions	369,275	369,275	0
Employee Contributions	212,579	212,579	0
Member Reassignments <sup>2</sup>	(3,939,862)	(3,939,862)	0
Employer Contributions		721,285,479	(721,285,479)
Non-employer Contributions		0	0
Employee Contributions		0	0
Net Investment Income		1,084,958,870	(1,084,958,870)
Administrative Expenses <sup>3</sup>		(21,769,213)	21,769,213
Other		69,894	(69,894)
Net Changes	\$ 1,257,898,658	\$ 756,247,830	\$ 501,650,828
<b>3. Balance at June 30, 2024</b>	\$ 19,673,147,024	\$ 15,642,162,196	\$ 4,030,984,828

<sup>1</sup> Service cost provided as of beginning of year. Interest to end of year is included in the interest cost.

<sup>2</sup> Includes net interfund transfers of employer contributed amounts.

<sup>3</sup> Includes contributions made by INPRS for its employees of \$1,762,100 in the hybrid plan and \$303,859 in the My Choice plan.





## SECTION VI – GASB INFORMATION

TABLE 18

### DEFERRED OUTFLOWS OF RESOURCES

	June 30, 2023	Remaining Period	Recognition	June 30, 2024
<b>1. Liability Experience</b>				
June 30, 2024 Loss	\$ 518,904,895	3.71	\$ 139,866,549	\$ 379,038,346
June 30, 2023 Loss	31,767,569	2.65	11,987,763	19,779,806
June 30, 2022 Loss	33,909,676	1.73	19,600,970	14,308,706
June 30, 2021 Loss	6,531,780	0.82	6,531,780	0
June 30, 2020 Loss	0	0.00	0	0
June 30, 2019 Loss	0	0.00	0	0
June 30, 2018 Loss	0	0.00	0	0
June 30, 2017 Loss	0	0.00	0	0
June 30, 2016 Loss	0	0.00	0	0
June 30, 2015 Loss	0	0.00	0	0
June 30, 2014 Loss	0	0.00	0	0
<b>2. Assumption Changes</b>				
June 30, 2024 Loss	\$ 0	3.71	\$ 0	\$ 0
June 30, 2023 Loss	0	2.65	0	0
June 30, 2022 Loss	0	1.73	0	0
June 30, 2021 Loss	192,461,564	0.82	192,461,564	0
June 30, 2020 Loss	0	0.00	0	0
June 30, 2019 Loss	0	0.00	0	0
June 30, 2018 Loss	0	0.00	0	0
June 30, 2017 Loss	0	0.00	0	0
June 30, 2016 Loss	0	0.00	0	0
June 30, 2015 Loss	0	0.00	0	0
<b>3. Investment Experience</b>				
June 30, 2024 Loss	\$ 0	5.00	\$ 0	\$ 0
June 30, 2023 Loss	440,731,666	4.00	110,182,917	330,548,749
June 30, 2022 Loss	1,235,145,761	3.00	411,715,255	823,430,506
June 30, 2021 Loss	0	2.00	0	0
June 30, 2020 Loss	109,803,420	1.00	109,803,420	0
<b>Total Outflows:</b>				
<b>(1)+(2)+(3)</b>	<b>\$ 2,569,256,331</b>		<b>\$ 1,002,150,218</b>	<b>\$ 1,567,106,113</b>

Results prior to 2018 were produced by the prior actuary.

In accordance with GASB, the original amortization period for liability experience and assumption changes are amortized over the expected future working lifetime of all members, whereas the investment experience is amortized over five years.





## SECTION VI – GASB INFORMATION

**TABLE 19**  
**DEFERRED INFLOWS OF RESOURCES**

	June 30, 2023	Remaining Period	Recognition	June 30, 2024
<b>1. Liability Experience</b>				
June 30, 2024 Gain	\$ 0	3.71	\$ 0	\$ 0
June 30, 2023 Gain	0	2.65	0	0
June 30, 2022 Gain	0	1.73	0	0
June 30, 2021 Gain	0	0.82	0	0
June 30, 2020 Gain	0	0.00	0	0
June 30, 2019 Gain	0	0.00	0	0
June 30, 2018 Gain	0	0.00	0	0
June 30, 2017 Gain	0	0.00	0	0
June 30, 2016 Gain	0	0.00	0	0
June 30, 2015 Gain	0	0.00	0	0
June 30, 2014 Gain	0	0.00	0	0
<b>2. Assumption Changes</b>				
June 30, 2024 Gain	\$ 0	3.71	\$ 0	\$ 0
June 30, 2023 Gain	0	2.65	0	0
June 30, 2022 Gain	0	1.73	0	0
June 30, 2021 Gain	0	0.82	0	0
June 30, 2020 Gain	0	0.00	0	0
June 30, 2019 Gain	0	0.00	0	0
June 30, 2018 Gain	0	0.00	0	0
June 30, 2017 Gain	0	0.00	0	0
June 30, 2016 Gain	0	0.00	0	0
June 30, 2015 Gain	0	0.00	0	0
<b>3. Investment Experience</b>				
June 30, 2024 Gain	\$ 164,861,442	5.00	\$ 32,972,289	\$ 131,889,153
June 30, 2023 Gain	0	4.00	0	0
June 30, 2022 Gain	0	3.00	0	0
June 30, 2021 Gain	976,747,868	2.00	488,373,936	488,373,932
June 30, 2020 Gain	0	1.00	0	0
<b>Total Inflows: (1)+(2)+(3)</b>	<b>\$ 1,141,609,310</b>		<b>\$ 521,346,225</b>	<b>\$ 620,263,085</b>

Results prior to 2018 were produced by the prior actuary.

In accordance with GASB, the original amortization period for liability experience and assumption changes are amortized over the expected future working lifetime of all members, whereas the investment experience is amortized over five years.





## SECTION VI – GASB INFORMATION

TABLE 20

### DEFERRED INFLOWS / OUTFLOWS TO BE RECOGNIZED IN PENSION EXPENSE

<b>Fiscal Year Ending June 30</b>	<b>Deferred Outflows</b>	<b>Deferred Inflows</b>	<b>Net Deferred Outflows/(Inflows)</b>
Current Year:			
2024	\$ 1,002,150,218	\$ 521,346,225	\$ 480,803,993
Future Years:			
2025	\$ 688,061,190	\$ 521,346,221	\$ 166,714,969
2026	669,556,760	32,972,289	636,584,471
2027	209,488,163	32,972,289	176,515,874
2028	0	32,972,286	(32,972,286)
2029	0	0	0
Thereafter	0	0	0





## SECTION VI – GASB INFORMATION

TABLE 21

### PENSION EXPENSE UNDER GASB NO. 68

	<b>For Fiscal Year Ending June 30, 2024</b>	
1. Service Cost, beginning of year	\$	266,403,884
2. Interest Cost, including interest on service cost		1,135,468,978
3. Member Contributions <sup>1</sup>		0
4. Administrative Expenses <sup>2</sup>		19,703,254
5. Expected Return on Assets <sup>3</sup>		(920,097,428)
6. Plan Amendments		365,418,101
7. Recognition of Deferred Inflows / Outflows of Resources Related to:		
a. Liability Experience (Gains) / Losses	177,987,062	
b. Assumption Change (Gains) / Losses	192,461,564	
c. Investment Experience (Gains) / Losses	110,355,367	
d. Total: (7a)+(7b)+(7c)		480,803,993
8. Miscellaneous (Income) / Expense		(69,894)
9. Total Collective Pension Expense: (1)+(2)+(3)+(4)+(5)+(6)+(7d)+(8)		1,347,630,888
10. Employer Service Purchases <sup>4</sup>		369,275
<b>Pension Expense / (Income): (9) + (10)</b>	<b>\$</b>	<b>1,348,000,163</b>

<sup>1</sup> Excludes member paid service purchases of \$212,579.

<sup>2</sup> Excludes contributions made by INPRS for its employees of \$1,762,100 in the hybrid plan and \$303,859 in the My Choice plan.

<sup>3</sup> Cash flows assumed to occur mid-year.

<sup>4</sup> To be expensed by the employers who purchased the service.





## SECTION VI – GASB INFORMATION

### GASB NO. 67 and GASB NO. 68

#### NOTES TO THE FINANCIAL STATEMENTS

The material presented herein is a subset of the information requested as Notes to the Financial Statements. Required information not provided herein is to be supplied by the plan.

#### Actuarial Assumptions and Inputs

Significant actuarial assumptions and other inputs used to measure the total pension liability:

Type of Plan	The Public Employees' Retirement Fund is a cost-sharing multiple-employer plan for GASB accounting purposes.
Measurement Date	June 30, 2024
Valuation Date	
Assets:	June 30, 2024
Liabilities:	June 30, 2023 – The TPL as of June 30, 2024 was determined based on an actuarial valuation prepared as of June 30, 2023 rolled forward one year to June 30, 2024, using the following key actuarial assumptions and other inputs, such as benefit accruals and actual benefit payments during that time period.
Inflation	2.00%
Future Salary Increases	2.65% - 8.65% based on service
Cost-of-Living Increases	As of June 30, 2024: A one-time 13 <sup>th</sup> check was granted and payable by October 1, 2024. Thereafter, it is assumed participants who have commenced benefits prior to July 1, 2025 will receive an annual 13 <sup>th</sup> check indexed with inflation. Participants commencing on or after July 1, 2025 are assumed to receive a 1% COLA.  As of June 30, 2023: No COLA was granted for the 2023-2025 biennium. Thereafter, the following COLAs, compounded annually, were assumed: 0.4% beginning on January 1, 2026 0.5% beginning on January 1, 2034 0.6% beginning on January 1, 2039







