

GASB 74/75 ACTUARIAL VALUATION

Fiscal Year Ending June 30, 2021

STATE OF INDIANA

CONTACT

Emily Clauss, ASA, MAAA emily.clauss@nyhart.com

ADDRESS

Nyhart

8415 Allison Pointe Blvd. Suite 300 Indianapolis, IN 46250

PHONE

General (317) 845-3500 Toll-Free (800) 428-7106 Fax (317) 845-3654

Table of Contents

	Page
Certification	1
Section A – Executive Summary Actuary's Notes Summary of Results Liabilities Breakdown	A – 1 A – 3 A – 4
Section B – State Personnel	B – 1 to B – 24
Section C – Legislature	C – 1 to C – 20
Section D – Indiana State Police	D – 1 to D – 24
Section E – Conservation and Excise Police	E – 1 to E – 22
Section F – Appendix Comparison of Participant Demographic Information Data Reconciliation by Group Summary of Medical Benefits	F – 1 F – 2 F – 3
Section G – Glossary Decrements Exhibit Retirement Rates Exhibit Definitions	G – 1 G – 2 G – 3



December 6, 2021

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 2020/21 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.

Emily Clauss, ASA, MAAA Actuary

Emily Clauss

John Mallows, FSA, MAAA Actuary Cody Kocher, ASA, MAAA

Actuary





State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Detailed Actuary's Notes

The following plan provision and assumption changes have been made since last year's interim valuation, which was for the fiscal year ending June 30, 2020:

- 1. For Indiana State Police (ISP):
 - The mortality assumption has been updated from using the MP-2019 improvement scale to use the MP-2020 improvement scale. The base mortality tables are unchanged. This changed to a slight decrease in liabilities.
- 2. For Conservation and Excise Police (CEP):
 - The mortality assumption has been updated from using the MP-2019 improvement scale to use the MP-2020 improvement scale. The base mortality tables are unchanged. This changed to a slight decrease in liabilities.
 - The baseline payroll growth rate has been updated from 2.75% to 2.65% based on the assumptions used in the 2021 INPRS actuarial valuation. This change led to a slight increase in liabilities.
- 3. For State Personnel
 - The mortality assumption has been updated from using the MP-2019 improvement scale to use the MP-2020 improvement scale. The base mortality tables are unchanged. This changed to a slight increase in liabilities.
 - The baseline payroll growth rate has been updated from 2.75% to 2.65% based on the assumptions used in the 2021 INPRS actuarial valuation. This change led to a slight increase in liabilities.
 - The turnover rate for State employees has been updated to follow the State employee turnover rate table from the 2021 INPRS actuarial valuation. This change has led to an increase in liabilities.
- 4. For the Legislature
 - The mortality assumption has been updated from using the MP-2019 improvement scale to use the MP-2020 improvement scale. The base mortality tables are unchanged. This changed to a decrease in liabilities.
 - The baseline payroll growth rate has been updated from 2.75% to 2.65% based on the assumptions used in the 2021 INPRS actuarial valuation. This change led to a slight increase in liabilities.

For all groups as applicable, medical/rx trend rates have been reset to an initial rate of 8.0% decreasing by 0.5% per year to an ultimate rate of 4.5%. This change caused an increase in liabilities for all entities.



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Detailed Actuary's Notes - Continued

For the funded groups (State Personnel, ISP and CEP), we have updated the discount rate assumption to be based on a blended rate using the expected rate of return on assets (3.00% for State Personnel, 6.20% CEP, and 6.20% for ISP) for years when investments are expected to be sufficient to pay the projected benefit payments and the yield 20-year tax-exempt general obligation municipal bonds (2.19% as of June 30, 2021) for years when investments are insufficient to cover future benefit payments. The following discount rates were used for this year's valuation:

- State Personnel: 2.96% as of June 30, 2021 and 3.23% as of July 1, 2020
- ISP: 6.20% as of June 30, 2021 and 6.20% as of July 1, 2020
- CEP: 6.20% as of June 30, 2021 and 6.20% as of July 1, 2020

Refer to the Discussion of Discount Rates section for more information on selection of the discount rate. Making this change resulted in an increase in liabilities for State Personnel.

For the Legislature, which is unfunded, we have updated the discount rate assumption based on the yield for 20-year tax-exempt general obligation municipal bonds as of June 30, 2021 (measurement date). The discount rate is 2.19% as of June 30, 2021 and 2.66% as of July 1, 2020. Refer to the Discussion of Discount Rates section for more information on selection of the discount rate. Making this change resulted in an increase in liabilities.



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Summary of Results

Presented below is the summary of GASB 74/75 results (for all employee groups) for the fiscal year ending June 30, 2021.

As of June 30, 2021	S	tate Personnel	Legislature	Indiana State Police (ISP)	nservation and ise Police (CEP)	Total
Total OPEB Liability	\$	62,697,000	\$ 10,025,730	\$ 168,916,685	\$ 52,984,041	\$ 294,623,456
Actuarial Value of Assets		(46,837,203)	0	(178,207,168)	(32,137,546)	(257,181,917)
Net OPEB Liability	\$	15,859,797	\$ 10,025,730	\$ (9,290,483)	\$ 20,846,495	\$ 37,441,539
Funded Ratio		74.7%	0.0%	105.5%	60.7%	87.3%
For FY 2020/21	S	tate Personnel	Legislature	ISP	СЕР	Total
OPEB Expense	\$	5,073,641	\$ 173,596	\$ (26,129,737)	\$ (74,267)	\$ (20,956,767)
Annual Employer Contribution	\$	4,559,016	\$ 476,663	\$ 23,149,845	\$ 4,301,093	\$ 32,486,617
As of June 30, 2021	S	itate Personnel	Legislature	ISP	СЕР	
Discount Rate		2.96%	2.19%	6.20%	6.20%	
Expected Return on Assets		3.00%	N/A	6.20%	6.20%	
As of June 30, 2021	S	itate Personnel	Legislature	ISP	СЕР	Total
Total Active Participants		25,318	115	1,662	241	27,336
Total Retiree Participants		411	38	1,058	212	1,719

Participant counts shown above include only employees who have medical / rx coverage. Refer to Summary of Plan Participants section for an accurate breakdown of active employees with and without medical / rx coverage.



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Liabilities Breakdown

Below is a breakdown of total GASB 75 liabilities allocated to past and current service compared to the prior year. The table below also provides a breakdown of the Total OPEB Liability allocated to pre and post Medicare eligibility. The liability shown below includes explicit (if any) and implicit subsidies. Refer to the Substantive Plan Provisions section for complete information on the Plan Sponsor's GASB subsidies.

Present Value of Future Benefits (PVFB)	St	ate Personnel	Legislature	ISP	CEP
Active Employees	\$	91,424,778	\$ 835,750	\$ 159,494,375	\$ 41,911,296
Retired Employees		5,696,668	9,608,341	69,466,243	23,293,512
Total PVFB	\$	97,121,446	\$ 10,444,091	\$ 228,960,618	\$ 65,204,808

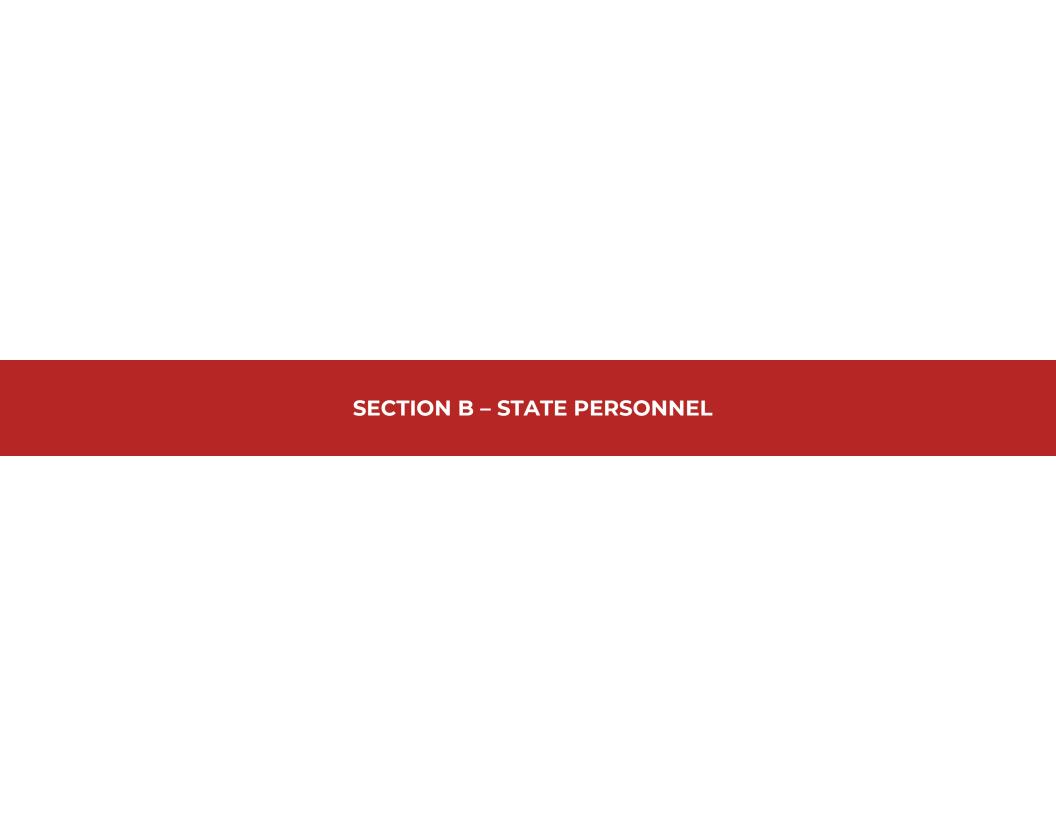
Total OPEB Liability	St	ate Personnel	Legislature	ISP	CEP
Active Pre-Medicare	\$	57,000,332	\$ 113,176	\$ 79,146,007	\$ 20,322,202
Active Post-Medicare		0	304,213	20,304,435	9,368,327
Active Liability	\$	57,000,332	\$ 417,389	\$ 99,450,442	\$ 29,690,529
Retiree Pre-Medicare	\$	5,696,668	\$ 946,480	\$ 18,662,372	\$ 7,822,048
Retiree Post-Medicare		0	8,661,861	50,803,871	15,471,464
Retiree Liability	\$	5,696,668	\$ 9,608,341	\$ 69,466,243	\$ 23,293,512
Total OPEB Liability	\$	62,697,000	\$ 10,025,730	\$ 168,916,685	\$ 52,984,041

As of June 30, 2021	State Personnel	Legislature	ISP	CEP
Discount Rate	2.96%	2.19%	6.20%	6.20%

Present Value of Future Benefits

(PVFB) is the amount needed as of June 30, 2021, to fully fund the State's retiree health care subsidies for existing and future retirees and their dependents assuming all actuarial assumptions are met.

Total OPEB Liability is the portion of PVFB considered to be accrued or earned as of June 30, 2021. This amount is a required disclosure in the Required Supplementary Information section.





State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Schedule of Changes in Net OPEB Liability and Related Ratios

OPEB Liability	FY 2020/21	FY 2019/20		FY 2018/19	FY 2017/18
Total OPEB Liability		112013/20			
Total OPEB liability – beginning of year	\$ 52,311,259	\$ 57,423,651	\$	47,525,294	\$ 53,040,129
Service cost	3,205,921	2,961,092		1,932,796	2,113,477
Interest	1,714,430	1,891,706		1,851,245	1,909,791
Changes of benefit terms	0	0		0	0
Changes in assumptions	7,075,425	(6,835,400)		2,802,670	(1,163,973)
Differences between expected and actual experience	3,306,760	1,622,200		6,587,365	(5,331,960)
Benefit payments	(4,916,795)	(4,751,990)		(3,275,719)	(3,042,170)
Net change in total OPEB liability	\$ 10,385,741	\$ (5,112,392)	\$	9,898,357	\$ (5,514,835)
Total OPEB liability – end of year	\$ 62,697,000	\$ 52,311,259	\$	57,423,651	\$ 47,525,294
Plan Fiduciary Net Position					
Plan fiduciary net position – beginning of year	\$ 47,137,471	\$ 46,203,020	\$	45,489,242	\$ 44,998,027
Contributions – employer	4,559,016	5,030,562		3,336,598	3,384,366
Contributions – active employees	0	0		0	0
Net investment income	57,511	789,133		1,006,887	546,743
Benefit payments	(4,916,795)	(4,751,990)		(3,275,719)	(3,042,170)
Trust administrative expenses	0	(133,254)		(353,988)	(397,724)
Net change in plan fiduciary net position	\$ (300,268)	\$ 934,451	\$	713,778	\$ 491,215
Plan fiduciary net position – end of year	\$ 46,837,203	\$ 47,137,471	\$	46,203,020	\$ 45,489,242
Net OPEB Liability – end of year	\$ 15,859,797	\$ 5,173,788	\$	11,220,631	\$ 2,036,052
Discoult the second of the sec	7470	00.404		00 501	05.70
Plan fiduciary net position as % of total OPEB liability	74.7%	90.1%	,	80.5%	95.7%
Covered employee payroll	\$ 1,535,792,090	\$ 1,503,767,928	\$	1,470,677,680	\$ 1,262,054,123
Net OPEB liability as % of covered payroll	1.0%	0.3%		0.8%	0.7%



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Schedule of Employer Contributions

The Actuarially Determined Contributions (ADC) shown below prior to FY 2016/17 are based on the Annual Required Contribution (ARC) calculated in prior GASB 45 actuarial valuations as shown in the Plan Sponsor financial statements.

	FY 2020/21	FY 2019/20	FY 2018/19	FY 2017/18	FY 2016/17
Actuarially Determined Contribution (ADC)	\$ 4,916,795 ¹	\$ 4,751,990	\$ 3,275,719	\$ 3,042,170	\$ 3,060,429
Contributions in relation to the ADC ²	4,559,016	5,030,562	3,336,598	3,384,366	4,801,561
Contribution deficiency / (excess)	\$ 357,779	\$ (278,572)	\$ (60,879)	\$ (342,196)	\$ (1,741,132)
Covered employee payroll	\$ 1,535,792,090	\$ 1,503,767,928	\$ 1,470,677,680	\$ 1,262,054,123	\$ 1,234,282,761
Contribution as a % of covered employee payroll	0.3%	0.3%	0.2%	0.3%	0.4%
	FY 2015/16	FY 2014/15	FY 2013/14	FY 2012/13	FY 2011/12
Actuarially Determined Contribution (ADC)	\$ 1,537,527	\$ 1,838,675	\$ 1,009,935	\$ 940,502	\$ 2,964,232
Contributions in relation to the ADC ⁴	2,977,166	3,567,257	3,200,158	4,202,964	33,849,768
Contribution deficiency / (excess)	\$ (1,439,639)	\$ (1,728,582)	\$ (2,190,223)	\$ (3,262,462)	\$ (30,885,536)
Covered employee payroll	\$ 1,148,771,000	\$ 1,180,296,000	\$ 1,219,424,000	\$ 1,208,402,000	\$ 1,166,823,000
Contribution as a % of covered employee payroll	0.3%	0.3%	0.3%	0.3%	2.9%

¹ Refer to the Actuarially Determined Contributions section for the calculation details.

² Includes employer contribution for pay-go cost and (any) pre-funding contributions deposited into the OPEB Trust.



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

OPEB Expense

OPEB Expense	FY 2020/21	FY 2019/20
Discount rate as of beginning of fiscal year	3.22%	3.26%
Discount rate as of end of fiscal year	2.96%	3.22%
Service cost	\$ 3,205,921	\$ 2,961,092
Interest	1,714,430	1,891,706
Changes of benefit terms	0	0
Projected earnings on OPEB plan investments	(1,526,200)	(1,503,941)
Reduction for contributions from active employees	0	0
OPEB plan administrative expenses	0	133,254
Current period recognition of deferred outflows / (inflows) of resources		
Differences between expected and actual experience	\$ 824,431	\$ 411,086
Changes in assumptions	142,041	(742,387)
Net difference between projected and actual earnings on OPEB plan investments	713,018	419,280
Total current period recognition	\$ 1,679,490	\$ 87,979
Total OPEB expense	\$ 5,073,641	\$ 3,570,090



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

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 an 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 items above.

Differences between expected and actual experien	nce for FYE	Init	ial Balance	Initial Amortization Period	Annua	ıl Recognition	namortized Ince as of June 30, 2021
June 30, 2018	\$	\$	(5,331,960)	7	\$	(761,709)	\$ (2,285,124)
June 30, 2019	\$	\$	6,587,365	7	\$	941,052	\$ 3,764,209
June 30, 2020	\$	\$	1,622,200	7	\$	231,743	\$ 1,158,714
June 30, 2021	\$	\$	3,306,760	8	\$	413,345	\$ 2,893,415

Changes in assumptions for FYE	Ini	tial Balance	Initial Amortization Annual Recognition Period				Unamortized Balance as of June 30, 2021		
June 30, 2018	\$	(1,163,973)	7	\$	(166,282)	\$	(498,845)		
June 30, 2019	\$	2,802,670	7	\$	400,381	\$	1,601,527		
June 30, 2020	\$	(6,835,400)	7	\$	(976,486)	\$	(4,882,428)		
June 30, 2021	\$	7,075,425	8	\$	884,428	\$	6,190,997		



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Deferred Outflows / (Inflows) of Resources - Continued

Net difference between projected and actual earnings in OPEB plan investments for FYE	Init	tial Balance	Initial Amortization Annual Recognition Period				Unamortized Balance as of June 30, 2021		
June 30, 2018	\$	914,798	5	\$	182,960	\$	182,958		
June 30, 2019	\$	466,788	5	\$	93,358	\$	186,714		
June 30, 2020	\$	714,808	5	\$	142,962	\$	428,884		
June 30, 2021	\$	1,468,689	5	\$	293,738	\$	1,174,951		

As of fiscal year ending June 30, 2021	Defe	rred Outflows	Def	Deferred Inflows		
Differences between expected and actual experience	\$	7,816,338	\$	(2,285,124)		
Changes in assumptions		7,792,524		(5,381,273)		
Net difference between projected and actual earnings in OPEB plan investments		1,973,507		0		
Total	\$	17,582,369	\$	(7,666,397)		

Annual Amortization of Deferred Outflows / (Inflows)

The balances as of June 30, 2021 of the deferred outflows / (inflows) of resources will be recognized in OPEB expense in the future fiscal years as noted below.

FYE	Balance			
2022	\$	1,679,488		
2023	\$	1,496,528		
2024	\$	1,403,174		
2025	\$	2,188,204		
2026	\$	553,031		
Thereafter	\$	2,595,547		



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Sensitivity Results

The following presents the net OPEB liability as of June 30, 2021, 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 2.96%.
- The 1% decrease in discount rate would be 1.96%.
- The 1% increase in discount rate would be 3.96%.

As of June 30, 2021	Net 0	PEB Liability
1% Decrease	\$	21,663,379
Current Discount Rate	\$	15,859,797
1% Increase	\$	10,557,192

The following presents the net OPEB liability as of June 30, 2021, 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 8.0% 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 7.0% 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 9.0% decreasing by 0.5% annually to an ultimate rate of 5.5%.

