



nyhart
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INTERIM GASB 74/75 ACTUARIAL VALUATION

Fiscal Year Ending June 30, 2022

STATE OF INDIANA Legislature

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November 4, 2022

**Andy Blough, FSA, EA, MAAA
Indiana Public Retirement System
One North Capital, Suite 001
Indianapolis, IN 46204**

This report summarizes the GASB actuarial valuation for the State of Indiana Legislature 2021/22 fiscal year. To the best of our knowledge, the report presents a fair position of the funded status of the plan in accordance with GASB Statement No. 74 (Financial Reporting for Post-Employment Benefit Plans Other Than Pension Plans) and GASB Statement No. 75 (Accounting and Financial Reporting by Employers for Post-Employment Benefits Other Than Pensions).

The information presented herein is based on the actuarial assumptions and substantive plan provisions summarized in this report and participant information furnished to us by the Plan Sponsor. We have reviewed the employee census provided by the Plan Sponsor for reasonableness when compared to the prior information provided but have not audited the information at the source, and therefore do not accept responsibility for the accuracy or the completeness of the data on which the information is based. When relevant data may be missing, we may have made assumptions we feel are neutral or conservative to the purpose of the measurement. We are not aware of any significant issues with and have relied on the data provided.

The discount rate, other economic assumptions, and demographic assumptions have been selected by the Plan Sponsor with the concurrence of Nyhart. In our opinion, the actuarial assumptions are individually reasonable and in combination represent our estimate of anticipated experience of the Plan. All calculations have been made in accordance with generally accepted actuarial principles and practice.

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); and
- changes in plan provisions or applicable law.

We did not perform an analysis of the potential range of future measurements due to the limited scope of our engagement.

To our knowledge, there have been no significant events prior to the current year's measurement date or as of the date of this report that could materially affect the results contained herein.



Neither Nyhart nor any of its employees has any relationship with the plan or its sponsor that could impair or appear to impair the objectivity of this report. Our professional work is in full compliance with the American Academy of Actuaries "Code of Professional Conduct" Precept 7 regarding conflict of interest. The undersigned meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Should you have any questions please do not hesitate to contact us.

A handwritten signature in black ink that reads "Cody Kocher".

Cody Kocher, ASA, MAAA
Actuary

A handwritten signature in black ink that reads "John Mallows".

John Mallows, FSA, MAAA
Actuary

EXECUTIVE SUMMARY



Executive Summary

State of Indiana Legislature GASB 75 Valuation for Fiscal Year Ending June 30, 2022

Detailed Actuary's Notes

The following assumption changes have been made since last year's full valuation, which was for the fiscal year ending June 30, 2021:

We have updated the discount rate assumption based on the yield for 20-year-tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher (or equivalent quality on another rating scale) as of June 30, 2022 (measurement date). The discount rate is 2.19% as of July 1, 2021 and 4.09% as of June 30, 2022. Refer to the Discussion of Discount Rates section for more information on selection of the discount rate. Making this change resulted in a significant decrease in liabilities.

Interim year valuation results have been projected from the prior year's valuation with adjustments for actual medical/Rx claims and enrollment experience for the 24 months ending May 2022 (with 70% weight on the most recent 12 months) and premium rate changes from 2022 to 2023. Making this change resulted in a decrease in liabilities.

Premium Rates

The 2022 and 2023 monthly retiree premium rates by plan for non-tobacco users are as shown below:

2022 Plans	w/o Wellness Discount		w/ Wellness Discount	
	Single	Family	Single	Family
CDHP 1	\$ 572.00	\$ 1,720.29	\$ 540.80	\$ 1,626.69
CDHP 2	\$ 628.38	\$ 1,879.89	\$ 597.18	\$ 1,786.29
Traditional PPO	\$ 807.78	\$ 2,418.74	\$ 776.58	\$ 2,325.14

2023 Plans	w/o Wellness Discount		w/ Wellness Discount	
	Single	Family	Single	Family
CDHP 1	\$ 604.76	\$ 1,811.16	\$ 573.56	\$ 1,717.56
CDHP 2	\$ 661.96	\$ 1,974.57	\$ 630.76	\$ 1,880.97
Traditional PPO	\$ 845.00	\$ 2,528.37	\$ 813.80	\$ 2,434.77



Executive Summary

State of Indiana Legislature GASB 75 Valuation for Fiscal Year Ending June 30, 2022

Summary of Results

Presented below is the summary of GASB 74/75 results for the fiscal year ending June 30, 2022.