## SECTION VI – GASB INFORMATION

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Mortality Assumption	<p>Pub-2010 Public Retirement Plans Mortality Tables (Amount-Weighted) with a fully generational projection of mortality improvements using SOA Scale MP-2019.</p> <p><i>Healthy Employees</i> – General Employee table with a 3 year set forward for males and a 1 year set forward for females.</p> <p><i>Retirees</i> – General Retiree table with a 3 year set forward for males and a 1 year set forward for females.</p> <p><i>Beneficiaries</i> – Contingent Survivor table with no set forward for males and a 2 year set forward for females.</p> <p><i>Disableds</i> – General Disabled table with a 140% load.</p>
Experience Study	<p>The most recent comprehensive experience study, based on member experience between June 30, 2014 and June 30, 2019, was completed in February 2020. The demographic assumptions were approved by the Board in June 2020 and were used beginning with the June 30, 2020 actuarial valuation. Economic assumptions were updated and approved by the Board in May 2021 following the completion of an Asset-Liability study and first used in the June 30, 2021 actuarial valuation.</p>
Discount Rate	<p>6.25%, net of investment expenses</p> <p>The discount rate is equal to the expected long-term rate of return on plan investments, net of investment expense and including price inflation. There was no change in the discount rate from the prior measurement date.</p> <p>The INPRS Board of Trustees has established a funding policy of setting the employer contribution rate equal to the greater of 11.2% (the current contribution rate) or a rate equal to the actuarially determined contribution rate, which is based on the assumptions and methods selected by the Board for the annual actuarial valuations and projected covered member payroll. The June 30, 2024 actuarial valuation assumes a long-term rate of return on assets of 6.25%, a 20-year level dollar closed method for amortizing the future layers of unfunded actuarial accrued liability (30 years for amortization layers established prior to June 30, 2016), and a 5-year smoothing method for recognizing investment gains and losses in the actuarial value of assets.</p> <p>In the past several years, the Board has followed its current funding policy and the State has complied in its contributions to the plan. Therefore, if past practice is continued, the appropriations will be sufficient to fully fund the plan within 10 to 20 years. Deterministic projections indicate the actuarially determined contribution rate will decline over the coming years. As a result, it is presumed that the projected plan assets will be sufficient to cover the future benefit payments for current members and a detailed projection of plan assets and cash flows has not been prepared.</p>





## SECTION VI – GASB INFORMATION

### Discount Rate Sensitivity

	1% Decrease	Current Rate	1% Increase
	5.25%	6.25%	7.25%
Net Pension Liability	\$6,421,937,321	\$4,030,984,828	\$2,042,954,721

### Classes of Plan Members Covered

The June 30, 2024 valuation was performed using census data provided by INPRS as of June 30, 2023. Standard actuarial techniques were used to roll forward the total pension liability computed as of June 30, 2023 to the June 30, 2024 measurement date using actual benefit payments during that period of time.

Number as of June 30, 2023	
1. Currently Receiving Benefits:	
Retired Members, Disabled Members, and Beneficiaries	101,853
2. Inactive Members Entitled To But Not Yet Receiving Benefits	35,805
3. Inactive Non-vested Members Entitled to a Refund of Member Contributions	0
4. Active Members	121,200
Total Covered Plan Members: (1)+(2)+(3)+(4)	258,858

### Money-Weighted Rate of Return

The money-weighted rate of return equals investment performance, net of pension plan investment expense, adjusted for the changing amounts actually invested. For the fiscal year ending June 30, 2023, the money-weighted return on the plan assets is 7.4%.

### Components of Net Pension Liability

As of June 30, 2024	
Total Pension Liability	\$ 19,673,147,024
Fiduciary Net Position	15,642,162,196
Net Pension Liability	\$ 4,030,984,828
Ratio of Fiduciary Net Position to Total Pension Liability	79.51%





## SECTION VI – GASB INFORMATION

### GASB NO. 67 AND GASB NO. 68: REQUIRED SUPPLEMENTAL INFORMATION SCHEDULE OF CHANGES IN THE TOTAL PENSION LIABILITY AND PLAN FIDUCIARY NET POSITION

Fiscal Year Ending June 30	2020	2021	2022	2023	2024
<b>Total Pension Liability</b>					
Total Pension Liability - beginning	\$16,576,060,167	\$16,281,754,235	\$17,563,157,462	\$18,002,194,131	\$18,415,248,366
DC Account Balances - beginning <sup>1</sup>	0	0	0	0	0
DB Pension Liability - beginning	\$16,576,060,167	\$16,281,754,235	\$17,563,157,462	\$18,002,194,131	\$18,415,248,366
Service Cost (SC), beginning-of-year	201,143,591	206,224,841	237,481,419	246,229,109	266,403,884
Interest Cost, including interest on SC	1,101,241,510	1,080,919,775	1,082,718,830	1,109,694,433	1,135,468,978
Experience (Gains)/Losses	(54,831,797)	30,428,538	73,111,616	43,755,332	518,904,895
Assumption Changes	(616,829,795)	896,589,242	0	0	0
Plan Amendments	0	15,946,383	0	0	365,418,101
DC Annuity Payments	0	0	0	0	0
Actual Benefit Payments	(922,190,241)	(946,107,172)	(949,954,676)	(984,758,539)	(1,024,939,192)
Member Reassignments	(3,163,150)	(3,056,997)	(5,714,455)	(5,876,185)	(3,939,862)
Service Purchases	323,950	458,617	1,393,935	4,010,085	581,854
Net Change in Total Pension Liability	(294,305,932)	1,281,403,227	439,036,669	413,054,235	1,257,898,658
DB Pension Liability - ending	\$16,281,754,235	\$17,563,157,462	\$18,002,194,131	\$18,415,248,366	\$19,673,147,024
DC Account Balances - ending <sup>1</sup>	0	0	0	0	0
<b>(a) Total Pension Liability - ending</b>	<b>\$16,281,754,235</b>	<b>\$17,563,157,462</b>	<b>\$18,002,194,131</b>	<b>\$18,415,248,366</b>	<b>\$19,673,147,024</b>
<b>Plan Fiduciary Net Position</b>					
Plan Fiduciary Net Position – beginning	\$13,270,996,471	\$13,261,359,961	\$16,247,309,759	\$14,848,362,129	\$14,885,914,366
DC Account Balances - beginning <sup>1</sup>	0	0	0	0	0
DB Plan Fiduciary Net Position – beginning	\$13,270,996,471	\$13,261,359,961	\$16,247,309,759	\$14,848,362,129	\$14,885,914,366
Contributions – employer	599,100,479	627,316,041	629,000,411	682,853,672	721,654,754
Contributions – non-employer	0	0	0	0	0
Contributions – member	126,815	129,035	307,370	208,051	212,579
Net investment income	335,138,985	3,325,549,967	(1,053,902,084)	366,818,480	1,084,958,870
Actual benefit payments	(922,190,241)	(946,107,172)	(949,954,676)	(984,758,539)	(1,024,939,192)
Net member reassignments	(3,163,150)	(3,056,997)	(5,714,455)	(5,876,185)	(3,939,862)
DC Annuity Payments	0	0	0	0	0
Administrative expense	(18,886,120)	(18,003,369)	(18,703,663)	(21,696,048)	(21,769,213)
Other	236,722	122,293	19,467	2,806	69,894
Net change in Plan Fiduciary Net Position	(9,636,510)	2,985,949,798	(1,398,947,630)	37,552,237	756,247,830
DB Plan Fiduciary Net Position – ending	\$13,261,359,961	\$16,247,309,759	\$14,848,362,129	\$14,885,914,366	\$15,642,162,196
DC Account Balances - ending <sup>1</sup>	0	0	0	0	0
<b>(b) Plan Fiduciary Net Position - ending</b>	<b>\$13,261,359,961</b>	<b>\$16,247,309,759</b>	<b>\$14,848,362,129</b>	<b>\$14,885,914,366</b>	<b>\$15,642,162,196</b>
<b>Net Pension Liability - ending, (a) - (b)</b>	<b>\$3,020,394,274</b>	<b>\$1,315,847,703</b>	<b>\$3,153,832,002</b>	<b>\$3,529,334,000</b>	<b>\$4,030,984,828</b>

<sup>1</sup> Effective January 1, 2018, DC account balances are handled by a third party annuity provider and are treated as a separate defined contribution plan.

Results prior to 2018 were produced by the prior actuary.





## SECTION VI – GASB INFORMATION

### GASB NO. 67 AND GASB NO. 68: REQUIRED SUPPLEMENTAL INFORMATION SCHEDULE OF CHANGES IN THE TOTAL PENSION LIABILITY AND PLAN FIDUCIARY NET POSITION (continued)