As of June 30, 2021	Net	OPEB Liability
1% Decrease	\$	9,035,954
Current Health Care Trend Rates	\$	15,859,797
1% Increase	\$	23,974,365



Asset Information (STATE PERSONNEL)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Asset Information

Asset Breakdown	FY 2019/20	FY 2020/21
Assets		
Cash and cash equivalents	\$ 208,759	\$ 374,857
Securities lending cash collateral	0	0
Total cash	\$ 208,759	\$ 374,857
Receivables		
Contributions	\$ 656,429	\$ 374,547
Accrued interest	112,664	248
Total receivables	\$ 769,093	\$ 374,795
Investments		
Debt Securities	\$ 46,493,498	\$ 46,497,328
Equities	0	0
Mutual Funds	0	0
Other	0	0
Total investments	\$ 46,493,498	\$ 46,497,328
Total assets	\$ 47,471,350	\$ 47,246,980
Liabilities		
Payables		
Investment management fees	\$ 0	\$ 0
Benefits	333,879	409,777
Total liabilities	\$ 333,879	\$ 409,777
Net position restricted to OPEB	\$ 47,137,471	\$ 46,837,203



Asset Information (STATE PERSONNEL)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Asset Information

Asset Reconciliation	FY 2019/20	FY 2020/21
Additions		
Contributions received		
Employer	\$ 5,030,562	\$ 4,559,016
Employee	0	0
Total contributions	\$ 5,030,562	\$ 4,559,016
Investment income		
Net increase in fair value of investments	\$ 789,133	\$ 57,511
Interests and dividends	0	0
Investment expense, other than from securities lending	0	0
Securities lending income	0	0
Securities lending expense	0	0
Net investment income	\$ 789,133	\$ 57,511
Total additions	\$ 5,819,695	\$ 4,616,527
Deductions		
Benefit payments (net of retiree contributions)	\$ (4,751,990)	\$ (4,916,795)
Administrative expenses	(133,254)	0
Other	0	0
Total deductions	\$ (4,885,244)	\$ (4,916,795)
Net increase in net position	\$ 934,451	\$ (300,268)
Net position restricted to OPEB		
Beginning of year	46,203,020	47,137,471
End of year	\$ 47,137,471	\$ 46,837,203



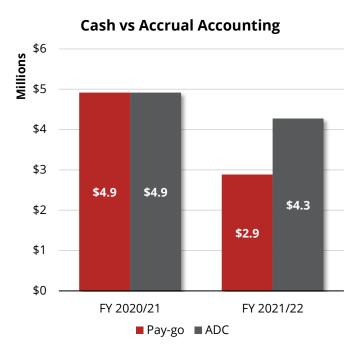
Actuarially Determined Contributions (STATE PERSONNEL)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Actuarially Determined Contribution

The Actuarially Determined Contributions calculated below are recommended target contributions and assumes that the Plan Sponsor has the ability to contribute these amounts on an annual basis. The Plan Sponsor has the responsibility to decide how much it should contribute after considering its other needs and the OPEB participants' needs.

	FY 2020/21	FY 2021/22
Discount rate	3.25%	3.00%
Payroll growth factor used for amortization	N/A	N/A
Actuarial cost method	ry Age Normal vel % of Salary	ry Age Normal evel % of Salary
Amortization type	Level Dollar	Level Dollar
Amortization period	26 years	25 years
Actuarial accrued liability (AAL) – beginning of year	\$ 52,226,758	\$ 62,475,229
Actuarial value of assets – beginning of year	(47,137,471)	(46,837,203)
Unfunded AAL – beginning of year	\$ 5,089,287	\$ 15,638,026
Normal Cost	\$ 3,193,095	\$ 3,276,575
Amortization of UAAL	283,718	871,901
Total normal cost plus amortization	\$ 3,476,813	\$ 4,148,476
Interest to the end of year	112,996	124,454
Actuarially Determined Contribution – Preliminary	\$ 3,589,809	\$ 4,272,930
Expected benefit payments ³	4,916,795	2,887,018
Actuarially Determined Contribution – Final ⁴	\$ 4,916,795	\$ 4,272,930



Actuarially Determined Contribution (ADC) is the target or recommended contribution to a defined benefit OPEB plan, which if paid on an ongoing basis, will provide sufficient resources to fund future costs for services to be earned and liabilities attributed to past services. This is typically higher than the pay-as-you-go cost because it includes recognition of employer costs expected to be paid in future accounting periods.

³ Actual for FY 2020/21

⁴ Set to be the greater of the preliminary ADC and expected benefit payments.



Projection of GASB Results (STATE PERSONNEL)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Projection of GASB Results

The Total OPEB Liability (TOL) is expected to change on an annual basis as a result of expected and unexpected events. Under normal circumstances, it is generally expected to have a net increase each year. Below is a list of the most common events affecting the total OPEB liability and whether they increase or decrease the liability.

Expected Events

- Increases in TOL due to additional benefit accruals as employees continue to earn service each year
- Increases in TOL due to interest as the employees and retirees age
- Decreases in TOL due to benefit payments

Unexpected Events

- Increases in TOL when actual premium rates increase more than expected. A liability decrease occurs of the reverse happens.
- Increases in TOL when more new retirements occur than expected or fewer terminations occur than anticipated. Liability decreases occur when the opposite outcomes happen.
- Increases or decreases in TOL depending on whether benefits are improved or reduced.

Projection of Total OPEB Liability (TOL)	FY 2020/21	FY 2021/22
TOL as of beginning of year	\$ 52,311,259	\$ 62,697,000
Normal cost as of beginning of year	3,205,921	3,304,690
Exp. benefit payments during the year	(4,916,795)	(2,887,018)
Interest adjustment to end of year	1,714,430	1,911,234
Exp. TOL as of end of year	\$ 52,314,815	\$ 65,025,906
Actuarial Loss/(Gain)	10,382,185	TBD
Actual TOL as of end of year	\$ 62,697,000	\$ TBD

Projection of Actuarial Value of Assets (AVA)	FY 2020/21	FY 2021/22
AVA as of beginning of year	\$ 47,137,471	\$ 46,837,203
Exp. employer contributions during the year ⁵	4,559,016	4,272,930
Exp. benefit payments during the year	(4,916,795)	(2,887,018)
Exp. investment income ⁶	1,526,200	1,421,218
Exp. Trust administrative expenses	0	(304,442)
Exp. AVA as of end of year	\$ 48,305,892	\$ 49,339,891
Differences between expected and actual experience	(1,468,689)	TBD
AVA as of end of year	\$ 46,837,203	\$ TBD

⁵ Employer contribution for 2020/21 is based on actual employer contribution made into the Trust. FY 2021/22 expected employer contribution is based on the final ADC as shown on page B-9.

⁶ Fiscal years 2020/21 expected investment income is based on a 3.25% asset return and 2021/22 expected investment income is calculated based on a 3.00% asset return.



Employer Contribution Cash Flow Projections (STATE PERSONNEL)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Employer Contribution Cash Flow Projections

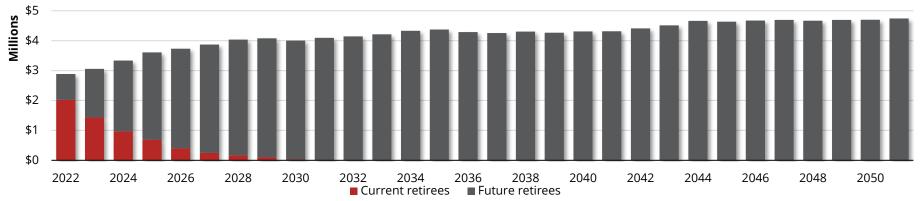
The below projections show the actuarially estimated employer-paid contributions for retiree health benefits for the next thirty years. Results are shown separately for a closed group of current / future retirees. These projections include explicit and implicit subsidies.

FYE	Current Retirees	Future Retirees ⁷	Total
2022	\$ 2,023,718	\$ 863,300	\$ 2,887,018
2023	\$ 1,435,876	\$ 1,622,333	\$ 3,058,209
2024	\$ 971,460	\$ 2,365,282	\$ 3,336,742
2025	\$ 688,863	\$ 2,917,876	\$ 3,606,739
2026	\$ 402,303	\$ 3,329,748	\$ 3,732,051
2027	\$ 245,724	\$ 3,623,100	\$ 3,868,824
2028	\$ 170,003	\$ 3,863,067	\$ 4,033,070
2029	\$ 98,679	\$ 3,977,298	\$ 4,075,977
2030	\$ 26,479	\$ 3,976,213	\$ 4,002,692
2031	\$ 0	\$ 4,094,197	\$ 4,094,197

FYE	Current Retirees		Future etirees ⁸	Total
2032	\$	0	\$ 4,142,220	\$ 4,142,220
2033	\$	0	\$ 4,213,932	\$ 4,213,932
2034	\$	0	\$ 4,330,173	\$ 4,330,173
2035	\$	0	\$ 4,372,256	\$ 4,372,256
2036	\$	0	\$ 4,288,363	\$ 4,288,363
2037	\$	0	\$ 4,256,566	\$ 4,256,566
2038	\$	0	\$ 4,303,210	\$ 4,303,210
2039	\$	0	\$ 4,262,462	\$ 4,262,462
2040	\$	0	\$ 4,310,085	\$ 4,310,085
2041	\$	0	\$ 4.311.847	\$ 4.311.847

FYE	Current Retirees		Future etirees ⁸	Total
2042	\$	0	\$ 4,408,312	\$ 4,408,312
2043	\$	0	\$ 4,512,669	\$ 4,512,669
2044	\$	0	\$ 4,660,450	\$ 4,660,450
2045	\$	0	\$ 4,635,982	\$ 4,635,982
2046	\$	0	\$ 4,670,692	\$ 4,670,692
2047	\$	0	\$ 4,690,383	\$ 4,690,383
2048	\$	0	\$ 4,665,996	\$ 4,665,996
2049	\$	0	\$ 4,691,928	\$ 4,691,928
2050	\$	0	\$ 4,697,847	\$ 4,697,847
2051	\$	0	\$ 4,742,497	\$ 4,742,497

Projected Employer Pay-go Cost



⁷ Projections for future retirees do not take into account future new hires.



Discussion of Discount Rates (STATE PERSONNEL)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Under GASB 74, the discount rate used in valuing OPEB liabilities for funded plans as of the Measurement Date must be based on the long-term expected rate of return on OPEB plan investments that are expected to be used to finance future benefit payments to the extent that (a) they are sufficient to pay for the projected benefit payments and (b) the OPEB plan assets are invested using a strategy that will achieve that return. When the OPEB plan investments are insufficient to cover future benefit payments, 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) must be used.

For the current valuation:

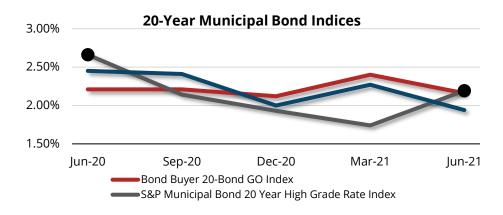
1. The long-term expected rate of return on OPEB plan investment is 3.00%. This was determined using a building block method in which expected future real rates of return (expected returns, net of OPEB plan investment expense and inflation) are developed for each major asset class. These expected future real rates of return are then combined to produce the long-term expected rate of return by weighting them based on the target asset allocation percentage and adding in expected inflation (2.00%). The best estimates of arithmetic real rates of return for each major asset class included in the OPEB Plan's target asset allocation as of June 30, 2021 are summarized in the following table.

Asset Class	Target Allocation	L/T Expected Real ROR (JP Morgan)
U.S. Bond	100.00%	1.00%

 The discount rate used when the OPEB plan investments are insufficient to pay for future benefit payments are 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.

Yield as of	July 1, 2020	June 30, 2021
Bond Buyer Go 20-Bond Municipal Bond Index	2.21%	2.16%
S&P Municipal Bond 20-Year High Grade Rate Index	2.66%	2.19%
Fidelity 20-Year Go Municipal Bond Index	2.45%	1.94%
Bond Index Range	2.21% - 2.66%	1.94% - 2.19%
Actual Discount Rate Used	2.66%	2.19%

3. The final equivalent single discount rate used for this year's valuation is 3.23% as of July 1, 2020 and 2.96% as of June 30, 2021, with the expectation that the State will continue to contribute at least the Actuarially Determined Contribution each year.





Summary of Plan Participants (STATE PERSONNEL)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Active Employees

Actives with coverage	Single	Non-Single	Total	Avg. Age	Avg. Svc	Salary
Traditional PPO w/ Wellness Discount	29	9	38	51.4	12.2	\$ 2,074,194
Traditional PPO w/o Wellness Discount	314	67	381	45.6	8.8	\$ 18,930,794
CDHP 1 w/ Wellness Discount	3,653	5,835	9,488	46.7	13.2	\$ 535,512,521
CDHP 1 w/o Wellness Discount	6,227	6,628	12,855	44.2	9.9	\$ 625,868,180
CDHP 2 w/ Wellness Discount	391	365	756	47.5	11.7	\$ 41,682,848
CDHP 2 w/o Wellness Discount	974	826	1,800	43.5	7.3	\$ 89,266,282
Total actives with coverage	11,588	13,730	25,318	45.2	11.0	\$ 1,313,334,819

Actives without coverage	Total	Avg. Age	Avg. Svc	Salary
Total actives without coverage	4,593	43.4	7.7	\$ 222,457,271

For active employees who currently have no coverage, 35% of them are assumed to elect coverage after meeting PERF eligibility requirement. They have been included in the GASB valuation.



Summary of Plan Participants (STATE PERSONNEL)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Active Age-Service Distribution

		Years of Service									
Age	< 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
Under 25	864	790	9								1,663
25 to 29	960	1,866	480	4							3,310
30 to 34	665	1,315	1,216	162	5						3,363
35 to 39	506	1,042	947	711	161	5					3,372
40 to 44	410	756	770	569	511	195	3				3,214
45 to 49	376	681	683	480	444	459	185	6			3,314
50 to 54	323	581	569	454	435	426	553	181	17		3,539
55 to 59	318	470	514	435	374	458	443	400	254	24	3,690
60 to 64	242	231	370	381	358	306	314	286	292	195	2,975
65 to 69	98	71	149	147	123	101	88	76	80	131	1,064
70 & up	35	25	43	48	42	58	41	34	24	57	407
Total	4,797	7,828	5,750	3,391	2,453	2,008	1,627	983	667	407	29,911



Summary of Plan Participants (STATE PERSONNEL)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Summary of Plan Participants – Retirees

Retirees with coverage	Single	Non-Single	Total	Avg. Age
Traditional PPO w/ Wellness Discount	1		1	63.6
Traditional PPO w/o Wellness Discount	6		6	62.9
CDHP 1 w/ Wellness Discount	100	12	112	62.6
CDHP 1 w/o Wellness Discount	243	25	268	62.7
CDHP 2 w/ Wellness Discount	15	3	18	63.2
CDHP 2 w/o Wellness Discount	5	1	6	61.6
Total retirees with coverage	370	41	411	62.7

Retiree Age Distribution

Age	Retirees
< 45	
45 to 49	
50 to 54	
55 to 59	42
60 to 64	369
65 to 69	
70 to 74	
75 to 79	
80 to 84	
85 to 89	
90 & up	
Total	411



Substantive Plan Provisions (STATE PERSONNEL)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Eligibility

State Employees State employees are eligible for retiree health care benefits once they attain age 55 with 15 years of service.

Judges are eligible for retiree health care benefits once they attain age 62 with 8 years of service credit as a

participant in the Indiana judges' retirement fund.

Prosecuting Attorneys Prosecuting attorneys are eligible for retiree health care benefits once they attain age 62 with 10 years of

service credit as a participant in the prosecuting attorneys retirement fund.

All Groups Retired employee's eligibility to continue retiree health care coverage ends when the retiree becomes eligible

for Medicare coverage (typically at age 65).

Spouse Coverage Surviving spouse coverage ends at the earlier of Medicare eligibility or 2 years after the death of the retiree.

State Explicit Subsidy None

Retiree Contributions Retirees pay the full premium rate as determined by the State.

Medical Benefit

The same benefit options are available to retirees as active employees. The State does not subsidize HSA contributions for early retirees. For purposes of this valuation, no EAP plan benefits have been valued. All health plans are self-insured. The 2022 monthly premium rates by plan for non-tobacco users are as shown below:

	w/o Wellne	ess Discount	w/ Wellne	ss Discount
Plans	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

Dental and Vision Benefits

There is no GASB liability and no implicit subsidy is generated for dental and vision benefits as retirees pay the full cost for these benefits.



Substantive Plan Provisions (STATE PERSONNEL)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Life Insurance

None

Senate Enrolled Act 501

Purpose

Senate Enrolled Act 501 establishes a retirement medical benefits account for elected officers, appointed officers, and employees of the executive, legislative, and judicial branches of state government to pay for participants' medical expenses after retirement.

Eligibility

A participant who:

- a. Is eligible for and has applied to receive a normal, unreduced or disability retirement benefit under PERF: or
- b. Has completed at least 10 years of service as an elected or appointed officer; or
- c. Has completed at least 15 years of service with the state for an employee

is entitled to receive a benefit from this account.

Annual State Contributions

The bill requires the state to make annual contributions to the account based on the following schedule:

Employee's Age	Annual State Contributions
Less than 30	\$ 500
At least 30 but less than 40	\$ 800
At least 40 but less than 50	\$ 1,100
At least 50	\$ 1,400

Bonus Contributions

An additional bonus contribution is to be made upon a participant's retirement with normal unreduced benefits if the retirement occurs between July 1, 2007 and July 1, 2017, and the retiree on the last day of service has completed at least 15 years of service or 10 years of service as an elected or appointed officer.

The additional bonus contribution amount is one thousand dollars (\$1,000) multiplied by the participant's years of service (rounded down to the nearest whole year).



Substantive Plan Provisions (STATE PERSONNEL)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Senate Enrolled Act 501

Surviving Spouse

Surviving spouse or IRS dependent of a retired participant is allowed to receive the benefit from this account. Amounts credited to a retired participant are forfeited if the participant dies without a surviving spouse or IRS dependent.

GASB 74/75 Impact

The Senate Enrolled Act 501 plan is considered a defined contribution individual account for GASB 74/75 purposes and has no unfunded liabilities. The employer subsidy is defined in terms of an annual contribution to an individual account. Plan assets are maintained in a Trust Fund. All benefits and expenses in administering the Plan will be paid from the Fund. Money in the Fund may not be transferred, assigned, or otherwise removed from the Fund by the state board of finance, the Agency or any other state agency, and does not revert to the state general fund at the end of any state fiscal year.

The presence of this individual-account is expected to increase the percentage of future retirees electing to continue health coverage under the State plan. As a result, the health coverage election rate assumption has been set at 35% for retirements occurring after employees have met the minimum eligibility to use his/her individual account.

The Retirement Medical Benefits Account Trust Fund consists of cigarette tax revenues deposited in the fund under IC 6-7-1-28.1(7) and other appropriations, revenues, or transfers to the trust fund under IC 4-12-1. Beginning on July 1, 2012, these cigarette tax revenues are temporarily redirected to the General Fund per HEA 1001 (2011) in order to recover prior General Fund overpayments to the plan. Beginning on July 1, 2014, cigarette tax revenues will once again be deposited directly to the trust fund. The plan benefits satisfy the condition of being a defined contribution OPEB benefit and by definition, there is no unfunded liability.



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Measurement Date

June 30, 2021

Actuarial Valuation Date

June 30, 2021 with no adjustments to get to the June 30, 2021 measurement date. Liabilities as of July 1, 2020 are based on an actuarial valuation date of July 1, 2019 projected to July 1, 2020 on a "no loss / no gain" basis.

Discount Rate

3.23% as of July 1, 2020 and 2.96% as of June 30, 2021 for accounting disclosure purposes; refer to the Discussion of Discount Rates section for more information on selection of the discount rate.

3.25% as of July 1, 2020 and 3.00% as of June 30, 2021 for calculating Actuarially Determined Contribution

Inflation Rate

2.00%

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.

Salary Scale

2.65% for general wage inflation (includes 2.00% inflation and 0.65% real wage growth) plus the following merit and productivity increases which are based on the assumptions approved from the Indiana Public Retirement System (INPRS) 2020 Experience Study.

YOS	General	Judges	Prosecuting Attorneys
0	6.00%	0.00%	0.00%
5	2.00%	0.00%	0.00%
10	0.75%	0.00%	0.00%
13+	0.00%	0.00%	0.00%

Contribution Funding Policy

The State contributes at least the Actuarially Determined Contribution annually.