	<i>As of June 30, 2021</i>	<i>As of June 30, 2022</i>
Total OPEB Liability	\$ 10,025,730	\$ 7,311,548
Actuarial Value of Assets	0	0
Net OPEB Liability	\$ 10,025,730	\$ 7,311,548
Funded Ratio	0.0%	0.0%

	<i>For FY 2020/21</i>	<i>For FY 2021/22</i>
OPEB Expense	\$ 173,596	\$ (313,064)
Annual Employer Contribution	\$ 476,663	\$ 527,332

	<i>As of June 30, 2021</i>	<i>As of June 30, 2022</i>
Discount Rate	2.19%	4.09%
Expected Return on Assets	N/A	N/A



GASB Disclosures

State of Indiana Legislature GASB 75 Valuation for Fiscal Year Ending June 30, 2022

Schedule of Changes in Net OPEB Liability and Related Ratios

OPEB Liability	FY 2021/22	FY 2020/21	FY 2019/20	FY 2018/19	FY 2017/18
Total OPEB Liability					
Total OPEB liability – beginning of year	\$ 10,025,730	\$ 8,110,150	\$ 8,090,224	\$ 9,994,526	\$ 11,987,469
Service cost	35,185	38,653	43,131	113,767	120,023
Interest	214,591	210,460	276,890	380,946	420,082
Changes of benefit terms	0	0	0	(1,062,888)	0
Changes in assumptions	(1,752,835)	835,261	463,515	335,132	(385,363)
Differences between expected and actual experience	(683,791)	1,307,869	(269,845)	(1,136,744)	(1,527,405)
Benefit payments ¹	(527,332)	(476,663)	(493,765)	(534,515)	(620,280)
Net change in total OPEB liability	\$ (2,714,182)	\$ 1,915,580	\$ 19,926	\$ (1,904,302)	\$ (1,992,943)
Total OPEB liability – end of year	\$ 7,311,548	\$ 10,025,730	\$ 8,110,150	\$ 8,090,224	\$ 9,994,526
Plan Fiduciary Net Position					
Plan fiduciary net position – beginning of year	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Contributions – employer	527,332	476,663	493,765	534,515	620,280
Contributions – active employees	0	0	0	0	0
Net investment income	0	0	0	0	0
Benefit payments	(527,332)	(476,663)	(493,765)	(534,515)	(620,280)
Trust administrative expenses	0	0	0	0	0
Net change in plan fiduciary net position	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Plan fiduciary net position – end of year	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Net OPEB Liability – end of year	\$ 7,311,548	\$ 10,025,730	\$ 8,110,150	\$ 8,090,224	\$ 9,994,526
Plan fiduciary net position as % of total OPEB liability	0.0%	0.0%	0.0%	0.0%	0.0%
Covered employee payroll	\$ N/A	\$ N/A	\$ N/A	\$ N/A	\$ N/A
Net OPEB liability as % of covered payroll	N/A	N/A	N/A	N/A	N/A

¹ Benefit payment amounts shown are estimates determined by our valuation system rather than actual benefit payment amounts.