Fiscal Year Ending June 30	2015	2016	2017	2018	2019
<b>Total Pension Liability</b>					
Total Pension Liability - beginning	\$16,732,222,649	\$17,980,568,263	\$18,408,946,980	\$19,106,214,994	\$16,091,372,940
DC Account Balances - beginning <sup>1</sup>	2,851,500,608	2,717,173,311	2,656,892,220	2,770,961,812	0
DB Pension Liability - beginning	\$13,880,722,041	\$15,263,394,952	\$15,752,054,760	\$16,335,253,182	\$16,091,372,940
Service Cost (SC), beginning-of-year	273,909,865	191,055,506	194,101,310	202,323,634	195,382,841
Interest Cost, including interest on SC	936,403,574	1,018,992,903	1,051,217,483	1,088,503,109	1,069,184,188
Experience (Gains)/Losses	247,977,703	(4,869,991)	82,963,628	20,103,378	101,180,620
Assumption Changes	488,354,517	0	22,809,173	(731,600,714)	0
Plan Amendments	0	0	(22,765,723)	0	12,919,637
DC Annuities	196,788,238	75,035,755	78,792,615	43,873,966	0
Actual Benefit Payments	(752,895,719)	(786,606,562)	(820,721,414)	(860,613,831)	(888,510,777)
Member Reassignments	(8,155,200)	(5,441,493)	(3,617,572)	(7,030,159)	(5,787,037)
Service Purchases	289,933	493,690	418,922	560,375	317,755
Net Change in Total Pension Liability	1,382,672,911	488,659,808	583,198,422	(243,880,242)	484,687,227
DB Pension Liability - ending	\$15,263,394,952	\$15,752,054,760	\$16,335,253,182	\$16,091,372,940	\$16,576,060,167
DC Account Balances - ending <sup>1</sup>	2,717,173,311	2,656,892,220	2,770,961,812	0	0
<b>(a) Total Pension Liability - ending</b>	<b>\$17,980,568,263</b>	<b>\$18,408,946,980</b>	<b>\$19,106,214,994</b>	<b>\$16,091,372,940</b>	<b>\$16,576,060,167</b>
<b>Plan Fiduciary Net Position</b>					
Plan Fiduciary Net Position – beginning	\$14,104,287,554	\$13,907,666,213	\$13,870,502,444	\$14,644,671,525	\$12,694,327,690
DC Account Balances - beginning <sup>1</sup>	2,851,500,608	2,717,173,311	2,656,892,220	2,770,961,812	0
DB Plan Fiduciary Net Position – beginning	\$11,252,786,946	\$11,190,492,902	\$11,213,610,224	\$11,873,709,713	\$12,694,327,690
Contributions – employer	538,059,283	615,773,383	558,892,767	571,373,825	581,873,684
Contributions – non-employer	0	0	0	0	0
Contributions – member	0	442,809	589,663	708,034	294,752
Net investment income	(10,667,128)	147,106,621	870,591,483	1,093,094,099	906,388,001
Actual benefit payments	(752,895,719)	(786,606,562)	(820,721,414)	(860,613,831)	(888,510,777)
Net member reassignments	(8,155,200)	(5,441,493)	(3,617,572)	(7,030,159)	(5,787,037)
DC Annuities	196,788,238	75,035,755	78,792,615	43,873,966	0
Administrative expense	(25,506,518)	(24,098,191)	(24,483,053)	(20,844,003)	(18,471,916)
Other	83,000	905,000	55,000	56,046	882,074
Net change in Plan Fiduciary Net Position	(62,294,044)	23,117,322	660,099,489	820,617,977	576,668,781
DB Plan Fiduciary Net Position – ending	\$11,190,492,902	\$11,213,610,224	\$11,873,709,713	\$12,694,327,690	\$13,270,996,471
DC Account Balances - ending <sup>1</sup>	2,717,173,311	2,656,892,220	2,770,961,812	0	0
<b>(b) Plan Fiduciary Net Position - ending</b>	<b>\$13,907,666,213</b>	<b>\$13,870,502,444</b>	<b>\$14,644,671,525</b>	<b>\$12,694,327,690</b>	<b>\$13,270,996,471</b>
<b>Net Pension Liability - ending, (a) - (b)</b>	<b>\$4,072,902,050</b>	<b>\$4,538,444,536</b>	<b>\$4,461,543,469</b>	<b>\$3,397,045,250</b>	<b>\$3,305,063,696</b>

<sup>1</sup> Effective January 1, 2018, DC account balances are handled by a third party annuity provider and are treated as a separate defined contribution plan.

Results prior to 2018 were produced by the prior actuary.





## SECTION VI – GASB INFORMATION

### GASB NO. 67 AND GASB NO. 68: REQUIRED SUPPLEMENTAL INFORMATION

#### SCHEDULE OF THE NET PENSION LIABILITY

<b>Fiscal Year Ending June 30</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
Total Pension Liability	\$16,281,754,235	\$17,563,157,462	\$18,002,194,131	\$18,415,248,366	\$19,673,147,024
Plan Fiduciary Net Position	<u>13,261,359,961</u>	<u>16,247,309,759</u>	<u>14,848,362,129</u>	<u>14,885,914,366</u>	<u>15,642,162,196</u>
Net Pension Liability	\$3,020,394,274	\$1,315,847,703	\$3,153,832,002	\$3,529,334,000	\$4,030,984,828
Ratio of Plan Fiduciary Net Position to Total Pension Liability	81.45%	92.51%	82.48%	80.83%	79.51%
Covered payroll <sup>1</sup>	\$5,380,842,933	\$5,482,242,349	\$5,670,744,395	\$6,149,915,494	\$6,593,262,118
Net Pension Liability as a percentage of covered payroll	56.13%	24.00%	55.62%	57.39%	61.14%
<b>Fiscal Year Ending June 30</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
Total Pension Liability	\$17,980,568,263	\$18,408,946,980	\$19,106,214,994	\$16,091,372,940	\$16,576,060,167
Plan Fiduciary Net Position	<u>13,907,666,213</u>	<u>13,870,502,444</u>	<u>14,644,671,525</u>	<u>12,694,327,690</u>	<u>13,270,996,471</u>
Net Pension Liability	\$4,072,902,050	\$4,538,444,536	\$4,461,543,469	\$3,397,045,250	\$3,305,063,696
Ratio of Plan Fiduciary Net Position to Total Pension Liability	77.35%	75.35%	76.65%	78.89%	80.06%
Covered payroll <sup>1</sup>	\$4,804,145,033	\$4,868,709,366	\$4,997,555,495	\$5,083,130,815	\$5,205,242,704
Net Pension Liability as a percentage of covered payroll	84.78%	93.22%	89.27%	66.83%	63.49%

<sup>1</sup> As provided by INPRS.

Results prior to 2018 were produced by the prior actuary.





## SECTION VI – GASB INFORMATION

### GASB NO. 67 AND GASB NO. 68: REQUIRED SUPPLEMENTAL INFORMATION

#### SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ending June 30	2020	2021	2022	2023	2024
Actuarially Determined Contribution <sup>1</sup>	\$482,316,183	\$452,332,617	\$433,048,227	\$467,206,774	\$475,272,724
Actual employer contributions <sup>2</sup>	<u>\$598,903,344</u>	<u>\$626,986,459</u>	<u>\$627,913,846</u>	<u>\$679,051,638</u>	<u>\$721,285,479</u>
Annual contribution (deficiency) / excess	\$116,587,161	\$174,653,842	\$194,865,619	\$211,844,864	\$246,012,755
Covered payroll <sup>3</sup>	\$5,380,842,933	\$5,482,242,349	\$5,670,744,395	\$6,149,915,494	\$6,593,262,118
Actual contributions as a percentage of covered payroll	11.13%	11.44%	11.07%	11.04%	10.94%

Fiscal Year Ending June 30	2015	2016	2017	2018	2019
Actuarially Determined Contribution <sup>1</sup>	\$517,716,612	\$491,999,602	\$496,867,070	\$502,205,573	\$527,836,147
Actual employer contributions <sup>2</sup>	<u>\$536,202,332</u>	<u>\$547,684,477</u>	<u>\$558,660,887</u>	<u>\$571,098,939</u>	<u>\$581,850,681</u>
Annual contribution (deficiency) / excess	\$18,485,720	\$55,684,875	\$61,793,817	\$68,893,366	\$54,014,534
Covered payroll <sup>3</sup>	\$4,804,145,033	\$4,868,709,366	\$4,997,555,495	\$5,083,130,815	\$5,205,242,704
Actual contributions as a percentage of covered payroll	11.16%	11.25%	11.18%	11.24%	11.18%

<sup>1</sup> The State and Political Subdivision employer rates were applied to the actual covered employee payroll for the fiscal year to determine the contribution amount. The surcharge rate used for both State and Political Subdivision uses the valuation completed two years ago for July-December and one year ago for January-June. State - The actuarially determined amortization and normal cost rates were developed in the actuarial report completed one year prior to the fiscal year. Political Subdivisions - The rate is determined as the average of these two rates:

- Actuarially determined amortization and normal cost rates for January-June were developed in the actuarial report completed one year prior to the fiscal year.
- Actuarially determined amortization and normal cost rates for July-December were developed in the actuarial report completed two years prior to the fiscal year.

<sup>2</sup> Excludes service purchases paid for by the employer of \$369,275.

<sup>3</sup> As provided by INPRS.

Results prior to 2018 were produced by the prior actuary.





## SECTION VI – GASB INFORMATION

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### GASB NO. 67 AND GASB NO. 68: REQUIRED SUPPLEMENTAL INFORMATION

#### SCHEDULE OF MONEY-WEIGHTED RETURNS

<u>For Fiscal Year Ending June 30</u>	<u>Money-Weighted Return</u>
2024	7.4%
2023	2.5%
2022	(6.6%)
2021	25.5%
2020	2.6%
2019	7.3%
2018	9.3%
2017	7.6%
2016	1.1%
2015	0.3%

Returns provided by INPRS.





## APPENDIX TABLE OF CONTENTS

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	<u>Page</u>
<b>Appendix A</b>	Membership Data.....44
	- <i>Schedules of valuation data classified by various categories of members.</i>
<b>Appendix B</b>	Summary of Plan Provisions.....55
	- <i>A summary of the current benefit structure, as determined by the provisions of governing law on June 30, 2024.</i>
<b>Appendix C</b>	Summary of Actuarial Methods and Assumptions .....60
	- <i>A summary of the actuarial methods and assumptions used to estimate liabilities and determine contribution rates.</i>
<b>Appendix D</b>	Glossary of Actuarial Terms.....67
	- <i>A glossary of actuarial terms used in the valuation report.</i>







## APPENDIX A – MEMBERSHIP DATA

### MEMBER DATA RECONCILIATION For June 30, 2023 Data used in the June 30, 2024 Valuation

	Active Members	Inactive Vested	Inactive Deceased	Disabled	Retired	Beneficiary	Total
<b>1. As of June 30, 2022</b>	<b>119,398</b>	<b>35,004</b>	<b>170</b>	<b>2,713</b>	<b>85,786</b>	<b>11,136</b>	<b>254,207</b>
<b>2. Data Adjustments</b>							
New Participants	19,218	0	0	0	0	0	19,218
Rehires	556	(556)	0	0	0	0	0
Terminations:							
Not Vested	(11,456)	0	0	0	0	0	(11,456)
Deferred Vested	(2,627)	2,627	0	0	0	0	0
Disability	(59)	0	0	59	0	0	0
Retirements	(3,565)	(1,396)	(7)	0	4,961	7	0
Refund / Benefits Ended	0	(128)	(3)	0	(1)	(40)	(172)
Transfer	(59)	(213)	0	0	0	0	(272)
Deaths:							
With Beneficiary	(54)	(43)	0	(61)	(884)	1,042	0
Without Beneficiary	(172)	(205)	0	(63)	(2,267)	(698)	(3,405)
Entitled to Future Benefit	(8)	(372)	380	0	0	0	0
Data Corrections <sup>1</sup>	28	539	8	54	37	72	738
Net Change	1,802	253	378	(11)	1,846	383	4,651
<b>3. As of June 30, 2023 <sup>2</sup></b>	<b>121,200</b>	<b>35,257</b>	<b>548</b>	<b>2,702</b>	<b>87,632</b>	<b>11,519</b>	<b>258,858</b>

<sup>1</sup> Data corrections reflect the movement between Disabled and Retired status, along with other movements in the INPRS data.