Census Data

Census data was provided by the State and it was collected as of June 30, 2021. We have reviewed it for reasonableness and no material modifications were made to the census data.



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Data Assumption

The State has separate rates for tobacco and non-tobacco users, however these rates are not enforced for retired users. All retirees contribute the non-tobacco rates.

Mortality

Healthy Judges and PARF employees and retirees: SOA Pub-2010 General Headcount Weighted Mortality Table fully generational using Scale MP-2020 with a 1 year setback for males and a 1 year setback for females All other healthy employees and retirees: SOA Pub-2010 General Headcount Weighted Mortality Table fully generational using Scale MP-2020 with a 3 year set forward for males and a 1 year set forward for females Disabled retirees: SOA Pub-2010 General Disabled Retiree Headcount Weighted Mortality Table fully generational using Scale MP-2020 with a 140% load

Surviving Spouses: SOA Pub-2010 Continuing Survivor Headcount Weighted Mortality Table fully generational using Scale MP-2020 with no set forward for males and a 2 year set forward for females

The above tables are based on 2020 INPRS Experience Study with recent mortality improvement scales.

Withdrawal Rate

Assumption used to project terminations (voluntary and involuntary) prior to meeting minimum retirement eligibility for retiree health care coverage.

Annual withdrawal rates for judges follow the PERF, PARF, and Judges' Retirement System rates from the Indiana Public Retirement System (INPRS) 2020 Experience Study. Sample rates are as shown below:

State Personnel						
YOS	Unisex					
0	24.00%					
5	12.00%					
10	7.00%					
15	5.25%					
20	4.00%					
25	4.00%					
27+	1.00%					

Judges					
Age	Rates				
All ages	3%				
Atto	Attorney				
Age	Rates				
Age All ages	Rates 10%				
Age	Rates				



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Disability

None expected

Retirement Rate

Annual retirement rates follow the PERF, PARF, and Judges' Retirement System rates are based on the Indiana Public Retirement System (INPRS) 2020 Experience Study. Sample rates are as shown below:

State Per	rsonnei						
Age	< 10 YOS	10 YOS	15 YOS	25 YOS	27 YOS	29 YOS	30+ YOS
50	0%	0%	4%	4%	4%	4%	4%
55	0%	0%	5%	5%	5%	5%	14%
60	0%	0%	12%	12%	12%	12%	12%
62	0%	0%	22%	22%	22%	22%	22%
65	0%	30%	30%	30%	30%	30%	30%
67+	0%	100%	100%	100%	100%	100%	100%

Judges				Attorneys	;		
Age	< 8 YOS	8 - 22 YOS	22+ YOS	Age	< 10 YOS	10 - 22 YOS	22+ YOS
55 – 61	0%	0%	20%	55 - 61	0%	0%	40%
62	0%	8%	20%	62	0%	20%	40%
63	0%	8%	20%	63	0%	20%	40%
64	0%	8%	20%	64	0%	20%	40%
65	0%	30%	30%	65 – 69	0%	50%	50%
66 – 74	0%	30%	30%	70+	0%	100%	100%
75+	0%	100%	100%				



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Per Capita Costs

Annual per capita costs are based on medical and prescription drug claims and enrollment data for the 24-month period ending May 31, 2021 projected to the 2021/22 plan year and includes administrative expenses effective on January 1, 2022. The per capita costs were actuarially increased to a retiree-basis using health index factors and enrollment by plan. The costs are assumed to increase with health care trend rates.

Age	Trad PPO	CDHP 1	CDHP 2	
<55	\$ 15,700	\$ 7,900	\$ 11,300	
55 - 59	\$ 19,500	\$ 9,800	\$ 14,100	
60 - 64	\$ 24.800	\$ 12.400	\$ 17.900	

The per capita costs represent the cost of coverage for a retiree-only population.

Actuarial standards require the recognition of higher inherent costs for a retired population versus an active population.

There are no GASB liabilities for dental and vision benefits are retirees pay the full cost of coverage.

Health Care Trend Rates

FYE	Medical/Rx	FYE	Medical/Rx
2022	8.0%	2026	6.0%
2023	7.5%	2027	5.5%
2024	7.0%	2028	5.0%
2025	6.5%	2029+	4.5%

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.

Contribution Trend Rates

Retiree contributions are assumed to increase with Health Care Trend Rates.

Spousal Coverage

20% of male and 15% of female employees are assumed to be married upon retirement. Husbands are assumed to be three years older than wives.

Spousal coverage for current retirees is based on actual data.



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Health Care Coverage Election Rate

Active Employees

Actives with Current Health Coverage

10% of employees are assumed to elect coverage at retirement. Once the employees have met the PERF eligibility for normal, unreduced or a disability pension, the election rate increases to 35% due to the presence of the Senate Enrolled Act 501 account balance.

PERF eligibility requirement is the earlier of:

- a. Age 55 with 85 points
- b. Age 60 with 15 years of service
- c. Age 65 with 10 years of service

Actives without Current Health Coverage

35% of employees are assumed to elect coverage at retirement after meeting the PERF retirement eligibility.

Inactive Employees

Based on actual data

Explicit Subsidy

The difference between (a) the premium rate approved by the State and (b) the retiree contribution. Below is an example of the monthly explicit subsidies for a retiree enrolled in CDHP 1 plan without wellness discount with non-tobacco use incentive.

	Premium Rate	Retiree Contribution	Explicit Subsidy			
	Α	В	C = A - B			
Retiree	\$ 572.00	\$ 572.00	\$ 0.00			
Spouse	\$ 1,148.29	\$ 1,148.29	\$ 0.00			



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Implicit Age Subsidy

The difference between (a) the per capita cost as determined by Nyhart and (b) the premium rate approved by the State. Below is an example of the monthly implicit subsidies for a retiree age 62 and spouse of the same age enrolled in CDHP 1 plan without wellness discount with non-tobacco incentive.

	Per Capita Cost	Premium Rate*	Implicit Age Subsidy			
	Α	В	C = A - B			
Retiree	\$ 1,033.33	\$ 572.00	\$ 461.33			
Spouse	\$ 1,033.33	\$ 1,033.33	\$ 0.00			

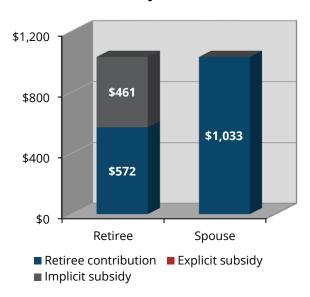
All employers that utilize premium rates based on blended active/retiree claims experience will have an implicit subsidy. There is an exception for Medicare plans using a true community-rated premium rate.

GASB Subsidy Breakdown

Below is a breakdown of the GASB 74/75 monthly total cost for a retiree age 62 and his spouse of the same age enrolled in CDHP 1 plan without wellness discount with non-tobacco incentive.

	Retiree	Spouse			
Retiree contribution	\$ 572.00	\$	1,033.33		
Explicit subsidy	\$ 0.00	\$	0.00		
Implicit subsidy	\$ 461.33	\$	0.00		
Total monthly cost	\$ 1,033.33	\$	1,033.33		

GASB Subsidy Breakdown



^{*} Spouse premium rate has been limited to the per capita cost.





GASB Disclosures (LEGISLATURE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Schedule of Changes in Net OPEB Liability and Related Ratios

ODED 1: 122.		E1/ 0000/04	E1/ 00/0/00	EV 0040440	EV 004E 440
OPEB Liability		FY 2020/21	FY 2019/20	FY 2018/19	FY 2017/18
Total OPEB Liability					
Total OPEB liability – beginning of year	\$	8,110,150	\$ 8,090,224	\$ 9,994,526	\$ 11,987,469
Service cost		38,653	43,131	113,767	120,023
Interest		210,460	276,890	380,946	420,082
Changes of benefit terms		0	0	(1,062,888)	0
Changes in assumptions		835,261	463,515	335,132	(385,363)
Differences between expected and actual experience		1,307,869	(269,845)	(1,136,744)	(1,527,405)
Benefit payments		(476,663)	(493,765)	(534,515)	(620,280)
Net change in total OPEB liability	\$	1,915,580	\$ 19,926	\$ (1,904,302)	\$ (1,992,943)
Total OPEB liability – end of year	\$	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
Contributions – employer		476,663	493,765	534,515	620,280
Contributions – active employees		0	0	0	0
Net investment income		0	0	0	0
Benefit payments		(476,663)	(493,765)	(534,515)	(620,280)
Trust administrative expenses		0	0	0	0
Net change in plan fiduciary net position	\$	0	\$ 0	\$ 0	\$ 0
Plan fiduciary net position – end of year	\$	0	\$ 0	\$ 0	\$ 0
Net OPEB Liability – end of year	\$	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%
Covered employee payroll	\$	N/A	\$ N/A	\$ N/A	\$ N/A
Net OPEB liability as % of covered payroll		N/A	N/A	N/A	N/A



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

OPEB Expense

OPEB Expense		FY 2020/21		FY 2019/20
Discount rate as of beginning of fiscal year		2.66%		3.51%
Discount rate as of end of fiscal year		2.19%		2.66%
Service cost	\$	38,653	\$	43,131
Interest		210,460		276,890
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	\$	(325,225)	\$	(586,799)
Changes in assumptions		249,708		82,656
Net difference between projected and actual earnings on OPEB plan investments		0		0
Total current period recognition	\$	(75,517)	\$	(504,143)
	ŕ	(10)017)	•	(20.7.10)
Total OPEB expense	\$	173,596	\$	(184,122)
,			,	, - , ,



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

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 an 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 items above.

Differences between expected and actual experien	oce for FYE	Initial Balance	Initial Amortization Period	l Recognition	namortized nce as of June 30, 2021	
June 30, 2018	\$	(1,527,405)	5	\$	(305,481)	\$ (305,481)
June 30, 2019	\$	(1,136,744)	5	\$	(227,349)	\$ (454,697)
June 30, 2020	\$	(269,845)	5	\$	(53,969)	\$ (161,907)
June 30, 2021	\$	1,307,869	5	\$	261,574	\$ 1,046,295

Changes in assumptions for FYE	Initi	ial Balance	Initial Amortization Annual Recognition Period				Unamortized Balance as of June 30, 2021		
June 30, 2018	\$	(385,363)	5	\$	(77,073)	\$	(77,071)		
June 30, 2019	\$	335,132	5	\$	67,026	\$	134,054		
June 30, 2020	\$	463,515	5	\$	92,703	\$	278,109		
June 30, 2021	\$	835,261	5	\$	167,052	\$	668,209		



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Deferred Outflows / (Inflows) of Resources - Continued

Net difference between projected and actual earnings in OPEB plan investments for FYE	Initial E	Balance	Initial Amortization Period	Annual I	Recognition	namortized Ince as of June 30, 2021
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

As of fiscal year ending June 30, 2021	Defe	rred Outflows	Defe	erred Inflows
Differences between expected and actual experience	\$	1,046,295	\$	(922,085)
Changes in assumptions		1,080,372		(77,071)
Net difference between projected and actual earnings in OPEB plan investments		N/A		N/A
Total	\$	2,126,667	\$	(999,156)

Annual Amortization of Deferred Outflows / (Inflows)

The balances as of June 30, 2021 of the deferred outflows / (inflows) of resources will be recognized in OPEB expense in the future fiscal years as noted below.

FYE	В	alance
2022	\$	(75,515)
2023	\$	307,040
2024	\$	467,360
2025	\$	428,626
2026	\$	0
Thereafter	\$	0



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Sensitivity Results

The following presents the net OPEB liability as of June 30, 2021, 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 2.19%.
- The 1% decrease in discount rate would be 1.19%.
- The 1% increase in discount rate would be 3.19%.

As of June 30, 2021	Net OPEB Liability			
1% Decrease	\$	11,397,626		
Current Discount Rate	\$	10,025,730		
1% Increase	\$	8,906,459		

The following presents the net OPEB liability as of June 30, 2021, 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 8.0% 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 7.0% 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 9.0% decreasing by 0.5% annually to an ultimate rate of 5.5%.

As of June 30, 2021	Net	OPEB Liability
1% Decrease	\$	8,956,502
Current Health Care Trend Rates	\$	10,025,730
1% Increase	\$	11,305,292



Projection of GASB Results (LEGISLATURE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Projection of GASB Results

The Total OPEB Liability (TOL) is expected to change on an annual basis as a result of expected and unexpected events. Under normal circumstances, it is generally expected to have a net increase each year. Below is a list of the most common events affecting the total OPEB liability and whether they increase or decrease the liability.

Expected Events

- Increases in TOL due to additional benefit accruals as employees continue to earn service each year
- Increases in TOL due to interest as the employees and retirees age
- Decreases in TOL due to benefit payments

Unexpected Events

- Increases in TOL when actual premium rates increase more than expected. A liability decrease occurs of the reverse happens.
- Increases in TOL when more new retirements occur than expected or fewer terminations occur than anticipated. Liability decreases occur when the opposite outcomes happen.
- Increases or decreases in TOL depending on whether benefits are improved or reduced.

Projection of Total OPEB Liability (TOL)	FY 2020/21	FY 2021/22
TOL as of beginning of year	\$ 8,110,150	\$ 10,025,730
Normal cost as of beginning of year	38,653	35,185
Exp. benefit payments during the year	(476,663)	(527,332)
Interest adjustment to end of year	210,460	214,591
Exp. TOL as of end of year	\$ 7,882,600	\$ 9,748,174
Actuarial Loss/(Gain)	2,143,130	TBD
Actual TOL as of end of year	\$ 10,025,730	\$ TBD



Employer Contribution Cash Flow Projections (LEGISLATURE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

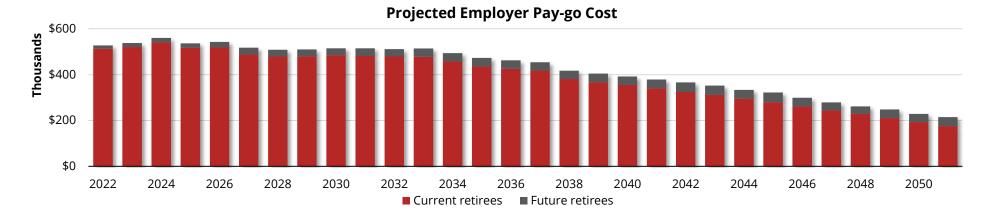
Employer Contribution Cash Flow Projections

The below projections show the actuarially estimated employer-paid contributions for retiree health benefits for the next thirty years. Results are shown separately for a closed group of current / future retirees. These projections include explicit and implicit subsidies.

FYE	Current Retirees	Future Retirees ⁸		Total
2022	\$ 512,520	\$ 14,812	\$	527,332
2023	\$ 520,218	\$ 17,477	\$	537,695
2024	\$ 541,034	\$ 19,030	\$	560,064
2025	\$ 517,061	\$ 19,590	\$	536,651
2026	\$ 518,278	\$ 24,594	\$	542,872
2027	\$ 487,987	\$ 29,550	\$	517,537
2028	\$ 479,081	\$ 29,677	\$	508,758
2029	\$ 480,161	\$ 29,779	\$	509,940
2030	\$ 484,616	\$ 30,368	\$	514,984
2031	\$ 481,250	\$ 33,421	\$	514,671

FYE	Current Retirees	Future Retirees ⁹		Total
2032	\$ 479,423	\$ 32,176	\$	511,599
2033	\$ 478,100	\$ 36,302	\$	514,402
2034	\$ 457,530	\$ 36,119	\$	493,649
2035	\$ 435,914	\$ 36,766	\$	472,680
2036	\$ 425,230	\$ 37,347	\$	462,577
2037	\$ 417,788	\$ 36,319	\$	454,107
2038	\$ 381,158	\$ 36,215	\$	417,373
2039	\$ 367,174	\$ 37,141	\$	404,315
2040	\$ 355,176	\$ 36,828	\$	392,004
2041	\$ 340.060	\$ 38.634	\$	378.694

FYE	Current Retirees		Future Retirees ⁹		Total
2042	\$ 324,321	\$	41,885	\$	366,206
2043	\$ 311,623	\$	40,534	\$	352,157
2044	\$ 294,823	\$	38,854	\$	333,677
2045	\$ 279,252	\$	43,087	\$	322,339
2046	\$ 261,597	\$	37,591	\$	299,188
2047	\$ 243,658	\$	35,044	\$	278,702
2048	\$ 228,664	\$	32,930	\$	261,594
2049	\$ 210,710	\$	37,686	\$	248,396
2050	\$ 192,986	\$	35,642	\$	228,628
2051	\$ 175,688	\$	39,288	\$	214,976



⁸ Projections for future retirees do not take into account future new hires.



Discussion of Discount Rates (LEGISLATURE)

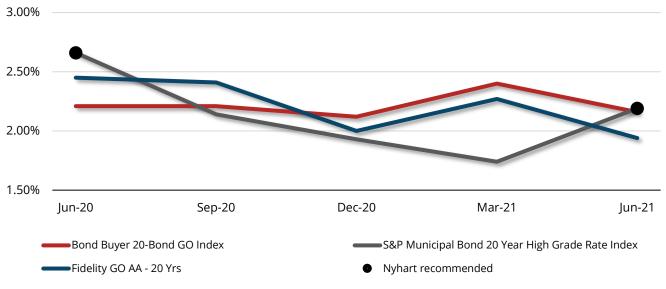
State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

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, 2020	2.21%	2.66%	2.45%	2.21% - 2.66%	2.66%
Yield as of June 30, 2021	2.16%	2.19%	1.94%	1.94% - 2.19%	2.19%







Summary of Plan Participants (LEGISLATURE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Active Employees

Actives with coverage	Single	Non-Single	Total	Avg. Age	Avg. Svc	S	alary
CDHP 1 w/o Wellness discount	18	53	71	54.6	9.5	\$	N/A
CDHP 1 w/ Wellness discount	1	8	9	48.2	5.4	\$	N/A
CDHP 2 w/o Wellness discount	1	3	4	54.3	3.4	\$	N/A
CDHP 2 w/ Wellness discount	1		1	50.7	12.7	\$	N/A
Traditional PPO w/o Wellness discount	1	1	2	62.2	8.0	\$	N/A
ISP Optional	7	21	28	65.2	14.2	\$	N/A
Total actives with coverage	29	86	115	56.7	10.2	\$	N/A

Actives without coverage	Total	Avg. Age	Avg. Svc	Salary
Total actives without coverage	35	60.3	10.0	\$ N/A

For active employees who currently have no coverage, 35% of them are assumed to elect coverage after meeting PERF eligibility requirement. They have been included in the GASB valuation.



Summary of Plan Participants (LEGISLATURE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Active Age-Service Distribution

					Years o	f Service					
Age	< 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
Under 25											0
25 to 29	2	2									4
30 to 34	2	2									4
35 to 39		3	1	2							6
40 to 44	3	8	4	1							16
45 to 49		5	3	3	1						12
50 to 54	7	7	3	4	1						22
55 to 59	1	5	5	4	1	1		1			18
60 to 64		2	11	3		1	1				18
65 to 69		5	3	3	1	3	3				18
70 & up		2	5	11	3	3	2	4	2		32
Total	15	41	35	31	7	8	6	5	2	0	150



Summary of Plan Participants (LEGISLATURE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Summary of Plan Participants – Retirees

Retirees with coverage	Single	Non-Single	Total	Avg. Age
Traditional PPO w/o Wellness Discount	7	12	19	79.0
CDHP 1 w/o Wellness Discount		3	3	57.9
CDHP 2 w/o Wellness Discount	1	2	3	64.6
ISP Optional	2	11	13	78.8
Total retirees with coverage	10	28	38	76.1

Of those shown above, 23 retirees (19 on the PPO plan, 1 on the CDHP 1 plan, and 3 on the CDHP 2 plan) retired prior to June 1, 2007 and are eligible to receive lifetime health coverage.