GASB Disclosures

State of Indiana Legislature GASB 75 Valuation for Fiscal Year Ending June 30, 2022

OPEB Expense

<i>OPEB Expense</i>	<i>FY 2021/22</i>	<i>FY 2020/21</i>
Discount rate as of beginning of fiscal year	2.19%	2.66%
Discount rate as of end of fiscal year	4.09%	2.19%
Service cost	\$ 35,185	\$ 38,653
Interest	214,591	210,460
Changes of benefit terms	0	0
Projected earnings on OPEB plan investments	0	0
Reduction for contributions from active employees	0	0
OPEB plan administrative expenses	0	0
Current period recognition of deferred outflows / (inflows) of resources		
Differences between expected and actual experience	\$ (461,983)	\$ (325,225)
Changes in assumptions	(100,857)	249,708
Net difference between projected and actual earnings on OPEB plan investments	0	0
Total current period recognition	\$ (562,840)	\$ (75,517)
Total OPEB expense	\$ (313,064)	\$ 173,596



GASB Disclosures

State of Indiana Legislature GASB 75 Valuation for Fiscal Year Ending June 30, 2022

Deferred Outflows / (Inflows) of Resources

Deferred Outflows / (Inflows) of Resources represents the following items that have not been recognized in the OPEB Expense:

1. Differences between expected and actual experience of the OPEB plan
2. Changes of assumptions
3. Difference between projected and actual earnings in OPEB plan investments

The initial amortization period for the first two items noted above is based on the average future service to retirement while the difference between projected and actual earnings in OPEB plan investment is amortized over five years. All balances are amortized linearly on a principal only basis and new bases will be created annually for each of the item above.

<i>Differences between expected and actual experience for FYE</i>	<i>Initial Balance</i>	<i>Initial Amortization Period</i>	<i>Annual Recognition</i>	<i>Unamortized Balance as of June 30, 2022</i>
June 30, 2018	\$ (1,527,405)	5	\$ (305,481)	\$ 0
June 30, 2019	\$ (1,136,744)	5	\$ (227,349)	\$ (227,348)
June 30, 2020	\$ (269,845)	5	\$ (53,969)	\$ (107,938)
June 30, 2021	\$ 1,307,869	5	\$ 261,574	\$ 784,721
June 30, 2022	\$ (683,791)	5	\$ (136,758)	\$ (547,033)

<i>Changes in assumptions for FYE</i>	<i>Initial Balance</i>	<i>Initial Amortization Period</i>	<i>Annual Recognition</i>	<i>Unamortized Balance as of June 30, 2022</i>
June 30, 2018	\$ (385,363)	5	\$ (77,071)	\$ 0
June 30, 2019	\$ 335,132	5	\$ 67,026	\$ 67,028
June 30, 2020	\$ 463,515	5	\$ 92,703	\$ 185,406
June 30, 2021	\$ 835,261	5	\$ 167,052	\$ 501,157
June 30, 2022	\$ (1,752,835)	5	\$ (350,567)	\$ (1,402,268)



GASB Disclosures

State of Indiana Legislature GASB 75 Valuation for Fiscal Year Ending June 30, 2022

Deferred Outflows / (Inflows) of Resources – Continued

<i>Net difference between projected and actual earnings in OPEB plan investments for FYE</i>	<i>Initial Balance</i>	<i>Initial Amortization Period</i>	<i>Annual Recognition</i>	<i>Unamortized Balance as of June 30, 2022</i>
June 30, 2018	\$ 0	5	\$ 0	\$ 0
June 30, 2019	\$ 0	5	\$ 0	\$ 0
June 30, 2020	\$ 0	5	\$ 0	\$ 0
June 30, 2021	\$ 0	5	\$ 0	\$ 0
June 30, 2022	\$ 0	5	\$ 0	\$ 0

<i>As of fiscal year ending June 30, 2022</i>	<i>Deferred Outflows</i>	<i>Deferred Inflows</i>
Differences between expected and actual experience	\$ 784,721	\$ (882,319)
Changes in assumptions	753,591	(1,402,268)
Net difference between projected and actual earnings in OPEB plan investments	0	0
Total	\$ 1,538,312	\$ (2,284,587)

Annual Amortization of Deferred Outflows / (Inflows)

The balances as of June 30, 2022 of the deferred outflows / (inflows) of resources will be recognized in OPEB expense in the future fiscal years as noted below.