<sup>2</sup> Valuation results as of June 30, 2024 were calculated using June 30, 2023 census data, adjusted for certain activity before the valuation date. Headcounts may include multiple records for individuals, such as members with multiple periods of service.





## APPENDIX A – MEMBERSHIP DATA

### SUMMARY OF MEMBERSHIP DATA

Valuation Date	June 30, 2023	June 30, 2024	% Change
Date of Membership Data <sup>1</sup>	July 1, 2022	July 1, 2023	
<b>ACTIVE MEMBERS</b>			
Number of Active Members <sup>2</sup>	119,398	121,200	1.5%
Annual Membership Data Salary <sup>3</sup>	\$ 5,294,828,949	\$ 5,774,659,017	9.1%
Anticipated Payroll for Next Fiscal Year	\$ 6,312,888,255	\$ 6,767,983,564	7.2%
Active Member Averages			
Age	47.4	47.0	(0.8%)
Service	10.9	10.5	(3.7%)
Annual Membership Data Salary	\$ 44,346	\$ 47,646	7.4%
<b>INACTIVE MEMBERS</b>			
Number of Inactive Members	35,174	35,805	1.8%
Inactive Member Averages			
Age	53.9	54.0	0.2%
Service	11.4	11.4	0.0%
<b>RETIREES, DISABLEDS, AND BENEFICIARIES</b>			
Number of Members			
Retired	85,786	87,632	2.2%
Disabled	2,713	2,702	(0.4%)
Beneficiaries	11,136	11,519	3.4%
Total	99,635	101,853	2.2%
Annual Benefits			
Retired	872,828,577	905,058,629	3.7%
Disabled	15,054,270	15,216,246	1.1%
Beneficiaries	79,924,559	84,226,980	5.4%
Total	\$ 967,807,406	\$ 1,004,501,855	3.8%
Annual Benefits			
Pension	849,179,327	888,866,678	4.7%
DC Plan Annuities	118,628,079	115,635,177	(2.5%)
Total	\$ 967,807,406	\$ 1,004,501,855	3.8%

<sup>1</sup> The valuation results were calculated using the prior year's census data and were adjusted for certain activity during fiscal year, such as new units, enlargements, or withdrawals.

<sup>2</sup> Salary provided without data adjustments for activity that occurred during the year.

<sup>3</sup> Annualized for actives with less than a year of service. Actives with no salary provided are defaulted to the average salary.

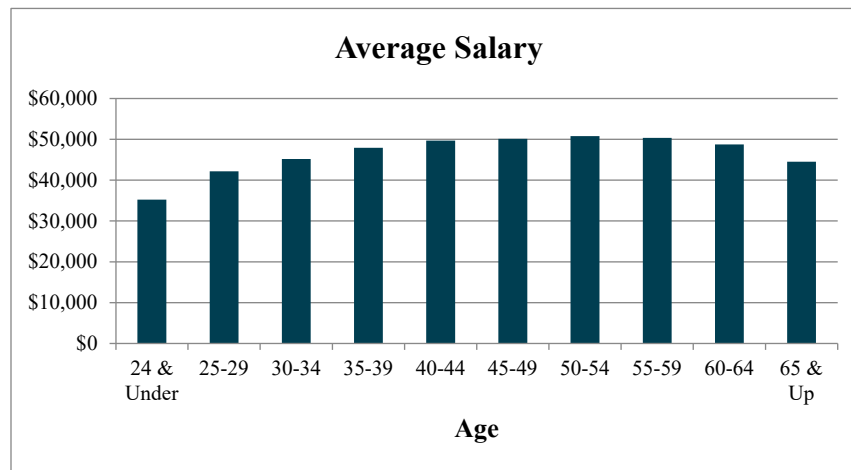
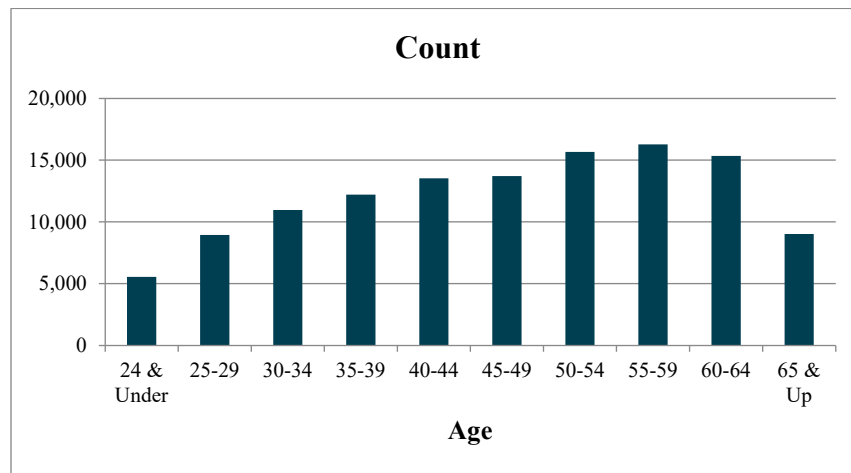




## APPENDIX A – MEMBERSHIP DATA

### ACTIVE MEMBERS <sup>1</sup> As of June 30, 2023 for the June 30, 2024 Valuation

Age	Count of Members			FY 2023 Annual Membership Data Salary		
	Male	Female	Total	Male	Female	Total
24 & Under	2,641	2,913	5,554	\$ 103,324,478	\$ 92,367,728	\$ 195,692,206
25-29	3,992	4,947	8,939	184,742,205	192,127,132	376,869,337
30-34	4,501	6,461	10,962	230,882,908	264,163,062	495,045,970
35-39	4,814	7,391	12,205	268,832,823	316,111,708	584,944,531
40-44	5,147	8,383	13,530	302,628,091	369,499,167	672,127,258
45-49	5,068	8,635	13,703	300,869,073	385,550,893	686,419,966
50-54	6,029	9,631	15,660	358,386,768	436,641,285	795,028,053
55-59	6,251	10,022	16,273	364,252,593	454,694,019	818,946,612
60-64	5,964	9,384	15,348	339,217,929	408,523,163	747,741,092
65 & Up	4,031	4,995	9,026	201,823,546	200,020,446	401,843,992
<b>Total</b>	<b>48,438</b>	<b>72,762</b>	<b>121,200</b>	<b>\$ 2,654,960,414</b>	<b>\$ 3,119,698,603</b>	<b>\$ 5,774,659,017</b>



<sup>1</sup> Includes 563 actives where the missing salary was defaulted to the average salary of \$47,646.