Retiree Age Distribution

Age	Retirees
< 45	
45 to 49	
50 to 54	1
55 to 59	1
60 to 64	4
65 to 69	4
70 to 74	5
75 to 79	8
80 to 84	8
85 to 89	5
90 & up	2
Total	38



Substantive Plan Provisions (LEGISLATURE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Eligibility

Legislators are eligible for retiree health care coverage once they have 8 years of service (or 4 sessions). Legislators who retired prior to June 1, 2007 are eligible for retiree health care coverage for lifetime. Legislators who retired on/after June 1, 2007 are eligible for retiree health care coverage to age 65.

Spouse Coverage

Surviving spouse coverage continues for after the death of the retiree for legislators who retired prior to June 1, 2007. Surviving spouse coverage continues after the death of the retiree to age 65 for legislators who retired on/after June 1, 2007.

State Explicit Subsidy

The State contributes various percentages of the premium rates for grandfathered current retirees. There is no State explicit subsidy for future retirees.

Retiree Contributions

Retirees pay the full cost of the retiree health care coverage. A limited group of grandfathered retirees receive explicitly subsidized health coverage. Any participants currently enrolled in the Indiana State Police (ISP) plans will receive the same retiree health benefits as a regular ISP retiree.

Medical Benefit

The same benefit options are available to retirees as active employees. The State does not subsidize HSA contributions for early retirees. For purposes of this valuation, no EAP plan benefits have been valued. All health plans are self-insured. The 2022 monthly premium rates by plan for non-tobacco users are as shown below (for those enrolled in State plans only):

	w/o Wellne	ess Discount	w/ Wellne	ss Discount
Plans	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

Dental and Vision Benefits

There is no GASB liability generated for dental and vision benefits for those retiring on/after June 1, 2007, as they pay the full cost for these benefits. Grandfathered retirees receive free dental benefits and subsidized vision benefits. The 2022 monthly premium rates for dental and vision benefits are as shown below:

Plans	Single	Family
Dental	\$ 25.35	\$ 66.56
Vision	\$ 4.68	\$ 11.44



Substantive Plan Provisions (LEGISLATURE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Senate Enrolled Act 501

Pur	pose

Senate Enrolled Act 501 establishes a retirement medical benefits account for elected officers, appointed officers, and employees of the executive, legislative, and judicial branches of state government to pay for participants' medical expenses after retirement.

Eligibility

A participant who:

- a. Is eligible for and has applied to receive a normal, unreduced or disability retirement benefit under PERF: or
- b. Has completed at least 10 years of service as an elected or appointed officer; or
- c. Has completed at least 15 years of service with the state for an employee

is entitled to receive a benefit from this account.

Annual State Contributions

The bill requires the state to make annual contributions to the account based on the following schedule:

Employee's Age	Annual State Contributions
Less than 30	\$ 500
At least 30 but less than 40	\$ 800
At least 40 but less than 50	\$ 1,100
At least 50	\$ 1,400

Bonus Contributions

An additional bonus contribution is to be made upon a participant's retirement with normal unreduced benefits if the retirement occurs between July 1, 2007 and July 1, 2017, and the retiree on the last day of service has completed at least 15 years of service or 10 years of service as an elected or appointed officer.

The additional bonus contribution amount is one thousand dollars (\$1,000) multiplied by the participant's years of service (rounded down to the nearest whole year).

Surviving Spouse

Surviving spouse or IRS dependent of a retired participant is allowed to receive the benefit from this account. Amounts credited to a retired participant are forfeited if the participant dies without a surviving spouse or IRS dependent.



Substantive Plan Provisions (LEGISLATURE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Senate Enrolled Act 501

GASB 74/75 Impact

The Senate Enrolled Act 501 plan is considered a defined contribution individual account for GASB 74/75 purposes and has no unfunded liabilities. The employer subsidy is defined in terms of an annual contribution to an individual account. Plan assets are maintained in a Trust Fund. All benefits and expenses in administering the Plan will be paid from the Fund. Money in the Fund may not be transferred, assigned, or otherwise removed from the Fund by the state board of finance, the Agency or any other state agency, and does not revert to the state general fund at the end of any state fiscal year.

The presence of this individual-account is expected to increase the percentage of future retirees electing to continue health coverage under the State plan. As a result, the health coverage election rate assumption has been set at 35% for retirements occurring after employees have met the minimum eligibility to use his/her individual account.

The Retirement Medical Benefits Account Trust Fund consists of cigarette tax revenues deposited in the fund under IC 6-7-1-28.1(7) and other appropriations, revenues, or transfers to the trust fund under IC 4-12-1. Beginning on July 1, 2012, these cigarette tax revenues are temporarily redirected to the General Fund per HEA 1001 (2011) in order to recover prior General Fund overpayments to the plan. Beginning on July 1, 2014, cigarette tax revenues will once again be deposited directly to the trust fund. The plan benefits satisfy the condition of being a defined contribution OPEB benefit and by definition, there is no unfunded liability.



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Measurement Date June 30, 2021

Actuarial Valuation Date June 30, 2021 with no adjustments to get to the June 30, 2021 measurement date. Liabilities as of July 1, 2020

are based on an actuarial valuation date of July 1, 2019 projected to July 1, 2020 on a "no loss / no gain" basis.

Discount Rate 2.66% as of July 1, 2020 and 2.19% as of June 30, 2021 for accounting disclosure purposes; refer to the

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

Inflation Rate 2.00%

Cost MethodAllocation 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.

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

Census Data

Census data for was provided by the State and it was collected as of June 30, 2021. We have reviewed it for

reasonableness and no material modifications were made to the census data.

Data Assumption The State has separate rates for tobacco and non-tobacco users, however these rates are not enforced for

retired users. All retirees contribute the non-tobacco rates.



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Contribution Funding Policy Pay-as-you-go cash basis

Mortality Healthy employees and retirees: SOA Pub-2010 General Headcount Weighted Mortality Table fully generational

using Scale MP-2020 with a 1 year setback for males and a 1 year setback for females

Disabled retirees: SOA Pub-2010 General Disabled Retiree Headcount Weighted Mortality Table fully

generational using Scale MP-2020 with a 140% load

Surviving Spouses: SOA Pub-2010 Continuing Survivor Headcount Weighted Mortality Table fully generational

using Scale MP-2020 with no set forward for males and a 2 year set forward for females

The above tables are based on 2020 INPRS Experience Study with recent mortality improvement scales.

Withdrawal Rate None

Disability None

Retirement Rate Annual retirement rates by group are as shown below.

 YOS	House	Senate	
<6	0%	0%	
6	0%	5%	
8	10%	5%	
12	0%	20%	
14	10%	0%	
16	20%	20%	
20	0%	25%	
22	10%	0%	
24	20%	10%	
28	0%	10%	
30	10%	0%	
32	100%	100%	

100% retirement at age 70 is assumed for House members with at least 6 year of service and Senate members with at least 8 years of service.



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Health Care Coverage Election Rate

Active Employees

Actives with Current Health Coverage

10% of employees are assumed to elect coverage at retirement. Once the employees have met the PERF eligibility for normal, unreduced or a disability pension, the election rate increases to 35% due to the presence of the Senate Enrolled Act 501 account balance.

PERF eligibility requirement is the earlier of:

- a. Age 55 with 85 points
- b. Age 60 with 15 years of service
- c. Age 65 with 10 years of service

Actives without Current Health Coverage

35% of employees are assumed to elect coverage at retirement after meeting the PERF retirement eligibility.

Inactive Employees

Based on actual data

Spousal Coverage

95% of male and 50% of female employees are assumed to be married upon retirement. Husbands are assumed to be three years older than wives.

Spousal coverage for current retirees is based on actual data.



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Per Capita Costs

For those enrolled in the State plans, annual per capita costs are based on medical and prescription drug claims and enrollment data for the 24-month period ending May 31, 2021 projected to 2021/22 plan year and includes administrative expenses effective on January 1, 2022. For those enrolled in the ISP plan, annual per capita costs are based on medical and prescription drug claims and enrollment data for the 24-month period ending May 31, 2021 projected to 2021/22 plan year and includes administrative expenses effective on January 1, 2022. The per capita costs were actuarially increased to a retiree-basis using health index factors and enrollment by plan. The costs are assumed to increase with health care trend rates.

Age	Trad PPO	CDHP 1
50 - 54	\$ 15,700	\$ 7,900
55 - 59	\$ 19,500	\$ 9,800
60 - 64	\$ 24,800	\$ 12,400
65 – 69	\$ 8,700	\$ 4,300
70 – 74	\$ 10,900	\$ 5,500
75+	\$ 12,400	\$ 6,200
A ~ ~	CDUDO	ICD*

Age	CDHP 2	ISP*
50 - 54	\$ 11,300	\$ 9,027
55 - 59	\$ 14,100	\$ 11,027
60 - 64	\$ 17,900	\$ 13,827
65 - 69	\$ 6,300	\$ 2,149
70 – 74	\$ 7,800	\$ 2,149
75+	\$ 8,900	\$ 2,149

The per capita costs represent the cost of coverage for a retiree-only population.

Actuarial standards require the recognition of higher inherent costs for a retired population versus an active population.

^{*} ISP per capita costs above include dental and vision costs. ISP post-65 costs are assumed to be equal to the premium rate of the Medicare Advantage plan and do not include dental and vision costs. Post-65 ISP retirees are also assumed to receive the ISP's HRA benefit, which is \$57.25 per month effective January 1, 2022.



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Health Care Trend Rates

FYE	Medical / Rx
2022	8.0%
2023	7.5%
2024	7.0%
2025	6.5%
2026	6.0%
2027	5.5%
2028	5.0%
2029+	4.5%

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 costs for those enrolled in the ISP plan are assumed to increase by 3.0% in the future.

Retiree Contributions

Explicit Subsidy

Retiree contributions for medical and prescription drugs are assumed to increase with Health Care Trend Rates.

The difference between (a) the premium rate approved by the State and (b) the retiree contribution. Below is an example of the monthly explicit subsidies for a retiree enrolled in CDHP 1 plan without wellness discount with non-tobacco use incentive.

	Premium Rate	Retiree Contribution	Explicit Subsidy
	Α	В	C = A - B
Retiree	\$ 572.00	\$ 572.00	\$ 0.00
Spouse	\$ 1,148.29	\$ 1,148.29	\$ 0.00



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Implicit Age Subsidy

The difference between (a) the per capita cost as determined by Nyhart and (b) the premium rate approved by the State. Below is an example of the monthly implicit subsidies for a retiree age 62 with spouse of the same age enrolled in CDHP 1 plan without wellness discount with non-tobacco incentive.

	Per Capita Cost	Premium Rate*	Implicit Age Subsidy
	Α	В	C = A - B
Retiree	\$ 1,033.33	\$ 572.00	\$ 461.33
Spouse	\$ 1,033.33	\$ 1,033.33	\$ 0.00

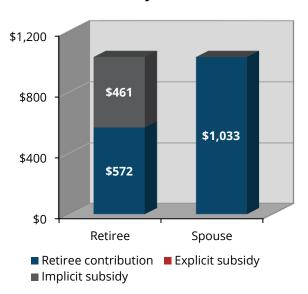
All employers that utilize premium rates based on blended active/retiree claims experience will have an implicit subsidy. There is an exception for Medicare plans using a true community-rated premium rate.

GASB Subsidy Breakdown

Below is a breakdown of the GASB 74/75 monthly total cost for a retiree age 62 and his spouse of the same age enrolled in CDHP 1 plan without wellness discount with non-tobacco incentive.

	Retiree	Spouse
Retiree contribution	\$ 572.00	\$ 1,033.33
Explicit subsidy	\$ 0.00	\$ 0.00
Implicit subsidy	\$ 461.33	\$ 0.00
Total monthly cost	\$ 1,033.33	\$ 1,033.33

GASB Subsidy Breakdown



^{*} Spouse premium rate has been limited to the per capita cost.





State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Schedule of Changes in Net OPEB Liability and Related Ratios

OPEB Liability	FY 2020/21	FY 2019/20	FY 2018/19	FY 2017/18
Total OPEB Liability				
Total OPEB liability – beginning of year	\$ 177,447,852	\$ 198,445,243	\$ 324,517,099	\$ 539,736,386
Service cost	4,993,476	5,032,384	8,531,267	17,810,791
Interest	11,208,431	12,530,058	12,777,709	19,725,281
Changes of benefit terms	0	0	3,253,798	(196,573,638)
Changes in assumptions	7,028,805	(15,686,765)	(66,154,178)	(27,946,460)
Differences between expected and actual experience	(28,390,809)	(20,071,092)	(78,675,348)	(21,241,592)
Benefit payments	(3,371,070)	(2,801,976)	(5,805,104)	(6,993,669)
Net change in total OPEB liability	\$ (8,531,167)	\$ (20,997,391)	\$ (126,071,856)	\$ (215,219,287)
Total OPEB liability – end of year	\$ 168,916,685	\$ 177,447,852	\$ 198,445,243	\$ 324,517,099
Plan Fiduciary Net Position				
Plan fiduciary net position – beginning of year	\$ 158,657,034	\$ 137,969,003	\$ 117,362,956	\$ 97,322,900
Contributions – employer	22,322,322	21,727,429	23,936,818	25,813,525
Contributions – active employees	827,523	845,660	857,420	404,060
Net investment income	131,020	1,276,385	2,108,792	1,422,502
Benefit payments	(3,371,070)	(2,801,976)	(5,805,104)	(6,993,669)
Trust administrative expenses	(359,661)	(359,467)	(491,879)	(606,362)
Net change in plan fiduciary net position	\$ 19,550,134	\$ 20,688,031	\$ 20,606,047	\$ 20,040,056
Plan fiduciary net position – end of year	\$ 178,207,168	\$ 158,657,034	\$ 137,969,003	\$ 117,362,956
Net OPEB Liability – end of year	\$ (9,290,483)	\$ 18,790,818	\$ 60,476,240	\$ 207,154,143
Disp fiducion not position as N of total ODED linking	105 50/	90.407	60.5%	26.20
Plan fiduciary net position as % of total OPEB liability	105.5%	89.4%	69.5%	36.2%
Covered employee payroll	\$ 110,538,883	\$ 113,431,389	\$ 110,664,770	\$ 98,338,193
Net OPEB liability as % of covered payroll	-8.4%	16.6%	54.6%	210.7%



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Schedule of Employer Contributions

The Actuarially Determined Contributions (ADC) shown below prior to FY 2016/17 are based on the Annual Required Contribution (ARC) calculated in prior GASB 45 actuarial valuations as shown in the Plan Sponsor financial statements.

	FY 2020/21	FY 2019/20	FY 2018/19	FY 2017/18	FY 2016/17
Actuarially Determined Contribution (ADC)	\$ 5,897,655 ⁹	\$ 9,116,153	\$ 18,356,134	\$ 35,041,558	\$ 34,980,369
Contributions in relation to the ADC ¹⁰	22,322,322	21,727,429	23,936,818	25,813,525	26,871,267
Contribution deficiency / (excess)	\$ (16,424,667)	\$ (12,611,276)	\$ (5,580,684)	\$ 9,228,033	\$ 8,109,102
Covered employee payroll	\$ 110,538,883	\$ 113,431,389	\$ 110,664,770	\$ 98,338,193	\$ 96,174,272
Contribution as a % of covered employee payroll	20.2%	19.2%	21.6%	26.2%	27.9%
	FY 2015/16	FY 2014/15	FY 2013/14	FY 2012/13	FY 2011/12
Actuarially Determined Contribution (ADC)	\$ 30,629,812	\$ 29,604,071	\$ 26,029,514	\$ 27,418,949	\$ 27,793,932
Contributions in relation to the ADC ⁴	34,862,363	25,319,778	24,834,550	11,683,966	18,626,963
Contribution deficiency / (excess)	\$ (4,232,551)	\$ 4,284,293	\$ 1,194,964	\$ 15,734,983	\$ 9,166,969
Covered employee payroll	\$ 91,753,000	\$ 92,130,000	\$ 93,630,000	\$ 87,040,000	\$ 87,040,000
Contribution as a % of covered employee payroll	38.0%	27.5%	26.5%	13.4%	21.4%

⁹ Refer to the Actuarially Determined Contributions section for the calculation details.

¹⁰ Includes employer contribution for pay-go cost and (any) pre-funding contributions deposited into the OPEB Trust.



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

OPEB Expense

OPEB Expense	FY 2020/21	FY 2019/20
Discount rate as of beginning of fiscal year	6.20%	6.20%
Discount rate as of end of fiscal year	6.20%	6.20%
Service cost	\$ 4,993,476	\$ 5,032,384
Interest	11,208,431	12,530,058
Changes of benefit terms	0	0
Projected earnings on OPEB plan investments	(10,429,676)	(9,146,790)
Reduction for contributions from active employees	(827,523)	(845,660)
OPEB plan administrative expenses	359,661	359,467
Current period recognition of deferred outflows / (inflows) of resources		
Differences between expected and actual experience	\$ (21,196,977)	\$ (17,141,147)
Changes in assumptions	(14,679,799)	(15,683,914)
Net difference between projected and actual earnings on OPEB plan investments	4,442,670	2,382,939
Total current period recognition	\$ (31,434,106)	\$ (30,442,122)
Total OPEB expense	\$ (26,129,737)	\$ (22,512,663)



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Deferred Outflows / (Inflows) of Resources

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

- 4. Differences between expected and actual experience of the OPEB plan
- 5. Changes of assumptions
- 6. Difference between projected an 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 items above.

Differences between expected and actual experience for FYE	In	itial Balance	Initial Amortization Period	Annı	ual Recognition	Inamortized ance as of June 30, 2021
June 30, 2018	\$	(21,241,592)	7	\$	(3,034,513)	\$ (9,103,540)
June 30, 2019	\$	(78,675,348)	7	\$	(11,239,335)	\$ (44,957,343)
June 30, 2020	\$	(20,071,092)	7	\$	(2,867,299)	\$ (14,336,494)
June 30, 2021	\$	(28,390,809)	7	\$	(4,055,830)	\$ (24,334,979)

Changes in assumptions for FYE	Ini	tial Balance	Initial Amortization Period	Annu	Unamortized on Balance as of June 30, 2021		
June 30, 2018	\$	(27,946,460)	7	\$	(3,992,351)	\$	(11,977,056)
June 30, 2019	\$	(66,154,178)	7	\$	(9,450,597)	\$	(37,802,387)
June 30, 2020	\$	(15,686,765)	7	\$	(2,240,966)	\$	(11,204,833)
June 30, 2021	\$	7,028,805	7	\$	1,004,115	\$	6,024,690



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Deferred Outflows / (Inflows) of Resources - Continued

Net difference between projected and actu plan investments for FYE	al earnings in OPEB	Initio	al Balance	Initial Amortization Period	Annuc	al Recognition	namortized Ince as of June 30, 2021
June 30, 2018	\$	\$	2,040,609	5	\$	408,122	\$ 408,121
June 30, 2019	\$	\$	2,003,681	5	\$	400,736	\$ 801,473
June 30, 2020	\$	\$	7,870,405	5	\$	1,574,081	\$ 4,722,243
June 30, 2021	\$	\$	10,298,656	5	\$	2,059,731	\$ 8,238,925

As of fiscal year ending June 30, 2021	Defei	red Outflows	De	ferred Inflows
Differences between expected and actual experience	\$	0	\$	(92,732,356)
Changes in assumptions		6,024,690		(60,984,276)
Net difference between projected and actual earnings in OPEB plan investments		14,170,762		0
Total	\$	20,195,452	\$	(153,716,632)

Annual Amortization of Deferred Outflows / (Inflows)

The balances as of June 30, 2021 of the deferred outflows / (inflows) of resources will be recognized in OPEB expense in the future fiscal years as noted below.