<i>FYE</i>	<i>Balance</i>
2023	\$ (180,285)
2024	\$ (19,965)
2025	\$ (58,699)
2026	\$ (487,326)
2027	\$ 0
Thereafter	\$ 0



GASB Disclosures

State of Indiana Legislature GASB 75 Valuation for Fiscal Year Ending June 30, 2022

Sensitivity Results

The following presents the net OPEB liability as of June 30, 2022, calculated using the discount rate assumed and what it would be using a 1% higher and 1% lower discount rate.

- The current discount rate is 4.09%.
- The 1% decrease in discount rate would be 3.09%.
- The 1% increase in discount rate would be 2.09%.

<i>As of June 30, 2022</i>	<i>Net OPEB Liability</i>	
1% Decrease	\$	8,154,499
Current Discount Rate	\$	7,311,548
1% Increase	\$	6,608,406

The following presents the net OPEB liability as of June 30, 2022, using the health care trend rates assumed and what it would be using 1% higher and 1% lower health care trend rates.

- The current health care trend rate starts at an initial rate of 7.5% decreasing by 0.5% annually to an ultimate rate of 4.5%.
- The 1% decrease in health care trend rates would assume an initial rate of 6.5% decreasing by 0.5% annually to an ultimate rate of 3.5%.
- The 1% increase in health care trend rates would assume an initial rate of 8.5% decreasing by 0.5% annually to an ultimate rate of 5.5%.

<i>As of June 30, 2022</i>	<i>Net OPEB Liability</i>	
1% Decrease	\$	6,563,852
Current Health Care Trend Rates	\$	7,311,548
1% Increase	\$	8,193,824



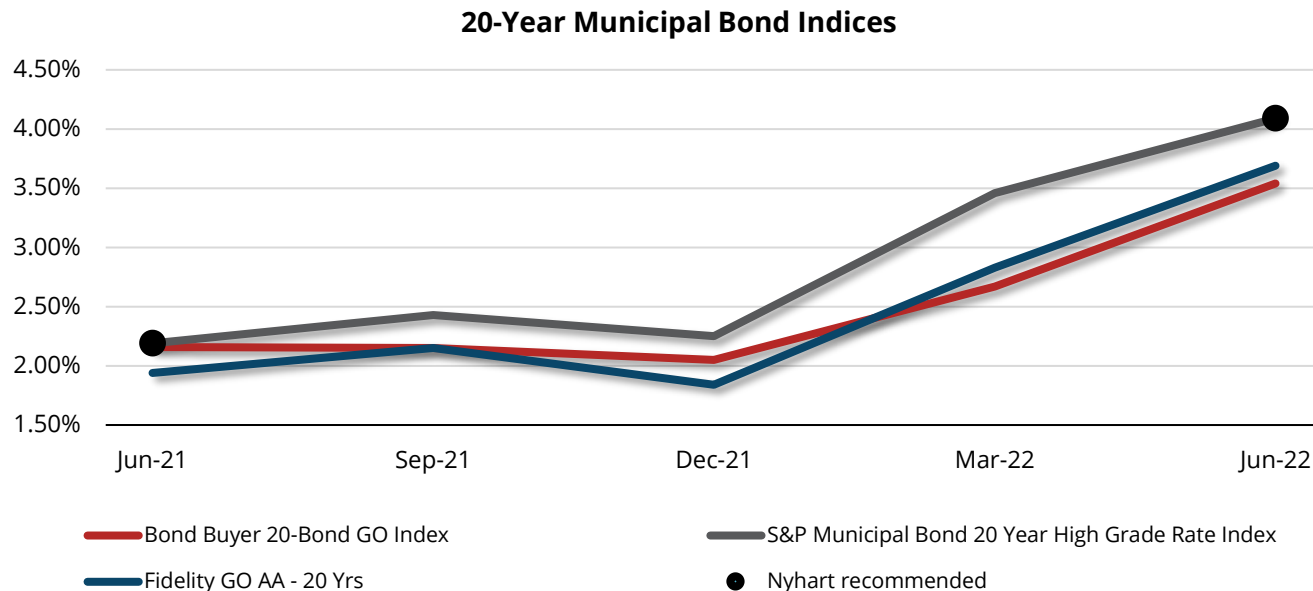
Discussion of Discount Rates

State of Indiana Legislature GASB 75 Valuation for Fiscal Year Ending June 30, 2022