# APPENDIX A – MEMBERSHIP DATA

## AGE AND SERVICE DISTRIBUTION <sup>1</sup> As of June 30, 2023 for the June 30, 2024 Valuation

Age		0-4	5-9	10-14	15-19	20-24	25-29	30-34	Over 34	Total
<b>24 &amp; Under</b>	Number	5,527	27	0	0	0	0	0	0	5,554
	Total Salary	\$ 194,377,489	\$ 1,314,717	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 195,692,206
	Average Sal.	\$ 35,169	\$ 48,693	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 35,234
<b>25-29</b>	Number	7,697	1,232	10	0	0	0	0	0	8,939
	Total Salary	\$ 313,660,905	\$ 62,781,728	\$ 426,704	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 376,869,337
	Average Sal.	\$ 40,751	\$ 50,959	\$ 42,670	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 42,160
<b>30-34</b>	Number	6,816	3,560	574	12	0	0	0	0	10,962
	Total Salary	\$ 272,461,220	\$ 188,670,389	\$ 33,292,019	\$ 622,342	\$ 0	\$ 0	\$ 0	\$ 0	\$ 495,045,970
	Average Sal.	\$ 39,974	\$ 52,997	\$ 58,000	\$ 51,862	\$ 0	\$ 0	\$ 0	\$ 0	\$ 45,160
<b>35-39</b>	Number	5,979	3,514	2,038	663	11	0	0	0	12,205
	Total Salary	\$ 230,837,542	\$ 183,153,968	\$ 127,792,493	\$ 42,616,207	\$ 544,321	\$ 0	\$ 0	\$ 0	\$ 584,944,531
	Average Sal.	\$ 38,608	\$ 52,121	\$ 62,705	\$ 64,278	\$ 49,484	\$ 0	\$ 0	\$ 0	\$ 47,927
<b>40-44</b>	Number	5,416	3,338	2,116	2,035	607	18	0	0	13,530
	Total Salary	\$ 208,593,685	\$ 163,953,136	\$ 124,797,207	\$ 133,857,557	\$ 39,697,519	\$ 1,228,154	\$ 0	\$ 0	\$ 672,127,258
	Average Sal.	\$ 38,514	\$ 49,117	\$ 58,978	\$ 65,778	\$ 65,400	\$ 68,231	\$ 0	\$ 0	\$ 49,677
<b>45-49</b>	Number	4,427	3,188	1,935	1,961	1,608	575	9	0	13,703
	Total Salary	\$ 172,528,452	\$ 146,408,848	\$ 103,438,884	\$ 120,019,520	\$ 106,020,318	\$ 37,448,992	\$ 554,952	\$ 0	\$ 686,419,966
	Average Sal.	\$ 38,972	\$ 45,925	\$ 53,457	\$ 61,203	\$ 65,933	\$ 65,129	\$ 61,661	\$ 0	\$ 50,093
<b>50-54</b>	Number	4,075	3,104	2,351	2,175	1,788	1,586	559	22	15,660
	Total Salary	\$ 161,577,171	\$ 139,764,758	\$ 117,126,011	\$ 120,430,982	\$ 109,328,035	\$ 108,029,967	\$ 37,465,004	\$ 1,306,125	\$ 795,028,053
	Average Sal.	\$ 39,651	\$ 45,027	\$ 49,820	\$ 55,371	\$ 61,145	\$ 68,115	\$ 67,021	\$ 59,369	\$ 50,768
<b>55-59</b>	Number	3,329	2,857	2,318	2,330	2,015	1,586	1,221	617	16,273
	Total Salary	\$ 132,674,440	\$ 128,126,731	\$ 110,040,628	\$ 120,794,344	\$ 110,074,085	\$ 94,901,515	\$ 81,709,045	\$ 40,625,824	\$ 818,946,612
	Average Sal.	\$ 39,854	\$ 44,847	\$ 47,472	\$ 51,843	\$ 54,627	\$ 59,837	\$ 66,920	\$ 65,844	\$ 50,325
<b>60-64</b>	Number	2,402	2,385	2,083	2,271	2,064	1,623	1,066	1,454	15,348
	Total Salary	\$ 86,654,295	\$ 105,322,568	\$ 96,148,629	\$ 110,119,490	\$ 103,771,242	\$ 85,263,998	\$ 64,513,277	\$ 95,947,593	\$ 747,741,092
	Average Sal.	\$ 36,076	\$ 44,160	\$ 46,159	\$ 48,489	\$ 50,277	\$ 52,535	\$ 60,519	\$ 65,989	\$ 48,719
<b>65 &amp; Up</b>	Number	1,611	1,678	1,510	1,305	854	723	481	864	9,026
	Total Salary	\$ 50,397,266	\$ 64,372,539	\$ 67,048,746	\$ 60,637,657	\$ 40,904,195	\$ 36,842,179	\$ 26,591,532	\$ 55,049,878	\$ 401,843,992
	Average Sal.	\$ 31,283	\$ 38,363	\$ 44,403	\$ 46,466	\$ 47,897	\$ 50,957	\$ 55,284	\$ 63,715	\$ 44,521
<b>Total</b>	Number	47,279	24,883	14,935	12,752	8,947	6,111	3,336	2,957	121,200
	Total Salary	\$ 1,823,762,465	\$ 1,183,869,382	\$ 780,111,321	\$ 709,098,099	\$ 510,339,715	\$ 363,714,805	\$ 210,833,810	\$ 192,929,420	\$ 5,774,659,017
	Average Sal.	\$ 38,574	\$ 47,577	\$ 52,234	\$ 55,607	\$ 57,040	\$ 59,518	\$ 63,200	\$ 65,245	\$ 47,646

<sup>1</sup> Includes 563 actives who were missing a salary. Their salaries are defaulted to the average salary of \$47,646.

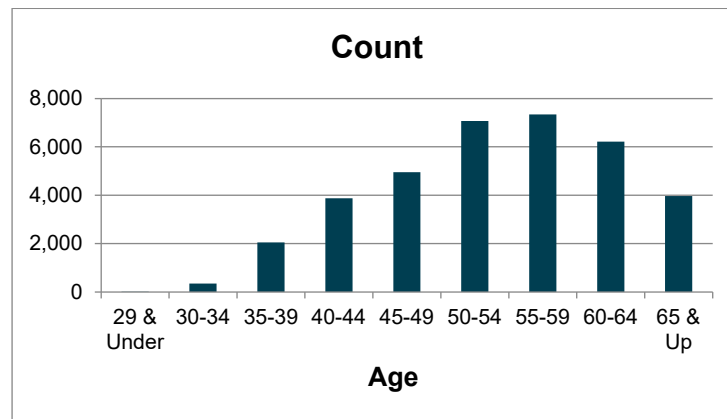




## APPENDIX A – MEMBERSHIP DATA

### INACTIVE VESTED MEMBERS As of June 30, 2023 for the June 30, 2024 Valuation

Age	Count of Members		
	Male	Female	Total
29 & Under	3	4	7
30-34	105	240	345
35-39	663	1,385	2,048
40-44	1,412	2,459	3,871
45-49	1,653	3,300	4,953
50-54	2,206	4,860	7,066
55-59	2,185	5,156	7,341
60-64	1,849	4,363	6,212
65 & Up	<u>1,305</u>	<u>2,657</u>	<u>3,962</u>
Total	11,381	24,424	35,805

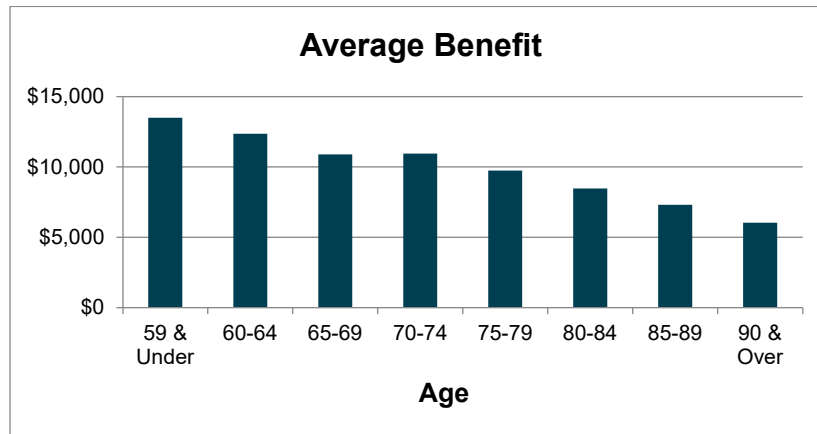
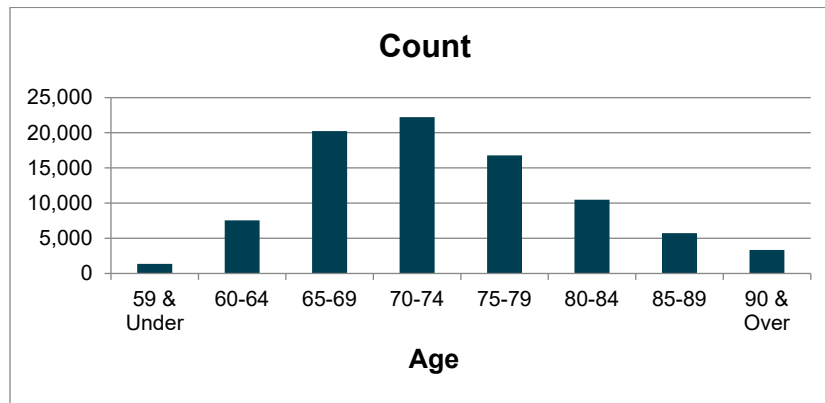




## APPENDIX A – MEMBERSHIP DATA

### RETIRED MEMBERS As of June 30, 2023 for the June 30, 2024 Valuation

Age	Count of Members			Annual Benefits		
	Male	Female	Total	Male	Female	Total
59 & Under	604	745	1,349	\$ 9,766,244	\$ 9,246,621	\$ 19,012,865
60-64	2,961	4,581	7,542	44,753,145	48,877,759	93,630,904
65-69	7,232	13,001	20,233	99,170,996	125,849,457	225,020,453
70-74	7,852	14,350	22,202	106,091,158	137,358,527	243,449,685
75-79	5,641	11,132	16,773	68,517,159	99,732,459	168,249,618
80-84	3,078	7,402	10,480	32,871,782	59,386,244	92,258,026
85-89	1,544	4,181	5,725	14,696,898	28,197,322	42,894,220
90 & Over	<u>690</u>	<u>2,638</u>	<u>3,328</u>	<u>5,443,130</u>	<u>15,099,728</u>	<u>20,542,858</u>
Total	29,602	58,030	87,632	\$ 381,310,512	\$ 523,748,117	\$ 905,058,629

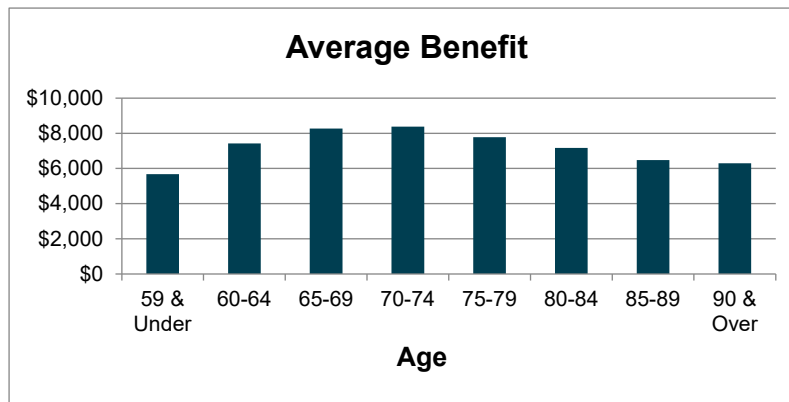
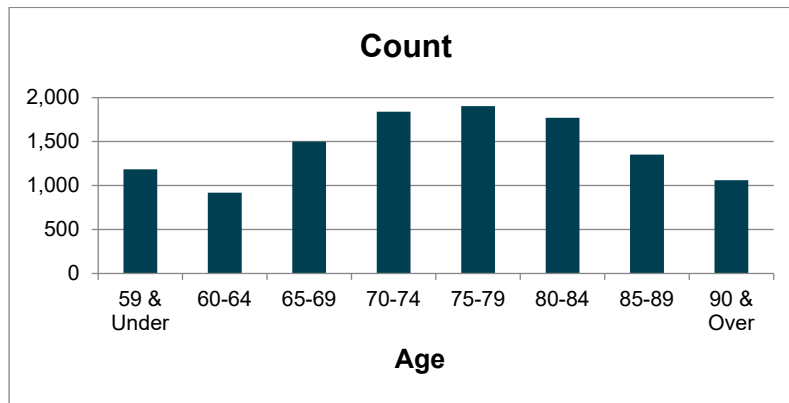