FYE	Balance
2022	\$ (31,434,107)
2023	\$ (31,842,227)
2024	\$ (32,242,968)
2025	\$ (26,790,182)
2026	\$ (8,159,982)
Thereafter	\$ (3,051,714)



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Sensitivity Results

The following presents the net OPEB liability as of June 30, 2021, 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 6.20%.
- The 1% decrease in discount rate would be 5.20%.
- The 1% increase in discount rate would be 7.20%.

As of June 30, 2021	Net (OPEB Liability
1% Decrease	\$	9,102,675
Current Discount Rate	\$	(9,290,483)
1% Increase	\$	(25,261,455)

The following presents the net OPEB liability as of June 30, 2021, 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 8.0% 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 7.0% 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 9.0% decreasing by 0.5% annually to an ultimate rate of 5.5%.

As of June 30, 2021	Net	OPEB Liability
1% Decrease	\$	(26,755,850)
Current Health Care Trend Rates	\$	(9,290,483)
1% Increase	\$	11,340,454



Asset Information (INDIANA STATE POLICE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Asset Information

Asset Breakdown	FY 2019/20	FY 2020/21
Assets		
Cash and cash equivalents	\$ 4,685,467	\$ 6,449,943
Securities lending cash collateral	0	0
Total cash	\$ 4,685,467	\$ 6,449,943
Receivables		
Contributions	\$ 0	\$ 0
Accrued interest	14,605	3,330
Total receivables	\$ 14,605	\$ 3,330
Investments		
Fixed income	\$ 154,476,767	\$ 172,244,986
Equities	0	0
Mutual Funds	0	0
Other	0	0
Total investments	\$ 154,476,767	\$ 172,244,986
Total assets	\$ 159,176,839	\$ 178,698,259
Liabilities		
Payables		
Investment management fees	\$ 0	\$ 0
Benefits	519,805	491,091
Total liabilities	\$ 519,805	\$ 491,091
Net position restricted to OPEB	\$ 158,657,034	\$ 178,207,168



Asset Information (INDIANA STATE POLICE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Asset Information

Asset Reconciliation	FY 2019/20	FY 2020/21
Additions		
Contributions received		
Employer	\$ 21,727,429	\$ 22,322,322
Active Employees	845,660	827,523
Total contributions	\$ 22,573,089	\$ 23,149,845
Investment income		
Net increase in fair value of investments	\$ 1,276,385	\$ 131,020
Interests and dividends	0	0
Investment expense, other than from securities lending	0	0
Securities lending income	0	0
Securities lending expense	0	0
Net investment income	\$ 1,276,385	\$ 131,020
Total additions	\$ 23,849,474	\$ 23,280,865
Deductions		
Benefit payments (net of retiree contributions)	\$ (2,801,976)	\$ (3,371,070)
Administrative expenses	(359,467)	(359,661)
Other	0	0
Total deductions	\$ (3,161,443)	\$ (3,730,731)
Net increase in net position	\$ 20,688,031	\$ 19,550,134
Net position restricted to OPEB		
Beginning of year	137,969,003	158,657,034
End of year	\$ 158,657,034	\$ 178,207,168

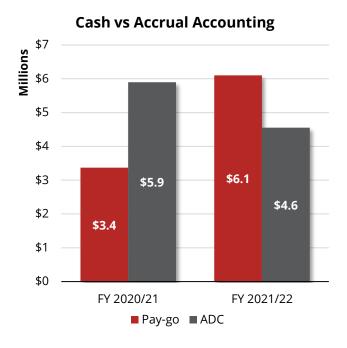


Actuarially Determined Contributions (INDIANA STATE POLICE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

The Actuarially Determined Contributions calculated below are recommended target contributions and assumes that the Plan Sponsor has the ability to contribute these amounts on an annual basis. The Plan Sponsor has the responsibility to decide how much it should contribute after considering its other needs and the OPEB participants' needs.

	FY 2020/21	FY 2021/22
Discount rate	6.20%	6.20%
Payroll growth factor used for amortization	N/A	N/A
Actuarial cost method	try Age Normal evel % of Salary	try Age Normal evel % of Salary
Amortization type	Level Dollar	Level Dollar
Amortization period	26 years	25 years
Actuarial accrued liability (AAL) – beginning of year	\$ 177,447,852	\$ 168,916,685
Actuarial value of assets – beginning of year	(158,657,034)	(178,207,168)
Unfunded AAL – beginning of year	\$ 18,790,818	\$ (9,290,483)
Normal Cost ¹¹	\$ 4,165,954	\$ 4,327,322
Amortization of UAAL	1,387,393	(697,394)
Total normal cost plus amortization	\$ 5,553,347	\$ 3,629,928
Interest to the end of year	344,308	225,056
Actuarially Determined Contribution – Preliminary	\$ 5,897,655	\$ 3,854,984
Expected benefit payments ¹²	3,371,070	6,102,807
Actuarially Determined Contribution – Final ¹³	\$ 5,897,655	\$ 4,552,378



Actuarially Determined Contribution (ADC) is the target or recommended contribution to a defined benefit OPEB plan, which if paid on an ongoing basis, will provide sufficient resources to fund future costs for services to be earned and liabilities attributed to past services. This is typically higher than the pay-as-you-go cost because it includes recognition of employer costs expected to be paid in future accounting periods.

¹¹ Reduced for active employee contributions, which were \$827,523 for FY 2020/21 and assumed to be \$856,486 for FY 2021/22 (based on FY 2020/21 contribution increased by total payroll growth assumption of 3.5%).

¹² Actual for FY 2020/21

¹³ If fully funded under the long-term expected discount rate, an entity could contribute \$0. However, for long-term sustainability purposes, Nyhart would recommend contributing the normal cost plus interest for years in which that entity is fully funded (total for employer + employee contributions). For FY 2021/22, the final recommended contribution reflects the employer only portion (the normal cost plus interest less expected active employee contributions).



Projection of GASB Results (INDIANA STATE POLICE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Projection of GASB Results

The Total OPEB Liability (TOL) is expected to change on an annual basis as a result of expected and unexpected events. Under normal circumstances, it is generally expected to have a net increase each year. Below is a list of the most common events affecting the total OPEB liability and whether they increase or decrease the liability.

Expected Events

- Increases in TOL due to additional benefit accruals as employees continue to earn service each year
- Increases in TOL due to interest as the employees and retirees age
- Decreases in TOL due to benefit payments

Unexpected Events

- Increases in TOL when actual premium rates increase more than expected. A liability decrease occurs of the reverse happens.
- Increases in TOL when more new retirements occur than expected or fewer terminations occur than anticipated. Liability decreases occur when the opposite outcomes happen.
- Increases or decreases in TOL depending on whether benefits are improved or reduced.

Projection of Total OPEB Liability (TOL)	FY 2020/21	FY 2021/22
TOL as of beginning of year	\$ 177,447,852	\$ 168,916,685
Normal cost as of beginning of year	4,993,476	5,183,808
Exp. benefit payments during the year	(3,371,070)	(6,102,807)
Interest adjustment to end of year	11,208,431	10,607,888
Exp. TOL as of end of year	\$ 190,278,689	\$ 178,605,574
Actuarial Loss/(Gain)	(21,362,004)	TBD
Actual TOL as of end of year	\$ 168,916,685	\$ TBD

Projection of Actuarial Value of Assets (AVA)	FY 2020/21	FY 2021/22
AVA as of beginning of year	\$ 158,657,034	\$ 178,207,168
Exp. employer contributions during the year ¹⁴	22,322,322	23,102,807
Exp. benefit payments during the year	(3,371,070)	(6,102,807)
Exp. investment income ¹⁵	10,429,676	11,574,731
Exp. Trust administrative expenses	(359,661)	(633,406)
Exp. Active employee contributions ¹⁶	827,523	856,486
Exp. AVA as of end of year	\$ 188,505,824	\$ 207,004,979
Differences between expected and actual experience	(10,298,656)	TBD
AVA as of end of year	\$ 178,207,168	\$ TBD

¹⁴ Employer contribution for 2020/21 is based on actual employer contribution made into the Trust. FY 2021/22 expected employer contribution is based on the expected pay-go cost plus the average Trust contribution in the past five years, rounded down to the nearest million.

¹⁵ Fiscal year 2020/21 expected investment income is calculated based on a 6.20% asset return and fiscal year 2021/22 expected investment income is calculation based on a 6.20% asset return.

¹⁶ Active employee contributions were \$827,523 for FY 2020/21 and assumed to be \$856,486 for FY 2021/22 (based on FY 2020/21 contribution increased by total payroll growth assumption of 3.5%).



Employer Contribution Cash Flow Projections (INDIANA STATE POLICE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Projection of GASB Results

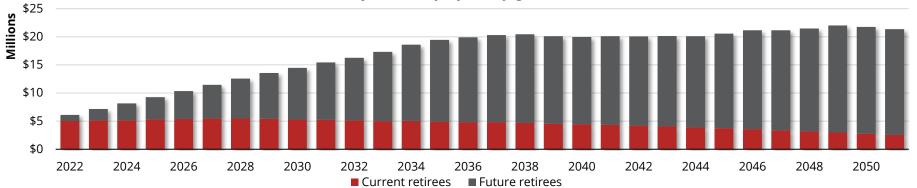
The below projections show the actuarially estimated employer-paid contributions for retiree health benefits for the next thirty years. Results are shown separately for a closed group of current / future retirees. These projections include explicit and implicit subsidies.

FYE	Current Retirees	F	Future Retirees ¹⁷	Total
2022	\$ 5,022,437	\$	1,080,370	\$ 6,102,807
2023	\$ 5,145,226	\$	2,024,585	\$ 7,169,811
2024	\$ 5,170,601	\$	2,980,115	\$ 8,150,716
2025	\$ 5,331,978	\$	3,934,716	\$ 9,266,694
2026	\$ 5,395,544	\$	4,938,647	\$ 10,334,191
2027	\$ 5,450,333	\$	6,009,231	\$ 11,459,564
2028	\$ 5,477,504	\$	7,081,937	\$ 12,559,441
2029	\$ 5,408,479	\$	8,140,957	\$ 13,549,436
2030	\$ 5,274,839	\$	9,197,389	\$ 14,472,228
2031	\$ 5,249,354	\$	10,190,948	\$ 15,440,302

FYE	Current Retirees	F	Future Retirees ¹⁶	Total
2032	\$ 5,132,537	\$	11,135,364	\$ 16,267,901
2033	\$ 4,998,402	\$	12,300,945	\$ 17,299,347
2034	\$ 5,046,030	\$	13,537,759	\$ 18,583,789
2035	\$ 4,919,761	\$	14,535,258	\$ 19,455,019
2036	\$ 4,836,430	\$	15,055,736	\$ 19,892,166
2037	\$ 4,827,741	\$	15,470,384	\$ 20,298,125
2038	\$ 4,693,288	\$	15,739,303	\$ 20,432,591
2039	\$ 4,550,678	\$	15,539,312	\$ 20,089,990
2040	\$ 4,461,637	\$	15,493,646	\$ 19,955,283
2041	\$ 4,333,557	\$	15,780,064	\$ 20,113,621

FYE	Current Retirees	F	Future Retirees ¹⁶	Total
2042	\$ 4,212,868	\$	15,863,392	\$ 20,076,260
2043	\$ 4,065,027	\$	16,062,959	\$ 20,127,986
2044	\$ 3,893,957	\$	16,203,713	\$ 20,097,670
2045	\$ 3,737,618	\$	16,808,420	\$ 20,546,038
2046	\$ 3,565,681	\$	17,595,646	\$ 21,161,327
2047	\$ 3,379,150	\$	17,777,011	\$ 21,156,161
2048	\$ 3,179,920	\$	18,292,391	\$ 21,472,311
2049	\$ 2,970,322	\$	19,046,925	\$ 22,017,247
2050	\$ 2,758,199	\$	19,000,591	\$ 21,758,790
2051	\$ 2,536,149	\$	18,807,155	\$ 21,343,304





 $^{^{\}rm 17}$ Projections for future retirees do not take into account future new hires.



Discussion of Discount Rates (INDIANA STATE POLICE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Under GASB 74, the discount rate used in valuing OPEB liabilities for funded plans as of the Measurement Date must be based on the long-term expected rate of return on OPEB plan investments that are expected to be used to finance future benefit payments to the extent that (a) they are sufficient to pay for the projected benefit payments and (b) the OPEB plan assets are invested using a strategy that will achieve that return. When the OPEB plan investments are insufficient to cover future benefit payments, 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) must be used.

For the current valuation:

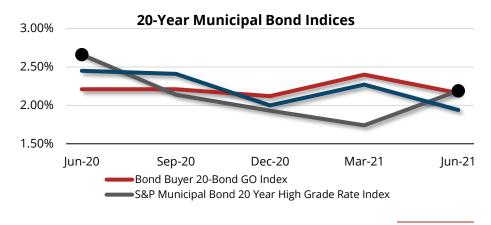
1. The long-term expected rate of return on OPEB plan investment is 6.20%. This was developed in consultation with the group's asset advisor using a building-block approach in which expected future rates of returned are developed for each major asset class. The expected future nominal rates of return as shown in the State of Indiana 2021 ISP Pension Plan valuation are shown below. Inflation is expected to be 2.00%. The best estimates of arithmetic real rates of return for each major asset class included in the OPEB Plan's target asset allocation as of June 30, 2021 are summarized in the following table.

Asset Class	Target Allocation	L/T Expected ROR
Broad US Equity	31%	6.6%
Global ex-US Equity	11%	6.8%
Domestic Fixed	22%	1.8%
Short Duration	4%	1.5%
Cash Equivalents	2%	1.0%
Hedge Funds	25%	4.0%
Real Estate	5%	5.8%

2. The discount rate used when the OPEB plan investments are insufficient to pay for future benefit payments are 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.

Yield as of	July 1, 2020	June 30, 2021
Bond Buyer Go 20-Bond Municipal Bond Index	2.21%	2.16%
S&P Municipal Bond 20-Year High Grade Rate Index	2.66%	2.19%
Fidelity 20-Year Go Municipal Bond Index	2.45%	1.94%
Bond Index Range	2.21% - 2.66%	1.94% - 2.19%
Actual Discount Rate Used	2.66%	2.19%

3. The final equivalent single discount rate used for this year's valuation is 6.20% as of July 1, 2020 and 6.20% as of June 30, 2021, based on the expectation that the ISP will continue to make contributions equal to the benefit payments each year plus additional prefunding contributions of \$17.0 million per year (based on actual pre-funding contributions over the past five years) until the trust is sufficient to pay all future benefits.





Summary of Plan Participants (INDIANA STATE POLICE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Active Employees

Actives with coverage	Single	Non-Single	Total	Avg. Age	Avg. Svc	Salary
Optional	605	1,057	1,662	43.7	16.1	\$ 110,538,883
Total actives with coverage	605	1,057	1,662	43.7	16.1	\$ 110,538,883

There are no active employees without coverage reported for Indiana State Police.

Active Age-Service Distribution

	Years of Service										
Age	< 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
Under 25	36	28	2								66
25 to 29	36	114	38								188
30 to 34	16	50	103	16							185
35 to 39	8	15	40	122	24						209
40 to 44	2	6	20	69	64	33	1				195
45 to 49	2	3	14	40	30	153	48				290
50 to 54	2	4	4	19	18	62	107	19			235
55 to 59	3	7	7	6	5	12	31	63	17	1	152
60 to 64	2	2	7	3	5	7	9	26	19	24	104
65 to 69		3	5	1	2	6	2	2	3	10	34
70 & up			1			1				2	4
Total	107	232	241	276	148	274	198	110	39	37	1,662



Summary of Plan Participants (INDIANA STATE POLICE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Summary of Plan Participants - Retirees

Retirees with coverage	Single	Non-Single	Total	Avg. Age
Basic without Medicare	13	27	40	61.2
Optional without Medicare	89	105	194	60.6
Basic with Medicare	48	40	88	78.2
Optional with Medicare	314	422	736	75.5
Total retirees with coverage	464	594	1,058	72.5

In addition to the above, there are 273 retirees who currently have no health coverage with ISP but they have life insurance coverage. They have been included in the GASB valuation.

Enrollments shown above as "without Medicare" includes all pre-65 retirees on each plan and any post-65 retirees who are not Medicare eligible. Enrollments shown as "with Medicare" include only post-65 retirees who are Medicare eligible.

Retiree Age Distribution¹⁸

Age	Retirees
< 45	3
45 to 49	6
50 to 54	25
55 to 59	61
60 to 64	124
65 to 69	214
70 to 74	207
75 to 79	182
80 to 84	144
85 to 89	62
90 & up	30
Total	1,058

Page D - 14

¹⁸ Including retirees and surviving spouse beneficiaries who have health coverage only.



Substantive Plan Provisions (INDIANA STATE POLICE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Eligibility

Police officers and civilian employees employed by the Indiana State Police are eligible for retiree health care benefits at the earlier of:

- a. 25 years of service
- b. Age 55 with 85 points
- c. Age 60 with 15 years of service
- d. Age 65 with 10 years of service

Spouse Coverage

Surviving spouse coverage continues for life after the death of the member (retiree or active employee). The coverage is free for six months and then it reverts to single retiree coverage.

Surviving spouses receive free coverage for life after the death of a member in the line of duty.

Medical Benefit

The same benefit options are available to retirees as active employees. All health plans are self-insured.

The Basic Plan includes medical coverage only. The Optional Plan includes medical, dental, and vision coverage.

The monthly premium rates effective on January 1, 2022 (as determined by the Indiana State Police) for the plans are as shown below:

	Retiree Only	Retiree plus One Dependent
Without Medicare		
Basic Plan	\$ 457.73	\$ 611.28
Optional Plan	\$ 535.23	\$ 759.29
With Medicare		
Medicare Advantage	\$ 179.06	\$ 358.12

State Police Explicit Subsidy

None



Substantive Plan Provisions (INDIANA STATE POLICE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Retiree Contributions

Retirees pay the full cost of the retiree health care coverage as determined by the State Police. The breakdown of retiree contributions by benefit are as shown below.

<u>Without Medicare</u>	Retiree Only	Retiree plus One Dependent	Spouse Increment	
Basic Plan	\$ 457.73	\$ 611.28	\$ 153.55	
Optional Plan	\$ 535.23	\$ 759.29	\$ 224.06	
With Medicare	Retiree Only	Retiree plus One Dependent	Spouse Increment	
Medicare Advantage	\$ 179.06	\$ 358.12	\$ 179.06	

HRA Benefit

Effective on January 1, 2019, all post-65 Medicare eligible retirees were removed from the ISP's traditional health plan. They are covered under a Medicare Advantage Plan through Anthem and a Medicare Part D plan with premiums paid fully by the retiree. These members will now also be given a flat HRA contribution of \$57.25 per eligible person effective January 1, 2022 for life while participating in the Medicare Advantage plan. This will continue to be available to surviving spouses of deceased retirees. The aggregate HRA contribution for all members is capped at \$1 million annually going forward. For purposes of this valuation, the HRA contribution amount provided by ISP is not assumed to increase in the future.

All post-65 non-Medicare eligible retirees will continue to be covered under ISP's traditional health plan.

All retirees (pre and post-Medicare eligible) will continue to have dental and vision coverage with premiums paid fully by the retiree.

Life Insurance

All current and future retired Police officers are eligible for life insurance benefits \$20,000 with premiums fully paid by the ISP.

Disability Benefit

Police officers who become long-term disabled receive free health care coverage during the disability period. When they meet the requirements for retiree health care benefits they will have to make the required retiree contributions.



Substantive Plan Provisions (INDIANA STATE POLICE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Senate Enrolled Act 501

Purpose

Senate Enrolled Act 501 establishes a retirement medical benefits account for elected officers, appointed officers, and employees of the executive, legislative, and judicial branches of state government to pay for participants' medical expenses after retirement.