Under GASB 75, the discount rate used in valuing OPEB liabilities for unfunded plans as of the Measurement Date must be based on a yield for 20-year tax-exempt general obligation municipal bonds with an average rating of AA /Aa or higher (or equivalent quality on another rating scale).

For the current valuation, the discount rate was selected from the range of indices as shown in the table below, where the range is given as the spread between the lowest and highest rate shown.

	Bond Buyer Go 20-Bond Municipal Bond Index	S&P Municipal Bond 20-Year High Grade Rate Index	Fidelity 20-Year Go Municipal Bond Index	Nyhart Range	Actual Discount Rate Used
Yield as of July 1, 2021	2.16%	2.19%	1.94%	1.94% - 2.19%	2.19%
Yield as of June 30, 2022	3.54%	4.09%	3.69%	3.54% - 4.09%	4.09%





Summary of Key Actuarial Assumptions

State of Indiana Legislature GASB 75 Valuation for Fiscal Year Ending June 30, 2022

For a complete summary of actuarial methods and assumptions, refer to the GASB 75 actuarial valuation report for the fiscal year ending June 30, 2021.

Measurement Date

For fiscal year ending June 30, 2022, a June 30, 2022 measurement date was used.

Actuarial Valuation Date

July 1, 2021 with results actuarially projected on a “no gain / no loss” basis to get to the June 30, 2022 measurement date. Liabilities as of July 1, 2021 are based on an actuarial valuation date of July 1, 2021.

Discount Rate

4.09% as of June 30, 2022 and 2.19% as of July 1, 2021 for accounting disclosure purposes.

Refer to the Discussion of Discount Rates section for more information on selection of the discount rate.

The discount rate was chosen by the plan sponsor based on the information provided in the “Discussion of Discount Rates” section above.

Salary Scale

2.00% for general wage inflation plus 0.65% for merit and productivity increases.

Inflation Rate

2.00% per year

The inflation rate is based on assumptions approved from the Indiana Public Retirement System (INPRS) 2020 Experience Study and future expectations.

Cost Method

Allocation of Actuarial Present Value of Future Benefits for services prior and after the Measurement Date was determined using Entry Age Normal Level % of Salary method where:

- Service Cost for each individual participant, payable from date of employment to date of retirement, is sufficient to pay for the participant’s benefit at retirement; and
- Annual Service Cost is a constant percentage of the participant’s salary that is assumed to increase according to the Payroll Growth.



Summary of Key Actuarial Assumptions

State of Indiana Legislature GASB 75 Valuation for Fiscal Year Ending June 30, 2022

Health Care Trend Rates

FYE	Medical/Rx	FYE	Medical/Rx
2023	7.5%	2027	5.5%
2024	7.0%	2028	5.0%
2025	6.5%	2029+	4.5%
2026	6.0%		

The initial trend rate was based on a combination of employer history, national trend surveys, and professional judgment.

The ultimate trend rate was selected based on historical medical CPI information.

Dental and vision trend rates are assumed to be 3.0% per year.

Models

ProVal

Valuation software developed by Winklevoss Technologies, LLC. This software is widely used for the purpose of performing postretirement medical valuations. We coded the plan provisions, assumptions, methods and participant data summarized in this report, and reviewed the liability and cost outputs for reasonableness. We are not aware of any weakness or limitations in the software and have determined it is appropriate for performing this valuation.

HealthMAPS Manual

Rating manual developed by WTW. Aging factors are used to develop per capita costs by age for plans with limited credible exposure to develop plan-specific factors. We are not aware of any weakness or limitations in the factors and have determined they are appropriate for performing this valuation.