## APPENDIX A – MEMBERSHIP DATA

### BENEFICIARIES RECEIVING BENEFITS As of June 30, 2023 for the June 30, 2024 Valuation

Age	Count of Members			Annual Benefits		
	Male	Female	Total	Male	Female	Total
59 & Under	365	818	1,183	\$ 1,723,772	\$ 4,993,918	\$ 6,717,690
60-64	225	693	918	1,371,739	5,445,484	6,817,223
65-69	360	1,138	1,498	2,320,404	10,070,237	12,390,641
70-74	413	1,425	1,838	2,855,913	12,547,675	15,403,588
75-79	464	1,438	1,902	2,928,590	11,869,571	14,798,161
80-84	392	1,377	1,769	2,248,092	10,430,575	12,678,667
85-89	268	1,083	1,351	1,464,406	7,286,041	8,750,447
90 & Over	<u>178</u>	<u>882</u>	<u>1,060</u>	<u>868,292</u>	<u>5,802,271</u>	<u>6,670,563</u>
Total	2,665	8,854	11,519	\$ 15,781,208	\$ 68,445,772	\$ 84,226,980

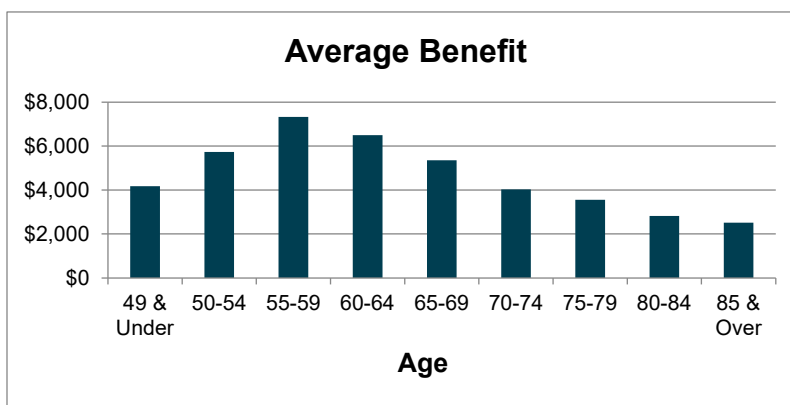
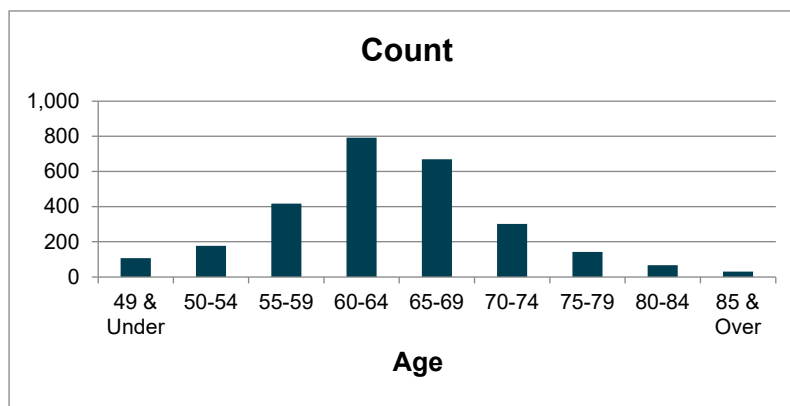




## APPENDIX A – MEMBERSHIP DATA

### DISABLED MEMBERS As of June 30, 2023 for the June 30, 2024 Valuation

Age	Count of Members			Annual Benefits		
	Male	Female	Total	Male	Female	Total
49 & Under	40	67	107	\$ 192,822	\$ 253,584	\$ 446,406
50-54	76	101	177	517,603	496,505	1,014,108
55-59	193	224	417	1,707,640	1,346,000	3,053,640
60-64	331	461	792	2,482,506	2,659,408	5,141,914
65-69	254	415	669	1,506,014	2,072,636	3,578,650
70-74	109	192	301	466,595	745,654	1,212,249
75-79	58	84	142	237,105	268,007	505,112
80-84	19	48	67	58,523	130,321	188,844
85 & Over	<u>12</u>	<u>18</u>	<u>30</u>	<u>27,144</u>	<u>48,179</u>	<u>75,323</u>
Total	1,092	1,610	2,702	\$ 7,195,952	\$ 8,020,294	\$ 15,216,246







## APPENDIX A – MEMBERSHIP DATA

### ADDITIONAL IN PAY INFORMATION As of June 30, 2023 for the June 30, 2024 Valuation

#### Schedule of Average Benefit Payments <sup>1</sup>

For the Year Ended June 30, 2024	Years of Credited Service						Total
	< 10 <sup>2</sup>	10 - 14	15 - 19	20 - 24	25 - 29	30 +	
Average Monthly Defined Benefit	\$169	\$323	\$454	\$637	\$886	\$1,422	\$727
Average Monthly DC Annuity <sup>3</sup>	\$49	\$115	\$158	\$216	\$288	\$497	\$252
Average Final Average Salary <sup>4</sup>	\$26,808	\$29,089	\$31,131	\$33,708	\$37,421	\$45,445	\$35,125
Number of Benefit Recipients	3,168	18,412	23,764	19,593	15,272	21,644	101,853

<sup>1</sup>Calculated using the prior year census data, adjusted for certain activity during the fiscal year.

<sup>2</sup>Members with less than 10 years of service are: (1) a member receiving a disability benefit from INPRS; (2) a member who has at least eight years of creditable service as a county clerk, county auditor, county recorder, county treasurer, county sheriff or county coroner eligible for a normal retirement after reaching age 65 (applies to only members retiring after June 30, 2002); (3) a member who has at least eight years of creditable service as a state auditor, state treasurer, or secretary of state (whose term commences after the November 5, 2002 election).

<sup>3</sup>This represents those retirees who elected to receive their DC account as a supplemental monthly payment in addition to the monthly Defined Benefit payment.

<sup>4</sup>Excludes the 2,105 in-pay members who are missing a final average salary in the data.





## APPENDIX A – MEMBERSHIP DATA

### ADDITIONAL IN PAY INFORMATION As of June 30, 2023 for the June 30, 2024 Valuation

#### Schedule of Benefit Recipients by Type of Benefit Option <sup>1</sup>

##### Number of Recipients by Benefit Option <sup>2</sup>

Amount of Monthly Benefit (in dollars)	5-Year Certain & Life <sup>3</sup>	Straight Life	Joint with 100% Survivor Benefits	Joint with Two-Thirds Survivor Benefits	Joint with One-Half Survivor Benefits	Survivors	Disability	Total Benefit Recipients
1-500	10,374	10,531	8,222	990	2,120	6,349	1,829	40,415
501-1,000	7,619	10,986	6,106	1,265	2,582	3,279	609	32,446
1,001-1,500	3,008	5,264	3,627	808	1,430	1,203	191	15,531
1,501-2,000	1,273	2,558	1,678	558	701	404	58	7,230
2,001-2,500	562	1,206	857	223	402	175	12	3,437
2,501-3,000	241	519	351	107	177	70	1	1,466
Over 3,000	180	525	291	138	153	39	2	1,328
Total	23,257	31,589	21,132	4,089	7,565	11,519	2,702	101,853

<sup>1</sup> Calculated using the prior year census data, adjusted for certain activity during the fiscal year.

<sup>2</sup> Beginning October 2014, social security integration can apply to any optional form.

<sup>3</sup> Includes members who elected a modified cash refund plus 5-year certain & life.





## APPENDIX A – MEMBERSHIP DATA

### ADDITIONAL IN PAY INFORMATION As of June 30, 2023 for the June 30, 2024 Valuation

#### Schedule of Retirees and Beneficiaries <sup>1</sup>

	<u>Added to Rolls</u>		<u>Removed from Rolls</u>		<u>Rolls - End of Year</u>		Percent Change In Total Annual Benefits	Average Annual Benefit	Percent Change In Average Annual Benefit
	Number	Annual Benefits <sup>2</sup>	Number	Annual Benefits <sup>2</sup>	Number	Total Annual Benefits <sup>2</sup>			
2024 <sup>3</sup>	5,294	\$61,355	3,076	\$22,695	101,853	\$1,004,502	3.8%	\$9,862	1.5%
2023 <sup>3</sup>	6,075	66,246	3,523	26,018	99,635	967,807	5.0	9,714	2.3
2022 <sup>3</sup>	5,658	56,959	3,426	24,240	97,083	922,040	3.5	9,497	1.1
2021 <sup>3</sup>	5,502	55,399	3,087	21,538	94,851	891,168	3.7	9,395	1.0
2020 <sup>3</sup>	5,194	50,481	2,690	18,520	92,436	859,427	3.7	9,298	0.9
2019 <sup>3</sup>	5,077	50,319	3,135	21,565	89,932	829,035	3.4	9,218	1.2
2018 <sup>3</sup>	5,249	55,236	2,389	15,609	87,990	801,551	5.8	9,110	2.3
2017 <sup>3</sup>	4,855	49,980	2,913	18,808	85,130	757,851	3.9	8,902	1.5
2016 <sup>3</sup>	6,478	78,487	2,488	15,597	83,188	729,366	9.9	8,768	4.6
2015 <sup>3</sup>	5,489	60,538	2,241	14,107	79,198	663,767	7.4	8,381	3.0

<sup>1</sup>Dollar amounts are in thousands except for the average annual benefit.