Effective July 1, 2011 employees of Indiana State Police, other than those who waived coverage under a common and unified plan of self-insurance provided for under IC 5-10-8-6 before July 1, 2011, are not eligible for the Senate Enrolled Act 501 retirement medical benefits account.



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Measurement Date

June 30, 2021

Actuarial Valuation Date

June 30, 2021 with no adjustments to get to the June 30, 2021 measurement date. Liabilities as of July 1, 2020 are based on an actuarial valuation date of July 1, 2019 projected to July 1, 2020 on a "no loss / no gain" basis.

Discount Rate

6.20% as of July 1, 2020 and 6.20% as of June 30, 2021 for accounting disclosure purposes; refer to the Discussion of Discount Rates section for more information on selection of the discount rate.

6.20% as of July 1, 2020 and 6.20% as of June 30, 2021 for calculating Actuarially Determined Contribution

Inflation Rate

2.00%

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.

Salary Scale

Payroll growth rates are based on the tables used in the Indiana State Police actuarial pension valuation as of July 1, 2020.

Age	Pre-1987 Plan	1987 Plan	
26	3.50%	9.00%	
31	3.50%	6.50%	
36+	3.50%	4.00%	



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Census Data

Census data was provided by the State and it was collected as of June 30, 2021. We have reviewed it for reasonableness and have made the following adjustment to the census data:

- Participants who were found in both State Personnel and ISP census data are included in the ISP census
 data for valuation purposes (or whichever group was showing health coverage for conservatism).
 Participants who were found in both Legislature and ISP census data are included in the Legislature
 census data for valuation purposes. These participants are eligible to receive retiree health care
 coverage through ISP once they meet the eligibility requirements.
- For participant whose date of hire provided in this year's census data was more than one year different than the date provided in prior years, the earlier of the two dates was used for conservatism.
- Only employees and retirees who were identified by the ISP as not being eligible for Medicare assumed
 to be ineligible for Medicare for life. Pre-65 retirees who were identified as not being Medicare eligible in
 the past were assumed not to be Medicare eligible. All other participants are assumed to be eligible for
 Medicare.

Mortality

Healthy employees and retirees: SOA Pub-2010 Public Safety Headcount Weighted Mortality Table fully generational using Scale MP-2020 with a 3 year set forward for males no set forward for females Disabled retirees: SOA Pub-2010 General Disabled Retiree Headcount Weighted Mortality Table fully generational using Scale MP-2020

Surviving Spouses: SOA Pub-2010 Continuing Survivor Headcount Weighted Mortality Table fully generational using Scale MP-2020 with no set forward for males and a 2 year set forward for females

The above tables are based on 2020 INPRS Experience Study with recent mortality improvement scales.

Withdrawal Rate

Assumption used to project terminations (voluntary and involuntary) prior to meeting minimum retirement eligibility for retiree health care coverage.

No withdrawal rates are assumed for police officers in the pre-1987 plan.

For police officers in the 1987 pension plan, the annual withdrawal rates are assumed to be 2% prior to age 37. For ages 37 and older the annual withdrawal rates follow the Saranson T-1 table.



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Disability

Sample rates are as shown below and are based on the 2020 INPRS Experience Study.

_	Age	Rate
	20	0.10%
	30	0.10%
	40	0.30%
	50+	0.50%

Contribution Funding Policy

Indiana State Police has established a 401(h) account and Section 115 Trust for the purpose of funding retiree medical benefits since FYE June 30, 2011. Contributions to the 401(h) account and Section 115 Trust will be made from the following sources:

- 1. Medicare Part D retiree drug subsidy reimbursement
- 2. Excess Long-Term Disability (LTD) fund
- 3. A percentage of retiree premiums according to the following schedule:
 - a. Starting January 1, 2012 through June 30, 2014: 0%
 - b. July 1, 2014 through June 30, 2016: 25%
 - c. July 1, 2016 through June 30, 2018: 50%
 - d. July 1, 2018 onwards: 100%
- 4. State contributions for ISP active employees in accordance with SEA 501
- 5. Discretionary contributions from ISP Healthcare Fund up to \$1 million

Additionally, active employees will contribute \$20 per paycheck towards the 401(h) Trust account.

At this time, the ISP new funding policy is expected to continue for the foreseeable future.



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Retirement Rate

Annual retirement rates were based on ISP's 2011 experience study.

YOS	1987 Plan ¹⁹	Age	Pre-1987 Plan
25	15.0%	45	10.0%
26	12.5%	46 - 54	7.5%
27	10.0%	55	10.0%
28 – 29	7.5%	56	12.5%
30	10.0%	57	15.0%
31	12.5%	58	20.0%
32	15.0%	59 - 64	40.0%
33	40.0%	65+	100.0%
34+	27.5%		

Health Care Trend Rates

FYE	Medical / Rx	FYE	Medical / Rx
2022	8.0%	2026	6.0%
2023	7.5%	2027	5.5%
2024	7.0%	2028	5.0%
2025	6.5%	2029+	4.5%

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 costs are assumed to increase by 3.0% in the future.

Retiree Contributions

Retiree contributions are assumed to increase with health care trend rates.

Health Care Coverage Election Rate

Active Employees 100% of active employees with current coverage are assumed to elect coverage at retirement. Active employees

with no current coverage are assumed not to elect coverage at retirement.

Inactive Employees Based on actual data

¹⁹ 100% retirement is assumed for all participants upon reaching age 65.



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Spousal Coverage

80% of male and 40% of female employees are assumed to be married upon retirement. Husbands are assumed to be three years older than wives.

Spousal coverage for current retirees is based on actual data.

Per Capita Costs

Annual per capita costs are based on medical and prescription drug claims and enrollment data for the 24-month period ending May 31, 2021 projected to 2021/22 plan year and includes projected administrative expenses effective on January 1, 2022. The per capita costs were actuarially increased to a retiree-basis using health index factors and enrollment. These costs are assumed to increase with health care trend rates.

	Pre-65 I	Retirees			without icare
Age	Male	Female	Age	Male	Male
<55	\$ 8,300	\$ 9,500	65 – 69	\$ 14,600	\$ 14,600
55 - 59	\$ 11,200	\$ 10,900	70 – 74	\$ 15,800	\$ 15,800
60 - 64	\$ 14,700	\$ 13,300	75+	\$ 17,000	\$ 17,000

The per capita costs represent the cost of coverage for a retiree-only population.

Actuarial standards require the recognition of higher inherent costs for a retired population versus an active population.

Per capita costs for post-65 retirees and disabled retirees are Medicare eligible are assumed to be equal to the premium rate of the Medicare Advantage plan (\$179.06 per month). Post-65 ISP retirees also receive the ISP's HRA benefit, which is \$57.25 per month effective January 1, 2022.

Annual dental and vision per capita costs are \$566 and \$61 respectively for those enrolled in the Optional plan and they are expected to increase according to dental and vision trend rates. These costs are based on claims and enrollment data for the 24-month period ending May 31, 2021 projected to 2021/22 plan year and includes projected administrative expenses effective on January 1, 2022.



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Data Assumptions

15% of future retirees are assumed to elect the Basic Plan (without dental and vision benefits).

Explicit Subsidy

The difference between (a) the medical portion of the premium rate approved by ISP and (b) the retiree contribution for medical benefits. Below is an example of the monthly explicit subsidy for a retiree under age 62 enrolled in the Optional plan.

	Premium Rate				
	Α	В	C = A - B		
Retiree	\$ 535.23	\$ 535.23	\$ 0.00		
Spouse	\$ 224.06	\$ 224.06	\$ 0.00		

Implicit Age Subsidy

The difference between (a) the per capita cost as determined by Nyhart and (b) the rate approved by ISP. Below is an example of the monthly implicit subsidies for a male retiree age 62 enrolled in the Optional plan with spouse of the same age.

	Per Capita Cost	Premium Rate	Implicit Subsidy
	Α	В	C = A - B
Retiree	\$ 1,225.00	\$ 535.23	\$ 689.77
Spouse	\$ 1,108.33	\$ 224.06	\$ 884.27

All employers that utilize premium rates based on blended active/retiree claims experience will have an implicit subsidy. There is an exception for Medicare plans using a true community-rated premium rate.



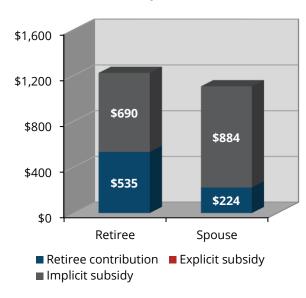
State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

GASB Subsidy Breakdown

Below is a breakdown of the GASB 74/75 monthly total cost for a male retiree age 62 enrolled in the Optional Plan with spouse of the same age for medical benefits only.

	Retiree	Spouse
Retiree contribution	\$ 535.23	\$ 224.06
Explicit subsidy	\$ 0.00	\$ 0.00
Implicit subsidy	\$ 689.77	\$ 884.27
Total monthly cost	\$ 1,225.00	\$ 1,108.33

GASB Subsidy Breakdown







State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Schedule of Changes in Net OPEB Liability and Related Ratios

OPEB Liability	FY 2020/21	FY 2019/20	FY 2018/19	FY 2017/18
Total OPEB Liability				
Total OPEB liability – beginning of year	\$ 49,274,689	\$ 76,898,620	\$ 60,902,667	\$ 56,023,950
Service cost	1,130,554	2,367,309	1,840,364	1,794,865
Interest	3,092,201	2,646,881	2,410,074	2,035,351
Changes of benefit terms	0	0	2,112,887	0
Changes in assumptions	2,447,468	(23,750,835)	6,222,558	(3,386,967)
Differences between expected and actual experience	(1,882,593)	(7,899,725)	4,353,479	5,738,944
Benefit payments	(1,078,278)	(987,561)	(943,409)	(1,303,476)
Net change in total OPEB liability	\$ 3,709,352	\$ (27,623,931)	\$ 15,995,953	\$ 4,878,717
Total OPEB liability – end of year	\$ 52,984,041	\$ 49,274,689	\$ 76,898,620	\$ 60,902,667
Plan Fiduciary Net Position				
Plan fiduciary net position – beginning of year	\$ 27,172,098	\$ 23,722,678	\$ 20,235,818	\$ 15,175,762
Contributions – employer	4,301,093	4,166,567	4,020,900	6,240,555
Contributions – active employees	0	0	0	0
Net investment income	1,856,428	347,133	492,902	213,433
Benefit payments	(1,078,278)	(987,561)	(943,409)	(1,303,476)
Trust administrative expenses	(113,795)	(76,719)	(83,533)	(90,456)
Net change in plan fiduciary net position	\$ 4,965,448	\$ 3,449,420	\$ 3,486,860	\$ 5,060,056
Plan fiduciary net position – end of year	\$ 32,137,546	\$ 27,172,098	\$ 23,722,678	\$ 20,235,818
Net OPEB Liability – end of year	\$ 20,846,495	\$ 22,102,591	\$ 53,175,942	\$ 40,666,849
	60 721	FF 10/	20.227	22.52
Plan fiduciary net position as % of total OPEB liability	60.7%	55.1%	30.8%	33.2%
Covered employee payroll	\$ 20,598,966	\$ 18,165,798	\$ 17,722,730	\$ 16,842,290
Net OPEB liability as % of covered payroll	101.2%	121.7%	300.0%	241.5%



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Schedule of Employer Contributions

The Actuarially Determined Contributions (ADC) shown below prior to FY 2016/17 are based on the Annual Required Contribution (ARC) calculated in prior GASB 45 actuarial valuations as shown in the Plan Sponsor financial statements.

	FY 2020/21	FY 2019/20	FY 2018/19	FY 2017/18	FY 2016/17
Actuarially Determined Contribution (ADC)	\$ 2,933,739 ²⁰	\$ 5,599,619	\$ 3,774,197	\$ 3,831,452	\$ 3,348,809
Contributions in relation to the ADC ²¹	4,301,093	4,166,567	4,020,900	6,240,555	3,717,824
Contribution deficiency / (excess)	\$ (1,367,354)	\$ 1,433,052	\$ (246,703)	\$ (2,409,103)	\$ (369,015)
Covered employee payroll	\$ 20,598,966	\$ 18,165,798	\$ 17,722,730	\$ 16,842,290	\$ 16,471,677
Contribution as a % of covered employee payroll	20.9%	22.9%	22.7%	37.1%	22.6%
	FY 2015/16	FY 2014/15	 FY 2013/14	FY 2012/13	FY 2011/12
Actuarially Determined Contribution (ADC)	\$ 3,312,731	\$ 3,123,622	\$ 2,821,614	\$ 3,052,678	\$ 3,674,720
Contributions in relation to the ADC ⁹	3,575,032	2,436,777	2,482,148	2,892,842	6,889,202
Contribution deficiency / (excess)	\$ (262,301)	\$ 686,845	\$ 339,466	\$ 159,836	\$ (3,214,482)
Covered employee payroll	\$ 14,497,000	\$ 15,106,000	\$ 15,969,000	\$ 25,532,000	\$ 12,600,000
Contribution as a % of covered employee payroll	24.7%	16.1%	15.5%	11.3%	54.7%

²⁰ Refer to the Actuarially Determined Contributions section for the calculation details.

²¹ Includes employer contribution for pay-go cost paid from General Fund and pre-funding contributions deposited into the OPEB Trust.



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

OPEB Expense

	_			
OPEB Expense		FY 2020/21		FY 2019/20
Discount rate as of beginning of fiscal year		6.20%		3.36%
Discount rate as of end of fiscal year		6.20%		6.20%
Service cost	\$	1,130,554	\$	2,367,309
Interest		3,092,201		2,646,881
Changes of benefit terms		0		0
Projected earnings on OPEB plan investments		(1,779,600)		(820,996)
Reduction for contributions from active employees		0		0
OPEB plan administrative expenses		113,795		76,719
Current period recognition of deferred outflows / (inflows) of resources				
Differences between expected and actual experience	\$	(135,921)	\$	133,021
Changes in assumptions		(2,688,889)		(3,038,527)
Net difference between projected and actual earnings on OPEB plan investments		193,593		208,959
		(0.604.047)	_	(0.505.5.17)
Total current period recognition	\$	(2,631,217)	\$	(2,696,547)
Total OPEB expense	\$	(74,267)	\$	1,573,366



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

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 an 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 items above.

Differences between expected and actual experience for FYE	Initial Balance		Initial Amortization Annual Re Period		al Recognition	Unamortized Balance as of June 30, 2021		
June 30, 2018	\$	5,738,944	8	\$	717,368	\$	2,869,472	
June 30, 2019	\$	4,353,479	8	\$	544,185	\$	2,720,924	
June 30, 2020	\$	(7,899,725)	7	\$	(1,128,532)	\$	(5,642,661)	
June 30, 2021	\$	(1,882,593)	7	\$	(268,942)	\$	(1,613,651)	

Changes in assumptions for FYE Initial Bo			Initial Initial Balance Amortization Period		alance Amortization Annual Recognition			Inamortized ance as of June 30, 2021
June 30, 2018	\$	(3,386,967)	8	\$	(423,371)	\$ (1,693,483)		
June 30, 2019	\$	6,222,558	8	\$	777,820	\$ 3,889,098		
June 30, 2020	\$	(23,750,835)	7	\$	(3,392,976)	\$ (16,964,883)		
June 30, 2021	\$	2,447,468	7	\$	349,638	\$ 2,097,830		



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Deferred Outflows / (Inflows) of Resources - Continued

Net difference between projected and actual earnings in OPEB plan investments for FYE	Init	ial Balance	Initial Amortization Period	Annua	l Recognition	namortized Ince as of June 30, 2021
June 30, 2018	\$	357,907	5	\$	71,581	\$ 71,583
June 30, 2019	\$	213,025	5	\$	42,605	\$ 85,210
June 30, 2020	\$	473,863	5	\$	94,773	\$ 284,317
June 30, 2021	\$	(76,828)	5	\$	(15,366)	\$ (61,462)

As of fiscal year ending June 30, 2021	Deferred Outflows		Deferred Inflo	
Differences between expected and actual experience	\$	5,590,396	\$	(7,256,312)
Changes in assumptions		5,986,928		(18,658,366)
Net difference between projected and actual earnings in OPEB plan investments		379,648		0
Total	\$	11,956,972	\$	(25,914,678)

Annual Amortization of Deferred Outflows / (Inflows)

The balances as of June 30, 2021 of the deferred outflows / (inflows) of resources will be recognized in OPEB expense in the future fiscal years as noted below.

FYE	,	Balance
2022	\$	(2,631,215)
2023	\$	(2,702,798)
2024	\$	(2,745,405)
2025	\$	(2,840,173)
2026	\$	(3,118,814)
Thereafter	\$	80,699



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Sensitivity Results

The following presents the net OPEB liability as of June 30, 2021, 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 6.20%.
- The 1% decrease in discount rate would be 5.20%.
- The 1% increase in discount rate would be 7.20%.

As of June 30, 2021	Net O	PEB Liability
1% Decrease	\$	28,534,042
Current Discount Rate	\$	20,846,495
1% Increase	\$	14,552,984

The following presents the net OPEB liability as of June 30, 2021, 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 8.0% 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 7.0% 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 9.0% decreasing by 0.5% annually to an ultimate rate of 5.5%.

As of June 30, 2021	Net OPEB Liability			
1% Decrease	\$	13,915,447		
Current Health Care Trend Rates	\$	20,846,495		
1% Increase	\$	29,529,186		



Asset Information (CONSERVATION AND EXCISE POLICE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Asset Information

Asset Breakdown	FY 2019/20	FY 2020/21
Assets		
Cash and cash equivalents	\$ 378,235	\$ 965,549
Securities lending cash collateral	0	0
Total cash	\$ 378,235	\$ 965,549
Receivables		
Contributions	\$ 0	\$ 0
Accrued interest	2,869	37,381
Total receivables	\$ 2,869	\$ 37,381
Investments		
Fixed income	\$ 26,896,478	\$ 10,671,485
Equities	0	17,190,748
Mutual Funds	0	0
Partnerships/Joint Ventures	0	3,361,928
Total investments	\$ 26,896,478	\$ 31,224,161
Total assets	\$ 27,277,582	\$ 32,227,091
Liabilities		
Payables		
Investment management fees	\$ 0	\$ 0
Benefits	105,484	89,545
Total liabilities	\$ 105,484	\$ 89,545
Net position restricted to OPEB	\$ 27,172,098	\$ 32,137,546



Asset Information (CONSERVATION AND EXCISE POLICE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Asset Reconciliation	FY 2019/20	FY 2020/21
Additions		
Contributions received		
Employer	\$ 4,166,567	\$ 4,301,093
Employee	0	0
Total contributions	\$ 4,166,567	\$ 4,301,093
Investment income		
Net increase in fair value of investments	\$ 347,133	\$ 1,856,428
Interests and dividends	0	0
Investment expense, other than from securities lending	0	0
Securities lending income	0	0
Securities lending expense	0	0
Net investment income	\$ 347,133	\$ 1,856,428
Total additions	\$ 4,513,700	\$ 6,157,521
Deductions		
Benefit payments (net of retiree contributions)	\$ (987,561)	\$ (1,078,278)
Administrative expenses	(76,719)	(113,795)
Other	0	0
Total deductions	\$ (1,064,280)	\$ (1,192,073)
Net increase in net position	\$ 3,449,420	\$ 4,965,448
Net position restricted to OPEB		
Beginning of year	23,722,678	 27,172,098
End of year	\$ 27,172,098	\$ 32,137,546



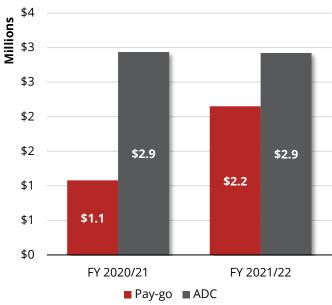
Actuarially Determined Contributions (CONSERVATION AND EXCISE POLICE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

The Actuarially Determined Contributions calculated below are recommended target contributions and assumes that the Plan Sponsor has the ability to contribute these amounts on an annual basis. The Plan Sponsor has the responsibility to decide how much it should contribute after considering its other needs and the OPEB participants' needs.