<sup>2</sup> Annual benefits includes members selecting an annuity for their DC account. End of year annual benefits are not equal to prior end of year annual benefits plus additions less removals due to beneficiary benefit changes, data changes, and COLA increases.

<sup>3</sup>The valuation results were calculated using the prior year census data, adjusted for certain activity during the fiscal year.





## APPENDIX B – SUMMARY OF PLAN PROVISIONS

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### Definitions

Fiscal year	Twelve-month period ending June 30.
Participation	All full-time employees of the State of Indiana and all full-time employees of Political Subdivisions which have adopted the plan become members of PERF upon date of hire.
Average monthly earnings	The monthly average of earnings during 20 quarters (in groups of 4 consecutive contribution quarters) preceding retirement that produce the highest such average. Earnings include basic salary, the member's 3% mandatory contribution paid by the employer, the member's salary reduction agreement under Section 125, 430(b), or 457 of the Internal Revenue Code, and up to \$2,000 of additional compensation received from the employer in anticipation of the member's termination or retirement.
Member contributions	<p>Each member is required to contribute to a Defined Contribution Account at the rate of 3% of pay (unless the employer has opted to make the contribution for the employee). These contributions are kept on deposit and credited with interest based on the investment elections of each member until such time as they are withdrawn or annuitized by the member.</p> <p>The Defined Contribution Account benefit is in addition to the annuity benefits provided by employer contributions. During FYE 2018, the Defined Contribution Accounts were completely separated from the defined benefit plan, and so are no longer relevant to the valuation process.</p>
Minimum pension benefit	The minimum pension benefit paid to a member with 10 or more years of creditable service receiving any pension benefit is \$180 per month.

### Eligibility for Benefits

Deferred vested	10 or more years of vesting service and no longer active.
Disability retirement	5 or more years of vesting service and qualified for Social Security disability benefits or federal Civil Service disability benefits.





## APPENDIX B – SUMMARY OF PLAN PROVISIONS

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Early retirement	Age 50 with 15 or more years of vesting service.
Normal retirement	<p>Earliest of:</p> <ul style="list-style-type: none"><li>- Age 65 with 10 or more years of vesting service</li><li>- Age 60 with 15 or more years of vesting service</li><li>- Age 55 with sum of age and vesting service equal to 85 or more.</li></ul> <p>Upon age 65 with 20 or more years of service, members become eligible for a Millie Morgan Retirement and can receive their pension benefit while still working. Election is irrevocable.</p>
Pre-retirement death	10 or more years of vesting service.

### Monthly Benefits Payable

Normal retirement	The normal retirement benefit is a pension payable for life with 60 months guaranteed and is equal to 1.1% of average monthly earnings multiplied by years of creditable service earned. The minimum monthly benefit is \$180 if the member has at least 10 years of creditable service.
Early retirement	The early retirement benefit is the accrued retirement benefit determined as of the early retirement date and payable commencing at the normal retirement date. A member may elect to have the benefit commence prior to normal retirement provided the benefit is reduced by 1/10% for each of the first 60 months and by 5/12% for each of the next 120 months that the benefit commencement date precedes the normal retirement date. The minimum monthly benefit is \$180 if the member has at least 10 years of creditable service.
Deferred retirement	The termination benefit is the accrued retirement benefit determined as of the termination date and payable commencing at age 65. If the member has 15 or more years of creditable service, then the member may elect to receive a reduced early retirement benefit prior to age 65. The minimum monthly benefit is \$180 if the member has at least 10 years of creditable service.





## APPENDIX B – SUMMARY OF PLAN PROVISIONS

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Disability	The disability retirement benefit is the accrued retirement benefit determined as of the disability date and payable commencing the month following disability date without reduction for early commencement. The minimum monthly benefit is \$180.
Pre-retirement death	The spouse or dependent beneficiary is entitled to receive the monthly life benefit payable immediately under the assumption that the member retired on the later of age 50 or the date before the date of death and elected the joint and full survivor option. The minimum monthly benefit is \$180 if the member has at least 10 years of creditable service.
Cost-of-Living-Adjustments	<p>The employer-funded monthly pension benefits for members in pay status are increased periodically to preserve purchasing power that is diminished due to inflation. Such increases are not guaranteed by Statute and will only be provided by legislative action.</p> <p>A "13th check" was paid to each member in pay status during fiscal year 2018, 2019, 2020, 2021, and 2025. The amount of the 13th check varied based on the years of creditable service the member had earned prior to retirement.</p> <p>Legislation passed in the 2018 legislative session and updated in the 2024 session creates a funding mechanism to provide for future benefit increases or 13<sup>th</sup> checks. Prior to the 2024 session, the INPRS Board had the authority to have employers contribute up to 1% of member pay into the fund. Beginning with the 2024 valuation, they may not decrease this rate, but may increase it by up to 0.1% each year. The Board is charged with funding an inflation-indexed 13<sup>th</sup> Check for those commencing benefits before July 1, 2025 and a 1% COLA for those commencing benefits after June 30, 2025, although these benefits have not been granted or promised.</p> <p>Increases or payments are made upon passed legislation subject to the availability of funds to provide the benefit.</p>





## APPENDIX B – SUMMARY OF PLAN PROVISIONS

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### Forms of payment

- |  |  |
|--|--|
| a. 5-Year Guaranteed Beneficiary Benefit (Option 10)   | Member will receive a monthly benefit for the rest of their life. If the member dies before receiving benefits for 5 years, the beneficiary will receive that monthly benefit for the remainder of those 5 years or a lump sum distribution equal to the present value of those payments. After 5 years, there are no payments available to the beneficiary. |
| b. Benefit with No Guarantee (Option 20)               | Member will receive a monthly benefit for life, but there are no monthly payments to anyone after death. However, the balance of the Defined Contribution Account will be distributed to the beneficiary or estate if it is larger than the payments previously made to the member.  |
| c. Joint with Full Survivor Benefits (Option 30)       | Member will be paid a monthly benefit for life. After death, the same monthly benefit will be paid to the beneficiary for their lifetime.  |
| d. Joint with Two-Thirds Survivor Benefits (Option 40) | Member will be paid a monthly benefit for life. After death, two-thirds (2/3) of the benefit will be paid to the beneficiary for their lifetime.   |
| e. Joint with One-Half Survivor Benefits (Option 50)   | Member will be paid a monthly benefit for life. After death, one-half (1/2) of the benefit will be paid to the beneficiary for their lifetime.   |
| f. Integration with Social Security (Option 61)        | A member who retires between ages 50 and 62 may integrate the PERF monthly pension benefit with the member's estimated Social Security benefits. This does not affect the amount of the benefit received from the Social Security Administration.  |

Before age 62, the member's benefits will equal the sum of the member's Social Security estimate, multiplied by actuarial factors, and the member's early retirement benefit. This will result in the member receiving a larger monthly benefit payment before age 62. After age 62, the member's benefit will equal the difference between the member's Social Security estimate, multiplied by actuarial factors, and the member's pre-62 monthly pension benefit. Depending upon the member's estimated Social Security disbursement, benefit





## APPENDIX B – SUMMARY OF PLAN PROVISIONS

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	payments may be greatly reduced or terminated at age 62.
g. 5-Year Guaranteed Beneficiary Benefit with Cash Refund (Option 71)	In order to select this option, the member must choose to combine at least a portion of their Defined Contribution Account with their lifetime monthly pension benefit. If selected, the member will receive a monthly benefit for the rest of their life. If the member dies before receiving payments for 5 years, the beneficiary will receive the pension portion of their monthly benefit for the remainder of those 5 years or a lump sum equal to the present value of those remaining payments. Also, upon death (whether death occurs before or after receiving 5 years of benefits), the beneficiary may receive any remaining balance of the Defined Contribution Account.

### Changes in Plan Provisions since the Prior Year

A 13<sup>th</sup> Check to be paid in Fiscal Year 2025 from the SRA was granted. The Supplemental Benefit funding for an inflation-indexed 13<sup>th</sup> Check for participants who have commenced prior to July 1, 2025 and a 1% COLA for commencements thereafter is now required by legislation, although no additional benefits have yet been granted beyond this FY 2025 13<sup>th</sup> Check.







## APPENDIX C – SUMMARY OF ACTUARIAL METHODS/ASSUMPTIONS

### ACTUARIAL METHODS

#### 1. Actuarial Cost Method

The actuarial cost method is Entry Age Normal - Level Percent of Payroll.

The normal cost is calculated separately for each active member and is equal to the level percentage of payroll needed as an annual contribution from entry age to retirement age to fund projected benefits. The actuarial accrued liability on any valuation date is the accumulated value of such normal costs from entry age to the valuation date.

For funding, gains and losses occurring from census experience different than assumed, assumption changes, and benefit changes are amortized over a 20-year period with level payments each year. A new gain or loss base is established each year based on the additional gain or loss during that year and that base is amortized over a new 20-year period (gain or loss bases established prior to June 30, 2016 were amortized over 30 years and will continue to be amortized over 30 -year period). However, when the plan is at or above 100% funded (based on Actuarial Value of Assets), the past amortization bases are considered fully amortized and a single amortization base equal to the surplus is amortized over a 30-year period with level payments each year. Effective June 30, 2018, the bases are calculated without regards to the COLA provisions. The purpose of the method is to give a smooth progression of the costs from year to year and, at the same time, provide for an orderly funding of the unfunded liabilities.

For accounting, gains and losses occurring from census experience different than assumed and assumption changes are amortized into expense over the average expected future service of all plan participants. Gains and losses occurring from investment experience different than assumed are amortized into expense over a 5-year period. The effect of plan changes on the plan liability are fully recognized in expense in the year in which they occur.

Member census data as of June 30, 2023 was used in the valuation and adjusted, where appropriate, to reflect changes between June 30, 2023 and June 30, 2024. The valuation results from June 30, 2023 were rolled-forward to June 30, 2024 to reflect benefit accruals during the year less benefits paid.

#### 2. Surcharge Rate

The Surcharge Rate is based on the same normal cost and amortization method as is being used for the base benefits, effective with the 2024 valuation which is required by HEA 1004-2024 to begin funding for an inflation-indexed 13<sup>th</sup> Check and 1% COLA. These benefits have not been granted or promised beyond a 13<sup>th</sup> Check payable in Fiscal Year 2025.





## APPENDIX C – SUMMARY OF ACTUARIAL METHODS/ASSUMPTIONS

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### 3. Asset Valuation Method

Actuarial Value of Assets is equal to a five-year smoothing of gains and losses on the Market Value of Assets subject to a 20% corridor.

### 4. Anticipated Payroll

The Anticipated Payroll for the fiscal year beginning July 1, 2024 is equal to the actual payroll during the year ending June 30, 2024, increased with one year of salary scale.

### 5. Employer Contribution Rates

Based on the assumptions and methods previously described, an actuarially determined contribution rate is computed. The Board considers this information and has ultimate authority in setting the employer contribution rates.

### Changes in Methods since the Prior Year

The Surcharge Rate Method was significantly revised by the passage of HEA 1004-2024.





## APPENDIX C – SUMMARY OF ACTUARIAL METHODS/ASSUMPTIONS

### ACTUARIAL ASSUMPTIONS

Valuation Date June 30, 2024

#### Economic Assumptions

1. Investment return 6.25% per year, compounded annually (net of administrative and investment expenses)

2. Inflation 2.00% per year

3. Salary increase

Service	Wage Inflation	Merit	Salary Increase
0	2.65%	6.00%	8.65%
1	2.65%	5.00%	7.65%
2	2.65%	4.00%	6.65%
3	2.65%	3.00%	5.65%
4	2.65%	2.50%	5.15%
5	2.65%	2.00%	4.65%
6	2.65%	1.75%	4.40%
7	2.65%	1.50%	4.15%
8	2.65%	1.25%	3.90%
9	2.65%	1.00%	3.65%
10	2.65%	0.75%	3.40%
11	2.65%	0.50%	3.15%
12	2.65%	0.25%	2.90%
13+	2.65%	0.00%	2.65%

4. Cost-of-Living Adjustment (COLA)

A one-time 13<sup>th</sup> check was granted and payable by October 1, 2024. Thereafter, it is assumed participants who have commenced benefits prior to July 1, 2025 will receive an annual 13<sup>th</sup> check indexed with inflation. Participants commencing on or after July 1, 2025 are assumed to receive a 1% COLA.





## APPENDIX C – SUMMARY OF ACTUARIAL METHODS/ASSUMPTIONS

### Demographic Assumptions

#### 1. Mortality

Pub-2010 Public Retirement Plans Mortality Tables (Amount-Weighted) with a fully generational projection of mortality improvements using SOA Scale MP-2019.

*Healthy Employees* – General Employee table with a 3 year set forward for males and a 1 year set forward for females.

*Retirees* – General Retiree table with a 3 year set forward for males and a 1 year set forward for females.

*Beneficiaries* – Contingent Survivor table with no set forward for males and a 2 year set forward for females.

*Disableds* – General Disabled table with a 140% load.

#### 2. Disability

Sample Rates		
Age	Male	Female
20	0.004%	0.003%
25	0.008%	0.006%
30	0.014%	0.010%
35	0.024%	0.018%
40	0.042%	0.032%
45	0.080%	0.061%
50	0.160%	0.124%
55+	0.300%	0.200%

#### 3. Retirement

Age	Eligible for Reduced Benefit	Eligible for Unreduced Benefit
50-54	4%	N/A
55	5%	14%
56-59	5%	10%
60	N/A	12%
61	N/A	16%
62	N/A	22%
63	N/A	19%
64	N/A	24%
65-74	N/A	30%
75+	N/A	100%

Active members: 30% commence benefit immediately (reduced for early retirement, if applicable). 70% defer to earliest unreduced retirement date.





## APPENDIX C – SUMMARY OF ACTUARIAL METHODS/ASSUMPTIONS

Inactive vested members are assumed to commence their retirement benefit at their earliest normal retirement date.

### 4. Termination

Service	PSD, Salary >\$20K		PSD, Salary <\$20k		
	State Unisex	Unisex	Age	Male	Female
0	24.00%	18.00%	15-22	34.00%	40.00%
1	20.00%	16.00%	23	34.00%	38.00%
2	18.00%	14.00%	24	34.00%	36.00%
3	16.00%	12.00%	25	34.00%	34.00%
4	14.00%	10.00%	26	34.00%	32.00%
5	12.00%	8.00%	27	34.00%	30.00%
6	11.00%	7.50%	28	34.00%	29.00%
7	10.00%	7.00%	29	34.00%	28.00%
8	9.00%	6.50%	30	29.00%	27.00%
9	8.00%	6.50%	31	29.00%	26.00%
10	7.00%	6.50%	32	29.00%	25.00%
11	6.50%	6.25%	33	29.00%	24.00%
12	6.00%	6.00%	34	29.00%	23.00%
13	5.75%	5.75%	35	25.00%	22.00%
14	5.50%	5.50%	36	25.00%	21.00%
15	5.25%	5.25%	37	25.00%	20.00%
16	5.00%	5.00%	38	25.00%	19.00%
17	4.75%	4.75%	39	25.00%	18.00%
18	4.50%	4.50%	40	24.00%	17.00%
19	4.25%	4.25%	41	24.00%	16.00%
20	4.00%	4.00%	42	24.00%	15.00%
21	4.00%	3.75%	43	24.00%	14.00%
22	4.00%	3.50%	44	24.00%	13.00%
23	4.00%	3.25%	45-49	21.00%	12.00%
24	4.00%	3.00%	50-60	17.00%	12.00%
25	4.00%	3.00%	61+	14.00%	12.00%
26	4.00%	3.00%			
27+	1.00%	3.00%			





## APPENDIX C – SUMMARY OF ACTUARIAL METHODS/ASSUMPTIONS

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### Other Assumptions

- |                              |  |
|------------------------------|--|
| 1. Form of payment           | 100% of members are assumed to elect the normal form of benefit payment, a single life annuity with a five-year certain period.                                    |
| 2. Marital status            |  |
| a. Percent married           | 80% of male members and 65% of female members are assumed to be married and or to have a dependent beneficiary.  |
| b. Spouse's age              | Male members are assumed to be three (3) years older than their spouses and female members are assumed to be two (2) years younger than their spouses.             |
| 3. Decrement timing          | Decrements are assumed to occur at the beginning of the year.  |
| 4. Miscellaneous adjustments | For active members, the Average Annual Compensation was increased by \$200 for additional wages received upon termination, such as severance or unused sick leave. |

### Changes in Assumptions since the Prior Year

The COLA assumption was revised by the passage of HEA 1004-2024.





## APPENDIX C – SUMMARY OF ACTUARIAL METHODS/ASSUMPTIONS

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### **Data Adjustments**

Active and retired member data is reported as of June 30. Member census data as of June 30, 2023 was used in the valuation and adjusted, where appropriate, to reflect changes between June 30, 2023 and June 30, 2024. Standard actuarial roll-forward techniques were then used to project the liability computed as of June 30, 2023 to the June 30, 2024 measurement date. The normal cost rate is assumed to remain unchanged between June 30, 2023 and June 30, 2024.

The member payroll and asset information for this valuation were furnished as of June 30, 2024. Projected FYE 2025 payroll is assumed to increase by the salary growth assumption over the total payroll observed for FYE 2024. We did not audit the information provided, but we did review it thoroughly for reasonableness and compared it with the prior year's submission for consistency.

Actives and inactives with no date of birth are assumed to be the average age of the member population with their respective status. Additionally, payroll for new hires is annualized, and actives missing a salary are assumed to earn the average active salary amount.

### **Other Technical Valuation Procedures**

Salary increases are assumed to apply to annual amounts.

Decrements are assumed to occur at the beginning of the year. Standard adjustments are made for multiple decrements.

No actuarial liability is included for participants who terminated without being vested prior to the valuation date.





## APPENDIX D – GLOSSARY OF ACTUARIAL TERMS

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<b>Accrued Service</b>	Service credited under the plan that was rendered before the date of the actuarial valuation.
<b>Actuarial Assumptions</b>	Estimates of future experience with respect to demographic or economic events. Demographic assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.
<b>Actuarial Cost Method</b>	A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of retirement plan benefits between future normal cost and actuarial accrued liability. Sometimes referred to as the “actuarial funding method.”
<b>Actuarial Equivalent</b>	A single amount or series of amounts of equal value to another single amount or series of amounts computed on the basis of a given set of actuarial assumptions.
<b>Actuarial Accrued Liability</b>	The difference between the actuarial present value of plan benefits and the actuarial value of future normal costs. Also referred to as “accrued liability” or “actuarial liability.”
<b>Actuarial Present Value</b>	The amount of funds currently required 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 payment.
<b>Amortization</b>	Paying off an interest-discounted amount with periodic payments of interest and principal, as opposed to paying off with lump sum payment.
<b>Experience Gain (Loss)</b>	The difference between actual experience and actuarial assumptions anticipated experience during the period between two actuarial valuation dates.
<b>Normal Cost</b>	The actuarial present value of retirement plan benefits allocated to the current year by the actuarial cost method.







## APPENDIX D – GLOSSARY OF ACTUARIAL TERMS

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**Unfunded Actuarial Accrued Liability** The difference between actuarial liability and the actuarial value of assets. Sometimes referred to as “unfunded accrued liability” or “unfunded liability”.

Most retirement plans have unfunded actuarial liability. They arise anytime new benefits are added and anytime an actuarial loss is realized.