	FY 2020/21	FY 2021/22
Discount rate	6.20%	6.20%
Payroll growth factor used for amortization	N/A	N/A
Actuarial cost method	ry Age Normal vel % of Salary	ry Age Normal evel % of Salary
Amortization type	Level Dollar	Level Dollar
Amortization period	26 years	25 years
Actuarial accrued liability (AAL) – beginning of year	\$ 49,274,690	\$ 52,984,041
Actuarial value of assets – beginning of year	(27,172,098)	(32,137,546)
Unfunded AAL – beginning of year	\$ 22,102,592	\$ 20,846,495
Normal Cost	\$ 1,130,554	\$ 1,185,007
Amortization of UAAL	1,631,912	1,564,852
Total normal cost plus amortization	\$ 2,762,466	\$ 2,749,859
Interest to the end of year	171,273	170,491
Actuarially Determined Contribution – Preliminary	\$ 2,933,739	\$ 2,920,350
Expected benefit payments ²²	1,078,278	2,151,207
Actuarially Determined Contribution – Final ²³	\$ 2,933,739	\$ 2,920,350

Cash vs Accrual Accounting



Actuarially Determined Contribution (ADC) is the target or recommended contribution to a defined benefit OPEB plan, which if paid on an ongoing basis, will provide sufficient resources to fund future costs for services to be earned and liabilities attributed to past services. This is typically higher than the pay-as-you-go cost because it includes recognition of employer costs expected to be paid in future accounting periods.

²² Actual for FY 2020/21

 $^{^{\}rm 23}\,{\rm Set}$ to be the greater of the preliminary ADC and expected benefit payments.



Projection of GASB Results (CONSERVATION AND EXCISE POLICE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Projection of GASB Results

The Total OPEB Liability (TOL) is expected to change on an annual basis as a result of expected and unexpected events. Under normal circumstances, it is generally expected to have a net increase each year. Below is a list of the most common events affecting the total OPEB liability and whether they increase or decrease the liability.

Expected Events

- Increases in TOL due to additional benefit accruals as employees continue to earn service each year
- Increases in TOL due to interest as the employees and retirees age
- Decreases in TOL due to benefit payments

Unexpected Events

- Increases in TOL when actual premium rates increase more than expected. A liability decrease occurs of the reverse happens.
- Increases in TOL when more new retirements occur than expected or fewer terminations occur than anticipated. Liability decreases occur when the opposite outcomes happen.
- Increases or decreases in TOL depending on whether benefits are improved or reduced.

Projection of Total OPEB Liability (TOL)	FY 2020/21	FY 2021/22
TOL as of beginning of year	\$ 49,274,689	\$ 52,984,041
Normal cost as of beginning of year	1,130,554	1,185,007
Exp. benefit payments during the year	(1,078,278)	(2,151,207)
Interest adjustment to end of year	3,092,201	3,292,796
Exp. TOL as of end of year	\$ 52,419,166	\$ 55,310,637
Actuarial Loss/(Gain)	564,875	TBD
Actual TOL as of end of year	\$ 52,984,041	\$ TBD

Projection of Actuarial Value of Assets (AVA)	FY 2020/21	FY 2021/22
AVA as of beginning of year	\$ 27,172,098	\$ 32,137,546
Exp. employer contributions during the year ²⁴	4,301,093	5,251,207
Exp. benefit payments during the year	(1,078,278)	(2,151,207)
Exp. investment income ²⁵	1,779,600	2,083,038
Exp. Trust administrative expenses	(113,795)	(135,728)
Exp. AVA as of end of year	\$ 32,060,718	\$ 37,184,856
Differences between expected and actual experience	76,828	TBD
AVA as of end of year	\$ 32,137,546	\$ TBD

²⁴ Employer contribution for 2020/21 is based on actual employer contribution made into the Trust. FY 2021/22 expected employer contribution is based on the expected pay-go cost plus the average Trust contribution in the past five years, rounded down to the nearest hundred thousand.

²⁵ Fiscal years 2020/21 and 2021/22 expected investment income are calculated based on 6.20% asset returns.



Employer Contributions Cash Flow Projections (CONSERVATION AND EXCISE POLICE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Employer Contribution Cash Flow Projections

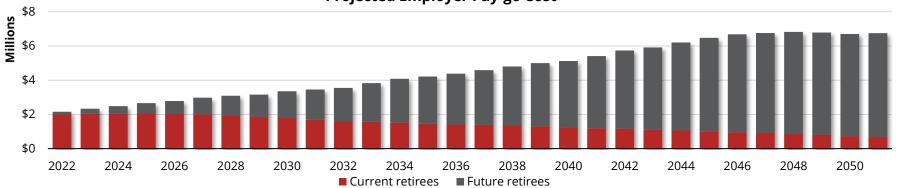
The below projections show the actuarially estimated employer-paid contributions for retiree health benefits for the next thirty years. Results are shown separately for a closed group of current / future retirees. These projections include explicit and implicit subsidies.

FYE	Current Retirees	Future etirees ²⁶	Total
2022	\$ 1,994,961	\$ 156,246	\$ 2,151,207
2023	\$ 2,035,246	\$ 294,757	\$ 2,330,003
2024	\$ 2,045,750	\$ 438,657	\$ 2,484,407
2025	\$ 2,049,612	\$ 610,344	\$ 2,659,956
2026	\$ 2,024,580	\$ 758,285	\$ 2,782,865
2027	\$ 2,011,632	\$ 963,262	\$ 2,974,894
2028	\$ 1,936,126	\$ 1,155,562	\$ 3,091,688
2029	\$ 1,848,593	\$ 1,309,147	\$ 3,157,740
2030	\$ 1,791,976	\$ 1,560,180	\$ 3,352,156
2031	\$ 1,685,084	\$ 1,766,007	\$ 3,451,091

FYE	Current Retirees	Future etirees ²³	Total
2032	\$ 1,581,248	\$ 1,968,636	\$ 3,549,884
2033	\$ 1,560,894	\$ 2,268,709	\$ 3,829,603
2034	\$ 1,506,623	\$ 2,571,817	\$ 4,078,440
2035	\$ 1,456,525	\$ 2,751,879	\$ 4,208,404
2036	\$ 1,406,955	\$ 2,971,716	\$ 4,378,671
2037	\$ 1,388,765	\$ 3,194,045	\$ 4,582,810
2038	\$ 1,349,475	\$ 3,449,512	\$ 4,798,987
2039	\$ 1,287,082	\$ 3,707,028	\$ 4,994,110
2040	\$ 1,230,914	\$ 3,890,185	\$ 5,121,099
2041	\$ 1,194,159	\$ 4,216,941	\$ 5,411,100

FYE	Current Retirees	Future etirees ²³	Total
2042	\$ 1,153,736	\$ 4,581,226	\$ 5,734,962
2043	\$ 1,109,897	\$ 4,799,158	\$ 5,909,055
2044	\$ 1,062,928	\$ 5,141,570	\$ 6,204,498
2045	\$ 1,013,159	\$ 5,460,323	\$ 6,473,482
2046	\$ 960,959	\$ 5,714,788	\$ 6,675,747
2047	\$ 906,749	\$ 5,845,237	\$ 6,751,986
2048	\$ 851,009	\$ 5,966,621	\$ 6,817,630
2049	\$ 794,247	\$ 5,989,289	\$ 6,783,536
2050	\$ 736,999	\$ 5,966,688	\$ 6,703,687
2051	\$ 679,775	\$ 6,066,487	\$ 6,746,262





 $^{^{\}rm 26}$ Projections for future retirees do not take into account future new hires.



Discussion of Discount Rates (CONSERVATION AND EXCISE POLICE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Under GASB 74, the discount rate used in valuing OPEB liabilities for funded plans as of the Measurement Date must be based on the long-term expected rate of return on OPEB plan investments that are expected to be used to finance future benefit payments to the extent that (a) they are sufficient to pay for the projected benefit payments and (b) the OPEB plan assets are invested using a strategy that will achieve that return. When the OPEB plan investments are insufficient to cover future benefit payments, 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) must be used.

For the current valuation:

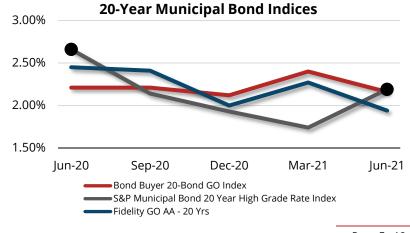
1. The long-term expected rate of return on OPEB plan investment is 6.20%. This was developed in consultation with the group's asset advisor using a building-block approach in which expected future rates of returned are developed for each major asset class. The expected future nominal rates of return as provided by the entity's investment advisor are shown below. Inflation is expected to be 2.00%. The best estimates of arithmetic real rates of return for each major asset class included in the OPEB Plan's target asset allocation as of June 30, 2021 are summarized in the following table.

Asset Class	Target Allocation	L/T Expected ROR
Broad US Equity	45%	6.6%
Global ex-US Equity	15%	6.8%
Domestic Fixed	23%	1.8%
Short Duration	5%	1.5%
Cash Equivalents	2%	1.0%
Hedge Funds	10%	4.0%

 The discount rate used when the OPEB plan investments are insufficient to pay for future benefit payments are 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.

Yield as of	July 1, 2020	June 30, 2021
Bond Buyer Go 20-Bond Municipal Bond Index	2.21%	2.16%
S&P Municipal Bond 20-Year High Grade Rate Index	2.66%	2.19%
Fidelity 20-Year Go Municipal Bond Index	2.45%	1.94%
Bond Index Range	2.21% - 2.66%	1.94% - 2.19%
Actual Discount Rate Used	2.66%	2.19%

3. The final equivalent single discount rate used for this year's valuation is 6.20% as of July 1, 2020 and June 30, 2021 based on the expectation that the CEP will continue to make contributions equal to the benefit payments each year plus additional pre-funding contributions of \$3.1 million per year (based on actual pre-funding contributions over the past five years).





Summary of Plan Participants (CONSERVATION AND EXCISE POLICE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Active Employees

Actives with coverage	Single	Non-Single	Total	Avg. Age	Avg. Svc	Salary
Total actives with coverage	46	195	241	41.0	15.5	\$ 20,598,966

Census information for active employees who currently have no coverage was not provided. These individuals are not assumed to elect coverage at retirement and do not generate GASB liabilities.

Active Age-Service Distribution

	Years of Service										
Age	< 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
Under 25		7									7
25 to 29		13	10								23
30 to 34		5	26	5	1						37
35 to 39		1	11	23	16	1					52
40 to 44			2	11	21	4					38
45 to 49			3	3	10	13	6				35
50 to 54				1	3	8	18	5			35
55 to 59						2	2	5	2		11
60 to 64						1			2		3
65 to 69											0
70 & up											0
Total	0	26	52	43	51	29	26	10	4	0	241



Summary of Plan Participants (CONSERVATION AND EXCISE POLICE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Summary of Plan Participants - Retirees

Retirees with coverage	Single	Non-Single	Total	Avg. Age
Total retirees with coverage	77	135	212	69.0

Retiree Age Distribution

Age	Retirees
< 45	1
45 to 49	1
50 to 54	5
55 to 59	26
60 to 64	40
65 to 69	40
70 to 74	44
75 to 79	33
80 to 84	15
85 to 89	3
90 & up	4
Total	212



Substantive Plan Provisions (CONSERVATION AND EXCISE POLICE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Eligibility

Conservation and Excise police officers are eligible for retiree health care benefits at the earlier of:

- a. Age 50 with 25 years of service
- b. Age 55 with 85 points

Spouse Coverage

Surviving spouse coverage continues for life after the death of the member (retiree or active employee eligible to retire). The coverage is free for six months and then it reverts to single retiree coverage.

Medical Benefit

The same benefit options are available to retirees as active employees. All health plans are self-insured. Effective on January 1, 2020, all post-65 Medicare eligible retirees were removed from the CEP's traditional health plan. They are covered under a Medicare Advantage Plan through Anthem and a Medicare Part D plan. The medical premium for the post-65 Medicare Advantage plan is \$372.47 per month effective on January 1, 2022.

For retirees, health, dental, and vision coverage are combined.

Life Insurance

None

CEP Explicit Subsidy

An explicit subsidy is valued for post-Medicare medical benefits, since the retiree contribution for the Medicare Advantage plan is less than the full cost of coverage for these benefits.

Senate Enrolled Act 501

Purpose

Senate Enrolled Act 501 establishes a retirement medical benefits account for elected officers, appointed officers, and employees of the executive, legislative, and judicial branches of state government to pay for participants' medical expenses after retirement.

Effective July 1, 2011 conservation officers of the Department of National Resources and employees of the State Excise Police are not eligible for the Senate Enrolled Act 501 retirement medical benefits account.



Substantive Plan Provisions (CONSERVATION AND EXCISE POLICE)

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Retiree Contributions

2022 monthly retiree contributions effective on January 1, 2022 as determined by CEP are split by benefit as shown below. The dental and vision costs below are determined based on dental and vision claims and enrollment information for the 24-month period ending May 31, 2021 projected to 2021/22 plan year and includes projected administrative expenses effective on January 1, 2022. Contributions are allocated to vision benefit first, dental second, and medical last.

	Single	Member + Spouse	Incremental Spouse Cost
Pre-Medica	<u>re</u>		
Medical	\$ 340.32	\$ 661.36	\$ 321.04
Dental	\$ 37.77	\$ 75.54	\$ 37.77
Vision	\$ 7.70	\$ 15.40	\$ 7.70
Total	\$ 385.79	\$ 752.30	\$ 366.51
Post-Medica	<u>are</u>		
Medical	\$ 104.85	\$ 209.70	\$ 104.85
Dental	\$ 37.77	\$ 75.54	\$ 37.77
Vision	\$ 7.70	\$ 15.40	\$ 7.70
Total	\$ 150.32	\$ 300.64	\$ 150.32



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Measurement Date June 30, 2021

Actuarial Valuation Date June 30, 2021 with no adjustments to get to the June 30, 2021 measurement date. Liabilities as of July 1, 2020

are based on an actuarial valuation date of July 1, 2019 projected to July 1, 2020 on a "no loss / no gain" basis.

Discount Rate 6.20% as of July 1, 2020 and June 30, 2021 for accounting disclosure purposes; refer to the Discussion of

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

6.20% as of July 1, 2020 and June 30, 2021 for calculating Actuarially Determined Contribution

Inflation Rate 2.00%

Cost MethodAllocation 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.

Payroll Growth

2.65% for general wage inflation plus the following merit and productivity increases which are based on the assumptions approved from the Indiana Public Retirement System (INPRS) 2020 Experience Study.

YOS	CEP
0	2.25%
5	1.00%
9+	0.00%



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Data Assumptions

All employees are assumed to elect medical, dental, and vision coverage at retirement.

Health Care Coverage Election Rate

Active Employees

100% of active employees with current coverage are assumed to elect coverage at retirement. Active employees with no current coverage are assumed not to elect coverage at retirement.

Inactive Employees

Based on actual data.

Spousal Coverage

85% of male and 15% of female employees are assumed to be married upon retirement. Husbands are assumed to be three years older than wives.

Spousal coverage for current retirees is based on actual data.

Contribution Funding Policy

The Conservation and Excise Police maintain a separate health plan for its active and retired employees. The plan is self-insured and the Conservation and Excise Police maintain stop-loss reinsurance to protect against excessive claims. The annual cost of the plan is financed on a pay-as-you-go basis from State subsidies and active/retiree contributions. The Conservation and Excise Police also has the ability to manage plan costs by changing the benefit design to less expensive designs. The State contributes the same employer subsidy per active employee as regular State employees to the Conservation and Excise Police health fund. There is no direct State subsidy for retiree health care.

The Conservation and Excise Police active employees are younger and healthier, as a group, than regular State employees which results in lower health care costs per employee when comparing the two groups. Because of the lower active health costs, the State subsidy per employee is sufficient to cover the active health costs and create a surplus which is then used to subsidize the current retiree health care costs.

Starting in FYE June 30, 2012, the Conservation and Excise Police started pre-funding retiree health benefits.



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Mortality

Healthy employees and retirees: SOA Pub-2010 Public Safety Headcount Weighted Mortality Table fully generational using Scale MP-2020 with a 3 year set forward for males no set forward for females Disabled retirees: SOA Pub-2010 General Disabled Retiree Headcount Weighted Mortality Table fully generational using Scale MP-2020

Surviving Spouses: SOA Pub-2010 Continuing Survivor Headcount Weighted Mortality Table fully generational using Scale MP-2020 with no set forward for males and a 2 year set forward for females

These are based on the INPRS 2020 Experience Study with recent mortality improvement scales.

Disability

Sample rates are as shown below and are based on the INPRS 2020 Experience Study.

Age	Rate
20	0.10%
30	0.10%
40	0.30%
50+	0.50%

Retirement Rate

Annual retirement rates are as shown below and are based on the INPRS 2020 Experience Study.

Age	0 – 9 YOS	10 - 14 YOS	15 - 24 YOS	25+ YOS	
45 – 49	0%	0%	2%	2%	
50 - 54	0%	0%	2%	20%	
55 - 58	0%	0%	2%	25%	
59	0%	0%	2%	35%	
60	0%	55%	55%	55%	
61	0%	65%	65%	65%	
62 - 64	0%	75%	75%	75%	
65+	0%	100%	100%	100%	



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Withdrawal Rate

Assumption used to project terminations (voluntary and involuntary) prior to meeting minimum retirement eligibility for retiree health care coverage. Annual withdrawal rates are based on State Excise Police, Gaming Agent, Gaming Control Officer, and Conservation Enforcement Officers tables from the INPRS 2020 Experience Study. Annual rates are as shown below.

YOS	Rates	YOS	Rates
0 – 1	10%	6	5%
2	9%	7	4%
3	8%	8	3%
4	7%	9	2%
5	6%	10+	1%

Per Capita Costs

Annual pre-65 per capita costs are based on medical and prescription drug claims and enrollment data for the 24-month period ending May 31, 2021 projected to 2021/22 plan year and includes administrative expenses effective on January 1, 2022. The per capita costs were actuarially increased to a retiree-basis using health index factors and enrollment. These costs are assumed to increase with health care trend rates.

Age	Male	Female
50 - 54	\$ 9,500	\$ 10,900
55 – 59	\$ 12,800	\$ 12,400
60 - 64	\$ 16,800	\$ 15,200

The per capita costs represent the cost of coverage for a retiree-only population.

Actuarial standards require the recognition of higher inherent costs for a retired population versus an active population.

Post-65 per capita costs are assumed to be equal to the premium rate for the Medicare Advantage plan, which is \$372.47 per month (\$4,470 per year).

Annual dental and vision per capita costs are based on claims and enrollment data for the 24-month period ending May 31, 2021 projected to 2021/22 plan year and includes projected administrative expenses effective on January 1, 2022. The annual dental and vision per capita costs are \$453 and \$92 respectively and they are assumed to increase with dental and vision trend rates.



State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Retiree Contributions

Retiree contributions are assumed to increase with health care trend rates.

Health Care Trend Rates

FYE	Medical / Rx	FYE	Medical / Rx
2022	8.0%	2026	6.0%
2023	7.5%	2027	5.5%
2024	7.0%	2028	5.0%
2025	6.5%	2029+	4.5%

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 costs are assumed to increase by 3.0% in the future.

Explicit Subsidy

The difference between (a) the Nyhart calculated premium equivalent rates and (b) the retiree contribution approved by CEP for medical benefits only. Below is an example of the monthly explicit subsidies for a retiree age 62 with spousal coverage.

	Premium Rate	Retiree Contribution	Explicit Subsidy
	Α	В	C = A - B
Retiree	\$ 658.78	\$ 340.32	\$ 318.46
Spouse	\$ 658.78	\$ 321.04	\$ 337.74

Implicit Subsidy

The difference between (a) the per capita cost and (b) the Nyhart calculated premium equivalent rates. Below is an example of the monthly medical implicit subsidies for a male retiree age 62 and his spouse of the same age.

	Per Capita Cost	Premium Rate	Implicit Subsidy
	Α	В	C = A - B
Retiree	\$ 1,400.00	\$ 658.78	\$ 741.22
Spouse	\$ 1,266.67	\$ 658.78	\$ 607.89

All employers that utilize premium rates based on blended active/retiree claims experience will have an implicit subsidy. There is an exception for Medicare plans using a true community-rated premium rate.



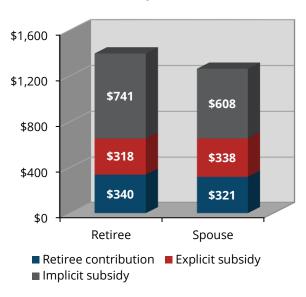
State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

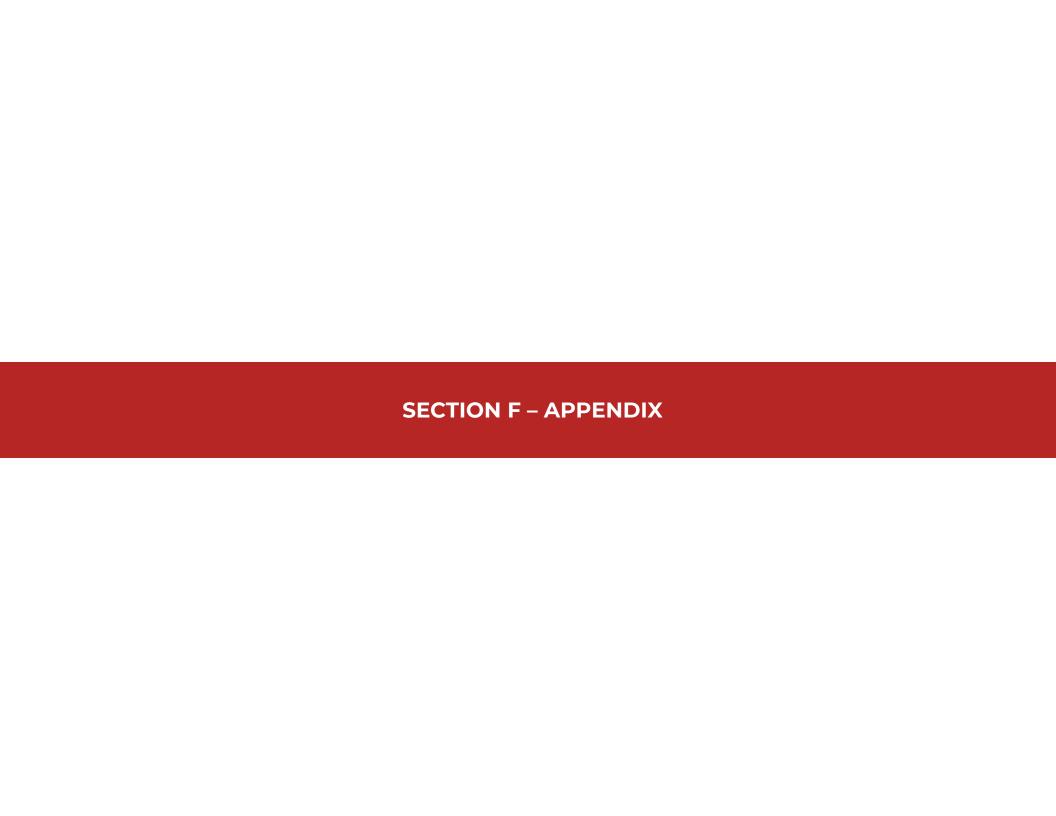
GASB Subsidy Breakdown

Below is a breakdown of the GASB 74/75 monthly total cost for a male retiree age 62 and his spouse of the same age for medical benefits only.

		Retiree	Spouse
Retiree contribution	\$	340.32	\$ 321.04
Explicit subsidy	\$	318.46	\$ 337.74
Implicit subsidy	\$	741.22	\$ 607.89
Total monthly cost	\$	1,400.00	\$ 1,266.67

GASB Subsidy Breakdown





State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Appendix A - Comparison of Participant Demographic Information

	As of June 30, 2019				As of June 30, 2021			
	State Personnel	Legislature	ISP	CEP	State Personnel	Legislature	ISP	СЕР
Active Participants ²⁷	25,659	113	1,688	244	25,318	115	1,662	241
Retired Participants ²⁸	552	34	1,076	198	411	38	1,058	212
Averages for Active								
Age	44.9	56.7	43.3	40.5	45.2	56.7	43.7	41.0
Service	10.0	9.8	15.4	14.6	11.0	10.2	16.1	15.5
Averages for Inactive								
Age	62.4	74.9	71.6	68.3	62.7	76.1	72.5	69.0

²⁷ Only includes employees who have medical / rx coverage. Refer to Summary of Plan Participants section for an accurate breakdown of active employees with and without medical / rx

²⁸ The retired enrollment figures above exclude spouses of current retirees and those who currently have no medical / rx coverage. ISP retired participants enrollment excludes those who have life insurance benefits only and include beneficiaries. Refer to Summary of Plan Participants section for an accurate breakdown of retirees with and without medical / rx coverage.



Appendix

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Appendix B - Data Reconciliation by Group

	State Personnel	Indiana State Police	Conservation and
		(ISP)	Excise Police (CEP) ²⁹
Active employees with coverage			
Actives as of June 30, 2019	25,659	1,688	244
Terminated	(5,983)	(114)	(11)
New hires	5,415	153	16
Active employees who retired	(172)	(66)	(11)
Retirees who returned to active employment	2	1	
Other adjustment ³⁰	397		3
Actives as of June 30, 2021	25,318	1,662	241
Retirees with coverage			
Retirees as of June 30, 2019	552	912	198
Active employees who retired	174	57	11
Retirees who returned to active employment	(3)	(1)	
Retirees who dropped coverage or passed away without beneficiaries	(317)	(33)	(5)
Retirees who passed away with beneficiaries		(21)	
New retirees ³¹	5	9	8 ³²
Other adjustment ³¹		(22)	
Retirees as of June 30, 2021	411	901	212
Beneficiaries with coverage			
Beneficiaries as of June 30, 2019		164	
Active/retirees who passed away with beneficiaries		22	
Beneficiaries who dropped coverage or are listed as retiree		(29)	
Beneficiaries as of June 30, 2021		157	

²⁹ Beneficiaries are included with retirees for the Conservation and Excise Police.

³⁰ This line shows adjustments for participants who have changed health plan enrollment status from June 30, 2019 to June 30, 2021 (i.e. those who did not have coverage before but are currently enrolled, and vice versa).

³¹ This line shows new retirees who were not found as active employees in June 30, 2019 census data or those who were previously active in a different employee group.

³² Includes five beneficiaries.



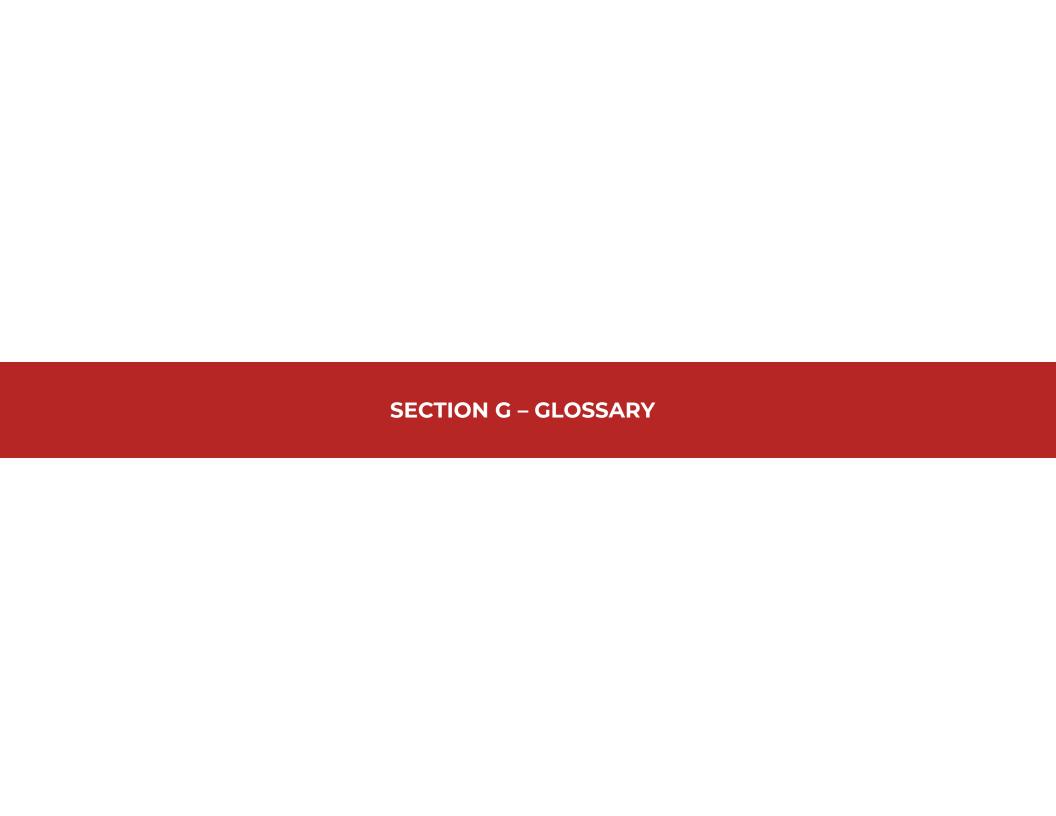
State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

Appendix C - Summary of Medical Benefits

A brief summary of all pre-65 health plans offered for all entities effective on January 1, 2022 are as shown below. The out-of-pocket maximum includes the deductible, coinsurance, and copayments. Information shown below is for in-network coverage.

STATE PERSONNEL / LEGISLATURES	CDHP 1	CDHP 2	Traditional PPO
Deductible (Single / Family)	\$2,000 / \$4,000	\$1,400 / \$2,800	\$750 / \$1,500
Coinsurance	90%	90%	90%
Out-of-Pocket Maximum (Single / Family)	\$3,500 / \$7,000	\$2,500 / \$5,000	\$2,000 / \$4,000
Co-pay / co-insurances for:			
Office Visit	Subject to ded / co-ins	Subject to ded / co-ins	10%
Emergency Room	Subject to ded / co-ins	Subject to ded / co-ins	10%
Prescription drugs (Retail)			
Generic	\$10	\$10	\$10
Preferred Brand	20% (\$30 min / \$50 max)	20% (\$30 min / \$50 max)	20% (\$30 min / \$50 max)
Non-Preferred Brand	40% (\$50 min / \$70 max)	40% (\$50 min / \$70 max)	40% (\$50 min / \$70 max)
Specialty	40% (\$75 min / \$150 max)	40% (\$75 min / \$150 max)	40% (\$75 min / \$150 max)
Prescription drugs (Mail Order)			
Generic	\$20	\$20	\$20
Preferred Brand	20% (\$60 min / \$100 max)	20% (\$60 min / \$100 max)	20% (\$60 min / \$100 max)
Non-Preferred Brand	40% (\$100 min / \$140 max)	40% (\$100 min / \$140 max)	40% (\$100 min / \$140 max)

	ISP Retirees	CEP Retirees
Deductible (Single / Family)	\$750 / \$1,500	\$750 / \$1,500
Coinsurance	80%	80%
Out-of-Pocket Maximum (Single / Family)	\$4,000 / \$7,000	\$2,250 / \$5,100
Co-pay / co-insurances for:		
Office Visit	20%	20%
Emergency Room	20%	20%
Prescription Drugs:		
Deductible	\$200	\$300 / \$900
Retail (Generic / Pref / Non-Pref)	\$25 / \$40 / 50%	\$15 / \$40 / \$60
Mail Order (Generic / Pref / Non-Pref + Speciality)	\$30 / \$80 / 50%	\$ 30/ \$80 / \$120





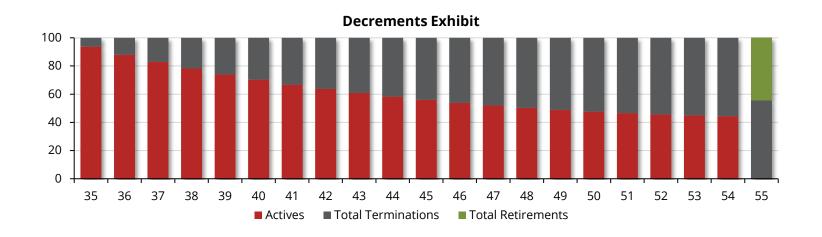
Glossary – Decrements Exhibit

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

The table below illustrates how actuarial assumptions can affect a long-term projection of future liabilities. Starting with 100 employees at age 35, the illustrated actuarial assumptions show that 44.43 employees out of the original 100 are expected to retire and could elect retiree health benefits at age 55.

Age	# Remaining Employees	# of Terminations per Year ³³	# of Retirements per Year	Total Decrements
35	100.000	6.276	0.000	6.276
36	93.724	5.677	0.000	5.677
37	88.047	5.136	0.000	5.136
38	82.911	4.648	0.000	4.648
39	78.262	4.209	0.000	4.209
40	74.053	3.814	0.000	3.814
41	70.239	3.456	0.000	3.456
42	66.783	3.131	0.000	3.131
43	63.652	2.835	0.000	2.835
44	60.817	2.564	0.000	2.564
45	58.253	2.316	0.000	2.316

Age	# Remaining Employees	# of Terminations per Year	# of Retirements per Year	Total Decrements
46	55.938	2.085	0.000	2.085
47	53.853	1.866	0.000	1.866
48	51.987	1.656	0.000	1.656
49	50.331	1.452	0.000	1.452
50	48.880	1.253	0.000	1.253
51	47.627	1.060	0.000	1.060
52	46.567	0.877	0.000	0.877
53	45.690	0.707	0.000	0.707
54	44.983	0.553	0.000	0.553
55	44.430	0.000	44.430	44.430



³³ The above rates are illustrative rates and are not used in our GASB calculations.



Glossary – Retirement Rates Exhibit

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

The table below illustrates how actuarial assumptions can affect a long-term projection of future liabilities. The illustrated retirement rates show the number of employees who are assumed to retire annually based on 100 employees age 55 who are eligible for retiree health care coverage. The average age at retirement is 62.0.

Age	Active Employees BOY	Annual Retirement Rates*	# Retirements per Year	Active Employees EOY
55	100.000	5.0%	5.000	95.000
56	95.000	5.0%	4.750	90.250
57	90.250	5.0%	4.513	85.738
58	85.738	5.0%	4.287	81.451
59	81.451	5.0%	4.073	77.378
60	77.378	5.0%	3.869	73.509
61	73.509	5.0%	3.675	69.834
62	69.834	30.0%	20.950	48.884
63	48.884	15.0%	7.333	41.551
64	41.551	15.0%	6.233	35.318
65	35.318	100.0%	35.318	0.000



^{*} The above rates are illustrative rates and are not used in our GASB calculations.



Glossary - Definitions

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

GASB 75 defines several unique terms not commonly employed in the funding of pension and retiree health plans. The definitions of the terms used in the GASB actuarial valuations are noted below.

- 1. **Actuarial Assumptions** Assumptions as to the occurrence of future events affecting health care costs, such as: mortality, withdrawal, disablement and retirement; changes in compensation and Government provided health care benefits; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; characteristics of future entrants for Open Group Actuarial Cost Methods; and other relevant items.
- 2. **Actuarial Cost Method** A procedure for determining the Actuarial Present Value of Future Benefits and expenses and for developing an actuarially equivalent allocation of such value to time periods, usually in the form of a Service Cost and a Total OPEB Liability.
- 3. **Actuarially Determined Contribution** A target or recommended contribution to a defined benefit OPEB plan for the reporting period, determined in accordance with the parameters and in conformity with Actuarial Standards of Practice.
- 4. **Actuarial Present Value** The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:
 - a. adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, Social Security, marital status, etc.);
 - b. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned; and
 - c. discounted according to an assumed rate (or rates) of return to reflect the time value of money.
- 5. **Deferred Outflow / (Inflow) of Resources** represents the following items that have not been recognized in the OPEB Expense:
 - a. Differences between expected and actual experience of the OPEB plan
 - b. Changes in assumptions
 - c. Differences between projected and actual earnings in OPEB plan investments (for funded plans only)
- 6. **Explicit Subsidy** The difference between (a) the amounts required to be contributed by the retirees based on the premium rates and (b) actual cash contribution made by the employer.
- 7. **Funded Ratio** The actuarial value of assets expressed as a percentage of the Total OPEB Liability.



Glossary – Definitions

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

- 8. **Healthcare Cost Trend Rate** The rate of change in the per capita health claims costs over time as a result of factors such as medical inflation, utilization of healthcare services, plan design, and technological developments.
- 9. **Implicit Subsidy** In an experience-rated healthcare plan that includes both active employees and retirees with blended premium rates for all plan members, the difference between (a) the age-adjusted premiums approximating claim costs for retirees in the group (which, because of the effect of age on claim costs, generally will be higher than the blended premium rates for all group members) and (b) the amounts required to be contributed by the retirees.
- 10. **OPEB** Benefits (such as death benefits, life insurance, disability, and long-term care) that are paid in the period after employment and that are provided separately from a pension plan, as well as healthcare benefits paid in the period after employment, regardless of the manner in which they are provided. OPEB does not include termination benefits or termination payments for sick leave.
- 11. **OPEB Expense** Changes in the Net OPEB Liability in the current reporting period, which includes Service Cost, interest cost, changes of benefit terms, expected earnings on OPEB Plan investments, reduction of active employees' contributions, OPEB plan administrative expenses, and current period recognition of Deferred Outflows / (Inflows) of Resources.
- 12. **Pay-as-you-go** A method of financing a benefit plan under which the contributions to the plan are generally made at about the same time and in about the same amount as benefit payments and expenses becoming due.
- 13. **Per Capita Costs** The current cost of providing postretirement health care benefits for one year at each age from the youngest age to the oldest age at which plan participants are expected to receive benefits under the plan.
- 14. **Present Value of Future Benefits** Total projected benefits include all benefits estimated to be payable to plan members (retirees and beneficiaries, terminated employees entitled to benefits but not yet receiving them, and current active members) as a result of their service through the valuation date and their expected future service. The actuarial present value of total projected benefits as of the valuation date is the present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment. Expressed another way, it is the amount that would have to be invested on the valuation date so that the amount invested plus investment earnings will provide sufficient assets to pay total projected benefits when due.
- 15. **Real Rate of Return** the rate of return on an investment after adjustment to eliminate inflation.



Glossary – Definitions

State of Indiana GASB 74/75 Valuation for Fiscal Year Ending June 30, 2021

- 16. **Select and Ultimate Rates** Actuarial assumptions that contemplate different rates for successive years. Instead of a single assumed rate with respect to, for example, the investment return assumption, the actuary may apply different rates for the early years of a projection and a single rate for all subsequent years. For example, if an actuary applies an assumed investment return of 8% for year 20W0, then 7.5% for 20W1, and 7% for 20W2 and thereafter, then 8% and 7.5% select rates, and 7% is the ultimate rate.
- 17. **Service Cost** The portion of the Actuarial Present Value of projected benefit payments that are attributed to a valuation year by the Actuarial Cost Method.
- 18. **Substantive Plan** The terms of an OPEB plan as understood by the employer(s) and plan members.
- 19. **Total OPEB Liability** That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of Future Benefits which is attributed to past periods of employee service (or not provided for by the future Service Costs).